Ocean Wind Construction and Operations Plan Scoping Report

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U.S. Department of the Interior
Bureau of Ocean Energy Management
Office of Renewable Energy Programs

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List of Abbreviations and Acronyms

Abbreviation	Definition
BOEM	Bureau of Ocean Energy Management
CFR	Code of Federal Regulations
COP	Construction and Operations Plan
CRM	Collision Risk Modeling
EFH	Essential Fish Habitat
EIS	Environmental Impact Statement
EMF	electromagnetic fields
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
ID	identification
MBTA	Migratory Bird Treaty Act
NARW	North Atlantic right whale
NEPA	National Environmental Policy Act
NJDEP	New Jersey Department of Environmental Protection
NOI	Notice of Intent
Ocean Wind	Ocean Wind, LLC
PDF	portable document format
WTG	wind turbine generator

1 Draft Scoping Summary Statement for the Ocean Wind Environmental Impact Statement

1.1 Introduction

Council on Environmental Quality regulations for implementing the National Environmental Policy Act (NEPA) under Title 40 of the Code of Federal Regulations (CFR) Section 1501.7(a) require agencies such as the Bureau of Ocean Energy Management (BOEM) to perform certain actions as part of the scoping process, including:

- Determining the scope and the significant issues to be analyzed in depth in the Environmental Impact Statement (EIS); and
- Identifying and eliminating from detailed study the issues that are not significant.

This document, in combination with the Draft EIS, is intended to satisfy BOEM's obligations under 40 CFR 1501.7(a).

On March 24, 2021, Ocean Wind, LLC (Ocean Wind) submitted a Construction and Operations Plan (COP) to BOEM seeking approval to construct and operate up to 98 wind turbine generators (WTGs) with a capacity to generate 1,100 megawatts (herein referred to as the proposed Project or Proposed Action) offshore of New Jersey in federal waters. On March 30, 2021, BOEM issued a Notice of Intent (NOI) to prepare an EIS consistent with NEPA regulations (42 United States Code § 4321 et seq.) to assess the potential impacts of the Proposed Action and alternatives (83 *Federal Register* 13777).

The NOI commenced a public scoping process for identifying issues and potential alternatives for consideration in the EIS. The formal scoping period was from March 30 through April 29, 2021. During this timeframe, federal agencies, state and local governments, and the general public had the opportunity to help BOEM identify potential significant resources and issues, impact-producing factors, reasonable alternatives (e.g., size, geographic, seasonal, or other restrictions on construction and siting of facilities and activities), and potential mitigation measures to analyze in the EIS, as well as provide additional information. BOEM also used the NEPA scoping process to initiate the Section 106 consultation process under the National Historic Preservation Act (54 United States Code § 300101 et seq.), as permitted by 36 CFR § 800.2(d)(3), which requires federal agencies to assess the effects of projects on historic properties. Additionally, BOEM informed its Section 106 consultation by seeking public comment and input through the NOI regarding the identification of historic properties or potential effects on historic properties from activities associated with approval of the Ocean Wind COP. The NOI requested comments from the public in written form, delivered by hand or by mail, or through the regulations.gov web portal.

This Scoping Report outlines the objectives, methodology, and content of the information provided by interested parties during the scoping period.

1.2 Objective

This report reviews and catalogues the information and materials provided to BOEM during the scoping period for the proposed Project. The goal of the exercise was to identify substantive comments for consideration in the development of the EIS and categorize them based on the applicable resource areas or NEPA topics. Section 1.3 describes the methodology used to identify and categorize comments. This categorization scheme allowed subject matter experts to review comments directly related to their areas of expertise and allowed BOEM to generate statistics based on the resource areas or NEPA topics addressed

in each of the comments. In addition, the process demonstrates consideration of the materials received while simultaneously contributing to the development of the EIS.

1.3 Methodology

1.3.1 Terminology

The following terminology is used throughout this Scoping Report:

- **Submission:** The entire content submitted by a single person or group at a single time. For example, a 10-page letter from a citizen, an email with a portable document format (PDF) attachment, or a transcript of an oral comment given at a public scoping meeting was considered to be a submission.
- **Comment:** A specific statement within a submission that expresses a sender's specific point of view, concern, question, or suggestion. One submission may contain many comments.

1.3.2 Comment Submittal

BOEM received comment submissions during the scoping process via the following mechanisms:

- Electronic submissions received via Regulations.gov on docket number BOEM-2021-0024
- Electronic submissions received via email to a BOEM representative
- Comments submitted verbally at each of the three public scoping meetings

BOEM did not receive any hard-copy comment submissions by hand or by mail. While the NOI did not include email as a method for submitting a comment, any submissions received via email that were clearly identified as relating to the Project were considered a valid comment submission.

Three virtual public scoping meetings were held on the following dates as outlined in Table 1-1. The number of submissions received via each submission method is provided in Table 2-1.

Table 1-1 Public Scoping Meetings

Public Scoping Meetings Date	Time
April 13, 2021	1:00 p.m.
April 15, 2021	5:30 p.m.
April 20, 2021	5:30 p.m.

1.3.3 Comment Processing

1.3.3.1 Compilation of Submissions

BOEM's process for analyzing public comments builds upon ICF's commercial web-based CommentWorks® software product. Submissions were provided via Regulations.gov, email, or verbally at the public meetings (as shown in Table 2-1). All submissions were downloaded, processed, and imported into CommentWorks. CommentWorks served as the submission database and recorded information about each submission, including the submitter's name, submission date, submission method, and whether the submitter was an individual, representative of an organization, or from a government entity or agency.

As submissions were entered into CommentWorks, they were assigned a submission identification (ID). This ID begins with the Project Docket number, e.g., "BOEM-2021-0024," followed by the submission method, followed by a submission ID number. For the submission method, "DRAFT" indicates the

submission was received via Regulations.gov; "EMAIL" indicates the submission was received via email; and "TRANS" indicates the submission was received via a transcript from a public scoping meeting. If the submission was received verbally during a scoping meeting, this "TRANS" is also followed by the date of the meeting. These submission IDs can be found in Appendix A, *List of Submissions and Individual Comments by Resource or NEPA Topic*.

1.3.3.2 Identification of Comments

All submissions and oral testimonies were read to identify individual comments (as defined in Section 1.3.1). A hierarchical outline was developed to include key issues addressed by the commenters or identified in the NOI. This issue outline was used to code each individual comment within CommentWorks to a specific resource or NEPA topic. Each comment coded received a unique comment ID number. For example, the first comment identified in submission BOEM-2021-0024-DRAFT-0139 was identified as comment BOEM-2021-0024-DRAFT-0139-1. When a comment pertained to more than one resource or NEPA topic, it was not coded to multiple topics but instead coded to the most applicable topic. The resource categories are provided in Table 2-2.

Appendix A, *List of Submissions and Individual Comments by Resource or NEPA Topic*, provides a listing of all the submissions received as well as all the individual comments that were extracted from each submission, organized by resource or NEPA topic area. The individual comments provided in Appendix A include verbatim comment excerpts as written by the commenters. The purpose of presenting this material in its verbatim form is to preserve the exact words of the commenter as they relate to each issue.

2 Scoping Submission and Comment Summary

2.1 Submissions

BOEM received 381 submissions from the public, agencies, and other interested groups and stakeholders. Table 2-1 shows the number of submissions received via each submission method.

Table 2-1 Distribution of Submissions by Method

Submission Type	Number of Submissions Received
Regulations.gov submissions	302
Email to BOEM representative	6
Verbal submission at a public meeting	73
Total	**381**

The totals above included the following submissions by federal, state, and local government entities:

- Three submissions from federal agencies: U.S. Environmental Protection Agency (EPA), Region 2; U.S. Coast Guard; and National Oceanic and Atmospheric Administration
- Three submissions from state agencies or representatives: New Jersey Department of Transportation, New Jersey Department of Environmental Protection (NJDEP), and New York State Department of State
- Four submissions from local governments: City of Ocean City, Ocean City Council, and two from the City of Beach Haven

In addition to the federal, state, and local government entities identified above, 68 submissions came from non-governmental organizations and the remainder were provided by individuals.

2.2 Comments

BOEM identified a total of 1,614 unique comments. Table 2-2 shows the distribution of comments by resource and NEPA topic. Section 2.3 defines the resource areas to which comments were assigned and summarizes the comments by each topic. The most commonly addressed resource topics included NEPA/Public Involvement, Recreation and Tourism, and Mitigation and Monitoring.

Table 2-2 Distribution of Comments by Resource or NEPA Topic

Resource	Comments
Air Quality and Climate Change	48
Alternatives	
- Wind turbines	6
- Cables and landfalls	35
- Project relocation	47
- Other comments on alternatives	38
Bats	7
Benthic Resources	15
Birds	77
Climate Change	19
Coastal Habitat and Fauna	9
Commercial Fisheries and For-Hire Recreational Fishing	76
Cultural, Historical, and Archaeological Resources	16
Demographics, Employment, and Economics	
- Recreation and Tourism	124
- Employment and job creation	53
- Other	71
Environmental Justice	3
Finfish, Invertebrates, and Essential Fish Habitat	64
Land Use and Coastal Infrastructure	4
Marine Mammals	63
Mitigation and Monitoring	108
Navigation and Vessel Traffic	29
NEPA/Public Involvement Process	127
Other Resources and Uses	
- Aviation	2
- Military	1
- Other	3
Other Topics not Listed	
- Coastal Zone Consistency	4
- Noise	27
- Materials and Waste Management	58

Resource	Comments
- General Wildlife	34
- Electromagnetic Fields (EMF)	32
- Other	15
Planned Activities Scenario/Cumulative Impacts	51
Proposed Action/Project Design Envelope	63
Purpose and Need	58
Sea Turtles	1
Scenic and Visual Resources	62
Water Quality	1
Wetlands and Waters of the U.S.	2
General Support or Opposition	161

2.3 Definition of Resource Areas and Common NEPA Topics Raised

The following sections define each of the resource areas or NEPA topics that the comments were categorized under and summarizes the comments by each of the resource areas or topics listed. Comments have been summarized below, as appropriate, particularly for concerns that were raised by several commenters. Appendix A presents the individual comments that were extracted from each of the submissions, organized by resource area or NEPA topic. The comment excerpts that only expressed general support or opposition are not included in Appendix A in their verbatim form. Instead, those comments are summarized in Section 2.3.27 below and in Section A.2.27 of Appendix A.

2.3.1 Air Quality

Air quality comments included evaluating emissions from proposed Project construction, operations, maintenance, and decommissioning. Comments specific to climate change are described in Section 2.3.6, *Climate Change*. Topics raised in this category included the following:

- The EIS should consider the carbon footprint of the entire turbine production process including manufacturing, transportation, installation, and decommissioning.
- The proposed Project, and others like it, are essential to combat global warming, promote improved air quality, decrease reliance on fossil fuels and greenhouse gas emissions, and contribute to achieving New Jersey's clean energy goals.
- Ocean Wind must acquire the appropriate air quality permits before Project construction can begin, including submission of an air permit application to EPA within 18 months from the NOI.
- Ocean Wind must provide an analysis concluding that proposed Project emissions would not cause or contribute to violations of the National Ambient Air Quality Standards or result in significant deterioration of air quality.
- The EIS should consider the air quality impacts anticipated during construction and decommissioning, including the beneficial impacts.
- The EIS should quantify the carbon emissions from the manufacturing, transportation, and construction of the turbines, cables, and stations.

2.3.2 Alternatives

Alternative comments included suggesting, questioning, or providing opinion about alternatives to the proposed Project. Additional comments related to alternatives and Project design are included in Section 2.3.21, *Proposed Action/Project Design Envelope*. Topics raised in this category included the following:

- The EIS should consider and evaluate the full range of reasonable alternatives to the Proposed Action, including those that would cause less damage to the environment.
- The EIS should analyze the Project components separately (wind farm area, offshore cables, and inshore cables/landfalls) and each element of the proposed Project should have multiple alternatives that could be "mixed and matched."
- Ocean Wind should evaluate the most appropriate locations for each Project component within the Lease Area and consider reducing the number of turbines within the Lease Area to reduce the associated impacts.
- Ocean Wind should evaluate an alternative combining the Project components that are the least harmful to natural habitats and associated flora and fauna.
- The EIS should include an alternative combining the most disruptive components for each aspect of the proposed Project.
- The proposed Project should consider newer technologies.
- The No Action Alternative must be considered and analyzed in the EIS.

2.3.2.1 Wind Turbines

- When multiple lease areas share borders, the U.S. Coast Guard recommends a common turbine spacing and layout throughout all adjoining wind projects. This will have the cumulative effect of presenting one wind farm with consistent straight-line routes for the mariner through the entire area.
- In the absence of a common spacing and orientation between adjacent wind projects, the U.S. Coast Guard recommends setbacks from the shared border to create a gap between projects. The space between projects should be greater than any turbine spacing within either wind farm to provide a clear visual reference to easily distinguish them as two separate projects.
- Similar to the agreement between developers for adjacent Rhode Island and Massachusetts offshore wind projects, coordination with Atlantic Shores Offshore Wind is necessary to ensure that the WTG layout and spacing alternatives developed for this Project do not conflict with these projects and result in hazards and safety issues for vessels operating within or navigating through the adjacent projects. BOEM should consider alternatives that increase WTG layout and spacing consistency between these two adjacent projects.
- The proposed Project should consider alternative WTG locations within the Lease Area and outside the Project boundary defined in the COP, despite the segmentation of the Lease Area.
- Alternatives for WTG layout, location, and spacing, particularly related to impacts on fishing and survey vessel operations and transit, are important considerations for the alternatives analysis in the EIS. Vessel monitoring system data used by BOEM to develop polar histograms of vessel operating courses can be used to inform alternative WTG location, layout, and spacing.
- BOEM should apply the same turbine exclusion zone of 17.3 miles that was applied off the coast of New York to reduce visual impacts.
- The EIS should consider if the number of turbines can be reduced.
- The proposed Project should adjust the array of turbines to a minimum spacing of 2 nautical miles.

- Floating turbine technology should be considered as an alternative for the Project, which would allow relocation of turbines, as needed, and a lower cost per kilowatt-hour.
- Turbine spacing should include a clearance zone of at least 1,000 meters for the North Atlantic right whale (NARW).

2.3.2.2 Cables and Landfalls

- Commenters expressed varying opinions about the cable corridors and landfall locations that should be selected.
  - The proposed Project should not cut through the Island Beach State Park Bather Beach or Barnegat Bay.
  - The cables should not cross Roosevelt Avenue or travel up Route 9.
- Cable burial depths need to be deeper than Ocean Wind's target of 4 to 6 feet. Specific depth suggestions differ by commenter.
- Cable placement needs to consider all navigation channels, safe navigation, anchoring areas, dredged material management locations, tug-tow traffic routes, and commercial fishing activity. Cable route alternatives should conform to industry practices and reduce navigation risks.
- A full range of reasonable alternatives to the proposed offshore and inshore export cable corridors and landing site options should also be considered and evaluated to avoid and minimize impacts on sensitive habitats in the Project area.
- Options for avoiding and minimizing impacts related to the methods of construction and routes that allow for full cable burial to minimize permanent habitat impacts and potential interactions with fishing gear should be considered.
- Offshore export cable routing alternatives that use common corridors with adjacent projects (Atlantic Shores, OCS-A-0499) should be evaluated and discussed.
- The Project should avoid the Lighthouse Drive and Bay Parkway residential sites and consider using the vacant land across from Oyster Creek Power Plant.
- The Project should consider routing the landfall cables under the Forked River or Oyster Creek directly to the Oyster Creek substation.
- The Project should consider utilizing the inlets at each end of the island: Corson's on the south end and Egg Harbor on the north, because both inlets provide easy access to the B L England Plant.

2.3.2.3 Project Relocation

- The proposed Project should be relocated to the Hudson South Lease Area 30 to 57 miles offshore to minimize visual impacts, reduce fishing and navigation conflicts, and maximize wind capacity.
- The proposed Project should be a minimum of 30 miles offshore.

2.3.2.4 Other Comments on Alternatives

- The EIS should consider alternatives to using monopiles and consider construction alternatives to avoid the use of pile driving. Gravity-based foundations are included in other current projects and should be considered for this proposed Project.
- Consider an alternative that limits or avoids development within areas of the lease that may adversely affect important benthic features, including ridge and swale complexes.
- The EIS should include lower power levels as alternatives to the proposed 1,100-megawatt turbines. Alternate power levels would result in varying numbers of turbines and array options.

- Alternative energy options should be considered such as onshore wind farms, electricity generation from tidal movements, or solar energy.
- Commenters expressed concern that the reliability of offshore wind power has not been demonstrated in the U.S. for the Project size proposed. Many commenters urge BOEM to "go slow." Others suggest building a test facility to confirm benefits and impacts before building out the complete proposed Project.

2.3.3 Bats

Bat comments included several references noting which species are found to forage or rest in the Lease Area and stressed the need to evaluate and consider turbine risks to bats. Topics raised in this category included the following:

- The EIS should consider the range of potential bat species to forage and rest in or near the Lease Area, including those species protected under the Migratory Bird Treaty Act (MBTA) and the Endangered Species Act (ESA). Some bat species can be found up to 70 nautical miles away from seashore.
- Ocean Wind should adopt a precautionary approach for bats in all steps of offshore wind energy development due to limited understanding of the risk for bats to collide with turbines in the Project area.
- Commenters expressed concern that wind turbines will injure or kill bats moving through the Project area.

2.3.4 Benthic Resources

Benthic resource comments included the need to address biological, structural, or habitat impacts on benthic species and their habitat. Benthic habitat refers to habitat on the sea floor, including natural structures and vegetation. Topics raised in this category included the following:

- Ocean Wind should use best engineering practices when designing export and array cables to minimize impacts on the sea floor.
- The EIS should evaluate the effects of WTG installation on surface flow turbulence and the Mid-Atlantic cold pool, particularly in relation to current impacts due to climate change.
- The EIS should include an analysis of the effects of future maintenance activities, such as remedial burial events, within protected benthic habitats and describe the proposed mitigation measures.
- Commenters noted that new hard structures on the ocean floor could create artificial reefs, which could increase biodiversity but also lead to displacement and introduction of invasive species.
- The EIS should include an assessment of species status and habitat requirements for benthic, demersal, bentho-pelagic, and pelagic species and infaunal, emergent fauna, and epifaunal species living on and within surrounding substrates.
- The EIS should analyze the ecological and economic impacts from the loss of seabed and the associated loss of benthic communities, including impacts on the forage base for other marine species due to construction, operation, and decommissioning activities. The analysis should discuss impacts due to habitat conversion from facility installation using site-specific data and an evaluation of impacts on higher trophic levels.
- Commenters expressed opposition to the Project due to concerns regarding the environmental impacts on the ocean floor, particularly involving the installation of drilled piers and underwater cables, and impacts on the cold pool.

- Commenters raised concerns regarding the loss of marine life in the Project area due to avoidance of construction activities and modification of habitat.

2.3.5 Birds

Bird comments included addressing biological, structural, or habitat impacts on the species or their habitat. Topics raised in this category included the following:

- BOEM should continue to interpret the MBTA to encompass "incidental takes" of migratory birds, including from wind turbines, and should disregard the U.S. Department of the Interior Memorandum M-37050 (December 22, 2017), "The Migratory Bird Treaty Act Does Not Prohibit Incidental Take," which has been found to be unlawful in court.
- The EIS should consider the full range of potential impacts on all bird species known to migrate, forage, and rest in or near the Lease Area, including those species protected under the MBTA and the ESA.
- The EIS should consider birds' avoidance of previously used habitats and extension of migration routes to avoid wind farms.
- The EIS assessment of cumulative impacts on birds should consider other proposed wind farms, habitat loss, and climate change.
- BOEM should implement a delta flight deviation detection system as a monitoring approach.
- BOEM should collect and evaluate data on bird species' vulnerability before, during, and after wind turbine construction to inform decision-making, improve mitigation, and advise future offshore wind efforts.
- The EIS should consider a 20-kilometer buffer around the Lease Area to capture annual and seasonal variations in avian movement within and around the Project.
- The EIS should consider the impacts of weather on bird behavior and collision risk, including flight altitude. These impacts should be evaluated and not dismissed as "atypical" given the potential for climate change to alter weather patterns.
- The EIS should consider population-level impacts on local populations. Concerns were raised over limitation of the data used in the COP, due to the roughness of estimates at the smaller scale of the Lease Area.
- Ocean Wind should adopt a precautionary and conservative approach for birds in all steps of offshore wind energy development due to limited understanding of the risk for birds to collide with turbines in the Project area. The Draft EIS should use Collision Risk Modeling (CRM) and be transparent about the limitations and uncertainty in the underlying data and analysis. A range of turbine specifications could influence collision risk, such as air gap, total rotor swept zone, turbine spacing, number of turbines in the array, and turbine height. In addition, density of flocks during different types of behaviors (e.g., migration, feeding) could influence collision risk. Suggested CRM models under development include the C-D CRM for seabirds from the Shatz Energy Research Center and stochastic CRM for ESA-listed species in southern New England from the University of Rhode Island.
- BOEM should use data from appropriate survey methods for each species, based on size, population levels, frequency of presence in the Project area, and altitude. Satellite telemetry technology and pressure sensors were recommended for large birds, and radio telemetry for smaller-bodied birds. Limitations of various survey and monitoring methods were noted, especially for migrating birds (based on seasonal timing of activity versus data collection frequency), species with daytime versus nighttime activity, species with small populations (who will be harder to detect), species that are difficult to distinguish due to size or similarity to other species, and species who displace themselves from surveys or wind farm arrays. Digital, vessel,

and aerial surveys; marine radar monitoring; and acoustic monitoring could be used together to contribute to a robust dataset. Using the Identiflight avian detection system was recommended. Recommended additional data sources include Movebank and the National Aeronautics and Space Administration's ICARUS and AMASS projects.

- The EIS should discuss the biases and limitations of data from the monitoring and survey methods used. The EIS should use impact analysis models that account for limitations in the raw data and standardize across data sources. Reporting of results should include high and low estimates to communicate uncertainty and include seasonal risks (instead of just annual). It was requested that the data and analyses incorporated into the Draft EIS be made available to the public.
- BOEM should develop a plan to evaluate displacement impacts over the next decade or more as additional offshore wind facilities are expected to be built in the Atlantic.
- The EIS should evaluate these species of concern: piping plover, red-throated loon, horned grebe, great shearwater, Audubon's shearwater, black skimmer, back-capped petrel, gull-billed tern, common tern, least tern, Hudsonian godwit, upland sandpiper, whimbrel, arctic tern, roseate tern, black-legged kittiwake, Leach's storm-petrel, long-tailed duck, Atlantic puffin, chimney swift, black scoter, common eider, semipalmated sandpiper, blackpoll warbler, razorbill, sooty shearwater, red knot, buff-breasted sandpiper, American golden-plover, Bicknell's thrush, black-bellied plover, bobolink, Connecticut warbler, pectoral sandpiper, solitary sandpiper, northern gannets, white-rumped sandpiper, American oystercatcher, and Ipswich sparrow.
- The EIS should consider species prioritized for conservation by avian expert partners (such as including the Atlantic Flyway Shorebird Initiative, Partners in Flight, Atlantic Coast Joint Venture, and North American Waterbird Plan) in addition to ESA listing and International Union for Conservation of Nature Red List status.
- The EIS should consider time of year and other conditions for the construction of the wind energy facilities. There should be practices followed during construction to avoid bird migration season to minimize the number of collision deaths. There should be practices during onshore, beach, and intertidal construction to avoid harm to chicks, nests, and foraging birds.
- BOEM should study bird collisions at offshore wind facilities in more depth during operations. Ocean Wind should make bird collision data publicly available, and commit to upgrading collision monitoring technology, as available, as part of an adaptive management strategy.
- Ocean Wind should employ a designated person to monitor the habitat and wellbeing of birdlife, considering Cape May County is recognized as a significant bird destination.
- BOEM should follow monitoring protocols in development by the New York State Energy Research and Development Authority and U.S. Fish and Wildlife Service for automated radio telemetry.
- There should be a commitment to, and process outlined for, addressing unforeseen impacts through compensatory mitigation.

2.3.6 Climate Change

Comments related to climate change focused on the urgency to develop renewable energy options to offset the use of fossil fuels and slow climate change. Topics raised in this category included the following:

- There are many climate-related issues that threaten this area including sea level rise, ocean temperatures, shifting species distribution, ocean acidification, and severe weather. Renewable energies are a helpful step to combatting climate change and lessening these impacts.

- The proposed Project should implement coastal resiliency and adaptation for sea level rise for onshore and offshore facilities.
- The EIS should account for the environmental benefits this Project can offer related to climate change.
- There are economic impacts associated with climate change. The EIS should include the social cost of carbon.
- Support for the proposed Project was expressed as a way to reduce fossil fuel emissions and provide a cleaner energy option. The cost of doing nothing is much greater.
- Some commenters expressed the opinion that offshore wind is not the answer to solving the climate crisis.
- The impacts from global climate change are greater than the impacts possible from the proposed Project and we must start implementing renewable energy projects and turn away from fossil fuels.

2.3.7 Coastal Habitat and Fauna

Coastal habitat includes those areas closer to the shoreline than offshore waters. Topics raised in this category included the following:

- The EIS should comply with New Jersey's coastal policies for "Prime Fishing Areas," including rules for siting submarine cables.
- BOEM should consult and coordinate with the U.S. Army Corps of Engineers Planning Programs and Project Management Division, NJDEP's Division of Coastal Engineering, and New Jersey Department of Transportation.
- The EIS should identify all potential impacts of onshore substations on coastal habitat and wildlife.
- The EIS should identify impacts on seagrass beds from construction (including laying cables), operation, and vessel traffic. An analysis should include conducting surveys to identify seagrass beds affected by the Proposed Action and identifying how recovery may be hindered due to cumulative impacts (e.g., water turbidity).
- The EIS should identify impacts on stormwater runoff and coastal flooding.

2.3.8 Commercial Fisheries and For-Hire Recreational Fishing

Comments discussed economic and social aspects or impacts on commercial fisheries, commercial fishing operations, and for-hire recreational fishing operators. Topics raised in this category included the following:

- BOEM should comply with requirements of the Magnuson-Stevens Fishery Conservation and Management Act.
- BOEM should coordinate and consult with the National Oceanic and Atmospheric Administration's Northeast Fishery Science Center, including identifying the most appropriate data on fisheries and socioeconomic impacts. Additional information may be found from Council-managed fisheries (e.g., www.mafmc.org and www.nefmc.org) and the American Sportfishing Association. The EIS should gather additional information where data are sparse, such as for recreational fisheries.
- The EIS should consider the decrease in fishing opportunities due to areas leased by BOEM when assessing impacts on fisheries. It is important to identify the value of fishing grounds lost compared to the remaining available grounds, and potential to contribute to overfishing of areas outside of the Lease Area.

- Commercial fishing in the Project area is a significant economic driver for multiple states in New England and the Mid-Atlantic. The EIS should consider all economic impacts on fisheries, vessels in transit, and fishery participants.
- The EIS should consider impacts on low-value species that are used as bait for high-value species and seasonally important fisheries.
- Commenters requested access to the Lease Area for fishing and transit during operation of the wind farm. It was recommended that offshore wind structures fall under existing U.S. Coast Guard regulations regarding "aids to navigation."
- It was noted that not all fishing gear types will be usable in the offshore turbine array spacing, and requested that the EIS consider greater array spacing to accommodate additional gear types. If the Lease Areas are closed to certain gear types, it was requested that mitigation be considered to offset fishery losses.
- The EIS should address benefits to fishermen of artificial reef effects from turbine foundations, as well as limitations due to navigation challenges and safety concerns with fishing around these structures and due to changes in vessel traffic.
- The EIS should address whether artificial reef effects around turbine foundations will negatively alter the abundance in adjacent fishing areas, including the inshore waters. This could have impacts on recreational fishing from shore.
- It is requested that decommissioned turbine structures be left on the sea floor as marine habitat and that BOEM provide the positions to the fishing community.
- Commenters observed that it is confusing that impacts on private recreational fishing are captured in the *Recreation and Tourism* category instead of with for-hire recreational fisheries, as impacts are likely similar.
- Commenters expressed concern regarding the lack of current scientific evidence regarding anticipated effects on the commercial and recreational fishing and tourism industries from offshore wind development, particularly effects on the cold pool and electromagnetic fields (EMF) and how those affect marine life and ecosystems.
- Commenters expressed support for the Project and requested that Ørsted commit to providing fishing access to the offshore development area and commit to early public involvement and engagement.
- Commenters observed that fisheries will also be affected by climate change and overfishing (or regulations intended to prevent overfishing).
- Commenters suggested that impacts on the fishing industry could have economic impacts on the local restaurant industry.
- Commenters suggested that fishing communities be compensated for potential losses as a result of the Project.

2.3.9 Cultural, Historical, and Archaeological Resources

Comments related to cultural resources include those related to archaeological, historic architectural, or tribal resources or concerns. Topics raised in this category included the following:

- BOEM should ensure compliance with Section 106 of the National Historic Preservation Act including adequate consultation with State Historic Preservation Offices and other stakeholders throughout the EIS process.
- BOEM should recognize tribes' sovereign status and provide adequate government-to-government consultation with tribal governments throughout the EIS process.

- Commenters expressed concern regarding the potential of the Project to cause direct disturbance to archaeological resources, historic architectural resources, and historic properties.
- The EIS should consider the offshore shipwrecks not currently listed for historic preservation but with the potential for listing.
- Commenters expressed the opinion that the foundations of historic structures (including those in the Ocean City Historic District) may be damaged by excavation for the installation of cables.

2.3.10 Demographics, Employment, and Economics

2.3.10.1 Recreation and Tourism

Comments related to onshore or offshore recreation as well as tourism activity associated with these resources, such as whale watching, boat rentals (except for fishing), onshore sports leagues, or revenue-generating tourist facilities, are captured in this section. Topics raised in this category included the following:

- Many commenters felt that the turbines would be too close to the shore and expressed concern that the turbines being visible from beaches and tourist facilities could dissuade tourists from visiting and recreating in these areas, ultimately negatively affecting the local economy and property values. Commenters cited studies showing the estimated loss of tourism revenue and property values and rentals based on the visible impacts of offshore turbines.
- The blinking lights on the turbines would create visual pollution at night from the shoreline and dissuade tourists from visiting these coastal areas.
- The hospitality and tourism industry could suffer as a result of the turbines being visible from the shoreline. Local wildlife, vegetation, and beach vistas that draw tourists to the area would be adversely affected by the proposed Project and result in decreased tourism.
- Commenters suggested that BOEM hire an independent third party to create visual renderings of the turbines as well as perform a detailed study of the adverse economic impacts on coastal communities where the turbines will be visible.
- Other commenters felt that the turbines being visible from shore would either not affect tourism or could encourage tourism and cited examples of places where tourism has increased due to offshore wind farms being built where tourists had requested rooms with views of the turbines.
- Commenters felt that the Project would have negative impacts on real estate and the sales market, and would decrease property values. Commenters noted that the WTGs would be clearly visible from the shoreline, leading to property value depreciation, impacts on the tourism industry, rental property vacancies, and increased sight pollution.
- The EIS should address how recreational boating and water sports, such as wind surfing, may be affected by the Project.

2.3.10.2 Employment and Job Creation

Comments related to employment and job creation as a result of the construction, operation, and maintenance of the proposed wind farm are captured in this section. Topics raised in this category included the following:

- The offshore wind farm would diversify and strengthen the economies of coastal communities as well as provide new job opportunities, resulting in a beneficial economic impact. Commenters provided estimated numbers of dollars the proposed wind farm is expected to generate as well as numbers of potential job projections for construction, operations, and maintenance of the proposed turbines.

- Commenters were supportive of Ocean Wind's Pro-Grant Trust that will provide grants to small, women-owned and minority-owned businesses interested in entering the offshore wind industry. Commenters also commended Ocean Wind's commitments to hiring locally; union neutrality agreements; collective bargaining agreements; diversity, equality, and inclusion; and prevailing wages.
- Other commenters were concerned that manufacture of the turbines is performed overseas, and the main job growth opportunity for local communities will be short term during construction of the turbines. These commenters were concerned that long-term operation and maintenance of the turbines will be automated and therefore would limit the number of long-term job opportunities for local communities.
- Commenters expressed concern regarding the short-term nature of jobs and employment associated with offshore wind turbine installation and construction activities, and requested that Ørsted provide better employment estimates and benefits.
- Commenters stated that loss of jobs in the county associated with visual and environmental impacts from offshore WTGs will be devastating to the fishing and tourism industry, which will exist year after year, while jobs from the Project would be temporary.

2.3.10.3 Other

The category captures other demographics, employment, and economics topics that were not captured in the subcategories above. Topics raised in this category included the following:

- The EIS should address the concern that using offshore wind energy would not be cost-effective for consumers and taxpayers including residents and businesses. Commenters feared that electricity rates and prices would rise from using offshore wind and not be offset by any subsidies. Examples were provided of existing offshore wind facilities providing degrading energy over time.
- The EIS should confirm that the New Jersey power grid is capable of handling the new flow of offshore wind energy and that there would be no short- or long-term energy storage solutions.
- BOEM should fully consider the cumulative economic impacts associated with the Project on demographics, employment, and economics as well as future growth in the offshore wind industry by accurately estimating investments versus economic output and job creation. Some commenters felt that a cost-benefit analysis of potential economic factors would be useful.
- Numerous comments were submitted regarding concerns that Project costs will be passed on to taxpayers.
- Some commenters noted general support for the Project and stated that the Project would not increase energy prices.
- Concern was raised that the proposed facility would represent an inequitable economic burden on a largely seasonal population, due to the seasonal variations in wind power generation being greater during winter months, when the population of the region is greatly diminished. Commenters felt the Project would distribute the cost of construction, operation, maintenance, and dismantlement on a relatively small population of southern New Jersey homeowners who can least afford the burden.
- Concern was raised that the main economic benefits would be external to the U.S.

2.3.11 Environmental Justice

Comments pertaining to environmental justice included suggestions to assess adverse impacts on and benefits to these communities. Topics raised in this category included the following:

- Fossil fuel power plants are sited disproportionately close to environmental justice communities. The EIS should consider the benefits the proposed Project could bring to these communities.
- Coastal and fishing communities often have large minority and low-income populations. The EIS should account for impacts on these communities and consider Executive Orders 12898, 13985, and 13175.

2.3.12 Finfish, Invertebrates, and Essential Fish Habitat

Finfish, invertebrates, and Essential Fish Habitat (EFH) comments address fish, crustaceans, and other sea animals (other than sea turtles or marine mammals). Topics raised in this category included the following:

- Commenters noted concern that the Project could disrupt the Mid-Atlantic Cold Pool, and discussed the need for the EIS to thoroughly analyze impacts on the cold pool and resulting effects on oceanographic processes, ecosystems, marine species life cycles, EFH, and the fishing industry. Commenters stressed that strong scientific understanding and supporting research of how the Project would alter abiotic factors such as changes to primary productivity, ocean stratification, distribution and availability of prey species, ocean currents, and temperature stratification should be developed prior to moving forward with Project approval.
- The EIS should include a robust analysis of the effects of construction, operation, and decommissioning activities on managed and protected finfish and invertebrate species, and EFH, with particular attention given to the effects of the Project on areas that have been designated as Habitat Areas of Particular Concern under the Magnuson-Stevens Fishery Conservation and Management Act, and to critically endangered species.
- The EIS should include an analysis of impacts on habitat displacement and conversion of marine habitats resulting from the introduction of new hard surfaces to the ocean floor.
- The EIS should include detailed information on the effects of Project construction and operations on highly migratory species, such as the federally listed as endangered Atlantic sturgeon, striped bass, tuna, swordfish, billfish, small and large coastal sharks, and pelagic sharks, and analyze potential disruptions to migrating patterns.
- The EIS should disclose potential impacts on benthic invertebrates such as the American lobster and the Horseshoe and Jonah crabs.
- The EIS must complete a thorough evaluation of impacts at cable landfall sites, particularly on vegetated coastal habitats occurring in both Barnegat Bay and Great Egg Harbor.
- Commenters noted that BOEM must protect the integrity of Island Beach State Park and the barrier islands at Barnegat Bay that could be affected by the Project's construction or operation.
- An EFH Assessment should be completed for the Project that includes analyses of all potential impacts, including temporary and permanent and direct and indirect individual, cumulative, and synergistic impacts of the proposed Project.
- Commenters noted concern for impacts on the scallop industry caused by disruption to the ocean's thermal layers from placement of WTG foundations.
- Commenters expressed concern that the Project would negatively affect the summer flounder commercial and recreational industry in south New Jersey due to EMF avoidance behaviors shown in studies conducted at offshore wind projects in Europe.

2.3.13 Land Use and Coastal Infrastructure

Comments focused on the importance of protecting the coastal habitats. Topics raised in this category included the following:

- The EIS should fully evaluate impacts at cable landfall locations, including impacts on submerged aquatic vegetation and coastal habitats.
- The EIS should propose mitigation to minimize the impacts on the barrier islands. Impacts should be minimized at ecologically important areas such as the Island Beach State Park and the Barnegat Lighthouse State Park.
- Commenters expressed concern regarding the installation of electric cables in flood zones beneath Ocean City and the impacts on the environment, flood mitigation efforts, and traffic.

2.3.14 Marine Mammals

Comments about marine mammals that address biological, structural, or habitat impacts on the species or their habitat, including species listed under the ESA and Marine Mammal Protection Act. Topics raised in this category included the following:

- The EIS should carefully identify existing population trends, habitat availability and foraging activity, and species vulnerability and thoroughly analyze all potential impacts from construction, operations, and decommissioning activities on the critically endangered NARW.
- The EIS should analyze alternatives that minimize impacts on NARW, and describe avoidance, minimization, and mitigation measures to ensure protection of the species, such as ESA requirements for all vessels to maintain a separation distance of at least 500 meters from NARW at all times.
- The Project should not be sited in NARW Seasonal Management Areas or in areas where potential persistent or long-duration Dynamic Management Areas are established.
- The EIS should incorporate the most recent and up-to-date scientific studies conducted for large whale species, including fin whale, humpback whale (*Megaptera novaeangliae*), NARW (*Eubalaena glacialis*), blue whale (*Balaenoptera musculus*), sei whale (*Balaenoptera borealis*), and sperm whale (*Physeter macrocephalus*). The New York State Department of State encourages these data and findings to be incorporated into the environmental review and to include the most recent and up-to-date scientific studies conducted for these species and considered when developing Project-specific environmental protections.
- The EIS should include a range of alternatives that protect sensitive or endangered species known to be present in the Project area.
- The EIS should include the most current, best available science and scientific studies into the environmental review, and must consider a variety of local and regional data sources for conducting an analysis of the immediate and cumulative effects of the Project on marine mammals, particularly on species listed under the ESA and Marine Mammal Protection Act.
- BOEM must ensure that any potential stressors posed by site assessment activities on affected species and stocks are avoided, minimized, mitigated, and monitored to the fullest extent possible.
- The EIS should analyze the impacts of climate change on migratory marine mammal species.
- The EIS should analyze impacts from noise pollution and the risk of increased vessel strikes from construction and operations activities.
- The Affected Environment analysis in the EIS should include information on the seasonal abundance and distribution of marine mammals, sea turtles, ESA-listed marine fish, anticipated

habitat uses (e.g., foraging, migrating), threats, and habitats and prey these species depend on throughout the area that may be directly or indirectly affected by the Project.

- Commenters expressed concern that the Project would affect dolphin and porpoise populations, and cause harm to other marine wildlife.
- Commenters expressed concern that many ecological and environmental impacts on marine species are unknown and being overlooked in the analysis of the Project.

2.3.15 Mitigation and Monitoring

Comments related to mitigation measures to address potential impacts and monitoring of biotic and abiotic conditions. This includes comments on already proposed mitigation and monitoring measures, as well as suggestions for additional mitigation and monitoring strategies for the proposed Project. Topics raised in this category included the following:

- Commenters requested mitigation measures be coordinated across the Atlantic Outer Continental Shelf and for BOEM to use monitoring data to inform future projects. Additionally, commenters requested ongoing transparency in mitigation and monitoring measures and that monitoring data be reported as appropriate.
- Monitoring should be conducted before construction to assess baseline conditions, during construction and pile driving, and post-construction to address potential disturbance and recovery over time.
- The EIS should include proposed mitigation requirements to reduce vessel strikes to NARW, bird and bat collisions, and habitat impacts.
- The EIS should explain if and how financial compensation would be provided to commercial fisheries to offset potential losses to fish stock and navigation risks.
- The EIS should include plans for compensatory mitigation for unavoidable impacts on birds.

2.3.16 Navigation and Vessel Traffic

Comments related impacts on the ability to operate and navigate personal or commercial vessel and potential increases of vessel traffic. Topics raised in this category included the following:

- Commenters indicated that the currently proposed navigation lanes between turbines are not large or numerous enough. Suggested navigation lanes were between 2 and 4 nautical miles.
- Commenters indicated that submarine cables that are not properly sited, not buried deep enough, or not sufficiently maintained present a hazard to navigation.
- The EIS should address turbine blade interference with radar transmitters, which may inhibit safe navigation of the site.
- The EIS should clarify whether any restrictions will be imposed on anchoring and navigation around cables/corridors.
- Commenters noted the increased risk and danger of collision with turbines for both commercial and recreational vessels, especially during inclement weather.
- The EIS should address the turbines' impact on access to existing fishing locations and potential impacts on meeting fishing quotas as more time is spent navigating through the Project site.
- The EIS should address how helicopter and tugboat rescue operations will be affected by the proposed Project.
- Commenters noted that recreational vessels are not frequently equipped with good avoidance equipment or the same safety gear as commercial vessels.
- Commenters requested a higher-resolution nautical chart of turbine locations for fishermen to use.

2.3.17 NEPA/Public Involvement Process

Comments related to the preparation of the EIS and the NEPA process, including how public stakeholders, state and federal agencies, and tribes will be engaged. Topics raised in this category included the following:

- The environmental review process should continue coordination with local stakeholders, including the recreational and commercial fishing communities, state and federal agencies, and tribes.
- Commenters expressed a lack of trust in the public involvement process, citing a lack of advertisement for and awareness of public involvement opportunities and that the public's concerns were not being incorporated into the Project design. Commenters also cited dissatisfaction in the timing of public involvement, stating that involvement should have began earlier in the process.
- BOEM should ensure that decisions are being made with the best available science and in alignment with applicable state and federal laws.
- The EIS should provide clarity on how the 2020 changes to the Council on Environmental Quality NEPA Regulations and revocation of Executive Order 13807 will affect the NEPA process for this Project.
- Commentors indicated that information and data used to make decisions should be made publicly available.
- Commenters raised concerns that the initial selection of Lease Areas did not adequately consider visual or environmental impacts and did not have sufficient public involvement.
- Commenters stated that the Project development and permitting should be paused until local, long-term studies identifying the impacts on the fishing industry, wildlife and the sea floor and the effects of EMFs are conducted.

2.3.18 Other Resources and Uses

Comments related to aviation, marine minerals, military, research activities, and other resources.

2.3.18.1 Aviation

Topics raised in this category include the following:

- Commenters were concerned that the Project could affect airplane traffic.
- Commenters asked if the turbines will be illuminated at night to avoid plane crashes and requested a photometric study be conducted and provided to residents and local governments.

2.3.18.2 Military

Topics raised in this category include the following:

- Concern that a foreign-owned corporation would have a project so close to the United States' shore.

2.3.18.3 Other

Topics raised in this category included the following:

- A commenter noted that offshore wind development continues to be increasingly regional, interconnected, and complex in nature, with project facilities spanning a broad geography and

significant potential for increased interaction with state uses and resources, which are themselves regional and interconnected in nature.

- A commenter was concerned that the Project would affect air traffic patterns, U.S. Coast Guard rescue missions, and military defense endeavors.

2.3.19 Other Topics Not Listed

This generalized comment category was used to collect other substantive comments. Specific topics could include (but are not limited to) coastal zone consistency, noise, materials and waste management, general wildlife, and EMF.

2.3.19.1 Coastal Zone Consistency

Comments that addressed compliance with state Coastal Management Program(s). Topics raised in this category included the following:

- New York State has a Coastal Management Program and has requested approval to undertake a federal coastal consistency review of the Ocean Wind COP. Concerns include reasonably foreseeable effects on New York's commercial shipping and navigation.

2.3.19.2 Noise

Comments addressed noise associated with construction and operations, including low-frequency noise. Topics raised in this category included the following:

- The EIS should address the duration and continuity of construction noise and vibrations and impacts in air and water.
- The EIS should identify the level of low-frequency noise generated by operation of the turbines, how far it will propagate, how it compares to the baseline noise levels, and impacts on human health, wildlife, and historic structures.
- The EIS should use monitoring data from existing U.S. offshore wind farms to analyze construction and operation noise from Ocean Wind's Proposed Action.
- The EIS should identify cumulative impacts of reasonably foreseeable offshore wind projects in the New York-New Jersey Bight and vessel noise.
- The EIS should include alternatives to require noise reduction technologies and establish compliance requirements for noise mitigation measures.
- The EIS should conservatively consider noise impacts on marine species, taking into account the vulnerability of populations, available scientific evidence regarding National Marine Fisheries Service acoustic thresholds, effects on prey populations, and identifying data gaps.
- The EIS should include monitoring data to fill existing information gaps on noise impacts on marine species.
- The EIS should consider the 2018 World Health Organization guidelines for human health effects from wind turbine noise.
- The EIS should address whether construction noise will reach nearby beaches and relevant fishing areas.

2.3.19.3 Materials and Waste Management

Comments addressed the fate of materials and potential risks of materials/waste spills. Topics raised in this category included the following:

- The EIS should address the lifespan of the turbines, the method of decommissioning, and the impacts of disposal and develop a Life Cycle Assessment.
- The EIS should address the potential leakage of hazardous materials during construction, operations, and decommissioning.
- The EIS should address discharge (e.g., bilge water, ballast water) from vessels associated with construction and operation of the turbines.
- The EIS should address whether there are any risks due to waste or explosions from batteries used in the wind turbines during operation or disposal.
- The EIS should identify where funding for decommission and disposal of the wind farm will come from and what economic impacts that could have.
- The EIS should address the impacts from materials and waste at nearby beaches during construction.
- The EIS should identify the cleanup process for material leaks or spills.
- The EIS should address how risks in material/waste leaks or spills may change over the operational lifetime of the turbines.
- The EIS should address the environmental cleanup at the existing power plant site that is proposed as electrical power storage for this project.

2.3.19.4 General Wildlife

Comments addressed harm or death to multiple types of species due to construction and operation. Topics raised in this category included the following:

- The EIS should include the National Oceanic and Atmospheric Administration as a cooperating agency and conduct appropriate consultations.
- The EIS should include consideration of invasive species through artificial structures and vessel operations.
- The EIS should consider impacts on species' migration patterns and food webs.
- The EIS should address uncertainty in understood impacts of offshore wind farms on wildlife.
- The EIS should address potential minimization measures to reduce impacts on wildlife.
- The EIS should address impacts on the Edwin B. Forsythe National Wildlife Refuge.
- The EIS should address the impacts of turbine and vessel lights on wildlife.
- The EIS should consider long-term impacts on wildlife species.
- The EIS should evaluate the potential mitigation strategies for wildlife impacts presented in the COP.

2.3.19.5 Electromagnetic Fields (EMF)

Comments addressed the potential impacts of EMF on wildlife and humans. Topics raised in this category included the following:

- The EIS should consider published research on the effect of EMF on wildlife, including effects on migration/orientation and other behaviors.
- The EIS should evaluate the potential for EMF risk to humans.
- The EIS should consider ways to minimize the impacts of EMF on wildlife.
- The EIS should identify and address uncertainty in the potential for EMF impacts on wildlife and humans.

2.3.19.6 Other

Topics raised on other themes included the following:

- The EIS should explain how the wind farm will be secured from intentional harm.

2.3.20 Planned Activities Scenario/Cumulative Impacts

Comments on cumulative impacts suggested that the EIS include the full range of reasonably foreseeable projects, especially all potential offshore wind projects. Cumulative impacts could be severe for many different resources. Topics raised in this category included the following:

- The EIS should analyze and report the cumulative effects on all affected resources including marine mammals, birds, endangered species, navigation, commercial and recreational fisheries, cold pools, noise, vessel strike risk, habitat displacement, and oceanographic conditions.
- The cumulative impacts assessment in the EIS should include the combined impacts from the proposed Project and all other past, current, and foreseeable activities, including all 16 offshore wind lease areas and all projects currently proposed off the East Coast.
- The cumulative impacts assessment in the EIS should consider future regional transmission projects, offshore oil and gas projects, sand mining, aquaculture, vessel activity, fisheries management activities, and other development projects.
- The Biden Administration has jumpstarted the offshore wind industry. The foreseeable projects included in the cumulative analysis should consider all East Coast plans for future wind farms and upgrades to ports.
- The EIS should consider possible mitigation measures to address cumulative impacts and coordinate closely with other agencies. Integrated monitoring approaches should be implemented to coordinate among the various offshore wind projects.
- BOEM should develop regional construction schedules to coordinate with all offshore projects to reduce overlapping construction impacts, especially noise.
- The EIS should include cumulative impacts on species farther outside the immediate Project area. Prior BOEM analyses have focused the impacts to the Project area but the study area should be expanded.
- The cumulative impact assessment in the EIS should consider the long-term beneficial impacts from pursuing offshore wind.
- BOEM should prepare a programmatic EIS for the NARW, covering all East Coast development.

2.3.21 Proposed Action/Project Design Envelope

Comments that addressed the Proposed Action and the Project design envelope included suggestions to consider alternate technologies, account for impacts from all Project components, collaborate with adjacent wind farms, and undergo comprehensive surveys. Topics raised in this category included the following:

- The EIS should include construction methodologies to be utilized at the landfall locations and the export cable routes. The impacts associated with each construction/installation method and route would differ and should be identified in the EIS.
- The EIS should consider impacts from all construction activities including the deposition of fill material, dredging, water withdrawals, pile driving, vessel traffic, anchoring, and installation.
- The EIS should analyze the impacts associated with the onshore facilities needed to accommodate the proposed Project, including more detail on the use of various ports during construction than currently included in the COP.

- The EIS should explain how the wind farm will generate the expected amount of energy, who will be purchasing the generated electricity, what it will be used for, and how the manufacturer will work with current electricity suppliers, distributors, regulators, and communities.
- The EIS should include safety protocols to keep the wind farm secure and identify any lighting involved.
- The EIS should consider how high winds and storms will damage the turbines.
- The proposed Project should apply the same exclusion zone of 17.3 miles to be consistent with New York.
- The proposed Project should use the landfall in Ocean City, located at 35th Street.
- The onshore cable corridor to Oyster Creek plant should use existing waterways to avoid impacts on residential communities.
- The baseline must be established with comprehensive surveys at locations of all related infrastructure before any work begins.
- The EIS should explain what materials are being used for the turbines, including how the underwater structures are developed to avoid corrosion. Ocean Wind should consider using base structures that crabs and shellfish would attach to, as opposed to smooth monopiles.
- Ocean Wind should consider if it can share any infrastructure or cable corridors with the Atlantic Shores Lease Area. BOEM should evaluate the extent to which coordination may be required between Atlantic Shores and Ocean Wind.
- The construction schedule must be developed to minimize interactions with migratory species and construction should be prohibited during seasons when protected species are present. Restrictions should be put in place to shut down construction if a protected species is detected.
- Ocean Wind should consider analyzing even larger turbines to account for improved technologies prior to construction. Alternatively, the proposed Project should wait and use the next technological advancement with bladeless windmills or floating windmills.
- If the COP is revised to include any additional information, the agencies will need time to assess these changes. The COP from March 2021 is missing critical information including WTG capacity.
- Commenters questioned if BOEM would reopen review of the Project if the current cable routes are not approved by the City of Ocean City, or the routes change.
- The impact analyses, including visual renditions, need to be conducted by a non-biased third-party, not the Project proponent.
- The EIS should include the decommissioning process for the cables after the lifespan of the wind farm.
- The EIS should identify how cable burial depth will be maintained throughout the life of the Project.
- The EIS should explain why the use of multiple cables is necessary.
- The EIS should explain who will pay for the Project components and how long construction will take.
- The EIS should address the risk of turbine blades freezing or otherwise failing during cold weather during the winter and how that will affect energy supply. Similarly, the EIS should identify where there is a backup system.
- The EIS should identify how deep in the ocean floor the piers need to be drilled, the volume of concrete to be drilled, and whether that will affect sea level.

- Commenters identified challenges or limitations to connecting the project to the existing New Jersey power grid and the lack of short- and long-term storage.
- Commenters requested that the lease location be reanalyzed to reduce visual impacts based on the current turbine sizes and technology available. BOEM analyzed the lease location when much smaller turbine technology was available, and the current turbines being considered for the Project are considerably larger.
- Commenters requested clarification on the type of WTG foundations being proposed for the Project.
- A commenter questioned the schedule of construction to lay the onshore export cables, noting that the time to obtain road opening and closing permits was not taken into account. The commenter also noted that road closing permits must include provisions for handicapped-accessible pedestrian detours.

2.3.22 Purpose and Need

Comments on the purpose and need related to the goal of meeting state and federal goals, turning to other energy options, and shifting focus from the applicant's interests. Topics raised in this category included the following:

- Some commenters expressed opposition to the proposed Project in favor of other options to reduce carbon emissions before turning to offshore wind, including incentivized carbon-reduction programs, electricity consumption reduction methods, improvement of vehicle emissions, solar energy, and improved efficiencies at existing facilities.
- Some commenters expressed support for the proposed Project as a way to contribute to New Jersey's energy goals, align with Governor Murphy's offshore wind goals, and meet the White House's call for renewable energy, associated job creation, and stronger domestic supply.
- The primary purpose and need revolves around reducing our reliance on fossil fuels and creating jobs after a global pandemic.
- The purpose and need should focus on the state and federal purpose and the societal need for the proposed Project. It is not in the spirit of NEPA to focus the purpose and need on the applicant's interest.
- The purpose and need is too vague and general. Without a more specific and detailed purpose and need, it will be impossible to assess the impacts. The vague purpose and need statement does not directly link to the proposed Project.
- Offshore wind would not provide a significant reduction in greenhouse gas emissions and should not be the focus for battling climate change. Commenters felt that with reliability in question, a reassessment of comparative costs is necessary.
- Some commenters expressed concern over the inefficiency and unreliability of wind as a source of power, the expense of building the proposed Project, and the potential damage to the environment they felt the proposed Project could cause. These commenters advocated for other sources of power including nuclear, natural gas, and solar energy.

2.3.23 Sea Turtles

Comments about sea turtles that address biological, structural, or habitat impacts on the species or their habitat included the following:

- BOEM's Ocean Wind NOI identified anticipated negative impacts on sea turtles.

2.3.24 Scenic and Visual Resources

Comments on scenic and visual resources focus on the detrimental impact the wind farm would have on the landscape and viewing experience. Topics raised in this category included the following:

- The proposed Project will be visible from the shoreline and have a detrimental visual impact on the scenic coastline of New Jersey.
- The proposed Project will dramatically alter the landscape and character of the area.
- The visual renderings in the COP and the presentations were poorly done and not representative of the expected impact on visual quality. The EIS should include additional and better renderings.
- Commenters suggested that 15 miles is too close and the visual impacts from the proposed Project would be much higher than currently described. BOEM-conducted studies in New York, Massachusetts, and Rhode Island were cited to support this point.
- Socioeconomic impacts should be included in the visual impact assessment.
- The EIS should include visual renderings of how much of the turbines would be visible at high and low tide; at different elevations from shore (e.g., beach level, first floor of a building, second floor of a building, fifth floor of a building); and during daytime (with clear blue skies), nighttime, sunrise, and moonrise.
- The EIS should include visual renderings from the vantage points closest to the proposed Project (such as Sea Isle, Ocean City, and Avalon).
- The EIS should evaluate visual impacts of light pollution from the wind farm at night and explain how the radar-assisted night lighting would work.
- A commenter thought that the visual impact of the wind farm will be less detrimental than the existing smokestack at Beesley's Point and less detrimental than potential future impacts due to climate change.
- Commenters likened the scenic value of the current natural coastal views in the proposed Project area to that of the Grand Canyon. Commenters characterized the feeling of the current coastal view as serene, tranquil, beautiful, a sanctuary, and peaceful. These feelings were described as important to creating a sense of place for the New Jersey coast.
- A commenter asked about the status of the Rutgers study on visibility.

2.3.25 Water Quality

Common topics raised in this category include the following:

- A concern was raised about the effect of the metal wind turbine towers on water quality.

2.3.26 Wetlands and Waters of the U.S.

Comments on wetlands and waters of the U.S. suggest close coordination and compliance with laws and regulations. Topics raised in this category included the following:

- The EIS should include a range of design and construction measures to avoid and minimize impacts on wetlands, streams, and other waters of the U.S. and explain how the proposed Project would comply with EPA's Clean Water Act regulations.
- Close coordination with the U.S. Army Corps of Engineers, National Marine Fisheries Service, EPA, and state coastal zone management offices is essential during this process.

2.3.27 General Support or Opposition

Many comments expressed general support or opposition for the Project. Some commenters provided comments of support or opposition without providing a justification. Other commenters referred to generic resource topics as a justification for their support or opposition. Commenters are generally supportive of the proposed Project because it may reduce fossil fuel dependance, reduce climate change impacts, increase job opportunities, add to the aesthetics of the ocean view, or add habitat for marine fisheries. Commenters are generally opposed to the proposed Project because it may adversely affect commercial fisheries, cold pools, navigation, marine wildlife and habitat, visual quality, the local economy, or electricity rates. Commenters proposed moving the Project farther from shore, conducting long-term studies to assess potential ecosystem impacts, and adjusting the number and placement of turbines to reduce long-term impacts.

Appendix A. List of Submissions and Individual Comments by Resource or NEPA Topic

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List of Tables

A.1. Index of Comment Submissions Sorted by Submission Number

Table A-1 lists the name and agency or organization affiliation (if any) for each person who provided a scoping submission. The submission identification (ID) number listed below corresponds to the Comment IDs referenced in Section A-2.

Table A-1 List of Submission Identifications, Names, and Affiliations

Submission ID	Name	Government or Non-Governmental Organization Name
BOEM-2021-0024-DRAFT-0001	Michael McCarrick	
BOEM-2021-0024-DRAFT-0002	Kenneth Houseman	
BOEM-2021-0024-DRAFT-0003	Al Paulson	
BOEM-2021-0024-DRAFT-0004	Edward Gorkes	
BOEM-2021-0024-DRAFT-0006	Donald Cocozza	
BOEM-2021-0024-DRAFT-0007	Armen Zaybekian	
BOEM-2021-0024-DRAFT-0008	Robin McConekey	
BOEM-2021-0024-DRAFT-0009	Karen Barlow	
BOEM-2021-0024-DRAFT-0010	Keith Neill	
BOEM-2021-0024-DRAFT-0021	Lee Evans	
BOEM-2021-0024-DRAFT-0025	Devin Pantiliano	
BOEM-2021-0024-DRAFT-0043	Marc Halikas	
BOEM-2021-0024-DRAFT-0060	Lynn Duffy	
BOEM-2021-0024-DRAFT-0063	Joseph DeFinis	
BOEM-2021-0024-DRAFT-0064	John Atkinson	
BOEM-2021-0024-DRAFT-0065	Andy Giordano	
BOEM-2021-0024-DRAFT-0067	Tom Adelsberger	
BOEM-2021-0024-DRAFT-0068	Harley Cummins	
BOEM-2021-0024-DRAFT-0069	John Giordano	
BOEM-2021-0024-DRAFT-0071	Jeremiah Crean	
BOEM-2021-0024-DRAFT-0072	Susan Schwartz	
BOEM-2021-0024-DRAFT-0074	Carol Behl	
BOEM-2021-0024-DRAFT-0075	Jude Kulp	
BOEM-2021-0024-DRAFT-0076	Kathleen Johnson	
BOEM-2021-0024-DRAFT-0077	Robert Henry	
BOEM-2021-0024-DRAFT-0078	Chris Genaro	
BOEM-2021-0024-DRAFT-0080	Donna McManus	
BOEM-2021-0024-DRAFT-0081	Marie Donlevie	
BOEM-2021-0024-DRAFT-0082	William O'Neill	
BOEM-2021-0024-DRAFT-0083	Thomas McGlaughlin	
BOEM-2021-0024-DRAFT-0084	Greg Noll	
BOEM-2021-0024-DRAFT-0085	Robert Lewis	
BOEM-2021-0024-DRAFT-0086	William Georges	
BOEM-2021-0024-DRAFT-0088	Nancy Rosman	

Submission ID	Name	Government or Non-Governmental Organization Name
BOEM-2021-0024-DRAFT-0089	Beth DiFrangia	
BOEM-2021-0024-DRAFT-0090	Louise Halprin	
BOEM-2021-0024-DRAFT-0091	Melissa Haub	
BOEM-2021-0024-DRAFT-0092	William Shillingford	
BOEM-2021-0024-DRAFT-0093	Thomas Duffy	
BOEM-2021-0024-DRAFT-0094	Eric Ediger	
BOEM-2021-0024-DRAFT-0095	Alejandro Meseguer	
BOEM-2021-0024-DRAFT-0096	Maureen Larkin	
BOEM-2021-0024-DRAFT-0097	Anthony Jackson	
BOEM-2021-0024-DRAFT-0098	Mike Fischer	
BOEM-2021-0024-DRAFT-0099	Dave Kurtz	
BOEM-2021-0024-DRAFT-0100	Alexander Ross	
BOEM-2021-0024-DRAFT-0101	Richard Zinck	
BOEM-2021-0024-DRAFT-0102	Robert Pordon	
BOEM-2021-0024-DRAFT-0103	Katherine Prassas	
BOEM-2021-0024-DRAFT-0104		Manora USA, LLC
BOEM-2021-0024-DRAFT-0105	Natalie Georges	
BOEM-2021-0024-DRAFT-0106	Marty Connor	
BOEM-2021-0024-DRAFT-0107	Regina Warren	
BOEM-2021-0024-DRAFT-0108	Jennifer Trofa	
BOEM-2021-0024-DRAFT-0109	William Warren	
BOEM-2021-0024-DRAFT-0110	Paul Livore	
BOEM-2021-0024-DRAFT-0111	Natalie Thibault	
BOEM-2021-0024-DRAFT-0112	Robert and Joann Zuczek	
BOEM-2021-0024-DRAFT-0113	Meaghan Zanfardino	
BOEM-2021-0024-DRAFT-0114	Sal Sal Vitiello	
BOEM-2021-0024-DRAFT-0115	Thom Bonan	
BOEM-2021-0024-DRAFT-0116	Maureen Reilly	
BOEM-2021-0024-DRAFT-0117	Kathleen Daffin	
BOEM-2021-0024-DRAFT-0118	Cindy Sykes	
BOEM-2021-0024-DRAFT-0119	Catherine DeMaio	
BOEM-2021-0024-DRAFT-0120	Justin Matczak	
BOEM-2021-0024-DRAFT-0121	Kevin Clarke	
BOEM-2021-0024-DRAFT-0122		Monmouth-Ocean Development Council (MODC)
BOEM-2021-0024-DRAFT-0123	Joseph Gartland	
BOEM-2021-0024-DRAFT-0124	Patrick Nicastro	
BOEM-2021-0024-DRAFT-0125	Mitch Bernstein	
BOEM-2021-0024-DRAFT-0126	Frank Gallo	
BOEM-2021-0024-DRAFT-0127	Stephen Granieri	

Submission ID	Name	Government or Non-Governmental Organization Name
BOEM-2021-0024-DRAFT-0128	Margaret Doyle	
BOEM-2021-0024-DRAFT-0129	Gerry Lucidi	
BOEM-2021-0024-DRAFT-0130	Barbara J Henderson	
BOEM-2021-0024-DRAFT-0131	Walter Korfmacher	
BOEM-2021-0024-DRAFT-0132	William Morrill	
BOEM-2021-0024-DRAFT-0133	James Hutchinson	
BOEM-2021-0024-DRAFT-0134	Kate Hayden	
BOEM-2021-0024-DRAFT-0136	Courtney Hanscom	
BOEM-2021-0024-DRAFT-0137	Carol Ho	
BOEM-2021-0024-DRAFT-0138		Vacation Rentals Jersey Shore, LLC
BOEM-2021-0024-DRAFT-0139	Sharon M Boettcher	
BOEM-2021-0024-DRAFT-0140	Mike Mrazek	
BOEM-2021-0024-DRAFT-0142	Gary Hymer	
BOEM-2021-0024-DRAFT-0143	Janis Fahey	
BOEM-2021-0024-DRAFT-0144	Janet Rispoli	
BOEM-2021-0024-DRAFT-0145	Wendy Poulos	
BOEM-2021-0024-DRAFT-0146	Angelo Lovallo	
BOEM-2021-0024-DRAFT-0147	Martin Kiesaber	
BOEM-2021-0024-DRAFT-0148	Timothy Krug	
BOEM-2021-0024-DRAFT-0149	Paul Olsen	
BOEM-2021-0024-DRAFT-0150	Rahul Deo	
BOEM-2021-0024-DRAFT-0151	Peter Saretsky	
BOEM-2021-0024-DRAFT-0152	Scott Tzorfas	
BOEM-2021-0024-DRAFT-0153	Mark OMalley	
BOEM-2021-0024-DRAFT-0154	Laurie Cox	
BOEM-2021-0024-DRAFT-0155	Ruela Pabalan	
BOEM-2021-0024-DRAFT-0156	Steve Masselle	
BOEM-2021-0024-DRAFT-0157	Andrew Rackow	
BOEM-2021-0024-DRAFT-0158	Robert Bednar	
BOEM-2021-0024-DRAFT-0159	Jon Ansari	
BOEM-2021-0024-DRAFT-0160	Joseph Celentano	
BOEM-2021-0024-DRAFT-0161	R Paster	
BOEM-2021-0024-DRAFT-0162	Jill Skinner	
BOEM-2021-0024-DRAFT-0163	Bill Yurko	
BOEM-2021-0024-DRAFT-0164	Raymond Carile	
BOEM-2021-0024-DRAFT-0165	Teri Weidlein	
BOEM-2021-0024-DRAFT-0166	Karen Schurig	
BOEM-2021-0024-DRAFT-0167	concerned citizen	
BOEM-2021-0024-DRAFT-0168	Debra Burger-Trillhaase	

Submission ID	Name	Government or Non-Governmental Organization Name
BOEM-2021-0024-DRAFT-0169	Rick Robinson	
BOEM-2021-0024-DRAFT-0170	Calvin Douglass	
BOEM-2021-0024-DRAFT-0171	Terrence Smith	
BOEM-2021-0024-DRAFT-0172	Tabbetha Dobbins	
BOEM-2021-0024-DRAFT-0173	Christopher Martin	
BOEM-2021-0024-DRAFT-0174	Chris Haimbach	
BOEM-2021-0024-DRAFT-0175	Krid Olson	
BOEM-2021-0024-DRAFT-0176	Mark Licker	
BOEM-2021-0024-DRAFT-0178	John Davis	
BOEM-2021-0024-DRAFT-0179	Denise Fanelli	
BOEM-2021-0024-DRAFT-0180	Amy Mrazek	
BOEM-2021-0024-DRAFT-0181	Michael Gross	
BOEM-2021-0024-DRAFT-0184	Christopher Delancey	
BOEM-2021-0024-DRAFT-0185	Ronald Hammell	
BOEM-2021-0024-DRAFT-0186	Sherril BeMent	
BOEM-2021-0024-DRAFT-0187	Arthur Peterson	
BOEM-2021-0024-DRAFT-0188	Donald Horner	
BOEM-2021-0024-DRAFT-0189	Donma Haas	
BOEM-2021-0024-DRAFT-0190	Lou Savastani	
BOEM-2021-0024-DRAFT-0191	Patrick Adams	
BOEM-2021-0024-DRAFT-0192	Thomas Slater	
BOEM-2021-0024-DRAFT-0193	Matthew UebeleUebele	
BOEM-2021-0024-DRAFT-0194	Karen Byington	
BOEM-2021-0024-DRAFT-0196	Lisa Kazunas	
BOEM-2021-0024-DRAFT-0197	Joe Wilson	
BOEM-2021-0024-DRAFT-0198	Dave Rispoli	
BOEM-2021-0024-DRAFT-0199		New Jersey Shore Rentals Coalition, LLC
BOEM-2021-0024-DRAFT-0200	Megan Allen	
BOEM-2021-0024-DRAFT-0201	Jasper Kolimago	
BOEM-2021-0024-DRAFT-0202	Jasper Kolimago	
BOEM-2021-0024-DRAFT-0204		United Boatmen of NJ
BOEM-2021-0024-DRAFT-0205	Molly Grover	
BOEM-2021-0024-DRAFT-0206	Caitlin Liston	
BOEM-2021-0024-DRAFT-0207	Leslie Karvan	
BOEM-2021-0024-DRAFT-0208		Long Beach Island, NJ Coalition for Wind Without Impact
BOEM-2021-0024-DRAFT-0209	Jacqueline Marie McAndrew	
BOEM-2021-0024-DRAFT-0210	Steven Levy	

Submission ID	Name	Government or Non-Governmental Organization Name
BOEM-2021-0024-DRAFT-0211	Theresa Seaman	
BOEM-2021-0024-DRAFT-0214	Larry Mallon	
BOEM-2021-0024-DRAFT-0215	Gerald T. Keenan	New Jersey Alliance for Action
BOEM-2021-0024-DRAFT-0216	Andrew Ezzell	
BOEM-2021-0024-DRAFT-0217	Christine Naisby	
BOEM-2021-0024-DRAFT-0218	James Geiger	
BOEM-2021-0024-DRAFT-0219	Holly Fazelat	
BOEM-2021-0024-DRAFT-0220	Joann Zuczek	
BOEM-2021-0024-DRAFT-0221	Timothy Feeney	
BOEM-2021-0024-DRAFT-0222	John Berlingis	
BOEM-2021-0024-DRAFT-0223	Adriane Vail	
BOEM-2021-0024-DRAFT-0224	Jeanne Feenick	
BOEM-2021-0024-DRAFT-0225	Jeanne Feenick	
BOEM-2021-0024-DRAFT-0226	Denise Philipp	
BOEM-2021-0024-DRAFT-0227	Gerald Raab	
BOEM-2021-0024-DRAFT-0228	John Philipp	
BOEM-2021-0024-DRAFT-0230		Chamber of Commerce Southern New Jersey
BOEM-2021-0024-DRAFT-0231	Mark Talbot	
BOEM-2021-0024-DRAFT-0232	Joel Solomon	
BOEM-2021-0024-DRAFT-0233		City of Ocean City, Environmental Commission
BOEM-2021-0024-DRAFT-0234	Lee Widman	
BOEM-2021-0024-DRAFT-0235		NJ State Chamber of Commerce
BOEM-2021-0024-DRAFT-0236	Dr. Barbara Gaba	Atlantic Cape Community College
BOEM-2021-0024-DRAFT-0237	John Paukovits	
BOEM-2021-0024-DRAFT-0238	Cathy DeMaio	
BOEM-2021-0024-DRAFT-0239	Ralph Wolff	Greater Toms River Chamber of Commerce
BOEM-2021-0024-DRAFT-0241	Marie Carlin	
BOEM-2021-0024-DRAFT-0242	John Kauterman	
BOEM-2021-0024-DRAFT-0243	James Binder	
BOEM-2021-0024-DRAFT-0244	Zachary Nickerson	
BOEM-2021-0024-DRAFT-0246	Al Caesar	
BOEM-2021-0024-DRAFT-0247	Al Caesar	
BOEM-2021-0024-DRAFT-0248	Cheryl Bitner	
BOEM-2021-0024-DRAFT-0249	Tina Shearer	
BOEM-2021-0024-DRAFT-0250	Rick Shearer	
BOEM-2021-0024-DRAFT-0251	Paul E Towhey Sr	
BOEM-2021-0024-DRAFT-0252	Robert Liguori	
BOEM-2021-0024-DRAFT-0253	Susan Shirk	

Submission ID	Name	Government or Non-Governmental Organization Name
BOEM-2021-0024-DRAFT-0254	Matthew	
BOEM-2021-0024-DRAFT-0255	Arthur Peterson	
BOEM-2021-0024-DRAFT-0256	Capt. Paul Eidman	
BOEM-2021-0024-DRAFT-0257	Angela Trampota	
BOEM-2021-0024-DRAFT-0258	Vincent Miraglia	
BOEM-2021-0024-DRAFT-0259	Danielle Furey	
BOEM-2021-0024-DRAFT-0260	Geraldine Scarpa	
BOEM-2021-0024-DRAFT-0261	Monica Feeley	
BOEM-2021-0024-DRAFT-0264	Leslie Houston	
BOEM-2021-0024-DRAFT-0265	Walter A Rockey, 3rd	
BOEM-2021-0024-DRAFT-0266	John Scarpa	
BOEM-2021-0024-DRAFT-0267	Linda Clemente	
BOEM-2021-0024-DRAFT-0268	Tim Coughlin	
BOEM-2021-0024-DRAFT-0269	Felicity BeMent	
BOEM-2021-0024-DRAFT-0270		The Windmill Belgian Waffles & Ice Cream
BOEM-2021-0024-DRAFT-0271	William O'Neill	
BOEM-2021-0024-DRAFT-0272	William Roache	
BOEM-2021-0024-DRAFT-0273	Jeffrey Eidman	
BOEM-2021-0024-DRAFT-0274	Linda Scavello	
BOEM-2021-0024-DRAFT-0275	June and Michael Logan	
BOEM-2021-0024-DRAFT-0276	Susan Kirkpatrick	
BOEM-2021-0024-DRAFT-0277	Rachelle Steen	
BOEM-2021-0024-DRAFT-0278	Gerald Thornton	
BOEM-2021-0024-DRAFT-0279	Victor Gano	
BOEM-2021-0024-DRAFT-0281	Jorge Constantino	
BOEM-2021-0024-DRAFT-0282	James Fritsch	
BOEM-2021-0024-DRAFT-0283	Hector Rivera	
BOEM-2021-0024-DRAFT-0284	Denise Kubaska	
BOEM-2021-0024-DRAFT-0285	Victor Gano	
BOEM-2021-0024-DRAFT-0286	Ken Webb	
BOEM-2021-0024-DRAFT-0287		North Beach Taxpayers Association
BOEM-2021-0024-DRAFT-0288	John Feairheller, Jr., PP	
BOEM-2021-0024-DRAFT-0289	John Feairheller, Jr., PP	
BOEM-2021-0024-DRAFT-0290	John Feairheller, Jr., PP	
BOEM-2021-0024-DRAFT-0291	Linden Gruver	
BOEM-2021-0024-DRAFT-0292	John Feairheller, Jr.,	

Submission ID	Name	Government or Non-Governmental Organization Name
	PE, PP	
BOEM-2021-0024-DRAFT-0293	Diane Wieland	
BOEM-2021-0024-DRAFT-0294		Eastern Atlantic State Regional Council of Carpenters
BOEM-2021-0024-DRAFT-0295		New England Fishery Management and Mid-Atlantic Fishery Management Councils
BOEM-2021-0024-DRAFT-0296	Anthony Feenick	
BOEM-2021-0024-DRAFT-0297		Responsible Offshore Development Alliance
BOEM-2021-0024-DRAFT-0298		New Jersey Department of Transportation
BOEM-2021-0024-DRAFT-0299	Claire Wayner	
BOEM-2021-0024-DRAFT-0300	Howard Marshall	
BOEM-2021-0024-DRAFT-0301	Andrew Pockl	
BOEM-2021-0024-DRAFT-0302	Kristina Pockl	
BOEM-2021-0024-DRAFT-0303	Joseph Bisicchia	
BOEM-2021-0024-DRAFT-0304	Tammy Murray	
BOEM-2021-0024-DRAFT-0305	Jeff Straton	
BOEM-2021-0024-DRAFT-0307	Pamela Owsik	
BOEM-2021-0024-DRAFT-0308	Susan Damore	
BOEM-2021-0024-DRAFT-0309		Surfside Foods LLC
BOEM-2021-0024-DRAFT-0310	Sandy Prout	
BOEM-2021-0024-DRAFT-0311	Sam D'Amore	
BOEM-2021-0024-DRAFT-0312	B Caldwell	
BOEM-2021-0024-DRAFT-0314	Joseph DeFinis	
BOEM-2021-0024-DRAFT-0315	Regina Alfonso	
BOEM-2021-0024-DRAFT-0316	M McCarroll	
BOEM-2021-0024-DRAFT-0317	Brigid Caricich	
BOEM-2021-0024-DRAFT-0318	Jill Markley	
BOEM-2021-0024-DRAFT-0320	Sarah Jordan	
BOEM-2021-0024-DRAFT-0321	Robert Oldach	
BOEM-2021-0024-DRAFT-0322	Jim Weaver	
BOEM-2021-0024-DRAFT-0323	Barbara Rowley	
BOEM-2021-0024-DRAFT-0324	Rosemary Mancinelli	
BOEM-2021-0024-DRAFT-0325		Environment New Jersey
BOEM-2021-0024-DRAFT-0326	Andrew Jordan	
BOEM-2021-0024-DRAFT-0327	William Leighton	
BOEM-2021-0024-DRAFT-0328	John Breitling	
BOEM-2021-0024-DRAFT-0329	Richard Bertsch	
BOEM-2021-0024-DRAFT-0330	Stacey Jordan	

Submission ID	Name	Government or Non-Governmental Organization Name
BOEM-2021-0024-DRAFT-0331		Business Network for Offshore Wind
BOEM-2021-0024-DRAFT-0332	Suzanne Hornick	
BOEM-2021-0024-DRAFT-0333	Orlando Candelori	
BOEM-2021-0024-DRAFT-0334	Peter Straub	
BOEM-2021-0024-DRAFT-0335		The Nature Conservancy
BOEM-2021-0024-DRAFT-0336	John Feairheller, Jr., PP	
BOEM-2021-0024-DRAFT-0337	John Feairheller, Jr., PP	
BOEM-2021-0024-DRAFT-0338		American Littoral Society
BOEM-2021-0024-DRAFT-0339		American Littoral Society
BOEM-2021-0024-DRAFT-0340	John Feairheller, Jr., PP	
BOEM-2021-0024-DRAFT-0341	John Feairheller, Jr.	
BOEM-2021-0024-DRAFT-0342	John Feairheller, Jr.	
BOEM-2021-0024-DRAFT-0343	John Feairheller, Jr., PE, PP	
BOEM-2021-0024-DRAFT-0344	Julie D	
BOEM-2021-0024-DRAFT-0345		U.S. Environmental Protection Agency, Region 2
BOEM-2021-0024-DRAFT-0346	Martha Oldach	
BOEM-2021-0024-DRAFT-0347		NJ Work Environment Council
BOEM-2021-0024-DRAFT-0348		American Bird Conservancy
BOEM-2021-0024-DRAFT-0349	Rand Pearsall	
BOEM-2021-0024-DRAFT-0350	John Feairheller	
BOEM-2021-0024-DRAFT-0351		Barnegat Bay Partnership
BOEM-2021-0024-DRAFT-0352		National Wildlife Federation Action Fund and New Jersey Audubon
BOEM-2021-0024-DRAFT-0353		New Jersey Resource Project
BOEM-2021-0024-DRAFT-0353-01	Marita Vinci	
BOEM-2021-0024-DRAFT-0353-02	Patricia Dorr-Lewin	
BOEM-2021-0024-DRAFT-0353-03	Kathleen Hardeker	
BOEM-2021-0024-DRAFT-0353-04	Ashley DeNegre	
BOEM-2021-0024-DRAFT-0353-05	Victor Finamore	
BOEM-2021-0024-DRAFT-0353-06	Celso Valente	
BOEM-2021-0024-DRAFT-0353-07	Lisa Bonanno	
BOEM-2021-0024-DRAFT-0353-08	Maryjane Genestra	
BOEM-2021-0024-DRAFT-0353-09	Sharon Quilter	
BOEM-2021-0024-DRAFT-0353-10	Karen Barlow	
BOEM-2021-0024-DRAFT-0353-11	Colleen Forest	
BOEM-2021-0024-DRAFT-0354		New York State Department of

Submission ID	Name	Government or Non-Governmental Organization Name
		State
BOEM-2021-0024-DRAFT-0355		Anglers for Offshore Wind Power
BOEM-2021-0024-DRAFT-0356	Katie Feairheller	
BOEM-2021-0024-DRAFT-0357	Jean Gatti	
BOEM-2021-0024-DRAFT-0358		American Saltwater Guides Association
BOEM-2021-0024-DRAFT-0359	Annemarie Bach	
BOEM-2021-0024-DRAFT-0360	Jennifer Livak	
BOEM-2021-0024-DRAFT-0361	Susan Matthews	
BOEM-2021-0024-DRAFT-0362	Anthony Gatti	
BOEM-2021-0024-DRAFT-0363	Jersey Renews	
BOEM-2021-0024-DRAFT-0364	Oceana	
BOEM-2021-0024-DRAFT-0365	Anthony Butch	
BOEM-2021-0024-DRAFT-0366		National Wildlife Federation
BOEM-2021-0024-DRAFT-0367		Atlantic Shores Offshore Wind
BOEM-2021-0024-DRAFT-0368		New Jersey Department of Environmental Protection
BOEM-2021-0024-DRAFT-0369	Kathleen McGuire	
BOEM-2021-0024-DRAFT-0370		Recreational Fishing Alliance
BOEM-2021-0024-DRAFT-0371	Martha Wright	
BOEM-2021-0024-DRAFT-0372		Garden State Seafood Association
BOEM-2021-0024-DRAFT-0373	John Helbig	
BOEM-2021-0024-DRAFT-0374	Patricia Conte	
BOEM-2021-0024-DRAFT-0375		Garden State Seafood Association
BOEM-2021-0024-DRAFT-0377	Joseph Conte	
BOEM-2021-0024-DRAFT-0378	Kim Galatro	
BOEM-2021-0024-DRAFT-0379	Frances France	
BOEM-2021-0024-DRAFT-0380	Jennifer Trofa	
BOEM-2021-0024-DRAFT-0381		Clean Ocean Action
BOEM-2021-0024-DRAFT-0382	Sandra Maxson	
BOEM-2021-0024-DRAFT-0383	Jeanne Connelly	
BOEM-2021-0024-DRAFT-0384	Gregory Cudnik	
BOEM-2021-0024-DRAFT-0465		City of Ventnor City
BOEM-2021-0024-DRAFT-0466		City of Ventnor City
BOEM-2021-0024-EMAIL-001	Jean Publiee	
BOEM-2021-0024-EMAIL-002	Matthew Bisicchia	
BOEM-2021-0024-EMAIL-003	Michael Pentony	NOAA Fisheries
BOEM-2021-0024-EMAIL-004	Bob Stern	Long Beach Island (LBI) New Jersey Coalition for Wind Without Impact
BOEM-2021-0024-EMAIL-005	Colleen Lambert	City of Beach Haven, New Jersey

Submission ID	Name	Government or Non-Governmental Organization Name
BOEM-2021-0024-EMAIL-006	Michael D Emerson	U.S. Coast Guard
BOEM-2021-0024-TRANS-41321-0001	Scott Mackey	Garden State Seafood Association
BOEM-2021-0024-TRANS-41321-0002	Louise Halprin	
BOEM-2021-0024-TRANS-41321-0003	Andrew Gold	Pinelands Preservation Alliance
BOEM-2021-0024-TRANS-41321-0004	Bob Stern	New Jersey Coalition for Wind Without Impact
BOEM-2021-0024-TRANS-41321-0005	Ciro Scalera	Laborers International Union of North America, LIUNA
BOEM-2021-0024-TRANS-41321-0006	Hailey Berlinger	Environmental New Jersey
BOEM-2021-0024-TRANS-41321-0007	Christina Renna	Chamber of Commerce Southern New Jersey
BOEM-2021-0024-TRANS-41321-0008	Jonathan Latko	
BOEM-2021-0024-TRANS-41321-0009	Kris Ohleth	Special Initiative on Offshore Wind
BOEM-2021-0024-TRANS-41321-0010	Walter Korfmacher	
BOEM-2021-0024-TRANS-41321-0011	Frank Giordano	
BOEM-2021-0024-TRANS-41321-0012	Max Slusher	Atlantic County Economic Alliance
BOEM-2021-0024-TRANS-41321-0013	Jane Asselta	Southern New Jersey Development Council
BOEM-2021-0024-TRANS-41321-0014	Tricia Conte	Shoreline New Jersey
BOEM-2021-0024-TRANS-41321-0015	Greg Cudnik	Fishermen's Headquarters Bait and Tackle
BOEM-2021-0024-TRANS-41321-0016	Michael DeVilager	Ocean City Council
BOEM-2021-0024-TRANS-41321-0017	Rick Robinson	
BOEM-2021-0024-TRANS-41321-0018	Martha	
BOEM-2021-0024-TRANS-41321-0019	Mike Fischer	
BOEM-2021-0024-TRANS-41321-0020	Suzanne Hornik	
BOEM-2021-0024-TRANS-41321-0021	Tony Butch	
BOEM-2021-0024-TRANS-41321-0022	William O'Hearn	
BOEM-2021-0024-TRANS-41521-0001	Doug O'Malley	Environment New Jersey
BOEM-2021-0024-TRANS-41521-0002	Kathleen Spaeth	
BOEM-2021-0024-TRANS-41521-0003	Eric Ediger	
BOEM-2021-0024-TRANS-41521-0004	Bob Stern	Long Beach Island Coalition for Wind Without Impact
BOEM-2021-0024-TRANS-41521-0005	Colleen Lambert	City of Beach Haven, New Jersey
BOEM-2021-0024-TRANS-41521-0006	Randall Pearson	
BOEM-2021-0024-TRANS-41521-0007	Eric Ford	New Jersey Energy Coalition
BOEM-2021-0024-TRANS-41521-0008	Manny Amador	LOCAL 472 Laborer's Internatinoal Union of North America (LIUNA)
BOEM-2021-0024-TRANS-41521-0009	Kathleen Hayden	
BOEM-2021-0024-TRANS-41521-0010	Greg Cudnik	Fishermen's Headquarters Bait and Tackle
BOEM-2021-0024-TRANS-41521-0011	William Healy	New Jersey Alliance for Action

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BOEM-2021-0024-TRANS-41521-0012	Rick Bernardini	Ocean City Environmental Commission
BOEM-2021-0024-TRANS-41521-0013	Richard Birch	
BOEM-2021-0024-TRANS-41521-0014	William Georges	
BOEM-2021-0024-TRANS-41521-0015	John Berlingis	
BOEM-2021-0024-TRANS-41521-0016	Paul Eidman	
BOEM-2021-0024-TRANS-41521-0017	Martha Oldach	
BOEM-2021-0024-TRANS-41521-0018	Chris Platicella	
BOEM-2021-0024-TRANS-41521-0019	Tony Butch	
BOEM-2021-0024-TRANS-42021-0001	Steven Cabano	
BOEM-2021-0024-TRANS-42021-0002	Lorraine Vineberg	
BOEM-2021-0024-TRANS-42021-0003	Debra Coyle McFadden	New Jersey Work Environmental Council
BOEM-2021-0024-TRANS-42021-0004	Paul Eidman	Anglers for Offshore Wind Power
BOEM-2021-0024-TRANS-42021-0005	Stanislav Jarizak	Central Jersey Electrical Association
BOEM-2021-0024-TRANS-42021-0006	Alyssa Campanella	New Jersey Research Project
BOEM-2021-0024-TRANS-42021-0007	Michael Egenton	New Jersey State Chamber of Commerce
BOEM-2021-0024-TRANS-42021-0008	Tony McDonald	Urban Coast Institute at Monmouth University
BOEM-2021-0024-TRANS-42021-0009	Vicky Clark	Cape May County Chamber of Commerce
BOEM-2021-0024-TRANS-42021-0010	Joe De Finnis	
BOEM-2021-0024-TRANS-42021-0011	Peggy Worthington	
BOEM-2021-0024-TRANS-42021-0012	Greg Kudnik	
BOEM-2021-0024-TRANS-42021-0013	Chris Cole	Heavy and General Construction Laborers Local 172
BOEM-2021-0024-TRANS-42021-0014	Jodi Stuart	
BOEM-2021-0024-TRANS-42021-0015	Bernice Tompkins	New Jersey Work Environmental Council
BOEM-2021-0024-TRANS-42021-0016	Chris Gasman	
BOEM-2021-0024-TRANS-42021-0017	Brenda Briton	
BOEM-2021-0024-TRANS-42021-0018	Will Rush	
BOEM-2021-0024-TRANS-42021-0019	Rick Birch	
BOEM-2021-0024-TRANS-42021-0020	Joel Merrimen	
BOEM-2021-0024-TRANS-42021-0021	Christian Hartman	New Jersey Alliance for Action
BOEM-2021-0024-TRANS-42021-0022	Hillary Shebra	Chamber of Commerce, Southern New Jersey
BOEM-2021-0024-TRANS-42021-0023	David Monte	
BOEM-2021-0024-TRANS-42021-0024	Tricia Conte	Save our Shoreline New Jersey
BOEM-2021-0024-TRANS-42021-0025	Danielle Fury	

Submission ID	Name	Government or Non-Governmental Organization Name
BOEM-2021-0024-TRANS-42021-0026	Dwayne Waddlington	
BOEM-2021-0024-TRANS-42021-0027	Anthony Ciatello	Research and Development Council of New Jersey
BOEM-2021-0024-TRANS-42021-0028	Brian Williams	Bad Fish Fishing Charters
BOEM-2021-0024-TRANS-42021-0029	Allison Arne	
BOEM-2021-0024-TRANS-42021-0030	Brandon Burke	Business Network for Offshore Wind
BOEM-2021-0024-TRANS-42021-0031	Michael Chate	Greater Atlantic City Chamber
BOEM-2021-0024-TRANS-42021-0032	Anthony Etidali	
BOEM-2021-0024-TRANS-42021-0033	Tony Butch	

A.2. Individual Comments by Resource or NEPA Topic

A.2.1 Air Quality and Climate Change

Comment Number: BOEM-2021-0024-DRAFT-0008-6
Commenter: Robin McConekey
Commenter Type: Individual

Comment Excerpt Text:

* In considering the comprehensive cost of offshore wind turbine production (manufacturing, transportation and installation), we must also consider the carbon footprint involved in all these processes and the fact that it needs to be repeated every 20 years to replace the field that was decommissioned.

Comment Number: BOEM-2021-0024-DRAFT-0009-3
Commenter: Karen Barlow
Commenter Type: Individual

Comment Excerpt Text:

An offshore wind farm may not be perfect, but we will need a full arsenal of renewable energy tools to divest from fossil fuels. And we have a reliable supply of wind and a relatively shallow seabed.

Comment Number: BOEM-2021-0024-DRAFT-0009-6
Commenter: Karen Barlow
Commenter Type: Individual

Comment Excerpt Text:

Lets face it, if the ocean temperatures continue to rise, the birds and fish will have much greater threats than windmills. Our city must make a commitment to a sustainable future. We must do this for the future of our children, our coastal community, and our part in the ecosystem. Making these changes is not based on saving money. What we are saving is the climate and our ability to thrive on this planet.

Comment Number: BOEM-2021-0024-DRAFT-0082-1
Commenter: William O'Neill
Commenter Type: Individual

Comment Excerpt Text:

We maybe already too late in turning away from fossil fuels and expanding or use or renewable energy. We have to start now!!

Comment Number: BOEM-2021-0024-DRAFT-0083-2
Commenter: Thomas McGlaughlin
Commenter Type: Individual

Comment Excerpt Text:

I wholeheartedly support the installation of these wind turbines. Its a step in the right direction toward a sustainable future.

Comment Number: BOEM-2021-0024-DRAFT-0094-1
Commenter: Eric Ediger
Commenter Type: Individual

Comment Excerpt Text:

You would naturally think that any coastal area prone to flooding (such as Ocean City) would have an acute interest in any proposed measures to fight climate change - including a reduced dependency on fossil fuels.

Comment Number: BOEM-2021-0024-DRAFT-0100-4
Commenter: Alexander Ross
Commenter Type: Individual

Comment Excerpt Text:

Finally, the reality of sudden climate change is not being driven by the United States, which has substantially reduced its carbon emissions over the last several decades, but instead by the pollution caused by developing countries, in particular China and India, which rely on coal power generation and have no incentive to change this method over the foreseeable future. Wind power, which is unreliable and unsightly, is not the answer, and I object to the densely populated coastline of New Jersey, which has finally eliminated other sources of pollution being used as the experimental basis for this theory.

Comment Number: BOEM-2021-0024-DRAFT-0126-1
Commenter: Frank Gallo
Commenter Type: Individual

Comment Excerpt Text:

Renewable energy is unreliable, costly and has a very large footprint. It isnt as green as advertised nor will it deliver a lower global temperature.

Comment Number: BOEM-2021-0024-DRAFT-0131-2
Commenter: Walter Korfmacher
Commenter Type: Individual

Comment Excerpt Text:

I am keenly aware of the short timeframe we have to reduce the effects of climate change on our planet. By 2030, we should reduce the use of fossil fuels by at least 50% and by 2050, we should eliminate all use of fossil fuels. While offshore wind power is just one part of the solution, it is a part that NJ is uniquely qualified to become a leader.

Comment Number: BOEM-2021-0024-DRAFT-0173-1
Commenter: Christopher Martin
Commenter Type: Individual

Comment Excerpt Text:

I am a homeowner in Avalon, NJ and wish to express my support for this project. The benefits of renewable energy are significant for these costal communities. In addition to reducing climate changing impacts of CO2 on the sea level there are multiple long term benefits I see for these type of projects. First there is the reduction in acidification with lower CO2 levels. This will reduce the damage particularly to the shellfish and help to maintain ocean biodiversity.

Comment Number: BOEM-2021-0024-DRAFT-0196-3
Commenter: Lisa Kazunas
Commenter Type: Individual

Comment Excerpt Text:

The carbon emission that is needed to manufacture, transport, and construct the offshore turbines, cables, and collection stations has not been quantified.

Comment Number: BOEM-2021-0024-DRAFT-0227-2
Commenter: Gerald Raab
Commenter Type: Individual

Comment Excerpt Text:

Not to mention the fact that there has been no cradle to grave inquiry to determine if putting these turbines out there will have any measurable effect on carbon emissions. As you probably already know China is the the mostly sole provider of the rare earths needed for the neodymium magnets and the mining and refining of this material spews millions of tons of pollutants every year. These turbines also use tons and tons of concrete and the production of concrete is highly polluting.

Comment Number: BOEM-2021-0024-DRAFT-0233-1
Organization: City of Ocean City, Environmental Commission
Commenter Type: Local Agency

Comment Excerpt Text:

Global warming is the biggest long term threat to Ocean City and neighboring coastal communities. We are more vulnerable to rising sea levels. We have installed and are continuing to install extensive pumping systems to alleviate nuisance flooding. Our island is sinking as we are using the aquifer as the source of our drinking water via wells. We are increasingly subject to severe weather and storms.

The Environmental Commission is supportive of offshore wind as one tool to combat climate change

Comment Number: BOEM-2021-0024-DRAFT-0233-5
Organization: City of Ocean City, Environmental Commission
Commenter Type: Local Agency

Comment Excerpt Text:

Carbon Neutrality - produce a report that demonstrates concept to decommission neutrality.

Comment Number: BOEM-2021-0024-DRAFT-0235-3
Organization: NJ State Chamber of Commerce
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

my association recognizes the environmental benefits of offshore wind energy in improving air quality and creating a clean energy future for our residents and businesses.

Comment Number: BOEM-2021-0024-DRAFT-0259-1
Commenter: Danielle Furey
Commenter Type: Individual

Comment Excerpt Text:

One of my earliest memories is sitting on the bulkhead fishing for snapper in front of my grandparents house in Highlands. That bulkhead is now a steel wall that i can't even see over much less fish from because over the years every storm has brought us progressively worse flooding, property damage & loss of life. That's not going to change unless we start taking climate catastrophe as the serious threat it is & do BIG THINGS to intervene. I think this wind project is a big deal & the benefit far outweighs the risk. I understand the concerns raised by the recreational & commercial fishing community.

Comment Number: BOEM-2021-0024-DRAFT-0291-4
Commenter: Linden Gruver
Commenter Type: Individual

Comment Excerpt Text:

The "Not in my back yard" attitude is nice for our (me) older generation, we've had a great last 50 years of up and down growth. But our grandchildren need to have a chance and non-polluted USA and NJ and Cape May Co. I too do not like the prospect of going down to watch a beautiful Atlantic Ocean Sunrise on the 34th St. Beach, OC, or 96th St., Stone Harbor, or Corson's Inlet NWW, and seeing a forest of windmills on the horizon. But it's about time we get started saving our only home, Planet Earth.

Comment Number: BOEM-2021-0024-DRAFT-0292-1
Commenter: John Feairheller, Jr., PE, PP
Commenter Type: Individual

Comment Excerpt Text:

The windmills will consume electrical power to operate the communications, controls, warning lights and temperature controls such as gear box heaters even when not operating. This impacts the overall efficiency of the system.

Since these are critical systems, they most likely have backup powers systems.

Power generators usually track energy consumption by generating systems so that the power consumed is purchased at retail rates and credit is received for all power generated rather than the net amount.

How much electrical power will be consumed by each windmill and by each sub-station?

What is the source of the back-up electrical power and does this back-up equipment generate CO2?

Comment Number: BOEM-2021-0024-DRAFT-0293-3
Commenter: Diane Wieland
Commenter Type: Individual

Comment Excerpt Text:

The offset in creating renewable energy is greatly diminished as the Federal and State government spend billions to make us reliant on wind energy when it is more effective to combine all available resources. One only has to look at Texas to understand this will be a failure as we move forward in this direction. It

is well known this is not an economical method of generating energy and don't care because it is assumed it is about being 'green'. We will all pay for this feel-good plan that will ultimately impact every person in the county.

I question how this can rank as a form of 'green' energy when they require fossil fuels to operate? No energy will be generated when there is no wind or when there is too much wind, it is not any more effective than solar as a stand-alone energy source.

Comment Number: BOEM-2021-0024-DRAFT-0299-1
Commenter: Claire Wayner
Commenter Type: Individual

Comment Excerpt Text:

I travel to Ocean City, New Jersey, each year and would be delighted to get to see offshore wind turbines off the coast. I think they are beautiful and want to see them put up to help the state reduce its carbon emissions and access cheaper and cleaner electricity

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Comment Number: BOEM-2021-0024-DRAFT-0315-3
Commenter: Regina Alfonso
Commenter Type: Individual

Comment Excerpt Text:

I understand that we want to move towards more renewable energy but this is not the solution.

Comment Number: BOEM-2021-0024-DRAFT-0322-1
Commenter: Jim Weaver
Commenter Type: Individual

Comment Excerpt Text:

Climate change poses the single greatest threat to life as we know it. Harvesting the energy of the wind to produce electricity, is one of the cheapest and least damaging ways to mitigate climate change available to us. Whales and other sea life face greater threats from climate change than from off shore wind farms. We need wind farms!

Comment Number: BOEM-2021-0024-DRAFT-0323-1
Commenter: Barbara Rowley
Commenter Type: Individual

Comment Excerpt Text:

I am in favor of this notice of intent to prepare an EIS. I think the threat posed by climate change warrants serious consideration of offshore wind farms. I recognize there are legitimate concerns about offshore wind farms, but I worry that NIMBYism may hold back these kinds of projects and unfortunately threaten future generations lives on our planet.

Comment Number: BOEM-2021-0024-DRAFT-0332-7
Commenter: Suzanne Hornick
Commenter Type: Individual

Comment Excerpt Text:

Fossil fuels will be necessary in the production, transportation, installation, monitoring (diesel fuel boats patrolling the entire area every day according to Orsted), decommissioning and transporting to a landfill.

Comment Number: BOEM-2021-0024-DRAFT-0334-1
Commenter: Peter Straub
Commenter Type: Individual

Comment Excerpt Text:

I am in support of the proposed COP from the standpoint of the project's carbon neutrality and contribution to the state of NJ's stated goals of shifting to renewable clean energy.

Comment Number: BOEM-2021-0024-DRAFT-0337-1
Commenter: John Feairheller, Jr., PP
Commenter Type: Individual

Comment Excerpt Text:

In the interest of reducing carbon emissions the project should utilize compressed natural gas rather than diesel fuel. While the systems are referred to as back-up power supplies, they must be run on a regular basis even when not needed. The use of CNG would reduce the frequency of fuel spills in the ocean waters. Compressed gas is zero emission when the engines are not in use unlike liquid fuel takes that must be vented and lose fuel by evaporation.

Comment Number: BOEM-2021-0024-DRAFT-0345-4
Organization: U.S. Environmental Protection Agency, Region 2
Commenter Type: Federal Agency

Comment Excerpt Text:

AIR PERMITTING AND OTHER AIR POLLUTION CONTROL PROGRAMS

Outer Continental Shelf Air Permit

Pursuant to Section 328 of the Clean Air Act (CAA), Congress requires EPA to establish federal air permitting rules to control air pollution from the outer continental shelf (OCS) in order to attain and maintain ambient air quality standards and comply with the provisions of part C of Title I of the CAA. EPA promulgated permitting rules at 40 CFR part 55, which establish air pollution control requirements for OCS sources consistent with section 328(a)(I) of the CAA. OCS sources located within 25 miles of a State's seaward boundary are subject to both the federal requirements of part 55 and the state and local requirements of the corresponding onshore area (COA). Beyond 25 miles, OCS sources are not subject to the state and local requirements of the COA. EPA has not delegated part 55 to any states in the northeastern part of the United States, and thus EPA serves as the permitting authority for New England OCS areas. Permits issued pursuant to 40 CFR part 55 regulate and restrict air emissions related to construction and operation activities associated with OCS sources, including certain vessels servicing the OCS sources. Permits are required before project construction can begin.

Comment Number: BOEM-2021-0024-DRAFT-0345-5
Organization: U.S. Environmental Protection Agency, Region 2
Commenter Type: Federal Agency

Comment Excerpt Text:

The Ocean Wind Offshore Wind Farm COP sufficiently characterizes the air permitting obligations for the project and identified that, for air permitting purposes, requirements shall be the same as would be applicable if the sources were located in the COA. To date Ocean Wind has not submitted a notice of intent (NOI) to EPA to submit an air permit application, and thus EPA cannot definitively state what State will be the nearest onshore area (NOA) to the project area. However, EPA anticipates New Jersey will be

the NOA, and barring any request and demonstration from another State seeking COA designation, New Jersey will serve as the COA.

Pursuant to 40 CFR part 55.4(a), Ocean Wind must submit an air permit application to EPA within 18 months from the submittal date of the NOI. EPA will then follow the administrative procedures for issuing a permit in accordance with 40 CFR parts 124 or 71 and any applicable federal regulations and state-based regulations for the designated COA. A permit will initially be issued as a draft and subject to a 30-day public comment period and a public hearing if one is requested. Following the public comment period, EPA will make adjustments to the permit as needed, and issue a final permit. EPA will provide all relevant permit documents (application, draft permit, fact sheet, supplemental documents, public comments, response to public comments, and the final permit) on our CAA permitting website (https://www.epa.gov/caa-permitting/caa-permits-issued-epa-region-2). The process to issue a final Ocean Wind OCS air permit will run in parallel with the NEPA process, and a final decision on the OCS permit is likely to occur no later than 90 days after BOEM's issuance of a Record of Decision on its final Environmental Impact Statement.

Comment Number: BOEM-2021-0024-DRAFT-0345-6
Organization: U.S. Environmental Protection Agency, Region 2
Commenter Type: Federal Agency

Comment Excerpt Text:

EPA has reviewed the COP with respect to the project's impact on air quality. Based on our experience reviewing the air quality-related impacts of other offshore wind projects in the northeastern United States, the emission projections and anticipated impacts are consistent given the size and scope of the proposed Ocean Wind project. EPA notes the proposed environmental protection measures identified in COP Volume II Table 1.1-2 will likely become permit conditions in EPA's OCS permit by virtue of a best available control technology and/or lowest achievable emission rate review. As such, EPA anticipates receiving similar measures in Ocean Wind's forthcoming air permit application. In addition, Ocean Wind proposes measures such as limiting engine idling time and selecting engines designed to reduce air pollution to the extent practicable to further ensure air quality impacts will be minimal.

Comment Number: BOEM-2021-0024-DRAFT-0345-7
Organization: U.S. Environmental Protection Agency, Region 2
Commenter Type: Federal Agency

Comment Excerpt Text:

The Ocean Wind OCS permit will contain, at a minimum, requirements for emissions control, emissions limitation, emissions offsets (for nitrogen oxides and/or volatile organic compounds), monitoring, testing, and reporting. Ocean Wind will be required to conduct air quality analysis to demonstrate that its emissions will not cause or contribute to a violation of any applicable national air ambient quality standards or prevention of significant deterioration increment. Ocean Wind will also need to demonstrate that its emissions will not adversely impact the air quality related values in a Class I area. With respect to the broader impact of the Ocean Wind project on regional air emissions from stationary sources, EPA recommends that the EIS describe how the project may advance the reduction of emissions from the power generation sector in the northeast and emphasize the "avoided emissions," as is demonstrated in Volume II, Table 2.1.3-5 of the COP.

Comment Number: BOEM-2021-0024-DRAFT-0353-04-1
Commenter: Ashley DeNegre
Commenter Type: Individual

Comment Excerpt Text:

As climate change accelerates, NJ will be at even greater risk for catastrophic storms and flooding. Wind power is a sensible energy alternative that NJ must adopt.

Comment Number: BOEM-2021-0024-DRAFT-0353-09-1
Commenter: Sharon Quilter
Commenter Type: Individual

Comment Excerpt Text:

We need to find alternative means to generate energy. We must lessen negative impact on this Planet. Offshore wind not only does this, it enhances our community economy

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Comment Number: BOEM-2021-0024-DRAFT-0363-3
Organization: Jersey Renews
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

As New Jersey is already feeling the impacts of climate change, we have no time to lose. We must move forward in an environmentally responsible manner that avoids, minimizes, and mitigates impacts to ocean wildlife, habitat and traditional ocean uses, meaningfully engages stakeholders from the start, and uses the best available science and data to ensure science- based and stakeholder-informed decision making.

Comment Number: BOEM-2021-0024-DRAFT-0366-28
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Air emissions present a similar story to climate emissions, but with the additional dimension of locational benefits to pollution impacts. Based on previous analyses of offshore wind projects, air quality impacts should be anticipated during construction with smaller and more infrequent impacts anticipated during decommissioning.[Footnote 50: Id. at A-45.] Previous analyses have shown a “minor beneficial” improvement in air quality is expected from offshore wind development coming online and displacing fossil fuels. [Footnote 51: See e.g., Vineyard Wind FEIS, at ES-14.] These impacts, including the beneficial impacts, need to be considered in the Draft EIS.

Comment Number: BOEM-2021-0024-DRAFT-0368-6
Organization: New Jersey Department of Environmental Protection
Commenter Type: State Agency

Comment Excerpt Text:

The New Jersey Global Warming Response Act, N.J.S.A., 26:2C-37, et seq., directed the NJDEP to develop plans for reducing emissions of climate pollutants, including through the adoption of renewable energy plans and policies consistent with the State’s Energy Master Plan (EMP). The State’s Offshore Wind Economic Development Act, N.J.S.A. C.48:3-87, et seq., authorizes the NJBPU to accept applications for qualified offshore wind (“OSW”) projects and to conduct one or more competitive solicitations for open access OSW transmission facilities designed to facilitate the collection of OSW energy from qualified OSW projects.

Comment Number: BOEM-2021-0024-DRAFT-0381-6
Organization: Clean Ocean Action
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

implementation of coastal resiliency and adaption for sea level rise and storm surges for all onshore and offshore facilities, especially as the life span of these projects is 35 years

Comment Number: BOEM-2021-0024-EMAIL-005-25
Organization: City of Beach Haven, New Jersey
Commenter: Colleen Lambert
Commenter Type: Local Agency

Comment Excerpt Text:

For example, the document implies that the project will have some substantive mitigative benefit to climate change but upon some examination the impact of this and similar projects on climate change would be quite different than expected, as described below.

The greenhouse gas reductions from offshore wind are tiny compared to global omissions. Even more important, on the path the world is headed now such reductions do not result in any mitigation at all of the coming impacts but merely delay those impacts by a very short period. It's only if and when you can get the rest of the world to reduce emissions to a point where the coming temperature rise In 2100 is close to that two-degree centigrade number that you've heard the scientists talk about, that projects like this will actually have some mitigating effect, even though very small. Getting to that two degrees now appears very unlikely, so, the only climate change impact of this and similar projects is a very small delay in the impacts that are coming, as shown below.

Those relationships can be seen for sea level rise in the chart below that was created from data in the IPCC Fifth Assessment Report, Chapter 13, including Table 13.8. The chart shows the expected sea level rise for various future years versus the temperature rise that could occur by 2100. From it, it can be seen that there is only a small increase in future sea level rise from a 2.5-degree centigrade increase compared to 2 degrees, but above 2.5 degrees, sea level rise increases dramatically, becomes unmanageable, and eventually will result in extraordinary human dislocation and$ trillions of real property and infrastructure loss from coastal inundation.

Because global greenhouse gas emissions have not been significantly reduced, we are currently headed towards a 3.3-degree centigrade temperature rise in 2100 as shown by the black vertical line below. The sea level rise from that in 2200 would be about 0.8 meters or 2.6 feet. The chart also shows that if the temperature rise in 2100 were reduced by 0.65 degrees to 2.65° that same sea level rise would occur 100 years later.

So, the question is how much does the offshore wind program actually delay climate change impacts. The program claims a reduction of 78 million metric tons of greenhouse gases for the fuII 30,000-megawatt effort. But global omissions are 36 billion metric tons per year and a 95 percent reduction of that is necessary to bring the 3.3° to 2°. So, with a little math a 78 million tons reduction results in a temperature decrease of .003 degrees centigrade from the full offshore wind program.

Going back to the 0.65-degree reduction resulting in a 100-yeardelay that means that the full offshore wind program results in a delay of climate change impact of 6 months, and this project a delay in impact of 7 days. So, while there may be other benefits to the program and project, climate change is not a strong point.

Comment Number: BOEM-2021-0024-TRANS-41321-0008-1
Commenter: Jonathan Latko
Commenter Type: Individual

Comment Excerpt Text:

When I see projects like this, I get really excited, I am happy New Jersey was ahead of the curve on solar, I think we need to be ahead of the curve on wind. We look at stuff like Super Storm Sandy that came up, if it just hit the coast a little bit lower and pushed up the Delaware, on high tide and a full moon, my house would have been flooded but it did push up a little further up the coast and we didn't have to deal with those issues. So I support projects like this, I think it's the future, I get concerned when I see hotbeds especially in places like Ocean City where I visit with my family, we go to the beach and will be there again in August, the hotbed on one end is people that own beach homes who are worried about their view, right, I got to look at a stack of trash burning in my view, but they are worried about the view, at the same time they are subsidizing those beaches at millions of dollars a year to make sure that that beach is still there every year. Army Corps of Engineers is replenishing that beach, and then on the other end there was an article about FEMA providing like eight million dollars to raise a condo association on the bayside because the bay is starting to flood the back end of the island. It's just how do you stand up against something that helps deal with our carbon footprint and the decarbonization of our world and then stand in line and put your hand out and ask for all the funds to raise your properties and to make sure the beach is there to protect your home. I think that's an inequity to deal with and this isn't going to solve all our problems but we are heading in the right direction. It's a combination of all these little things that will add up to change in the future and I think this is just the right step and the right direction to get this going. I appreciate everybody's time, I am happy to hear they have these open forums, yes, we are going to get economic benefits long term, we will get jobs, but we really need to think about our future beyond, you know, our pockets and the next 20 years. In 50 years, there might not be an Ocean City if we don't deal with these issues now.

Comment Number: BOEM-2021-0024-TRANS-41321-0009-3
Organization: Special Initiative on Offshore Wind
Commenter: Kris Ohleth
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Climate change is the most pressing environmental and indeed societal threat we face, we know that replacing fossil fuel burning plants with clean energy sources like offshore wind will have a major impact on the dangerous acceleration of climate change as well as playing a significant role in cleaning our air which has incredible benefits to our planet, our environment and our health.

Comment Number: BOEM-2021-0024-TRANS-41321-0010-1
Commenter: Walter Korfmacher
Commenter Type: Individual

Comment Excerpt Text:

I'd like to voice my support in favor of offshore wind power projects in general including those off the New Jersey coast, and specifically I am in favor of the Ocean Wind Project. As a scientist, I am keenly aware of the short timeframe we have to reduce the effects of climate change on our planet. By 2030, we should reduce the use of fossil fuels by at least 50 percent and by 2050 we should eliminate all use of fossil fuels. Offshore wind power is one part of that solution, it is one part that New Jersey is uniquely qualified to become a leader. Governor Murphy of New Jersey has established initial offshore wind goals for New Jersey. In 2018, Governor Murphy signed an executive order eight which committed New Jersey to 3,500 megawatts of offshore wind by 2030 and in 2019 he signed executive order 92 increasing that goal to 7,500 megawatts by 2035. These goals will help New Jersey reach our 50 percent renewable energy mandate laid out in the 2018 Clean Energy Act and will help New Jersey -- help protect New Jersey communities from the existential threat of climate change. These goals are a good start. I would like to see New Jersey become even more aggressive in producing and pursuing offshore wind power as

an important part of replacement electricity from burning coal and natural gas but making electricity from renewable sources such as offshore wind power. New Jersey could easily provide three times it's 2019 electrical needs with offshore wind power alone and more than 100 percent of it's projected 2050 electrical needs with offshore wind power. For all these reasons, we need to move forward with offshore wind power in New Jersey as soon as we can do so.

Comment Number: BOEM-2021-0024-TRANS-41321-0022-2
Commenter: William O'Hearn
Commenter Type: Individual

Comment Excerpt Text:

So I wanted to speak strongly on behalf of the project. One thing that hasn't been talked about enough is the high cost of doing nothing because we are facing climate change, everything we do has to be seen through that lens and what that means is that the ocean is warming which is effecting offshore movement of both mammals and fish. The ocean is becoming more acidic which damages the shellfish. I personally love scallops so I am concerned about that, and of course surf clams and other important environmental and economic resources offshore but the -- so basically we have to address climate change by getting to clean power. Clean power is what is going to allow us to get off of coal and natural gas and gasoline ultimately. So that's why this project is so important, we have to generate clean power, it's clean power that's going to be a predictable -- the way the power purchase agreements are done, we will be off the up and down dancing around that we do with fossil fuels which of course we just witnessed over the pandemic so this is a stable source of clean power in the ocean coming directly into southern and northern New Jersey. It's going to be a great resource.

Comment Number: BOEM-2021-0024-TRANS-41521-0001-1
Organization: Environment New Jersey
Commenter: Doug O'Malley
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

We have the other vision of fossil fuels represented by BL England which is now a retired facility and the Orsted project is going to use BL England as well as the retired Oyster Creek facility to move towards a clean renewable energy future and the reason why that is so clear and this is incredibly important, is that New Jersey and our shore is facing an existential threat from climate change. We are seeing sea level rise like we have never seen it before and that sea level rise is only to going to get worse. And that's why this investment in clean renewable energy is exactly what we need to do to be able to hit New Jersey's renewable portfolio standard, we need offshore wind; to be able to avoid the impacts of climate change, we need offshore wind; to be able to reduce air pollution which still plagues our entire state, we need offshore wind. This is a tremendous opportunity for the state and we are anxiously looking forward to the development of this site as well as others so that New Jersey can be the national leader in offshore wind

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Comment Number: BOEM-2021-0024-TRANS-42021-0005-1
Organization: Central Jersey Electrical Association
Commenter: Stanislav Jarizak
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

I just would like to express my support for offshore wind. And to make a particular statement that to me, the offshore wind, the turbines, they represent a very detailed study about environment, about all the infrastructure, it represents our ability to cope with the climate change by replacing the dirty fossil fuel with clean and cheap renewable energy, specifically wind, and by doing so, we are actually adding what is called the base load so it's very stable and it helps our resilience and as a member of the electrical

association, I also want to shout out that the clean energy will make electric vehicles even cleaner because now 3 we can state that -- not only that electric vehicles don't have local pollution, tail pipe emission but they don't even have any remote emissions and this is fantastic.

Comment Number: BOEM-2021-0024-TRANS-42021-0006-1
Organization: New Jersey Research Project
Commenter: Alyssa Campanella
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

I am here tonight in support of offshore wind so long it is implemented equitably and appropriately and environmentally sensitively, that it's done right. I actually consider offshore wind as part of our duty to offset the negative impacts of climate change. There has been some pushback that's true on the idea of offshore wind. I understand the concerns, environmental, tourism, home values, but the biggest question for me is then what is the cost of doing nothing? Suppose we don't do any renewable energy and we just let nature continue to take its course. We know that sea level rise will continue, we have seen not only the increase in the number of storms but in their severity as well but I don't hear any cogent alternatives to not doing the wind.

Comment Number: BOEM-2021-0024-TRANS-42021-0007-2
Organization: New Jersey State Chamber of Commerce
Commenter: Michael Egenton
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

In addition, the recently announced New Jersey wind port is welcome news for Salem County and all of New Jersey. I will add as the longest serving member of New Jersey Clean Air Council at the New Jersey Department of Environmental Protection, my association recognizes the environmental benefits of offshore wind energy and improving air quality and creating a clean energy future for our residents and businesses.

Comment Number: BOEM-2021-0024-TRANS-42021-0016-1
Commenter: Chris Gasman
Commenter Type: Individual

Comment Excerpt Text:

One as many have touched on, if we don't do it, you know, figure out climate now for all, the how and the who great points that other have mentioned won't matter so I really encourage it and appreciate the thoughtful inclusive and empowering conversation of let's find a way to make it work for all.

Comment Number: BOEM-2021-0024-TRANS-42021-0019-1
Commenter: Rick Birch
Commenter Type: Individual

Comment Excerpt Text:

I will say this, the county and its residents are greatly effected by climate change with flooding occurring more frequently each year and we certainly support efforts to lower the carbon footprint along with the acidification of the ocean.

Comment Number: BOEM-2021-0024-TRANS-42021-0033-1
Commenter: Tony Butch
Commenter Type: Individual

Comment Excerpt Text:

I heard some mention and concerns about, you know, the effects of doing nothing. For starters I will say it's not an option, you know, something needs to be done but Ocean Wind is not the answer. If we set aside the negative impacts on the bird life, marine mammals, fish, fisheries that depend on them, heck, if we put aside the fact that this wind power is slated to be sold to New Jersey at five times the cost that New Jersey currently gets it from PJM, even putting that aside, the wind energy is not going to solve our climate issues. It won't stop the flooding. I know many have been effected by that. I can guarantee if this project goes through that each storm that rolls through that would have resulted in flooding prior to them being installed, is still going to happen after, and you are going to be looking after thinking what's going on.

A.2.2 Alternatives

Comments associated with this issue appear in the sub-issues below.

A.2.2.1. Wind turbines

Comment Number: BOEM-2021-0024-DRAFT-0268-2
Commenter: Tim Coughlin
Commenter Type: Individual

Comment Excerpt Text:

It is also not the most economical design for windmill farms.

The technology used in Great Britain for floating turbines (Hywind) should be considered here to both move the windmills further out to sea, where there are stronger winds. This will also allow the windmills to be relocated should the need arise.

A study by Carbon Trust showed that floating offshore wind turbines are more economical than fixed installations, producing electricity at a lower cost per megwatt. While the cost per Mwh is still much higher than carbon based sources, this cost represents an astronomical burden for the taxpayers, and in exchange for this subsidy to Orsted, the company should mitigate all impacts, including visual, and provide for the most economical form of turbine power...floating turbines, located further out to sea.

This is a win-win proposition lower cost per kwh, ability to move the windmills should weather patterns change, and, I also believe, would mitigate a lot of the public opposition.

Comment Number: BOEM-2021-0024-EMAIL-003-5
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

Reduced number of WTG locations

Because the segmented lease restricts the size of the potential development area, BOEM should also consider reducing the number of WTG locations within the lease area to reduce impacts to marine resources and associated habitat, while still meeting the purpose and need of the project. For example, we recommend that you consider an alternative that limits or avoids development within areas of the lease that may adversely impact important benthic features, including ridge and swale complexes (inclusive of sand ridges and waves, and their associated troughs and depressions). The EIS should evaluate the most appropriate location for each project component (e.g., WTG, substations, and cables) siting within the lease area. If alternative locations within the larger lease area are not considered, it will be necessary to provide a detailed explanation and justification as to why other areas within the lease were not evaluated.

Comment Number: BOEM-2021-0024-EMAIL-004-10
Organization: Long Beach Island (LBI) New Jersey Coalition for Wind Without Impact
Commenter: Bob Stern
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The Wind Energy Potential of this Project is Very Limited: The NOI states that the turbines will not be placed closer than 15 miles offshore. But the BOEM has already applied an inner turbine exclusion zone of 17.3 miles to New York State wind energy projects based on visible impact. As a matter of equity, it should apply that same exclusion zone to New Jersey or explain to the public why New York's tourism and visual beauty interests are greater than New Jersey's.

Comment Number: BOEM-2021-0024-TRANS-41321-0004-4
Organization: New Jersey Coalition for Wind Without Impact
Commenter: Bob Stern
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The BOEM has adopted a turbine exclusion zone for New York State of 17.3 miles offshore. We believe they should apply that to New Jersey as well. On the outside, you have a migration path for the North Atlantic Right Whale, highly endangered species. By the time you exclude from the inside, from human beings who don't want to see the turbines and from the outside from Right Whales who don't want to listen to the turbines, you don't have much left to place wind turbines in here.

A.2.2.2. Cables and landfalls

Comment Number: BOEM-2021-0024-DRAFT-0217-3
Commenter: Christine Naisby
Commenter Type: Individual

Comment Excerpt Text:

What is the exact reasoning that 2 residential sites, Lighthouse Drive and Bay Parkway, are being considered when there is vacant land across from the Oyster Creek Power Plant? Why disrupt the lives of thousands of residents when you can chose a site that is uninhabited?

Comment Number: BOEM-2021-0024-DRAFT-0217-4
Commenter: Christine Naisby
Commenter Type: Individual

Comment Excerpt Text:

Why are the lines not being run under the Forked River or Oyster Creek? The equipment to bury the lines will already be present in the Barnegat Bay, why not continue up the River or Creek and directly into the Oyster Creek substation? By burying the lines under the River or Creek this will allow for less interruptions and construction on State Highway Rt 9. This is a major thoroughfare in Ocean County and the less disruption the better for the residents.

Comment Number: BOEM-2021-0024-DRAFT-0282-5
Commenter: James Fritsch
Commenter Type: Individual

Comment Excerpt Text:

When the topic of onshore power transmission was brought up, I was stunned to hear that they are proposing to run through two points that make little to no sense: through a seaside community at Ocean City and through a nature preserve on Beach Island State Park. Has there been any consideration to put this along the western side of NJ where the transmission lines are more readily accessible? Has there been any consideration to put windmills in the areas impacted by the NJ Highlands Act since development of those areas are restricted for residential development, but to what extent? Couldn't the state pass legislation to preserve the lands, but still install windmills or solar farms to help meet goals of reducing our carbon footprint? There is a huge expense in installing the transmission lines, an expense that will be borne by the utility users of the State. Shouldn't there be a plan to install renewable power sources closer to pre-existing transmission lines?

Comment Number: BOEM-2021-0024-DRAFT-0295-13
Organization: New England Fishery Management and Mid-Atlantic Fishery Management Councils
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The COP proposes connecting the project to shore via three cables along two distinct cable routes to reduce impacts to the onshore power grid. The EIS should explain why the use of multiple cables is needed, develop and analyze alternatives to this approach, and acknowledge that the use of two cable routes greatly increases offshore impacts, including habitat disturbance and modification, as well as safety concerns for fisheries that use bottom tending mobile gear. Specifically, according to table 6.1.1-10 in Volume 1 of the COP, the northern cable route to Oyster Creek is much longer than the southern route to BL England (71 miles and 32 miles, respectively). The New England Council's submarine cables policy recommends that when cable burial is not possible, cables should be protected with materials that mimic natural, nearby habitats where possible. It would be helpful to identify the characteristics of any cable protection materials, should burial depths of 4-6 feet not be achieved, because these materials contribute to the net amount of complex habitat that would exist in the area once the project is constructed.

Comment Number: BOEM-2021-0024-DRAFT-0309-5
Organization: Surfside Foods LLC
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

I participated in the Ørsted Wind Array Design Exploration Workshop for the Ocean Wind Project in Atlantic City, NJ on January 16, 2019 and subsequently provided Ørsted with an analysis of the use (fishing and transit) of the lease area by the surfclam industry (a summary of those workshops, as approved by both RODA and Ørsted and the spatial conflict analysis is appended). The communications with Ørsted in the workshop and the analysis subsequently given to them after the workshop were clear that surfclam vessels needed a minimum of 2 nautical miles between turbines in order for safe access of the area for commercial fishing and a minimum of 2 nautical miles between the Ocean Wind lease area and BOEM Lease Area OCS-A0499 for safe transit. The analysis of the use (fishing and transit) of the lease area by the surfclam industry clearly showed by the use of a heat map the area where 2nm spacing for harvest activity would be beneficial but no accommodations were made in consideration of our requests. Using clam dredges weighing 10s of thousands of pounds and pumps capable of moving thousands of gallons of water per minute our gear penetrates the substrate when fishing this area. It is extremely important that interarray and export cables are buried to sufficient depths to reduce the risk of fishing gear interactions. We request that a minimum of 8-10 feet cable depth is required to avoid interactions. Shallower depths should not be permitted unless remote monitoring is possible that will ensure the cable remains adequately buried at all times. BOEM must provide clear cable burial standard

in this lease are and covering the export cables in regard to monitoring protocols to ensure there are no future interactions.

Comment Number: BOEM-2021-0024-DRAFT-0329-6
Commenter: Richard Bertsch
Commenter Type: Individual

Comment Excerpt Text:

EMF's _ Ocean Wind proposes 2 crossing areas for the Cables leading to 2 dormant power plants, Oyster Creek Nuclear in Lacy Twp and BL England Coal in Upper Township. Accessing the lines to Oyster Creek would be via Island State Park, an state park with no residental structures, however the plan to reach BL England is having cables carrying high doses of EMFs going across the barrier island of Ocean City, a population of approc 10,000 year residents and 100,000 during the summer months. There are 3 location possiblities however, none at all are acceptable to me. I oppose the crossing of our island of Ocean City with the cable lines. Exposing, regardless of how low the risk is, of potential cancer radiating cables to tens of thousands of beach goers and the owners and residents that live on the streets is not an option. As an alternative if the project moves forward consider that you require Ocean Wind LLC to ulilize 1 the 2 inlets at each end of the island. Corson's on the South End and Egg Harbor on the North. Both inlents provide easy access to the B L England Plant and will eliminate the possiblilty of the aforementioned health risk. In addition the EMF's attract bottom fish tha includes skates and sharks and while again we are told the lines will be buried deep enough to eliminate the threat we should not be taking on any whatsoever possiblity of beach goers having to confront the risk of attacks. Per the attached article from the OC Sentinel dated 4/7/2021 titled "20 Questions for Orsted" Marc Reimer of Orsted even states in Quest 14 that the effects of EMFs are site specific and not possible to study their impact before they are done.

Comment Number: BOEM-2021-0024-DRAFT-0335-10
Organization: The Nature Conservancy
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

As BOEM is considering which project alternatives to assess within the EIS, TNC urges the development of an alternative that maximizes the protection of natural habitats and minimizes the impact on those habitats and associated flora and fauna. We appreciate the measures taken to-date to route export cables and site onshore interconnection points in a manner that minimizes the impact on identified sensitive natural areas and other resource areas. However, we request that BEOM carefully review these routes and interconnection points within the design envelope to identify an alternative that prioritizes the protection of natural habitats. TNC is particularly concerned about the impacts of a potential cable landing on Island Beach State Park and other barrier island locations that are prime ecological assets containing populations of several globally rare, federal and State rare, endangered, and threatened animals, plants, and natural communities [Footnote 1: Construction and Operations Plan. Ocean Wind Offshore Wind Farm. March 2021. Vol. 2 p. 122.]. We also question the wisdom of locating this landfall on an undeveloped barrier island that could be highly vulnerable to increase rates of sea level rise – which in NJ are double the global average [Footnote 2: New Jersey Department of Environmental Protection. 2020. New Jersey Scientific Report on Climate Change, Version 1.0. (Eds. R. Hill, M.M. Rutkowski, L.A. Lester, H. Genievich, N.A. Procopio). Trenton, NJ. 184 pp.].

Comment Number: BOEM-2021-0024-DRAFT-0354-3
Organization: New York State Department of State
Commenter Type: State Agency

Comment Excerpt Text:

A detailed alternatives analysis that includes offshore export cable right-of-way alternatives. The alternatives considered and dismissed should be presented visually, where possible.

Comment Number: BOEM-2021-0024-DRAFT-0354-4
Organization: New York State Department of State
Commenter Type: State Agency

Comment Excerpt Text:

Evaluate different alignments to the Oyster Creek cable corridor (northern route) to minimize the area that cables occupy within the existing tug-tow traffic route. Various alignments should be evaluated, including crossing perpendicular to the prevailing north-south coastwise tug-tow traffic route, rather than parallel and within it; and shifting the cable corridor to be predominantly west of the traffic route. If a tug transiting northwest of the lease area were to lose power the operator could be challenged to find a safe location to drop anchor. Given the local currents and prevailing winds, the vessel would drift in an east to southeast direction toward the Oyster Creek cable corridor and potentially a wind turbine array (Figure 1, if the lease area to the north is developed). This scenario is highly plausible. As a result, BOEM should consider cable route alternatives to conform to industry best practices and reduce navigation risks.

Comment Number: BOEM-2021-0024-DRAFT-0367-4
Organization: Atlantic Shores Offshore Wind
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Siting and installation of export cables. The Ocean Wind EIS also should address the potential need for coordination between Atlantic Shores and Ocean Wind regarding routing and installation of electric power export cables extending from the offshore lease areas. Offshore export cable crossings are likely to be required, and the design and installation for the Ocean Wind export cables should take into consideration the need to accommodate crossings by Atlantic Shores. Both COPs identify two export cable routes extending from the offshore lease areas (four export cable routes in total have been proposed for the two lease areas) for which right-of-use easements are requested from BOEM. Atlantic Shores anticipates that coordination with Ocean Wind and BOEM may be required to ensure that export cable routing for one lease area does not adversely affect export cable routing for the other, particularly as BOEM and other cooperating agencies and stakeholders consider the preferred routes and route alternatives.

Coordination and input also may be needed with regard to the proposed installation methods and schedule for segments of the Atlantic Shores' and Ocean Wind's export cable routes that are proximate to both lease areas, given the likelihood that installation activities for the lease areas may occur concurrently or under a staggered schedule. Atlantic Shores requests that the Ocean Wind EIS analyze these factors in further detail with respect to the Atlantic Shores and Ocean Wind lease areas.

Comment Number: BOEM-2021-0024-EMAIL-003-8
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

Alternative cable corridor routes and landing sites

A full range of reasonable alternatives to the proposed offshore and inshore export cable corridors and landing site options should also be considered and evaluated to avoid and minimize impacts to sensitive

habitats located in the project area. Such sensitive habitats include, but are not limited to, important commercial and recreational fishing areas, artificial reefs, SAV, shellfish reefs, biogenic habitats, coastal marshes, subtidal and intertidal flats (e.g., mudflats), and bay islands. Options for avoiding and minimizing impacts related to the methods of construction and routes that allow for full cable burial to minimize permanent habitat impacts and potential interactions with fishing gear should be considered.

Currently, both offshore export cable corridors cross through and will impact numerous Prime Fishing Areas. Prime Fishing Areas are tidal water areas and water's edge areas that have a demonstrable history of supporting a significant local intensity of recreational or commercial fishing activity. These areas include, but are not limited to, groins, artificial reefs, and features such as rock outcroppings, sand ridges, rough bottoms, aggregates such as cobblestones, coral, shell and tubeworms, slough areas and offshore canyons. Additionally, the northern offshore export cable route corridor alternative (Oyster Creek route) appears to be sited in close proximity (tens to hundreds of meters) to ecologically valuable, well-known artificial reef sites (and Prime Fishing Areas), including Atlantic City Reef, Little Egg Reef, Garden State South Reef, Garden State North Reef, and Barnegat Light Reef. We recommend BOEM work closely with the commercial and recreational fishing industry on cable corridor route alternatives to minimize impacts to existing fishing areas and operations.

The Oyster Creek route is proposed to cross the Barnegat Bay, north of the Barnegat Inlet, where numerous sensitive habitats such as shellfish habitat, SAV beds and habitat, and subtidal and intertidal flats (e.g., mudflats), and prominent features (e.g., Tices Shoal) occur. The Barnegat Bay-Little Egg Harbor estuary (Barnegat Bay) is one of 28 estuaries located along the Atlantic, Gulf, and Pacific coasts and in Puerto Rico designated as estuaries of national significance.

Alternatives that avoid impacts to these habitats and the Barnegat Bay as a whole should be thoroughly evaluated, discussed, and fully considered. BOEM should also be aware that many aquaculture leases are present in Barnegat Bay and should be considered in determining potential cable routing alternatives.

Comment Number: BOEM-2021-0024-EMAIL-003-9
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

Coordinated cable routing

Offshore export cable routing alternatives that use common corridors with adjacent projects (Atlantic Shores, OCS-A-0499) should be evaluated and discussed. At present, the proposed Oyster Creek route runs parallel to nearly the entirety of lease area OCS-A-0499 as it heads north-northeast toward the Barnegat Bay. For lease areas such as these that are adjacent to one another, BOEM should develop common cable corridors to both increase efficiency and predictability and reduce resource impacts. Specifically, common cable corridors would lead to efficiencies in planning, project development, and benthic habitat mapping, more predictability and time savings for applicants and resource agencies, and comprehensive avoidance and minimization of impacts to marine resources through reducing the number of corridors and allowing for programmatic-level review and comment.

A.2.2.3. Project relocation

Comment Number: BOEM-2021-0024-DRAFT-0080-1
Commenter: Donna McManus
Commenter Type: Individual

Comment Excerpt Text:

I am all for the concept of wind power and have donated toward it in the past. Please keep it on land though!

Comment Number: BOEM-2021-0024-DRAFT-0100-1
Commenter: Alexander Ross
Commenter Type: Individual

Comment Excerpt Text:

I am opposed to the proposed location of the "Ocean Wind" turbine farm off the coast of Southern New Jersey. The wind turbines are located too close to the shoreline, and should be located farther out to sea where they will not constitute visual pollution for the residents of this area.

Comment Number: BOEM-2021-0024-DRAFT-0105-1
Commenter: Natalie Georges
Commenter Type: Individual

Comment Excerpt Text:

I believe the location of the wind farm will negatively impact tourism to the NJ beaches if people will be able to see the project. I highly suggest moving the wind farm at least 35 miles off the coast so it doesnt not impact the sightline of tourists and beach-goers.

Comment Number: BOEM-2021-0024-DRAFT-0106-1
Commenter: Marty Connor
Commenter Type: Individual

Comment Excerpt Text:

While the focus on renewable energy is admirable, clearly the wind farm should not be viewable any day from the beach or beachfront homes along the coast. I am troubled that such a location was even considered. Push the farms further offshore so they are out of sight.

Comment Number: BOEM-2021-0024-DRAFT-0115-3
Commenter: Thom Bonan
Commenter Type: Individual

Comment Excerpt Text:

Put it in New York or somewhere that doesn't have the extensive beachfront views that we have.

Comment Number: BOEM-2021-0024-DRAFT-0138-3
Organization: Vacation Rentals Jersey Shore, LLC
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

It has come to our attention that there IS a BOEM screened and approved lease area, 30 - 57 miles off shore that is bigger, and has more wind capacity. I am referencing the "Hudson South" call area.

Locating the wind farm in this area, a minimum of 30 miles off shore, and even with the bigger 12MW turbines, will solve the visual pollution that the current lease area emits, thus saving our Tourism economy which is so important to the state. We strongly urge you to slow this project down and consider relocation of both the Ocean Wind and Atlantic Shore projects to the Hudson South area.

Comment Number: BOEM-2021-0024-DRAFT-0140-1
Commenter: Mike Mrazek
Commenter Type: Individual

Comment Excerpt Text:

It has come to my attention that there IS a BOEM screened and approved lease area, 30 - 57 miles off shore that is bigger, and has more wind capacity. I am referencing the Hudson South call area. Locating the wind farm in this area, a minimum of 30 miles off shore, and even with the bigger 12MW turbines, will solve the visual pollution that the current lease area emits, thus saving our Tourism economy which is so important to the state. We strongly urge you to slow this project down and consider relocation of both the Ocean Wind and Atlantic Shore projects to the Hudson South area.

Comment Number: BOEM-2021-0024-DRAFT-0143-3
Commenter: Janis Fahey
Commenter Type: Individual

Comment Excerpt Text:

It has come to our attention that there IS a BOEM screened and approved lease area, 30 - 57 miles off shore that is bigger, and has more wind capacity. I am referencing the Hudson South call area. Locating the wind farm in this area, a minimum of 30 miles off shore, and even with the bigger 12MW turbines, will solve the visual pollution that the current lease area emits, thus saving our Tourism economy which is so important to the state. We strongly urge you to slow this project down and consider relocation of both the Ocean Wind and Atlantic Shore projects to the Hudson South area.

Comment Number: BOEM-2021-0024-DRAFT-0148-2
Commenter: Timothy Krug
Commenter Type: Individual

Comment Excerpt Text:

With federally approved, larger and arguably superior lease area further out to sea (30mi), it makes no sense why this site would even be considered.

Comment Number: BOEM-2021-0024-DRAFT-0149-2
Commenter: Paul Olsen
Commenter Type: Individual

Comment Excerpt Text:

Have them placed at 30 miles offshore so they cant be visible.

Comment Number: BOEM-2021-0024-DRAFT-0151-2
Commenter: Peter Saretsky
Commenter Type: Individual

Comment Excerpt Text:

It has come to my attention that there is a BOEM screened and approved lease area, 30 - 57 miles off shore that is bigger and has more wind capacity. I am referencing the Hudson South call area. Locating the wind farm in this area, a minimum of 30 miles offshore, and even with the bigger 12MW turbines, will solve the visual pollution that the current lease area emits, thus saving our tourism economy which is so important to the state. I strongly urge you to slow this project down and consider relocation of both the Ocean Wind and Atlantic Shore projects to the Hudson South area.

Comment Number: BOEM-2021-0024-DRAFT-0154-2
Commenter: Laurie Cox
Commenter Type: Individual

Comment Excerpt Text:

Please consider installing the wind turbines in an area that wont disturb the view that many have during the summer. Consider the Hudson South area and making sure that youre at least 30 miles away from the shoreline. If youre that far away, you can even use the 12MW turbines and it wont be an eyesore.

Comment Number: BOEM-2021-0024-DRAFT-0156-1
Commenter: Steve Masselle
Commenter Type: Individual

Comment Excerpt Text:

Do they not understand that the million dollar view is what makes this special part of the state so exceptional and is what draws in billions of tourist dollars to the tourism industry as well as major tax dollars to the state? Why even consider jeopardizing this to do something so experimental at this stage, and when there are alternative options such as placing the wind farms further out of view. It doesn't make any sense.

Comment Number: BOEM-2021-0024-DRAFT-0160-1
Commenter: Joseph Celentano
Commenter Type: Individual

Comment Excerpt Text:

The Ocean Wind project, as currently proposed, with the wind turbines visible from shore, should not be built. Put them out where they are NOT visible from the shoreline.

Comment Number: BOEM-2021-0024-DRAFT-0161-1
Commenter: R Paster
Commenter Type: Individual

Comment Excerpt Text:

Put your wind farm somewhere of the coast where there is no dense populations of summer tourists. Anywhere along the Jersey shore between Sandy hook and AC is a bad choice.

Comment Number: BOEM-2021-0024-DRAFT-0162-1
Commenter: Jill Skinner
Commenter Type: Individual

Comment Excerpt Text:

I am not in agreement with the placement of the turbines in the Atlantic Shores corridor. I see on the Off Shore Wind map (https://www.4coffshore.com/offshorewind/index.aspx?lat=39.513wfid=US5U) the Hudson South space has been researched and approved for turbines. Will you please consider moving the project there?

Comment Number: BOEM-2021-0024-DRAFT-0165-3
Commenter: Teri Weidlein
Commenter Type: Individual

Comment Excerpt Text:

We understand that there is space further out where these turbines can be placed. We implore you to please consider using this space so that the turbines will not ruin the overall view and the beautiful sunrises.

Comment Number: BOEM-2021-0024-DRAFT-0168-1
Commenter: Debra Burger-Trillhaase
Commenter Type: Individual

Comment Excerpt Text:

I am all for sustainable energy, but not when it interferes with our vista. Why are you not following European guidelines? The windmills have to be at least 30 ft. Off shore. I'm all for the Hudson South location, whicI understand is at least 30 ft. Off shore.

Comment Number: BOEM-2021-0024-DRAFT-0170-4
Commenter: Calvin Douglass
Commenter Type: Individual

Comment Excerpt Text:

I believe these wind farms should be stopped but if a compromise is needed - can these be built farther out to sea - where they are not visible from shore areas and may not be as harmful to tourism, fishing, wildlife, boating? I understand areas farther off the New Jersey coast are available for construction and not visible.

Comment Number: BOEM-2021-0024-DRAFT-0171-1
Commenter: Terrence Smith
Commenter Type: Individual

Comment Excerpt Text:

As I understand the proposal under consideration, the wind turbines will be visible from the Barnegat Light beaches. I think this should be recodidered, specifically, to move the turbines further east out of sight.

Anyone who travels to and from Long Beach Island can see the Atlantic City skyline from the cross bay causeway. By my amateur calculation, the Atlantic City buildings are more than 19 miles south of the causeway. If structures of similar size were positioned off Long Beach Island at the same distance, they would, in my opinion, be an unwelcome eyesore.

I understand that the continental shelf off New Jersey is a more or less similar depth for a considerable distance off the coast. Placement of the wind turbines at greater distance from the shore apparently create no additional technological or engineering problems other than the extension of the electrical cabling to the former nuclear power stations. I do not believe that the marginal costs of more remote turbine placement outweigh the potential losses to the Long Beach Island economy.

Comment Number: BOEM-2021-0024-DRAFT-0179-1
Commenter: Denise Fanelli
Commenter Type: Individual

Comment Excerpt Text:

Let's make it a win-win for everyone and place the turbines further out where they can't be viewed from the shoreline.

Comment Number: BOEM-2021-0024-DRAFT-0181-1
Commenter: Michael Gross
Commenter Type: Individual

Comment Excerpt Text:

Would it be possible to allow the construction to be about 10 miles further from the coast beyond the military use area, and out of the line of sight?

Comment Number: BOEM-2021-0024-DRAFT-0194-1
Commenter: Karen Byington
Commenter Type: Individual

Comment Excerpt Text:

In general, I support efforts to find alternative energy sources for the long-term protection of our planet. But I think these alternatives should be in balance with the preservation of our planet's natural beauty.

I understand that the current plans for wind turbines off the coast of the jersey coast would be visible from shore. This would cause a significant reduction in the value of our state treasure, not to mention our property values and rental income, should the turbines distract from the natural beauty of our shoreline.

Please consider alternatives that are further off shore such as the BOEM screened and approved lease area, 30 - 57 miles off shore that is bigger, and has more wind capacity. I am referencing the Hudson South call area. Locating the wind farm in this area, a minimum of 30 miles off shore, and even with the bigger 12MW turbines, will solve the visual pollution that the current lease area would create. Istrongly urge you to slow this project down and consider relocation of both the Ocean Wind and Atlantic Shore projects to the Hudson South area.

Comment Number: BOEM-2021-0024-DRAFT-0200-1
Commenter: Megan Allen
Commenter Type: Individual

Comment Excerpt Text:

This will forever diminish New Jerseys beautiful shoreline. There are plenty of other places to put these.

Comment Number: BOEM-2021-0024-DRAFT-0208-7
Organization: Long Beach Island, NJ Coalition for Wind Without Impact
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The BOEM Can Rectify Its NEPA Compliance Omissions Here.

When challenged on its narrow NEPA process, the BOEM states under litigation that it will do a thorough EIS analysis, which must include reasonable alternatives, when it gets to the project construction phase, but now that it is there, it reneges on that promise and just considers the applicant's plan within its lease area.

The BOEM should reconsider its stilted NEPA environmental review approach. Under the BOEM's own description of its regulatory framework, the Energy Policy Act of 2005 (EPAct) authorized BOEM to issue leases, easements and rights of way to allow for renewable energy development on the Outer Continental Shelf (OCS). The EPAct provided a general framework for BOEM to follow when authorizing these renewable energy activities. For example, the EPAct requires that BOEM coordinate with relevant Federal agencies and affected state and local governments, obtain fair return for leases and grants issued, and ensure that renewable energy development takes place in a safe and environmentally

responsible manner. Under Section 585.102(a)(10), it requires consideration of the location of and any schedule relating to a lease or grant under this part for an area of the OCS and any other use of the sea or seabed.

The BOEM therefore has broad authority to develop offshore wind in a safe and environmentally responsible manner. As the agency authorized to implement this program in the public interest, its responsibility is not simply to say yes or no to an applicant's proposal, which may have interests divergent from the public's, but to implement wind energy in that broader public interest. That means consideration of reasonable alternatives, and especially those that reduce adverse impacts as would Hudson South. At a minimum, this EIS must include the Hudson South call area as a reasonable alternative.

Since an EIS was not done to support the selection of Hudson South as an area suitable for leasing, NEPA compliance now requires at a minimum that any of those New York Bight areas identified serving the same electric market as this proposal, which includes the Hudson South area, be included as reasonable alternatives in this project EIS. Given the tenuous nature of the wind energy potential from this lease area as described below it would seem just from a practical standpoint to be in the BOEM's programmatic interest to prepare an EIS that creates rather than forecloses options.

Comment Number: BOEM-2021-0024-DRAFT-0208-12
Organization: Long Beach Island, NJ Coalition for Wind Without Impact
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

A NOI is required to present a preliminary description of alternatives. There are reasonable alternatives to this unreasonable proposal that have been previously provided(6) to the BOEM and that it has to date chosen to ignore. The BOEM has not even included the Hudson South call area which it has endorsed for turbine placement as a reasonable alternative. In this NOI there are no alternatives to the proposal presented other than no action which cannot be defined because the project's purpose has not been defined, and which the BOEM probably has never or rarely exercised as reasonable. An EIS without any reasonable alternatives to the proposal is not in compliance with the NEPA,

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Comment Number: BOEM-2021-0024-DRAFT-0208-2
Organization: Long Beach Island, NJ Coalition for Wind Without Impact
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

[Bold: A Better Alternative for Turbine Installation Lies Waiting Further Offshore.] The Hudson South call area, 30 to 57 miles offshore, shown below has been screened by the BOEM for all relevant wind energy development factors including visible impact, fishing conflicts, navigation, and marine mammal impacts, recommended for wind energy development, and is proceeding to lease sales. It has at least seven times the wind energy than the current proposal and would avoid the economic devastation to local shore communities from visible wind turbines.

All the turbines would be placed there. Even the more powerful wind turbines emerging today can be placed in Hudson South and not be visible, allowing the shore to sustain its tourism-based economy and its unvarnished seascape.

[See original attachment A1 for map "Final BOEM Wind Energy Areas-the NY Bight"]

The existing closer-in lease areas off of Atlantic City and LBI would be used as the hub for a planned, coordinated network to transmit all the power from Hudson South destined for New Jersey under the seabed to shore. The NJ Board of Public Utilities (BPU) is proceeding to secure such a network, soliciting

proposals, and we urge Ocean Wind and Atlantic Shores Offshore Wind to submit proposals. The BOEM repeatedly states in its lease sale conditions that such sales in no way authorizes or prejudices it to approve turbine installation, so such a change in project direction is well within its authority to pursue.

The Hudson South area has greater acreage, higher annual mean wind speeds and close to 7000 megawatts of wind energy potential, at least seven times the wind energy of the current project, clearly enough to serve as a programmatic alternative to it.

The Hudson South area does not interfere with NJ Department of Environmental Protection defined prime fishing (including shellfish) areas, and this can be examined further in the EIS.

Job prospects in New Jersey from offshore wind development, especially for foundation and other component manufacturing at Paulsboro, NJ and for turbine staging at Lower Alloways Creek are not hurt by this proposal- the turbines will still be assembled and installed, just further out and where monopile foundations are still viable.

In fact, those job prospects are improved with "invisible" turbines in Hudson South as opposed to highly visible ones near shore that could create a public backlash to the entire wind energy program. The creation of a single large transmission project also creates the opportunity to bring more substation construction industries and jobs to New Jersey.

The "Hudson South" alternative is a much better approach for securing more offshore wind power while not damaging the shores natural beauty and economy. The BOEM has concluded its screening analysis and recommended it for wind energy development. [Bold: It is incomprehensible why the BOEM would go through the exercise of identifying desirable areas for wind energy development and then not even include its own recommended area as an alternative in its project EISs.]

The benefits of turbine placement there are more fully described in Enclosure 1. The Hudson South alternative at this point appears far better than the applicant's plan and must at a minimum be treated as an alternative in the EIS. Let each alternative get a full evaluation so that the benefits and detriments of each can be compared.

Comment Number: BOEM-2021-0024-DRAFT-0208-24
Organization: Long Beach Island, NJ Coalition for Wind Without Impact
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

A much better alternative exists that can meet the State's offshore wind energy goals, without harming the shore's tourism-based economy, that should be included as a reasonable alternative in the environmental impact statement (EIS) for this project.

A Better Alternative

That alternative lies waiting just beyond the current lease area, in the "Hudson South" call area, 30 to 57 miles out, as shown below. The Hudson South area has been screened by the BOEM for relevant wind turbine siting factors including visible impact, fishing interests, marine protected species, vessel navigation and cost of development, and initially recommended by them in draft form for wind energy development in 2018 as a shown below for comparison with the current lease area. They just adopted the NY Bight areas, including Hudson South in final form (see map in cover letter) and are moving forward on lease sales.

Under this alternative all the wind turbines would be placed out there. The existing closer-in lease area would be used as the hub for a planned, coordinated network to transmit all the power from Hudson South destined for New Jersey under the seabed to shore.

Even the more powerful wind turbines emerging today can be placed in Hudson South and not be visible, allowing the shore to sustain its tourism-based economy and its unvarnished seascape.

The Hudson South area has greater acreage, higher annual mean wind speeds and close to 7500 megawatts of wind energy potential, four times the wind energy of the full current lease area, and eight times the power if the BOEM turbine exclusion zone for NY is applied to NJ.

Substantial wind energy development in Hudson South will be needed regardless to meet the State's offshore wind energy goal.

It makes good sense to have one set of cables and substations transmitting all the power from Hudson South rather than multiple companies dredging and constructing their own. This leaves the current lessee, Atlantic Shore Offshore Wind, with a substantial power transmission project to undertake.

The Hudson South area does not appear to interfere with NJ Department of Environmental protection defined prime fishing areas, and this can be examined further in the EIS.

Job prospects in New Jersey from offshore wind development, especially for foundation and other component manufacturing at Paulsboro, and for turbine staging at Lower Alloways Creek are not hurt by this proposal- the turbines will still be assembled and installed, just further out and where monopile foundations are still viable.

In fact, those job prospects are improved with "invisible" turbines in Hudson South as opposed to highly visible ones near shore that could create a public backlash to the entire wind energy program.

Additional New Jersey jobs may also arise from the large, coordinated transmission project envisioned through the manufacture of approximately 16 electric substation structures, assuming about a 6000-megawatt transmission project.

Conclusions

Given the State's 7500-megawatt goal, the Hudson South wind energy potential of 7500 megawatts and the proposed contribution coming from the Ocean Wind project to the south of at least 1100 megawatts, turbine placement in Hudson South is a clear programmatic alternative to turbine placement in the close-in lease area off of LBI.

The "Hudson South" alternative is a much better approach for securing more offshore wind power while not damaging the shores natural beauty and economy.

It is far better than the current plan and could even become the 'proposed action" in the upcoming BOEM EIS instead of the current plan, or at a minimum be treated as an equal alternative plan. Let each alternative get a full evaluation in the EIS so that the benefits and detriments of each can be compared.

Comment Number: BOEM-2021-0024-DRAFT-0211-2
Commenter: Theresa Seaman
Commenter Type: Individual

Comment Excerpt Text:

It doesn't make sense to have turbines visible from the shore when there is another alternative available. Please consider the screened and approved lease area known as Hudson South for placement of these wind turbines.

Please do not clutter our shore line. You wouldn't approve wind turbines on the rim of the Grand Canyon. Don't approve them for our "Grand Canyon".

Comment Number: BOEM-2021-0024-DRAFT-0257-4
Commenter: Angela Trampota
Commenter Type: Individual

Comment Excerpt Text:

I appeal to the BOEM and any other state and federal agencies involved with the approval of this plan to please consider the Hudson South Call area (from my understanding, federally approved waters for wind energy, which are 35- 50 miles out) as an alternative to the current proposed area for this project. In doing so, this alternative may provide a greater capacity for wind power while lessening the impact on the shore area.

Comment Number: BOEM-2021-0024-DRAFT-0260-2
Commenter: Geraldine Scarpa
Commenter Type: Individual

Comment Excerpt Text:

It has come to our attention that there IS a BOEM screened and approved lease area, 30 - 57 miles off shore that is bigger, and has more wind capacity. I am referencing the Hudson South call area. Locating the wind farm in this area, a minimum of 30 miles off shore, and even with the bigger 12MW turbines, will solve the visual pollution that the current lease area emits, thus saving our Tourism economy which is so important to the state. We strongly urge you to slow this project down and consider relocation of both the Ocean Wind and Atlantic Shore projects to the Hudson South area.

Comment Number: BOEM-2021-0024-DRAFT-0274-3
Commenter: Linda Scavello
Commenter Type: Individual

Comment Excerpt Text:

I strongly urge you to slow this project down and consider relocation of both the Ocean Wind and Atlantic Shore projects to the Hudson South area. Please dont ruin our Jersey Shore!!!

Comment Number: BOEM-2021-0024-DRAFT-0277-2
Commenter: Rachelle Steen
Commenter Type: Individual

Comment Excerpt Text:

Please consider the alternative locations for this windfarm and preserve this piece of unpolluted NJ landscape for future generations.

Comment Number: BOEM-2021-0024-DRAFT-0282-3
Commenter: James Fritsch
Commenter Type: Individual

Comment Excerpt Text:

While the BOEM presentation briefly discussed the selection areas, the idea of putting the windmills well over the horizon and out of view of the shoreline was never discussed or broached. Granted the depth may not lend itself to putting bottom fixed monopiles further out, there is new technology and procedures to allow for floating windmills with an anchoring network to put the windmills in much deeper water and much further out to sea.

Comment Number: BOEM-2021-0024-DRAFT-0296-3
Commenter: Anthony Feenick

Commenter Type: Individual

Comment Excerpt Text:

I am urging, along with others in this community, for this project to be slowed down so these devastating impacts can be understood. If a wind farm needs to be created, we are urging for the inclusion of the "Hudson South" call area in the upcoming Environmental Impact Statement (EIS). "Hudson South" is a BOEM screened and approved lease area, 30 - 57 miles off shore that is bigger, and has more wind capacity. Locating the wind farm in this area, a minimum of 30 miles off shore will solve the visual pollution (even with the bigger 12MW turbines) that the current lease area emits. We strongly urge you to consider relocation of both the Ocean Wind and Atlantic Shore projects to the Hudson South area.

Comment Number: BOEM-2021-0024-DRAFT-0328-2
Commenter: John Breitling
Commenter Type: Individual

Comment Excerpt Text:

I understand there is another location in the ocean that that has been approved by the federal BOEM for wind turbines. It is an area further offshore called Hudson South. I have attached a photo of an ocean map showing the Ocean Wind and Atlantic Shores turbine locations in black and the Hudson South location in green. I understand that the Hudson South location has the capacity to produce more wind energy than the Ocean Wind and Atlantic Shores locations. At Hudson South the turbines would be much less if at all visible but still be able to supply electricity. At Hudson South the turbine industry would still create jobs while protecting coastal community jobs. Hudson South would be a win win for both wind electric generation and beach communities that depend on the vacationing tourist economy. Please include Hudson South location in the current projects Environmental Impact Statements (EIS). Please move these wind turbine construction sites further offshore to the Hudson South.

Comment Number: BOEM-2021-0024-DRAFT-0349-1
Commenter: Rand Pearsall
Commenter Type: Individual

Comment Excerpt Text:

With all of the concern about how close the field is to the shore, is it at all practical to put a wind farm to the east of the shipping lanes much further out in the ocean? I know the Federal government has determined the field locations but would like a specific answer to this question. If it is feasible to be further east, would it also be affordable or is that the key factor?

Comment Number: BOEM-2021-0024-DRAFT-0360-3
Commenter: Jennifer Livak
Commenter Type: Individual

Comment Excerpt Text:

And it seems there's already a better option out there! It's my understanding that there IS a BOEM screened and approved lease area, 30 - 57 miles off shore that is bigger, and has more wind capacity. Locating the wind farm in this area, a minimum of 30 miles off shore, and even with the bigger 12MW turbines, will solve the visual pollution that the current lease area emits, thus saving our Tourism economy which is so important to the state. We strongly urge you to slow this project down and consider relocation of both the Ocean Wind and Atlantic Shore projects to the Hudson South area.

Comment Number: BOEM-2021-0024-EMAIL-004-15
Organization: Long Beach Island (LBI) New Jersey Coalition for Wind Without Impact
Commenter: Bob Stern

Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

A NOI is required to present a preliminary description of alternatives. There are reasonable alternatives to this unreasonable proposal that have been previously provided to the BOEM and that it has to date chosen to ignore. The BOEM has not even included the Hudson South call area which it has endorsed for turbine placement as a reasonable alternative. In this NOI there are no alternatives to the proposal presented other than no action which cannot be defined because the project's purpose has not been defined, and which the BOEM probably has never or rarely exercised as reasonable. An EIS without any reasonable alternatives to the proposal is not in compliance with the NEPA.

Comment Number: BOEM-2021-0024-EMAIL-004-3
Organization: Long Beach Island (LBI) New Jersey Coalition for Wind Without Impact
Commenter: Bob Stern
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

A Better Alternative for Turbine Installation Lies Waiting Further Offshore. The Hudson South call area, 30 to 57 miles offshore, shown below has been screened by the BOEM for all relevant wind energy development factors including visible impact, fishing conflicts, navigation, and marine mammal impacts, recommended for wind energy development, and is proceeding to lease sales. It has at least seven times the wind energy than the current proposal and would avoid the economic devastation to local shore communities from visible wind turbines.

All the turbines would be placed there. Even the more powerful wind turbines emerging today can be placed in Hudson South and not be visible, allowing the shore to sustain its tourism-based economy and its unvarnished seascape.

[See original attachment for map titled, "Final BOEM Wind Energy Areas - NY Bight"]

The existing closer-in lease areas off of Atlantic City and LBJ would be used as the hub for a planned, coordinated network to transmit all the power from Hudson South destined for New Jersey under the seabed to shore. The NJ Board of Public Utilities (BPU) is proceeding to secure such a network. The BOEM repeatedly states in its lease sale conditions that such sales in no way authorizes or prejudices it to approve turbine installation, so such a change in project direction is well within its authority to pursue.

The Hudson South area has greater acreage, higher annual mean wind speeds and close to 7000 megawatts of wind energy potential, at least seven times the wind energy of the current project, clearly enough to serve as a programmatic alternative to it.

The Hudson South area does not interfere with NJ Department of Environmental Protection defined prime fishing (including shellfish) areas, and this can be examined further in the EIS.

Job prospects in New Jersey from offshore wind development, especially for foundation and other component manufacturing at Paulsboro, NJ and for turbine staging at Lower Alloways Creek are not hurt by this proposal- the turbines will still be assembled and installed, just further out and where monopile foundations are still viable.

In fact, those job prospects are improved with "invisible" turbines in Hudson South as opposed to highly visible ones near shore that could create a public backlash to the entire wind energy program. The creation of a single large transmission project also creates the opportunity to bring more substation construction industries and jobs to New Jersey.

The "Hudson South" alternative is a much better approach for securing more offshore wind power while not damaging the shores natural beauty and economy. The BOEM has concluded its screening analysis and recommended it for wind energy development. It is incomprehensible why the BOEM would go through the exercise of identifying desirable areas for wind energy development and then not even include its own recommended area as an alternative in its project EISs.

The benefits of turbine placement there are more fully described in Enclosure 1. The Hudson South alternative at this point appears far better than the applicant's plan and must at a minimum be treated as an alternative in the EIS. Let each alternative get a full evaluation so that the benefits and detriments of each can be compared.

This EIS should actually make the Hudson South option the proposed action but must, at a minimum, include development of the Hudson South call area as a reasonable alternative.

Comment Number: BOEM-2021-0024-EMAIL-004-9
Organization: Long Beach Island (LBI) New Jersey Coalition for Wind Without Impact
Commenter: Bob Stern
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

When challenged on its narrow NEPA process, the BOEM states under litigation that it will do a thorough EIS analysis, which must include reasonable alternatives, when it gets to the project construction phase, but now that it is there, it reneges on that promise and just considers the applicant's plan within its lease area.

The BOEM should reconsider its stilted NEPA environmental review approach. Under the BOEM's own description of its regulatory framework, the Energy Policy Act of 2005 (EPAct) authorized BOEM to issue leases, easements and rights of way to allow for renewable energy development on the Outer Continental Shelf (OCS). The EPAct provided a general framework for BOEM to follow when authorizing these renewable energy activities. For example, the EPAct requires that BOEM coordinate with relevant Federal agencies and affected state and local governments, obtain fair return for leases and grants issued, and ensure that renewable energy development takes place in a safe and environmentally responsible manner. Under Section 585.102(a)(10), it requires consideration of the location of and any schedule relating to a lease or grant under this part for an area of the OCS and any other use of the sea or seabed.

The BOEM therefore has broad authority to develop offshore wind in a safe and environmentally responsible manner. As the agency authorized to implement this program in the public interest, its responsibility is not simply to say yes or no to an applicant's proposal, which may have interests divergent from the public's, but to implement wind energy in that broader public interest. That means consideration of reasonable alternatives, and especially those that reduce adverse impacts as would Hudson South. At a minimum, this EIS must include the Hudson South call area as a reasonable alternative.

Since an EIS was not done to support the selection of Hudson South as an area suitable for leasing, NEPA compliance now requires at a minimum that any of those New York Bight areas identified serving the same electric market as this proposal, which includes the Hudson South area, be included as reasonable alternatives in this project EIS. Given the tenuous nature of the wind energy potential from this lease area as described below it would seem just from a practical standpoint to be in the BOEM's programmatic interest to prepare an EIS that creates rather than forecloses options.

Comment Number: BOEM-2021-0024-EMAIL-004-30
Organization: Long Beach Island (LBI) New Jersey Coalition for Wind Without Impact

Commenter: Bob Stern
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Enclosure 1, The Hudson South Alternative

The Current Projects

The project currently envisioned off of Long Beach Island (LBI), with several hundred turbines as tall as the Eiffel Tower and just 9 to 20 miles offshore, would be the most visible modern wind turbine complex in the world, and would cause severe adverse economic impacts on its tourism-based economy. The impact from the Ocean Wind project off of Atlantic City is expected to be similar to that described here.

Applying data from prior published studies to these new turbine heights and distances (Enclosure 3), the estimated economic impact of the Atlantic Shores Offshore Wind project to LBI includes:

• Several hundred million dollars of lost tourism revenues annually

• 18 percent fewer visits to the island,

• A 55 percent loss of previous renters of ocean front and ocean view properties, and

• An associated loss in property values of ocean front and ocean view homes

ranging from $189,000 to $1,010,000, with spillover implications for other property owners.

Citizen groups in Maryland and Delaware reviewing wind projects similar to ours are requesting a 33-mile exclusion zone, which means that no wind turbines would be placed closer than 33 miles from their shores. In Europe and elsewhere globally, large modern wind fanns start 44 miles out.

The current project has limited wind energy potential toward meeting the State's goal of 7500 megawatts of power from offshore wind by 2035. The federal Bureau of Ocean Energy Management (BOEM) has proposed a turbine exclusion zone of 17.3 miles for New York State offshore wind projects based on visible impact. New York wants 20 miles. If the 17 .3-mile exclusion zone was applied here, and the outer edge was limited to 18.5 miles to avoid impacts to the North Atlantic Right Whale, the maximum turbine output from the useable lease area would be just about 530 megawatts, and unfortunately the turbines would still be quite visible. There may be other unacceptable environmental impacts that would limit the project's usable lease area and wind energy potential.

A much better alternative exists that can meet the State's offshore wind energy goals, without harming the shore's tourism-based economy, that should be included as a reasonable alternative in the environmental impact statement (EIS) for this project.

A Better Alternative

That alternative lies waiting just beyond the current lease area, in the "Hudson South" call area, 30 to 57 miles out, as shown below. The Hudson South area has been screened by the BOEM for relevant wind turbine siting factors including visible impact, fishing interests, marine protected species, vessel navigation and cost of development, and initially recommended by them in draft form for wind energy development in 2018 as a shown below for comparison with the current lease area. They just adopted the NY Bight areas, including Hudson South in final form (see map in cover letter) and are moving forward on lease sales.

[See original map titled, "Original BOEM Recommended Lease Areas (in green)"]

Under this alternative all the wind turbines would be placed out there. The existing closer-in lease area would be used as the hub for a planned, coordinated network to transmit all the power from Hudson South destined for New Jersey under the seabed to shore.

Even the more powerful wind turbines emerging today can be placed in Hudson South and not be visible, allowing the shore to sustain its tourism-based economy and its unvarnished seascape.

The Hudson South area has greater acreage, higher annual mean wind speeds and close to 7500 megawatts of wind energy potential, four times the wind energy of the full current lease area, and eight times the power if the BOEM turbine exclusion zone for NY is applied to NJ.

Substantial wind energy development in Hudson South will be needed regardless to meet the State's offshore wind energy goal.

It makes good sense to have one set of cables and substations transmitting all the power from Hudson South rather than multiple companies dredging and constructing their own. This leaves the current lessee, Atlantic Shore Offshore Wind, with a substantial power transmission project to undertake.

The Hudson South area does not appear to interfere with NJ Department of Environmental protection defined prime fishing areas, and this can be examined further in the EIS.

Job prospects in New Jersey from offshore wind development, especially for foundation and other component manufacturing at Paulsboro, and for turbine staging at Lower Alloways Creek are not hurt by this proposal-the turbines will still be assembled and installed, just further out and where monopile foundations are still viable.

In fact, those job prospects are improved with "invisible" turbines in Hudson South as opposed to highly visible ones near shore that could create a public backlash to the entire wind energy program. Additional New Jersey jobs may also arise from the large, coordinated transmission project envisioned through the manufacture of approximately 16 electric substation structures, assuming about a 6000-megawatt transmission project.

Conclusions

Given the State's 7500-megawatt goal, the Hudson South wind energy potential of 7500 megawatts and the proposed contribution coming from the Ocean Wind project to the south of at least 1100 megawatts, turbine placement in Hudson South is a clear programmatic alternative to turbine placement in the close-in lease area off of LBI.

The "Hudson South" alternative is a much better approach for securing more offshore wind power while not damaging the shores natural beauty and economy.

It is far better than the current plan and could even become the 'proposed action" in the upcoming BOEM EIS instead of the current plan, or at a minimum be treated as an equal alternative plan. Let each alternative get a full evaluation in the EIS so that the benefits and detriments of each can be compared.

Comment Number: BOEM-2021-0024-EMAIL-005-15
Organization: City of Beach Haven, New Jersey
Commenter: Colleen Lambert
Commenter Type: Local Agency

Comment Excerpt Text:

Fortunately, such an alternative lies waiting just beyond the current lease area, in the "Hudson South" call area, 30 to 57 miles out, as shown below. The Hudson South area has been screened by the BOEM for relevant wind turbine siting factors including visible impact, fishing interests, marine protected species,

vessel navigation and cost of development, and initially recommended by them for wind energy development Lease sales are expected soon.

Under this alternative all wind turbines would be placed out there. The existing closer-in lease areas off of Atlantic City and Long Beach Island would be used as the hub fora planned, coordinated network to transmit all the power from Hudson South destined for New Jersey under the seabed to shore.

Even the more powerful wind turbines emerging today can be placed in Hudson South and not be visible, allowing the shore to sustain its tourism-based economy and its unvarnished seascape.

The Hudson South area has greater acreage, higher annual mean wind speeds and close to 7500 megawatts of wind energy potential, at least seven times the wind energy of the current project, clearly enough to serve as a programmatic alternative to it.

The Hudson South area does not appear to interfere with NJ Department of Environmental protection defined prime fishing areas, and this can be examined further in the EIS.

Comment Number: BOEM-2021-0024-EMAIL-005-16
Organization: City of Beach Haven, New Jersey
Commenter: Colleen Lambert
Commenter Type: Local Agency

Comment Excerpt Text:

The "Hudson South" alternative is a much better approach for securing more offshore wind power while not damaging the shores natural beauty and economy. The BOEM has concluded its screening analysis and recommended it for wind energy development. It is incomprehensible why the BOEM wouId goes through the exercise of identifying desirable areas for wind energy development and then not even include those areas as alternatives in its project EISs.

The Hudson South alternative at this point appears far better than the applicant's plan and must at a minimum be treated as an alternative in the EIS. Let each alternative get a full evaluation so that the benefits and detriments of each can be compared.

Comment Number: BOEM-2021-0024-EMAIL-005-5
Organization: City of Beach Haven, New Jersey
Commenter: Colleen Lambert
Commenter Type: Local Agency

Comment Excerpt Text:

The Hudson South call area has been screened by the BOEM for all relevant wind energy development factors including visible impact, fishing conflicts, navigation, and marine mammal impacts, and recommended for wind energy development. It has at least seven times the wind energy than the current project and would avoid economic devastation to local shore communities from visible wind turbines.

Comment Number: BOEM-2021-0024-TRANS-41321-0004-2
Organization: New Jersey Coalition for Wind Without Impact
Commenter: Bob Stern
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

There are reasonable alternatives and I know that was asked for. Sitting out there waiting for us, the Hudson South Call area starts 30 miles out, goes out 57 miles, it has been screened, analyzed by the BOEM and determined to be very suitable for wind energy based on everything we know today. So we

would urge that BOEM take a step back here, reconsider and at least put the Hudson South alternative in there as an option, place the turbines out there, everything should be fine, use the current lease areas as the hub for transmission project to bring all that power to shore and that is a much more sensible approach. We will be submitting that as our primary recommendation to you.

Comment Number: BOEM-2021-0024-TRANS-41321-0016-3
Organization: Ocean City Council
Commenter: Michael DeVilager
Commenter Type: Local Agency

Comment Excerpt Text:

If they feel so strongly about this and not going to effect these things, take them up north where most of the people voted on it, and if they can successfully put these windmills, these wind turbines in up north and it doesn't effect their areas, then certainly we will consider it but the research has not been done down here and we want it done before they take those chances and wreck things for the next 25 years along our coast.

Comment Number: BOEM-2021-0024-TRANS-41521-0005-1
Organization: City of Beach Haven, New Jersey
Commenter: Colleen Lambert
Commenter Type: Local Agency

Comment Excerpt Text:

the Hudson South Call area which was originally considered for this project for whatever reason has been abandoned and we are now much closer to shore for the Atlantic Shores Project which of course Orsted we are concerned because both are so close to us. There would be much greater wind speed out there as well. So as an alternative, we would like to make that suggestion right off the bat.

Comment Number: BOEM-2021-0024-TRANS-42021-0010-7
Commenter: Joe De Finnis
Commenter Type: Individual

Comment Excerpt Text:

So somebody had mentioned earlier in a talk, not in the public comments but one of the presentators, that perhaps there are areas where these could be put which are less threatening to all the things that I mentioned and I am hoping that's being taken into consideration.

A.2.2.4. Other comments on alternatives

Comment Number: BOEM-2021-0024-DRAFT-0208-3
Organization: Long Beach Island, NJ Coalition for Wind Without Impact
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

[Bold: Other alternatives] include alternate power levels -or equivalently numbers of turbines- and different turbine spacings and configurations. In addition, until the purpose and need of this project is made clear (see comment below) it will not be possible to assess the impacts of the no action alternative properly. Whether the purpose is energy security, climate change, air quality, or electric power reliability or some other makes a big difference on what the impacts of the no action alternative are.

Comment Number: BOEM-2021-0024-DRAFT-0208-4
Organization: Long Beach Island, NJ Coalition for Wind Without Impact
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Alternate Power Levels: In addition to alternate lease areas, the EIS should include other power levels as alternatives to the proposed 1100 megawatts.

The BOEM Programmatic EIS states in section 5.22 1.4 that the visual impacts of turbine operation will be dealt with in the site-specific NEPA analysis, and lists major factors that will determine their visibility, e.g., the distance from shore, and the size and number of turbines.

However, in-between the lease sale and the project draft EIS the NJ BPU reached a power purchase agreement with the applicant, and now the applicant's proposed power level is apparently the only one to be assessed in the EIS.

Once the power output for the lease area is determined, given each turbines power dictated by market availability, the number of turbines is pre-determined. Turbine spacing is constrained by engineering practice and determines the minimum distance to shore. So, by the time of the draft EIS all these major factors are determined and varying them to mitigate the visible impact is foreclosed.

Here the BOEM has abrogated its federal responsibility to the applicant. The BOEM is not bound by the arrangement between the NJ BPU and the applicant. It must include lower alternative power levels which would confine the turbines to specific sections of the lease area and have a mitigating impact on visible impacts as well as other possible environmental impacts, and assess them in the EIS. A decision on power level should await consideration of those impacts in the final EIS.

To summarize, the BOEM needs to state whether it feels bound by the BPU decision and if so, provide its legal reasoning. If not, it needs to consider alternate power levels and therefore different numbers of turbines as alternatives in the EIS and not promote any one level until its record of decision following the final EIS.

Comment Number: BOEM-2021-0024-DRAFT-0243-5
Commenter: James Binder
Commenter Type: Individual

Comment Excerpt Text:

We need to go slowly, and as recommended by the Governor's Blue Ribbon Panel in 2006, build a test facility (no greater than 350MW) to obtain practical knowledge of costs, benefits and impacts resulting from offshore wind turbine facilities. Let's not forfeit what we have for an uncertain future before we know for sure what we are doing. And, when and if we do it, let's do it without visual impact and environmental harm as part of a diverse formula for energy generation.

Comment Number: BOEM-2021-0024-DRAFT-0243-7
Commenter: James Binder
Commenter Type: Individual

Comment Excerpt Text:

Limited Test Project Alternative ("Go Slow Alternative") : Regarding offshore wind, the reliability of offshore wind power has not been demonstrated at a level in the U.S. for the project size proposed. As noted previously, the Blue Ribbon Panel established by the Governor of NJ to look into the viability of large offshore wind projects in New Jersey prepared a report in 2006. They recommended to the BPU that a limited test project no larger than 350MW first be done to obtain practical knowledge of benefits and impacts resulting from offshore wind turbines before larger projects are developed. That limited test project has never been done. It would be wise to "walk before we run".

Comment Number: BOEM-2021-0024-DRAFT-0281-5
Commenter: Jorge Constantino
Commenter Type: Individual

Comment Excerpt Text:

6. Why pass the cables across Roosevelt Avenue and up Route 9 to the BBL plant, and not just go directly from the Ocean City bay directly to the BBL plant (a hypotenuse), which is much shorter? The cables are already traveling 15 miles underwater to reach the shore, and this would lead to less disruption of roads and infrastructure.

Comment Number: BOEM-2021-0024-DRAFT-0281-6
Commenter: Jorge Constantino
Commenter Type: Individual

Comment Number: BOEM-2021-0024-DRAFT-0284-9
Commenter: Denise Kubaska
Commenter Type: Individual

Comment Excerpt Text:

How do the environmental impacts compare to placement of wind turbines in more decentralized locations on land? Perhaps located in conjunction with solar at facility sites comparable to those located at the ACUA water treatment facility?

Comment Number: BOEM-2021-0024-DRAFT-0295-3
Organization: New England Fishery Management and Mid-Atlantic Fishery Management Councils
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

BOEM should consider if additional alternatives beyond a no action alternative and the proposal outlined in the COP are necessary to mitigate impacts to fisheries and habitat. For example, input from fishermen should be sought regarding if the proposed 1 by 0.8 nautical mile layout is sufficient to allow for safe fishing operations and transiting or if additional transit lanes should be considered. In addition, ongoing habitat data collection and analysis may suggest that certain preferred turbine locations should be removed or relocated to minimize impacts to habitat. The EIS should include specific criteria that would result in a preferred turbine location being moved or removed to minimize habitat impacts.

Comment Number: BOEM-2021-0024-DRAFT-0295-4
Organization: New England Fishery Management and Mid-Atlantic Fishery Management Councils
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The EIS should also clearly state the extent to which a reduction in the proposed number of 98 turbines is feasible, especially given the recent segmentation of the lease (leaving less space available to move turbine locations) and existing procurements.

Comment Number: BOEM-2021-0024-DRAFT-0297-10
Organization: Responsible Offshore Development Alliance
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

C. BOEM DEIS Scoping Presentation

Our members were surprised and dismayed, then, to see during BOEM's hearing regarding Ocean Wind DEIS scoping on April 13, 2021, a statement from Ørsted that its preferred layout was developed with input from RODA and NJ fishermen and that it "provides for vessels moving through and fishing within the array." In clear contrast, the workshop summary states "[m]ost fishermen said they would be unlikely to fish within an array with less than 2 miles of spacing (and might not do so even then)." It also includes suggestions for specific locations of transit lanes "at least 2 miles in total or more" that are not included in Ørsted's proposed layout. Moreover, fishermen do not recognize any change between the layout presented during the hearing and the ones presented by Ørsted at those meetings, calling into question what "input" fishermen had into the design at all.

It is extremely important that discussions are appropriately characterized if fishermen are to invest time and resources in communications with developers. If Ørsted would like to continue reasonable two-way communications about its project layout based on the design/mitigation principles fishermen thoughtfully requested during these meetings RODA would be happy to pick up this effort again. BOEM also now has two duties: (1) to include and analyze these fishermen-identified alternatives in the DEIS; and (2) to remove from the COP and all public records incorrect characterizations regarding the content of input from the fishing community to this project.

Comment Number: BOEM-2021-0024-DRAFT-0297-11
Organization: Responsible Offshore Development Alliance
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

III. REQUESTS FROM THE FISHING INDUSTRY TO OCEAN WIND

The following clear, consistent, and reasonable requests have been provided by the NJ fishing community with regard to the Ocean Wind project, as detailed in the workshop summary referenced above and other prior communications. These must be included among the range of alternatives in any forthcoming DEIS.

A. Array Layout and Cable Burial

Array design and spacing between turbines are important determinants of commercial fishing operations within wind development areas. Atlantic surfclam and ocean quahog are the dominant species fished with mobile gear in the Ocean Wind lease area. In order for these fisheries to operate after construction, a minimum spacing of 2 nm between turbines must be maintained, due to the specific way gear is deployed and hauled back, chain lengths, vessel maneuverability, and other conditions. [Footnote 13: This does not mean that spacing of 2 nm would lead to no impacts from the project, but that gear cannot effectively operate at all in denser layouts] Turbine spacing less than 2 nm will be considered a complete closure for this fishery, including for purposes of determining compensatory mitigation.

Furthermore, as clam dredges are substrate penetrating gear and the substrate in this area consists of high-energy sand, it is extremely important that interarray and export cables are buried to sufficient depths to reduce the risk of fishing gear interactions. The fishing industry requests this to be a minimum of 8-10 feet to avoid interactions; if a shallower depth is permitted, it must be paired with remote monitoring to ensure the cable remains adequately buried at all times. BOEM must provide clear standards as to what this depth is, how it is determined, and monitoring protocols to ensure there are no future interactions. Moreover, the project layout should be designed to minimize instances where cables transect fishing tow areas.

Comment Number: BOEM-2021-0024-DRAFT-0316-6
Commenter: M McCarroll
Commenter Type: Individual

Comment Excerpt Text:

Why not consider harnessing the tides for energy which would safeguard our precious land, be operated on our soil by an American company?

Comment Number: BOEM-2021-0024-DRAFT-0335-4
Organization: The Nature Conservancy
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The Nature Conservancy requests that BOEM consider a project alternative that includes the use of non-pile driven foundation alternatives (aka quiet foundations) as opposed to the use of monopiles. While the submitted construction and operations plan (COP) indicates that the technology has not been fully developed or assessed, gravity base foundations are included in Equinor's Empire Wind 1 & 2 combined 2076 mw project in the NY Bight, where project site water depths (65 ft to 131 ft) are comparable to the water depths for Ocean Wind (49 ft to 118 ft) – indicating sufficient technology advancements for their use in the region. While we understand there may be a tradeoff in terms of the disturbance of the seabed, all potential options should be considered in order to have a full understanding of the costs and benefits of particular scenarios.

Comment Number: BOEM-2021-0024-DRAFT-0335-7
Organization: The Nature Conservancy
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

All options to avoid impacts of pile driving noise through the use of quiet foundations should be thoroughly assessed. If that is unfeasible then best technology available for pile driving noise mitigation, and vessel collision avoidance, should be required as part of the projects Protected Species Monitoring and Management Plan (PSMMP).

Comment Number: BOEM-2021-0024-DRAFT-0346-7
Commenter: Martha Oldach
Commenter Type: Individual

Comment Excerpt Text:

There is a very simple alternative. It is cheap it is clean energy and it is natural gas. Under the Christie administration it was ready to be applied. There is only one reason that that didnt happen. And that is because of one man that was in charge of the small and non-local sierra club that harassed with lawsuits the gas company till they just gave up. We here on the island were very positive to the natural gas solution. I personally feel that that is the right way to proceed. I am all for keeping the environment clean and for research which could be accomplished while we were providing clean cheap energy with natural gas. Windvturbines are not the solution. I and many people feel that they are in efficient, destructive and the wrong alternative to fossil fuel.

Comment Number: BOEM-2021-0024-DRAFT-0364-13
Organization: Oceana
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Separate from the overarching requirements described above, Oceana encourages BOEM to include alternatives specific to each phase of the project (siting, construction, operation, and decommissioning) to ensure the environmental effects of the project are avoided and if not avoided the mitigated or minimized.

Comment Number: BOEM-2021-0024-DRAFT-0364-18
Organization: Oceana
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

High resolution geophysical (HRG) surveys are an essential part of offshore wind development but have noted environmental effects on the marine ecosystem. As such, the EIS should include a range of alternatives to prohibit HRG surveys during seasons when protected species are known to be present in the project area, in addition to any dynamic restrictions due to the presence of NARW or other endangered species.

Additionally, the EIS should include alternatives that require clearance zones for North Atlantic right whales that extend at least 1,000 meters with requirements for HRG survey vessels to use Protected Species Observers (PSOs) and Passive Acoustic Monitoring (PAM) to establish and monitor these zones with requirements to cease surveys if a NARW enters the clearance zone. When safe to begin, HRG surveys should use a soft start, ramp-up procedure to encourage any nearby marine life to leave the area.

Comment Number: BOEM-2021-0024-DRAFT-0366-33
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Additionally, to encompass the full range of reasonably foreseeable impacts, BOEM's analysis must include an alternative that combines the most disruptive components for each option included in the envelope. The design envelope alternative also cannot be conceived or analyzed so broadly that it impairs BOEM's duty to effectively "inform decision makers and the public of the reasonable alternatives which would avoid or minimize impacts," as NEPA requires.

Comment Number: BOEM-2021-0024-DRAFT-0370-10
Organization: Recreational Fishing Alliance
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

In response to the request for information on other possible alternatives, it is the understanding of the RFA that renewable energy sources such as offshore wind will require a comparable amount of energy capacity from non-renewable sources. Even if the goal to produce 30,000 mega watts of electricity from offshore wind along the Atlantic coast is achieved, the electricity contribution to the nation's overall energy needs is still less than 1%. Thus, offshore is unlikely to offer a real net reduction of carbon. Furthermore, if offshore wind is to contribute to the east coast energy market of the United States in any meaningful way, thousands of wind turbines would be needed on the outer continental shelf. RFA simply does not view that scale of development to the outer continental shelf and level of public investment as practical. If carbon free energy generation is a long-term goal then RFA suggests that the EIS conduct an analysis of the net carbon savings associated with the Ocean Wind facility and what carbon emission savings could be achieved through the use of small modular nuclear reactors at the Oyster Creek and B.L. England facilities. Closed loop nuclear reactors may provide a far more realistic and long term means of achieving the nation' long term energy goals including reductions to greenhouse gas emissions. RFA

hopes this type of analysis is conducted in the EIS so the public can evaluate how best to invest public resources to reduce carbon emissions.

Comment Number: BOEM-2021-0024-EMAIL-003-3
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

Alternatives Analysis

The "Alternatives" section of the EIS should consider and evaluate the full range of reasonable alternatives to the proposed action, including those that would cause less damage to the environment. The analysis should include development of mitigation measures that follow the sequence of avoidance, minimization, and compensation, or offsetting, of adverse impacts. For difficult-to-replace resources such as submerged aquatic vegetation (SAV; inclusive of attached macroalgae and seagrasses), natural hard bottom substrates with epifauna (including corals), and shellfish habitat and reefs, alternatives that avoid impacts to these habitats should be evaluated and given full consideration. To facilitate efficient review of the alternatives, we recommend the alternatives and comprehensive analyses associated with each be grouped into the three corresponding elements of the proposed project: (1) wind farm area; (2) offshore export cable routes and associated corridors; and (3) inshore export cable routes and associated corridors and landfall points. Each element of the proposed project should have multiple alternatives that could be "mixed and matched" in the final selection of the single and complete project.

Comment Number: BOEM-2021-0024-EMAIL-003-4
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

Alternative locations within the lease area

A full range of reasonable alternatives should be considered despite restrictions to the project area. On March 26, 2021, BOEM approved the segmentation of the original lease area into two portions, designating OCS-A 0498 as the lease area for this project and reserving OCS-A 0532 as a separate project for future development. Further, the project boundaries described in Section 5.1.5 of the COP narrowly define the project such that few options would be considered viable except the proposed action. Together, these decisions limit the number of alternatives that could be considered for this project. Despite these limitations, alternative locations within the lease area and outside of the project boundary defined in the COP should be considered, particularly if such locations would minimize impacts to ecologically sensitive habitats and other marine resources. As we noted with respect to the South Fork Wind project, we remain concerned about the process by which segmentation of the lease area occurs, particularly with little opportunity for input from cooperating agencies. Such segmentation substantially limits the range of alternatives available for consideration for each project, especially alternative WTG locations within the lease area that may reduce impacts on habitat.

Comment Number: BOEM-2021-0024-EMAIL-003-6
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

Alternative layout, location, and spacing

Commercial and recreational fishing are essential components contributing to the economic viability of many coastal communities that must be preserved in the development of the project. Impacts to such users should be minimized to ensure co-existence between fishing and offshore wind development and prevent interference with existing reasonable uses of the lease area.

Alternatives for WTG layout, location, and spacing, particularly related to impacts on fishing and survey vessel operations and transit, are important considerations for the alternatives analysis in the EIS. To that end, we appreciate efforts to consider such operations in the proposed layout specified in the COP instead of the non-orthogonal layout.

Comment Number: BOEM-2021-0024-EMAIL-003-7
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Other Sections: 8

Comment Excerpt Text:

Vessel monitoring system (VMS) [Footnote 1: VMS data is only required for specific vessels.] data used by BOEM to develop polar histograms of vessel operating courses can be used to inform alternative WTG location, layout, and spacing. These data suggest a similar number of vessels operate along both a roughly southwest-northeast course (similar to the proposed layout) while fishing and a north-south course while transiting within the project area. We recommend BOEM continue to work closely with the commercial and recreational fishing communities and the U.S. Coast Guard to ensure WTG spacing and layout alternatives minimize impacts to existing fishing and NOAA Fisheries survey operations, including vessel transit. Similar to the agreement between developers for adjacent Rhode Island and Massachusetts offshore wind projects, coordination with Atlantic Shores Offshore Wind is necessary to ensure that the WTG layout and spacing alternatives developed for this project do not conflict with and result in hazards and safety issues for vessels operating within or navigating through the adjacent projects. BOEM should consider alternatives that increase WTG layout and spacing consistency between these two adjacent projects.

Comment Number: BOEM-2021-0024-EMAIL-004-28
Organization: Long Beach Island (LBI) New Jersey Coalition for Wind Without Impact
Commenter: Bob Stern
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

If the BOEM decides to proceed with this proposed project it should structure it in two phases, as was recommended by the New Jersey Governor's Blue-Ribbon Panel on the Development of Wind Turbine Facilities in Coastal Waters in 2006. That would start with a smaller scale pilot project that would allow us to gain first-hand knowledge of the actual visible and other impacts, and take measurements of noise and other effects before proceeding with any full-scale development.

Comment Number: BOEM-2021-0024-EMAIL-004-4
Organization: Long Beach Island (LBI) New Jersey Coalition for Wind Without Impact
Commenter: Bob Stern
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Other alternatives include alternate power levels -or equivalently numbers of turbines and different turbine spacings and configurations.

Comment Number: BOEM-2021-0024-EMAIL-004-6
Organization: Long Beach Island (LBI) New Jersey Coalition for Wind Without Impact
Commenter: Bob Stern
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Alternate Power Levels: In addition to alternate lease areas, the EIS should include other power levels as alternatives to the proposed 1100 megawatts.

The BOEM Programmatic EIS states in section 5.22 1.4 that the visual impacts of turbine operation will be dealt with in the site-specific NEPA analysis, and lists major factors that will determine their visibility, e.g., the distance from shore, and the size and number of turbines.

However, in-between the lease sale and the project draft EIS the NJ BPU reached a power purchase agreement with the applicant, and now the applicant's proposed power level is apparently the only one to be assessed in the EIS.

Once the power output for the lease area is determined, given each turbines power dictated by market availability, the number of turbines is pre-determined. Turbine spacing is constrained by engineering practice and determines the minimum distance to shore. So, by the time of the draft EIS all these major factors are determined and varying them to mitigate the visible impact is foreclosed.

Here the BOEM has abrogated its federal responsibility to the applicant. The BOEM is not bound by the arrangement between the NJ BPU and the applicant. It must include lower alternative power levels which would confine the turbines to specific sections of the lease area and have a mitigating impact on visible impacts as well as other possible environmental impacts, and assess them in the EIS. A decision on power level should await consideration of those impacts in the final EIS.

To summarize, the BOEM needs to state whether it feels bound by the BPU decision and if so, provide its legal reasoning. If not, it needs to consider alternate power levels and therefore different numbers of turbines as alternatives in the EIS and not promote any one level until its record of decision following the final EIS.

Comment Number: BOEM-2021-0024-EMAIL-005-18
Organization: City of Beach Haven, New Jersey
Commenter: Colleen Lambert
Commenter Type: Local Agency

Comment Excerpt Text:

In addition to alternate lease areas, the revised NOI should include other power levels as alternatives to the proposed 1100 megawatts. The BOEM Programmatic EIS states in section 5.22 1.4 that the visual impacts of turbine operation will be dealt with in the site-specific NEPA analysis, and lists major factors that will determine their visibility, e.g., the distance from shore, and the size and number of turbines.

Comment Number: BOEM-2021-0024-EMAIL-005-19
Organization: City of Beach Haven, New Jersey
Commenter: Colleen Lambert
Commenter Type: Local Agency

Comment Excerpt Text:

Once the power output for the lease area is determined, given each turbines power dictated by market availability, the number of turbines is pre-determined. Turbine spacing is constrained by engineering practice and determines the minimum distance to shore. So, by the time of the draft EIS all these major factors are determined and varying them to mitigate the visible impact is foreclosed.

Here again the BOEM has abrogated its federal responsibility to the applicant. The BOEM is not bound by the arrangement between the NJ BPU and the applicant. It must include lower alternative power levels which would confine the turbines to specific sections of the lease area and have a mitigating impact on visible impacts as well as other possible environmental impacts, and assess them in the EIS. A decision on power level should await consideration of those impacts in the final EIS.

Comment Number: BOEM-2021-0024-EMAIL-006-1
Organization: U.S. Coast Guard
Commenter: Michael D Emerson
Commenter Type: Federal Agency

Other Sections: 16

Comment Excerpt Text:

The Ocean Wind Construction and Operations Plan (COP) includes several wind turbine generators (WTG) constructed in close proximity to the lease area border it shares with lease OCS-A 0499

(Atlantic Shores Offshore Wind, LLC). When multiple lease areas share borders, the Coast Guard recommends a common turbine spacing and layout throughout all adjoining wind projects. This will have the cumulative effect of presenting one wind farm with consistent straight-line routes for the mariner through the entire area. The common turbine spacing and layout will help facilitate navigation safety, consistent and continuous marking and lighting, search and rescue, and where necessary, other uses such as commercial fishing.

In the absence of a common spacing and orientation between adjacent wind projects, the Coast Guard recommends setbacks from the shared border to create a gap between projects. The space between projects should be greater than any turbine spacing within either wind farm to provide a clear visual reference to easily distinguish them as two separate projects. A change in orientation or spacing without this separation will increase risk for surface and aerial navigation through the wind farms, and could inhibit an aerial search within the wind farms. Spacing along the shared border and the subsequent impacts to navigation and Coast Guard missions should be addressed in each individual Navigation Safety Risk Assessment (NSRA) and Emergency Response Considerations for Search and Rescue.

Comment Number: BOEM-2021-0024-TRANS-41521-0004-3
Organization: Long Beach Island Coalition for Wind Without Impact
Commenter: Bob Stern
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

but at every point in this notice of intent, it just comes back to what Orsted wants to do. The most glaring is the absence of any alternatives to the Orsted proposal. And it’s particularly strange when BOEM itself has identified an area 30 to 57 miles off the shore which now they say is ideal for wind energy development and that is not in the notice of intent.

A.2.3 Bats

Comment Number: BOEM-2021-0024-DRAFT-0366-178
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

H. IMPACTS TO BATS

The most comprehensive survey of bats offshore in the United States found bats to be present at all surveyed coastal sites in the Gulf of Maine, mid-Atlantic, and the Great Lakes. Some bat species were detected up to 70 nautical miles (130 kilometers) from the mainland, although their activity generally declined with increased distance from shore. [Footnote 271: Peterson, Trevor S, Steven K Pelletier, and Matt Giovanni. "Long-Term Bat Monitoring on Islands, Offshore Structures, and Coastal Sites in the Gulf of Maine, Mid-Atlantic, and Great Lakes—Final Report." Prepared for the U.S. Department of Energy, Topsham, ME, USA, 2016.] These acoustic survey efforts identified Myotis calls at 63% of all sites surveyed and Myotis species were present at 89% of sites surveyed across all these locations. [Footnote 272: Peterson et al. 2016.] Migratory bats also were frequently detected offshore. Eastern red bats appear to be the most widespread and active off the Atlantic Coast accounting for 40% of all detected bat activity offshore. [Footnote 273: Eastern red bats were identified in the New York Bight and were present at 100% of the static sites in the Mid- Atlantic (and represented 81% of the passes/bat activity identifiable to species) and at 96% of the static sites in the found at 95% and 89% of all sites, respectively.] Hoary bats and silver-haired bats had less total activity offshore but were still widespread,

Comment Number: BOEM-2021-0024-DRAFT-0366-179
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

[Footnote 274: Bird Studies Canada. 2018. "Motus Wildlife Tracking System." 2018. https://motus.org/ 275 New Jersey Agricultural Experiment Station: The Facts About Bats in New Jersey, https://njaes.rutgers.edu/fs1207/]] Because there is limited understanding of the risk for bats to collide with turbines in the Project area, BOEM should adopt a precautionary approach impact assessment for bats in all steps of offshore wind energy development.

Comment Number: BOEM-2021-0024-DRAFT-0366-180
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

1. Bat Occurrence and Considerations in the Ocean Wind Project Area

Nine species of bats are found in the New Jersey area.

a. Of the six cave-dwelling resident bats [little brown bat (Myotis lucifugus), northern long- eared bat (M. septentrionalis), eastern small-footed bat (M. leibii), Indiana bat (M. sodalis), tricolored bat (Perimyotis subflavus), and the big brown bat (Eptesicus fucsus)], two are federally listed species under the ESA. The Indiana bat is endangered [Footnote 276: US Fish and Wildlife Service - Environmental Conservation Online System (ECOS): Indiana bat (Myotis sodalis) https://ecos.fws.gov/ecp/species/5949] and the northern long-eared bat is threatened. [Footnote 277: US Fish and Wildlife Service - Environmental Conservation Online System (ECOS): Northern Long-Eared Bat (Myotis septentrionalis) https://ecos.fws.gov/ecp/species/9045 However, a judge recently ruled that USFWS's decision to list the northern long-eared bat as threatened (rather than endangered) was arbitrary and capricious and failed to

consider the best available scientific evidence; [Footnote 278: https://defenders.org/sites/default/files/2020-01/Dkt.%2081%20Opinion%20and%20Order.pdf] that listing decision has been remanded to the agency so the status of the northern long- eared bat could change in the near future. Furthermore, the listing status of the tricolored bat is currently under review by the USFWS. [Footnote 279: US Fish and Wildlife Service - Environmental Conservation Online System (ECOS): Tricolored bat (Perimyotis subflavus) https://ecos.fws.gov/ecp/species/10515large insects.]

b. The three migratory tree-roosting bat species include the silver-haired bat (Lasionycteris noctivagans), eastern red bat (Lasiurus borealis), and the hoary bat (Lasiurus cinereus).

Some of these bat species have been detected offshore in marine environments. The Motus Wildlife Tracking System is an international collaborative research network that uses coordinated automated radio telemetry to study the ecology and conservation of small flying animals such as birds, bats, and Gulf of Maine (where they represented 46% of passes identifiable to species). Peterson et al. 2016; Sjollema, Angela L., J. Edward Gates, Robert H. Hilderbrand, and John Sherwell. "Offshore Activity of Bats Along the Mid- Atlantic Coast." Northeastern Naturalist, vol. 21, no. 2 (2014): 154–63. https://doi.org/10.1656/045.021.0201; Hatch, Shaylyn K., Emily E. Connelly, Timothy J. Divoll, Iain J. Stenhouse, and Kathryn A. Williams. "Offshore Observations of Eastern Red Bats (Lasiurus Borealis) in the Mid-Atlantic United States Using Multiple Survey Methods."Justin David Brown, ed. PLoS ONE, vol. 8, no. 12 (2013): e83803. https://doi.org/10.1371/journal.pone.0083803. Additionally, red bats were detected within the New York Bight from research vessels and one was tracked flying across the New York Bight, likely cutting across the eastern parts of Hudson South and Statoil Wind US LLC OCS-A 0512. "Motus Wildlife Tracking System," Bird Studies Canada, 2018. https://motus.org/data/tracksSearch.; The NOAA Bigelow (research vessel) detected 23 bats in the NY Bight, identified including 2 eastern red bats; 16 high frequency, unknown species; 1 low frequency, unknown species; 2 big brown or silver-haired bats; 2 eastern red bat, tricolored bat, or evening bat. Peterson, Trevor S, Steven K Pelletier, and Matt Giovanni. "Long-Term Bat Monitoring on Islands, Offshore Structures, and Coastal Sites in the Gulf of Maine, Mid-Atlantic, and Great Lakes—Final Report." Prepared for the U.S. Department of Energy, Topsham, ME, USA, 2016.

Comment Number: BOEM-2021-0024-DRAFT-0366-181
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

[Footnote 280:Bird Studies Canada. 2018. "Motus Wildlife Tracking System." 2018. https://motus.org/] Motus data indicate that eastern red bats, hoary bats, and eastern small-footed bats all have made cross-water flights near Cape Cod. [Footnote 281: Id] The northern long-eared bat has also been documented roosting and hibernating on offshore islands in the Gulf of Maine, [Footnote 282: Brown, J., McAlpine, D., and R. Curley, "Northern Long-eared Bat, Myotis septentrionalis (Chiroptera: Vespertilionidae), on Prince Edward Island: First Records of Occurrence and Over-Wintering," The Canadian Field Naturalist, vol. 121, no. 2 (2007):208-209.; Dowling, Z. Sievert, P., Baldwin, E., Johnson, L., Von Oettingen, S., and J. Reichard, Flight Activity and Offshore Movements of Nano-Tagged Bats on Martha's Vineyard, MA: Final Report.OCS Study BOEM 2017-054. U.S. Department of the Interior Bureau of Ocean Energy Management.

] and in 2015, a tagged Indiana bat was detected on Cape Cod and Nantucket. [Footnote 283: There are not many bats included in Motus, so although only a single Indiana bat was detected in eastern Massachusetts, this does not necessarily indicate that Indiana bats are rarely present in the area.] Recent survey efforts on Martha's Vineyard also detected little brown bats making offshore movements, with one bat traveling from Martha's Vineyard to Cape Cod. [Footnote 284: Dowling, Zara D. 2018. "Not Gone with the Wind: Addressing Effects of Offshore Wind Development on Bat Species in the Northeastern

United States. Chapter III: Flight activity and offshore movements of nano-tagged bats on Martha's Vineyard." University of Massachusetts Amherst, PhD Dissertation The presence of the federally threatened northern long-eared bats on both Martha's Vineyard and Nantucket indicates that this species can cross open water. This species has also been tracked making long distance flights over water in the Gulf of Maine. [Footnote 285: Bird Studies Canada. 2018. "Motus Wildlife Tracking System." 2018. https://motus.org/]

Comment Number: BOEM-2021-0024-DRAFT-0366-182
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Regarding the presence of bats in offshore areas, the Ocean Wind COP [Footnote 286: COP, Vol. III, Appendix H, P. 3-4. states that "bats are not expected to regularly forage in the Wind Farm Area, but migratory tree-roosting bats may be present during migration. Impacts to bats during construction are limited because, while bats may be attracted to vessels, stationary objects are not generally considered a collision risk. During operation, individual migratory tree-roosting bats, particularly eastern red bats (Lasiurus borealis), may pass through the array during fall migration." The COP offers "minimizing lighting" as a mitigation measure for "[p]otential effects during all construction phases" on these bats. The COP further states that "uncertainty remains on the extent to which bats use the offshore environment" but concludes, despite this stated uncertainty, that "the Project is unlikely to have a population level impact for any species of bat." [Footnote 287: Id]

Comment Number: BOEM-2021-0024-DRAFT-0366-185
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

2. Bat Stressors and their Cumulative Impacts on Bat Populations

On land, fatal collisions of bats with wind turbine blades, [Footnote 290: Although barotrauma can also cause bat fatalities, it is likely a very small contributor to overall mortality at wind turbines, especially since bats must be very close to turbine blades to experience barotrauma. Rollins, K. E., D. K. Meyerholz, G. D. Johnson, A. P. Capparella, and S. S. Loew. 2012. "A Forensic Investigation Into the Etiology of Bat Mortality at a Wind Farm: Barotrauma or Traumatic Injury?" Veterinary Pathology, vol. 49, no. 2 (2012): 362–71.] mostly at low wind speeds on warm nights during migration, have been well-documented. [Footnote 291: Arnett, Edward, Manuela Huso, Michael Schirmacher, and John Hayes. "Altering Turbine Speed Reduces Bat Mortality at Wind-Energy Facilities." Frontiers in Ecology and the Environment, vol. 9, no. 4 (2011): 209–14. https://doi.org/10.1890/100103.] Studies have shown that more than half a million bats are killed at land-based wind turbines each year in the U.S. and Canada. [Footnote 292: Hayes, Mark A. "Bats Killed in Large Numbers at United States Wind Energy Facilities." BioScience, vol. 63, no. 12 (2013): 975–79. https://doi.org/10.1525/bio.2013.63.12.10] The migratory tree-roosting bat species seem to be particularly attracted to WTGs on land, and some have been recorded altering course towards turbines. [Footnote 293: Cryan, Paul M., P. Marcos Gorresen, Cris D. Hein, Michael R. Schirmacher, Robert H. Diehl, Manuela M. Huso, David T. S. Hayman, et al. "Behavior of Bats at Wind Turbines." Proceedings of the National Academy of Sciences of the United States of America, vol. 111, no. 42: 15126-15131. https://doi.org/10.1073/pnas.1406672111] Although there is not scientific consensus on why bats are approaching wind turbines, theories include that bats perceive WTGs as potential roosting opportunities, use the structures for navigational purposes while migrating, [Footnote 294: South Fork Wind Farm and South Fork Export Cable Project Draft Environmental Impact Statement, Table H-36, 86 Fed. Reg. 1520 (Posted January 4, 2021).] mistake smooth turbine surfaces for water, seek out insect prey that congregate near turbines, [Footnote 295: BOEM, 2021, South Fork Wind Farm and

South Fork Export Cable - Development and Operation Biological Assessment, at pg. 45. or this attraction could be due to an as yet unknown reason.54

The three migratory tree-roosting bat species found in NJ (hoary bats, silver-haired bats, and eastern red bats) are also the ones most impacted by land-based wind energy development, accounting for almost 80% of all bat fatalities at wind facilities in North America. [Footnote 296: Hoary bats, eastern red bats, and silver-haired bats represent 38%, 22%, and 18% of all bat fatalities at wind turbines in the United States and Canada, respectively. Arnett, Edward B., and Erin F. Baerwald. "Impacts of Wind Energy Development on Bats: Implications for Conservation." Bat Evolution, Ecology, and Conservation, (2013): 435–56. https://doi.org/10.1007/978-1-4614-7397-8_21

] Mortality of cave-dwelling bat species found in the NJ region have also been documented at land-based WTGs, including little brown bat, northern long-eared bat, Indiana bat, tricolored bat, and big brown bat. [Footnote 297: Id]

Comment Number: BOEM-2021-0024-DRAFT-0366-186
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

As discussed in the above section, there is increasing evidence that bats do regularly use the offshore environment but more tracking and acoustic monitoring studies are needed to better understand how this translates into risk. The bat species potentially present in the Project area are already facing multiple stressors on land including WTG collisions, deadly diseases like the fungal white-nose syndrome, habitat loss, etc., which increases their vulnerability to additional take from the expansion of the built-environment in coastal and marine habitats.

A.2.4 Benthic Resources

Comment Number: BOEM-2021-0024-DRAFT-0025-2
Commenter: Devin Pantiliano
Commenter Type: Individual

Comment Excerpt Text:

I have watched video clips on cold pools studies from Rutgers University and there seems to be so much more that needs to be studied and understood prior to committing to this large scale of a project.

Comment Number: BOEM-2021-0024-DRAFT-0064-1
Commenter: John Atkinson
Commenter Type: Individual

Comment Excerpt Text:

It is hard to believe this is environmentally responsible to do such damage to the ocean floor.

Comment Number: BOEM-2021-0024-DRAFT-0233-3
Organization: City of Ocean City, Environmental Commission
Commenter Type: Local Agency

Comment Excerpt Text:

Export and Array Cables - since the cable needs to be designed, use best engineering practices to provide cables that will have no impact to sea floor life, and not use a "standard/ordinary" cable.

Comment Number: BOEM-2021-0024-DRAFT-0233-8
Organization: City of Ocean City, Environmental Commission
Commenter Type: Local Agency

Comment Excerpt Text:

Cold Pool - Monopile installation will be a temporary impact to the ocean floor, final installation will provide fish habitat. Surface Flow

Turbulence impact from the turbines is unknown and must be considered. Climate change is already influencing the cold pool; the Gulf Stream is slowing and fish are migrating towards the poles due to ocean warming.

Comment Number: BOEM-2021-0024-DRAFT-0251-1
Commenter: Paul E Towhey Sr
Commenter Type: Individual

Comment Excerpt Text:

I write today in opposition to the wind farm that is being considered off the coast of Ocean City NJ.

I believe that this project is ill-considered for the following reasons:

It will harm our underwater seabeds.

Comment Number: BOEM-2021-0024-DRAFT-0253-2
Commenter: Susan Shirk
Commenter Type: Individual

Comment Excerpt Text:

first, it will have a negative impact on the environment. running huge power lines through the ocean and then underneath a barrier island is disruptive to the ecosystem.

Comment Number: BOEM-2021-0024-DRAFT-0333-1
Commenter: Orlando Candelori
Commenter Type: Individual

Comment Excerpt Text:

Now that we start seeing that our ocean is starting to heal and the water quality getting better, we turn around and propose too pile drive hundreds of holes, hundreds of feet deep into the ocean floor to put in 815 feet plus monoliths and run miles of cables emitting electro magnetic fields around them, that will act as a barrier to certain fish migration.

Comment Number: BOEM-2021-0024-DRAFT-0336-1
Commenter: John Feairheller, Jr., PP
Commenter Type: Individual

Comment Excerpt Text:

the structure will be constructed below the water table and will need to be heavy enough to resist floatation when maintenance is performed. Given the interior dimensions shown in Figure 6.2.2-5 the interior of the structure displaces 6,740 pounds and the structure exterior of the structure will be nearly 13 feet in height. The weight and length of the structure will require pile foundations so that the structure survives construction.

Comment Number: BOEM-2021-0024-DRAFT-0346-2
Commenter: Martha Oldach
Commenter Type: Individual

Comment Excerpt Text:

The years that it will take to install 98 turbines and the cables (not to mention the pollution of the ships, cement pouring, leakage etc.) will forever, I believe and scientific studies predict, force the sea life to leave this important natural area. There is absolutely no guarantee that any of the sea life will return.

Comment Number: BOEM-2021-0024-DRAFT-0351-4
Organization: Barnegat Bay Partnership
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Volume 1 of the COP states that the applicant anticipates that remedial burial events are likely to be needed over the lifetime of the project. If these events occur within protected habitats (i.e., SAV, wetlands, shellfish beds) are there mitigation requirements for these additional disturbances? The EIS should indicate how the impacts for these events are calculated and considered.

Comment Number: BOEM-2021-0024-DRAFT-0371-5
Commenter: Martha Wright
Commenter Type: Individual

Comment Excerpt Text:

The ocean floor, the water and the ever-changing tides are a dynamic environment which must not be tampered with, especially on the massive scale as proposed.

Comment Number: BOEM-2021-0024-DRAFT-0381-20
Organization: Clean Ocean Action
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

2. Habitat Change

a. Introducing hard substructures into the marine environment creates artificial reefs leading to the settlement of marine organisms in the area. This can be positive, as well as negative. It increases biodiversity but can also potentially introduce new harmful species (including invasive species) and disrupt food chains.

b. The creation of these large homogenous changes to the sea floor will change the environment and the impact it has on the marine life is uncertain but could result in displacement.

Comment Number: BOEM-2021-0024-EMAIL-003-13
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

The “Affected Environment” section should also include all of the biological, cultural, and socioeconomic issues related to fisheries and marine resources that may be affected by this project, including species that live within or seasonally use the immediate project area and adjacent locations. For benthic resources, fish, and invertebrate species, this section should include an assessment of species status and habitat

requirements, including benthic, demersal, bentho-pelagic, and pelagic species and infaunal, emergent fauna and epifaunal species living on and within surrounding substrates.

Comment Number: BOEM-2021-0024-EMAIL-003-18
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

The ecological impacts resulting from the loss of seabed and the associated benthic communities and forage base should be evaluated. This should include a discussion of the ecological and economic impacts associated with habitat conversion (e.g., soft sediments to artificial reef or man-made structural habitat) from WTG, substation, and cable installation. This analysis should also include site-specific benthic data collection and an evaluation of impacts to higher trophic levels due to the loss of prey species. Impacts associated with decommissioning of the project should also be included, with details on how decommissioning would occur and the environmental consequences associated with project removal.

Comment Number: BOEM-2021-0024-TRANS-41321-0002-2
Commenter: Louise Halprin
Commenter Type: Individual

Comment Excerpt Text:

How deep below the ocean floor do the piers need to be drilled. Now, it looks like 46 feet on today's presentation but, you know, you didn't say a single thing about like how many yards or, you know, of concrete are going to be poured per each pier casing, I mean you have to know that, that's going to effect so much of the mammal life.

A.2.5 Birds

Comment Number: BOEM-2021-0024-DRAFT-0009-5
Commenter: Karen Barlow
Commenter Type: Individual

Comment Excerpt Text:

Research from reputable sources, such as Sierra Club and 350.org, shows that birds typically migrate closer to the shore than most wind farms and higher than even the tallest turbines.

Comment Number: BOEM-2021-0024-DRAFT-0082-3
Commenter: William O'Neill
Commenter Type: Individual

Comment Excerpt Text:

How it will hurt migratory birds when here in Ocean City we have Hawkman chasing Laughing Gulls (migratory birds) off of the boardwalk here in the summer time and Geese Chasers chasing geese and Brandts off of the athletic fields.

Comment Number: BOEM-2021-0024-DRAFT-0084-1
Commenter: Greg Noll
Commenter Type: Individual

Comment Excerpt Text:

This area of NJ is an important flyway for migrating birds that will be chopped to pieces by these turbines.

Comment Number: BOEM-2021-0024-DRAFT-0108-3
Commenter: Jennifer Trofa
Commenter Type: Individual

Comment Excerpt Text:

Second, on behalf of the wildlife, we must bring to the attention of the BOEM and all other federal agencies charged with the designation, protection and preservation of certain areas as historically and/or environmentally important that Cape May County is recognized as one of the most significant bird destinations in the world; and that it and the Atlantic Ocean are crucial to our existing economic stability and health. There is well-recognized bird species and bird population-loss already. We call upon those agencies to notify any other such interested or duty-bound agencies of these two facts and to designate a representative-trustee-advocate-guardian for the Atlantic Ocean and our region's wildlife.

Comment Number: BOEM-2021-0024-DRAFT-0112-7
Commenter: Robert and Joann Zuczek
Commenter Type: Individual

Comment Excerpt Text:

The destruction of local birds and migrating birds will occur by spinning blades and discourage long term natural gain.

Comment Number: BOEM-2021-0024-DRAFT-0129-3
Commenter: Gerry Lucidi
Commenter Type: Individual

Comment Excerpt Text:

I know areas around Ocean City have preserves for endangered birds like Malibu Beach (dog beach). Efforts years ago to develop this property was thwarted due to the possible impact on endangered species. Why is this not the case now? Those birds migrate up and down the coast and 900 foot tall turbines wont negatively impact them?

Comment Number: BOEM-2021-0024-DRAFT-0134-5
Commenter: Kate Hayden
Commenter Type: Individual

Comment Excerpt Text:

Additionally, the rotating blades are deadly to migrating birds.

Comment Number: BOEM-2021-0024-DRAFT-0146-2
Commenter: Angelo Lovallo
Commenter Type: Individual

Comment Excerpt Text:

If wind turbines do not kill birds and bats, then why did MidAmerican Energy apply for a permit with the US Fish and Wildlife Services to kill Bald Eagles and two protected bat species? The American Bird Conservancy reports that 5,000 wind turbines have killed more than 2,000 eagles in California alone since 1998 when facilities were made to keep track.

Comment Number: BOEM-2021-0024-DRAFT-0169-8
Commenter: Rick Robinson
Commenter Type: Individual

Comment Excerpt Text:

Will birds really be unaffected by such a huge new man made structure?

Comment Number: BOEM-2021-0024-DRAFT-0185-2
Commenter: Ronald Hammell
Commenter Type: Individual

Comment Excerpt Text:

Also, the known danger of birds and wildfowl flying into windmills.

Comment Number: BOEM-2021-0024-DRAFT-0196-11
Commenter: Lisa Kazunas
Commenter Type: Individual

Comment Excerpt Text:

The interruption and deaths of various migratory birds and bats that fly within the wind farm fields in which there are many on the endangered list.

Comment Number: BOEM-2021-0024-DRAFT-0220-4
Commenter: Joann Zuczek
Commenter Type: Individual

Comment Excerpt Text:

The destruction of local birds and migrating birds will occur by spinning blades and discourage long term natural gain.

Comment Number: BOEM-2021-0024-DRAFT-0227-4
Commenter: Gerald Raab
Commenter Type: Individual

Comment Excerpt Text:

Then add on the incidentals including bird strikes ,oil leakage from the construction equipment and from the turbines themselves and the eyesore factor. Please end this now

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Comment Number: BOEM-2021-0024-DRAFT-0233-2
Organization: City of Ocean City, Environmental Commission
Commenter Type: Local Agency

Comment Excerpt Text:

Birds - we highly recommend the implementation of the Identiflight avian detection system despite the apparent “unlikely” impacts noted in the COP.

Comment Number: BOEM-2021-0024-DRAFT-0252-1
Commenter: Robert Liguori
Commenter Type: Individual

Comment Excerpt Text:

What birds would fly in the vicinity of the new offshore wind farms and would they be subjected to bird strikes or as I read about wild geese onshore, can they avoid being harmed?

Comment Number: BOEM-2021-0024-DRAFT-0255-1
Commenter: Arthur Peterson

Commenter Type: Individual

Comment Excerpt Text:

I'm opposed to this project due to the large number of birds that will be kill and washing up on our beaches. And children asking why are all these birds dying.

Comment Number: BOEM-2021-0024-DRAFT-0261-1
Commenter: Monica Feeley
Commenter Type: Individual

Comment Excerpt Text:

In addition to being unsightly, wind farms cause a great deal of death and destruction to birds as well as marine life during construction. The migratory birds follow the coastline down to Cape May annually - the results would be catastrophic. I am against the installation of wind farms off the Jersey shoreline.

Comment Number: BOEM-2021-0024-DRAFT-0272-3
Commenter: William Roache
Commenter Type: Individual

Comment Excerpt Text:

The obvious negative impact to the MILLIONS of migratory sea birds and waterfowl is unimaginable. Common sense should tell you that this is a horrible idea. Find an area that isnt a major migration flyway .

Comment Number: BOEM-2021-0024-DRAFT-0299-2
Commenter: Claire Wayner
Commenter Type: Individual

Comment Excerpt Text:

My only request is for the turbines to be sited sufficiently offshore to protect migratory birds in their flyway.

Comment Number: BOEM-2021-0024-DRAFT-0316-1
Commenter: M McCarroll
Commenter Type: Individual

Comment Excerpt Text:

Today's Cape May County Herald contains an article sharing that Stone Harbor might be considering the discharge of firearms to allow predator control at its Point where protected birds nest. Those predators kill very few birds. Conversely, the number of birds killed by already established wind farms in the west is incalculable.

Comment Number: BOEM-2021-0024-DRAFT-0316-2
Commenter: M McCarroll
Commenter Type: Individual

Comment Excerpt Text:

Millions if not billions of taxpayer dollars have been expended to protect birds, other animals including whales and turtles, wetlands and coastal habitat along the Atlantic Flyway in an ocean area that is essentially a Grand Canyon. This precious habitat is collaboratively shared in its usage and oversight.

Comment Number: BOEM-2021-0024-DRAFT-0348-10
Organization: American Bird Conservancy
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

It is possible that collisions at offshore wind facilities in the U.S. may be uncommon, but that is impossible to conclude without robust data collection at operational facilities. Bird collision monitoring is standard practice for onshore wind facilities. There is no reason that offshore wind development should be held to a different standard, fully recognizing the differences in conducting such monitoring in the two settings. To the contrary, a cautionary approach should be taken for this industry, which is new to U.S. waters and ecosystems.

Monitoring measures being considered for other offshore wind energy facilities in the Atlantic include acoustic monitoring, deployment of nanotags and installation of Motus receivers on wind turbines, and avian behavior point count surveys at individual turbines. We support this, and recommend that additional technologies also be used to gather post-construction monitoring data at the Ocean Wind facility, with the understanding that upgrades in technology may be substituted as part of an adaptive management strategy.

Comment Number: BOEM-2021-0024-DRAFT-0348-11
Organization: American Bird Conservancy
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

RECOMMENDATIONS

We recommend that Ocean Wind, and all other offshore wind facilities being planned in the U.S.:

Utilize the best available technology to monitor bird collisions once facilities are constructed; this should include digital video, in addition to acoustic monitoring, nanotags and GPS tags;

Make bird collision data publicly available, providing transparency and an opportunity for informed discussion about minimizing impacts as this industry grows; and Commit to upgrading collision monitoring technology, as available, as part of an adaptive management strategy; in particular, we urge that collision sensor technology be installed for testing at the facility if not yet verified, and/or deployed when verification is complete.

Comment Number: BOEM-2021-0024-DRAFT-0348-12
Organization: American Bird Conservancy
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

MONITORING MUST BE CONDUCTED TO EVALUATE POTENTIAL DISPLACEMENT EFFECTS

For some species, displacement effects have emerged as the most concerning impact of offshore wind development in Europe. For example, Mendel et al. (2019) [Footnote 7: Mendel et al. 2019. Operational offshore wind farms and associated ship traffic cause profound changes in distribution patterns of Loons (Gavia spp.). Journal of Environmental Management 231: 429-438.] found that the abundance of red-throated loons decreased as far as 16km from the nearest facility. Displacement effects will be longer-term and become more important as more facilities are constructed. A plan should be developed to evaluate these impacts over the next decade or more as additional facilities are expected to be built in the Atlantic. This requires a broad-scale approach more appropriate for a federal and/or multi-state effort.

Comment Number: BOEM-2021-0024-DRAFT-0348-2
Organization: American Bird Conservancy
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

IMPACTS TO MIGRATORY LAND BIRDS MUST BE STUDIED AND ADDRESSED

An EIS for Ocean Wind must substantively evaluate the impacts of offshore wind energy development on transatlantic migratory land birds. Large numbers of these birds make nocturnal migratory flights in fall from the northeastern U.S. to wintering grounds in the Caribbean and South America. For example, DeLuca et al. (2015) [Footnote 1: DeLuca et al. 2015. Transoceanic migration by a 12 g songbird. Biology Letters 11: 20141045.] found that the Blackpoll Warbler, a songbird weighing less than half an ounce, makes a nonstop fall migratory flight from New England / Southeast Canada as far as northern South America. La Sorte and Fink (2017) [Footnote 2: La Sorte and Fink. 2017. Projected changes in prevailing winds for transatlantic migratory birds under global warming. Journal of Animal Ecology 86: 273-284.] found that another nine species follow a similar fall migration pattern, including species of conservation concern such as Bicknell's Thrush. Dokter et al. (2018) [Footnote 3: Dokter et al. 2018. Seasonal abundance and survival of North America's migratory avifauna determined by weather radar. Nature Ecology & Evolution 2: 1603-1609.] used weather radar data to estimate nocturnal migration patterns in the U.S. They found that an estimated 219 million birds followed a translatlantic migration pattern in the fall, and 63 million in spring.

Comment Number: BOEM-2021-0024-DRAFT-0348-3
Organization: American Bird Conservancy
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Very little data exists regarding transatlantic migrants' flight heights and behavior when they leave our shores. As was found by FWS's Avian Radar Project [Footnote 4: https://www.fws.gov/radar/] in the Great Lakes, nocturnal migrant birds may fly within the rotor-swept zone of offshore wind turbines off the Atlantic coast, creating risk of collisions. What's more, these birds migrate in flocks, meaning that a large number of birds could be killed in a single event. As you know, these birds are protected under the Migratory Bird Treaty Act.

This issue is of concern for all offshore wind projects proposed along the Atlantic coast, but perhaps more important for Ocean Wind than all others. Southern New Jersey is renowned for its incredible concentration of migratory land birds in the fall. This may make Ocean Wind the highest-risk project currently being proposed for nocturnal migrants.

Comment Number: BOEM-2021-0024-DRAFT-0348-4
Organization: American Bird Conservancy
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The New Jersey Department of Environmental Protection conducted some relevant work in 2008-2009 using radar, [Footnote 5: New Jersey Department of Environmental Protection Office of Science. 2010. Ocean/Wind power ecological baseline studies, Volume II: Avian Studies. Prepared by Geo-Marine, Inc.] which we applaud and would like to see become an industry standard. However, the survey work was limited both spatially and temporally in the offshore environment, despite an obviously concerted effort. Their report for fall radar studies found that "the data are limited and insufficient to make any conclusions." Far greater numbers of nocturnal migrants fly over the Atlantic in fall than in spring, as noted above, so this must be rectified.

Comment Number: BOEM-2021-0024-DRAFT-0348-5
Organization: American Bird Conservancy
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

RECOMMENDATIONS

We urge the agencies to use radar within the project area to assess flight height and relative abundance of nocturnal migrants during fall migration, and augment this with acoustic monitoring so species can be identified to the greatest extent possible. This should be complemented by nanotagging and GPS tagging birds to obtain data on their migratory flight paths. Studies must examine whether risk increases with different climatic conditions, and must be conducted over multiple years to assess inter-annual variability.

This work could also improve risk assessment for federally threatened Red Knots, which also migrate at night and are potentially at risk of collisions with turbines.

Comment Number: BOEM-2021-0024-DRAFT-0348-6
Organization: American Bird Conservancy
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

IMPACTS TO ESA-LISTED SPECIES MUST BE FURTHER CONSIDERED

We have serious concerns about the conclusions in the Construction and Operations Plan (COP) regarding risks the Ocean Wind project poses to Endangered Species Act-listed birds. In particular, we are concerned about the threatened Rufa Red Knot and Piping Plover.

Comment Number: BOEM-2021-0024-DRAFT-0348-7
Organization: American Bird Conservancy
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The Rufa Red Knot formerly migrated in huge numbers along the Atlantic coast, but a precipitous population decline due to a variety of threats prompted its listing in 2015. The COP acknowledges that based on data regarding the species' flight behavior offshore, there is risk of Rufa Red Knots colliding with turbines. The COP also acknowledges that this species' migration occurs primarily at night, when turbine visibility is necessary limited. However, the COP concludes that the species has minimal to low vulnerability to collisions. The COP similarly concludes that collision risk to Piping Plovers is low, despite acknowledging that they are known to traverse wind energy areas within the rotor swept zone.

Comment Number: BOEM-2021-0024-DRAFT-0348-8
Organization: American Bird Conservancy
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

RECOMMENDATIONS

Further study is warranted. Delaware Bay is one of the most important stopover sites for Rufa Red Knot, and the Atlantic coast is used by both species during migration. For Rufa Red Knot in particular, this potentially places a relatively large number of birds in the Ocean Wind project area during migratory periods. Studies must be conducted to further refine collision risk assessment for these species specifically within the vicinity of the Ocean Wind project area.

Comment Number: BOEM-2021-0024-DRAFT-0348-9
Organization: American Bird Conservancy
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

EFFECTIVE BIRD COLLISION MONITORING MUST BE CONDUCTED

Bird collisions at offshore wind facilities have been minimally studied to date, despite the many years of industry development in European waters. Skov et al. (2018)6 is frequently cited, but this study consisted of cameras on two turbines in the interior of a single facility. It found that, of 15 birds that were documented flying perpendicularly to the rotor blades within the rotor-swept zone, [Footnote 6: Skov et al. 2018. ORJIP bird collision avoidance study. Final report – April 2018. The Carbon Trust.] (40%) collided with turbine blades.

Comment Number: BOEM-2021-0024-DRAFT-0353-6
Organization: New Jersey Resource Project
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

We want best practices followed during construction to spot whales and avoid bird migration season to minimize the number of deaths. Construction schedules must be arranged in conjunction with migration patterns.

Comment Number: BOEM-2021-0024-DRAFT-0359-1
Commenter: Annemarie Bach
Commenter Type: Individual

Comment Excerpt Text:

I am very concerned about the proposed wind farm and the effects it will have on both birds and marine animals. Many birds migrate past our shores and could come into contact with these machines.

Comment Number: BOEM-2021-0024-DRAFT-0366-121
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

1. The Draft EIS Must Consider the Full Scope of Impacts to Federally Protected Birds and Species that Trigger Conservation Obligations

BOEM must ensure that the Draft EIS retains consideration of the full range of potential impacts on all bird species known to forage or rest in or near the Project, or migrate through the area, including those species protected under the Migratory Bird Treaty Act (MBTA) and the ESA as well as species of birds covered under obligations for conservation of birds under the Fish and Wildlife Conservation Act as amended in 1988, [Footnote 202: 16 U.S.C. 2901-2911 (1988), https://www.fws.gov/laws/lawsdigest/FWCON.HTML.] Executive Order (EO) 13186 "Responsibilities of Federal Agencies to Protect Migratory Birds" (January 17, 2001), [Footnote 203: Exec. Order No.13186, 3 C.F.R. 1 (Jan. 10, 2001), https://www.energy.gov/sites/prod/files/nepapub/nepa_documents/RedDont/Req-EO13186migratorybirds.pdf.

] North American Waterbird Conservation Plan, [Footnote 204: North American Waterbird Conservation Plan, Waterbird Conservation for the Americas, Version 1. https://www.fws.gov/migratorybirds/pdf/management/northamericawaterbirdconservationplan.pdf.] the

U.S. Shorebird Conservation Plan, [Footnote 205: 205Brown, S., C. Hickey, B. Harrington, and R. Gill, eds. 2001. The U.S. Shorebird Conservation Plan, 2nd ed. Manomet Center for Conservation Sciences, Manomet, MA.] the Memorandum of Understanding (MOU) between the Department of the Interior U.S. Minerals Management Service and the Department of the Interior U.S. Fish and Wildlife Service (USFWS) regarding implementation of EO 13186, [Footnote 206: Memorandum of Understanding Between the Department of the Interior U.S. Minerals Management Service and the Department of the Interior U.S. Fish and Wildlife Service Regarding Implementation of Executive Order 13186, "Responsibilities of Federal Agencies to Protect Migratory Birds" (Jun. 4, 2009). https://www.boem.gov/Renewable-Energy- Program/MMSFWS_MBTA_MOU_6-4-09-pdf.aspx] the United Nations Convention on the Conservation of Migratory Species of Wild Animals (CMS), [Footnote 207: Convention on the conservation of migratory species of wild animals, Bonn, 23 June 1979. https://www.cms.int/en/convention-text.] and BOEM, Department of Interior (DOI), USFWS, and NOAA membership in the International Union for Conservation of Nature [Footnote 208: IUCN Member List, https://www.iucn.org/about/members/iucn-members.] (hereinafter collectively referred to as the "conservation obligations").

Comment Number: BOEM-2021-0024-DRAFT-0366-122
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

As we have commented to BOEM before, we are aware that the DOI and the USFWS are now relying on a new rule [Footnote 209: 50 C.F.R. § 10 (2021).] which codifies an illegal interpretation of the MBTA and limits its scope to the purposeful take of birds. [Footnote 210: U.S. Department of the Interior, "The Migratory Bird Treaty Act Does Not Prohibit Incidental Take,"Memorandum M- 37050 (Dec. 22, 2017), https://www.doi.gov/sites/doi.gov/files/uploads/m-37050.pdf.] Our organizations strongly oppose this rule as contrary to the plain language and intent of the law, and we urge BOEM to continue to implement its MBTA responsibilities as all previous administrations have done in the past, with explicit recognition that incidental take is prohibited. This would also be consistent with the memorandum of understanding that BOEM signed with USFWS in 2009 to protect migratory bird populations. [Footnote 211: Memorandum of Understanding Between the Department of the Interior U.S. Minerals Management Service and the Department of the Interior U.S. Fish and Wildlife Service Regarding Implementation of Executive Order 13186, "Responsibilities of Federal Agencies to Protect Migratory Birds" (Jun. 4, 2009). https://www.boem.gov/Renewable-Energy-Program/MMSFWS_MBTA_MOU_6-4-09-pdf.aspx .] If DOI's new interpretation changes BOEM's analysis and associated requirements for impacts to migratory birds in any way, a detailed description and explanation of such changes must be included in the Draft EIS. We note that signatories of these comments (Natural Resources Defense Council, Defenders of Wildlife, and National Audubon Society), together with many other organizations and states, successfully challenged DOI's unlawful reinterpretation of the MBTA in court [Footnote 212: National Audubon Society v. U.S. Department of Interior, No. 18-cv-08084 (S.D.N.Y 2019).] and expect BOEM and USFWS to respect the court's ruling.

Comment Number: BOEM-2021-0024-DRAFT-0366-123
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The MBTA states that, "[u]nless and except as permitted by regulations . . . it shall be unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, kill, attempt to take, capture, or kill . . . any migratory bird." [Footnote 213: 213Migratory Bird Treaty Act of 1918, 16 U.S.C. § 703 (1918).] For decades, the DOI has interpreted the MBTA to encompass "incidental takes" of migratory birds,

including from wind turbines. It was not until the 2017 Jorjani Opinion M- 37050 that the DOI limited the MBTA's legal scope to only include actions that purposely take migratory birds. [Footnote 214: United States Department of Interior, The Migratory Bird Treaty Act Does Not Prohibit Incidental Take, Memo M-37050 (Dec. 14, 2017), https://www.doi.gov/sites/doi.gov/files/uploads/m-37050.pdf.] However, on August 11, 2020, the United States District Court for the Southern District of New York found that "the Jorjani Opinion's interpretation runs counter to the purpose of the MBTA to protect migratory bird populations." [Footnote 215: Natural Resources Defense Council v. United States DOI, 2020 WL 4605235, at *6 (S.D.N.Y. Aug. 11, 2020).] The court found that the statute's unambiguous text makes clear that killing a migratory bird "by any means or in any manner," regardless of how, is covered by the statute. [Footnote 216: Id. at 28.] As such, the district court struck down the Jorjani Opinion as unlawful, restoring the MBTA's protections for migratory birds from incidental takes. [Footnote 217: Id. at 42-44.] The unlawful reinterpretation does not relieve BOEM or FWS from their obligations for conservation of birds under the aforementioned federal laws, EO and MOU, as well as MBTA.

Comment Number: BOEM-2021-0024-DRAFT-0366-124
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

At a minimum, the Draft EIS should include analysis of the following priority species for fulfilling BOEM's conservation obligations:

-Red-throated Loon, Horned Grebe, Great Shearwater, Audubon's Shearwater, Black Skimmer, Gull-billed Tern, Hudsonian Godwit, Upland Sandpiper, Whimbrel, and Arctic Tern are all USFWS Birds of Conservation Concern [Footnote 218: U.S. Fish and Wildlife Service. 2008. Birds of conservation concern 2008. Page 85. United States Department of Interior, Fish and Wildlife Service, Division of Migratory Bird Management, Arlington, Virginia. Available from https://www.fws.gov/migratorybirds/pdf/management/BCC2008.pdf (accessed July 20, 2020).] under the Fish & Wildlife Conservation Act, 1988 amendment.

-Black-legged Kittiwake, Horned Grebe, Leach's Storm-petrel, Long-tailed Duck, Atlantic Puffin, and Chimney Swift are classified by the International Union for Conservation of Nature (IUCN) as Vulnerable.

- Black Scoter, Common Eider, Semipalmated Sandpiper, Blackpoll warbler, Razorbill, and Sooty Shearwater are classified by IUCN as Near Threatened.

- Red Knot, Semipalmated Sandpiper, and Buff-breasted Sandpiper are classified by the CMS as Endangered.

Comment Number: BOEM-2021-0024-DRAFT-0366-125
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Further, the following trans-Atlantic migrating birds have documented routes through the Atlantic OCS WEAs, and should therefore be prioritized in the Draft EIS for analysis of impacts to nocturnal migrants [Footnote 219: Sorte FAL, Fink D. 2017. Projected changes in prevailing winds for transatlantic migratory birds under global warming. Journal of Animal Ecology 86:273–284.]:

American Golden-Plover

Bicknell's Thrush

Blackpoll Warbler

Bobolink

Buff-breasted Sandpiper

Chimney Swift

Connecticut Warbler

Pectoral Sandpiper

Semipalmated Sandpiper

Solitary Sandpiper

Upland Sandpiper

Whimbrel

White-rumped Sandpiper

Ipswich Sparrow [Footnote 220: Crysler ZJ, Ronconi RA, Taylor PD. 2016. Differential fall migratory routes of adult and juvenile Ipswich Sparrows (Passerculus sandwichensis princeps). Movement Ecology 4:3.]

Comment Number: BOEM-2021-0024-DRAFT-0366-126
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Many of the species which may migrate through the Project area are also protected under various state regulations, in addition to the federal ESA and the MBTA. The Draft EIS should consider impacts to species protected under New Jersey's endangered species laws, as well as the species of greatest conservation need designated under the state's Wildlife Action Plan. However, the state's endangered species list does not consider all vulnerable species which occur in federal waters off New Jersey's coast. Many species that occur in the Project area are not considered vulnerable by the state, because they do not occur frequently in state jurisdiction, but are protected under other state laws. Razorbill and Atlantic Puffin, for example, are both considered threatened in the state of Maine, occur regularly within the planned Project footprint and are highly vulnerable to habitat loss from offshore wind. Additionally, recent research suggests that similar species are sensitive to underwater noise [Footnote 221: Anderson Hansen K, Hernandez A, Mooney TA, Rasmussen MH, Sørensen K, Wahlberg M. 2020. The common murre (Uria aalge), an auk seabird, reacts to underwater sound. The Journal of the Acoustical Society of America 147:4069–4074.] and may experience physiological impacts from construction.

Comment Number: BOEM-2021-0024-DRAFT-0366-127
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

BOEM should additionally consider species prioritized for conservation by avian expert partners, including the Atlantic Flyway Shorebird Initiative, Partners in Flight, Atlantic Coast Joint Venture, and the North American Waterbird Plan. Along with ESA-listing and IUCN Redlist status, the species included on these initiative priority lists are of high national and international conservation concern. Their

priority status by these entities highlights their vulnerability and is further indicative of the need for enhanced mitigation and conservation measures to ensure their survival.

The COP does not provide species-specific impact assessments beyond ESA-listed species. The Draft EIS must not rely on the COP for its evaluation of impacts and must evaluate the cumulative species-specific impacts in a manner that is appropriate for each species' ecology.

Comment Number: BOEM-2021-0024-DRAFT-0366-128
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

2. The Draft EIS Should Consider Local Population-level Impacts

In evaluating impacts to vulnerable species, BOEM must consider local population-level impacts in addition to flyway-wide impacts.

The COP uses the MDAT results to evaluate the total proportion of avian populations impacted by the Project. This is inappropriate for several reasons. For one, the MDAT projections are rough estimates of relative density in the Atlantic OCS--they are not intended to assess avian habitat use at the Project scale and they cannot be interpreted as population proportions. The NJDEP surveys provide a higher resolution picture of relative density, but these are also inappropriate to interpret as population proportions. Limitations of these analyses are provided below.

BOEM should instead consider the population-level impacts of the project to potentially affected local populations, based on the best available science. Black Skimmers, as an example, are state-endangered in New Jersey and a species of special concern in New York. New Jersey and New York make up the northernmost range of the species along the Atlantic coast, so removing individuals from these local state breeding colonies may have a lower impact on the metapopulation along the Atlantic Coast.

However, even small levels of take from the Project could be detrimental to the persistence of the populations in New York and New Jersey.

Comment Number: BOEM-2021-0024-DRAFT-0366-129
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

3. BOEM Should Base Its Impact Analyses on Methods Appropriate for Each Species that Triggers Conservation Obligations

Radio and satellite telemetry and radar monitoring methods should be employed to evaluate risks to species which are likely to use the Project area for migration. Many species use New Jersey's coast, adjacent to the Project area, during migration. Red Knots and other shorebirds regularly visit New Jersey's barrier islands on their southerly migration and likely cross the Project area as they head out over the Atlantic Ocean. In fact, the New Jersey coastline is a critical stopover for Red Knots on southbound migration. Nocturnally migrating passerines from across North America similarly convene along New Jersey's coast prior to beginning their southward trans-Atlantic migration in the fall. Beach nesting birds, like Piping Plover, American Oystercatcher, and Black Skimmer, may cut across the Mid- Atlantic Bight and the Project area to reach breeding grounds along New York and New England in the spring and on their return flights south. These interactions are fleeting, however, and would not be adequately captured using transect survey methods. Adults and sub-adults may occur in the project area in the spring and

summer to forage. Therefore, any transect surveys are likely to underestimate the impacts to these populations.

Satellite telemetry technology, supplemented with pressure sensors should be prioritized for large bodied birds, as this is the best method for gathering fine scale movement data and flight altitude. The COP has included some satellite telemetry raw data for raptors. However, this information is available for other taxa. Radio telemetry is appropriate for smaller bodied birds, including song birds, but it should be reserved for these species, and the network of receiving stations in the offshore will need to be expanded significantly in order to evaluate the level of interaction between birds and the Project. Radar telemetry has been deployed extensively along New Jersey's coast. While the COP does not incorporate this information, BOEM must include these analyses in the Draft EIS. We expect that the Draft EIS will include an evaluation of all relevant telemetry and radar data available for birds which may enter the Project area (on and offshore), work with the Project developers to expand these monitoring methods to evaluate impacts of the Project, and outline these requirements within the Draft EIS.

Comment Number: BOEM-2021-0024-DRAFT-0366-130
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

4. The Draft EIS Should Account for the Limitations in the Survey Methods Used to Assess the Project Area for Avian Species Present

Given that there are no studies within the United States that document the responses of local avian populations to offshore wind development in United States' waters, BOEM should adopt a conservative approach in the Draft EIS's avian impact analysis. In doing so, BOEM must address the limitations of the survey methods used within the COP to assess avian impacts.

Comment Number: BOEM-2021-0024-DRAFT-0366-131
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

a. Limitations of Avian Surveys to Make Species-specific Assessments for Vulnerable Species

The authors of the Project COP base their exposure assessment on NJDEP surveys and MDAT projections. [Footnote 222: COP, Vol. III, p. 47.] Personned aerial surveys paired with vessel surveys, like those used in the NJDEP surveys, can inform offshore wind siting that minimizes avian impacts, while also measuring the realized level of impacts when comparing survey results before and after construction. However, both aerial and vessel surveys have limitations and associated biases. They are most appropriate for larger bodied species that spend a great deal of time within the survey area (e.g., alcids, gannet, phalarope, ducks). Transect surveys are less appropriate for assessing risk to migrants, as the surveys are generally not repeated frequently enough to catch migration events.

Many species are left out of transects survey methods. Aerial surveys cannot appropriately address impacts to species that are potentially vulnerable to offshore wind but rarely occur in and around the WEAs under consideration. This is true for species for which populations are low enough that even small levels of take can have population-level effects (e.g., endangered Black-capped Petrel) or species for which interactions with the WEA may be relatively rare but theoretically could result in large take levels under particular circumstances (e.g., nocturnal trans-Atlantic migrants encountering the WEAs during inclement weather). Additionally, smaller avian taxa are difficult to distinguish at the species level during transect surveys. Alcids are rarely attributed to species using personned or digital aerial surveys. Sterna terns and small gulls are rarely attributable to species using any survey method (i.e. aerial or vessel), and

vessel surveys frighten away many marine birds. Therefore, it is important to supplement transect surveys with additional methods to assess potential changes in distribution or migratory patterns before and after Project construction. Aerial surveys should be supplemented with telemetry (e.g., radio and/or satellite telemetry as appropriate) and marine radar monitoring methods.

Additionally, much of the purpose of these surveys is to collect background information regarding spatial trends which can be compared against data collected post-construction. Personned aerial surveys cannot be completed safely at wind development areas post-construction. We recommend that BOEM work with the Project developer to institute digital aerial surveys pre- and post-construction and include this requirement in the Draft EIS. As marketed, digital aerial surveys allow for surveys that fly at higher altitudes than personned surveys, reducing safety risks, while also allowing for surveys to be continued after wind farms have been constructed. While this is true given the current 12-15MW turbines under consideration by the offshore wind farms with publicly available construction and operation plans, the 200-meter turbine blades in development in Virginia [Footnote 223: Institute of Energy for Southeast Europe, Blades, Longer Than Two Football Fields, Could Help Bring Offshore 50 MW Wind Turbines to the World https://www.iene.eu/blades-longer-than-two-football-fields-could-help-bring-offshore-50-mw-wind-turbines-to- the-world-p2488.html (visited Apr. 29, 2021).] will challenge the potential for even digital aerial surveys post-construction. Additionally, digital aerial survey technology is relatively new and its reliability for attributing observations to species and characterizing flight altitude has not yet been tested or published. As of now, it appears that federally endangered Roseate Terns can be distinguished from other sterna tern species for at least some proportion of occurrence events.

However, the reliability of these photo identifications have not been verified. Additionally, Common Terns are considered threatened in New York and a species of concern in New Jersey. Records from Normandeau suggest that digital aerial photos of this species are less distinguishable from other sterna terns (namely Arctic and Forster's Tern). This is similarly true for storm petrel and alcid species, making it difficult to understand how these species distributions may be influenced by the development of the WEAs under consideration. Therefore, the rate of mis-identification for Roseate Tern and other species should be tested and published, and these rates should be incorporated into density estimates.

Comment Number: BOEM-2021-0024-DRAFT-0366-132
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The Marine-Life Data and Analysis Team (MDAT) predictive models, while excellent for estimating broad-scale, relative patterns of avian abundance along the Atlantic, are not of suitable resolution for reliably estimating distribution at a local scale. The MDAT models are wholly inappropriate for use in impact assessments and should only be used for broad scale planning purposes (such as determining Call Areas). Furthermore, even as it relates to broad scale evaluations, BOEM's own report indicates that the MDAT models are not suitable for predicting distribution and abundance for a rare and narrowly distributed species. [Footnote 224: Curtice C., Cleary J., Shumchenia E., Halpin P.N. 2018. Marine-life Data and Analysis Team (MDAT) technical report on the methods and development of marine-life data to support regional ocean planning and management. Prepared on behalf of the Marine-life Data and Analysis Team (MDAT). Accessed at: http://seamap.env.duke.edu/models/MDAT/MDATTechnicalReport.pdf.] As a result, when these and other data deficiencies [Footnote 225: The BRI spring tern surveys failed to identify any Roseate Terns. However of the total of 23 terns found, 22% were unidentified, and a high proportion of unidentified terns (86%) were noted in transit surveys to and from the lease area. The unpublished nanotag study did not include MOTUS receivers within the area, potentially skewing data results.] are factored into the biological assessment, the density of ESA species within the Project area is likely to be underestimated.

Comment Number: BOEM-2021-0024-DRAFT-0366-133
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

b. Sampling Biases in Survey Methods

As stated above and in previous comments to BOEM, raw data from transect surveys is not appropriate for addressing potential environmental impacts. The Draft EIS must address the biases of each monitoring method used in the COP and Draft EIS and present published results from the associated studies that account for imperfect detection. Distance sampling is the most obvious method to address imperfect detection in transect surveys and we recommend that BOEM and developers incorporate this accepted method into their survey protocols. [Footnote 226: Bradbury G, Trinder M, Furness B, Banks AN, Caldow RWG, Hume D. 2014. Mapping Seabird Sensitivity to Offshore Wind Farms. PLOS ONE 9:e106366. Public Library of Science.] Personned and digital aerial surveys, as well as vessel surveys are unable to reliably distinguish between similar-looking species in all cases. Digital area surveys may be able to attribute observations to species more frequently, but so far there are no peer- reviewed publications which document the reliability of this method. Vessel surveys, while occasionally better for attributing observations to species, are biased against species which sit on the water (sea ducks, waterbirds, alcids) and are more likely to flee from approaching vessels. [Footnote 227: Henkel LA, Ford RG, Tyler WB, Davis JN. 2007. Comparison of aerial and boat-based survey methods for Marbled Murrelets Brachyramphus marmoratus and other marine birds: 8.] Because of these biases, it would be inappropriate to assess the Project using raw data alone. It is also inappropriate to base an impact analysis on lumping the data together into species groups if species-specific extrapolations are available and statistically sound. The Draft EIS must not rely on the presentation of raw lumped data, and instead rely on models produced from these standardized collection methods and by species when appropriate. We expect a full analysis of the data from the NJDEP surveys of the Project to be made publicly available and incorporated in the Draft EIS.

The COP also relied on flight heights discerned from NJDEP surveys to assess collision risk. Flight height estimates from vessel surveys are generally biased low and should not be relied on to estimate average flight height. [Footnote 228 Harwood AJP, Perrow MR, Berridge RJ. 2018. Use of an optical rangefinder to assess the reliability of seabird flight heights from boat-based surveyors: implications for collision risk at offshore wind farms. Journal of Field Ornithology 89:372–383.]28 Radar, LiDAR, and pressure sensor technologies should be relied upon in the Draft EIS and the limitations of each data collection method should be explicit within the Draft EIS.

It is also critical to note the extreme amount of sampling bias across much of the data used in the MDAT avian density models referenced in the COP. Not only do the data used in this model include vessel and aerial surveys which come with the sampling bias described above, but there is no standardization across data sources. Much of the data do not come from standardized protocols and are instead opportunistic observations from pelagic birding trips. Additionally, many of these opportunistic observations occur during chumming activities. This does not necessarily over inflate the number of birds overall, but it does confound model results by artificially creating higher densities of seabirds in vessel paths.

Comment Number: BOEM-2021-0024-DRAFT-0366-134
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

c. Effect of Survey Effort on Assessment Reliability

We applaud NJDEP efforts to date to survey avian activity along New Jersey's coast. However, these surveys are temporally and spatially limited to detect changes in avian distribution from Project development. While the survey coverage extends well beyond the Project footprint to the north, south, and west, the eastern boundary of the surveys do not extend beyond the Project footprint. Additionally, the survey effort does not extend beyond the lease boundary to the south. Some species may experience displacement for up to 20 km from an offshore wind turbine array. [Footnote 229: Peschko V, Mendel B, Müller S, Markones N, Mercker M, Garthe S. 2020. Effects of offshore windfarms on seabird abundance: Strong effects in spring and in the breeding season. Marine Environmental Research:105157.] Therefore, any EIS must include information of avian distribution and occurrence for a minimum of 20 km surrounding the Project area in order to completely understand which species may be impacted by developing the Project. Annual and seasonal variations in avian movement are also not well captured during the limited survey period, and therefore BOEM should work with developers continue aerial surveys over the New Jersey wind planning areas, including a 20km buffer, to capture this variation, beginning as soon as possible. Surveys should be repeated frequently enough to cover within and between seasonal and annual variation in avian distribution, so that changes in distribution caused by OSW development can be discerned from other sources.

Comment Number: BOEM-2021-0024-DRAFT-0366-135
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

5. The Draft EIS Should Address Collision Risk for Species Most at Risk of Collision and be Transparent in Its Use of Collision Risk Models

The Draft EIS should include a collision risk analysis on species that occur within a 20-km radius of the WEA and that trigger conservation obligations: ESA-listed endangered and threatened species, state-listed threatened, endangered, and species of concern, and International Union for Conservation of Nature (IUCN) listed endangered, threatened, and near threatened. These species include, but are not limited to Roseate Tern, Piping Plover, Red Knot, Common Tern, Least Tern, and Upland Sandpiper, including the risk to birds as they migrate through the projects. The Draft EIS should include the most recently available scientific information.

Based on MDAT models, the Mid-Atlantic Bight is a rich avian resource, containing a relatively high density of birds and relatively high diversity of species. While collision events during migration are likely to occur less frequently, these events have the potential to have large, population-level consequences during a short time. The Project is placed within an essential migratory pathways for trans-Atlantic migratory songbirds and shorebirds. BOEM's Draft EIS needs to evaluate the cumulative risk of collision, as the likelihood of large migratory collision events will increase as the total offshore wind footprint increases.

Comment Number: BOEM-2021-0024-DRAFT-0366-136
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

a. Collision Risk for Passerines and Other Nocturnal Migrants

BOEM must sufficiently assess collision risks to nocturnal migrants in the Draft EIS. As addressed above, migration events are relatively infrequent, and therefore, survey transects of the Project are not appropriate for characterizing collision risk to nocturnal migrants. Likewise, radar studies conducted on Block Island [Footnote 230: Mizrahi D, Fogg T, Magarian V, Elia P, Hodgetts D, La Puma D. 2010.

Radar Monitoring of bird and bat movement patterns on Block Island and its coastal waters. Report prepared for State of Rhode Island Ocean Strategic Area Management Plan.], while helpful in characterizing migration timing, do not reach New Jersey's coast and are based on a limited number of years. The Draft EIS must consider migration timing, variations in flight height, and the distance from shore at which nocturnal migrants reach maximum migration height. The Draft EIS should contain a full analysis of these study results and not rely on a simple summary of the raw data to inform its collision risk analysis for nocturnal migrants. In general, efforts to understand these impacts should rely on a combination of radar, telemetry, survey, and acoustic monitoring, and should not be based on a single technology alone.

Comment Number: BOEM-2021-0024-DRAFT-0366-137
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

When incorporating radio-telemetry methods, receiving stations need to be installed in the offshore environment, in such a way that avian movement in and around the WEAs can be adequately assessed. BOEM should follow the monitoring protocols for automated radio telemetry currently in development by NYSERDA and USFWS. [Footnote 231: Williams K, Adams E, Gilbert A. (n.d.). USFWS Migratory Birds: Pam Loring, Scott Johnston Univ. of Rhode Island: Peter Paton:21. Accessed at https://www.briloon.org/uploads/BRI_Documents/Wildlife_and_Renewable_Energy/AutomatedVHF/NYSERDA%2 0PAC%20Webinar%20Radio%20Telemetry%2020200826_Final.pdf] We applaud this interagency effort to develop robust, scientifically sound monitoring protocols and to test the feasibility of floating receiving stations. BOEM needs to financially support the efforts to further this technology, adopt these methods into regional monitoring protocols for offshore wind development, ensure the success of this technology moving forward, and incorporate data from these efforts into this Draft EIS and other impacts analyses into the future.

Comment Number: BOEM-2021-0024-DRAFT-0366-138
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Acoustic monitoring is especially inappropriate on its own to characterize the community of nocturnal migrants within the WEA. We recognize that BOEM is considering acoustic monitoring as a standardized monitoring method. However, evidence indicates that Empidonax flycatchers and vireos, two of the most abundant nocturnal migrant groups, do not emit nocturnal flight calls, and therefore, would not be accounted for using acoustic monitoring. [Footnote 232: 232 Evans WR, Rosenberg KV. 2000. Strategies for bird conservation: The Partners in Flight planning process; Proceedings of the 3rd Partners in Flight Workshop; 1995 October 1-5; Cape May, NJ:9.] Additionally, acoustic monitoring does not adequately assess flux – a necessary value for assessing collision risk and estimating population-level impacts.

Comment Number: BOEM-2021-0024-DRAFT-0366-139
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

La Sorte and Fink (2017) [Footnote 233: 233 Sorte FAL, Fink D. 2017. Projected changes in prevailing winds for transatlantic migratory birds under global warming. Journal of Animal Ecology 86:273–284.] document the flights of species of migratory birds that migrate over the Atlantic Ocean: American Golden-Plover, Bicknell's Thrush, Blackpoll Warbler, Bobolink, Buff-breasted Sandpiper, Connecticut Warbler, Pectoral Sandpiper, Semipalmated Sandpiper, Solitary Sandpiper, and White-rumped Sandpiper.

Two species classified by USFWS as Birds of Conservation Concern—Upland Sandpiper and Whimbrel, also cross the Atlantic Ocean during migration. We do not currently know what the Project's turbine specifications will be. While there is evidence to suggest that nocturnal migrants typically fly above the rotor swept zone for current wind turbines in operation, we also know that nocturnal migrants fly lower, potentially within the rotor swept zone, during inclement weather and cross winds. [Footnote 234: Van Doren BM, Horton KG, Stepanian PM, Mizrahi DS, Farnsworth A. 2016. Wind drift explains the reoriented morning flights of songbirds. Behavioral Ecology 27:1122–1131. 262 COP Volume II, p. 19.] The COP provides for this when accounting for risks to the federally threatened Piping Plover, stating, "during times of poor visibility the birds may flight lower within the rotor swept zone". [Footnote 235: COP, Vol. III, p. 67.

]

This risk cannot be discounted simply because it may be considered by the developer to be atypical. Under our changing climate, we can expect unfavorable crosswinds to become more frequent, and therefore must take a conservative approach to evaluate risk so that this risk is not underestimated.

Comment Number: BOEM-2021-0024-DRAFT-0366-140
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Many species of conservation obligation, including ESA-listed Red Knot and Piping Plover, migrate over the Atlantic ocean, many which take off from the Jersey shore. Relying on the current system of automated radio telemetry receivers to minimize risk is inappropriate, as the network of receivers has not been established in the offshore to the degree necessary. Additionally, automated radio telemetry does not adequately estimate flight height, though there are efforts underway to fill this information gap. Remote tracking studies that rely on the Motus passive VHF radio tracking system do, however, provide that Piping Plovers migrate nocturnally over open water, "directly across the mid-Atlantic Bight, from breeding areas in southern New England to stopover sites spanning from New York to North Carolina...at altitudes of 288 m (range of model uncertainty: 36-1,031m)," [Footnote 236: Loring PH, McLaren JD, Goyert HF, Paton PWC. 2020. Supportive wind conditions influence offshore movements of Atlantic Coast Piping Plovers during fall migration. The Condor 122. Available from https://doi.org/10.1093/condor/duaa028 (accessed February 9, 2021).] putting this ESA-listed species at high risk of collision with turbines, should their path cross through the Project area. The current configuration of VHF receiving towers does not allow for detailed characterization of flight paths for this species or any protected avian species using this tracking technology, and therefore, BOEM should take a conservative approach in the Draft EIS when evaluating potential impacts (cumulative or otherwise) to Piping Plover, Red Knot, and other species which may fly through the Project area and other wind development areas expected in the foreseeable future. It is imperative that BOEM invests in supporting this work and in constructing and maintaining a full network of VHF receiving towers throughout the offshore environment to inform its Draft EIS.

Comment Number: BOEM-2021-0024-DRAFT-0366-141
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The Draft EIS must produce a full picture of migratory pathways for songbirds and shorebirds. This could be realized with the addition of satellite tracking information from Movebank and NASA's Icarus project for larger bodied shorebirds, additional research and tagging of priority bird species using radio and satellite telemetry technology as appropriate, and an expansion of the radio telemetry receiver network in

the offshore environment. While we recognize the unlikelihood of implementing and completing new tracking studies prior to the publication of the Draft EIS, BOEM should outline their plans to fill these knowledge gaps to inform future offshore wind operation and siting processes. In addition, there should be a commitment to, and process outlined for, addressing unforeseen impacts through compensatory mitigation (see section on Compensatory Mitigation for Birds). The Draft EIS should use the data currently available to calculate the risk to these migratory birds, especially in regard to modern turbine height, and provide for tracking these migratory birds during the life of the project and over all the cumulative projects in the Atlantic OCS.

Comment Number: BOEM-2021-0024-DRAFT-0366-142
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

NJDEP surveys further indicated that songbirds were detected offshore during the spring and summer, when songirds are nesting. Because each of these seasons also included months during which some songbirds might have been migrating, the observations could be indicative of passerine presence solely during migration. However, the data presented in the COP are binned by season, so there is no way to parse out the observations to determine the risk to resident birds. The Draft EIS must address this, as the risk to songbirds will likely be very different depending on whether the birds are migrants or breeding season residents in New Jersey.

Comment Number: BOEM-2021-0024-DRAFT-0366-144
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

b. Collision Risk for Seabirds

The Draft EIS must adequately assess collision risk to seabirds. This must include an analysis, using the most current available science, of flight heights (averages and ranges), avoidance rates, and other relevant avian flight behavior at the very least. The Draft EIS must also consider the range of turbine specifications that could influence collision risk, including air gap, total rotor swept zone, and turbine height.

Comment Number: BOEM-2021-0024-DRAFT-0366-145
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The Draft EIS must also provide results from BOEM's own analysis of the vulnerability of 177 species of birds that could come into contact with the WTGs in the cumulative OCS WDAs in the foreseeable future and incorporate this analysis into the cumulative impacts conclusions within the Draft EIS. [Footnote 237: Robinson Willmot J, Forcey G, Kent A. 2013. The Relative Vulnerability of Migratory Bird Species to Offshore Wind Energy Projects on the Atlantic Outer Continental Shelf: An Assessment Method and Database. Page 294. Final Report to the U.S. Department of the Interior, Bureau of Ocean Energy Management, Office of Renewable Energy Programs OCS Study BOEM 2013-207.] In doing so, the Draft EIS must be transparent in presenting the high level of uncertainty in the results, including high and low estimates for population-level cumulative impacts. Much of the high uncertainty in these models is a result of highly variable concentrations of seabirds throughout the year. BOEM needs to be explicit about these seasonally higher risks and not rely on annual averages. Many tubenoses, for example, congregate outside the breeding season near upwellings and other locations of high productivity. Such concentrated

flocks, if occurring within the turbine array, could produce significantly large collision events, even if such events are relatively rare. The Draft EIS should consider this variability of large concentrations of birds even in short periods of time in its analysis of seasonal abundance when calculating risk to birds.

Comment Number: BOEM-2021-0024-DRAFT-0366-146
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

b. Collision Risk Models (CRMs)

We expect that BOEM will apply CRMs to evaluate avian impacts from the Project. While limited, CRMs are one of the only tools available to hypothesize potential impacts to birds from collision in the offshore environment. As such, CRMs provide a mechanism for testing outcomes (e.g., observed collision rates) against the model predictions (e.g., expected collision rates), and BOEM must address the need to collect the data necessary to test these hypotheses. We appreciate how BOEM addressed our concerns in the FEIS for VW I and reiterate our expectation that BOEM's collision risk analysis in the Draft EIS be complete and transparent.

Comment Number: BOEM-2021-0024-DRAFT-0366-147
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The Draft EIS should include a CRM-driven analysis for all species of conservation obligation which may occur within 20 km of the Project footprint and for which a current CRM would be appropriate, even if the species has not been documented within the footprint of the Project. This should include a recent stochastic derivation of the Band model, such as the McGregor (2018)[Footnote 238: McGregor RM, King S, Donovan CR, Caneco B, Webb A. 2018. A Stochastic Collision Risk Model for Seabirds in Flight:61. https://tethys.pnnl.gov/sites/default/files/publications/McGregor-2018-Stochastic.pdf.] version.

Comment Number: BOEM-2021-0024-DRAFT-0366-148
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

BOEM must be transparent in its CRM application. These models are extremely sensitive to the input parameters. A study by Cook et al. (2014) found that estimations of avoidance and collision risk from Band models were highly sensitive to the flux rate (total number of birds passing through the wind farm), corpse detection rate, rotor speed, and bird speed. Factors such as weather (i.e. wind speed and visibility) and habitat use would also affect the accuracy of these estimates, as such factors would greatly influence avian flight patterns and behavior. [Footnote 239: 239 Cook ASCP, Humphreys EM, Masden EA, Burton NHK. 2014. The Avoidance Rates of Collision Between Birds and Offshore Turbines. Scottish Marine and Freshwater Science 5:263.] Therefore, the Draft EIS must provide the inputs used in its analysis for public comment and transparency. Providing CRM results without transparency to the inputs and analytical process would never be acceptable from a scientific perspective and, therefore, should not be acceptable from BOEM. Providing inputs would show whether BOEM followed the guidance provided by Band in assessing collision risk. These details regarding inputs should include, but not be limited to, avoidance behavior, flight height, flight activity, flux rate, corpse detection rate, rotor speed, bird speed, and collision risk.

Comment Number: BOEM-2021-0024-DRAFT-0366-149
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Additionally, CRMs should consider differences in daytime and nighttime flight patterns. As Band himself stipulates:

"For some species typical flight heights are dependent on the season, and in such a case it will be best to use seasonally dependent typical flight heights in assessing collision risk for each month, rather than average flight heights across the year...Flight activity estimates should allow both for daytime and night-time activity. Daytime activity should be based on field surveys. Night-time flight activity should be based if possible on nighttime survey; if not on expert assessment of likely levels of nocturnal activity...collision model[s] should take both day and night flights into account. Where there is no night-time survey data available, or other records of nocturnal activity, for the species in question, (or for other sites if not at this site), it should be assumed that the Garthe and Hüppop/ King et al. 1-5 rankings apply. These rankings should then be translated to levels of activity at night which are respectively 0%, 25%, 50%, 75% and 100% of daytime activity. These percentages are a simple way of quantifying the rankings for use in collision modelling, and they may to some extent be precautionary. [Footnote 240: Band, B. 2012. Using a collision risk model to assess bird collision risks for offshore windfarms. SOSS report for The Crown Estate, Norway. https://www.bto.org/sites/default/files/u28/downloads/Projects/Final_Report_SOSS02_Band1ModelGuidance.pdf.]"

Comment Number: BOEM-2021-0024-DRAFT-0366-150
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

There are new derivations of the Band model under development, namely the 3-D CRM for seabirds by the Shatz Energy Research Center [Footnote 241: Seabird Distribution in 3D: Assessing Risk from Offshore Wind Energy Generation, Shatz Energy Research Center (2020), https://schatzcenter.org/2020/04/seabird3dstudy/.] and stochastic CRM specific to ESA-listed species in southern New England from the University of Rhode Island. [Footnote 242: Transparent Modeling of Collision Risk for Three Federally-Listed Bird Species to Offshore Wind Development, US Fish and Wildlife Service with University of Rhode Island (Oct. 29, 2020) https://www.boem.gov/sites/default/files/documents/environment/environmental-studies/Transparent-modeling-of-collisionrisk-for-three-federally-listed-bird-species-to-offshore-wind-development_1.pdf] These models should be applied, once available, in BOEM's assessments of avian impacts for future offshore wind developments, as they will be better able to incorporate variation in input parameters.

Moreover, collision risk models provide a starting point, not an end point, from which to predict cumulative, population-level impacts across wind farms in the Atlantic OCS. Collision risk models are not found to be reliable in predicting mortality:

"Siting and permitting decisions for many European offshore wind facilities are informed by collision risk models, which have been created to predict the number of avian collisions for offshore wind energy facilities. However, these models are highly sensitive to uncertainties in input data. The few empirical studies at land-based wind facilities that have compared model-estimated collision risk to actual mortality rates found only a weak relationship between the two, and due to logistical difficulties, the accuracy of these models has not been evaluated in the offshore environment. [Footnote 243: Allison, T. D., Diffendorfer, J. E., Baerwald, E. F., Beston, J. A., Drake, D., Hale, A. M., Hein, C. D., Huso, M. M.,

Loss, S. R., Lovich, J. E., Strickland, M. D., Williams, K. A., & Winder, V. L. (2019). Impacts to wildlife of wind energy siting and operation in the United States. Issues in Ecology, vol. 21, Ecological Society of America.]"

BOEM should pursue studies to not only verify CRM utility in the offshore environment, but should also move toward viable collision detection requirements for the Project and future offshore wind developments.

Comment Number: BOEM-2021-0024-DRAFT-0366-152
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Construction activities from the cable laying and pile driving will likely impact birds, regardless of timing. Beach nesting birds, like Piping Plover, American Oystercatcher, Least Tern, and Black Skimmer, may be present in and around the Project March through September; Red Knots, Semipalmated Sandpiper, and Black-bellied Plover may be affected by construction activities in spring and fall. Marine birds, such as Northern Gannets, shearwater, and petrel, will be present within the Project area during the winter. If the construction of cable routes is timed to avoid beach nesting birds, then it will likely impact wintering seaducks. While it may not be possible to avoid impacts entirely, the Draft EIS needs to be transparent in addressing these impacts and provide a path to mitigate these impacts.

Comment Number: BOEM-2021-0024-DRAFT-0366-153

Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

While Piping Plover and Red Knot may fly through the Project area, the Draft EIS must also consider the potential impacts of developing the Project to these ESA-listed species onshore. Piping Plover or tern chicks within 100 m of onshore construction activities will require the developer hire a spotter to prevent the chicks from encountering harm during activities. Additionally, no construction activities may be allowed on the beach or intertidal zone within 100 m of piping plover chicks or nests, as this would starve breeding plovers of necessary foraging habitat. Migrating Red Knots rely on the mudflats along New Jersey's coast to rest and refuel during their fall migration. The Draft EIS must consider the impacts of building out the Project to these species, even when the activities associated with development fall outside the Project footprint.

Comment Number: BOEM-2021-0024-DRAFT-0366-165
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

9. BOEM Cannot Assume that Larger Turbines, Further Apart, Reduces Risks to Birds

There is no substantial evidence to suggest that larger turbines, spaced farther apart, reduces risks to birds, and it should be a goal of BOEM to understand the effects of displacement and mortality relative to turbine size and spacing. The size of turbines has grown substantially over the past decade, and this trend is expected to continue. In its Vineyard Wind I project, Vineyard Wind plans to use GE's 12MW Haliade-X turbine, which has a 220-meter rotor swept zone and is estimated to reach a maximum height of 260 meters above sea level. University of Virginia is currently developing 200-meter-long blades to power a 50MW turbine, with a potential rotor swept zone of approximately 400 meters.

Given that the tower height would need to be more than 200 meters in height to accommodate rotor blades of this size, turbines could soon reach heights greater than 400 meters above sea level. Studies, like those from Krijgsveld et al. (2009), [Footnote 257: Krijgsveld KL, Akershoek K, Schenk F, Dijk F, Dirksen S. 2009. Collision Risk of Birds with Modern Large Wind Turbines. Ardea 97:357–366. Netherlands Ornithologists' Union.] Smallwood and Karas (2009), [Footnote 258: Smallwood KS, Karas B. 2009. Avian and Bat Fatality Rates at Old-Generation and Repowered Wind Turbines in California. The Journal of Wildlife Management 73:1062–1071.] and Johnston et al. (2014), [Footnote 259: Johnston, A., A.S.C.P. Cook, L.J. Wright, E.M. Humphreys, and N.H.K. Burton. 2014. Modeling Flight Heights of Marine Birds to More Accurately Assess Collision Risk with Offshore Wind Turbines. Journal of Applied Ecology 51, 31-41.] which suggest that fewer, larger turbines reduce avian collision risk, are based on turbines less than 5MW. As turbines increase in size, they are more likely to encroach on airspace occupied by nocturnal migrants [Footnote 260: Id] while not necessarily avoiding airspace occupied by relatively lower flying foraging marine bird species. Conversely, studies by Loss et al. (2013), [Footnote 261: Loss SR, Will T, Marra PP. 2013. Estimates of bird collision mortality at wind facilities in the contiguous United States. Biological Conservation 168:201–209.] Choi et al. (2020), [Footnote 262: Choi DY, Wittig TW, Kluever BM. 2020. An evaluation of bird and bat mortality at wind turbines in the Northeastern United States. PLOS ONE 15:1–22. Public Library of Science.] and Huso et al. (2020), [Footnote 263: Huso MMP, Conkling TJ, Dalthrop DH, Davis M, Smith H, Fesnock A, Katzner T. 2020. Bigger not necessarily better for wind turbines: Wildlife mortality scales with energy production. In review.] find that bird deaths not only increase with turbine size, but also suggest that the number of bird deaths from collision with wind turbines is proportional to the number of MW produced in a wind farm.

Turbulence above and below the rotor swept zone can affect flight performance. If this should make birds more susceptible to physical interactions with turbines, then larger turbines would only increase that risk. Additionally, limiting risk evaluations to the rotor swept zone neglects the risk of collision from the tower itself and turbulence around the rotor swept zone can affect.

Comment Number: BOEM-2021-0024-DRAFT-0366-166
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Suggestions that increased spacing (1 nm) between turbines would reduce risks to birds from both collision and displacement is unfounded, as offshore wind farms in Europe do not provide this level of spacing, and therefore, there is no operational comparison to be made. Instead, increased spacing means fewer turbines and less energy production within the footprint of the project, so more projects (and more space) will be necessary to meet state and national energy goals. Furthermore, greater space between turbines may increase collision risk if species vulnerable to collision end up using the wind farm more frequently. Unfortunately, these are all unknowns until these configurations are developed and operational. BOEM will need to fund studies to answer these questions either through tax revenue or through the preferred method of financial support from offshore wind project developers.

Comment Number: BOEM-2021-0024-DRAFT-0366-167
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The Draft EIS should include a risk assessment, considering the full range of the potential rotor swept zone provided in the COP, to assess 1) impacts from collision and barrier effects to migrating birds, and 2) potential increased habitat loss that may need to occur in order to reach offshore wind energy goals.

Comment Number: BOEM-2021-0024-DRAFT-0366-6
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

As recognized by the United Nations Environment Program Convention on the Conservation of Migratory Species of Wild Animals, migratory species, such as migratory marine species, are particularly vulnerable to climate change impacts.7 Similarly, a report by National Audubon Society found that bird species, already facing threats from habitat loss and other stressors, face significant impacts from climate change that can be ameliorated if we prevent warming from reaching higher levels. [Footnote 8: 8 Wilsey, C, B Bateman, L Taylor, JX Wu, G LeBaron, R Shepherd, C Koseff, S Friedman, R Stone. Survival by Degrees: 389 Bird Species on the Brink. National Audubon Society: New York (2019), https://www.audubon.org/sites/default/files/climatereport-2019-english-lowres.pdf]

Comment Number: BOEM-2021-0024-DRAFT-0369-3
Commenter: Kathleen McGuire
Commenter Type: Individual

Comment Excerpt Text:

We have no data to understand how these enormous structures will impact the birds and how the migration.

Comment Number: BOEM-2021-0024-DRAFT-0380-4
Commenter: Jennifer Trofa
Commenter Type: Individual

Comment Excerpt Text:

Likewise, NASA, and in particular its AMASS scientists, must be consulted in regard to bird migration routes.

Comment Number: BOEM-2021-0024-DRAFT-0381-18
Organization: Clean Ocean Action
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

IMPACTS TO BIRDS

1. Displacement of Habitat

Behavioral responses to offshore wind farms may cause birds to avoid previously used habitats. This phenomenon has been dubbed displacement. At Robin Rigg offshore wind farm in Scotland, the monitoring program showed evidence of a decrease in the number of common scoter (Melanitta nigra) one year after construction.

2. Risk of Collision

There is concern for birds colliding with wind turbines. This has been a big issue with onshore wind projects, specifically in the middle of the country.

Weather increases the risk of collision, and the ocean is an area with some of the harshest weather conditions, which will only increase due to climate change impacts.

3. Migration Barriers

a. The barrier effect may have a negative impact of birds. The birds' behavioral avoidance response to the wind farm may lead to detours circumventing the structures, ultimately extending the total flying distance and energy use. This energy loss is critical for birds experiencing other stressing factors to their populations.

b. Furthermore, for species such as the common eider (Somateria mollissima) the reproductive success is related to the females' body reserves during the breeding period. By increasing the energy use for common eiders their body mass may drop, thus affecting the breeding output.

c. Results from the monitoring programs at Nysted and Horns Rev offshore wind farms in Europe showed that all birds generally avoid wind farms if they block migration pathways. The specific level of avoidance depends on the species with some going further out of their way to avoid the area. Over 50 percent of the birds avoided passing through the wind farms at half a mile to a mile.

Comment Number: BOEM-2021-0024-EMAIL-004-24
Organization: Long Beach Island (LBI) New Jersey Coalition for Wind Without Impact
Commenter: Bob Stern
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Authorizations should also include compliance with the Migratory Bird Protection Act.

Comment Number: BOEM-2021-0024-EMAIL-005-23
Organization: City of Beach Haven, New Jersey
Commenter: Colleen Lambert
Commenter Type: Local Agency

Comment Excerpt Text:

Authorizations should also include compliance with the Migratory Bird Protection Act.

Comment Number: BOEM-2021-0024-TRANS-41521-0012-2
Organization: Ocean City Environmental Commission
Commenter: Rick Bernardini
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

With regard to potential damage, death rate to birds, we highly recommend the implementation of delta flight deviation detection system, despite the apparent unlikely impacts noted in the COP.

Comment Number: BOEM-2021-0024-TRANS-42021-0010-1
Commenter: Joe De Finnis
Commenter Type: Individual

Comment Excerpt Text:

So for example, there is a lot of studies out there that talk about how wind turbines kill up to a half a million birds a year. That's something that seems contradictory for talking about green energy, helping wildlife and preserving our earth. That doesn't seem to jive.

Comment Number: BOEM-2021-0024-TRANS-42021-0020-1
Commenter: Joel Merrimen
Commenter Type: Individual

Comment Excerpt Text:

However, we also strongly believe that stronger protective measures are needed for birds than we have seen proposed for offshore wind facilities thus far. Where birds are concerned, the location of Ocean Wind presents a different suite of challenges and risks than other projects that have received public scrutiny to this point. I will provide a few key recommendations which will be followed with more detailed written comments. Our first recommendation is to effectively evaluate the likely impacts of this project on nocturnal migrant land birds. Hundreds of millions of these birds make migratory flights from the northeastern U.S. to wintering grounds of the Caribbean and South America. We have very little data about their flight heights or behavior when they leave our shores posing risk that they may collide with turbines. What is more, these birds migrate in flocks so any such instance may result in relatively large numbers of birds being killed during a single event. This is important for all off shored wind projects proposed along the Atlantic coast but perhaps more important for Ocean Wind than all others. Southern New Jersey is renowned for it's incredible concentration of migratory land birds in the fall. This may make Ocean Wind the highest risk project currently being proposed for nocturnal migrants. This can be remedied by conducting nocturnal migrant studies in the project area prior to the preparation of an EIS. NJDEP conducted some relevant work in 2008 and 2009 using radar which we applaud and would like to see become an industry standard. However, the survey work was limited both spatially and temporally and the offshore environment despite obvious good intentions and a concerted effort. The report for fall radar studies found that the data are limited and insufficient to make any conclusions. Far greater numbers of nocturnal migrants fly over the Atlantic in fall than in the spring so this must be rectified. We urge the agencies to use radar within the project area to assess flight height and relative abundance of nocturnal migrants and augment this with acoustic monitoring so species can be identified. This could be complimented by GPS tagging birds to obtain data on their migratory flight paths. Studies must examine whether risk increases with different climatic conditions and must be conducted over multiple years to assess inter-annual vulnerability. This work would also improve risk assessment for federally threatened red knots, which also migrate at night and are potentially at risk for collision with turbines. Our second key recommendations is that post construction bird impact monitoring protocols must be robust. To the best of current technological capabilities, this monitoring must detect birds strikes and identify which birds are struck. Continual use of acoustic monitoring can provide some relevant data but this is not sufficient alone. Digital video technology must be used as well which is being used more and more in Europe.

A.2.6 Climate Change

Comment Number: BOEM-2021-0024-DRAFT-0265-2
Commenter: Walter A Rockey, 3rd
Commenter Type: Individual

Comment Excerpt Text:

1-The US, as a member of the global community, has the responsibility to contribute and hopefully lead world efforts in the reduction of carbon based energy production and use.

2-Too much time has been lost in addressing the consequences of human activities on climate. Meaningful action is long over due. To begin potential years long studies to access multiple impacts on natural, economic and human resources of an offshore wind energy facility could prevent the necessary timely achievement of reducing carbon emissions. There is a significant urgency to find solutions to prevent further increases in atmospheric and oceanic temperatures.

3-The decades old slogan of environmentalists, Think global act local has never been more appropriate. A wind energy facility off shore of NJ would be New Jerseys opportunity to contribute to the global community. Locally, NJ can be a work force leader of basic research, innovative technologies and needed thoughtful solutions for wind energy production. Opportunities await our state.

We must endeavor to meet the challenge of climate change and its associated impacts. We need to think beyond ourselves and be prepared to make sacrifices for the common good. We must be accountable to future generations by supporting efforts to reduce our share of carbon emissions. We can accomplish our goals if we listen to each other and problem solve together. If we pass up the opportunity to develop a wind energy facility off NJ coast, we will only limit our chances to address the existential threat of climate change.

Comment Number: BOEM-2021-0024-DRAFT-0273-1
Commenter: Jeffrey Eidman
Commenter Type: Individual

Comment Excerpt Text:

We are currently observing the environmental impacts of continued use of fossil fuel as an energy source. The climate calamities that have been occurring more frequently and with greater force hopefully will act as a wakeup call for Earth's citizens. We are experiencing definite rising of sea level, increases in water temperature, more violent and frequent hurricanes, flooding and melting of glaciers and the polar ice caps amongst many other calamities afflicting the globe.

The development of alternate sources of energy like wind will help us diminish our dependence upon fossil fuels and help to shrink our carbon footprint. We thought the coal fired plants were out of step as the by-products of production were filthy and is a huge detriment to health. Oil is no better. Too think that wind vanes turning cause zero pollution and use no carbon seems to be a substantial improvement.

If there is a problem with a generator it stops working until repaired. I reflect back to tragedies like the Exxon Valdes or the BP Oil spill in the Gulf of Mexico to illustrate accidents in the oil industry that are intolerable.

Comment Number: BOEM-2021-0024-DRAFT-0284-3
Commenter: Denise Kubaska
Commenter Type: Individual

Comment Excerpt Text:

3. Analysis due to Climate Change consequences: If sea level rises and coastline changes result; If chemical composition of ocean or air changes; If populations of organisms including humans shift.

Comment Number: BOEM-2021-0024-DRAFT-0287-7
Organization: North Beach Taxpayers Association
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Offshore wind will not solve the climate crisis. As of 2020, 350 coal-fired power plants are under construction. They include seven in South Korea, 13 in Japan, 52 in India, and 184 in China with the rest underway in other parts of the world. China is building and financing hundreds of other coal-fired power plants in countries such as Turkey, Vietnam, Indonesia, Philippines, Egypt, and Bangladesh. Offshore wind planned for the Northeast is dwarfed by the coal capacity being constructed and planned in other parts of the world. Can't we at least take the time to get it right? Don't start building massive offshore wind farms before the impacts are fully understood. Please, slow down!

Comment Number: BOEM-2021-0024-DRAFT-0325-3
Organization: Environment New Jersey
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Rutgers University scientists estimate that sea levels along the Jersey Shore could rise 1 ft from 2000 levels by 2030, 2 ft by 2050 and 6 ft by 2100 and that sunny day flooding in Atlantic City could increase from 19 days in 2019 to 70 days in 2040, all due to climate change. The New Jersey Department of Environmental Protection estimates that the real estate loss from sea level rise and flooding in New Jersey will be worth hundreds of millions of dollars.

Comment Number: BOEM-2021-0024-DRAFT-0327-4
Commenter: William Leighton
Commenter Type: Individual

Comment Excerpt Text:

The other thing we've heard much speculation about are impacts of the wind farm on tourism, property values and fishing. Let's deal with some facts here also rather than speculation and personal opinions. Sea levels are rising. Ocean temperatures are increasing. Ocean acidity is increasing. This is directly related to the consumption of fossil fuels driving unprecedented levels of carbon dioxide into the atmosphere where it reflects excess heat and carbon dioxide back into the oceans increasing the ocean temperature and acidity levels and causing sea level rise from thermal expansion and ice melt.

The sea level at Atlantic City has been measured for over 100 years and based on 100 years of data, the current rate of increase is 4.14 mm/year [Footnote 5: https://tidesandcurrents.noaa.gov/sltrends/sltrends_station.shtml?id=8534720]. To put that in perspective, 4.14 mm/yr is 16 inches in 100 years. Two years ago it was 4.09 mm/year, so the rate is increasing over time and accelerating. Recently, scientists have been able to precisely measure the acceleration [Footnote 6: https://www.pnas.org/content/115/9/2022 and the acceleration in rate will add another 16 inches over the next 100 years. So at current course and speed, we're looking at somewhere between 16 and 32 inches of sea level rise by 2121.

To make this more real, on the telephone pole on the bay side of Bay Ave at 3rd St in Ocean City, NJ there is a metal disk which marks 10 feet of elevation on the NAVD88 system (NAVD is the geodesic reference system used for flood insurance among other things. At Atlantic City, Mean Sea Level is -0.4 NAVD88.) The disk is 7 feet above the sidewalk, meaning the sidewalk is 3 feet NAVD88 and Bay Ave will begin to flood if the water gets to 3 feet NAVD88 or higher. At 5th St on the Bay at the Sailing Center there is a USGS tide gauge for the Great Egg Harbor Bay [Footnote 7: https://waterdata.usgs.gov/nj/nwis/uv?cb_00010=on&cb_72279=on&format=gif_default&site_no=01411320&period=7&begin_date=20 21-04-21&end_date=2021-04-29]. It displays the tide level in NAVD88. That gauge shows that the 3 foot level has been exceeded 9 times since 1/1/21, most recently Sunday 4/25/21 and indeed on Sunday there was water in the street at 3rd and Bay as well as 9th and Bay and also 14th and Haven. Most people who are long term owners or residents can remember when this flooding just didn't happen on a regular basis. Now it happens on average twice a month.

If we want to talk about tourism and property values, let's talk about what happens to tourism and property values when flooding goes from twice a month to twice a week to twice a day. That's what will happen if we don't move from fossil fuels to renewable energy very soon.

Comment Number: BOEM-2021-0024-DRAFT-0327-5
Commenter: William Leighton
Commenter Type: Individual

Comment Excerpt Text:

Similarly, ocean temperatures are rising [Footnote 8: https://www.epa.gov/climate-indicators/climate-change-indicators-sea-surface-temperature] causing the fish to move away and the increases in acidity are destroying entire parts of the marine food chain [Footnote 9: https://www.epa.gov/climate-indicators/climate-change-indicators-ocean-acidity].

Comment Number: BOEM-2021-0024-DRAFT-0327-7
Commenter: William Leighton
Commenter Type: Individual

Comment Excerpt Text:

These wind turbines are big but they're very e?cient, each generating around 67 million kiloWatt hours of electricity a year [Footnote 10: https://www.ge.com/renewableenergy/wind-energy/o?shore-wind/haliade-x-o?shore-turbine]. More importantly, each avoids the emissions of 30,000 tons of CO2 per year from natural gas power plants and the whole wind farm avoids 2.9 million tons of CO2 a year. A frequently made comparison is that is the equivalent of taking over 500,000 gasoline powered cars o? the road. I prefer a more modern comparison which is the power they generate is enough to power around 1.8 million electric vehicles [Footnote 11: A gallon of gas contains 33.7 kWh of energy. The average gasoline powered car gets 22 MPG and uses 33.7/22 = 1.53 kWh of energy per mile. An electric vehicle like the Tesla model 3 uses less than 0.3 kWh of energy per mile.], which really takes those gasoline powered vehicles o? the road and eliminates 9.2 million tons of carbon dioxide emissions per year they would otherwise generate.

Given that Ocean City NJ is ground zero for climate change with the rising sea levels surrounding us on all sides, we should welcome the wind farm and make it a point of pride. And our grandchildren can tell their grandchildren how we helped stop climate change and saved Ocean City. The alternative is they tell their grand children how they used to go to Ocean City while it was still there.

Comment Number: BOEM-2021-0024-DRAFT-0335-1
Organization: The Nature Conservancy
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Climate change is the greatest environmental challenge facing humanity in the 21st century. We are already seeing the consequences: chronic droughts, rising seas, record high temperatures, more frequent extreme storms, fishery disasters, and significant economic losses. Climate change threatens to undo decades of conservation work and fundamentally alter our future. The Nature Conservancy is committed to helping reduce global greenhouse gas emissions to limit global warming to well below 2° Celsius. This goal cannot be achieved without a rapid transition to a clean energy economy. The ways we generate, store, transport, and use electricity are changing and advancements in renewable technologies—like offshore wind—are leading to a cleaner, cheaper, and more efficient energy future. We are determined to see that future come to fruition as it is critical to the well-being of our economy, our communities, and our planet.

Comment Number: BOEM-2021-0024-DRAFT-0335-14
Organization: The Nature Conservancy
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The ocean environment is changing at a rapid and unprecedented pace due to climate change. Some assumptions that are critical for reducing impacts will need to be frequently updated, particularly for

future projects and critically endangered animals like the North Atlantic Right Whale (NARW). For example, the phenology of seasonal migrations used to establish seasonal pile driving restrictions for other projects has shifted, in some cases dramatically (Pettis et al. 2017) [Footnote 7: South Fork DEIS Sec 3.3.7.] and the same has been shown for other large whales. [Footnote 8: https://onlinelibrary.wiley.com/doi/epdf/10.1111/gcb.15191] Climate change is already causing major shifts in fish species distribution [Footnote 9: Hare, Jonathan A., et al. "A vulnerability assessment of fish and invertebrates to climate change on the Northeast US Continental Shelf." PloS one 11.2 (2016): e0146756.] which are already impacting commercial and recreational fishermen and coastal communities. [Footnote 10: Rogers, Lauren A., et al. "Shifting habitats expose fishing communities to risk under climate change." Nature Climate Change 9.7 (2019): 512-516.] The Nature Conservancy is working with regional fisheries management Councils and Commissions across the country [Footnote 11: https://www.pcouncil.org/actions/climate-and-communities-initiative/#sp-workshop-materials] and along the entire US East coast to help make fisheries management "climate ready" [Footnote 12: Bell, Richard J., et al. "Actions to Promote and Achieve Climate-Ready Fisheries: Summary of Current Practice." Marine and Coastal Fisheries 12.3 (2020): 166-190. https://afspubs.onlinelibrary.wiley.com/doi/full/10.1002/mcf2.10112] but that is adapting to change, not slowing it. While early projects like Ocean Wind, South Fork and Vineyard Wind 1 will set precedents for future projects in the region, BOEM will need to carefully evaluate the changing conditions for each location and project, in consultation with agency and independent researchers, to determine which monitoring and mitigation measures can be directly transferred and which ones require more evaluation. It is critical that throughout the next decade of rapid offshore wind buildout that we invest in the science needed to stay current and keep adjusting the best practices and mitigation measures as the research indicates.

Comment Number: BOEM-2021-0024-DRAFT-0353-3
Organization: New Jersey Resource Project
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

I consider offshore wind to be part of our duty to offset the negative impacts of climate change.

Of course we must be sensitive to the environmental impacts that may occur, especially the impacts to fish and sea mammals. However, because of rising ocean temperatures and ocean acidification, fish numbers are already declining and will continue to do so, if we do nothing.

Comment Number: BOEM-2021-0024-DRAFT-0365-1
Commenter: Anthony Butch
Commenter Type: Individual

Comment Excerpt Text:

Wind energy will NOT solve our climate issues, it will not stop the flooding. I can guarantee you if this project goes through, each storm that rolls through that would have resulted in flooding prior to them being install will still occur after theyve been installed. Those that think this will stop coastal flooding are ill informed in regard to climate change and what needs to be done to curb it. If New Jersey went 100% energy, literally 100% clean energyan entire year of powering our state would only offset Chinas Carbon emissions = to 3 days of their output. China is emitting in a 3 day span would be what we would cancel out in an entire year.

Comment Number: BOEM-2021-0024-DRAFT-0366-23
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

D. BOEM MUST IDENTIFY THE CLIMATE AND AIR QUALITY BENEFITS

Climate change will result in a wide range of significant adverse environmental impacts in the Project area. As identified by BOEM in previous environmental analyses for offshore wind projects, these impacts include:

"alter ecological characteristics of benthic habitat, EFH [essential fish habitat], invertebrates, and finfish, primarily through increasing water temperatures."[Footnote 33: E.g., id. at 3-15.]

ocean acidification, contributing to "reduced growth or the decline of reefs and other habitats formed by shells" and to "the reduced growth or decline of invertebrates that have calcareous shells" and "lead to shifts in prey distribution and abundance."[Footnote 34: E.g., id. at E3-4, 3-15, E2-7.]

ocean warming affects coastal habitats and "influence[s] finfish and invertebrate migration and may increase the frequency or magnitude of disease."[Footnote 35: E.g., id. at 3-6.]

These climate impacts will affect a broad range of species utilizing coastal and marine ecosystems including marine mammals, turtles, birds, and fish. A number of impact-producing factors (IPFs) in previous offshore wind environmental reviews are related to climate change. For instance, "increased storm frequency and severity during breeding season can reduce productivity of bird nesting colonies and kill adults, eggs, and chicks."[Footnote 36: E.g., id. at E2-7.] These same IPFs may result in "changes in nesting and foraging habitat abundance and distribution, and changes to migration patterns and timing."[Footnote 37: E.g., id. at H-45.] For sea turtles, climate change would alter existing habitats, rendering some areas unsuitable for some species and more suitable for others.[Footnote 38: E.g., id. at H-68.] These IPFs also have the potential to "result in impacts on marine mammals" including physiological stress and behavioral changes,"[Footnote 39: E.g., id. at E3-15, E3-17.] as well as "reduced breeding, and/or foraging habitat availability, and disruptions in migration."[Footnote 40: E.g., id. at E3-19.] [Footnote 41: E.g., id. at 3-15.] These impacts must be accounted for in the Draft EIS.

Comment Number: BOEM-2021-0024-DRAFT-0366-25
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The buildout of offshore wind is a key component of meeting the goals of the Biden Administration, such as rebuilding domestic infrastructure for a sustainable economy, creating economic opportunity, and reducing greenhouse gas (GHG) emissions to 50-52% below 2005 levels by 2030. These benefits should be accounted for the Draft EIS. As explained in prior comments to the agency, if 22 GW of offshore wind displaced coal generation, over a 30-year period this would result in a net reduction in CO2 emissions of 2.89 billion tons.[Footnote 43: Comments of National Wildlife Federation et al. Submitted in Response to the Bureau of Ocean Energy Management Draft Environmental Impact Statement for the Deepwater South Fork Wind Farm and South Fork Export Cable Project, 86 Fed. Reg. 1520 (January 8, 2021) (submitted Feb. 22, 2021) at 9-13.] If this offshore wind energy were displacing gas, it would still be displacing nearly 1.5 billion tons of CO2 emissions and significant methane emissions. The climate benefits would only increase with the new Biden Administration's offshore wind goal of 30 GW.

Comment Number: BOEM-2021-0024-DRAFT-0366-26
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

These climate benefits can also be monetized using the social cost of carbon to illustrate differences between the social benefits of a project and the relative social cost of the alternatives. The social and environmental costs of GHG emissions are readily quantifiable and BOEM should consider them in evaluating project impacts and impacts of alternatives. For example, the Interagency Working Group on Social Cost of Carbon has produced estimates for the social cost of carbon in order to "allow agencies to incorporate the social benefits of reducing carbon dioxide (CO2) emissions into cost-benefit analyses of regulatory actions that impact cumulative global emissions."[Footnote 44: Interagency Working Group on Social Cost of Carbon, United States Government, Technical Support Document: - Technical Update of the Social Cost of Carbon for Regulatory Impact Analysis – Under Executive Order 12866 at 2 (July 2015 revision), available at https://www.whitehouse.gov/sites/default/files/omb/inforeg/scc-tsd-final-july-2015.pdf.] The working group presents values for social costs from 2015 to 2030, assuming discount rates of 5%, 3%, 2.5% and the 95th percentile of the 3% discount rate.[Footnote 45: Id] These values range from $11 to $212 (in 2007 dollars) per metric ton of CO2.[Footnote 46: Id] These values could be used to monetize the costs imposed by the net greenhouse gas emissions associated with failing to procure the full 22 GW of offshore wind. Using the working group values, annual climate costs of procuring electricity from 22 GW of coal rather than 22 GW of offshore wind range (assuming a 50% capacity factor in both cases) range from just over $1 billion/year (in 2007$) using a 5% discount rate and the 2020 social cost of carbon[Footnote 47: 23.9 million metric tons CO2 * $12/ton CO2 * (22 GW/6 GW) = $1.05 billion (2007$).] to more than $8.3 billion/year (in 2007$) using a 2.5% discount rate and the 2050 social cost of carbon of $95/ton.[Footnote 48: 23.9 million metric tons CO2 * $95/ton CO2 * (22 GW/6 GW) = $8.3 billion (2007$).] These social benefits would increase when calculated for 30 GW of offshore wind.

Comment Number: BOEM-2021-0024-DRAFT-0366-27
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Even absent direct quantification through the social cost of carbon, there are adverse economic impacts from climate change that exist and should be accounted for in the Draft EIS. These impacts include, as noted in previous BOEM analyses:

Property or infrastructure damage and increased insurance costs and reduced economic viability of coastal communities resulting from sea level rise and increased storm severity/frequency;

Damage to structures, infrastructures, beaches, and coastal land, with numerous economic impacts resulting from erosion and deposition of sediments;

Adverse impacts on commercial and for-hire fishing, individual recreational fishing, and sightseeing resulting from ocean acidification, altered habitats, altered migration patterns and increased disease frequency in marine species.

Comment Number: BOEM-2021-0024-DRAFT-0383-2
Commenter: Jeanne Connelly
Commenter Type: Individual

Comment Excerpt Text:

Most importantly it will allow us to produce cleaner energy. Most of us, who live anywhere near the coast can see the effects of sea level rise increasing. Many of us, have experienced it first hand.

The research real world experiences in established offshore wind farms bear out the minimal environmental impacts of wind farms, in particular, this is true when COMPARED with fossil fuel production.

The threat that fossil fuels present on our environment, are far less daunting thatn wind farms. We have come to accept so many of the negative aspects of fossil fuel as normal we often forget the clear danger they present via so many potental avenues including oil spills, the disposal of dangerous bi-products of oil processing, piplines fracking etc.

If not now, when will we move away from fossil fuel? If we are waiting for the perfect solution we will be literally drowning.

Comment Number: BOEM-2021-0024-TRANS-41521-0012-1
Organization: Ocean City Environmental Commission
Commenter: Rick Bernardini
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Globalwarming is the biggest long term threat to City and its neighboring coastal communities. We are more vulnerable to environmental impacts of global warming than other inland communities.These vulnerabilities include rising water levels along the Atlantic shoreline. We have installed and continued to install extensive pumping systems to alleviate flooding that innstantly is a nuisance in our city. We have wells that are underneath our island and we have land that is sinking because we are talking water out of the aquifers and that's not helping everything from both aspects. So we are in favor of the Ocean Wind project as one tool towards combatting climate change but we have concerns.

Comment Number: BOEM-2021-0024-TRANS-41521-0016-1
Commenter: Paul Eidman
Commenter Type: Individual

Comment Excerpt Text:

Many of the game fish that we target are migratory in nature and in addition to the natural movement, the increasingly warmer waters are pushing our game fish northwards into New England faster than ever before. I am not saying that the turbines are the ultimate answer, but I do feel that this massage amount of renewable energy should be tapped into and will give us all a head start installing the rate of change that is occurring. Whether they admit it or not, there isn't a fisherman out there whetherrecreation or commercial that doesn't see the effects of climate change on the water every single day. Hell, we don't even have to go out to see and fish in order to this see this, we can all see how bad our storms are getting and how our streets flood now with the slightest bit of rain. We all know something is wrong and need to slow this progression down quickly. The thought of powering a half a million homes without burning fossil fuels should excite every single fisherman out there. There is a big cost to doing nothing and continuing to burn natural gas and coal all contributes to pollution and this effecting our game fish navigation system, spawning its, shellfish, lobsters and even certain forms of plankton.

A.2.7 Coastal Habitat and Fauna

Comment Number: BOEM-2021-0024-DRAFT-0222-1
Commenter: John Berlingis
Commenter Type: Individual

Comment Excerpt Text:

I am writing to oppose the wind mills being placed on NJ shoreline. The shoreline wind farms and high voltage cable line will have adverse impact on the ocean environment as well as negative impact to

tourism. As the massive windmill farm is being wedged into the ocean, many fish and water life will perish from the devastative construction in their habitat.

Comment Number: BOEM-2021-0024-DRAFT-0246-1
Commenter: Al Caesar
Commenter Type: Individual

Comment Excerpt Text:

While addressing climate change rightly should be a priority for our state, nation, and planet, we must carefully assess all of the options being brought forth to do so. The ocean wind project in particular has several challenges, which outweigh the possible benefits from the project. First, the intensive construction and deployment of 98 of the worlds largest wind turbines will be highly disruptive, to the sea bed and to nearby marine life.

Comment Number: BOEM-2021-0024-DRAFT-0338-3
Organization: American Littoral Society
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

New Jersey's federally approved coastal policies identify a set of special areas, which are so naturally valuable, important for human use, hazardous, sensitive to impact or particular in their planning requirements that they require individualized, focused attention and special management rules. "Prime Fishing Areas" are a part of NJ's special areas. PFAs include tidal water areas and water's edge areas which have a demonstrated history of supporting a significant local intensity of recreational or commercial fishing. The PFAs are both unmapped (areas fitting the general description) as well as a set of identified, mapped PFAs. Under the state's general water area rules, PFAs are specifically identified in the rules pertaining to conditions for siting submarine cables. The COP asserts in its federal consistency statement that PFAs have been avoided to the maximum extent practicable; the burden that for a cable or portion therof to be sited within a PFA it must be demonstrated that no prudent or feasible alternative route exists outside the PFA and that the cable must follow the route with the least disturbance to the PFA should be more clearly demonstrated.

Comment Number: BOEM-2021-0024-DRAFT-0351-5
Organization: Barnegat Bay Partnership
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The details regarding the proposed impacts of the onshore substations should be fully described in the draft EIS. The COP indicates that impacts to terrestrial and coastal habitats are likely, but does not indicate what those impacts may be. While we understand the impacts will be site specific and dependent on the particulars of site engineering and design, it is difficult to assess the overall impacts of the project without this information.

Comment Number: BOEM-2021-0024-DRAFT-0351-7
Organization: Barnegat Bay Partnership
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

With most of New Jersey's remaining seagrass beds located within the Barnegat Bay, there is great scrutiny on any projects that would potentially impact them. We have several recommendations and comments regarding the discussion of impacts to seagrass beds in the COP and associated appendices.

1. Seagrass surveys should be conducted in the late spring, when numerous studies within the Barnegat Bay have documented seagrass beds are at their maximum density and extent, compared to the current studies conducted by the applicant at the end of the growing season, which likely represents identifies only the minimum bed extent. Furthermore, the on-the-ground survey should be repeated using a methodology that allows for complete assessment of SAV resources. Your SAV Survey Phase 2 did not survey a majority of the bed associated with the IBSP crossing due to depth issues; moreover/in addition, the area not available to the survey boat was mapped as the highest density in the Phase 1 aerial survey, As your SAV survey report states, the Phase 2 survey in the IBSP area is not representative of the bed there; therefore, it should not be used for planning, design, and permitting purposes.

2. Within the text of the COP, the applicant appears to be indicating that the only impacts to seagrass beds will be due to turbidity at the time of cable placement, and that those impacts will be ephemeral and negligible. There appears to be no consideration of the effects of the physical disturbance to the seagrass beds associated with trenching to lay the cables. Prop scars from boats within seagrass beds are visible on aerial photographs for a number of years (see Lathrop and Haag 2011); thus, it is almost certain that any trenching activities will have negative effects on beds, perhaps impacting upwards of 20 acres (Table 2.2.5-6). The applicants should include a discussion in the EIS of what the anticipated impacts to seagrass will be and how they will mitigate for those impacts, including a detailed restoration/mitigation plan that includes active adaptative management. The variable success rates which have been reported in recent seagrass restoration projects (e.g., NJDOT Route 72 project mitigation) lead us to recommend application of the maximum compensatory mitigation ratio.

3. In regard to the applicant's assertion that Wisehart (2007) suggests that potential impacts to SAV habitat are short-term, Wisehart also states the following.

"Other studies, however, have reported slower to no recovery following aquaculture activities (Waddell 1964, Peterson et al. 1987, Neckles et al. 2005). These differences could be maintained by larger scale variables such as water quality. For example, the lack of development surrounding Willapa Bay may mean recovery is faster than in more developed estuaries facing water quality problems that could hinder recovery (e.g., shading by excessive algal growth resulting from anthropogenic nutrient loading)."

Considering that the Barnegat Bay has experienced large declines in SAV, predominantly attributed to water quality concerns, it would appear that potential impacts to SAV associated with the project are serious and consequential.

Comment Number: BOEM-2021-0024-DRAFT-0351-9
Organization: Barnegat Bay Partnership
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

References Cited

Lathrop, R.G. and S. Haag. 2011. Assessment of Seagrass Status in the Barnegat Bay - Little Egg Harbor EstuarySystem: 2003 and 2009. Rutgers University, Grant F. Walton Center for Remote Sensing and Spatial Analysis, New Brunswick, NJ, CRSSA Report#2011-01. Retrieved from: http://www.crssa.rutgers.edu/projects/sav/downloads/CRSSAreport2011-01_Assessment_Seagrass_in_BBAY_LEH_2003_and_2009.pdf

Neckles HA, Short FT, Barker S, Kopp BS. 2005. Disturbance of eelgrass Zostera marina by commercial mussel Mytilus edulis harvesting in Maine: dragging impacts and habitat recovery. Marine Ecology Progress Series 285:57–73

Peterson CH, Summerson HC, Fegley SR. 1987. Ecological consequences of mechanical harvesting of clams. Fishery Bulletin 85:281–298

Waddell JE. 1964. The effect of oyster culture on eelgrass (Zostera marina L.) growth. MSc thesis, Humboldt State College, Arcata, CA

Wisehart, L.M., Dumbauld, B.R., Ruesink, J.L., Hacker, S.D. 2007. Importance of eelgrass early life history stages in response to oyster aquaculture disturbance. Marine Ecology Progress Series 344, 71-80.

Comment Number: BOEM-2021-0024-DRAFT-0353-01-1
Commenter: Marita Vinci
Commenter Type: Individual

Comment Excerpt Text:

We have wildlife area all around us to enjoy , rain storms caused roads to close with almost every storm . We need to continue to care for our beautiful shorelines and community

Comment Number: BOEM-2021-0024-DRAFT-0368-3
Organization: New Jersey Department of Environmental Protection
Commenter Type: State Agency

Comment Excerpt Text:

Additionally, further coordination with the United State Army Corps of Engineers (USACE) regarding shore protection projects and sand borrow areas will be necessary to ensure that ongoing and planned USACE projects are not adversely impacted, and should include the NJDEP's Division of Coastal Engineering as well as representatives from USACE Planning Programs and Project Management Division (PPMD). Also, the New Jersey Department of Transportation (NJDOT) Office of Maritime Resources should be consulted regarding potential impacts of cable installation to navigation projects, state channels, and other NJDOT managed infrastructure and projects.

Comment Number: BOEM-2021-0024-DRAFT-0381-8
Organization: Clean Ocean Action
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

protecting undersea Public Trust lands as these facilities are occupying, constructing, and altering what was (and still will be) treasured public resources, and habitat for extraordinary marine life; therefore, they must have the utmost respect and care.

A.2.8 Commercial Fisheries and For-Hire Recreational Fishing

Comment Number: BOEM-2021-0024-DRAFT-0008-1
Commenter: Robin McConekey
Commenter Type: Individual

Comment Excerpt Text:

-Electromagnetic Field (EMF): how it will effect the fish in our ocean and our fisheries that a coastal community like NJ depend on.

Comment Number: BOEM-2021-0024-DRAFT-0008-4
Commenter: Robin McConekey
Commenter Type: Individual

Comment Excerpt Text:

-Loss of Grounds: 100s of square miles of space has been leased out and will result in decreased fishing opportunities for our commercial and recreational fishing communities. This will also crest radar and navigational hazards, including search and rescue operations by the USCG.

Comment Number: BOEM-2021-0024-DRAFT-0025-3
Commenter: Devin Pantiliano
Commenter Type: Individual

Comment Excerpt Text:

I am concerned about fisheries who will have a very tough time fishing these areas especially the clam and scallops that require large spread out equipment. As a recreational fisherman who pilots a small 35 foot marine vessel at night using many forms of electronics to navigate, wondering how this will impact our travels from BI to the reachable canyons.

Comment Number: BOEM-2021-0024-DRAFT-0082-4
Commenter: William O'Neill
Commenter Type: Individual

Comment Excerpt Text:

Their next concern is that it might spoil the fishing and clammers. Not enough fish now and the clammers tear up the sea bed along with the USACE dredging every three years. They never complain about that!

Comment Number: BOEM-2021-0024-DRAFT-0084-2
Commenter: Greg Noll
Commenter Type: Individual

Comment Excerpt Text:

We also have no idea what it does to fisheries.

Comment Number: BOEM-2021-0024-DRAFT-0092-2
Commenter: William Shillingford
Commenter Type: Individual

Comment Excerpt Text:

They will destroy most of inshore fishing as fish especially flounder will not migrate past the electrical field off the buried cables

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Comment Number: BOEM-2021-0024-DRAFT-0097-1
Commenter: Anthony Jackson
Commenter Type: Individual

Comment Excerpt Text:

The risk on local fisheries can be devastating.

Comment Number: BOEM-2021-0024-DRAFT-0101-2
Commenter: Richard Zinck
Commenter Type: Individual

Comment Excerpt Text:

I also worry about the impact on fishing in general...disturbing the ocean floor, silt from construction killing marine eggs, electrical currents harming marine neuro systems, etc. Any benefit to fishing is

totally eliminated with territorial boundaries regarding encroachment to the turbines. There is no general consensus from the scientific community regarding the unintended consequences .. one scientist even admitting, We wont know until they are built.

Comment Number: BOEM-2021-0024-DRAFT-0113-4
Commenter: Meaghan Zanfardino
Commenter Type: Individual

Comment Excerpt Text:

100s of square miles of space has been leased out and will result in decreased fishing opportunities for our commercial and recreational fishing communities.

Comment Number: BOEM-2021-0024-DRAFT-0115-2
Commenter: Thom Bonan
Commenter Type: Individual

Comment Excerpt Text:

The beach replenishment has already done damage to the fishery, this will even further effect it.

Comment Number: BOEM-2021-0024-DRAFT-0129-6
Commenter: Gerry Lucidi
Commenter Type: Individual

Comment Excerpt Text:

The wind farms will be located in and around the Ocean City Reef, the GE Reef and the Atlantic City Reef. The only fish to catch inshore on these reefs in early Spring is black seabass since Flounder season doesnt start in the Bay until late May. Also, once Flounder season ends at the end of the summer the only fish on the reefs to catch is black seabass. If the installation of the wind farms negatively impacts the black sea bass population then the fisherman will go to other towns and communities to fish.

Comment Number: BOEM-2021-0024-DRAFT-0133-6
Commenter: James Hutchinson
Commenter Type: Individual

Comment Excerpt Text:

And, so far to date, I've not heard one legislator or bureaucrat say a single word about the Magnuson–Stevens Fishery Conservation and Management Act, the U.S. federal fisheries law hijacked years ago by the ENGOs and their friends on Wall Street and now used as a weapon against coastal fishermen. Yet from the very beginning (1976) The Magnuson-Stevens Act was implemented specifically for exercising "sovereign rights" for the purposes of exploring, exploiting, conserving, and managing all fisheries resources within the exclusive economic zone. [Italics: "It is further declared to be the policy of the Congress in this Act—to maintain without change the existing territorial or other ocean jurisdiction of the United States for all purposes other than the conservation and management of fishery resources, as provided for in this Act."]

So now BOEM is looking to perform an EIS on a project that will displace U.S. Fishermen, to the financial benefit of foreign companies harvesting a natural resource inside the U.S. exclusive economic zone? A federal law implemented in 1976 to protect and preserve the American fishermen, rewritten by ENGO's in the 90's and early 2000's to help erode at the core of our U.S. fishing communities, now grossly ignored in an effort to finally place America's fishermen once and for all.

Comment Number: BOEM-2021-0024-DRAFT-0169-10
Commenter: Rick Robinson

Commenter Type: Individual

Comment Excerpt Text:

So we plan to forge ahead and hope we dont irreparably damage the environmental driver of the entire coastal fishing industry and the jobs that depend on it.

Comment Number: BOEM-2021-0024-DRAFT-0196-10
Commenter: Lisa Kazunas
Commenter Type: Individual

Comment Excerpt Text:

The negative impact to commercial and recreation fishing due to a. EMF b. cold pooling, c. vibration and noise of construction and operation of turbines, etc. has also been identified by the fishing community.

Comment Number: BOEM-2021-0024-DRAFT-0204-2
Organization: United Boatmen of NJ
Commenter Type: Undetermined Organization

Comment Excerpt Text:

The cold pool effect has not been studied as well and there has been numerous issues given from the wind farms in Europe.

Comment Number: BOEM-2021-0024-DRAFT-0234-1
Commenter: Lee Widman
Commenter Type: Individual

Comment Excerpt Text:

Windfarms in the Ocean need another review. The plan is to put to many and to close to the shore. The project near Atlantic city can not be moved further away due to the trench so it should be canceled! Find better options. We can not impact the fishing and tourist industry it is too important. New Jersey is BLESSED with the Ocean do not screw it up.

Comment Number: BOEM-2021-0024-DRAFT-0238-1
Commenter: Cathy DeMaio
Commenter Type: Individual

Comment Excerpt Text:

I am writing to voice my opposition of the the proposed offshore wind energy facility in south Jersey. It will be a detriment to the fishing industry, sea life and tourism in the area. Please consider the voices of the people and dont let this happen.

Comment Number: BOEM-2021-0024-DRAFT-0246-2
Commenter: Al Caesar
Commenter Type: Individual

Comment Excerpt Text:

Once operational, the challenges continue two marine life, with unknown impacts to the cold pool, which will negatively impact our states fishing industry and those whose livelihood depends on it.

Comment Number: BOEM-2021-0024-DRAFT-0251-5
Commenter: Paul E Towhey Sr
Commenter Type: Individual

Comment Excerpt Text:

There will be great disruption to the fishing industry and their fishing areas, as well as recreational and sport fishing.

Comment Number: BOEM-2021-0024-DRAFT-0256-2
Commenter: Capt. Paul Eidman
Commenter Type: Individual

Comment Excerpt Text:

More structure in the water means more fish habitat and aggregation of key gamefish species like Black Sea Bass, Summer flounder, blackfish, bluefish and mahi mahi.

All this leads to increased fishing opportunity, increased trips out on the water with more paying customers on party boats, and more folks feeling confident enough with the fishing to buy more tackle, boats, and even trucks to tow them. For the folks that now run sixty or more miles offshore to chase tuna and other migratory species, looking for lobster pots, grass mats, current rips or anything that helps aggregate bait, the potential opportunity under the towers is extremely exciting.

Comment Number: BOEM-2021-0024-DRAFT-0259-2
Commenter: Danielle Furey
Commenter Type: Individual

Comment Excerpt Text:

Fishing has been a way of life here for generations & we have to preserve that life for future generations. A warming planet is a threat to all life, including NJ fisheries.

Comment Number: BOEM-2021-0024-DRAFT-0278-1
Commenter: Gerald Thornton
Commenter Type: Individual

Comment Excerpt Text:

The primary purpose of my objection is concerns for our commercial fishing industry, which is the second most important economic engine for Cape May County. To provide some context of its importance, the Cape May-Wildwood port in 2018 was ranked 14th in pounds landed and 10th in value for all ports in the United States and in the northeast (Maine to Virginia) ranked second in pounds harvested and value and is the largest commercial fishing port in New Jersey. In 2019, the Cape May-Wildwood port brought in 94.5 million pounds, which helped generate $270 million in local income. Commercial fishing in total for New Jersey in 2016 accounted for 37,100 jobs and Cape May County was the largest driver of that economic activity in this sector for the State. New Jerseys seafood industry ranked sixth in the U.S with sales.

Comment Number: BOEM-2021-0024-DRAFT-0287-2
Organization: North Beach Taxpayers Association
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

In 2017, the total seafood catch in New Jersey was 198.6 million pounds placing New Jersey 10th in the country for catch. New Jersey ranks No. 1 in the nation in quahogs landed at 16.5 million pounds, second in sea scallops landed with 11 million pounds, second in Atlantic mackerel landed at 2.8 million pounds, second in surf clam harvest with more than 18.3 million pounds, and second in squid commercial landings at 24.9 million pounds. Some of the most productive fishing grounds in the country are at the center of this experiment. Fifteen years ago, New Jersey's Blue-Ribbon Panel on the Development of

Wind Turbine Facilities in Coastal Waters (2006), suggested we should start on a much smaller scale before committing to the massive wind farms now proposed. This would allow us to gain practical knowledge of the impact and benefit based on real experience with a test project off the coast of New Jersey. Yet, we have ignored our own advice.

Comment Number: BOEM-2021-0024-DRAFT-0291-3
Commenter: Linden Gruver
Commenter Type: Individual

Comment Excerpt Text:

I see the negative impact this will have on the Fishing Industry, but this isn't the first impact and it won't be the last. At worst it will be a short term mostly, for the trenches that will need to be dug to bury the cables run from Off shore to their On shore connection. Winter and summer flounder and other bottom species will be affected, for awhile, but I feel it will rebound. For years now many of the fisheries have faced the increasing regulations on different species of fish for that exact purpose of keeping a species sustainable, and Not be fished out until it is no longer here on our planet. All of us, are in the same boat or environment. We must begin now to think long term. I don't know of a fishing boat with electric engines yet. so that means we are still totally dependent on fossil fuels to run the boats out to get our food. And, yes, I've seen fisherman friends and family loose income and have to adjust their life styles due to depleting fisheries up and down the Atlantic seaboard. Yes, I understand it will be hard on the port of Cape May, but the Co. Director and I won't be around when things really get bad, if we don't try to change our addiction the burning gas and oil in all our engines. We must sacrifice, all of us, not just the fisherman and the fishing industry. We need to try to make it on Sustainable Energy AND Food sources, now.

Comment Number: BOEM-2021-0024-DRAFT-0295-1
Organization: New England Fishery Management and Mid-Atlantic Fishery Management Councils
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

While the Councils recognize the importance of domestic energy development to U.S. economic security, we note that the marine fisheries throughout New England and the Mid-Atlantic, including within the Ocean Wind project area and in surrounding areas, are profoundly important to the social and economic well- being of communities in the Northeast U.S. and provide numerous benefits to the nation, including domestic food security.

Comment Number: BOEM-2021-0024-DRAFT-0295-10
Organization: New England Fishery Management and Mid-Atlantic Fishery Management Councils
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

We recognize that data on private angling are very limited; therefore, it will be important to clearly articulate the limitations of the available data and work with local fishermen to understand how the project area is used by recreational fisheries.

Comment Number: BOEM-2021-0024-DRAFT-0295-11
Organization: New England Fishery Management and Mid-Atlantic Fishery Management Councils
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The impacts of the project will not be felt only by fishermen from nearby ports; the EIS should consider commercial and recreational fisheries over a wide geographic area that may be impacted by the project. For example, vessels traveling from ports north and south of the project area may transit through and/or fish in the area. Again, BOEM should coordinate with NOAA Fisheries on the best data regarding fishing and transit, the EIS should clearly acknowledge the limitations of the available data, and local fishermen should be consulted to better understand use patterns not captured in the data.

Comment Number: BOEM-2021-0024-DRAFT-0295-12
Organization: New England Fishery Management and Mid-Atlantic Fishery Management Councils
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Turbine foundations and their associated fouling communities will create artificial reefs, which are expected to attract certain fishery species (e.g., black sea bass). The EIS should acknowledge that the benefits of this artificial reef effect will vary by target species. For example, any benefit to anglers targeting highly migratory species (e.g., tunas and sharks) could be offset by the inability to anchor or to drift throughout the area. If operators shift their effort outside the project area during construction or long-term operations, this will potentially put them in areas of higher vessel traffic and gear conflict. Also, depending on operating conditions at sea, commercial and recreational fishermen cannot always reap the benefits of any increased catchability of target species due to safety concerns of fishing in swells around the turbines. These safety considerations will be different than the existing artificial reefs in the Greater Atlantic region which, except for the Block Island Wind Farm turbine foundations, are all submerged structures.

Comment Number: BOEM-2021-0024-DRAFT-0295-6
Organization: New England Fishery Management and Mid-Atlantic Fishery Management Councils
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

BOEM should coordinate early and often with NOAA Fisheries on the most appropriate data for analysis of potential impacts to fisheries, including fishing and transiting locations, as well as socioeconomic impacts. The EIS should clearly and repeatedly acknowledge the limitations of each data set. Summary information on Council-managed fisheries is also available on the Council websites, www.mafmc.org, and www.nefmc.org, at fishery management plan-specific links, typically via annual fishery information reports (MAFMC) or recent plan amendment or framework documents (both councils).

Comment Number: BOEM-2021-0024-DRAFT-0295-7
Organization: New England Fishery Management and Mid-Atlantic Fishery Management Councils
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Commercial and recreational fisheries provide a wide range of benefits to coastal communities; not all are captured by looking only at financial metrics. The EIS should not overly rely on ex-vessel value when assessing and weighting impacts across various fisheries. Focusing on ex-vessel value can mask other important considerations such as the number of impacted fishery participants, the use of a low-value species as bait for a high-value species, or a seasonally important fishery.

Comment Number: BOEM-2021-0024-DRAFT-0295-8
Organization: New England Fishery Management and Mid-Atlantic Fishery Management Councils
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Models exist to estimate the amount of fisheries revenue generated from within the project area; however, it is important to acknowledge that changes in transit patterns will also have economic impacts and the associated economic impacts will be challenging to accurately quantify.

Comment Number: BOEM-2021-0024-DRAFT-0295-9
Organization: New England Fishery Management and Mid-Atlantic Fishery Management Councils
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Commercial, for-hire recreational, and private recreational fishing should be considered separately, but in the same or adjacent sections of the document. As the Councils have stated in comment letters on other wind projects, the grouping of private recreational fishing with recreation and tourism, rather than with commercial and for-hire fisheries, is not intuitive to us and makes it challenging for readers to understand the full picture of potential impacts on all fishery sectors. If fishery species are affected by the project, this will affect both for-hire and private recreational fishing. Grouping both types of recreational fishing would make linkages between biological and fishery conditions more straightforward to explain.

Comment Number: BOEM-2021-0024-DRAFT-0297-15
Organization: Responsible Offshore Development Alliance
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Commercial fisheries will be the most impacted from large scale ocean development and as RODA and our members have commented numerous times, the fishing industry cannot make up for these impacts by simply “fishing someplace else.” Based on regulations, management plans, and resource distribution, fisheries resources cannot be uniformly harvested across marine ecosystems. Commercial fishing is a historic industry in the U.S. and impacts to loss of fishing grounds will be felt throughout the supply chain; from the ice houses to the net makers to the vertically integrated fish houses, severely impacting fisheries quotas will have repercussions throughout coastal communities and on the American dinner plate.

Comment Number: BOEM-2021-0024-DRAFT-0301-2
Commenter: Andrew Pockl
Commenter Type: Individual

Comment Excerpt Text:

the turbines in the ocean will negatively impact the fishing industry. Many restaurants rely on this industry to stay in business.

Comment Number: BOEM-2021-0024-DRAFT-0305-2
Commenter: Jeff Straton
Commenter Type: Individual

Comment Excerpt Text:

Oceam Wind will not provide remuneration to local fisherman, yet in other countries they do. Why? Because they know it destroys fishing grounds, but we Americans dont know the facts. This is okay? NO!

Comment Number: BOEM-2021-0024-DRAFT-0309-2
Organization: Surfside Foods LLC
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Surfside Foods has seven harvest vessels, properly permitted by the U.S. National Marine Fisheries Service (NMFS) to harvest from the lease area and as such is an authorized user with harvest rights granted by an agency of the United States Government. Wind lease development in the lease area will negatively impact Surfside Foods; we therefore request BOEM fully consider our submission when making subsequent decisions in regard to commercial wind generation in this lease area. We request our rights of reasonable access and use as authorized users of the OCS are protected and maintained. In order to consider our rights of reasonable access our spatial operational needs when fishing our use of the area for transit must be considered.

Comment Number: BOEM-2021-0024-DRAFT-0309-3
Organization: Surfside Foods LLC
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

It is important that offshore wind development is done in a manner that does not unnecessarily harm the Atlantic Surfclam or Ocean Quahog industries. The waters in and around the lease are are very important to the fisheries and also very fragile; great care must be taken to preserve and manage these waters with sound science and reasoning.

Comment Number: BOEM-2021-0024-DRAFT-0309-9
Organization: Surfside Foods LLC
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The surfclam fishery will likely be the most impacted from the development of the Ocean Wind and Atlantic Shores leases. Loss of access to these lease areas will increase the local overfishing for surfclams occurring off New Jersey and further put pressure on our industry.

Comment Number: BOEM-2021-0024-DRAFT-0318-2
Commenter: Jill Markley
Commenter Type: Individual

Comment Excerpt Text:

I also believe it will harm our wildlife and hurt the fishing industry.

Comment Number: BOEM-2021-0024-DRAFT-0334-5
Commenter: Peter Straub
Commenter Type: Individual

Comment Excerpt Text:

Effects on the commercial fishing industry, which is a multimillion-dollar industry in NJ have been a concern locally and the plan/state should consider further the potential of redress for loss or limitation of access to historic fishing grounds.

Comment Number: BOEM-2021-0024-DRAFT-0346-3
Commenter: Martha Oldach
Commenter Type: Individual

Comment Excerpt Text:

Not only is this area proposed in the direct path of the right whales migratory pattern but it is also on top of our cold pool. The cold pool is essential for the fisheries in this area especially the fluke which is paramount to our fishing industry. Commercial fisherman and sports fisherman are against these turbines.

Comment Number: BOEM-2021-0024-DRAFT-0353-5
Organization: New Jersey Resource Project
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

We echo our Angler friends the fishing community is requesting written confirmation they will have access to fish.

Comment Number: BOEM-2021-0024-DRAFT-0354-20
Organization: New York State Department of State
Commenter Type: State Agency

Comment Excerpt Text:

DOS has a direct interest in minimizing temporary disruptions and increased risk of hazards for commercial vessels en route to or from the NY/NJ Harbor. As the largest port complex on the East Coast, the NY/NJ Harbor is an economic driver for New York State and the region. The Harbor contains a thriving network of public and private marine terminals and is a significant force in the New York metropolitan area's economy, creating thousands of jobs ($1.8 billion in New York wages in 2016) and generating approximately $3.3 billion in GDP for the State (ENOW 2019). [Footnote 5: NOAA ENOW. New York State – Marine Transportation. Accessed April 15, 2019. https://coast.noaa.gov/enowexplorer/#/gdp/transportation/2016/36000.]

The Harbor also benefits from the strong economic and maritime ties with the Delaware Bay, most directly by important tug-tow coastwise routes along New Jersey and eastward. In 2014, New York's tug, tow, and barge industry was estimated to contribute $570.9 million in GDP, with a total economic contribution (direct, indirect, and induced) of more than $2.1 billion and ranked fifth in the nation. [Footnote 6: The American Waterways Operators and U.S. Department of Transportation. 2017. "Economic Contribution of the US Tugboat, Towboat, and Barge Industry." May 10, 2017. Available at: https://www.americanwaterways.com/sites/default/files/Econ%20Impact%20of%20US%20Tugboat%20Towboat%20and%20Barge% 20Industry%20lh%206-22-17.pdf] The tug vessel traffic exhibits two dominant traffic patterns (Figure 1). Significant tug traffic transits north-south between the Harbor and Delaware Bay. Also important is the tug traffic traveling from points along the New Jersey coast north of Cape May to points along the Long Island and Rhode Island coasts west of Nantucket, taking the most direct route possible when conditions allow. These commercial ventures are dependent on waterborne commerce to move goods and raw materials or otherwise provide essential services. The tug/tow routes are also important because they reduce land-based traffic that would otherwise travel through New York and reduce vessel congestion along other navigation routes, which helps to reduce fuel consumption, air emissions, and journey time. [Footnote 7: BOEM. 2012. Commercial Wind Lease Issuance and Site Assessment Activities on the Atlantic Outer Continental Shelf Offshore New Jersey, Delaware, Maryland, and Virginia. OCS EIS/EA BOEM 2012 -003. p.140 https://www.boem.gov/sites/default/files/uploadedFiles/BOEM/Renewable_Energy_Program/Smart_from_t he_Start/Mid- Atlantic_Final_EA_012012.pdf.]

Comment Number: BOEM-2021-0024-DRAFT-0355-1
Organization: Anglers for Offshore Wind Power
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

By far, the number one issue of concern to the recreational fishing community is the potential loss of access to the very productive offshore fisheries that occupy this area at certain times of the year, mostly summer and fall. Besides the unique and irreplaceable social value of these fisheries, any loss of access in the Ocean Wind project site would result in significant impact to the local fishing and boating economy. This is a high-dollar fishery utilized by vessels accounting for hundreds of thousands of dollars of economic activity in electronics, gear, and tackle alone. For BOEM to gain a thorough understanding of potential impacts to recreational offshore fishing, we recommend consultation with the American Sportfishing Association and the NOAA Northeast Fishery Science Center.

Throughout this process many individual anglers and recreational fishing organizations have requested formal confirmation that after construction, access in lease areas and around turbines and other structures would be treated in the same manner as oil rigs in the Gulf of Mexico. In the decommissioning phase, we suggest that turbine structures be cut down to a safe height off the sea floor and the foundation and the reef that has been established as marine habitat remain intact. GPS positions of each of these reefs should be distributed to the fishing community as a "fishing hotspot reef chart."

We also request BOEM include firm language in the Draft EIS clarifying that the entire impact analysis is based on an expectation of total access to the wind farm area after construction. Our ideal approach to this issue would be for BOEM to make post-construction access a permit condition for all offshore wind-related structures. We feel offshore wind structures should fall under the existing US Coast Guard regulations regarding "aids to navigation." This is established language that is well understood by both mariners and enforcement.

Comment Number: BOEM-2021-0024-DRAFT-0358-2
Organization: American Saltwater Guides Association
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Charter/for-hire and private recreational anglers are both considered to be part of the recreational sector by fisheries managers. Charter/for-hire and private recreational anglers target the same species, use the same gear, and fish similar areas. Private recreational fishermen should not be included in the tourism/recreation category in the EIS but should instead be included with charter/for-hire. Adjusting this classification would make it easier for both scientists and managers to collaborate in the process.

Comment Number: BOEM-2021-0024-DRAFT-0370-1
Organization: Recreational Fishing Alliance
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

As an organization that represents recreational fishermen and fishing related businesses as well as advocates for the responsible management and longterm sustainability of our nation's marine resources, the RFA is extremely concerned about the potential negative impacts that could result from the development of offshore wind facilities. Fishermen, perhaps more than any other stakeholder, stand to be most affected by offshore wind development through the possible disruption and/or destruction of fishing grounds, fish habitat, fish migrations and the marine environment. Fish and fishermen, based on documentation of impacts observed from other offshore wind facilities, stand to endure imminent economic and non economic injury from offshore wind. RFA has reviewed literature from existing

offshore wind facilities and it can be ascertained with absolute justification that offshore wind facilities do cause measurable negative impacts. For these reasons, fishermen, both commercial and recreational and the businesses supported by them, have a demonstrated standing and interest in the permitting, construction and operation of offshore wind facilities.

Comment Number: BOEM-2021-0024-DRAFT-0370-8
Organization: Recreational Fishing Alliance
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

RFA believes there are significant socioeconomic impacts associated with the Ocean Wind project from a fisheries standpoint. As many advocates of offshore wind have expressed, the offshore wind facilities, once constructed, may become more productive fishing areas for commercial and recreational fishermen. This theory is based on the well known assumption that areas in the ocean with hard bottom, vertical relief or other such features tend to attract and consolidate fish. While the offshore wind facilities will not increase the overall biomass or productivity of fish stocks, they are expected to concentrate fish availability. Thus, a very real consequence of offshore wind facilities is that fish species that are important or targeted by recreational fishermen may concentrate in greater abundance at the offshore wind facilities and in less abundance in areas west/inshore of the wind facilities. Since the majority of recreational fishermen do not own or have access to a boat, a significant portion of the recreational fishing sector may see a significant decline in availability in the inshore waters. RFA demands that the EIS must evaluate how the Ocean Wind project will reduce availability of important species to anglers that fish from shore, piers, jetties and other inshore waters. RFA believes this is a significant issue which could impact millions of recreational anglers and the EIS must quantify this impact.

Comment Number: BOEM-2021-0024-DRAFT-0372-1
Organization: Garden State Seafood Association
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The current process in use by the Bureau of Ocean Energy Management (BOEM), identifies wind energy area sites without consideration of their adverse environmental impacts in the original lease selection, on the locations historically rich and economically vital commercial fisheries, or on the communities that support and benefit from those fisheries. The only factors even considered in the initial location determination was visibility from shore and an attempt to minimize bird interactions, not the needs of other ocean users, particularly fishermen. The potential results of continuing offshore wind solicitation include permanent harm to our environment, diminishment of our industry's ability to produce food from the sea, and increased costs to the consumers who must purchase expensive 'green' power.

Comment Number: BOEM-2021-0024-DRAFT-0372-9
Organization: Garden State Seafood Association
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Also, worth noting is the majority of fishing gear types will be unable to work in these arrays. Specifically gill net, bottom trawls, midwater trawls and clam and scallop dredges need at least a 2nm spacing between each array. This has been shared countless time and to date never been included in a design proposal. As such the EIS must consider a greater array spacing to allow commercial operation, or assume these areas will be closed to most gear types fished in NJ commercially. Thus, mitigation must be considered that includes the fact that these areas will be closed to commercial fishing. And this compensatory mitigation or impact fees fully offset these fisheries losses. Finally, this mitigation funds

must be identified and distributed by an independent source, with no relationship or control by the developers.

Comment Number: BOEM-2021-0024-DRAFT-0384-2
Commenter: Gregory Cudnik
Commenter Type: Individual

Comment Excerpt Text:

Marine recreation fishing in NJ has a very large economic value and social benefit. NJ Anglers contribute $1.3B and 9,000 jobs towards GDP. But the economic impacts to the recreational fishing sector are overlooked by painting the picture that the majority of saltwater anglers of NJ are in favor due to the reef effect. The truth is the majority don't know about the full scope of the project and exactly what's taking place. These concerns must be explicitly considered before any construction begins and this project must be delayed.

Comment Number: BOEM-2021-0024-EMAIL-003-14
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

The discussion of commercial and recreational (party/charter and private angler) fisheries affected should assess landings, revenue, and effort; fishery participants, including vessels, gear types, and dependency upon fishing within the project area; potential impacts beyond the vessel owner level (e.g., shoreside support services such as dealers, processors, distributors, suppliers, etc.); and coastal communities dependent on fishing. Our offshore wind socioeconomic impacts page [Link: https://www.fisheries.noaa.gov/resource/data/socioeconomic-impacts-atlantic-offshore-wind-development?utm_medium=email&utm_source=govdelivery] can help identify important commercial and recreational fisheries, while the status of many species can be found on our individual species pages, [Link: https://www.fisheries.noaa.gov/find-species] [Link: https://www.fisheries.noaa.gov/find-species] and recent trends can be found on our Stock SMART page. [Link: https://www.st.nmfs.noaa.gov/stocksmart?app=homepage] Information that can help characterize communities engaged in fishing activity can be found on our website describing social indicators for coastal communities [Link: https://www.fisheries.noaa.gov/national/socioeconomics/social-indicators-coastal-communities] and should be integrated into the EIS.

Comment Number: BOEM-2021-0024-EMAIL-003-23
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

In addition to focused evaluations on protected species, fish, invertebrates, and habitats, the "Environmental Consequences" section of the EIS should include a subsection evaluating impacts to commercial and recreational fisheries. The EIS should discuss biological impacts to marine species caused by the temporary or permanent loss/conversion of bottom habitat (i.e., resource distribution, productivity, or abundance changes) and direct or indirect socioeconomic impacts to commercial and recreational fishing activities and support businesses from project construction and operation such as loss of access to important fishing areas due to the presence of structures (WTGs, substations, cables, scour protection). This evaluation should also include any potential displacement of fishing activities and resulting increased gear conflicts, bycatch, catch rates, and fishing pressure in other locations. When structuring the fishery socioeconomic impact evaluation, BOEM and its contractors should address all of

the elements identified in the checklist we provided in January 2021, or explain why specific elements on that checklist were not included in the EIS. As noted above, our fishery socioeconomic impact summaries can and should serve as the foundation for this analysis in the EIS, although additional project-specific analysis may be necessary to address particular impacts or mitigation/compensation arrangements with affected fisheries.

Comment Number: BOEM-2021-0024-EMAIL-003-38
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

The EIS should also consider how any proposed wind farm may displace or alter fishing or existing vessel activity that may change the risk to protected species from interactions with fisheries or vessels either within or outside the lease area, including potential risks of interactions with recreational fishing activity around foundations and entanglement in marine debris that may become ensnared on the foundations. Additionally, the EIS should consider effects of any surveys that may occur following potential COP approval that may affect listed species (e.g., gillnet or trawl surveys to characterize fisheries resources), as well as any pre- or post- construction monitoring that may affect listed species. For further information on effects to consider, please refer to the ESA Information Needs document.

Comment Number: BOEM-2021-0024-EMAIL-003-58
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

Fisheries Management Comments

Species important to both commercial and recreational interests are found within the project area and associated cable corridors. The COP adequately identifies most species and fisheries that may be affected by the proposed operations. As noted in our socioeconomic impact summary report [Link: https://www.greateratlantic.fisheries.noaa.gov/ro/fso/reports/WIND/WIND_AREA_REPORTS/Ocean_Wind_1.html#most_impacted_species] [Link: https://www.greateratlantic.fisheries.noaa.gov/ro/fso/reports/WIND/WIND_AREA_REPORTS/Ocean_Wind_1.html#most_impacted_species]for this project, Atlantic menhaden, surfclam, scallops, and channeled whelk are the primary commercial fisheries affected. Because lobster vessels are only required to submit vessel trip reports (VTRs) if they are issued a Federal permit for another species (many are not), lobster and Jonah crab operations are not fully captured in available VTR data and are underrepresented in our socioeconomic impact summary report. Similarly, information on highly migratory species catch are only partially captured in VTRs available from the Greater Atlantic Regional Fisheries Office and are instead found in VTRs available from our Southeast Regional Office and the large pelagic survey (available at this link) [Link: https://www.fisheries.noaa.gov/recreational-fishing-data/recreational-fishing-data-downloads]. We are developing summaries of party/charter recreational fishing operations similar to those created for commercial fishing vessels and will post them on our website once available and can distribute the data upon request. However, private angler recreational catch data are not collected with sufficient area precision to determine the amount of catch inside a particular wind project area. Despite this limitation, the project area is likely to affect important regional recreational fisheries and a discussion of private angler catch should be included in the EIS. Any requests for fishery data should be submitted to nmfs.gar.data.requests@noaa.gov.

Comment Number: BOEM-2021-0024-EMAIL-003-59
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

BOEM should utilize information from all available and appropriate sources to characterize fishing operations and evaluate the potential impacts of the proposed project on private anglers, commercial and party/charter fishing vessels, and associated communities. As noted above, consideration of data across a broad time frame (10 years or more), including data from the most recent 2 years, is necessary to reflect both recent operations and annual fluctuations in fishing operations due to changing environmental conditions, market price, and management measures. As such, the COP and future EIS should include the most recent information available. We rely on VTRs as the best source of area-based data for all federally-managed commercial and party/charter fisheries. Both vessel monitoring system (VMS) and automatic identification system (AIS) data provide higher resolution spatial data, but such sources are not adequate to provide information on all commercial fisheries or fishing vessels. In evaluating the use of existing data sources, please refer to the list of data limitations provided in our January 2021 socioeconomic checklist. When using such data to analyze the impacts of the proposed project, BOEM should recognize such limitations and tailor impact conclusions based on the data used. Care should be taken to put operations into the proper context in future analysis to avoid mischaracterizing fishing operations and potential impacts associated with the proposed project.

Comment Number: BOEM-2021-0024-EMAIL-003-60
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

Like many wind projects, it is important to recognize that fishing operations in any one area are not necessarily limited to vessels operating in adjacent ports. Our summary reports indicate that vessels from Maryland, Massachusetts, Rhode Island, and Virginia operate in the project area along with vessels from New Jersey and New York. While the COP provides information on some of these states and ports, not all are included. For example, vessels from New Bedford, MA, operate in this area, but that port is not discussed in the description of affected ports. Operations and associated landings in all ports and states should be considered in future evaluations of this project as part of the EIS.

Comment Number: BOEM-2021-0024-EMAIL-003-61
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

A quantitative analysis of the potential biological, social and economic costs of the project to fishing industries and their communities must be included in the EIS. As noted above, we have provided a checklist outlining the elements we expect to be included in an analysis of the socioeconomic impacts of this project. Our previously referenced socioeconomic impact summaries address nearly all of the elements on the checklist and can be used as the foundation of such an analysis. The analysis should also address potential costs associated with reduced fishing revenues as a result of short or long-term effort displacement, impacts on catch rates, changes to species composition, potential impacts of construction activity on spawning success and future recruitment, and permanent or short-term changes to EFH during construction, operation, and decommissioning the project. Opportunity costs such as revenue lost by

fishing effort that is displaced into less productive areas, including vessels displaced out of the project area and those already fishing in an area into which displaced vessels move, and the potential for poor recruitment resulting from construction activities should be assessed. This is a critical analysis, as even marginal changes in costs could be impactful for some fisheries. Similarly, analysis of the affiliated non-market social impacts of such activities should be included in the EIS, including impacts to cultural norms, fishermen or fishing community social relationships, and health and well-being (see Fisheries Social Impact Assessment Guidance Document https://media.fisheries.noaa.gov/dam-migration/01-111-02.pdf and Practitioner's Handbook https://spo.nmfs.noaa.gov/sites/default/files/TM212_0.pdf). Finally, the EIS should consider and discuss any mitigation measures contemplated to reduce any adverse impacts to fishing operations, particularly those due to loss of area access or gear damage/loss.

Comment Number: BOEM-2021-0024-EMAIL-003-62
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

Presence of structures is an impact producing factor relevant to commercial and recreational fishing that should be addressed in the EIS. This factor is not listed in Section 2.3.4.2 of the current version of the COP. The EIS should provide a detailed analysis of how the presence of project structures (e.g., WTGs, substations, and cables), including layout and spacing, would affect fishing gear operation, including the ability for vessels to maintain maneuverability and minimize risk of fouling gear with other gear or with such structures. Specifications of all gear types operating in the project area should be compiled and incorporated into this analysis. This analysis should consider both fishing vessels and survey vessels, including state and federal fisheries surveys.

Comment Number: BOEM-2021-0024-EMAIL-003-63
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

Effects and Impacts on Federal Fisheries Surveys & Stock Assessments

As noted for other wind development projects, the Ocean Wind Project is anticipated to have major adverse impacts on NOAA Fisheries Northeast Fisheries Science Center scientific surveys, which will, in turn, result in adverse impacts on fishery participants and communities and on the American public who consume seafood. This project would have direct impacts on the federal multi-species bottom trawl survey conducted on the FSV Henry Bigelow, the surfclam and ocean quahog clam dredge surveys conducted on chartered commercial fishing platforms, the integrated benthic/sea scallop habitat survey, ship and aerial-based marine mammal and sea turtle surveys, and the shelf-wide Ecosystem Monitoring Survey (Ecomon). Based on standard operating practices conducted by the NOAA Office of Marine & Aviation Operations, wind WTG arrays would preclude safe navigation and safe and effective deployment of mobile survey gear on NOAA ships. The impacts to our surveys from this project will be driven by four main mechanisms: 1) exclusion of NMFS sampling platforms from the wind development area, 2) impacts on the random-stratified statistical design that is the basis for data analysis and use in scientific assessments, advice, and analyses; 3) the alteration of benthic, pelagic, and airspace habitats in and around the wind energy development; and 4) potential reductions in sampling outside wind areas caused by potential increased transit time by NOAA vessels. Adverse effects on monitoring and assessment activities would directly impact the critical scientific information used for fisheries management and the recovery and conservation programs for protected species. These impacts would result in increased uncertainty in the surveys' measures of abundance, which could potentially lead to

lower quotas for commercial and recreational fishermen and lower associated fishing revenue based on current fishery management council risk policies. These impacts will occur over the lifetime of wind energy operations at the project area and in the region (to at least 2050).

Comment Number: BOEM-2021-0024-EMAIL-003-7
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Other Sections: 2.4

Comment Excerpt Text:

Vessel monitoring system (VMS) [Footnote 1: VMS data is only required for specific vessels.] data used by BOEM to develop polar histograms of vessel operating courses can be used to inform alternative WTG location, layout, and spacing. These data suggest a similar number of vessels operate along both a roughly southwest-northeast course (similar to the proposed layout) while fishing and a north-south course while transiting within the project area. We recommend BOEM continue to work closely with the commercial and recreational fishing communities and the U.S. Coast Guard to ensure WTG spacing and layout alternatives minimize impacts to existing fishing and NOAA Fisheries survey operations, including vessel transit. Similar to the agreement between developers for adjacent Rhode Island and Massachusetts offshore wind projects, coordination with Atlantic Shores Offshore Wind is necessary to ensure that the WTG layout and spacing alternatives developed for this project do not conflict with and result in hazards and safety issues for vessels operating within or navigating through the adjacent projects. BOEM should consider alternatives that increase WTG layout and spacing consistency between these two adjacent projects.

Comment Number: BOEM-2021-0024-TRANS-41321-0001-2
Organization: Garden State Seafood Association
Commenter: Scott Mackey
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

during the Orsted presentation, they identified the final layout as having received fishing input. I just wanted to be on the record to be clear that the fishing industry did not support nor was our information incorporated into this final layout design

Comment Number: BOEM-2021-0024-TRANS-41321-0015-2
Organization: Fishermen's Headquarters Bait and Tackle
Commenter: Greg Cudnik
Commenter Type: Individual

Comment Excerpt Text:

As far as the recreational fishing sector goes which I am part of, recreational fishing is a $68 billion industry supports 472,000 thousand jobs, if you don't know, marine recreational fishing is a very popular activity in New Jersey, has a large economic value and social benefit. New Jersey anglers contribute $1.3 billion and 8,770 jobs towards the GDP, but the economic impacts of recreational fishing sector are overlooked by painting the picture that the majority of anglers are in favor of this.

Comment Number: BOEM-2021-0024-TRANS-41321-0019-1
Commenter: Mike Fischer
Commenter Type: Individual

Comment Excerpt Text:

I just want to reiterate, I am looking at this from the standpoint of the ecology of the ocean and fishing both commercial and recreational. I have been on a few calls with the wind farm farther to the north, Atlantic Shores and it just seems very clear through all the presentations and all the studies, I haven't seen or heard any definitive conclusions on fishing, the changes that could occur with fishing either commercial or recreational, the ocean migration is of marine and normal sealife and just overall the general, biological impact nor a position from this company on the ability for anglers to utilize the new structure should the farms actually improve the offshore fisheries.

Comment Number: BOEM-2021-0024-TRANS-41321-0020-3
Commenter: Suzanne Hornik
Commenter Type: Individual

Comment Excerpt Text:

If this effects our cold pool which we know it will and the recreational fisherman and the commercial fisherman can't fish or can't bring the volume of fish, that's going to effect our restaurants,

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Comment Number: BOEM-2021-0024-TRANS-41321-0021-1
Commenter: Tony Butch
Commenter Type: Individual

Comment Excerpt Text:

I am an avid fisherman, recreational fisherman, you know, I love it, it's a passion, my friends, my family, with my son, you know, hearing the project, this is a huge concern to me and what effects that's going to have, and as I dove in deep, really deep, can't tell you how many pages I have been on from the UK seeing what is going on over there, what is happened to their fisheries from the electromagnetic field obviously being a big concern, you know similar fish they have over there, Dover sole, very similar to the fluke that we have here which is probably one of the most important fisheries that we have, commercially and definitely recreationally, that's the fish we get to go after during the majority of the warmer months, so you have a lot of tourists that come down, want to rent a boat, buy sandwiches, buy eyes and support the local economy and that electromagnetic field, I think not enough studies has been done on that.

Comment Number: BOEM-2021-0024-TRANS-41521-0010-1
Organization: Fishermen's Headquarters Bait and Tackle
Commenter: Greg Cudnik
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Table 8.1-1 details maximum potential of almost 400,000 gallons of hazardous materials, greases, fuels and oils that will be in our oceans just at this lease site, not including the other lease sites that are potentially coming down the pike. I strongly oppose the industrialization of our offshore waters due to the detrimental impact on the recreational fisheries.

Comment Number: BOEM-2021-0024-TRANS-41521-0012-8
Organization: Ocean City Environmental Commission
Commenter: Rick Bernardini
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Cold pool is our biggest concern, monopiles don't necessarily disrupt them only temporarily, but surface flow turbulence is unknown. There is research that neds to be done and needs to be considered in the final

thing.Climate change is constantly now altering the Gulf stream which is slowing, and fish are generally moving northern towards the pole away from northern waters.

Comment Number: BOEM-2021-0024-TRANS-41521-0016-2
Commenter: Paul Eidman
Commenter Type: Individual

Comment Excerpt Text:

The overwhelming majority of anglers that I meet with all see the fishing potential of the wind farms, but it's not only the structure in the water, they all see the ecosystem benefits, they truly believe it is possible for wind farms to peaceably coexist with and even improve fishing along the cost provided that project developers like Orsted abide by three clear principles. First one is access, obviously we must be able to bring our boats right up close to the towers and be able to fish, you know, directly down on the new habitat below. Public input, we need to be engaged early so that we can avoid future conflicts. Science, we need, we clearly need fisheries research before during and after the wind farm construction.

Comment Number: BOEM-2021-0024-TRANS-41521-0017-3
Commenter: Martha Oldach
Commenter Type: Individual

Comment Excerpt Text:

The cold pool will breakdown, killing fish and destroying there habitat.

Comment Number: BOEM-2021-0024-TRANS-42021-0004-1
Organization: Anglers for Offshore Wind Power
Commenter: Paul Eidman
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

I feel that responsibly developed offshore wind farms will greatly benefit the fishing off of the New Jersey coast. To all the recreational fisherman out there that are listening, we all need to stand together and make sure that offshore wind developers take our input during the early planning stage and site turbines correctly. We should be using our collective voice to ensure that we have open access to fish the turbines, take advantage of opportunities, to provide public input and fishery science before, during and after construction. It seems there is another motivation beneath all of this, to help fan the flames of opposition that we are currently seeing from the profitable and influential commercial bottom trawling fleet and from folks that want to keep the natural gas supply pumping. Burning fewer fossil fuels leads to cleaner healthier waters which benefit all of us.

Comment Number: BOEM-2021-0024-TRANS-42021-0004-3
Organization: Anglers for Offshore Wind Power
Commenter: Paul Eidman
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

All this leads to increased fishing opportunity increased trips out on the water, more paying customers on party boats and more folks feeling confident enough when buying fishing tackle, boats and more trucks.

Comment Number: BOEM-2021-0024-TRANS-42021-0009-3
Organization: Cape May County Chamber of Commerce
Commenter: Vicky Clark
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The Cape May County fishing industry is valued at $300 million supporting families and supplying restaurants, fish markets, and shipping seafood by the tractor trailer load around the country.

Comment Number: BOEM-2021-0024-TRANS-42021-0018-4
Commenter: Will Rush
Commenter Type: Individual

Comment Excerpt Text:

The fishing locations have appeared to be minimized but fisherman use nautical charts, the vague image that I have seen on-line has not been, is not acceptable and I'd like to see a better posting of that.

Comment Number: BOEM-2021-0024-TRANS-42021-0023-3
Commenter: David Monte
Commenter Type: Individual

Comment Excerpt Text:

I would suggest that the Ocean Wind EIS address recreational fishing in the following ways, first develop an effective recreational research and surveys that assess what fish are caught and in what abundance. I see this as the responsibility of BOEM and NOAH and not necessarily the developers, I do not think It prudent to have a developer responsible for assessing health of fish docks

Comment Number: BOEM-2021-0024-TRANS-42021-0024-3
Organization: Save our Shoreline New Jersey
Commenter: Tricia Conte
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

A major environmental and economic concern is for the fluke fisheries because studies in Europe show that similar fish will not cross the electromagnetic fields created by miles of buried cables. This fish is a major recreational fishing draw and the negative effects of the fish not crossing the electromagnetic fields will not only effect the fishing community but will also have a significant negative impact on tourism in our coastal communities which rely on tourism to survive.

Comment Number: BOEM-2021-0024-TRANS-42021-0025-2
Commenter: Danielle Fury
Commenter Type: Individual

Comment Excerpt Text:

I understands the concerns raised by the recreational and commercial fishing community. I do. It seems to me that there has been a lot of time and effort dedicated to hearing their concerns and working towards solutions that benefit everyone. I think that turbine development can coexist with even improved fishing in the Atlantic and there is no doubt that this will become fish habitats in an area that is currently baron sea floor. Fishing has been a way of life here for generations and we have to preserve that life for future generation recalls. As long as we have open access to fish the turbines and we get to take part in the planning process and they do fish studies before, during and after construction, I am all for it.

A.2.9 Cultural, Historical, and Archaeological Resources

Comment Number: BOEM-2021-0024-DRAFT-0090-5
Commenter: Louise Halprin
Commenter Type: Individual

Comment Excerpt Text:

For the line running thru Ocean City, how do you plan to tunnel under the land to get over to Beesley's Point tower, as shown on your website? If you plan to use a method similar to Fracking, that has the potential to damage structures above. The majority (if not all) either have pilings, helical piers &/or other type of piers that extend 25' or more feet below the surface.

Comment Number: BOEM-2021-0024-DRAFT-0264-4
Commenter: Leslie Houston
Commenter Type: Individual

Comment Excerpt Text:

Are their special qualities (e.g., indigenous areas of significance, fishing, diving, whale-watching, archaeological significance) in these Wind Energy Areas that should prevent industrialization, including for renewable energy projects?

Comment Number: BOEM-2021-0024-DRAFT-0289-1
Commenter: John Feairheller, Jr., PP
Commenter Type: Individual

Comment Excerpt Text:

From the study of thermodynamics, it is known that performing or extracting work is less than 100% efficient. The system of an electric motor driving a turbine blower is typically 50% efficient with the inefficiency transforming to heat. The efficiency of the system of a wind turbine driving an electric generator is, in the absence of data, expected to be 50% efficient.

Air conditioning to make cool air moves heat at less than 100% efficiency and the net effect is to heat the local neighborhood.

A system with an output of 1,100 megawatts operating at 50% is in essence a space heater producing 1,100 megawatts of heat.

To what the will the local weather change with the placement of a 1,100-megawatt space heater off the coast? Specifically, what is the impact on Historic Structures in Ocean Citys Historic District which rely upon microclimate of the barrier island which in summer is cooler on than the mainland?

Comment Number: BOEM-2021-0024-DRAFT-0334-7
Commenter: Peter Straub
Commenter Type: Individual

Comment Excerpt Text:

Although most NJ offshore shipwrecks do not carry historic preservation listing, it is important to consider that these sites are not disturbed given their importance to tourism and diving, recreational fishing, and their potential future historic listing if adequately researched (https://njscuba.net/dive-sites/new-jersey-dive-sites/cape-may-chart/). As the EIS must consider NHPA section 106 (16 U.S.C. 470f) it is important to note that very few sites actually are designated at this time.

Comment Number: BOEM-2021-0024-DRAFT-0343-3
Commenter: John Feairheller, Jr., PE, PP
Commenter Type: Individual

Comment Excerpt Text:

Fifth Street in Ocean City does not have access to the bay and other provisions would be necessary for open cut construction.

Fifth Street in Ocean City places the proposed cable within less than 27 feet from the foundations of key historic structures. The foundations of the historic structures have brick and mortar foundation. The concrete truck used to deliver material for modern foundations did not arrive until 1932.

Having personally inspected foundations within the Ocean City Historic District and specifically the Lake cottage and having more than thirty years experience in heavy construction on unconsolidated soils, It is in my opinion that it is unreasonable to expect the foundation of key structures located on fifth Street to survive installation of the Onshore Export Cable by cut and fill even if to a nominal depth of five feet of cover.

It is my professional opinion that the route along fifth street can only be attempted by directional drilling techniques entering and exiting the bore hole will outside the historic district and that such work may not be sufficient to preclude damage to the Reverend Burrell and Reverend Lake structures.

Comment Number: BOEM-2021-0024-DRAFT-0366-34
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

F. BOEM MUST COMPLY WITH SECTION 106 OF THE NATIONAL HISTORIC PRESERVATION ACT AND RECOGNIZE AND RESPECT TRIBES' SOVEREIGN STATUS AND COLLABORATE DIRECTLY WITH TRIBAL GOVERNMENTS IN A CONSULTATIVE PROCESS

The construction of WTGs, offshore substation, installation of electrical support cables, operations and maintenance (O&M) facility, port facilities, and development of staging areas are ground- or seabed-disturbing activities that could directly affect archaeological resources. Section 106 of the National Historic Preservation Act (NHPA) requires Federal agencies to "take into account the effects of their undertakings on historic properties."[Footnote 58: 36 C.F.R. § 800.1.] It also gives the Advisory Council on Historic Preservation an opportunity to comment. [Footnote 59: Id] The Section 106 process balances historic preservation concerns with the needs of federal agencies while involving interested parties.[Footnote 60: Id]

Comment Number: BOEM-2021-0024-DRAFT-0366-35
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Successful compliance with Section 106 involves identifying state, tribal, and private interests involved in historic preservation within the development areas. Relevant State or Tribal Historical Preservation officers (SHPO or THPO respectively) must be involved in the Section 106 process, along with any private preservation groups with appropriate legal or economic interests. BOEM must identify which historic properties are listed, or are eligible for listing, on the National Register of Historic Places that could be affected by the project. BOEM must assess the project's impact on these properties to determine if any adverse effects "diminish the characteristics qualifying a property for inclusion in the national register."[Footnote 61: Id. § 800.5.] Collaborative efforts between BOEM, SHPO, THPO, and any private preservation groups can result in agreed upon measures to minimize or mitigate known adverse effects. These collaborations should continue throughout project development in case any unknown cultural or archeologic resources are discovered during development.

Comment Number: BOEM-2021-0024-DRAFT-0366-36
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Robust consultation with states and tribes under Section 106 is paramount to ensuring the Project appropriately considers impacts on historic state and tribal resources. Additionally, it is necessary that during development proper precautions are taken in case unknown cultural resources are uncovered. If any additional or previously unidentified cultural resources are located during project implementation, the find must be protected from operations and reported immediately to the SHPO or THPO staff. All operations in the vicinity of the find will be suspended until the site is visited and appropriate recordation and evaluation is made by the SHPO or THPO staff. It is critical that the project include best management practices developed collaboratively with tribes for cultural resource protection in order to avoid, minimize, and mitigate any potential adverse impacts to cultural resources.

Comment Number: BOEM-2021-0024-DRAFT-0366-37
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Such robust consultation is also called for in Secretary Haaland's recent order. It states that:

Bureaus/Offices will proactively begin consultation with potentially impacted Tribes, both those currently in the proposed area and those with a historic presence, as well as engage potentially impacted environmental justice communities early in the project planning process. "Early in the project planning process" includes when a Bureau/Office has enough information on a proposed action to determine that an environmental assessment or an environmental impact statement will be prepared.[Footnote 62: Secretarial Order No. 3399, at §5(c).]

Comment Number: BOEM-2021-0024-DRAFT-0366-38
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Native American and Alaska Native Tribes are sovereign governments recognized as self-governing under federal law, and the U.S. government has a "trust responsibility" to those Tribes.[Footnote 63: Id] The federal government has special fiduciary obligations to protect Native resources and uphold the rights of indigenous peoples to govern themselves on tribal lands.[Footnote 64: Eric v. Sec'y of U. S. Dep't of Hous. & Urban Dev., 464 F. Supp. 44 (D. Alaska 1978).] In carrying out this duty, federal officials are "bound by every moral and equitable consideration to discharge the federal government's trust with good faith and fairness."[Footnote 65: United States v. Payne, 264 U.S. 446, 448 (1924); accord Yukon Flats School Dist. V. Native Village of Venetie Tribal Govt't, 101 F.3d 1286 (9th Cir. 1996) rev'd on other grounds 522 U.S. 520 (1998); see also 84 Fed. Reg. 1200– 01 (Feb.1, 2019) (including 229 Alaska Native entities in the list of tribes recognized as having the immunities and privileges of "acknowledge Indian tribes by virtue of their government-to-government relationship with the United States").] The trust doctrine includes duties to manage natural resources for the benefit of Tribes and individual landowners, and the federal government has been held liable for mismanagement.[Footnote 66: See United States v. Mitchell, 463 U.S. 206 (1983) (holding that the Department of the Interior was liable for monetary damages for mismanaging timber resources of the Quinault tribe in violation of the agency's fiduciary duty).]

Comment Number: BOEM-2021-0024-DRAFT-0366-39
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

urther, as stated by Executive Order, the unique legal status of Native American and Alaska Native Tribes creates an important requirement for governmental entities and other stakeholders to understand that the federal government must consult directly with Tribal governments when contemplating actions that may affect tribal lands, resources, members, and welfare.[Footnote 67: Exec. Order No. 13,175, 65 Fed. Reg. 67,249, 67,249–50 (Nov. 6, 2000) (mandating that agencies "respect Indian tribal self-government and sovereignty" when "formulating and implementing policies" that affect tribal interests).] Executive Order 13175 mandates that all executive agencies recognize and respect Tribe's sovereign status. [Footnote 68: Id] The order also requires agencies to establish policies and procedures to ensure meaningful and timely consultation with Tribes when an action affects tribal interests.[Footnote 69: Id]

Comment Number: BOEM-2021-0024-DRAFT-0366-40
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Tribal sovereignty is thwarted when federal government agencies and departments attempt to treat Tribes in the same manner as any other interested members of the public, in a conventional public participation process.[Footnote 70: Letter from George Alexi, President, Nondalton Tribal Council, to Lieutenant General Todd T. Semonite, Commanding General and Chief of Engineers, U.S. Army Corps of Engineers, at 2–3 (Sept. 27, 2019).] Rather, in recognition of their status as sovereign nations, the federal government should ensure that collaboration occurs directly with Tribal governments in a consultative process, which leads to informed decision-making.

Comment Number: BOEM-2021-0024-DRAFT-0368-1
Organization: New Jersey Department of Environmental Protection
Commenter Type: State Agency

Comment Excerpt Text:

BOEM has chosen to utilize the National Environmental Policy Act (NEPA) substitution process to fulfill its obligations under the National Historic Preservation Act (NHPA), in accordance with 36 CFR 800.8. The NJDEP and the New Jersey Historic Preservation Office look forward to further consultation with BOEM regarding the identification, evaluation, and treatment of historic properties in accordance with the coordination of the NEPA provisions of Section 106 of the NHPA, as amended.

Comment Number: BOEM-2021-0024-DRAFT-0368-4
Organization: New Jersey Department of Environmental Protection
Commenter Type: State Agency

Comment Excerpt Text:

Since 2018, the NJDEP has engaged regularly with Ocean Wind regarding their proposed wind energy project and will continue to do so as design details are further refined. At this time, NJDEP specifically requests more detailed discussions on the proposed Island Beach State Park landfall and the long-term lease of State-owned lands for the cable route to the Oyster Creek substation in Lacey Township, Ocean County. In addition, more information regarding specific landfall locations and further coordination is needed for proposed activities on encumbered parcels and the approvals that are required from our Green Acres Program and the New Jersey State House Commission. This coordination is an important step in the state permitting process, since these reviews can take significant time to complete, and other NJDEP permit decisions may be contingent upon these being finalized.

Comment Number: BOEM-2021-0024-DRAFT-0375-1
Organization: Garden State Seafood Association
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

ON behalf of the Garden State Seafood Association and specifically the port of Viking Village in Barnegat Light, New Jersey, which has been a fishing port in NJ since the 1700s, we request to participate as NHPA consulting parties under 36 CFR 800.2(c)(5)) based on their legal or economic stake in historic properties affected by the Project.

Comment Number: BOEM-2021-0024-TRANS-41321-0002-4
Commenter: Louise Halprin
Commenter Type: Individual

Comment Excerpt Text:

For the line running through Ocean City, how do you plan to tunnel under the land to get over to Beesley's Point Tower as shown on your website. If you plan to use a method similar to fracking, that has the potential to damage structures above. The majority if not all either have pilings, helical piers or other types of piers that extend 25 feet or more below the surface, you are only going like four to six feet deep.

A.2.10 Demographics, Employment, and Economics

Comments associated with this issue appear in the sub-issues below.

A.2.10.1. Recreation and Tourism

Comment Number: BOEM-2021-0024-DRAFT-0001-1
Commenter: Michael McCarrick
Commenter Type: Individual

Comment Excerpt Text:

One of the major concerns about the offshore wind turbines is that they will be clearly visible from the beach since they are so tall and only 15 miles offshore. Orsted has experience from their Coastal Virginia Offshore Wind (CVOW) project near Hampton Roads, VA where those wind turbines are installed 27 miles offshore.

My question is why not install the Ocean Wind turbines 20 to 25 miles offshore so they would no longer be visible from the beach area? The ocean water depth is comparable there and it would eliminate a major area of concern for our resort community.

Comment Number: BOEM-2021-0024-DRAFT-0007-1
Commenter: Armen Zaybekian
Commenter Type: Individual

Comment Excerpt Text:

Please do not put his hideous monstrosity off the shores of Ocean City, NJ, one of the largest shore resorts in NJ. Just 20 miles north is the Brigantine State Natural Area with miles of no beaches and no resorts. Or move it to any other area of the NJ shore that isnt home to a massive resort town whose beautiful ocean views would be ruined by massive, hideous, white wind turbine towers!?! Isnt it just basic common sense to move this north to any location without beaches, or further north in NJ to the industrial zone?

Comment Number: BOEM-2021-0024-DRAFT-0008-8
Commenter: Robin McConekey
Commenter Type: Individual

Comment Excerpt Text:

Negative impact on Tourism and Coastal Economies

* 200+ turbines are projected to be 835 feet tall and wider than 2 football fields.

* Turbines will be visible from the beaches and negatively affect fishing (see above)

* Industrializing our natural ocean views will decrease tourism, affecting small and large business - everything from sandwich shops to real estate sales

* Night skies will include blinking continuous lighting (required for navigation) creating visual pollution

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Comment Number: BOEM-2021-0024-DRAFT-0064-2
Commenter: John Atkinson
Commenter Type: Individual

Comment Excerpt Text:

This will also impact tourism as it will certainly be unsightly and will make a wonderful, natural view seem industrialized.

Comment Number: BOEM-2021-0024-DRAFT-0068-1
Commenter: Harley Cummins
Commenter Type: Individual

Comment Excerpt Text:

Orstead has recently completed a 120 kilowat farm off the coast of England called “Hornsea One” that is 75 miles off shore, over the horizon and not visible from land. With many more wind farms planned in the future up and down the coast of New Jersey, it would seem prudent at the start to require their construction beyond the horizon, similar to Hornsea One so as to be invisible from Jersey Beaches. This would effectively eliminate years of large scale public push back over these wind farm’s impact on New Jersey’s tourism industry and quality of life. Admittedly costs for Orstead would be higher, but the Hornsea One farm seems to indicate that it can be done at a profit margin acceptable to Orstead. Get it Right The First Time would be my summary recommendation.

Comment Number: BOEM-2021-0024-DRAFT-0072-4
Commenter: Susan Schwartz
Commenter Type: Individual

Comment Excerpt Text:

If all parties determined that it is safe to build why then is the project only being built out 15 miles so it ruins the coast line? Who is protecting the rights of homeowners and visitors that come to the shore by the millions to have to see the blight on the coast line? If the project must be built then do so 25 miles out where it is not visible to anyone.

Comment Number: BOEM-2021-0024-DRAFT-0074-2
Commenter: Carol Behl
Commenter Type: Individual

Comment Excerpt Text:

Tell them to use the Delaware beaches and not destroy NJ beach views. When we in Maui, the wind turbines were in the mountainskilling birds and the scenic view. Tourism is southern New Jerseys lifeblood. Please dont destroy it.

Comment Number: BOEM-2021-0024-DRAFT-0086-1
Commenter: William Georges
Commenter Type: Individual

Comment Excerpt Text:

What does NJ have but for its beaches and the related economic activity. Move the wind turbines further out to sea where there is no possibility of seeing them, or otherwise impacting the shoreline and its critical economy.

Comment Number: BOEM-2021-0024-DRAFT-0097-3
Commenter: Anthony Jackson
Commenter Type: Individual

Comment Excerpt Text:

It also is a huge eye soar for tourist and locals on the east coast

Comment Number: BOEM-2021-0024-DRAFT-0108-1
Commenter: Jennifer Trofa
Commenter Type: Individual

Comment Excerpt Text:

The vacation-hospitality industry is our economic lifeline and the beauty and health of our coastline and its flora and fauna is our economic soul. We are an economically stable region of the country and we owe it to our ocean and wildlife, as well as to our heirs and progeny, to consider this project very critically.

Comment Number: BOEM-2021-0024-DRAFT-0111-5
Commenter: Natalie Thibault
Commenter Type: Individual

Comment Excerpt Text:

I believe that the 850-900 foot turbines will decimate the local economy and livelihood of the fishing community, along with the real estate rental and sales market. Through various local discussions and meetings it is clear that vacationers will no longer visit, and housing prices will fall. The entire economy of these small coastal communities centers on the natural and pristine experiences one seeks out along the shoreline. The lure of a calming beach escape will be lost once these industrial turbines litter the horizon.

Comment Number: BOEM-2021-0024-DRAFT-0112-1
Commenter: Robert and Joann Zuczek
Commenter Type: Individual

Comment Excerpt Text:

It is very obvious from the plans submitted that the turbines are far too large, too close to the shoreline and will be alien structures in such a picturesque and pristine shore environment. They will become an immediate eyesore on the natural landscape and ruin the views we have become so accustomed to. The distractions will deter visitors from visiting our pristine shore area and instead of enjoying the natural beauty of our area it will lose its valuable tourist appeal and onward financial depreciation for local businesses.

Comment Number: BOEM-2021-0024-DRAFT-0112-4
Commenter: Robert and Joann Zuczek
Commenter Type: Individual

Comment Excerpt Text:

Local residents have chosen to live in this are for the enjoyment, peace, tranquility and recreational amenities that this area provides. This proposal will cause a significant impairment to this residential amenity which will continue for generations and involve considerable loss to all local residents. The gain in energy value, which is not certain, will be outweighed by the detrimental effect to residential values and business relying upon tourism.

Comment Number: BOEM-2021-0024-DRAFT-0113-8
Commenter: Meaghan Zanfardino
Commenter Type: Individual

Comment Excerpt Text:

200+ turbines are projected to be 835 feet tall and wider than 2 football fields. Turbines will be visible from the beaches and negatively affect fishing and tourism. Industrializing our natural ocean views will decrease tourism, affecting small and large business - everything from sandwich shops to real estate sales

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Comment Number: BOEM-2021-0024-DRAFT-0114-1
Commenter: Sal Sal Vitiello
Commenter Type: Individual

Comment Excerpt Text:

I am concerned that NJ s tourism will be adversely effected.

Comment Number: BOEM-2021-0024-DRAFT-0119-6
Commenter: Catherine DeMaio
Commenter Type: Individual

Comment Excerpt Text:

Finally, there will be a negative aesthetic associated with the view of the now breathtaking coastline creating visual pollution which will negatively impact tourism and the financial well being of these coastal communities.

Comment Number: BOEM-2021-0024-DRAFT-0124-2
Commenter: Patrick Nicastro
Commenter Type: Individual

Comment Excerpt Text:

They also will have an impact on tourism in the areas where they are visible from the beach.

Comment Number: BOEM-2021-0024-DRAFT-0129-1
Commenter: Gerry Lucidi
Commenter Type: Individual

Comment Excerpt Text:

The wind farm will be an absolute eyesore from the beach and the ocean. The serenity of the ocean will be marred by the installation of the wind farm. I can see the shore on my way back from the canyons by boat from 30 miles offshore on clear days. Ask any boater if this is true to confirm. The idea that the wind farms will be barely visible on the horizon is simply not true. This will negatively impact tourism and housing prices.

Comment Number: BOEM-2021-0024-DRAFT-0129-7
Commenter: Gerry Lucidi

Commenter Type: Individual

Comment Excerpt Text:

Tourism and property ownership will ultimately be negatively affected as well.

Comment Number: BOEM-2021-0024-DRAFT-0136-1
Commenter: Courtney Hanscom
Commenter Type: Individual

Comment Excerpt Text:

I have serious concerns over the visibility of these turbines from the shoreline, the decrease in property values and tourism if these are installed where they are proposed.

Comment Number: BOEM-2021-0024-DRAFT-0138-2
Organization: Vacation Rentals Jersey Shore, LLC
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The Ocean Wind project, as currently proposed, with the wind turbines visible from shore, WILL have a negative impact on tourism. A number of studies and surveys of persons shown images of turbines, including several sponsored by the BOEM have concluded that significant reductions in rental and tourism revenues, and property values will occur from visible turbines. I bring you attention to the following studies:

New Jersey Global Insight Report, 2008

North Carolina State University Study, 2017

BOEM/University of Delaware Study, 2018

BOEM Viewshed Analysis. 2015

New York State Turbine Exclusion Distance, 2018

Of these studies mentioned above, the North Carolina study found that 55 percent of those surveyed would not re-rent that property if turbines were visible regardless of the degree of visibility or any rental discount offered. It also found that the negative reaction to wind turbines was primarily due to the offshore distance as opposed to the number of turbines. So even just a few visible turbines WILL have a negative effect on tourism.

What does this equate to? New Jersey visitor spending in 2019 was 46.4 Billion, which contributed over 5 Billion in taxes to the State of NJ and 540,500 jobs making it the 6th largest employer in the state (Source: NJ Economic impact of Tourism in NJ 2019) with lodging being the #1 revenue sector.

Breaking out the 4 shore counties from the above figures, the Jersey Shore contributes 22.3 Billion to the overall tourism economy or about half. If the North Carolina study is correct, that 55% of shore vacationers would not return, that would equal a 12.3 Billion dollar ANNUAL loss in tourism revenue and a 1.4 Billion dollar loss of annual tax revenue for the state of New Jersey! We cannot afford or accept this!

Comment Number: BOEM-2021-0024-DRAFT-0143-2
Commenter: Janis Fahey
Commenter Type: Individual

Comment Excerpt Text:

The Ocean Wind project, as currently proposed, with the wind turbines visible from shore, WILL have a negative impact on tourism. A number of studies and surveys of persons shown images of turbines, including several sponsored by the BOEM have concluded that significant reductions in rental and tourism revenues, and property values will occur from visible turbines. I bring you attention to the following studies:

New Jersey Global Insight Report, 2008

North Carolina State University Study, 2017 BOEM/University of Delaware Study, 2018 BOEM Viewshed Analysis. 2015

New York State Turbine Exclusion Distance, 2018

Of these studies mentioned above, the North Carolina study found that 55 percent of those surveyed would not re-rent that property if turbines were visible regardless of the degree of visibility or any rental discount offered. It also found that the negative reaction to wind turbines was primarily due to the offshore distance as opposed to the number of turbines. So even just a few visible turbines WILL have a negative effect on tourism.

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Breaking out the 4 shore counties from the above figures, the Jersey Shore contributes 22.3 Billion to the overall tourism economy or about half. If the North Carolina study is correct, that 55% of shore vacationers would not return, that would equal a 12.3 Billion dollar ANNUAL loss in tourism revenue and a 1.4 Billion dollar loss of annual tax revenue for the state of New Jersey! We cannot afford or accept this!

Comment Number: BOEM-2021-0024-DRAFT-0144-1
Commenter: Janet Rispoli
Commenter Type: Individual

Comment Excerpt Text:

It will ruin tourism, they are not cost effective, disposal and life span are not cost effective.

Comment Number: BOEM-2021-0024-DRAFT-0148-1
Commenter: Timothy Krug
Commenter Type: Individual

Comment Excerpt Text:

This project would unequivocally have a negative impact on travel (and thus spending) at the Jersey shore.

Comment Number: BOEM-2021-0024-DRAFT-0149-1
Commenter: Paul Olsen
Commenter Type: Individual

Comment Excerpt Text:

It will affect tourism tremendously and I depend on that for our vacation home.

Comment Number: BOEM-2021-0024-DRAFT-0151-1
Commenter: Peter Saretsky

Commenter Type: Individual

Comment Excerpt Text:

I strongly oppose the project as currently proposed as the visual pollution of the turbines will have a negative effect on my and other rentals.

The Ocean Wind project, as currently proposed, with the wind turbines visible from shore, will have a negative impact on tourism. It is my understanding that a number of studies and surveys of persons shown images of turbines, including several sponsored by the BOEM have concluded that significant reductions in rental and tourism revenues, and property values will occur from visible turbines.

Comment Number: BOEM-2021-0024-DRAFT-0159-1
Commenter: Jon Ansari
Commenter Type: Individual

Comment Excerpt Text:

As a home owner whose home and rental season will be negatively impacted by the Ocean Wind project, I wish to document my opposition to the ill-conceived notion that polluting the horizon with unsightly turbines. Not only will such an action have a direct negative impact on the property values (I certainly would not have purchased a home on LBI if this were the case), it will negatively impact the rental season that so many of us home owners rely upon to help defray the costs of ownership.

Comment Number: BOEM-2021-0024-DRAFT-0162-2
Commenter: Jill Skinner
Commenter Type: Individual

Comment Excerpt Text:

Why do you ask? I am a second homeowner who rents out our home to help cover mortgage and I am concerned the visuals of seeing manmade objects out in our beautiful ocean will effect tourism.

Comment Number: BOEM-2021-0024-DRAFT-0163-1
Commenter: Bill Yurko
Commenter Type: Individual

Comment Excerpt Text:

I am a homeowner in Wildwood Crest , NJ who relies on rent from tourism. We are opposed to any windfarm visible from the Jersey Shore because it will undoubtedly negatively impact our rental revenue to the point I may not be able to maintain my home in NJ. As the Jersey Shore is vitally important to NJ's revenue stream, why would anyone want to take steps to reduce that potential?

Comment Number: BOEM-2021-0024-DRAFT-0165-2
Commenter: Teri Weidlein
Commenter Type: Individual

Comment Excerpt Text:

I fear they may not continue to rent, thus hurting the local and state economy not to mention my husband and I not being able to afford the house if we cannot rent it as we have been able to do these past 3 years. We are not the only ones worried about what will happen to the rental market up and down the Jersey Shore. Most homeowners that rent out are also very concerned.

Comment Number: BOEM-2021-0024-DRAFT-0170-3
Commenter: Calvin Douglass
Commenter Type: Individual

Comment Excerpt Text:

These turbines will be visible from the shoreline - driving away tourists who love the now pristine views, driving away wildlife - birds, fish and mammals, causing property values to drop.

New Jersey is known for its beaches but is not the only state with great beaches - look at what competition did to Atlantic City - onetime AC visitors went elsewhere for their relaxation time and vacations once other states opened casinos !!! If our shoreline is damaged in any way by the VIEW of any wind turbines just off shore, NJ could lose this economic engine of tourism.

Comment Number: BOEM-2021-0024-DRAFT-0174-2
Commenter: Chris Haimbach
Commenter Type: Individual

Comment Excerpt Text:

Multiple studies (listed below) have demonstrated a decrease in tourists due to this change. We MUST protect our natural coast without the clear footprint of man in clear sight. Not only is there a loss in revenue for the state in tax revenue, but it would be like putting wind turbines across the Grand Canyon. Don't mess with our beautiful coast, find another way!

New Jersey Global Insight Report, 2008

North Carolina State University Study, 2017

BOEM/University of Delaware Study, 2018

BOEM Viewshed Analysis. 2015

New York State Turbine Exclusion Distance, 2018

Comment Number: BOEM-2021-0024-DRAFT-0176-1
Commenter: Mark Licker
Commenter Type: Individual

Comment Excerpt Text:

I rent my property for a few weeks during the summer season. If windmills are visible at all from the beach area it will severely limit my ability to rent in the summer season. There has to be an alternate plan where the windmills cannot be seen from the shoreline.

I vehemnetly oppose the present plan.

Comment Number: BOEM-2021-0024-DRAFT-0196-1
Commenter: Lisa Kazunas
Commenter Type: Individual

Comment Excerpt Text:

The effects on businesses, tourism, and property values of coastal communities has not been studied or quantified. It is a fact, however, that millions of people come to the NJ shore for vacationing, recreational boating and fishing, boardwalk, beaches, restaurants and to enjoy one of NJ's most valuable and beautiful pristine resources of the ocean. The entire coastal economy relies on the positive experience of visiting the Jersey Shore. It's a place where families can come to escape the everyday burdens of life. The visual pollution of windfarms will disrupt the well being of NJ's citizens. It's just plain ugly. There is a reason why people do not vacation at the oil refinery, waste management facility, or landfill. Do not industrialize our ocean too. However, in the first of the public meetings BOEM stated that the wind farm off of Long Island did not see any impact to the above. This statement is extremely misleading as the Long Island

windfarm has only 5 smaller turbines compared to the 1000+ turbines slated for the coast of NJ and, therefore, cannot be used for comparison.

Comment Number: BOEM-2021-0024-DRAFT-0198-1
Commenter: Dave Rispoli
Commenter Type: Individual

Comment Excerpt Text:

Our beaches dont need to have the equivalent of 40-50 story skyscrapers 10 miles on the horizon. That is not why people come to the beach let alone LBI. These towers will kill the number one industry in our state and for something that isnt even cost effective or environmentally friendly.

Comment Number: BOEM-2021-0024-DRAFT-0207-1
Commenter: Leslie Karvan
Commenter Type: Individual

Comment Excerpt Text:

Regarding Environmental Impact Statement (EIS) for Ocean Wind, LLC's Proposed Wind Energy Facility Offshore New Jersey, if a wind mill farm is visible, tourists will no longer rent. From loss of rental income, I will lose my home!

Our beach cannot be moved to a new location. All the people who hold LBI dear to their hearts will lose future island opportunities for family memories.

Please take time to consider all the implications of this wind project.

Comment Number: BOEM-2021-0024-DRAFT-0208-1
Organization: Long Beach Island, NJ Coalition for Wind Without Impact
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

[Bold: The Proposed Project is Unreasonable]: The advent of extremely large turbines has rendered this exceptionally close-in area obsolete. This extremely close-in project proposed, 15 to 20 miles out, will create a wall of massive clearly visible turbines off the coast of Atlantic City, in fact the second most visible wind turbine complex in the entire world, next to LBI. Such an extreme visible impact, inexplicably, was never considered in the delineation of the lease area. It would devastate tourism-reliant shore communities trying to recover from COVID-19. Numerous studies and surveys have demonstrated the severe adverse impacts on rentals, tourism and property values from visible turbines. Those study results were applied to the project proposed off of LBI and the results are severe (Enclosure 2).

The turbines off of Atlantic City are proposed as close as 15 miles and go out to 20 miles. For the newer, very large turbines to be used, almost all the turbine tower and the blades would be clearly visible at 15 miles. Even if the 17.3-mile turbine exclusion zone limit that the BOEM has proposed for New York State projects is applied to New jersey, which it should, a good portion of the tower and the blades would still be visible.

The Impacts of visible and rotating turbines on rentals, tourism in general and property should be a priority issue analyzed in this EIS. The importance of those impacts is supported by actual detailed surveys of those who have previously rented shore properties. A study by North Carolina State University found that fifty-five percent of those who previously rented oceanfront or ocean view properties would not return to those properties even if a significant discount was offered in the rental price. Additional studies, one by the University of Delaware which was sponsored by the BOEM shows 18 percent less visits to the shore if modern turbines were this close to shore. Other studies show several hundred million

dollars of lost tourism revenues annually just to LBI, and loss in property values of ocean front and ocean view homes ranging from $189,000 to $1,010,000, with spillover implications for other property owners (Enclosure 2).

So, for lease areas this close to shore the socio-economic impact is an obvious one and perhaps the worst environmental impact of the project. Inexplicably visible and associated socio-economic impact was apparently never even considered in the process leaving to the definition of this lease area. There is no mention of visible impact in the feasibility study done by Rutgers University nor in efforts like the Atlantic Wind Energy Workshop held in September of 2011. The failure by the BOEM to even consider such an obvious impact of this proposal, in or out of the NEPA process, raises serious concerns about the reasonableness of this project. and cries out for an analysis of alternatives.

This impact must be treated analytically in the EIS and actual numbers regarding lost rentals, property values and tourist visits provided by the BOEM. The BOEM cannot, as it has done in the past simply cite past studies and their different conclusions without a BOEM assessment of their strength and relevance. If necessary, the BOEM should conduct a new study of shore goer reaction here to accurate visual renderings of the turbines.

At about 28 miles the tower disappears from view but the blades rotating above it are still visible. Visual renderings from the Vineyard Wind 1 project off of Martha's Vineyard show the entire turbine-tower and blades- not visible from the mainland beyond 33.6 miles. Therefore, to avoid the unacceptable socio-economic impacts described above, a suitable lease area starting at least 30 miles offshore is needed.

Comment Number: BOEM-2021-0024-DRAFT-0208-16
Organization: Long Beach Island, NJ Coalition for Wind Without Impact
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The NOI should also commit the BOEM to provide initial visual renditions of the turbines, done by an independent third party, during the scoping process and to do full visual renditions and a detailed study of the specific adverse impacts to New Jersey shore communities of visible turbines on local rentals, property values, and tourism in the draft EIS. The BOEM has failed the public by standing idly by in Virginia while the company has presented flawed and implausible visual renditions, and false statements that the turbines will be "barely" and "rarely" visible. This needs to end.

Comment Number: BOEM-2021-0024-DRAFT-0208-25
Organization: Long Beach Island, NJ Coalition for Wind Without Impact
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The economic well-being of Long Beach Island (LBI) depends on summer rentals and tourism.

A number of studies and surveys of persons shown images of turbines, including several sponsored by the BOEM have concluded that significant reductions in rental and tourism revenues, and property values will occur from visible turbines. The results of those studies are applied below to the distances and turbine sizes being considered here to evaluate the potential socio-economic impact to LBI.

New Jersey Global Insight Report, 2008

A study sponsored by the State of New Jersey and conducted by Global Insight, Inc. titled an Assessment of the Potential Costs and Benefits of Offshore Wind Turbines was conducted in 2008. It estimated the loss of tourism revenues based on the visible impact of smaller turbines place three and six miles offshore. Since the height of those turbines is 47 percent of the height of a 12-megawatt (MW) turbine the

visual impact of a 12-MW turbine 10 miles offshore would be equivalent to the turbines used in the report sited 4.7 miles offshore. That is about halfway between their three- and six-mile scenarios.

From their data on page 43 then it can be concluded that 12 MW turbines 10 miles offshore would have resulted in $179 million of loss tourism sales for Ocean County in 2012. Scaling that up to the tourism revenue levels seen today that would mean a $280 million tourism sales loss for Ocean County, most of that to be borne by its shore communities, and much of that by LBI.

In addition, the report included estimates of oceanfront and ocean view property value losses due to visible turbines, Figures 5.3 and 5.4. Using numbers in-between the 3- and 6-mile scenarios as explained above, for Ocean County the average loss in value per property in 2012 ranges from $189,000 to $1,010,000 depending on the assumptions used. Losses would be expected to be greater today based on higher property values compared to 2012.

North Carolina State University Study, 2017

In 2017, North Carolina State University conducted a survey of persons who had previously rented oceanfront or ocean view properties. It published a report titled the Amenity Costs of Offshore Wind Farms- Evidence from a Choice Experiment in August 2017. It showed those persons visualizations of different numbers of 5 MW turbines at distances from shore of 5 to 30 miles. Since a 5 MW turbine is 60 percent of the height of the 12 MW turbines facing LBI, a 5 MW turbine at 6 miles has about the same visual impact as a 12 MW turbine at 10 miles.

It found (page 6) that 55 percent of those surveyed would not re-rent that property if turbines with visible regardless of the degree of visibility or any rental discount offered. Twenty-three percent would accept some degree visibility and twenty-one percent did not mind the visible turbines (Table 4, Panel A). It also found that the negative reaction to wind turbines was primarily due to the offshore distance as opposed to the number of turbines.

Use of this lease area therefore poses an insurmountable problem for owners of ocean front and ocean view properties. To regain the 55 percent, 12 MW turbines would have to be sited much further out where they would not be visible, which is not possible in this lease area.

Alternatively, they would have to in the future attract more renters who either did not mind turbine views or would accept some degree of visibility. However, the data suggests that attracting many more of the latter group would involve rental discounts that could become prohibitive.

Since the extent of the current lease area does not allow placing 12 MW turbines far enough out to not be visible, and retain many in the 55 percent group it poses a significant problem for ocean front and ocean view property owners in terms of lost rental income and property value.

BOEM/University of Delaware Study, 2018

In March,2018 the University of Delaware published a report titled Atlantic Offshore Wind Energy Development -Values and Implications for Recreation and Tourism that was sponsored by the BOEM. It assessed the impact on shore visits from visible turbines at various distances.

It interviewed 1,725 shore goers utilizing visuals of 5 MW turbines that were two-thirds the height of a 12 MW turbine. So, a 12 MW turbine at 10 miles would have about the same visual impact as data in the report for a 5 MW turbine at 6.6 miles. For that distance, it concluded (from Report Figure 3 below) that 40 percent of those surveyed will have a worse experience at the shore with turbines visible.

That negative reaction would result in 18 percent (from Report Figure 4 below) less visits to the shore, clearly an unacceptable impact on shore communities.

To reduce that level to 6 percent, where trip loss levels off with distance, based on the data in Figure 4, would require that 12 MW turbines be placed no closer than 15/0.66 or 23 miles offshore, which is not possible in the current lease area.

BOEM Viewshed Analysis. 2015

In 2015, the BOEM published the results of a viewshed analysis it did for the New York Outer Continental Shelf Area (Renewable Energy Viewshed Analysis and Visual Simulation for the New York Outer Continental Shelf Call Area: Compendium Report OCS Study, BOEM 2015- 044).

It simulated the visual impact of one hundred and fifty-two 6.2 MW wind turbines from 16 observation points in New York and New Jersey. The simulation most relevant to LBI is the Jones Beach observation point because the turbine array was roughly parallel to that shore. The closest point of the turbine array to Jones Beach was 15 miles.

It ranked the visible impact on a scale from 1 to 6. The visual impact from Jones Beach scored a 6, its highest rating. A 6 rating was defined as; "Dominates the view because the study subject fills most of the field for views in its general direction. Strong contrast in form, line, color, texture, luminance, or motion may contribute to view dominance".

Since the height of a 6.2 MW turbine is two-thirds that of a 12 MW, that visual impact would be equivalent to a 12 MW turbine at 23 miles. So even placing 12 MW turbines at the outer most points of the current lease area would still register a major visual impact, based on the BOEM study.

New York State Turbine Exclusion Distance, 2018

The BOEM also conducted an extensive visualization study for the Massachusetts And Rhode Island Wind Energy Areas in 2015. Based on these visualization studies and other outreach conducted by the State of New York, New York adopted a 20-mile exclusion distance for wind energy development. (FR Notice, Commercial leasing for Wind Power in the Outer Continental Shelf in the New York Area, April 18, 2018). The BOEM chose to temporarily use a 17.3-mile exclusion distance. Either way if these exclusions were applied to the New Jersey lease area they would remove most of the lease area from turbine placement.

A Local Perspective

Barnegat Lighthouse is 172 feet tall. The turbines are 5 times higher than Barnegat Lighthouse. Barnegat Lighthouse can be seen from the causeway, which is about 9 miles away. Now imagine the lighthouse 5 times taller. The turbines will be twice as tall as the Borgata (431 feet) in Atlantic City which can be seen from the causeway 25 miles to the south, and are very often visible from Holgate and Beach Haven,16 miles away.

Summary

To summarize, based on these studies this project as currently envisioned could be expected to result in:

Several hundred million dollars in lost annual tourism revenue and major losses in rental income and property value for oceanfront and ocean view property owners, with implications for other property owners (Global Insight, 2008)

A fifty-five percent loss in prior renters of oceanfront and ocean view properties (NC State University,2017)

Eighteen percent less Island tourist visits and forty percent of visitors having a "worse" shore experience (BOEM/University of Delaware, 2018), and

Twelve megawatt turbines will have a dominant and disturbing visible impact even at distances further out in the lease area

Comment Number: BOEM-2021-0024-DRAFT-0210-1
Commenter: Steven Levy
Commenter Type: Individual

Comment Excerpt Text:

We provide these comments in the hope that the Bureau of Ocean Energy Management (BOEM) will change course with regard to these ill-conceived projects and the inadequate economic review accompanying them. We therefore strongly oppose the project as currently proposed as the visual pollution of the turbines will have a negative effect on shore rentals.

Comment Number: BOEM-2021-0024-DRAFT-0211-1
Commenter: Theresa Seaman
Commenter Type: Individual

Comment Excerpt Text:

Please reconsider the Ocean Wind project that proposes wind turbines visible from the New Jersey shore. These turbines will have a negative impact on tourism, vacation rentals, and property values as concluded in a number of studies and surveys of persons shown images of turbines including several sponsored by the BOEM. The studies include NJ Global Insight Report (2008), North Carolina State University Study (2017), BOEM/University of Delaware Study (2018), BOEM Viewshed Analysis (2015), and NY State Turbine Exclusion Distance (2018).

The Jersey Shore contributes 22.3 billion dollars to the overall NJ tourism economy or about half. There could be a 12.3 billion dollar annual loss in tourism revenue and a 1.4 billion dollar loss of annual tax revenue for the state of New Jersey. This is unacceptable.

Comment Number: BOEM-2021-0024-DRAFT-0214-1
Commenter: Larry Mallon
Commenter Type: Individual

Comment Excerpt Text:

Do not want that ugly sight off my beach. Negatively impacting tourism dollars and jobs in new jersey

Comment Number: BOEM-2021-0024-DRAFT-0218-1
Commenter: James Geiger
Commenter Type: Individual

Comment Excerpt Text:

Hello, I am a homeowner in Barnegat Light, NJ and we rent our house each summer. The proposed ocean wind project will definitely have an negative affect in regard to my rental success as my current renters have already expressed concern of the view from the beach off 19th Street

Why cant you move the wind turbines out to sea another 20 miles or so? The turbines being visible from our beautiful beach is very worry some not only for our family, but our rental potential as the turbines would stick out like a sore thumb.

PLEASE consider moving the turbines further out so they are not visible from the shore line. The beauty of our NJ shoreside in jeopardy and would not ever be the same if the turbines are seen. My best description would be..the turbines are eye pollution.

Comment Number: BOEM-2021-0024-DRAFT-0219-1
Commenter: Holly Fazelat
Commenter Type: Individual

Comment Excerpt Text:

I am writing in hopes that the BOEM will change its planned course for the Ocean Wind Project. As it stands now, the planned wind turbines are to be placed far too close to shore for a positive outcome for the tourism industry that NJ so very much depends on. As someone who had the privilege of growing up on Long Beach Island, NJ, I had the opportunity to witness nature in all of her glory. We are now homeowners of an historic home that we rent every year to generational families who keep coming back to Long Beach Island for its beaches and for everything else a barrier Island has to offer. I can guarantee that our tourism industry will all but dry up and disappear if the ocean's horizon line was littered with wind turbines..I also wonder what the environmental impact would be upon an Island that serves as a place for all migratory wildlife? I am therefore asking you to consider the studies that have already been conducted, and propose that the wind turbines be moved at least 30 or more miles offshore. I am referring to the studies:

BOEM/University of Delaware Study, 2018

North Carolina State University Study, 2017

New Jersey Global Insight Report, 2008

BOEM Viewshed Analysis. 2015

New York State Turbine Exclusion Distance, 2018

Please do the right thing for not only the residents, the tourism industry, but for the wildlife and the continuation of a sustainable life on a barrier Island off of the coast of NJ and move these wind turbines further out to sea.

Comment Number: BOEM-2021-0024-DRAFT-0220-1
Commenter: Joann Zuczek
Commenter Type: Individual

Comment Excerpt Text:

It is very obvious from the plans submitted that the turbines are far too large, too close to the shoreline and will be alien structures in such a picturesque and pristine shore environment. They will become an immediate eyesore on the natural landscape and ruin the views we have become so accustomed to. The distractions will deter visitors from visiting our pristine shore area and instead of enjoying the natural beauty of our area it will lose its valuable tourist appeal and onward financial depreciation for local businesses.

2. The proposed turbines will be visible for a significant distance from the shoreline and have a detrimental visual impact.

3. The proposed turbines will dramatically alter the landscape and character of the area both in the immediate locality and from important vantage points.

4. Local residents have chosen to live in this are for the enjoyment, peace, tranquility and recreational amenities that this area provides. This proposal will cause a significant impairment to this residential amenity which will continue for generations and involve considerable loss to all local residents. The gain in energy value, which is not certain, will be outweighed by the detrimental effect to residential values and business relying upon tourism.

Comment Number: BOEM-2021-0024-DRAFT-0221-1
Commenter: Timothy Feeney
Commenter Type: Individual

Comment Excerpt Text:

New Jersey is the most densely populated state in the nation as well as being one of the most developed. For many the pristine open vista of the"Jersey Shore" is a source of respite and has been cherished for generations. I'm very disheartened at the thought of hundreds of of windmills on the horizon of a view I have treasured for my sixty plus years. The "shore" is the cornerstone of New Jersey's 42 billion dollar a year tourism industry(NJ Dept.of Tourism). A large part of the south jersey economy is dependent on this industry. Many visitors come from outside of New Jersey to enjoy the natural seascape. I'm concerned some of these visitors will be soured by the sight of turbines in the distance and not return to New Jersey. This has been confirmed by research done at North Carolina State University and Delaware University.

Comment Number: BOEM-2021-0024-DRAFT-0222-3
Commenter: John Berlingis
Commenter Type: Individual

Comment Excerpt Text:

In addition, vacationers will have the eyesore of seeing wind mills in the same water they are swimming in. This is is not very appealing and consequently, people will look elsewhere to go for their next vacations.

As a result, our personal and municipal revenues will then suffer. There will be a painful domino affect as the shoreline and neighboring vacation towns become less attractive. There will be less income generated by the merchants and real estate agencies. Since profits will not be able to be made, businesses will look elsewhere. As this happens, property values will go down, the economy fails, and less tax revenues go back to the municipalities. Individuals and families at the shoreline and near by localities will be hurt.

In closing, putting the wind mills on the shoreline is a flawed idea that will ultimately damage what is now a prosperous tourism region, as well as jeopardize the ocean environment.

Comment Number: BOEM-2021-0024-DRAFT-0223-1
Commenter: Adriane Vail
Commenter Type: Individual

Comment Excerpt Text:

Our hope is that the Bureau of Ocean Energy Management (BOEM) will change course with regard to having visible wind turbines off the coast of Long Beach Island, NJ. Wind turbines being visible from shore will most certainly have a negative impact on property values, rental incomes and tourism all of which are very important to our area. As a resident and property owner on Long Beach Island, I strongly oppose having wind turbines visible from shore and encourage you to reconsider this and ensure the wind turbines will not be visible from the shoreline. There is no need for them to be visible, as there is precedence and the space available to move these further off shore.

Comment Number: BOEM-2021-0024-DRAFT-0224-1
Commenter: Jeanne Feenick
Commenter Type: Individual

Comment Excerpt Text:

As a resident of Long Beach Island, I am writing in opposition to the proposed wind farm. This will be visible from our beautiful shoreline and negatively impact the beauty of one of New Jersey's greatest

treasures. We have owned property here for over 30 years, and recently moved here as a full time resident. We implore you not to build as proposed.

Comment Number: BOEM-2021-0024-DRAFT-0226-2
Commenter: Denise Philipp
Commenter Type: Individual

Comment Excerpt Text:

On top of the unmeasurable harm this will cause to the marine mammals, how can one decide they have the right to build in the ocean. This is a vacation community that a lot of people rely on revenue from tourist and rentals. This will also create an eye sore in the entire shoreline. Especially during these times people need a outlet and the beach and ocean is that for many. This should not happen and there are other alternatives that will be less harmful.

Comment Number: BOEM-2021-0024-DRAFT-0232-1
Commenter: Joel Solomon
Commenter Type: Individual

Comment Excerpt Text:

I have reviewed the proposed plans for this off-shore wind farm and strongly OBJECT to this project. As a homeowner in Stone Harbor, I can assure you that NOTHING in this proposal will benefit the ecology, economy, property values or energy savings. In fact, I would rather current energy providers raise prices than resort to adding something that will permanently damage everything that we love about Stone Harbor and the Jersey shore! The vast ocean vistas, the plentiful and thriving marine life and the overall vibe of escaping to the beach will all be lost if this project is permitted to move forward.

I also would expect that this project will directly result in a steep decline in property values at the Jersey shore causing direct and significant financial damages and losses to me and other property owners.

Comment Number: BOEM-2021-0024-DRAFT-0235-1
Organization: NJ State Chamber of Commerce
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

We appreciate that stakeholders have taken into consideration many requests to offset issues, such as making sure that there is minimal visual impacts - an important issue to our shore local and regional chambers of commerce and our important tourism industry.

Comment Number: BOEM-2021-0024-DRAFT-0241-1
Commenter: Marie Carlin
Commenter Type: Individual

Comment Excerpt Text:

Youve read all the arguments against windmill construction in the near Atlantic- economic, environmental, etc. but please, please consider the visual impact and psychological effect these monstrosities will have on one of the most natural, serene, yet powerful vistas on the planet.

Thousands flock to the edge of the continent for peace and healing and the giant windmills will be a slap in the face for all

Comment Number: BOEM-2021-0024-DRAFT-0243-3
Commenter: James Binder
Commenter Type: Individual

Comment Excerpt Text:

Consequences: What do we stand to lose by this massive investment that is too big and too fast. Visual impacts will forever change the unobstructed views from the beach, changing the character of Jersey Shore communities from tourist based pristine areas to industrial energy facilities. A loss of associated tourism will mean a loss of Mom and Pop businesses that support the tourist industry-restaurants, bars, gyms, beauty salons, recreational fishing, hotels, motels, everything that is here now. Why are we putting at risk the multibillion dollar Jersey Shore tourist industry, commercial and recreational fishing, migrating birds, fish and mammals, and the character, well being and soul of our communities? In the end, we may lose more tourist based local jobs than President Biden and Governor Murphy claim will be generated by the development of offshore wind. Property values will also be at risk.

Comment Number: BOEM-2021-0024-DRAFT-0248-1
Commenter: Cheryl Bitner
Commenter Type: Individual

Comment Excerpt Text:

I am writing to oppose the construction of offshore wind farms in New Jersey. The New Jersey Coastline is a natural resource that brings much needed tourism to the state and our cherished coast showcases some of the last untouched natural views in the country. Im very concerned about impacts to the environment, wildlife, tourism, businesses and the enjoyment of our beach towns for generations to come.

Comment Number: BOEM-2021-0024-DRAFT-0251-6
Commenter: Paul E Towhey Sr
Commenter Type: Individual

Comment Excerpt Text:

The tourism industry will suffer. People do not come to Ocean City, or anywhere on the Jersey Shore, to see windmills. They do want to see an uninterrupted view of the ocean, the waves, the occasional right whale or dolphin, and the sky.

Comment Number: BOEM-2021-0024-DRAFT-0253-5
Commenter: Susan Shirk
Commenter Type: Individual

Comment Excerpt Text:

fourth, it will negatively impact tourism. dozens of people go down to the beach early every morning to see our beautiful sun rises. who wants to see the sun blocked out by 90 metal towers? not exactly the peaceful seen we are accustomed. if this is such a great idea and it's going "to boost tourism like it did in rhode island," then why aren't avalon and stone harbor asking for towers to pollute their beaches? for these, and many other reasons, i am strongly opposed to this intrusion into the beautiful south jersey shore.

Comment Number: BOEM-2021-0024-DRAFT-0257-1
Commenter: Angela Trampota
Commenter Type: Individual

Comment Excerpt Text:

As a local resident of Long Beach Island, I am extremely concerned about the environmental and socioeconomic impact of the Atlantic Shores Wind Project project proposed to be within 10-15 miles of the LBI coastline. Our area, both on and around Long Beach Island, survives on tourism and the fishing

industry. This project is on track to be one of the largest wind farms, in both height and numbers of turbines, in the world.

Comment Number: BOEM-2021-0024-DRAFT-0260-1
Commenter: Geraldine Scarpa
Commenter Type: Individual

Comment Excerpt Text:

I provide these comments in the hope that the Bureau of Ocean Energy Management (BOEM) will change course with regard to these ill-conceived projects and the inadequate economic review accompanying them. We therefore strongly oppose the project as currently proposed as the visual pollution of the turbines will have a negative effect on shore rentals.

What does this equate to? New Jersey visitor spending in 2019 was 46.4 Billion, which contributed over 5 Billion in taxes to the State of NJ and 540,500 jobs making it the 6th largest employer in the state (Source: NJ Economic impact of Tourism in NJ 2019) with lodging being the #1 revenue sector.

Breaking out the 4 shore counties from the above figures, the Jersey Shore contributes 22.3 Billion to the overall tourism economy in the state; about half of the tax revenue overall.

Comment Number: BOEM-2021-0024-DRAFT-0267-2
Commenter: Linda Clemente
Commenter Type: Individual

Comment Excerpt Text:

I'm not against wind power but I do not believe this is an appropriate location for the project. This location is a huge player in fishing and tourism. I feel this project will have a negative impact on both of those areas. I am not in favor of the project at all in this location.

Comment Number: BOEM-2021-0024-DRAFT-0269-1
Commenter: Felicity BeMent
Commenter Type: Individual

Comment Excerpt Text:

Please do not erect wind turbines off the visible coast of New Jersey. The negative effects they will have on the wildlife as well as the tourism economy will far exceed any benefits they may provide.

Comment Number: BOEM-2021-0024-DRAFT-0270-1
Organization: The Windmill Belgian Waffles & Ice Cream
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Please do not erect wind turbines off the visible coast of New Jersey. The negative effects they will have on the business economy by decreasing tourism will far exceed any benefits they may provide.

Comment Number: BOEM-2021-0024-DRAFT-0272-2
Commenter: William Roache
Commenter Type: Individual

Comment Excerpt Text:

The economic importance of sport and commercial fishing to the county, state and mid-Atlantic region is too significant to put at risk.

Comment Number: BOEM-2021-0024-DRAFT-0274-2
Commenter: Linda Scavello
Commenter Type: Individual

Comment Excerpt Text:

This action WILL have a negative impact on our tourism.

Comment Number: BOEM-2021-0024-DRAFT-0275-1
Commenter: June and Michael Logan
Commenter Type: Individual

Comment Excerpt Text:

We are asking that you PLEASE put your wind turbines out to sea far enough so that we and all the other oceanfront home owners along the New Jersey Shore CANNOT see the turbines from our homes or the beach. We feel the sight of the turbines will effect property values and rental income of oceanfront homes, as tourism is a huge revenue factor in the summer at the Jersey Shore. Not only will the sight of the turbines effect Rental Property Owners income, but business income along the coast as well.

Comment Number: BOEM-2021-0024-DRAFT-0276-1
Commenter: Susan Kirkpatrick
Commenter Type: Individual

Comment Excerpt Text:

I do not agree with the placement of wind energy offshore NJ. The NJ shore is a major industry for commercial fishermen and for the tourist trade.

Comment Number: BOEM-2021-0024-DRAFT-0278-5
Commenter: Gerald Thornton
Commenter Type: Individual

Comment Excerpt Text:

A large portion of the economy in Cape May County is built upon fishing, sea life, and seafood. Many people immediately think only of commercial fishing, but we have businesses that go far beyond just that. Our County has bait and tackle shops, recreational fishing, charter boats, and even extending into our number one economic driver of tourism with the strong push to put locally caught food on our visitors plate at restaurants.

Fishing and boating play an even deeper role in our tourism efforts. A survey by our Cape May County Department of Tourism found that nearly one in four people who visit our County do so for fishing and boating. We also have amazing businesses that take people whale and dolphin watching.

Comment Number: BOEM-2021-0024-DRAFT-0278-7
Commenter: Gerald Thornton
Commenter Type: Individual

Comment Excerpt Text:

During the last prepandemic year in 2019, Cape May County produced $6.9 billion in tourism expenditures. This includes nearly $700 million that is produced through ecotourism. The main drivers of ecotourism include birding and fishing. Cape May County is a world recognized birding destination. This represents another important industry that we must protect. Also, while it is not clear the impacts this project will have to jobs in fishing and tourism; the jobs that are going to be created are not going to

support Cape May County residents. This includes the home office for this project being placed in Atlantic City, even though the windmills will be off the coast of Cape May County.

Comment Number: BOEM-2021-0024-DRAFT-0281-2
Commenter: Jorge Constantino
Commenter Type: Individual

Comment Excerpt Text:

3. Will the local fishing industry be subsidized for any loss of fishing harvests during the construction of the wind farm?

Comment Number: BOEM-2021-0024-DRAFT-0296-1
Commenter: Anthony Feenick
Commenter Type: Individual

Comment Excerpt Text:

LBI has a beautiful oceanfront with unobstructed and magnificent views of the horizon. Wind turbines visible from shore WILL have a negative impact. A number of studies and surveys of persons shown images of turbines, including several sponsored by the BOEM have concluded that significant reductions in rental and tourism revenues, and property values will occur from visible turbines.

Comment Number: BOEM-2021-0024-DRAFT-0301-1
Commenter: Andrew Pockl
Commenter Type: Individual

Comment Excerpt Text:

There will be a negative visual impact on the beaches. Many people come to town for the beach. The beach is a place to relax and forget about life for awhile. Sitting on the beach and viewing the industrialized wind turbines will reduce that feeling of relaxation on the beach. This means less people will visit the beach (they will go to Delaware) and less money will be spent at the shops and restaurants in town. The demand for beach homes will decrease and property values will be reduced as a result.

Comment Number: BOEM-2021-0024-DRAFT-0318-1
Commenter: Jill Markley
Commenter Type: Individual

Comment Excerpt Text:

No beaches are beautiful, people do not want to look out to the horizon and see this industrial wind farm. I believe people will go to other destinations where they can look at an unobstructed view of the horizon.

Comment Number: BOEM-2021-0024-DRAFT-0318-3
Commenter: Jill Markley
Commenter Type: Individual

Comment Excerpt Text:

I am writing to you to voice my opposition to the proposed wind farm along the NJ coastline. I believe that it will be an eyesore and hurt tourism

Comment Number: BOEM-2021-0024-DRAFT-0320-2
Commenter: Sarah Jordan
Commenter Type: Individual

Comment Excerpt Text:

Our coastal communities are stewards of our marine environment and we work hard to protect them, New Jersey should want to protect what makes this state special, and why millions of tourists visit our beaches each year. The visual impact of the wind turbines will also have a negative effect on our tourism industry. Many studies, including one from University of Delaware, found that people are much less likely to return to a vacation area where turbines are visible. A North Carolina study found that home values and vacation rental prices decreased with wind turbines visible on shore. Our jersey shore tourism industry is robust - from retail to restaurants to vacation rentals to wedding industry to commercial fishing - tourism in NJ brought in 46.4 billion dollars in 2019, and we as residents and business owners cannot afford to have our homes and livelihoods negatively affected for a turbine project with no concrete evidence it will be good for taxpayers.

Comment Number: BOEM-2021-0024-DRAFT-0328-1
Commenter: John Breitling
Commenter Type: Individual

Comment Excerpt Text:

The Ocean Wind turbine project is similar to the Atlantic Shores wind turbine project off Long Beach Island. Both projects are too close to the coastal communities. Tourists on the beach will see many large visible turbines, 853 feet tall, in the ocean. They will also be seen at night as they will be illuminated. This will cause tourists to go vacation somewhere else. This will cause coastal communities lose jobs, lose income, lose property value and become economically devastated. To support my claims I have done the math: A 853 foot tall tower can be seen 32 miles away. Also I have attached a photo of a radio a tower located in Little Egg Harbor (Tuckerton) NJ.. I took the photo with my iphone 9 miles away in Ship Bottom NJ. The photo fairly accurately portrays the radio tower from West 23rd St in Ship Bottom. attached also is a google earth photo showing the distance to the tower as 9 miles. This radio tower is 715 feet tall. The turbines will be 138 feet taller than this tower. The many turbines in the ocean will look like this radio tower, just add the 350 foot long turbine blades. These up in your face turbines will be very visible from the beach. There is speculation from the turbine companies that the turbines will be concealed by a marine layer of humidity, mist, and fog. I have commercial and recreationally fished in the ocean off New Jersey for many years. Most of our days are clear with good visibility. We do have some springtime fog when the water is cold. These turbines will be very visible from the beach.

Comment Number: BOEM-2021-0024-DRAFT-0328-3
Commenter: John Breitling
Commenter Type: Individual

Comment Excerpt Text:

Synopsis: Building the turbines inshore at their present proposed locations will create turbine jobs but PERMANENTLY devastate coastal economies by less tourism, less jobs, dropping property values. Building the turbines off shore at the Hudson South will still create turbine jobs but will not cause harm to coastal economies.

Comment Number: BOEM-2021-0024-DRAFT-0330-3
Commenter: Stacey Jordan
Commenter Type: Individual

Comment Excerpt Text:

The visual impact of the wind turbines will also have a negative impact on New Jersey's Tourism industry. My alma mater, the University of Delaware, found that people were less likely to return to a vacation area where turbines are visible. There are also studies done in North Carolina that found home

values and and rental prices decreased when wind turbines were visible from the shoreline. How will the company guarantee the cables will not be visible on our beaches or cause problems with recreational boating? Residents of Block Island have been dealing with these problems since 2016. Since New Jersey's tourism industry brought in over 46 billion in revenue- we as taxpayers cannot allow livelihoods to be affected negatively with this project that has no concrete evidence it will be good for the taxpayers of New Jersey, our commercial fishing industry and our wildlife.

Comment Number: BOEM-2021-0024-DRAFT-0332-1
Commenter: Suzanne Hornick
Commenter Type: Individual

Comment Excerpt Text:

Our tiny community is based solely on tourism. If you place this project here that will be severely diminished contrary to what Orsted says. We know our tourists and what they want and dont want. Our serene, pristine beaches are the primary reason people visit us and why people live here. Several hundred of these monolithic structures lit 24/7 would keep tourists away.

Comment Number: BOEM-2021-0024-DRAFT-0332-6
Commenter: Suzanne Hornick
Commenter Type: Individual

Comment Excerpt Text:

We are very concerned that our cold pool will be negatively impacted and that will damage our recreational and commercial fishing industries which in turn will devastate our already struggling restaurants and hospitality industries. Our boardwalk merchants are also very much against this because we know our tourists will go elsewhere if these turbines are put here. The only people who seem to support this are people who live inland and who will not seemingly be affected by the destruction of our coastline. Maybe they dont know how many billions of dollars are brought into the state due to our tourism industry?

Comment Number: BOEM-2021-0024-DRAFT-0334-2
Commenter: Peter Straub
Commenter Type: Individual

Comment Excerpt Text:

Secondarily, the economic impacts on southern NJ are important considerations as the region is over reliant on seasonal gaming and tourism industries that are cyclical.

Comment Number: BOEM-2021-0024-DRAFT-0346-5
Commenter: Martha Oldach
Commenter Type: Individual

Comment Excerpt Text:

We are completely dependent upon tourism. I have listened to two of the three BOEM Zoom meetings and spoken at two. The graphics, even though very poorly exhibited fuzzy and hard to see and the participants were complaining about that, made it clear that these massive turbines will be visible from the beach. My individual research confirms that fact. The aesthetic damage that will be permanently inflicted upon our pristine shoreline Will absolutely affect tourism! Many people will choose to go to Delaware Beaches or Maryland or anywhere where they can enjoy the aesthetic that they have come to expect. That is an ocean view not marred by Man made ugly eye pollution. If this happens I personally will forever be deeply disturbed and so sadden to look upon the horizon that I love so well and see this destruction of Gods creation. My grandchildren will never know a view of the ocean without seeing these

hideous turbines. And for what? So that we can lose tourism business, pay much higher electric bills, have 58% less percent less predictability in our electric supply

Comment Number: BOEM-2021-0024-DRAFT-0351-8
Organization: Barnegat Bay Partnership
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

In the draft EIS the applicant should further describe the impacts to Recreation and Tourism at Island Beach State Park due to landfall and installation of the TJB in one of the main parking lots for the park.

Comment Number: BOEM-2021-0024-DRAFT-0356-2
Commenter: Katie Feairheller
Commenter Type: Individual

Comment Excerpt Text:

I also feel it will be an eye sore to the coast line which may affect our tourism industry, which for many towns, is our way of life. As a resident of Ocean City, we can see the windmills in Atlantic City clearly and they are over 20 miles away. Our breathtaking views of the ocean will be replaced with windmills. Many residents will move-out of state to a coast line not inhibited by wind mills.

Comment Number: BOEM-2021-0024-DRAFT-0357-2
Commenter: Jean Gatti
Commenter Type: Individual

Comment Excerpt Text:

This is natural beauty LBI relies on summer tourism for its natural beauty. You will not only destroy our ocean but destroy tourism

Comment Number: BOEM-2021-0024-DRAFT-0360-2
Commenter: Jennifer Livak
Commenter Type: Individual

Comment Excerpt Text:

While I am a supporter of renewable energy and wind turbines, I am NOT a supporter of having wind turbines visible from the shores of Long Beach Island. It seems incomprehensible to me to challenge the the beauty of a landscape, that will have direct & dire consequences on a local economy that relies solely on tourists & visitors, and which will, in turn, have a far reaching negative impact on the overall economic well-being of the State of New Jersey.

Comment Number: BOEM-2021-0024-DRAFT-0361-2
Commenter: Susan Matthews
Commenter Type: Individual

Comment Excerpt Text:

First, as noted above, this project will significantly and negatively affect tourism.

Second, and accordingly, such impact will significantly and negatively affect myriad local businesses (e.g. restaurants, gift/clothing shops, water sports facilities) which serve New Jersey's shore communities and depend upon the summer tourist industry for their livelihoods.

Comment Number: BOEM-2021-0024-DRAFT-0365-3
Commenter: Anthony Butch

Commenter Type: Individual

Comment Excerpt Text:

The project is detrimental to our marine life and those that depend on it, whether that be a commercial fisherman, a recreational fisherman or the deli by the sea side town that counts on people to come down and load up their cooler with hoagies and drinks for a day of fishing.

Comment Number: BOEM-2021-0024-DRAFT-0369-4
Commenter: Kathleen McGuire
Commenter Type: Individual

Comment Excerpt Text:

I think there should also be an economic survey about tourist wanting to still visit the area with the list of a pristine ocean view being destroyed by 99 huge wind turbines. The economic impact could be huge and does that justify the installation of these costly turbines. The only ones it seems to be helping economically is company which I believe is not even an American company.

Comment Number: BOEM-2021-0024-DRAFT-0371-6
Commenter: Martha Wright
Commenter Type: Individual

Comment Excerpt Text:

This industrial complex will undermine if not destroy tourism as the now pristine views will be forever blemished. There will also be a negative impact on recreational fishing.

Comment Number: BOEM-2021-0024-DRAFT-0382-1
Commenter: Sandra Maxson
Commenter Type: Individual

Comment Excerpt Text:

We are very concerned about our property becoming virtually worthless because of the negative affect these turbines will have on tourism and the inability to enjoy the beautiful coastline unobstructed.

Comment Number: BOEM-2021-0024-DRAFT-0382-3
Commenter: Sandra Maxson
Commenter Type: Individual

Comment Excerpt Text:

I have seen studies that dead birds killed by the turbines will attract sharks to the region. If this happens this will definitely dramatically affect tourism. Ocean City and the southern NJ area does not want to be known as the new shark bite capitol of the East Coast.

Comment Number: BOEM-2021-0024-DRAFT-0382-5
Commenter: Sandra Maxson
Commenter Type: Individual

Comment Excerpt Text:

We would ask that you take your project farther north and leave our Southern NJ coastline alone. We do not want to be the guinea pig area for this type of project. I would say take it up to New England because they don’t swim in the ocean but one month of the year and don’t have tourists flocking to just sit on their beaches.

Comment Number: BOEM-2021-0024-EMAIL-004-1
Organization: Long Beach Island (LBI) New Jersey Coalition for Wind Without Impact
Commenter: Bob Stern
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The Proposed Project is Unreasonable: The advent of extremely large turbines has rendered this exceptionally close-in area obsolete. This extremely close-in project proposed, 15 to 20 miles out, will create a wall of massive clearly visible turbines off the coast of Atlantic City, in fact the second most visible wind turbine complex in the entire world, next to LBI. Such an extreme visible impact, inexplicably, was never considered in the delineation of the lease area. It would devastate tourism-reliant shore communities trying to recover from COVID-19. Numerous studies and surveys have demonstrated the severe adverse impacts on rentals, tourism and property values from visible turbines. Those study results were applied to the project proposed off of LBI and the results are severe (Enclosure 2).

The turbines off of Atlantic City are proposed as close as 15 miles and go out to 20 miles. For the newer, very large turbines to be used, almost all the turbine tower and the blades would be clearly visible at 15 miles. Even if the 17.3-mile turbine exclusion zone limit that the BOEM has proposed for New York State projects is applied to New jersey, which it should, a good portion of the tower and the blades would still be visible.

The Impacts of visible and rotating turbines on rentals, tourism in general and property should be a priority issue analyzed in this EIS. The importance of those impacts is supported by actual detailed surveys of those who have previously rented shore properties. A study by North Carolina State University found that fifty-five percent of those who previously rented oceanfront or ocean view properties would not return to those properties even if a significant discount was offered in the rental price. Additional studies, one by the University of Delaware which was sponsored by the BOEM shows 18 percent less visits to the shore if modern turbines were this close to shore. Other studies show several hundred million dollars of lost tourism revenues annually just to LBI, and loss in property values of ocean front and ocean view homes ranging from $189,000 to $1,010,000, with spillover implications for other property owners (Enclosure 2).

Comment Number: BOEM-2021-0024-EMAIL-004-2
Organization: Long Beach Island (LBI) New Jersey Coalition for Wind Without Impact
Commenter: Bob Stern
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

So, for lease areas this close to shore the socio-economic impact is an obvious one and perhaps the worst environmental impact of the project. Inexplicably visible and associated socio-economic impact was apparently never even considered in the process leaving to the definition of this lease area. There is no mention of visible impact in the feasibility study done by Rutgers University nor in efforts like the Atlantic Wind Energy Workshop held in September of 2011. The failure by the BOEM to even consider such an obvious impact of this proposal, in or out of the NEPA process, raises serious concerns about the reasonableness of this project. and cries out for an analysis of alternatives.

This impact must be treated analytically in the EIS and actual numbers regarding lost rentals, property values and tourist visits provided by the BOEM. The BOEM cannot, as it has done in the past simply cite past studies and their different conclusions without a BOEM assessment of their strength and relevance. If necessary, the BOEM should conduct a new study of shore goer reaction here to accurate visual renderings of the turbines.

At about 28 miles the tower disappears from view but the blades rotating above it are still visible. Visual renderings from the Vineyard Wind 1 project off of Martha's Vineyard show the entire turbine-tower and blades- not visible from the mainland beyond 33.6 miles. Therefore, to avoid the unacceptable socio-economic impacts described above, a suitable lease area starting at least 30 miles offshore is needed.

Comment Number: BOEM-2021-0024-EMAIL-004-31
Organization: Long Beach Island (LBI) New Jersey Coalition for Wind Without Impact
Commenter: Bob Stern
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The economic well-being of Long Beach Island (LBI) depends on summer rentals and tourism.

A number of studies and surveys of persons shown images of turbines, including several sponsored by the BOEM have concluded that significant reductions in rental and tourism revenues, and property values will occur from visible turbines. The results of those studies are applied below to the distances and turbine sizes being considered here to evaluate the potential socio-economic impact to LBI.

New Jersey Global Insight Report, 2008

A study sponsored by the State of New Jersey and conducted by Global Insight, Inc. titled an Assessment of the Potential Costs and Benefits of Offshore Wind Turbines was conducted in 2008. It estimated the loss of tourism revenues based on the visible impact of smaller turbines place three and six miles offshore. Since the height of those turbines is 47 percent of the height of a 12-megawatt (MW) turbine the visual impact of a 12-MW turbine 10 miles offshore would be equivalent to the turbines used in the report sited 4. 7 miles offshore. That is about halfway between their three- and six-mile scenarios.

From their data on page 43 then it can be concluded that 12 MW turbines 10 miles offshore would have resulted in $179 million of loss tourism sales for Ocean County in 2012. Scaling that up to the tourism revenue levels seen today that would mean a $280 million tourism sales loss for Ocean County, most of that to be borne by its shore communities, and much of that by LBI.

In addition, the report included estimates of oceanfront and ocean view property value losses due to visible turbines, Figures 5.3 and 5.4. Using numbers in-between the 3- and 6-mile scenarios as explained above, for Ocean County the average loss in value per property in 2012 ranges from $189,000 to $1,010,000 depending on the assumptions used. Losses would be expected to be greater today based on higher property values compared to 2012.

North Carolina State University Study, 2017

In 2017, North Carolina State University conducted a survey of persons who had previously rented oceanfront or ocean view properties. It published a report titled the Amenity Costs of Offshore Wind Farms- Evidence from a Choice Experiment in August 2017. It showed those persons visualizations of different numbers of 5 MW turbines at distances from shore of 5 to 30 miles. Since a 5 MW turbine is 60 percent of the height of the 12 MW turbines facing LBI, a 5 MW turbine at 6 miles has about the same visual impact as a 12 MW turbine at 10 miles.

It found (page 6) that 55 percent of those surveyed would not re-rent that property if turbines with visible regardless of the degree of visibility or any rental discount offered. Twenty-three percent would accept some degree visibility and twenty-one percent did not mind the visible turbines (Table 4, Panel A). It also found that the negative reaction to wind turbines was primarily due to the offshore distance as opposed to the number of turbines.

Use of this lease area therefore poses an insurmountable problem for owners of ocean front and ocean view properties. To regain the 55 percent, 12 MW turbines would have to be sited much further out where they would not be visible, which is not possible in this lease area.

Alternatively, they would have to in the future attract more renters who either did not mind turbine views or would accept some degree of visibility. However, the data suggests that attracting many more of the latter group would involve rental discounts that could become prohibitive.

Since the extent of the current lease area does not allow placing 12 MW turbines far enough out to not be visible, and retain many in the 55 percent group it poses a significant problem for ocean

BOEM/University of Delaware Study, 2018

In March,2018 the University of Delaware published a report titled Atlantic Offshore Wind Energy Development-Values and Implications for Recreation and Tourism that was sponsored by the BOEM. It assessed the impact on shore visits from visible turbines at various distances.

It interviewed 1,725 shore goers utilizing visuals of 5 MW turbines that were two-thirds the height of a 12 MW turbine. So, a 12 MW turbine at 10 miles would have about the same visual impact as data in the report for a 5 MW turbine at 6.6 miles. For that distance, it concluded (from Report Figure 3 below) that 40 percent of those surveyed will have a worse experience at the shore with turbines visible.

That negative reaction would result in 18 percent (from Report Figure 4 below) less visits to the shore, clearly an unacceptable impact on shore communities.

To reduce that level to 6 percent, where trip loss levels off with distance, based on the data in Figure 4, would require that 12 MW turbines be placed no closer than 15/0.66 or 23 miles offshore, which is not possible in the current lease area.

BOEM Viewshed Analysis. 2015

In 2015, the BOEM published the results of a viewshed analysis it did for the New York Outer Continental Shelf Area (Renewable Energy Viewshed Analysis and Visual Simulation for the New York Outer Continental Shelf Call Area: Compendium Report OCS Study, BOEM 2015- 044).

It simulated the visual impact of one hundred and fifty-two 6.2 MW wind turbines from 16 observation points in New York and New Jersey. The simulation most relevant to LBI is the Jones Beach observation point because the turbine array was roughly parallel to that shore. The closest point of the turbine array to Jones Beach was 15 miles.

It ranked the visible impact on a scale from 1 to 6. The visual impact from Jones Beach scored a 6, its highest rating. A 6 rating was defined as; “Dominates the view because the study subject fills most of the field for views in its general direction. Strong contrast in form, line, color, texture, luminance, or motion may contribute to view dominance”.

Since the height of a 6.2 MW turbine is two-thirds that of a 12 MW, that visual impact would be equivalent to a 12 MW turbine at 23 miles. So even placing 12 MW turbines at the outer most points of the current lease area would still register a major visual impact, based on the BOEM study.

New York State Turbine Exclusion Distance, 2018

The BOEM also conducted an extensive visualization study for the Massachusetts And Rhode Island Wind Energy Areas in 2015. Based on these visualization studies and other outreach conducted by the State of New York, New York adopted a 20-mile exclusion distance for wind energy development. (FR Notice, Commercial leasing for Wind Power in the Outer Continental Shelf in the New York Area, April 18, 2018). The BOEM chose to temporarily use a 17.3-mile exclusion distance. Either way if these

exclusions were applied to the New Jersey lease area they would remove most of the lease area from turbine placement.

A Local Perspective

Barnegat Lighthouse is 172 feet tall. The turbines are 5 times higher than Barnegat Lighthouse. Barnegat Lighthouse can be seen from the causeway, which is about 9 miles away. Now imagine the lighthouse 5 times taller. The turbines will be twice as tall as the Borgata (431 feet) in Atlantic City which can be seen from the causeway 25 miles to the south, and are very often visible from Holgate and Beach Haven, 16 miles away.

Summary

To summarize, based on these studies this project as currently envisioned could be expected to result in:

• Several hundred million dollars in lost annual tourism revenue and major losses in rental income and property value for oceanfront and ocean view property owners, with implications for other property owners (Global Insight, 2008)

• A fifty-five percent loss in prior renters of oceanfront and ocean view properties (NC State University,2017)

• Eighteen percent less Island tourist visits and forty percent of visitors having a “worse” shore experience (BOEM/University of Delaware, 2018}, and

• Twelve megawatt turbines will have a dominant and disturbing visible impact even at distances further out in the lease area (BOEM Viewshed Analysis, 2015, NYS Exclusion Distance, 2018).

Comment Number: BOEM-2021-0024-EMAIL-005-1
Organization: City of Beach Haven, New Jersey
Commenter: Colleen Lambert
Commenter Type: Local Agency

Comment Excerpt Text:

As you know, New Jersey’s tourist industry is huge and results in billions of dollars to our state economy and many millions to Long Beach Island. Studies and polls have shown that tourism could drop as much as 40% if these turbines are placed in a visible location and that would be devastating to New Jersey in general and all of the coastal communities in particular.

Comment Number: BOEM-2021-0024-EMAIL-005-12
Organization: City of Beach Haven, New Jersey
Commenter: Colleen Lambert
Commenter Type: Local Agency

Comment Excerpt Text:

In the second paragraph under Summary of Expected Impacts, The NOI seems to say that visible turbines will contribute to recreation and tourism. The notion that hundreds of visible and rotating offshore turbines will promote tourism is absurd, and that is supported by actual detailed surveys of those who have previously rented shore properties. A study by North Carolina State University found that fifty-five percent of those who previously rented oceanfront or ocean view properties would not return to those properties even if a significant discount was offered in the rental price. Additional studies, one by the University of Delaware which was sponsored by the BOEM shows 18 percent less visits to the shore if modem turbines were this close to shore. Other studies show several hundred million dollars of lost

tourism revenues annually, and loss in property values of ocean front and ocean view homes ranging from $189,000 to $1,010,000, with spillover implications for other property owners (Enclosure 2).

Comment Number: BOEM-2021-0024-EMAIL-005-29
Organization: City of Beach Haven, New Jersey
Commenter: Colleen Lambert
Commenter Type: Local Agency

Comment Excerpt Text:

The economic well-being of Long Beach Island (LSI) depends on summer rentals and tourism.

A number of studies and surveys of persons shown images of turbines, including several sponsored by the BOEM have concluded that significant reductions in rental and tourism revenues, and property values will occur from visible turbines. The results of those studies are applied below to the distances and turbine sizes being considered here to evaluate the potential socio-economic impact to LBI.

Comment Number: BOEM-2021-0024-EMAIL-005-30
Organization: City of Beach Haven, New Jersey
Commenter: Colleen Lambert
Commenter Type: Local Agency

Comment Excerpt Text:

A study sponsored by the State of New Jersey and conducted by Global Insight, Inc. titled an Assessment of the Potential Costs and Benefits of Offshore Wind Turbines was conducted in 2008. It estimated the loss of tourism revenues based on the visible impact of smaller turbines place three and six miles offshore. Since the height of those turbinesis47 percent of the height of a 12-megawatt (MW) turbine the visual impact of a 12-MW turbine 10 miles offshore would be equivalent to the turbines used in the report sited 4.7 miles offshore. That is about halfway between their three-and six-mile scenarios.

From their data on page 43 then it can be concluded that 12 MW turbines 10 miles offshore would have resulted in $179 million of loss tourism sales for Ocean County in 2012. Scaling that up to the tourism revenue levels seen today that would mean a $280 million tourism sales loss for Ocean County, most of that to be borne by its shore communities, and much of that by LBI.

In addition, the report included estimates of oceanfront and ocean view property value losses due to visible turbines, Figures 5.3 and 5.4. Using numbers in-between the 3- and 6-mile scenarios as explained above, for Ocean County the average loss in value per property in 2012 ranges from $189,000 to $1,010,000 depending on the assumptions used. Losses would be expected to be greater today based on higher property values compared to 2012.

Comment Number: BOEM-2021-0024-EMAIL-005-31
Organization: City of Beach Haven, New Jersey
Commenter: Colleen Lambert
Commenter Type: Local Agency

Comment Excerpt Text:

In 2017, North Carolina State University conducted a survey of persons who had previously rented oceanfront or ocean view properties. It published a report titled the Amenity Costs of Offshore Wind Farms- Evidence from a Choice Experiment in August 2017. It showed those persons visualizations of different numbers of 5 MW turbines at distances from shore of 5 to 30 miles. Since a 5 MW turbine is 60 percent of the height of the 12 MW turbines facing LBl, a 5 MW turbineat6 miles has about the same visual impact as a 12 MW turbine at 10 miles.

It found (page 6) that 55 percent of those surveyed would not re-rent that property if turbines with visible regardless of the degree of visibility or any rental discount offered. Twenty-three percent would accept some degree visibility and twenty-one percent did not mind the visible turbines (Table 4, Panel A). It also found that the negative reaction to wind turbines was primarily due to the offshore distance as opposed to the number of turbines.

Use of this lease area therefore poses an insurmountable problem for owners of ocean front and ocean view properties. To regain the 55 percent, 12 MW turbines would have to be sited much further out where they would not be visible, which is not possible in this lease area.

Alternatively, they would have to in the future attract more renters who either did not mind turbine views or would accept some degree of visibility. However, the data suggests that attracting many more of the latter group would involve rental discounts that could become prohibitive.

Since the extent of the current lease area does not allow placing 12 MW turbines far enough out to not be visible, and retain many in the 55 percent group it poses a significant problem for ocean front and ocean view property owners in terms of lost rental income and property value.

Comment Number: BOEM-2021-0024-EMAIL-005-35
Organization: City of Beach Haven, New Jersey
Commenter: Colleen Lambert
Commenter Type: Local Agency

Comment Excerpt Text:

To summarize, based on these studies this project as currently envisioned could be expected to result in:

Several hundred million dollars in lost annual tourism revenue and major losses in rental income and property value for oceanfront and ocean view property owners, with implications for other property owners (Globa Insight, 2008)

A fifty-five percent loss in prior renters of oceanfront and ocean view properties (NC State University,2017)

Eighteen percent less Island tourist visits and forty percent of visitors having a “worse” shore experience (BOEM/University of Delaware, 2018), and Twelve megawatt turbines will have a dominant and disturbing visible impact even at distances furtheroutin the lease area (BOEM Viewshed Analysis, 2015, NYS Exclusion Distance, 2018).

Comment Number: BOEM-2021-0024-EMAIL-005-4
Organization: City of Beach Haven, New Jersey
Commenter: Colleen Lambert
Commenter Type: Local Agency

Comment Excerpt Text:

It would devastate tourism-reliant shore communities trying to recover from COVID-19. Numerous studies and surveys have demonstrated the severe adverse impacts on rentals, property values and tourism in general from visible turbines (Enclosure 2), and this close-in project, 10 to 20 miles out, will create a wall of massive clearly visible turbines off the coast of Atlantic City, in fact the second most visible wind turbine complex in the entire world. Such an extreme visible impact, inexplicably, was never considered in the delineation of the lease area

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Comment Number: BOEM-2021-0024-TRANS-41321-0002-7
Commenter: Louise Halprin
Commenter Type: Individual

Comment Excerpt Text:

The parasailers, you know, the people that, that do all the water sports out there, the wind surfers, how is this going to effect all them

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Comment Number: BOEM-2021-0024-TRANS-41321-0004-1
Organization: New Jersey Coalition for Wind Without Impact
Commenter: Bob Stern
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The advent of the huge large turbines we have today will result in significant visible impacts to Atlantic City and other shore communities and it will results based on other numerous studies in significant losses in tourism, property values and rentals. The reference to Block Island is not appropriate because that is a smaller five turbine project.

Comment Number: BOEM-2021-0024-TRANS-41321-0013-2
Organization: Southern New Jersey Development Council
Commenter: Jane Asselta
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

One concern we had was the impact on tourism. According to Visit New Jersey analysis of the economic impact of tourism in New Jersey, in 2019, $160 million visitors spent $46.4 billion in New Jersey. Strong visitor spending growth continued in Atlantic County which after ranking second in 2018, ranked first in 2019 with visitor spending increasing 5.3 percent. And both Ocean and Cape May County visitor registration spending growth of over four percent. I am encouraged to learn of a recent survey where researchers showed beach goers visual simulations of wind power project located 12 and a half miles out and found that there were 13 percent reported the beach experience would be improved, 67 reported no effect and 20 percent reported a worse experience.

Comment Number: BOEM-2021-0024-TRANS-41321-0020-1
Commenter: Suzanne Hornik
Commenter Type: Individual

Comment Excerpt Text:

The only thing we have to support our community is tourism. If we put this project on our beach and it destroys our beach,

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Comment Number: BOEM-2021-0024-TRANS-41321-0020-2
Commenter: Suzanne Hornik
Commenter Type: Individual

Comment Excerpt Text:

You know, if we put these nearly 150 or however many between the two projects, these 900 foot turbines that are you know, 750 feet across, they are bigger than the Revel Casino and we are going to put 150 of them out in the ocean off the coast so we can no longer see the horizon by itself, people are not going to come. I don’t care what kind of studies and if you look at Orsted’s study, it’s not a legitimate study in my opinion, it was just ? it just was not scientific. We only have tourism.

Comment Number: BOEM-2021-0024-TRANS-41321-0020-4
Commenter: Suzanne Hornik
Commenter Type: Individual

Comment Excerpt Text:

who comes to the shore to our little island and doesn't want to go on a boat or parasail in the ocean or lay on the beach and watch the waves or moonlight walk which you won't be able to do without seeing those lights, I don't care what they say, you can see lights, we can see lights when they are out there. People are not going to come. That's going to collapse our community. Without the money that we get from tourism, we have less than 11,000 registered voters here, we are a very small community. Most of the homes on our island are second homeowners, those people are not here year round. Tourism is what pays for our police, our fire, our roads, our schools and we have some of the best schools you could ever want. Our recreational facilities that our tourists use, the tennis courts, the basketball courts, those are all things paid for by tourism and another thing, so you know, if this ruins our tourism, it ruins our community, then where do our children go to school if there is no money. Eventually it's going to be a disaster.

Comment Number: BOEM-2021-0024-TRANS-41321-0022-1
Commenter: William O'Hearn
Commenter Type: Individual

Comment Excerpt Text:

Lastly I will talk about Block Island and how those five turbines only three miles offshore have become what we call an industry tourism site. I myself have made that trip out there, many people do and it's increased tourism and the -- just the general recreational fishing in that whole area. So this can be a resource for recreational fishing and can be a source of additional tourism as well as a consistent source of clean power.

Comment Number: BOEM-2021-0024-TRANS-41521-0005-2
Organization: City of Beach Haven, New Jersey
Commenter: Colleen Lambert
Commenter Type: Local Agency

Comment Excerpt Text:

We are also very concerned about the impact on tourism, and I know you have done studies, we have seen some that have shown an increase or excuse me a decrease of possibly 40 percent in our revenue. And that could be devastating, not just for our town, but for the whole Jersey coast. If the wind mills were not visible, the turbines excuse me were not visible, it could be a huge, huge impact for us. We just wanted to say also thatJerseyShore Reporting, LLC 16 New York was given a 17.7 mile exclusionary limit and New Jersey is as close as ten miles and we are not sure why the discrepancy but it would be nice if the whole early scoping process and everything slowed down and we took a good look, a lot of the studies, I was impressed with what you did, but again, I don't know that we have given everything enough time to fully investigate the impacts.

Comment Number: BOEM-2021-0024-TRANS-41521-0009-3
Commenter: Kathleen Hayden
Commenter Type: Individual

Comment Excerpt Text:

And I am also concerned about our communities being effected, especially those of us who are expecting the cable landfall and the construction of that and how that's going to effect our tourism and just what it is going to be like for day-to-day life when this all happening.

Comment Number: BOEM-2021-0024-TRANS-41521-0014-1
Commenter: William Georges
Commenter Type: Individual

Comment Excerpt Text:

I just wanted to state my opposition to the project predominantly on the basis of the environmental impact that many people have cited the impact to the fishing industry and fisheries and finally and importantly to me personally the impact to the tourism and economy in Ocean City in particular.

Comment Number: BOEM-2021-0024-TRANS-42021-0002-1
Commenter: Lorraine Vineberg
Commenter Type: Individual

Comment Excerpt Text:

Yeah, so really just my statement is just some of the concerns I have with economic impact to the Jersey Shore for those who are homeowners and for those, you know, who rent their homes out, you know, during the summer, the summer season. I just -- I haven't really seen any information thus far if those impacts have been considered because when people come down the Jersey Shore, they come down to the beach to see the ocean and I understand that there has been studies in other parts of the country that when there is a wind farm off the shore, that people are less likely to, you know, rent a home or, you know, in that area, you know, for the summer. So I want to make sure those things are being, you know, looked at closely as well, so that is not impacting the -- not only just our rental market but also our home values as well.

Comment Number: BOEM-2021-0024-TRANS-42021-0003-4
Organization: New Jersey Work Environmental Council
Commenter: Debra Coyle McFadden
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

And then finally, I would just end on a personal note as somebody that grew up outside of the Jersey Shore area and who takes vacations there that, you know, looking at how far out these wind farms will be built, it certainly wouldn't be a deterrent for me, and I think a lot of people will continue to visit the shore. So thank you for the opportunity to comment.

Comment Number: BOEM-2021-0024-TRANS-42021-0005-3
Organization: Central Jersey Electrical Association
Commenter: Stanislav Jarizak
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

because that so beautiful, I think that I will actually come to the shore more often, I will bring my children and as we are on the beach, I will explain to them all the stories about the research, geology and climate change and I will tell them that this is the product of our ability to cope with the climate change and what not. And I will recommend them to talk about it in school so that they encourage other children to talk to their parents so they make extra trip to the shore so that they can enjoy not only the beach and water but also the beautiful sight of these wonderful wind turbines. Thank you.

Comment Number: BOEM-2021-0024-TRANS-42021-0006-2
Organization: New Jersey Research Project
Commenter: Alyssa Campanella
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

As I said, I am sensitive to environmental impacts and I hear the complaints about potential negative impacts on tourism. But as indicated there have been study after study survey after survey up and down the eastern seaboard including one that I found in New Jersey and as far as away as the coast of the UK and Briton that shows tourism not only uneffected when turbines are more than the ten miles away and these will be even further, but in some places actually increased Block Island and Briton.

Comment Number: BOEM-2021-0024-TRANS-42021-0006-3
Organization: New Jersey Research Project
Commenter: Alyssa Campanella
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Some people have complained their property values might be impacted by these wind farms, but there is actually no statistical proof of that. Again studies show that the negative impacts on property values was statistically insignificant, it was negligible. I might argue instead that houses located on streets that flood consistently will have much more of a negative impact not only on the value of your house but on the long term quality of your life. Who wants to buy a house if they have trouble traveling in and out because the road is flooded again

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Comment Number: BOEM-2021-0024-TRANS-42021-0009-2
Organization: Cape May County Chamber of Commerce
Commenter: Vicky Clark
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Tourism in Cape May County is a $6.9 billion industry employing nearly 38,000 people through direct and indirect employment and is the backbone of the Cape May County economy.

Comment Number: BOEM-2021-0024-TRANS-42021-0012-3
Commenter: Greg Kudnik
Commenter Type: Individual

Comment Excerpt Text:

These locations support more than 25 percent of New Jersey's fishing trips. New Jersey anglers contribute $1.3 billion and 9,000 jobs to the GDP of New Jersey.

Comment Number: BOEM-2021-0024-TRANS-42021-0012-7
Commenter: Greg Kudnik
Commenter Type: Individual

Comment Excerpt Text:

Please do not destroy the small businesses in coastal communities in at not an attempt to replace with big business with large foreign executives backed by political dealings and executive orders.

Comment Number: BOEM-2021-0024-TRANS-42021-0016-4
Commenter: Chris Gasman
Commenter Type: Individual

Comment Excerpt Text:

Second, on the local economic impacts, I know the focus has been on environmental and flagging, let's find ways to do it and I am going to add onto something that others have mentioned, I would be curious

about the value add from the visual, I have heard a lot about hey how this won't detract, like how solar on residential housing often adds to the premium for the house and adds to the sale value and ability, I'd be curious how much this will help boost local businesses.

Comment Number: BOEM-2021-0024-TRANS-42021-0022-2
Organization: Chamber of Commerce, Southern New Jersey
Commenter: Hillary Shebra
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Additionally for the region that has an important tourism industry, other locations of offshore wind have proven to have benefit from it. For example, according to data from the British Tourist Authority in Briton where the Rampion Offshore Wind Farm in the United Kingdom is comprised of 116 turbines, overnight visits increased from 604,000 in 2017 to 615,000 in 2018 and then again up to 647,000 and I apologize for the dog, in 2019. A study published by the Rhode Island University confirmed that Block Island, where Block Island wind farm is located and within view of the wind farm, tourism increased the year after the wind farm was built. In addition to spending $695 million in the state, the Ocean Wind project will diversify the economy and create an enormous number of jobs for Atlantic County and area ravaged by the pandemic on the casino industry.

Comment Number: BOEM-2021-0024-TRANS-42021-0026-1
Commenter: Dwayne Waddlington
Commenter Type: Individual

Comment Excerpt Text:

This Ocean Wind project and the proposed Atlantic Shores project to follow as currently designed will have a negative effect on shore rentals and tourism.

Comment Number: BOEM-2021-0024-TRANS-42021-0026-3
Commenter: Dwayne Waddlington
Commenter Type: Individual

Comment Excerpt Text:

And for those who say oh, maybe it will increase tourism for curiosity trips, maybe for some and probably only once, do you think people will pay over and over again to take a boat ride to see the big turbines every summer. What they do pay over and over again to see every summer are our beautiful beaches, clean ocean waters and our unobstructed view of the eastern horizon. If we pick at that horizon with hundreds of turbines, up to 55 percent of our vacationers who rent at the shore might not return. That's from the University of North Carolina study. In addition, four other studies that show vacationer do not want to look at turbines and their vacation experience will be diminished if they do causing most to search elsewhere for their next vacation. According to the annual economic impact of tourism in New Jersey report by Oxford Economics, the Jersey Shore contributes about half of the overall tourism dollars in the State of New Jersey. Half, that equates to over $22 billion with a B in 2019. It is also estimated that over 500,000 jobs are sustained by tourism, so if experts in North Carolina are correct, and 55 percent of renters might not come back, that's an impact of over $12 billion annually and a job loss of almost 300,000 jobs in New Jersey, not to mention approximately $1.4 billion loss of tax revenue for the state. That's a big economic impact. Therefore, I urge BOEM to include a study on tourism and specifically shore rentals when you consider this project.

A.2.10.2. Employment and Job Creation

Comment Number: BOEM-2021-0024-DRAFT-0025-5
Commenter: Devin Pantiliano
Commenter Type: Individual

Comment Excerpt Text:

This project seems to only benefit a few companies, and long term jobs dont seem feasible for this type of energy. Maybe a few wind turbine technicians which will most likely be contracted to a company outside the United States because we do not have equipment to perform maintenance.

Comment Number: BOEM-2021-0024-DRAFT-0122-4
Organization: Monmouth-Ocean Development Council (MODC)
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

And the positive economic impact on the state will be significant, with hundreds of jobs during construction and for many years thereafter for the operation, maintenance and manufacturing of the wind farm components.

Comment Number: BOEM-2021-0024-DRAFT-0122-5
Organization: Monmouth-Ocean Development Council (MODC)
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Ocean Wind is also extending their reach into the community by way of a Trust Fund that will provide grants to small, women-owned and minority-owned businesses looking to enter the offshore wind industry. Additionally, they are working with local students to have them better understand the job opportunities the industry will have to offer for years to come.

Comment Number: BOEM-2021-0024-DRAFT-0172-1
Commenter: Tabbetha Dobbins
Commenter Type: Individual

Comment Excerpt Text:

I am very excited about the jobs that the project will bring. At a time when fossil fuel based energy generation is declining (rapidly, and sometimes without well developed plans for the workforce), I believe that OceanWind and wind energy will help. Good paying jobs and a high tech workforce is expected with the installation of the facility. Likewise, development of plans for growth of jobs (rather than decline after the construction phase) would be ideal.

Comment Number: BOEM-2021-0024-DRAFT-0230-2
Organization: Chamber of Commerce Southern New Jersey
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

another benefit of this project is the economic development it will spark for the entire southern New Jersey region. In addition to committing to spending $695 million in the state, Ocean Wind is estimated to create an enormous number of jobs in Atlantic County, an area ravaged by the pandemic's impact on the casino industry. As a result of the casinos unprecedented 108- day closure last year, Atlantic County saw the highest unemployment in the nation – a trend that will take years to reverse even when the casinos are back online.

Ocean Wind, and its planned 1,000 construction jobs slated to begin in 2023, as well as the nearly 70 full-time jobs after its operations and maintenance hub is completed, are valuable and needed employment opportunities for South Jersey residents. Ocean Wind will diversify the Atlantic County economy, one that continues to be driven by gaming and hospitality.

Another cornerstone of Ocean Wind's economic and community commitment is the Pro-Grant Trust, which will award up to $15 million in grants to small, women and minority owned businesses looking to be involved in the emerging wind industry in New Jersey.

Small, women and minority owned business remain some of the most impacted by the pandemic, so any budding industry is a new opportunity for these enterprises to get their foot in the door at the ground level – and something the Chamber is incredibly supportive of given our organizational commitment to diversity and inclusion in South Jersey's economic portfolio.

Comment Number: BOEM-2021-0024-DRAFT-0235-2
Organization: NJ State Chamber of Commerce
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

the recently announced New Jersey Wind Port is welcome news for Salem County and all of New Jersey. This initiative will bring jobs to the state and will potentially generate approximately $500 million in new economic activity annually within the State.

Comment Number: BOEM-2021-0024-DRAFT-0235-6
Organization: NJ State Chamber of Commerce
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Ocean Wind will employ local, New Jersey-based workers during construction, as well as hire full-time Operations and Maintenance staff once the project is completed. Ocean Wind is expected to create about 1,000 construction jobs per year during the construction phase and about 69 full-time jobs at its operations and maintenance hub in Atlantic City for the 25-35 years lifespan of the project.

Comment Number: BOEM-2021-0024-DRAFT-0236-1
Organization: Atlantic Cape Community College
Commenter: Dr. Barbara Gaba
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

I am pleased to offer my support for the offshore wind industry here in Southern New Jersey. 0 rsted and PSEG's Ocean Wind project would diversify the local economy beyond hospitality and tourism to provide good paying jobs for our local workforce, in addition to advancing Governor Murphy's goal of expanding the clean energy economy to reach 100 percent clean energy by 2050.

As a regional leader in workforce development, Atlantic Cape Community College is excited about the enormous economic potential the offshore wind industry brings to our region. It's not often that we get to witness the birth of an entirely new, billion-dollar industry in our country, but that's exactly what we are seeing with offshore wind. We are prepared to train the workforce of the future and we are actively developing training and certification programs to directly support the emerging offshore wind industry in Atlantic and Cape May Counties.

In the coming months and years, offshore wind has the potential to drive our region's economic recovery and create enormous opportunity for our local workforce.

Comment Number: BOEM-2021-0024-DRAFT-0239-4
Organization: Greater Toms River Chamber of Commerce
Commenter: Ralph Wolff
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

As a the largest business organization representing almost 350 businesses in Ocean County, the construction and operation of the Ocean Winds project is in-line with our mission to leverage our coastal beauty and rich history to drive a new era of economic innovation and growth. Our involvement and participation in activities that create jobs and promote the development of existing businesses is essential.

We support Ocean Wind and look forward to the economic stimulation and job creation the industry has promised to bring to communities up and down the east coast.

Comment Number: BOEM-2021-0024-DRAFT-0243-2
Commenter: James Binder
Commenter Type: Individual

Comment Excerpt Text:

In regard to the jobs that are reported to be produced by offshore wind, consider the following. Recognize that manufacture of the wind turbines is done overseas, not in the U.S. Support facilities will be required in the U.S., but mainly for the construction period only, not long term operations. Further long-term operations and maintenance will be highly automated in the future to reduce costs, thereby limiting the number of long term jobs and need for support facilities. One day in the not too distant future you will see a robot climbing and maintaining that offshore tower and turbine.

Comment Number: BOEM-2021-0024-DRAFT-0246-5
Commenter: Al Caesar
Commenter Type: Individual

Comment Excerpt Text:

Aside from the environmental impacts, economic impact from ocean wind will be significant. It is well documented that New Jersey ratepayers will incur higher electric bills as a result of this project. While significant job creation has been promised, it remains yet to be seen If this will really materialize and, if so, How many of these jobs will be filled by local New Jersey citizens? Given this is new and unproven Technology, the risks of cost overruns and delays are high

Comment Number: BOEM-2021-0024-DRAFT-0293-5
Commenter: Diane Wieland
Commenter Type: Individual

Comment Excerpt Text:

The offset of jobs is non-existent, jobs mentioned by Orsted and others are short-term and will be gone once the turbines are up and running. I was on a panel hosted by the County Chamber of Commerce and Orsted they touted the fishing and sightseeing boats that could ferry workers out to the sites offshore. Or they could conduct tours to showcase the turbines. We all know that is a ridiculous statement and cannot replace the nearly $700 million in visitor spending generated by eco or nature-based tourism in our county. People spend money to see whales, dolphins, and birds. Our sea life will be chased away from our shores by the noise and vibration from the turbines and birds killed by the blades as they spin. For centuries this has been our quality of life that will be destroyed for expensive and questionable renewable energy.

The loss of jobs in the County will be devastating, starting with the fishing industry and moving quickly to the tourism industry. More than 60% of the jobs in Cape May County are tourism jobs. Wind Turbines and support businesses will not replace those jobs.

We are not against Wind Turbines or any other form of renewable energy. We ask to keep them on land in wide-open spaces and leave the ocean for sea life and sustaining our economy. Generations of families have depended on fishing for nearly 330 years. This is a way of life for so many and no amount of wind turbines can replace the value and resources derived from the Atlantic Ocean.

Comment Number: BOEM-2021-0024-DRAFT-0294-2
Organization: Eastern Atlantic State Regional Council of Carpenters
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The offshore wind industry could create 83,000 jobs by 2035 and deliver $25 billion in annual economic input, according to a recent report. Following the health and economic disaster the country has faced with the COIVD-19 pandemic, new industries will create a need for initiatives that will bring good-paying careers with family-sustaining wages.

Comment Number: BOEM-2021-0024-DRAFT-0294-3
Organization: Eastern Atlantic State Regional Council of Carpenters
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The Ocean Wind project alone is projected to create approximately 1,000 construction jobs per year during the construction phase and about 69 full-time jobs at its operation and maintenance hub in Atlantic City for the 25- to 35- year lifespan of the project. The project will require a network of domestic suppliers and specialized marine transport vessels. In some cases, an overhaul to the current ports and onshore facilities represents millions of dollars in investment in New Jersey and thousands of local jobs. Since the Wind Port announcement, the New Jersey Economic Development Authority projects will create 1,500 permanent jobs and generate $500 million a year in economic activity. EEW announced that the Paulsboro Marine Terminal investment as a monopile manufacturing facility will create an additional 500 high-paying jobs.

Comment Number: BOEM-2021-0024-DRAFT-0294-4
Organization: Eastern Atlantic State Regional Council of Carpenters
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The commitment made by Orsted's plans for local hiring; union neutrality agreements; collective bargaining agreements; diversity, equity, and inclusion; and prevailing wage are a major factor that BOEM should consider in this decision. Local hiring of workers also extends to the use of responsible contractors that utilize accredited apprentice programs to ensure we are helping boost the economy and train the next generations of workers for the growing offshore wind industry. These are commitments that extend toward the best overall economic impact of the wind industry. It follows the ideals of the National Environmental Policy Act ("NEPA"), which was intended to ensure large-scale development projects "foster and promote the general welfare, to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans." There should be a mobilization and expansion of Union labor to maximize and ensure offshore wind jobs offer family-sustaining wages, benefits, and have workers protections, advancement and career pathways.

Comment Number: BOEM-2021-0024-DRAFT-0300-2
Commenter: Howard Marshall
Commenter Type: Individual

Comment Excerpt Text:

Also they are tough Ted as creating jobs. I dont see enough jobs to justify their cost.

Comment Number: BOEM-2021-0024-DRAFT-0331-3
Organization: Business Network for Offshore Wind
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Ocean Wind is already generating significant positive economic impacts in New Jersey, and this will continue for decades to come. The project is estimated to result in net economic benefits of $1.17 billion on a present value basis. As part of this commitment to New Jersey's long-term economic growth, Ørsted and EEW are developing a $250 million monopile manufacturing facility – the largest industrial offshore wind investment in the United States to date – at the Paulsboro Marine Terminal. Construction commenced at this site on April 19, 2021. This manufacturing facility will create more than 500 high-paying jobs at full build-out, and Ocean Wind will source its (up to) 98 monopile foundation structures from this facility. It is likely that the Ørsted/EEW site will also supply monopiles to other offshore wind projects. Together with the planned New Jersey Wind Port, Ocean Wind and the Paulsboro monopile factory are driving New Jersey's position as a leader in the U.S. offshore wind industry.

Comment Number: BOEM-2021-0024-DRAFT-0331-4
Organization: Business Network for Offshore Wind
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

New Jersey's Offshore Wind Strategic Plan estimates that the offshore wind industry will create between 6,000 and 8,000 jobs per year in New Jersey from 2028 to 2034. Cumulatively, 68,340 job years will be created from 2020 to 2035.

Comment Number: BOEM-2021-0024-DRAFT-0331-5
Organization: Business Network for Offshore Wind
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Ocean Wind has a commitment to diversity, equity, and inclusion in offshore wind. Ocean Wind's $15 million Pro-NJ Grantor Trust offers financial support for small, women-owned, and minority-owned businesses interested in entering the developing offshore wind industry. The Trust also provides funding for infrastructure resiliency improvements critical to coastal communities in Atlantic, Ocean, and Cape May Counties. The Pro-NJ Grantor Trust is committed to developing New Jersey's offshore wind industry in a sustainable and inclusive way. In this way, the Pro-NJ Grantor Trust advances New Jersey's vision for a stronger and fairer economy, and the Biden Administration's objective of ensuring that the development of offshore wind is transparent and inclusive of all stakeholders.

Comment Number: BOEM-2021-0024-DRAFT-0331-6
Organization: Business Network for Offshore Wind
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Ocean Wind has also already opened a local office in Atlantic City and is committed to establishing an Operations & Maintenance Base there once construction has completed. Finally, Ocean Wind's long-term commitment to New Jersey is also demonstrated by the fact that an affiliate of New Jersey's largest utility company (PSE&G) has taken a 25% interest in the Ocean Wind project and is lending its local expertise. Ocean Wind has also submitted a project bid into New Jersey's second offshore wind solicitation. A decision by the New Jersey Board of Public Utilities is expected during June 2021.

Comment Number: BOEM-2021-0024-DRAFT-0331-7
Organization: Business Network for Offshore Wind
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

A recent analysis concluded that the rapidly developing economic opportunity presented by the U.S. offshore wind industry is on track to exceed $100 billion for capital expenditures alone. As both New Jersey's first utility-scale offshore wind project and the state's largest renewable energy project, Ocean Wind has been a crucial stimulator of the evolution of New Jersey's offshore wind program. New Jersey is positioned to be a hub of this new, highly vauable American industry, which will generate high-paying jobs for New Jerseyans. Ocean Wind is, and will continue to be, at the leading edge of this effort.

Comment Number: BOEM-2021-0024-DRAFT-0333-3
Commenter: Orlando Candelori
Commenter Type: Individual

Comment Excerpt Text:

What about tourism? They claim to add jobs in the installation of the windmills. What happens when the installation is over. How many jobs will remain after they complete installing the windmills. Our tourism has had a job base that exists year after year. Tourist come from as far away as Canada and the Midwest, bringing much needed revenue for our state in the way of jobs and taxes.

Comment Number: BOEM-2021-0024-DRAFT-0347-10
Organization: NJ Work Environment Council
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

When done right, offshore wind power will create thousands of high-quality, family-sustaining jobs in manufacturing, construction, operations and maintenance, and in the development of port facilities and associated infrastructure. We appreciate your work to prepare a DEIS, informed by early-stakeholder input, and thorough and diligent socioeconomic and environmental review of this project, to support swift permitting of New Jersey's first large- scale offshore wind project, so that we may realize the thousands of jobs and millions of dollars in economic benefits that will be provided by the development of Ørsted's Ocean Wind.

Comment Number: BOEM-2021-0024-DRAFT-0347-2
Organization: NJ Work Environment Council
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The offshore wind industry could create 83,000 jobs by 2035 and deliver $25 billion in annual economic input according to a recent report. [Footnote 1 U.S. Offshore Wind Power Economic Impact Assessment, American Wind Energy Association, March 2020.]

Comment Number: BOEM-2021-0024-DRAFT-0347-3
Organization: NJ Work Environment Council
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The Ocean Wind project is projected to create approximately 1,000 construction jobs per year during the construction phase and about 69 full-time jobs at its operation and maintenance hub in Atlantic City for the 25-35 years lifespan of the project. The project will require a network of domestic suppliers and specialized marine transport vessels, and in some cases, an overhaul to the current ports and onshore facilities, all representing millions of dollars in investment in New Jersey and thousands of local jobs. Since the announcement of the Wind Port, which the New Jersey Economic Development Authority projects will create 1,500 permanent jobs and generate $500 million a year in economic activity, EEW announced the investment in the Paulsboro marine Terminal to be used as a monopile manufacturing facility which will create an additional 500 high-paying jobs.

Comment Number: BOEM-2021-0024-DRAFT-0347-7
Organization: NJ Work Environment Council
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

We can and we must create a high-road offshore wind industry that maximizes domestic jobs content, delivers community benefits, expands manufacturing, and develops a robust local supply chain all with an attention to environmental justice impacts and improving access to low-income and Black, Brown, Indigenous, People of Color ("BIPOC"). As the National Environmental Policy Act ("NEPA") is intended to ensure large-scale development projects "foster and promote the general welfare, to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans," union labor must be mobilized and expanded to ensure offshore wind jobs pay family-sustaining wages, benefits, and have workers protections, have advancement and career pathways, and maximize job creation.

Comment Number: BOEM-2021-0024-DRAFT-0347-9
Organization: NJ Work Environment Council
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

To achieve the Biden Administration's vision for maximizing job creation and comply with NEPA's requirement that federal projects "fulfill the social, economic, and other requirements of present and future generations of Americans," the DEIS should analyze socioeconomic impacts associated with Ørsted's plans for local hiring; union neutrality agreements; collective bargaining agreements; diversity, equity, and inclusion; and prevailing wage. The DEIS should also evaluate the programs necessary for training and domestic workforce with an emphasis on health, safety, and alleviation of historic disparities for environmental justice and BIPOC communities. Related to these, plans to support a low-carbon domestic supply chain should be required and evaluated, both to maximize U.S. employment and to avoid, minimize and mitigate impacts to environmental justice and BIPOC communities have historically faced the worst impacts from industrialization and energy production.

Comment Number: BOEM-2021-0024-DRAFT-0353-8
Organization: New Jersey Resource Project
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

We want good jobs for New Jerseyans we want written confirmation that the job projections we are seeing are going to go to South Jersey and shore communities.

Comment Number: BOEM-2021-0024-DRAFT-0363-2
Organization: Jersey Renews
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

This is an important step forward not just for New Jersey, but for the industry national. The offshore wind industry could create 83,000 jobs by 2035 and deliver $25 billion in annual economic input according to a recent report.

Offshore wind represents a clear win for both NJ workers and our environment because the massive wind turbines can create a supply chain of union labor through the construction, delivery, installation, interconnection, and long-term maintenance of these units.

Comment Number: BOEM-2021-0024-DRAFT-0363-4
Organization: Jersey Renews
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The Ocean Wind project is projected to create approximately 1,000 construction jobs per year during the construction phase and about 69 full-time jobs at its operation and maintenance hub in Atlantic City for the 25-35 years lifespan of the project. The project will require a network of domestic suppliers and specialized marine transport vessels, and in some cases, an overhaul to the current ports and onshore facilities, all representing millions of dollars in investment in New Jersey and thousands of local jobs. Since the announcement of the Wind Port, which the New Jersey Economic Development Authority projects will create 1,500 permanent jobs and generate $500 million a year in economic activity, EEW announced the investment in the Paulsboro marine Terminal to be used as a monopile manufacturing facility which will create an additional 500 high-paying jobs.

The National Environmental Policy Act ("NEPA") is intended to ensure large-scale development projects "create... conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans." We can create a high-road offshore wind industry that maximizes the creation of quality, jobs, delivers community benefits, expands domestic manufacturing, and develops a robust local supply chain. Offshore wind jobs should be union, pay family-sustaining wages, have strong benefits and worker protections, and provide opportunities for career advancement.

Offshore wind energy done right could serve as an engine to help New Jersey rebuild from the aftermath of COVID-19. We must prioritize training a local workforce and specifically ensure that the jobs, business and economic investment opportunities brought by this new industry reach the communities hardest hit by the pandemic-- including low-income, Black, Brown, Indigenous, and People of Color ("BIPOC"), and immigrant communities.

Comment Number: BOEM-2021-0024-DRAFT-0371-4
Commenter: Martha Wright
Commenter Type: Individual

Comment Excerpt Text:

The net result of the project is the creation of approximately 69 jobs, once construction is complete. The seafood industry offers a far greater number of ongoing jobs, with employment diversity that spans all educational and cultural backgrounds.

Comment Number: BOEM-2021-0024-DRAFT-0465-2
Commenter: City of Ventnor City
Commenter Type: Local Agency

Comment Excerpt Text:

In terms of economic benefits, the bigger, overall picture is that Ocean Wind will invest in New Jersey. In fact, Ocean Wind has already committed to spending $695 million here, making our state a key player in the burgeoning offshore wind industry.

From a local, South Jersey perspective, 1,000 construction jobs will be created during the three¬year construction phase of Ocean Wind. Those jobs will be filled by local, New Jersey-based construction workers. Once completed, Ocean Wind will hire about 69 full-time jobs at its Operations and Maintenance hub in Atlantic City for the 25-35 years lifespan of the project.

Comment Number: BOEM-2021-0024-TRANS-41321-0005-2
Organization: Laborers International Union of North America, LIUNA
Commenter: Ciro Scalera
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Ocean wind represents the first part of a new clean energy industry in our state and one that will be built by Union workers.

Comment Number: BOEM-2021-0024-TRANS-41321-0005-3
Organization: Laborers International Union of North America, LIUNA
Commenter: Ciro Scalera
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Orsted has begun working closely with organized labor in New Jersey to initiate the development of plans for building this important project and insuring highly trained Union men and women who will be part of the onshore and offshore work needed to construct the wind farm.

Comment Number: BOEM-2021-0024-TRANS-41321-0007-2
Organization: Chamber of Commerce Southern New Jersey
Commenter: Christina Renna
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

when deliberating the numerous benefits of this project, I would be remiss if my comments did not focus on the project being a major economic driver for the entire South Jersey region. As planned, ocean wind is estimated to create an enormous amount of jobs in Atlantic County, an area ravaged by unemployment due to the pandemic on the casino industry. This is a trend that will take years to reverse even when casinos are fully back online. Ocean wind and its planned 1,000 construction jobs slated to begin in 2023 as well as the nearly 70 full-time jobs after its operation and maintenance hub are completed are valuable and needed employment opportunities for South Jersey residents. Additionally and critically important to the continued success of this area, it is ocean wind's succeeding and diversifying the Atlantic County

economy, when it continues to be driven by gaming and hospitality and this is something that is a big focus for us all in South Jersey. Another cornerstone of ocean wind's economic and community commitment is the program trust that will award up to $15 million in grants to small women and minority owned business looking to be involved in the emerging wind industry in New Jersey. Small women and minority owned businesses were some of the worst impacted by the pandemic so any budding industry is a new opportunity for these enterprises to get their foot in the door at the ground level and something the Chamber is incredibly supportive of given our organizational commitment to diversity and inclusion in South Jersey's economic portfolio

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Comment Number: BOEM-2021-0024-TRANS-41321-0009-2
Organization: Special Initiative on Offshore Wind
Commenter: Kris Ohleth
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

From an economic perspective, the cost of wind has fallen dramatically where we have seen this technology and scale bring down cost more than 60 percent over the past five years alone and the second part of that E of economics is creating a once in a generation opportunity to bring a new industry to our nation and our coast, indeed 83,000 jobs would be created by building out the offshore wind projects along the east coast.

Comment Number: BOEM-2021-0024-TRANS-41321-0012-1
Organization: Atlantic County Economic Alliance
Commenter: Max Slusher
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

This particular project, the offshore wind project with this one field will create a thousand construction jobs that will be maintained for three years and then 100 O&M jobs after that for 25 years. These are high paying living wage jobs. It's absolutely imperative that we diversify this local economy and bring that type of employment in here to cement our local families and keep us from backsliding into the economic dislocations that we have had over the last decade and actually last several generations. I also believe, as an economist, that there will be some considerable spinoff that goes above and beyond the O&M phase, we have an underutilized airport, we have some underutilized ports along the coast of New Jersey, especially up in Salem and these will be utilized to the economic advantage to not only the local citizen rate but state in the northeast United States as a whole.

Comment Number: BOEM-2021-0024-TRANS-41321-0013-1
Organization: Southern New Jersey Development Council
Commenter: Jane Asselta
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Ocean Wind will employ local New Jersey based workers during construction as well as hire full-time operation maintenance staff once the project is completed. It's intended supply chain needs such as surveying, design engineering, foundation, turbine and substation construction and cable installation will require contracting services and purchasing products from hundreds of local companies. We envision a whole new workforce of construction maintenance jobs, work for architects and engineers of all types, computer and telecommunications, transportation, legal, accounting, banking, financial services, a list of services and products and materials needed for contracting is in the hundreds.

Comment Number: BOEM-2021-0024-TRANS-41321-0019-4
Commenter: Mike Fischer
Commenter Type: Individual

Comment Excerpt Text:

There is an offset that I also want to make sure we look at those great Union -- great paying Union jobs, I know a lot of those Union people who actually have boats on the shore and they work really hard to be able to enjoy the shore and so it's a combination of both and I just wish we would be a little more balanced in how we address the situations both economic and environmental and I just think we are moving too fast and I would just like to see more conclusive definitive research with conclusions that will give us as good an idea as we can what the impact will be when the wind farms are put in.

Comment Number: BOEM-2021-0024-TRANS-41321-0020-5
Commenter: Suzanne Hornik
Commenter Type: Individual

Comment Excerpt Text:

Orsted has told me repeatedly as Kris Ohleth when she was part of Orsted, she still is, but in a different job, she spoke as though she wasn't but she is part of Orsted, she told me in the last public meeting so it is a public record that there would be for Atlantic City 59 jobs but nine of them would be custodial and the rest would be highly specialized jobs that require 18 months to 24 months training in Denmark.

Comment Number: BOEM-2021-0024-TRANS-41521-0011-1
Organization: New Jersey Alliance for Action
Commenter: William Healy
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

As other speakers have spoken to the jobs that will result from this, this is an important cog in our state's energy future. This project is going to represent the trans -- the start to the transition that quite frankly this state needs to make in transitioning its energy mix. The way our energy is delivered 20 years from now is going to be very very different from the way energy is delivered today. Wind energy is the critical part of our new energy infrastructure the New Jersey Alliance for Action would hardily endorse this project

Comment Number: BOEM-2021-0024-TRANS-42021-0003-1
Organization: New Jersey Work Environmental Council
Commenter: Debra Coyle McFadden
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

We are, you know, truly excited that the offshore wind industry is coming to New Jersey and just see the economic opportunity that it can bring. Certainly it has to be done in an environmentally responsible way and if there are impacts, they need to be mitigated as best as they can be. But we can't lose sight of what offshore wind can bring to New Jersey. You know, we have read studies and this is up and down the coast, not just New Jersey, but it could create up to 83,000 jobs, by 2035 and deliver $25 billion in annual economic input. So this is a real opportunity for us to move forward on something that you have referenced during your presentation of when OWEDA (ph) was signed and we have been stalling on bringing offshore wind to New Jersey and we can't allow that to happen anymore.

Comment Number: BOEM-2021-0024-TRANS-42021-0003-3
Organization: New Jersey Work Environmental Council
Commenter: Debra Coyle McFadden

Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

This is a spider effect so, you know, meaning that, you know, we also have the wind port that's being constructed and Lower Alloways Creek in Salem County to support the offshore wind industry, again not just here in New Jersey but also the region. And if we move forward in a responsible manner to the environment and to labor, this could be a real boom for our economy. It's projected the wind port alone could bring $500 million in economic activity annually. So just wanted to go on record as being supportive of this project and other projects as long again as they are done in an economically, excuse me, environmentally responsible way and also to make sure that as we are employing people in this industry that there is equitable access to jobs and that these are good paying family sustaining jobs. We don't need an industry to come in here to create low wage jobs in New Jersey.

Comment Number: BOEM-2021-0024-TRANS-42021-0006-4
Organization: New Jersey Research Project
Commenter: Alyssa Campanella
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

And let's not remember that there will be new good paying jobs and that wages from those jobs are going to be spent in the communities. I'll end where I began quickly, the cost of doing nothing is far greater to our towns, our property, our families and our long term quality of lives.

Comment Number: BOEM-2021-0024-TRANS-42021-0007-3
Organization: New Jersey State Chamber of Commerce
Commenter: Michael Egenton
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Finally and always important to my association, Ocean Wind will employ local New Jersey base workers during construction as well as hire full-time operations and maintenance staff once the project is completed. The State Chamber supports offshore wind in New Jersey and the building of a new clean energy that will spur significant economic growth in the Garden State.

Comment Number: BOEM-2021-0024-TRANS-42021-0008-3
Organization: Urban Coast Institute at Monmouth University
Commenter: Tony McDonald
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

And finally, I do want to expand on the equity point, I do think within the EIS, with the environmental impact statement, a broader consideration of equity impacts not only for as was mentioned earlier, equitable job development and good job development, but also the impacts on communities like fishing communities and others.

Comment Number: BOEM-2021-0024-TRANS-42021-0009-4
Organization: Cape May County Chamber of Commerce
Commenter: Vicky Clark
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Offshore wind brings an opportunity to diversify our local economy with a projected 1,000 construction jobs and 69 permanent positions once the construction phase is complete powering the electric grid with 1,100 megawatts of power for New Jersey homes and businesses which promises power for approximately 500,000 New Jersey homes reducing the state's carbon footprint. The township of Upper (ph) in Cape May County looks forward to the power generated from Ocean Wind farm connecting to the decommissioned BL England generating station bringing additional jobs and tax revenue to the township. Ocean Wind has offered grant opportunities to minority companies in Cape May, Atlantic and Ocean Counties to do business with them, and businesses in the marine industry are being recruited to enter this industry. All promising things for our economy.

Comment Number: BOEM-2021-0024-TRANS-42021-0015-1
Organization: New Jersey Work Environmental Council
Commenter: Bernice Tompkins
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Federal projections indicate that offshore wind development in the New York bite region alone which includes New Jersey is projected to create 25,000 development and construction jobs between 2022 and 2030, and an additional 7,000 jobs in community supported by this development as well as up to 4,000 operations and maintenance jobs annually. As this industry grows and with the right policies in place, the region could experience manufacturing booms and could bring with that good and long term jobs. So we need certain elements to ensure that we maximize the creation of good jobs including as I mentioned before the development of a domestic supply chain, provisions for local hiring, collective bargaining agreements, that includes skills training for local people and commitments to pay prevailing wages in order to ensure the most, the greatest possible benefit to workers and the communities. So we want to stress that these actions be taken to ensure the highest quality possible jobs and the greatest benefit possible to communities and of course to ensure the most environmentally responsible development possible but just really want to emphasize that this is a tremendous opportunity as Deb was saying earlier to put people back to work following an economic downturn and to reinvest and rebuild communities in the wake of Covid 19 and we want to ensure that we make the most of it and are grateful for the significant investments in wind that New Jersey is making.

Comment Number: BOEM-2021-0024-TRANS-42021-0017-2
Commenter: Brenda Briton
Commenter Type: Individual

Comment Excerpt Text:

They understand the economic impact with jobs, the need for new jobs and higher paying jobs, the property values increasing and the reduction in waste and hazardous materials and, you know, if we are going to agree on the earth warming and those type of things, they need to understand what that impact is going to be directly to them.

Comment Number: BOEM-2021-0024-TRANS-42021-0019-3
Commenter: Rick Birch
Commenter Type: Individual

Comment Excerpt Text:

The unemployment rate here in the county, in the winter time is around 14, 15 percent, but in the summer, it goes down to five percent, so the county generates well in excess of $500 million in sales tax and local taxes annually. We are 20th out of 21 in population and we get treated that way politically yet we bring in

ten percent of the statewide money on these taxes. And to quote our county's website, "nearly every sector of Cape May County's economy is dependent on the tourist season. Cape May County given its low capita income and its utter dependence on tourism stand in a uniquely vulnerable economic position."

Comment Number: BOEM-2021-0024-TRANS-42021-0021-4
Organization: New Jersey Alliance for Action
Commenter: Christian Hartman
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Last but not least, the investment into offshore wind energy is creating a brand new industry here in New Jersey. It is going to bring jobs, economic development, new facilities like the wind port, an entire supply chain and more infrastructure upgrades in the state which improve our quality of life here in New Jersey.

Comment Number: BOEM-2021-0024-TRANS-42021-0029-1
Commenter: Allison Arne
Commenter Type: Individual

Comment Excerpt Text:

So on top of that, it's amazing to see the job opportunities that are coming along with offshore wind. Because in South Jersey, we have had generation after generation, we can't afford to live here and stay here because the economic opportunities aren't just as readily available as it is across the bridge in Pennsylvania and going further up north.

Comment Number: BOEM-2021-0024-TRANS-42021-0030-2
Organization: Business Network for Offshore Wind
Commenter: Brandon Burke
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Responsibly developed U.S. offshore wind projects present a once in generation opportunity for Americans. New Jersey has taken a calculated strategic approach and successfully positioned itself not to only to capitalize upon but guide the development of this cutting edge industry. Just yesterday Ocean Wind and EEW broke ground at the monopile manufacturing facility at the Port of Paulsboro, a $250 million investment going to be completed subject to a project labor agreement with the South Jersey Building Labor Trades Council which means that hundreds of high paying jobs that have been created will be filled by local New Jersey Union trades men and women. Additionally, EEW has contracted more than 30 New Jersey companies in support of the design permitting site work and concrete at the Paulsboro facility. So to put it quite simply, it is completely untrue to say the economic benefits of offshore wind are only going to foreign companies. Real, everyday New Jerseyans are already benefitting everyday from the offshore wind industry.

Comment Number: BOEM-2021-0024-TRANS-42021-0031-1
Organization: Greater Atlantic City Chamber
Commenter: Michael Chate
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

While doing so, Ocean Wind will accelerate job growth by employing local New Jersey based workers during construction as well as hire full-time operations and maintenance staff once the project is completed. The project is expected to create about 1,000 construction jobs per year during the construction phase and about 69 full-time jobs at its operations and maintenance hub in Atlantic City for

the 25 to 35 year life span of the project. Ocean Wind will help diversify the economy that has mostly been dependent on casino and hospitality industries.

A.2.10.3. Other

Comment Number: BOEM-2021-0024-DRAFT-0004-1
Commenter: Edward Gorkes
Commenter Type: Individual

Comment Excerpt Text:

The wind farm is clearly visible from the shore line. It will be a very unattractive site on the shore line and potentially hurt property values along shore communities. I would be adamantly opposed to this proposition, regardless of the clean energy benefits.

Comment Number: BOEM-2021-0024-DRAFT-0008-9
Commenter: Robin McConekey
Commenter Type: Individual

Comment Excerpt Text:

Financial Impact

* Electric rates will increase in NJ in order to absorb the cost of the project, which is between $2.106 billion to $4.137 billion

* Unproven number of permanent local jobs

* Turbines will operate at a maximum of 59% efficiency

* The NJ grid is currently incapable of handling a new flow of energy. Without having both short term and long duration storage solutions (technology isn't there yet) as well as an updated grid the development of offshore wind farms faces major transmission issues. The development's cost will be a huge burden to ratepayers for the next 20+ years. Right now the return on investment is at this point very much unknown

Comment Number: BOEM-2021-0024-DRAFT-0025-1
Commenter: Devin Pantiliano
Commenter Type: Individual

Comment Excerpt Text:

I have seen reports from Denmark and Germany of electricity prices increasing to the point that thousands of people can not afford energy bills. The term energy poverty is now popular term used.

Comment Number: BOEM-2021-0024-DRAFT-0072-2
Commenter: Susan Schwartz
Commenter Type: Individual

Comment Excerpt Text:

Where is the analysis that simply lays out all of the savings? The little that Ive read is rates will actually go up. If that is the case why are we not building on abandoned farmland?

Comment Number: BOEM-2021-0024-DRAFT-0081-3
Commenter: Marie Donlevie
Commenter Type: Individual

Comment Excerpt Text:

There is no proven benefit to the energy consumer. We will pay more for this form of energy, so what is the point?

Comment Number: BOEM-2021-0024-DRAFT-0082-2
Commenter: William O'Neill
Commenter Type: Individual

Comment Excerpt Text:

Everything I've read about the concerns of barrier island opposition to the wind turbines are wrong and even ludicrous. How it will spoil their view. They are only afraid of what it might do to their property values which at this time are already astronomical.

Comment Number: BOEM-2021-0024-DRAFT-0083-1
Commenter: Thomas McGlaughlin
Commenter Type: Individual

Comment Excerpt Text:

The NIMBY contingent should look at the Greater Good. Ive seen the wind farm off the coast of Newport Rhode Island and its a barely visible, and as to concerns about property values, the homes in Newport and environs are appreciating nicely.

Comment Number: BOEM-2021-0024-DRAFT-0084-4
Commenter: Greg Noll
Commenter Type: Individual

Comment Excerpt Text:

There is also the problem of increased energy bills.

Comment Number: BOEM-2021-0024-DRAFT-0088-2
Commenter: Nancy Rosman
Commenter Type: Individual

Comment Excerpt Text:

I am 100% in favor of a wind farm off the coast of New Jersey, provided it does NOT increase the price of electricity to customers.

Comment Number: BOEM-2021-0024-DRAFT-0090-8
Commenter: Louise Halprin
Commenter Type: Individual

Comment Excerpt Text:

It's not likely that tenants will want to pay the higher rental amount (to be on the beach) if their view is wind turbines. This will depreciate our home values. That will also greatly affect the summer and shoulder season income for business owners in the city—like restaurants, clothing stores, etc. Many shop owners only make their income over a 3.5 month period.

Comment Number: BOEM-2021-0024-DRAFT-0092-3
Commenter: William Shillingford
Commenter Type: Individual

Comment Excerpt Text:

YOUR electrical monthly cost will increase by 20-25% and maybe more before it is all done

Comment Number: BOEM-2021-0024-DRAFT-0093-2
Commenter: Thomas Duffy
Commenter Type: Individual

Comment Excerpt Text:

They are not an economic source of energy being extravagant compared to other more reliable sources.

Comment Number: BOEM-2021-0024-DRAFT-0094-2
Commenter: Eric Ediger
Commenter Type: Individual

Comment Excerpt Text:

the US's power grid infrastructure hardly encourages adoption of alternative power sources as there aren't any tangible short-term benefits such as a comprehensive buy-back program (solar) or even a marked improvement in the actual cost of delivery to local residents.

Comment Number: BOEM-2021-0024-DRAFT-0112-20
Commenter: Robert and Joann Zuczek
Commenter Type: Individual

Comment Excerpt Text:

Offshore wind is not cost-effective, and the forecasts of rapidly declining costs through increasing economies of scale are unrealistic. Absent continued subsidies-such as state mandates for offshore generation and renewable energy credits, which force electric utilities to sign long=term agreements with offshore wind developers at above-market prices-it is unlikely that that any offshore wind will lower electric generations costs. These subsidies, along with the need for additional transmission infrastructure and backup sources of electricity, will increase the cost of electricity for consumers and reduce economic growth.

Comment Number: BOEM-2021-0024-DRAFT-0112-21
Commenter: Robert and Joann Zuczek
Commenter Type: Individual

Comment Excerpt Text:

The actual costs of the offshore wind project borne by electric ratepayers and taxpayers are likely to be greater than advertised. Experience with European OWF's over the past decade demonstrate that the performance of OWF's degrades rapidly-on average, 4.5% per year. As output declines and maintenance costs increase, project developers will have growing economic incentive to abandon their projects before the end of their contracts to supply power. In contrast to the strict requirements for nuclear plants, it is unclear whether offshore wind project owners will be required to set aside sufficient funds to decommission their facilities. This will likely mean that electricity ratepayers and state taxpayers will pay to decommission offshore wind turbines or pay higher prices to keep projects operating.

Comment Number: BOEM-2021-0024-DRAFT-0112-23
Commenter: Robert and Joann Zuczek
Commenter Type: Individual

Comment Excerpt Text:

The justification of subsidies for offshore wind based on increase economic growth, new industries, and state job creation is an appeal to "free-lunch" economics. The subsidies will benefit the well connected few while imposing economic costs on consumers and businesses at large.

Comment Number: BOEM-2021-0024-DRAFT-0113-10
Commenter: Meaghan Zanfardino
Commenter Type: Individual

Comment Excerpt Text:

Electric rates will increase in NJ in order to absorb the cost of the project, which is between $2.106 billion to $4.137 billion with an unproven number of permanent local jobs.

Comment Number: BOEM-2021-0024-DRAFT-0113-13
Commenter: Meaghan Zanfardino
Commenter Type: Individual

Comment Excerpt Text:

The development's cost will be a huge burden to ratepayers for the next 20+ years. Right now the return on investment is at this point very much unknown.

Comment Number: BOEM-2021-0024-DRAFT-0122-6
Organization: Monmouth-Ocean Development Council (MODC)
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Finally, the wind farm will help to diversify the Atlantic County economy, which has relied mostly on the casinos and the hospitality industry for too long. The Ocean Wind project appears to be a potential boon to the region and the state. In that regard, we hope you will give Ørsted your full consideration for this valuable energy and economic development project.

Comment Number: BOEM-2021-0024-DRAFT-0124-3
Commenter: Patrick Nicastro
Commenter Type: Individual

Comment Excerpt Text:

In addition, Im against the energy cost increases to local residents to pay for the equipment and installation of said equipment.

Comment Number: BOEM-2021-0024-DRAFT-0125-3
Commenter: Mitch Bernstein
Commenter Type: Individual

Comment Excerpt Text:

during construction, what has been estimated - during 'season' the negative economic impact to be during the height of construction? Please don't say 'nothing' or negligible' because we're not stupid

This is a major infrastructure project that will require major construction, logistics, and operational project management issues.

Comment Number: BOEM-2021-0024-DRAFT-0134-6
Commenter: Kate Hayden

Commenter Type: Individual

Comment Excerpt Text:

Furthermore, wind energy is extremely expensive- more expensive than any other form of energy. New Jersey residents will need to pay an increased energy rate to pay for this project.

Comment Number: BOEM-2021-0024-DRAFT-0142-1
Commenter: Gary Hymer
Commenter Type: Individual

Comment Excerpt Text:

I would like to see the cost versus return projection in dollars and in the environmental "savings". Without Fiscal responsibility based on good intentions don't equate to a prudent expense if Taxpayer dollars.

I would also like see the plan for disposal of the units when they're life span has expired. If they get put in a landfill then that is unacceptable.

Comment Number: BOEM-2021-0024-DRAFT-0146-3
Commenter: Angelo Lovallo
Commenter Type: Individual

Comment Excerpt Text:

Local municipalities owning wind turbines accounts for less then 0.5% of wind assets. Most energy from wind developments is dumped into the electrical grid. When a renewable energy source puts one megawatt-hour on the grid, it writes itself a certificate of credit. These Renewable Energy Credits are often purchased by states that have renewable energy mandates or companies that receive tax credits for purchasing the equivalent number of RECs needed to offset the carbon footprint of energy consumed. The actual energy being produced in Iowa may not be used in Florida, but its energy credits are.

The value factor of wind energy has been shown to decrease by 40 percent as the market share reaches 30 percent (Hirth). In Iowa, electricity prices rose 21 percent while the electricity market share from wind grew from 14 to 37 percent between 2009 and 2017.

Tax Increment Finance revenue that counties can implement on wind turbines has to be paid back with interest. Is it possible to have too much TIF debt? Worth County had the third highest debt-to-value ratio of Iowa counties in 2018.

Common sense and more than one study show a decline in residential property values within two miles of a wind turbine. Up to a 45 percent market value decline has been reported with some properties deemed uninhabitable and the wind companies being required to buy them out.

Comment Number: BOEM-2021-0024-DRAFT-0154-1
Commenter: Laurie Cox
Commenter Type: Individual

Comment Excerpt Text:

Hoping the BOEM will change course regarding this project partially because of the impact it will have on the economy. Having wind turbines like a picket fence on the horizon will be ugly, and this will have a bad impact for house values, the views from residents on the island and affect the income of rentals on the Jersey Shore which will effect the tax revenue of the state.

NJ visitors spent in 2019 was 46.4 Billion, amounting to more than 5 Billion in taxes to NJ and half a million jobs its the 6th largest employer in the state (Source: NJ Economic impact of Tourism in NJ 2019) with lodging being the #1 revenue sector.

The Jersey Shore contributes 22.3 Billion to the overall tourism economy or about half. If the North Carolina study is correct (North Carolina State University Study, 2017), that 55% of shore vacationers would not return, that would equal a 12.3 Billion dollar ANNUAL loss in tourism revenue and a 1.4 Billion dollar loss of annual tax revenue for the state of New Jersey! This is unacceptable.

Comment Number: BOEM-2021-0024-DRAFT-0196-2
Commenter: Lisa Kazunas
Commenter Type: Individual

Comment Excerpt Text:

Another aspect of the project is the monumental cost to the tax payers, as well as, the increase in the monthly electric bill that the people of NJ will experience in perpetuity. In fact, cost of the windfarm project is significantly more than other clean energy producing options. It has also been proven that wind energy is not always reliable. What happens when there is no wind? Or the turbines freeze up like we saw happen this winter in Texas? Where does NJ get its electric power from when the windfarm is not running due to inconsistent weather?

Comment Number: BOEM-2021-0024-DRAFT-0208-17
Organization: Long Beach Island, NJ Coalition for Wind Without Impact
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The EIS needs to present the increased electric cost from offshore wind to residents and businesses, and the longer-term economic losses that will occur from those higher electric rates. Those cost analyses should also include the taxpayer subsidies required to make these projects economically viable. They should be done on a cumulative basis including all projects that serve the same electric market.

Comment Number: BOEM-2021-0024-DRAFT-0220-13
Commenter: Joann Zuczek
Commenter Type: Individual

Comment Excerpt Text:

Offshore wind is not cost-effective, and the forecasts of rapidly declining costs through increasing economies of scale are unrealistic. Absent continued subsidies-such as state mandates for offshore generation and renewable energy credits, which force electric utilities to sign long-term agreements with offshore wind developers at above-market prices-it is unlikely that that any offshore wind will lower electric generations costs. These subsidies, along with the need for additional transmission infrastructure and backup sources of electricity, will increase the cost of electricity for consumers and reduce economic growth.

14. The actual costs of the offshore wind project borne by electric ratepayers and taxpayers are likely to be greater than advertised. Experience with European OWF's over the past decade demonstrate that the performance of OWF's degrades rapidly-on average, 4.5% per year. As output declines and maintenance costs increase, project developers will have growing economic incentive to abandon their projects before the end of their contracts to supply power. In contrast to the strict requirements for nuclear plants, it is unclear whether offshore wind project owners will be required to set aside sufficient funds to decommission their facilities. This will likely mean that electricity ratepayers and state taxpayers will pay to decommission offshore wind turbines or pay higher prices to keep projects operating.

Comment Number: BOEM-2021-0024-DRAFT-0220-15
Commenter: Joann Zuczek
Commenter Type: Individual

Comment Excerpt Text:

The justification of subsidies for offshore wind based on increase economic growth, new industries, and state job creation is an appeal to "free-lunch" economics. The subsidies will benefit the well-connected few while imposing economic costs on consumes and businesses at large.

Therefore, the totality of the negative impacts of the proposed construction of the Ocean Winds, LLC offshore wind farm, as stated above, far outweigh the perceived beneficial impacts of achieving state renewable energy goals, increased job opportunities, improving air quality and reduced carbon emissions.

Comment Number: BOEM-2021-0024-DRAFT-0227-1
Commenter: Gerald Raab
Commenter Type: Individual

Comment Excerpt Text:

I oppose the building of wind turbines in the ocean off of New Jersey. The mere fact that they need subsidies will only raise the cost of already expensive electric. And as usual the people most hurt by this are the low income bracket.

Comment Number: BOEM-2021-0024-DRAFT-0239-2
Organization: Greater Toms River Chamber of Commerce
Commenter: Ralph Wolff
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

New Jersey's ambitious goal of 7,500 MW of off shore wind energy by 2023 can only be met if the Ocean Winds project receives full support and approval as it will generate more than 1,100 MW of power to homes and businesses in New Jersey.

Comment Number: BOEM-2021-0024-DRAFT-0243-1
Commenter: James Binder
Commenter Type: Individual

Comment Excerpt Text:

We should not risk such a mammoth investment in offshore wind energy without further understanding its consequences. In 2006 a Blue Ribbon Panel for the Governor of NJ studied offshore wind energy and compared it to energy production from fossil, nuclear and renewable fuels as a means of meeting the State's long term energy needs. It's final report recommended to the NJ BPU that it proceed with a "limited test project, not to exceed 350MW to obtain practical knowledge of benefits and impacts resulting from offshore wind turbine facilities". To date, that test project has not been constructed, nor, for that matter, has any offshore wind project been constructed in NJ. Why is President Biden moving with such massive projects, so quickly, before offshore wind can be tested at a smaller scale. Why is Governor Murphy pushing so quickly for offshore wind as the corner stone of his renewable energy plan? It is untested in New Jersey. Look at what happened in Texas this past winter when the wind turbines froze.

Comment Number: BOEM-2021-0024-DRAFT-0243-4
Commenter: James Binder
Commenter Type: Individual

Comment Excerpt Text:

As recently reported in an opinion piece in the New York Post on April 9, 2021, the cost of offshore wind power is very high, even after subsidized by the government. It stated that the U.S. Energy Information Administration in a report published in February 2021 stated that the cost of offshore wind power (after government subsidy) is more than three times as high as for natural gas. The cost for offshore wind was reported at $121 per MWhr as compared to $37 per MWhr for natural gas. All of us who use electricity will pay that increased cost. Should not BOEM and the NJ BPU be taking a hard look at these cost implications? What happens if the current Biden bill for infrastructure does not pass Congress? How will the power grid transmission needs for redirecting the flow of electricity in New Jersey from West to East be paid for?

Comment Number: BOEM-2021-0024-DRAFT-0251-3
Commenter: Paul E Towhey Sr
Commenter Type: Individual

Comment Excerpt Text:

The cost is exorbitant and will increase utility costs for residents and businesses

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Comment Number: BOEM-2021-0024-DRAFT-0253-4
Commenter: Susan Shirk
Commenter Type: Individual

Comment Excerpt Text:

third, as usual, south jersey will see no benefit to this intrusion by north jersey. our already extremely high electric rates will never go down. if governor murphy thinks this is such a great idea, why is he dumping it off of the south jersey shore? i guess his friends in north jersey don't want any more "sight pollution?"

Comment Number: BOEM-2021-0024-DRAFT-0256-4
Commenter: Capt. Paul Eidman
Commenter Type: Individual

Comment Excerpt Text:

Overall, Offshore wind power leads to an improved and sustainable coastal economy.

Comment Number: BOEM-2021-0024-DRAFT-0264-5
Commenter: Leslie Houston
Commenter Type: Individual

Comment Excerpt Text:

What are the onshore impacts to offshore wind energy in terms of infrastructure needs, environmental impacts and communities?

Comment Number: BOEM-2021-0024-DRAFT-0279-3
Commenter: Victor Gano
Commenter Type: Individual

Comment Excerpt Text:

Orsted is a billion dollar industry and they want to exploit our natural resources at our long term expense for their economic gain.

Comment Number: BOEM-2021-0024-DRAFT-0281-1
Commenter: Jorge Constantino
Commenter Type: Individual

Comment Excerpt Text:

1. Will there be a charge to our electric bill to subsidize the project?

2. If there is a charge, why doesn't Orsted reduce the charges to the effected shore communities and Upper Township to help get their support for the project?

Comment Number: BOEM-2021-0024-DRAFT-0282-6
Commenter: James Fritsch
Commenter Type: Individual

Comment Excerpt Text:

While Orsted may be fronting the money, with the BPU's tacit approval, this project will be shouldered by the utility consumers in NJ as PSEG will be acquiring a 25% stake in Ocean Wind and will then pass along the expenses of owning and operating to the utility users. Historically, these renewable energy efforts have caused utility prices to rise, not fall. An example is in Texas, the epicenter of fossil fuel usage, where electricity costs were up 27% in 2017, and were only held in check by the significant reduction in the cost of natural gas at the time (Forbes.com, 4/25/2018).

Comment Number: BOEM-2021-0024-DRAFT-0284-2
Commenter: Denise Kubaska
Commenter Type: Individual

Comment Excerpt Text:

2. Cost/Benefit Analysis

a. The cost of the initial and ongoing ecosystem analysis must be figured into the estimated and ongoing costs of the entire project.

b. These analyses must be based not only on the projected expenses of construction and maintenance but also on the environmental costs of implementing this project compared to alternatives.

c. Alternatives must include projections of consequences of no other climate change mitigation measures as well as reasonable alternative mitigations that could be taken instead of or in addition to offshore wind turbine construction.

d. It should include impacts of projections of energy use based on current use as well as possible future use.

e. It should include cost of deconstruction, environmental remediation, and disposal/recycling of materials should that become necessary.

Comment Number: BOEM-2021-0024-DRAFT-0285-5
Commenter: Victor Gano
Commenter Type: Individual

Comment Excerpt Text:

Orsted is lying and not being transparent. I live in Atlantic County New Jersey. The County that I live in has a over capacitated electrical grid. If Orsted wants to help New Jersey why don't they help New Jersey upgrade our electrical grid systems in Counties like Atlantic County New Jersey? Orsted is hiring people from organizations such as the NJ Audobon Society to mask their greety intentions to exploit our natural

resources for their monetary gain. Orsted is a billion dollar organization, they don't need to come the the United States and push their fake hidden agenda.

Comment Number: BOEM-2021-0024-DRAFT-0293-1
Commenter: Diane Wieland
Commenter Type: Individual

Comment Excerpt Text:

It is no secret that this is the most costly form of energy generation and there are no cost savings to the end-user. As the cost of fuel increases by the day, the cost of generating wind energy will increase exponentially.

Fossil fuels are needed to generate and transfer wind energy and the costs will only go up as we lose our energy independence from the EOs currently in place.

Comment Number: BOEM-2021-0024-DRAFT-0307-2
Commenter: Pamela Owsik
Commenter Type: Individual

Comment Excerpt Text:

BUT, why would you ever consider companies that are not AMERICAN???

Comment Number: BOEM-2021-0024-DRAFT-0320-5
Commenter: Sarah Jordan
Commenter Type: Individual

Comment Excerpt Text:

According to multiple studies on off-shore wind vs on shore wind, off shore wind costs 2.6 times more! As a homeowner, business owner (who is 26 years old) struggling to sometimes keep up with the high taxes and cost of doing business in NJ, a more than doubled electricity bill will 100% make me consider moving my business and moving my home someplace else. On top of the visible impacts on our shoreline, this would put me and so many other people like me in financial distress.

Comment Number: BOEM-2021-0024-DRAFT-0321-1
Commenter: Robert Oldach
Commenter Type: Individual

Comment Excerpt Text:

The proposed facility represents an inequitable economic burden on a largely seasonal population, which is not represented. Seasonal variations in wind favor power generation during winter months, when the population of the region is greatly diminished, resulting in much higher transmission losses during the periods of highest generation. This proposal distributes the cost of construction, operation, maintenance, and dismantlement on a relatively small population of southern New Jersey homeowners who can least afford the burden. For maximum benefit to the public interest in renewable energy generation and capital utilization, this facility needs to be located closer to a densely populated area, where there is full utilization at maximum efficiency otherwise it will be just another example of government waste at taxpayers expense.

Comment Number: BOEM-2021-0024-DRAFT-0330-4
Commenter: Stacey Jordan
Commenter Type: Individual

Comment Excerpt Text:

I also believe the proposed Wind Farm will bring higher energy costs to taxpayers. There are multiple studies that show off-shore wind turbines vs. on-shore wind turbines cost over 2 1/2 times more. Look at California- they have a milder climate than New Jersey, are the nation's leader in solar and wind energy and yet their electricity prices have risen over 30% in the last 10 years.

I believe a little conservation can replace the perceived need to build these giant wind farms that do so much more harm than good.

Please think about the harm this will do to our state.

Comment Number: BOEM-2021-0024-DRAFT-0332-11
Commenter: Suzanne Hornick
Commenter Type: Individual

Comment Excerpt Text:

This plan is very flawed and provides no benefit to us here in Ocean City. It will destroy our waters, beaches, land and bay. It will destroy our community because without tourism all the things that pays for will be diminished like our schools, roads, emergency services like fire, EMa and police, library, senior center, our stores, hotels restaurants, recreational businesses, real estate sales and rentals etc. This project will not bring us electricity, we have enough. It will cost us approximately 5times more for almost half the power but the bigger cost is our community.

Comment Number: BOEM-2021-0024-DRAFT-0353-05-1
Commenter: Victor Finamore
Commenter Type: Individual

Comment Excerpt Text:

Many options that wind offers.. In order to sell wind,, it need to give back to the tax payer.. Homeowners should receive a 600- 1000 yr rebate that pays for property taxes directly .. thats how you sell wind..

Comment Number: BOEM-2021-0024-DRAFT-0361-4
Commenter: Susan Matthews
Commenter Type: Individual

Comment Excerpt Text:

Third, the impact of this Wind Farm will negatively affect property values.

Comment Number: BOEM-2021-0024-DRAFT-0366-197
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

IV. THE ECONOMIC IMPACTS ASSOCIATED WITH THE PROJECT AND FUTURE GROWTH IN THE OFFSHORE WIND INDUSTRY MUST BE ADEQUATELY CONSIDERED

BOEM must accurately estimate the economic impacts associated with the Project. A March 2020 study by the American Wind Energy Association, which analyzed the economic impacts from offshore wind, found that the industry is expected to invest $57 billion in offshore wind energy development, which is expected to contribute $25.4 billion in annual economic output and approximately 82,500 jobs by 2030 based on a high estimate of a 30 GW offshore wind build out. [Footnote 316: See Peterson et al. (2016).] In their study, the majority of bat activity in the Gulf of Maine and the Mid-Atlantic occurred below 10 m/s average nightly wind speed and above ~7oC. We urge BOEM to closely examine the cumulative

impact on demographics, employment, and economics to ensure that it properly reflects the vast potential of offshore wind to create jobs and economic opportunity while generating clean, renewable energy.

Comment Number: BOEM-2021-0024-DRAFT-0371-3
Commenter: Martha Wright
Commenter Type: Individual

Comment Excerpt Text:

Solar seems a good idea, and so does wind power, but not at the expense of other natural resources. The natural resource at issue here is the ocean and all it provides. Think of the ocean as farmlands that feed the economy and the people of our nation. NJ has a robust seafood industry and year after year, harvests a significant percentage of seafood destined for both domestic consumption and export. This project is takes and damages farmland, sacrificing one industry to please another.

Comment Number: BOEM-2021-0024-DRAFT-0377-2
Commenter: Joseph Conte
Commenter Type: Individual

Comment Excerpt Text:

New Jersey visitor spending in 2019 was $46.4 Billion, which contributed over $5 Billion in taxes to the State of NJ and 540,500 jobs making it the 6th largest employer in the state (Source: NJ Economic impact of Tourism in NJ 2019) with lodging being the #1 revenue sector.

If you break out the four shore counties from the above figures, the Jersey Shore contributes $22.3 Billion to the overall tourism economy or about half. If the North Carolina study is correct (North Carolina State University Study, 2017), that 55% of shore vacationers would not return if they had to look at wind turbines in the ocean, that would equal a $12.3 Billion ANNUAL loss in tourism revenue and a $1.4 Billion loss of annual tax revenue for the state of New Jersey! We cannot afford this!

Comment Number: BOEM-2021-0024-DRAFT-0377-4
Commenter: Joseph Conte
Commenter Type: Individual

Comment Excerpt Text:

NJ taxpayers and rate payers will be bearing the cost of this debacle - whereas in California, Germany and Denmark when they moved to wind power they experienced a 25%-100% increases in electric bills, which will cripple our New Jersey economy just as we begin recovering from the recession caused by the Covid lockdowns. (https://www.forbes.com/sites/michaelshellenberger/2018/04/23/if-solar-and-wind-are-so-cheap-why-are-they-making-electricity-more-expensive/?sh=6ef9bf231dc6).

Comment Number: BOEM-2021-0024-DRAFT-0465-3
Commenter: City of Ventnor City
Commenter Type: Local Agency

Comment Excerpt Text:

Ocean Wind has already initiated two projects to boost our local economy: Pro-NJ Granter Trust and Orsted Cares. The former will award up to $15 million in grants to small, women owned and minority-owned businesses who wish to become part of the emerging offshore wind industry and support local coastal resiliency infrastructure investments in Ocean, Atlantic and Cape May counties. Orsted Cares is an emergency assistance program for electric customers in Atlantic, Cape May and Ocean counties in partnership with New Jersey SHARES.

The company is also partnering with the Boys and Girls Club of Atlantic City to conduct Live Classroom sessions to teach local high school students about the many job opportunities within the offshore wind industry.

With respect to the large and important tourism business in Southern New Jersey, more than 70% of voters say they vacation at the Jersey Shore and 85% of those would continue to vacation there with wind turbines 15 miles off the coast, and 75% of New Jersey voters think that tourism in the Jersey Shore communities would stay the same or even increase as a result of wind turbines off the coast of Atlantic City. [Footnote 1: Bellweather Research and Consulting Survey of 600 interviews statewide in NJ with an additional 250 interviews in Atlantic, Cape May and Ocean Counties, March 10 -17, 2020.]

Perhaps most exciting is that Ocean Wind will help diversify the Atlantic City economy that has long been primarily dependent on the casino and hospitality industries.

Thank you for this opportunity to voice my support for Ocean Wind.

Comment Number: BOEM-2021-0024-EMAIL-003-24
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

It is vital that all costs and benefits of available alternatives, including the no action alternative, are considered in a cost-benefit analysis. Costs and benefits should include both quantifiable measures (to the fullest extent that these can be usefully estimated) and qualitative measures of costs and benefits that are difficult to quantify, but nevertheless essential to consider (including potential economic, environmental, public health and safety, distributive impacts, equity, etc.).

Comment Number: BOEM-2021-0024-EMAIL-004-14
Organization: Long Beach Island (LBI) New Jersey Coalition for Wind Without Impact
Commenter: Bob Stern
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

As a key issue, the NOI should have summarized the expected socioeconomic impacts from visible turbines realistically. It should have informed the public that concern over visible impact has caused the BOEM to adopt a 15 nautical mile turbine exclusion zone for New York State projects, and that New York is seeking a greater exclusion zone.

Comment Number: BOEM-2021-0024-EMAIL-004-19
Organization: Long Beach Island (LBI) New Jersey Coalition for Wind Without Impact
Commenter: Bob Stern
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The EIS needs to present the increased electric cost from offshore wind to residents and businesses, and the longer-term economic losses that will occur from those higher electric rates. Those cost analyses should also include the taxpayer subsidies required to make these projects economically viable. They should be done on a cumulative basis including all projects that serve the same electric market.

Comment Number: BOEM-2021-0024-TRANS-41321-0014-2
Organization: Shoreline New Jersey
Commenter: Tricia Conte

Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

We are concerned with the likelihood of a 25 to 100 percent increase in our electric bills which would cripple the New Jersey economy just as we begin to recover from the recessions caused by the Covid lockdowns.

Comment Number: BOEM-2021-0024-TRANS-41321-0015-1
Organization: Fishermen's Headquarters Bait and Tackle
Commenter: Greg Cudnik
Commenter Type: Individual

Comment Excerpt Text:

New Jersey rate payers being forced into much more expensive energy with higher generation, interconnection and transmission costs that are still at this point estimated. Based on a September 2019 article from Tom Johnson newjerseyspotlight.com, the cofounder of the source, I have a link here, clearly I can't share that, but Orsted is a major funder of this news source, and I quote, this is Tom, total costs are in question and BPU order June 2019 states a company projective cost transmission would upgrades run from $36 to $130 million. But it could go as high as $174 million, those costs are not factored into subsidies, utility customers will pay to Ocean Wind. Ocean Wind sounds like will pay the first $10 million of transmission cost, from there $130 million Ocean Wind will incur 70 percent cost, 30 percent from tax payers, rate payers, from $130 million to $174 million costs will be split between developer and rate payer, and then after the $174 million, rate payers pay 100 percent, this is very alarming given the slide that Orsted Mid Atlantic Project Development Director Christian B. presented at the February 26, 2021 New Jersey Board of Public Utilities public meeting which I attended, he said risks are real between 2013, 2016 alone, rate payers had to pay $1.2 billion, costs associated with delays, overruns and passed along directly to the rate payers. This very much concerning to me as a rate payer and I think it should be very concerning to other rate payers in the state.

Comment Number: BOEM-2021-0024-TRANS-41321-0017-4
Commenter: Rick Robinson
Commenter Type: Individual

Comment Excerpt Text:

And so we don't know what's going to happen when we do this and then the other thing that we know is that this is going to cost more, we don't know how much more unfortunately but we are already guaranteed that it's going to cost more.

Comment Number: BOEM-2021-0024-TRANS-41321-0019-3
Commenter: Mike Fischer
Commenter Type: Individual

Comment Excerpt Text:

I appreciate the Chamber of Commerce and other economic voices that were brought on in the comments talking about the opportunities to South Jersey but I never heard anything about the potential loss of the economy due to a collapse of a recreational, commercial fishing, boat sales, real estate, everything to do with that.

Comment Number: BOEM-2021-0024-TRANS-41321-0020-6
Commenter: Suzanne Hornik
Commenter Type: Individual

Comment Excerpt Text:

Additionally, this company is owned by Denmark and Siemens and Goldman Sachs all of which are foreign interests, not so much Goldman Sachs, Siemens is German, Denmark owns Orsted, why are we selling our land, our water to foreign interest, that doesn't make sense to me but essentially it comes down to the people of Ocean City.

Comment Number: BOEM-2021-0024-TRANS-41521-0009-2
Commenter: Kathleen Hayden
Commenter Type: Individual

Comment Excerpt Text:

Also wind energy is a very expensive form of energy and I am concerned that this will be passed onto the tax payers in New Jersey.

Comment Number: BOEM-2021-0024-TRANS-41521-0012-7
Organization: Ocean City Environmental Commission
Commenter: Rick Bernardini
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

We also think in the cost benefit analysis of this project, the Penjerdale Grid Infrastructure for Impact (ph) needs to be considered and needs to be funded to accommodate the power that is going to be generated through this power.

Comment Number: BOEM-2021-0024-TRANS-41521-0018-2
Commenter: Chris Platicella
Commenter Type: Individual

Comment Excerpt Text:

So its just deeply concerning there, and hop into the cost, you know, I think currently we pay something as a state about $20 a kilowatt hour for energy and I think I read somewhere in the information that Orsted put out there that it's going to be roughly $100 per kilowatt being sold to New Jersey which is obviously a five fold cost. And we know that, you know, the affordable energy in New Jersey is something, you know, we are trying to be responsible for here aswell as, you know, the environmental safety of the land and the water, and you know, we have a stake here and I just think that this would be a big mistake to rush into this because we have politicians that throw out numbers like 2035, and 2050, it kind of seems like, alright, well, that's the timeline, make sure we get the studies done by then and make sure we do this by then, and, you know, we are going to have to move forward because these are dates that we put out there and we have to stick to those, because, you know, that's the platform we are running off of. I think that, you know, more time is needed to properly study all of these areas to make sure that we are not going to sit back one day and look out there and say what have we done, what have we done.

Comment Number: BOEM-2021-0024-TRANS-42021-0004-4
Organization: Anglers for Offshore Wind Power
Commenter: Paul Eidman
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Overall it leads to an improved and sustainable coastal economy.

Comment Number: BOEM-2021-0024-TRANS-42021-0004-6
Organization: Anglers for Offshore Wind Power

Commenter: Paul Eidman
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

All of this while adding thousands of American jobs, sustaining our coastal economy and building the recreational fishing business. Thank you for this opportunity to add our comments

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Comment Number: BOEM-2021-0024-TRANS-42021-0007-4
Organization: New Jersey State Chamber of Commerce
Commenter: Michael Egenton
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

As the Bureau explores alternatives to include in it's draft EIS work, it should consider doing nothing is not a viable alternative. We need to increase renewable energy sources to meet our growing energy demands and offshore wind is the most significant opportunity to do this on the east coast while creating thousands of jobs and billions of dollars of economic activity.

Comment Number: BOEM-2021-0024-TRANS-42021-0010-5
Commenter: Joe De Finnis
Commenter Type: Individual

Comment Excerpt Text:

And I really don't want to emphasize too much real estate values because then it sounds like you are being insensitive to what I think are good things which are trying to get energy to be more and more clean, I don't think there is anybody opposed to that.

Comment Number: BOEM-2021-0024-TRANS-42021-0017-1
Commenter: Brenda Briton
Commenter Type: Individual

Comment Excerpt Text:

I find that the local consumer and local resident that resides in Cape May County and further north up towards Ocean City is concerned about the impact that they are going to realize directly as it relates to their energy bills and so forth. Are they going to actually reap the benefit of the wind turbines.

Comment Number: BOEM-2021-0024-TRANS-42021-0024-2
Organization: Save our Shoreline New Jersey
Commenter: Tricia Conte
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

A major economic concern is for the likely 25 percent to 100 percent increase in our electric bills in New Jersey which will cripple our New Jersey economy just as we begin recovering from the recession caused by Covid lockdowns.

Comment Number: BOEM-2021-0024-TRANS-42021-0030-1
Organization: Business Network for Offshore Wind
Commenter: Brandon Burke
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The business network for offshore wind serves as the convener and the stimulator of the U.S. offshore wind supply chain and every single day my colleagues and I are lucky to be working hard to bring American companies and American workers into this globally booming industry, and when I say booming, I truly mean it, offshore wind is projected to become a $1 trillion industry globally by 2040. And closer to home, a recent economic impact report noted that the rapidly developing economic opportunity in the U.S. offshore wind market will "well exceed $100 billion for wind farm development and construction alone." In other words, capital expenditures or Cap Ex, this does not even account for 30 years of operations and maintenance associated with local economic benefits or Op Ex, operational expenditures. Now in the networks own research, we have totaled up more than $3.5 billion already invested in the U.S. offshore wind industry right now and this is just publicly available information so the true total is probably two to three times higher than that. These are significant investments.

Comment Number: BOEM-2021-0024-TRANS-42021-0032-3
Commenter: Anthony Etidali
Commenter Type: Individual

Comment Excerpt Text:

And I have one question for New Jersey Board of Public Utilities, don't they have any shame? We already pay one of the highest electric rates in the State of New Jersey and we have to subsidize this project. I don't think this project is very good for people of New Jersey, especially for its shoreline.

A.2.11 Environmental Justice

Comment Number: BOEM-2021-0024-DRAFT-0345-15
Organization: U.S. Environmental Protection Agency, Region 2
Commenter Type: Federal Agency

Comment Excerpt Text:

It appears that the installation and operation of offshore components of the Ocean Wind project are unlikely to impact minority and low-income communities. Onshore construction and associated project operations within port areas may cause community impacts that should be considered in the environmental justice analysis in the EIS. EPA defines environmental justice to mean the fair treatment of people of all races, cultures, and incomes with respect to the development, implementation, and enforcement of environmental laws and policies, and their meaningful involvement in the decision-making process of the government.

The environmental justice discussion provided in the Ocean Wind COP identifies noise, traffic, visible structures/lighting, land use, and economic change as potential impacts that could adversely affect low income and minority populations near ports during project construction and operation. The analysis in Volume II and Appendix V of the COP is thorough and concludes that onshore facilities would not cause a disproportionate share of high and adverse environmental or socioeconomic impacts on any racial, ethnic, or socioeconomic group. We recommend that the EIS environmental justice analysis consider the identified potential impacts as well as the potential for air quality impacts. The analysis should also describe whether the increased port activity will result in benefits to the adjacent communities.

Comment Number: BOEM-2021-0024-DRAFT-0366-29
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

BOEM must also consider the environmental justice impacts of the benefits. Power plants are frequently located in or close to population centers and disproportionately located in or near historically disadvantaged communities including communities of color, lower income communities, and indigenous communities. The ability of offshore wind to displace fossil fuel generation thus has a potentially important environmental justice benefit. This displacement could be particularly pronounced, as offshore wind facilities' generation often coincides with afternoon peak demand. [Footnote 52: Dep't of Energy, Office of Energy Efficiency & Renewable Energy, Top 10 Things You Didn't Know About Offshore Wind Energy, https://www.energy.gov/eere/wind/articles/top-10-things-you-didnt-know-about-offshore-wind- energy (last visited Apr. 28, 2021).

] Offshore wind may be especially helpful in displacing the dirtiest peaking units, providing especially large air quality benefits and benefits to environmental justice communities.

Comment Number: BOEM-2021-0024-EMAIL-003-25
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

Because coastal and fishing communities often have large minority and low-income populations, we anticipate Environmental Justice concerns will be included as required under Executive Order 12898 (E.O. 12898, 59 FR 7629; February 16, 1994) Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations. This E.O. requires that "each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States and its territories…" and take into account E.O. 13985 (86 FR 7009; January 20, 2021) On Advancing Racial Equity and Support for Underserved Communities Through the Federal Government. In addition, for coastal communities that include tribal nations who value the sea and fish to sustain Native American life, projects should also consider E.O. 13175 (65 FR 67249; November 6, 2000), which requires federal agencies to establish regular and meaningful consultation and collaboration with tribal officials where tribal implications may arise.

A.2.12 Finfish, Invertebrates, and Essential Fish Habitat

Comment Number: BOEM-2021-0024-DRAFT-0008-3
Commenter: Robin McConekey
Commenter Type: Individual

Comment Excerpt Text:

-Cold Pool Disruption: The unique layering of different water temperatures that fish depend on to migrate, breed and feed can be disruption, unnaturally and continuously by hundreds of bases placed in the water. This disruption is also of serious concern to our large Scallop industry.

Comment Number: BOEM-2021-0024-DRAFT-0009-4
Commenter: Karen Barlow
Commenter Type: Individual

Comment Excerpt Text:

The fish populations may actually increase thanks to the creation of reef-like conditions around the foundations of the turbines.

Comment Number: BOEM-2021-0024-DRAFT-0112-19
Commenter: Robert and Joann Zuczek
Commenter Type: Individual

Comment Excerpt Text:

One of the more overlooked issues associated with OWF's is the introduction of non-indigenous and invasive species, which presents a threat to biodiversity. Artificial structures (including OWF's, oil rigs, breakwaters and ports), are known to promote the spread of no-indigenous species, which can disrupt trophic webs and cause shifts in the populations of native species, normally with a negative impact on the overall ecosystem.

Comment Number: BOEM-2021-0024-DRAFT-0113-3
Commenter: Meaghan Zanfardino
Commenter Type: Individual

Comment Excerpt Text:

The unique layering of different water temperatures that fish depend on to migrate, breed and feed can be disruption, unnaturally and continuously by hundreds of bases placed in the water. This disruption is also of serious concern to our large Scallop industry.

Comment Number: BOEM-2021-0024-DRAFT-0119-5
Commenter: Catherine DeMaio
Commenter Type: Individual

Comment Excerpt Text:

The wind farms will have negative effects to marine mammals, brown sharks, and sand tiger sharks. There also have been reports of injury or death to bats, fish, dolphins, sea turtles and whales.

Comment Number: BOEM-2021-0024-DRAFT-0169-3
Commenter: Rick Robinson
Commenter Type: Individual

Comment Excerpt Text:

It is also clear to me that little is known about the Atlantic cold pool and how the construction and operation of these wind farms will impact its unique ecological balance.

Comment Number: BOEM-2021-0024-DRAFT-0173-2
Commenter: Christopher Martin
Commenter Type: Individual

Comment Excerpt Text:

These projects additionally contribute to sea life as they provide an environment which supports marine life.

Comment Number: BOEM-2021-0024-DRAFT-0208-20
Organization: Long Beach Island, NJ Coalition for Wind Without Impact
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The discussion in the NOI glosses over potential significant impacts on overlapping essential fish habitats (EFHs) for both migratory and nonmigratory species, which should be illuminated in the NOI. Concerns have been expressed regarding the presence of EFHs for ocean quahogs, surf clams, Atlantic cod and

black sea bass in the lease area. A December 2017 BOEM report, Habitat Mapping and Assessment of Northeast Wind Energy Areas, stated that the EFHs for these species broadly overlap the lease area. The report also stated that although the sea scallop EFH did not overlap the lease area, trawling surveys found scallops widespread in the lease area. The report states that these species are "worth considering in terms of potential habitat disturbance".

Comment Number: BOEM-2021-0024-DRAFT-0208-21
Organization: Long Beach Island, NJ Coalition for Wind Without Impact
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The NOI fails to point out potential impacts on select benthic invertebrates such as the American lobster, and the Horseshoe and Jonah crabs which are present in moderate abundance in the southern part of the lease area.

Comment Number: BOEM-2021-0024-DRAFT-0279-2
Commenter: Victor Gano
Commenter Type: Individual

Comment Excerpt Text:

I don't want fish habitat ripped up and destroyed. No environmental impact was ever done showing that this will cause a decrease in summer flounder in South New Jersey. We already have issues with the Army Corps of Engineers destroying fish habitat with beach replenishment, now Orsted wants to throw the final blow to the death of South New Jersey fishing.

Comment Number: BOEM-2021-0024-DRAFT-0279-5
Commenter: Victor Gano
Commenter Type: Individual

Comment Excerpt Text:

Flatfish such as summer flounder have been scientifically proven to show avoidance behaviors with wind mills attached to the ocean floor in Europe and off Block Island, Rhode Island.

Comment Number: BOEM-2021-0024-DRAFT-0285-2
Commenter: Victor Gano
Commenter Type: Individual

Comment Excerpt Text:

Summer Flounder, aka Fluke migrate in the area proposed for these windmills. It has been scientifically proven that windmills give off electrical magnetic energy that causes summer flounder avoidance behaviors to offshore windmills. A environmental impact investigation needs to be done asap, because these projects are going to destroy the flatfish fishery of summer flounder to both commercial fisherman and recreational fisherman, this will in turn hurt the New Jersey economy. Summer flounder use the continental shelf for their wintering grounds and then migrate to the intracoastal waterways in the spring and summer and then start their migration offshore where these windmills are proposed to be built.

Comment Number: BOEM-2021-0024-DRAFT-0285-4
Commenter: Victor Gano
Commenter Type: Individual

Comment Excerpt Text:

Orsted is a Denmark company and their projects have destroyed the flatfish fishery in European countries due to windmills, because of avoidance behavior of flatfish from electric magnetic energy. These projects will destroy fish habitat at Orsted's financial gain.

Comment Number: BOEM-2021-0024-DRAFT-0287-5
Organization: North Beach Taxpayers Association
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The waters of the eastern seaboard of the United States are not the North Sea. Even so, video evidence produced by Danish, German and French commercial fishermen indicates their fishing grounds are being severely impacted. Some say the fish are gone. Others say that they have been pushed into deeper waters and the ships that make up the existing fleets are not capable of safely operating further offshore.

Only recently have scientists begun to question the influence of offshore wind farms on continental shelf oceanography. With goals approaching 30 gigawatts of capacity, it is crucial to understand how offshore wind will impact the Mid- Atlantic Cold Pool before we proceed with construction.

Comment Number: BOEM-2021-0024-DRAFT-0329-3
Commenter: Richard Bertsch
Commenter Type: Individual

Comment Excerpt Text:

COLD POOLING: The atttached Study done by the Rutgers School of Enviromental and Biological Studies dated 12/01/2020 goes into depth on cold pooling on and while there are studies done in the North Atlantic European Blight Area they have been fully completed here in Mid Atlantic Blight in which the ocean currents and floor are different.

Comment Number: BOEM-2021-0024-DRAFT-0335-9
Organization: The Nature Conservancy
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

In addition to our specific concern regarding the impact of pile driving on marine mammals, sea turtles and other marine taxa, TNC strongly supports a robust analysis on the potential impacts of Ocean Wind construction and operations on the large suite of managed and protected species identified in the COP, including a detailed description of the anticipated impacts of the project on benthic resources, finfish, invertebrates, and essential fish habitat (EFH). As part of this assessment, should needed research be missing or inadequate, every effort should be made to develop the needed monitoring and research plan to fill those gaps. This should include a thorough assessment of if or how the anticipated electromagnetic field (EMF) distortion originating from networks of inter-array and transmission cables may impact the behavior of endangered Atlantic sturgeon, fish, turtles and other marine life.

Comment Number: BOEM-2021-0024-DRAFT-0338-2
Organization: American Littoral Society
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

We have a specific interest in fish, fish habitats and the conservation of these resources. In reviewing the sections of the provided reports, it was noticeable that many of the studies on which the conclusions and representations are not recent, for the most part. The COP representations in many cases rely on the

Ecological Baseline Studies conducted by the State of New Jersey which was reported out in 2010 - over 11 years ago. Given the acknowledged effects of climate change on both oceanic and estuarine conditions and the range and distribution of fish along the Atlantic Coast it is questionable as to the value of decade old studies to evaluate current proposed activities and possible impacts. The EIS should address this lack of current scientific information, assess its relevancy on the ability of BOEM and other responsible agencies to evaluate possible impacts and outcomes under current conditions and require responses which address the findings.

Comment Number: BOEM-2021-0024-DRAFT-0338-4
Organization: American Littoral Society
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The COP acknowledges that, as regards Fish and Essential Fish Habitats (EFH), 'long term habitat conversion would result from the introduction of hard bottom habitat associated with the placement of scour protection and cable protection on the seabed, and from the introduction of structure within the water column due to WTG foundations". The assertion that these new installations will provide "beneficial hard substrates" for a "new, more diverse community of finfish and invertebrates" implies an ecological change for the better which is not strongly supported in the literature. While studies of European farms demonstrate that these habitat changes do indeed facilitate shifts in species utilizing the area, the implication that this is for the better - in ecological terms - remains undetermined. BOEM needs to address both the implications of these changes for this project, as well as the overall regional development in line with recently articulated state and federal goals: while recently modified CEQ NEPA regulations eliminate any explicit requirement to analyze cumulative impacts, the Federal Register notice wisely notes that the description of the affected environment in the EIS will include reasonably foreseeable environmental trends and planned actions; as this habitat replacement outcome is acknowledged, it should be a priority for examination and the development of monitoring and assessment responses.

Comment Number: BOEM-2021-0024-DRAFT-0354-10
Organization: New York State Department of State
Commenter Type: State Agency

Comment Excerpt Text:

Similar to striped bass, the federally endangered Atlantic sturgeon (Acipenser oxyrinchus oxyrinchus) occurs in nearshore waters of the OCS. The New York Bight is identified as one of five distinct population segments for Atlantic sturgeon and continues to have the most robust population since the fishery experienced a coastwide collapse in 1901. [Footnote 3: Atlantic States Marine Fisheries Commission (ASMFC). 2017. 2017 Atlantic Sturgeon Benchmark Stock Assessment and Peer Review Report] Atlantic sturgeon are most likely to occur along shallow nearshore areas of the continental shelf off Long Island and New Jersey during seasonal migrations from March to June and September to November. [Footnote 4: Dunton, K.J., A. Jordaan, D.O. Conover, K.A. McKown, L.A. Bonacci, and & M.G. Frisk. 2015. Marine Distribution and Habitat Use of Atlantic Sturgeon in New York Lead to Fisheries Interactions and Bycatch. Marine and Coastal Fisheries, 7:1, 18 -32.] Offshore development should account for these seasonal movement patterns so that Atlantic sturgeon can fulfill this vital step in their life history and safely journey to estuaries and upriver spawning grounds. The COP indicates that additional modeling and an assessment of potential impacts for Atlantic sturgeon from construction noise will be provided in the Supplemental COP. [Footnote 5: COP Volume I, p.3]

Comment Number: BOEM-2021-0024-DRAFT-0354-9
Organization: New York State Department of State
Commenter Type: State Agency

Comment Excerpt Text:

Juvenile and adult striped bass (Morone saxatilis) in Long Island and the Hudson River have well-established migratory corridors connecting the Chesapeake Bay, Delaware Bay, and Hudson River stocks throughout their lifetime, with the Hudson River representing a significant spawning and nursery area on the East Coast. Not all striped bass migrate, but those that do typically migrate in groups when they are at least two years old and generally move northward in summer and southward in winter along the Atlantic coast. [Footnote 2: ASMFC. 2013. 57th SAW Assessment Report. http://www.asmfc.org/uploads/file/529e5ca12013StripedBassBenchmarkStockAssessment_57SAWReport.pdf] Important corridors necessary to support striped bass coastal migrations and their extensive movements between estuaries should be considered when evaluating construction and operational impacts.

Comment Number: BOEM-2021-0024-DRAFT-0358-4
Organization: American Saltwater Guides Association
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Cabling for these projects presents a challenging issue for fishermen and habitat. It is encouraging that submerged aquatic vegetation (SAV) was recently surveyed in the proposed cable areas. Since SAV beds can expand and contract over short periods of time and these projects will take time to initiate, we suggest that a survey update be considered prior to breaking ground. It is critical that BOEM, Ocean Wind, and NOAA coordinate with local authorities to ensure that we minimize impacts to estuarine environments.

Comment Number: BOEM-2021-0024-DRAFT-0359-2
Commenter: Annemarie Bach
Commenter Type: Individual

Comment Excerpt Text:

I have also read about the turbines interfering with sea creature's sonar and putting them off course. The Right Whale in particular concerns me as it is an endangered species and travels in our waters. There has also been no information on what the impact will be to the cold pool and the species that depend on it.

Comment Number: BOEM-2021-0024-DRAFT-0364-17
Organization: Oceana
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

As discussed above, a wide range of areas of the ocean have been designated by fisheries managers for their importance in supporting sustainable fisheries including EFH for spawning, breeding, feeding and growth, and a subset of EFH, Habitat Areas of Particular Concern (HAPC), that are EFH areas which are important, sensitive to human-induced environmental degradation, threatened by development, or are rare. Further, some areas have been identified as deep-sea coral areas under the deep-sea coral Research and Technology Program that support slow-growing corals in temperate and deep habitats. [Footnote 9: 16 U.S.C. 1884] The EIS should explore these habitat areas in and around the project site and include alternatives to avoid these areas, particularly HAPCs. If the areas cannot be avoided, alternatives should be developed to minimize the frequency, intensity and duration of the effects.

Comment Number: BOEM-2021-0024-DRAFT-0364-5
Organization: Oceana
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

[Bold: Magnuson-Stevens Act-] Conservation of Essential Fish Habitat (EFH) is a critical element to sustainable modern fisheries management and both state and federal fishery managers have identified habitats that support critical life history processes such as spawning, breeding, feeding, and growth to maturity. A complete EIS must include a detailed assessment of the effects of the project on these habitats, including EFH designated under the MSA and a range of alternatives to conserve these habitats and minimize the effects of the project on EFH and other marine habitats.

Because the project is sited in federal waters and may have adverse effects on EFH, BOEM should consult with the Mid-Atlantic Fishery Management Council under the EFH provisions of the MSA that provides a clear mechanism for fisheries managers to comment on and make recommendations concerning any activity that may affect habitat including EFH. [Footnote 6: 16 U.S.C. 1855] Particular attention should be given to the effects of the project on areas that have been designated as Habitat Areas of Particular Concern (HAPC) under MSA because of their ecological importance, sensitivity to human-induced environmental degradation, the extent of threats posed by development, or the rarity of the habitat type.

Comment Number: BOEM-2021-0024-DRAFT-0365-5
Commenter: Anthony Butch
Commenter Type: Individual

Comment Excerpt Text:

Cold Pool Disruption- Rutgers article states this will be a disruption- how bad is UNKNOWN. The MAB is VERY unique, not like north sea.

Comment Number: BOEM-2021-0024-DRAFT-0366-48
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

D. BENTHIC RESOURCES, FINFISH, INVERTEBRATES, AND ESSENTIAL FISH HABITAT

The Draft EIS must present a detailed description of the anticipated impacts of the Project on benthic resources, finfish, invertebrates, and essential fish habitat (EFH). In doing so, the Draft EIS should contain an impact assessment based on the impending quantification of complex and non-complex habitats, consider additional ways to avoid and minimize impacts to complex habitats, and include additional mitigation and monitoring requirements for the Project.

Comment Number: BOEM-2021-0024-DRAFT-0366-49
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

We note that the Magnuson Stevens Fishery Conservation and Management Act [Footnote 80: 16 U.S.C. §1801 et seq.] requires federal agencies to consult with the National Marine Fisheries Service (NMFS) on activities that could adversely affect EFH. The National Oceanic and Atmospheric Administration (NOAA) defines EFH as “those waters and substrate necessary to fish for spawning, breeding, feeding or growth to maturity.” [Footnote 81: Guide to Essential Fish Habitat Designations in the Northeastern United States, NOAA, 2018, available at https://www.nrc.gov/docs/ML1409/ML14090A199.pdf.] The Project will take place in EFH designated areas for many species, including several overfished populations such as Atlantic cod, and winter flounder, and yellowtail flounder.[Footnote 82: COP Appx P, pg. 20.] There are also four fish species listed under the United States’ Endangered Species Act (ESA)

that are present in the Project area, including giant manta ray, Atlantic sturgeon, Shortnose sturgeon, and whitetip shark.[Footnote 83: COP, Appx I, at page 1..] The COP characterizes the area as typical of sandy bottom habitats with "no evidence of sensitive benthic habitats." [Footnote 84: COP at Appx P, 13.] Many of the species that rely on these habitats are important food sources for fish.

Comment Number: BOEM-2021-0024-DRAFT-0370-4
Organization: Recreational Fishing Alliance
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The Ocean Wind project would be constructed in an area known to hold Atlantic Sturgeon. Atlantic Sturgeon is a federally listed endangered species with 4 of its 5 distinct population segments identified as endangered. Significant protections have been put in place and regulations imposed on fishermen to help rebuild the fishery. RFA suggests that the EIS conduct extensive research how the Ocean Wind facility may influence the rebuilding efforts of Atlantic Sturgeon.

Comment Number: BOEM-2021-0024-DRAFT-0370-5
Organization: Recreational Fishing Alliance
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The Ocean Wind Project would be constructed in an area which has been identified as essential fish habitat for Summer Flounder, Scup, Black Sea Bass, bluefish, Atlantic cod, Yellowfin tuna, Silver Hake, Red Hake and numerous shark species. All of these species are extremely important to the recreational fishing community and the businesses supported by them. Significant efforts have gone into rebuilding and maintaining these fish stocks both domestically and internationally. Non-fishing related impacts and environmental factors, particularly loss, degradation or destruction of fish habitat, plays a key role in those efforts and influences our ability to meet management objectives. Given that the Ocean Wind project stands to disrupt or alter essential fish habitat, RFA suggests that the EIS must determine exactly what the level of impact will be, how the impacts will affect fishery management objectives and what the impact will be on the recreational fishing industry. In addition, the EIS must evaluate how the Ocean Wind project would alter abiotic factors such as changes to ocean currents, primary productivity, ocean stratification, and distribution and availability of prey species. All of these factors have significant and direct implications for important recreational fisheries.

Comment Number: BOEM-2021-0024-DRAFT-0370-6
Organization: Recreational Fishing Alliance
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The proposed offshore wind facilities may have a significant impact on physical resources and oceanographic processes. RFA and many other fishermen are increasingly concerned about how industrial scale wind farms off of the Atlantic Coast may impact the cold pool which has been identified as thermal structure drives primary production from Nantucket to Cape Hatteras. This critically important temperature stratification extends the entire area that is under consideration for offshore wind development. Little if any understanding is available at this time about how large turbines will influence and/or alter cold pool formation and ocean mixing each year. RFA is extremely concerned about how wind farms may alter primary production and other ecological functions such as larval transport and nutrient mixing. The EIS must thoroughly investigate this concern and evaluate this issue on the scale as it relates to the Ocean Wind project and as it relates to the full build out of the 16 lease areas from Massachusetts to North Carolina.

Comment Number: BOEM-2021-0024-DRAFT-0372-6
Organization: Garden State Seafood Association
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Assurance for the protection of the Cold Pool phenomenon must be include in the analysis, and scientific research ensuring its protection must be completed prior to the COP

Comment Number: BOEM-2021-0024-DRAFT-0381-13
Organization: Clean Ocean Action
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The NY/NJ Bight experiences intense ocean mixing, called a "Cold Pool" effect, that stimulates massive phytoplankton blooms central to the structure of all NY/NJ Bight ecosystems. Due to its relative warmth, heavy flows of freshwater and inland nutrients from the Hudson River, and unique bathymetry, the NY-NJ Bight holds rich habitat for whales and other species. Ocean currents wash over these bottom features and stir up nutrients that are absorbed by phytoplankton. In essence, the NY/NJ Bight has unique features that are ideal for a vast variety of ocean life, ranging from deep sea corals to over 300 fish species. [Footnote 3: New York Ocean Action Plan, Department of Environmental Conservation (2016-2026), available at https://www.dec.ny.gov/docs/fish_marine_pdf/nyoceanactionplan_final.pdf]

The Cold Pool in the Mid-Atlantic Bight supports some of the richest ecosystems and fisheries in the nation, including the most profitable shellfish fisheries and "second-most lucrative single-species fishery, sea scallops, in the western Atlantic." [Footnote 4: Travis Miles, Josh Kohut, and Daphne Munroe et al., Could federal wind farms influence continental shelf oceanography and alter associated ecological processes? A literature review., Rutgers University and Science Center for Marine Fisheries (SCEMFIS) (Dec. 1, 2020), available at h ttps://scemfis.org/wp-content/uploads/2021/01/ColdPoolReview.pdf] The Bight is also vital to the migratory patterns of many different species, ranging from deep sea corals to invertebrates. [Footnote 5: New York Ocean Action Plan, Department of Environmental Conservation (2016-2026), available at https://www.dec.ny.gov/docs/fish_marine_pdf/nyoceanactionplan_final.pdf] The Atlantic sea scallop (Placopecten magellanicu), Atlantic surfclam (Spisula solidissima), and ocean quahog (Arctica islandica) habitat along the Mid-Atlantic Bight is consistently among the most profitable fisheries in the world. [Footnote 6: National Marine Fisheries Service, 2020: Fisheries of the United States, 2018. U.S. Department of Commerce, NOAA Current Fishery Statistics No. 2018.]

Comment Number: BOEM-2021-0024-DRAFT-0381-14
Organization: Clean Ocean Action
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Further, water column stratification could affect a number of species vital to fisheries and local ecosystem health, including summer flounder. [Footnote 7: T.M. Grothues and E. A. Bochenek, 2011: Fine scale spawning habitat delineation for winter flounder (Pseudopleuronectes americanus) to mitigate dredging effects –Phase II (Cycle 8), 2/2011.] The health of habitat for these and other species is closely associated with Mid-Atlantic ocean conditions. Further, increased mortality and reduced reproductive success of shellfish and other species has been associated with warming-induced shifts to the stratification of cycles in oceanographic conditions. [Footnote 8: D. A. Narvaez, D. M. Munroe, E. E. Hofmann, J. M. Klinck, and E. N. Powell, 2015: Long-term dynamics in Atlantic surfclam (Spisula solidissima) populations: the role of bottom water temperature. Journal of Marine Systems, 141, 136-148.] This indicates that further alterations to ocean mixing may lead to changes in vital species activities across the board. Turbine arrays may directly or indirectly affect seasonal processes that dictate water column nutrient transfer among

ecosystems and species. [Footnote 9: Travis Miles, Josh Kohut, and Daphne Munroe et al., Could federal wind farms influence continental shelf oceanography and alter associated ecological processes? A literature review., Rutgers University and Science Center for Marine Fisheries (SCEMFIS) (Dec. 1, 2020), available at h ttps://scemfis.org/wp-content/uploads/2021/01/ColdPoolReview.pdf]

Many species in the waters and migratory corridors surrounding and within the project area could be vulnerable to interruptions in foraging, migration, or other effects of the foundations, cables, and all submerged gear.

Comment Number: BOEM-2021-0024-DRAFT-0384-4
Commenter: Gregory Cudnik
Commenter Type: Individual

Comment Excerpt Text:

Legitimate concerns and questions were raised about larval disbursement, cold pool disruption and the radical changes to essential fish habitats which will jeopardize recruitment and change migratory patterns. Drawing parallels from two different systems is unacceptable. Block Island's five turbines in a deep water rocky bottom is radically different from NJ's shallow soft bottom (sand, mud, clay). Well known and respected scientists have said, "Wind developments are outpacing science and the needs of the sea." Right now there's great minds working on many of these topics and their work must be completed and explicitly considered before any construction begins.

Comment Number: BOEM-2021-0024-DRAFT-0384-5
Commenter: Gregory Cudnik
Commenter Type: Individual

Comment Excerpt Text:

The rapid rate and massive scale of both 0498 & 0499 are extremely concerning. The footprint of Ocean Wind far exceeds the 160k acres issued in lease 0498. The 140 miles of cabling from the turbine site to Oyster Creek lassos Long Beach Island and rips right through Island Beach State Park's Bathers Beach and the Barnegat Bay. This can't be allowed!

The cabling depth is too shallow and must be deeper to decrease EMF effects. No shallower than the 4-6' detailed in Vol1 6.1.1-9. There also must be a large section (10-15 mile stretch centered off of Barnegat Light) where the cable is deeper 6-8' to offer a fish migration fairway to minimize risks to east-west migratory demersal species.

The high voltage export cabling route is in close proximity to SIX of NJ's artificial reefs. These essential fish habitats which support more than 25% of all NJ fishing trips can not be disturbed. Driving 30' diameter steel piles 150' into the sea bed will violently quake and possibly collapse or damage wrecks and reefs in close proximity. The sediment plums will also have detrimental effects, silting in and covering once vibrant fish habitats.

Comment Number: BOEM-2021-0024-DRAFT-0384-6
Commenter: Gregory Cudnik
Commenter Type: Individual

Comment Excerpt Text:

Barnegat Bay is a very fragile, shallow, 42 mile long, narrow essential estuary. A high voltage cable running across it risks cutting off vital fish migratory patterns.

The irresponsible drilling under IBSP Bather's Beach is in very close proximity to the Sedge Island Conservation Zone. The 1,600 acre ecologically sensitive ecosystem must be protected and conserved because the health of Barnegat Bay depends on it. It's protected under Administrative Order 2014-09.

The high voltage export cabling route rips through a very sensitive estuary of SAV (submerged aquatic vegetation) and salt marshes. Barnegat Bay has lots of issues, many of which are improving; however this puts the health of the bay in jeopardy! No NOT allow this to happen!

Comment Number: BOEM-2021-0024-DRAFT-0384-7
Commenter: Gregory Cudnik
Commenter Type: Individual

Comment Excerpt Text:

V3 Appendix P 3.4.1.10 Lists Winter Flounder as economically important flatfish and it happens to be a species that needs a lot of help. Yet developments put them at dire risk. The project area contains designated EFH for winter flounder egg, larval, juvenile and adult life stage. Appendix E Photo 7 the survey erroneously documented winter flounder as a summer flounder clearly showing winter flounder are present.

Comment Number: BOEM-2021-0024-DRAFT-0384-8
Commenter: Gregory Cudnik
Commenter Type: Individual

Comment Excerpt Text:

Some very important and critically endangered shark species (brown, dusky, sand tiger, thresher, mako and white) during all life stages call the Ocean Wind LLC project area home. Appendix P Table 3 lists these species which will not only be affected during construction but also during operation since sharks are known to be sensitive to EMF. Altering their patterns raises huge concerns. Sharks are slow to reproduce. A shark born today will not be sexually mature until the decommission of these projects in 20 years. There's no need to rush. Let's get this right.

Comment Number: BOEM-2021-0024-DRAFT-0384-9
Commenter: Gregory Cudnik
Commenter Type: Individual

Comment Excerpt Text:

The critically important sand lance are forage fish in the NW Atlantic that were grossly overlooked in Appendix P. There are 45 species of fish both coastal and pelagic, 16 sea birds and 9 marine mammals that depend on sand lance making the species a quintessential link in the food web. Table 4.9 (NJ Offshore Wind Energy: Feasibility Study, pg77) the American Sand Lance is the only species not to have their spawning location mentioned? Seems odd! Their role and strong association with sandy sediment must be explicitly considered before any construction begins.

Comment Number: BOEM-2021-0024-DRAFT-0384-10
Commenter: Gregory Cudnik
Commenter Type: Individual

Comment Excerpt Text:

Relatively little is known about surf clams which have 500 year lifespans. Yet 100 turbines are slated to be in their sandy home. Let's slow down and learn about what calls these waters home before destroying it!

Comment Number: BOEM-2021-0024-EMAIL-003-37
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

The construction and operation of a wind energy facility and installation of subsea electrical cables have the potential to impact listed species and the ecosystems on which they depend. Potential effects of offshore wind energy development on listed species that should be considered by BOEM when making any determinations about construction and operation in the Ocean Wind project area include:

- Potential for an increased risk of vessel strike due to increases in vessel traffic and/or shifts in vessel traffic patterns due to the placement of structures;

- Impacts of elevated noise during any geophysical and geotechnical surveys, pile driving, wind turbine operations, and other activities;

- Any activities which may displace species from preferred habitats, alter movements or feeding behaviors, increase stress and/or result in temporary or permanent injury or mortality;

- Disruption of benthic habitats during construction and conversion of habitat types that may affect the use of the area, alter prey assemblages or result in the displacement of individuals;

- Impacts to water quality through sediment disturbance or pollutant discharge; project lighting as a potential attractant;

- Effects from electromagnetic fields and heat from inter-array and export cable to listed species and their prey (i.e. ability to forage, attraction, etc.); and

- Potential changes to pelagic habitat resulting from the presence of wind turbines.

Comment Number: BOEM-2021-0024-EMAIL-003-47
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

Magnuson-Stevens Fishery Conservation and Management Act

As currently described in the NOI, this facility (inclusive of the wind farm area, offshore and inshore export cables and corridors, and shoreside landing points) will be constructed, operated, and maintained in areas designated Essential Fish Habitat (EFH) for various life stages of nearly every species managed by the New England Fishery Management Council (NEFMC), Mid- Atlantic Fishery Management Council (MAFMC), and NOAA Fisheries. The area is also designated EFH for species managed by the South Atlantic Fishery Management Council (SAFMC). Species for which EFH has been designated in the project area include, but are not limited to, bluefish (Pomatomus saltatrix), black sea bass (Centropristis striata), scup (Stenotomus chrysops), summer flounder (Paralichthys dentatus), windowpane flounder (Scophthalmus aquosus), winter flounder (Pseudopleuronectes americanus), yellowtail flounder (Limanda ferruginea), winter skate (Leucoraja ocellata), Atlantic sea scallop (Placopecten magellanicus), and Atlantic surfclam (Spisula solidissima). The proposed project area is also designated EFH for several Atlantic highly migratory species (tuna, swordfish, billfish, small and large coastal sharks, and pelagic sharks) including, but not limited to, Atlantic angel shark (Squatina dumeril), blue shark (Prionace glauca), bluefin tuna (Thunnus thynnus) sandbar shark (Carcharhinus plumbeus) and sand tiger shark (Carcharias taurus). The sand tiger shark has been listed as a Species of Concern by

NOAA. The project area is also designated as EFH for Spanish mackerel (Scomberomorus maculatus) and king mackerel (Scomberomorus cavalla).

The most up-to-date EFH and Habitat Areas of Particular Concern (HAPC) designations should be used in BOEM's evaluation of impacts to EFH. HAPCs are a subset of EFH that are either rare, particularly susceptible to human-induced degradation, especially important ecologically, or located in an environmentally stressed area. EFH and HAPC for species managed by the NEFMC have been modified under the Omnibus Amendment which was approved and implemented in 2018. The EFH mapper can be used to query, view, and download spatial data for the species managed by the New England, Mid-Atlantic, and South Atlantic Councils and for Highly Migratory Species. The EFH mapper can be accessed from our habitat website at https://www.habitat.noaa.gov/protection/efh/efhmapper/. BOEM should also be aware that the Final Amendment 10 to the 2006 Consolidated Atlantic Highly Migratory Species (HMS) Fishery Management Plan (FMP) went into effect on September 1, 2017. This amendment contains several changes to the EFH designations for sharks and other highly migratory species. More information can be found on our website at https://www.fisheries.noaa.gov/topic/atlantic-highly-migratory-species.

Comment Number: BOEM-2021-0024-EMAIL-003-48
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

EFH Consultation

The MSA requires federal agencies to consult with the Secretary of Commerce, through NOAA Fisheries, with respect to "any action authorized, funded, or undertaken, or proposed to be authorized, funded, or undertaken, by such agency that may adversely affect any essential fish habitat (EFH) identified under this Act," 16 U.S.C. § 1855(b)(2). This process is guided by the requirements of our EFH regulation at 50 CFR 600.905. Pursuant to the MSA, each FMP must identify and describe EFH for the managed fishery, and the statute defines EFH as "those waters and substrates necessary to fish for spawning, breeding, feeding or growth to maturity" 16

U.S.C. § 1853(a)(7) and § 1802(10). NOAA's regulations further define EFH adding, "waters" include aquatic areas and their associated physical, chemical, and biological properties that are used by fish and may include aquatic areas historically used by fish where appropriate; "substrate" includes sediment, hard bottom, structures underlying the waters, and associated biological communities; "necessary" means the habitat required to support a sustainable fishery and the managed species' contribution to a healthy ecosystem; and "spawning, breeding, feeding, or growth to maturity" covers a species' full life cycle.

The EFH final rule published in the Federal Register on January 17, 2002, defines an adverse effect as: "any impact which reduces the quality and/or quantity of EFH." The rule further states that:

Comment Number: BOEM-2021-0024-EMAIL-003-49
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

An adverse effect may include direct or indirect physical, chemical, or biological alterations of the waters or substrate and loss of, or injury to, benthic organisms, prey species and their habitat and other ecosystems components, if such modifications reduce the quality and/or quantity of EFH. Adverse effects

to EFH may result from action occurring within EFH or outside EFH and may include site-specific or habitat-wide impacts, including individual, cumulative, or synergistic consequences of actions.

Comment Number: BOEM-2021-0024-EMAIL-003-50
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

As stated above, adverse impacts to EFH may result from actions occurring within or outside of areas designated as EFH. In addition, the EFH final rule also states that the loss of prey may be an adverse effect on EFH and managed species. As a result, actions that reduce the availability of prey species, either through direct harm or capture, or through adverse impacts to the prey species' habitat may also be considered adverse effects on EFH. The EFH regulations state that for any Federal action that may adversely affect EFH, Federal agencies must provide NOAA Fisheries with a written assessment of the effects of that action on EFH (50 CFR 600.920(e)).

This EFH Assessment should include analyses of all potential impacts, including temporary and permanent and direct and indirect individual, cumulative, and synergistic impacts of the proposed project.

Comment Number: BOEM-2021-0024-EMAIL-003-51
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

The EFH assessment must contain the following mandatory elements: (i) a description of the action, (ii) an analysis of the potential adverse effects of the action on EFH and the managed species, (iii) the federal agency's conclusions regarding the effects of the action on EFH, and (iv) proposed mitigation, if applicable (50 CFR 600.920(e)(3)). Due to the potential for substantial adverse effects to EFH from the proposed project, an expanded EFH consultation as described in 50 CFR 600.920(f) is necessary for this project. As part of the expanded EFH consultation, the EFH Assessment for the proposed project, the assessment should also contain additional information, including: (i) the results of an on-site inspection to evaluate the habitat and the site specific effects of the project, (ii) the views of recognized experts on the habitat or species that may be affected, (iii) a review of pertinent literature and related information, (iv) an analysis of alternatives to the action, and (v) other relevant information.

Comment Number: BOEM-2021-0024-EMAIL-003-53
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

Considerations for the EFH Assessment

The expanded EFH Assessment and the assessment should include full delineation, enumeration, and characterization of all habitat types in the project area including the lease areas, cable corridors and landing sites. Particular attention should be paid to HAPCs, sensitive life stages of species, ecologically sensitive habitats, and difficult-to-replace habitats such as SAV, natural hard bottom substrates with epifauna (including corals), and shellfish habitat and reefs.

However, the habitat mapping data should also be shared directly with us in usable GIS format for review, apart from the body of the EFH Assessment and maps and figures contained therein. To aid

BOEM and project applicants in the development of comprehensive and complete EFH Assessments, we have published our Recommendations for Mapping Fish Habitat, dated March 2021. This document is an updated version, which was previously submitted to BOEM on May 27, 2020. To further streamline the consultation process, we have also shared a technical assistance document with BOEM in January of 2021, titled Essential Fish Habitat (EFH) Information Needs for Offshore Wind Energy Projects in the Atlantic which provides a checklist of information that should be incorporated into the EFH Assessment.

Comment Number: BOEM-2021-0024-EMAIL-003-57
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

Under the FWCA, our authority extends to numerous other aquatic resources in the area of the proposed project, including, but not limited to, the following species and their habitats: American lobster (Homarus americanus), striped bass (Morone saxatilis), American shad (Alosa sapidissima), alewife (Alosa pseudoharengus) and blueback herring (Alosa aestivalis) (collectively known as river herring), blue crab (Callinectes sapidus), Atlantic menhaden (Brevoortia tyrannus), Atlantic silversides (Menidia menidia), bay anchovies (Anchoa mitchilli), oyster (Crassostrea virginica), blue mussel (Mytilus edulis), horseshoe crab (Limulus polyphemus), tautog (Tautoga onitis), spot (Leiostomus xanthurus), weakfish (Cyanoscion regalis) and other assorted fish and invertebrates (e.g., Neomysis americana, Mysidopsis bigelowi). NOAA jointly manages a number of these species through Interstate FMPs with the Atlantic States Marine Fisheries Commission. A list of Commission species and plans can be found on their website at http://www.asmfc.org.

We anticipate all of these species will be included in your impact assessments, both in the EFH Assessment and NEPA document. We also expect the assessment to include impacts to the recreational and commercial fishing communities that rely on these species. The behaviors and habitat needs of diadromous and estuary-dependent fishes (associated with cable route locations) may not be represented by a discussion solely of the surrounding marine fishes in the wind WTG area. The discussion for FWCA species should be designed around an ecological guild model that uses locally important species to evaluate the project impacts to organisms or populations associated with the various trophic levels and life history strategies exhibited by FWCA species known to occupy the project area as residents or transients. Focus should be on issues surrounding particular species, life history stages, or habitat components that would be most susceptible to the various potential project impacts.

Comment Number: BOEM-2021-0024-EMAIL-004-22
Organization: Long Beach Island (LBI) New Jersey Coalition for Wind Without Impact
Commenter: Bob Stern
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The discussion in the NOI glosses over potential significant impacts on overlapping essential fish habitats (EFHs) for both migratory and nonmigratory species, which should be illuminated in the NOI. Concerns have been expressed regarding the presence of EFHs for ocean quahogs, surf clams, Atlantic cod and black sea bass in the lease area. A December 2017 BOEM report, Habitat Mapping and Assessment of Northeast Wind Energy Areas, stated that the EFHs for these species broadly overlap the lease area. The report also stated that although the sea scallop EFH did not overlap the lease area, trawling surveys found scallops widespread in the lease area.

The report states that these species are “worth considering in terms of potential habitat disturbance”.

Comment Number: BOEM-2021-0024-EMAIL-004-23
Organization: Long Beach Island (LBI) New Jersey Coalition for Wind Without Impact
Commenter: Bob Stern
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The NOI fails to point out potential impacts on select benthic invertebrates such as the American lobster, and the Horseshoe and Jonah crabs which are present in moderate abundance in the southern part of the lease area.

Comment Number: BOEM-2021-0024-EMAIL-005-22
Organization: City of Beach Haven, New Jersey
Commenter: Colleen Lambert
Commenter Type: Local Agency

Comment Excerpt Text:

It glosses over potential significant impacts on overlapping essential fish habitats for both migratory and nonmigratory species, which should be illuminated in the NOI. It fails to point out potential impacts on select benthic invertebrates such as the American lobster, and the Horseshoe and Jonah crabs which are present in moderate abundance in the southern part of the lease area.

Comment Number: BOEM-2021-0024-TRANS-41321-0015-4
Organization: Fishermen's Headquarters Bait and Tackle
Commenter: Greg Cudnik
Commenter Type: Individual

Comment Excerpt Text:

One particular species I feel was overlooked is the sand lands, this is critically important, sand lands are forage fish in Northwest Atlantic and are grossly overlooked in Appendix P, sand lands -- sorry, 45 species of both coastal and pelagic species, 16 seabirds and nine marine mammals depend on sand lands making the species a quintessential link in the food web. Their role and strong association with sandy sediment waters less than 100 meters must be explicitly considered before any construction begins.

Comment Number: BOEM-2021-0024-TRANS-41321-0016-1
Organization: Ocean City Council
Commenter: Michael DeVilager
Commenter Type: Local Agency

Comment Excerpt Text:

I believe that the wind turbines are an existential threat to the species off our coast. In particular the Atlantic Sturgeon which comes out of the rivers and migrates right where the turbines are going to be, the Right Whale which I think others have mentioned today, 360 known to exist and are a direct threat -- threatened by this. The horseshoe beds that they are talking about building this industrial complex right in the middle of these beds and, you know not only are they endangered but they have great medical value for medicine purposes, I mean several critical medicines today are extracts from these horseshoe crabs. But, you know, and that's not to even mention the cold pool which feeds our whole variety of wild life, sealife in the region can be effected by, you know, and no one has done the research, there is no research has been done on the cold pool and some of these folks at Rutgers, with professors, you can look it up and see what they have said about this, but we are rolling into this way too fast to not look out for these protected -- these, you know, these things that should be protected by the Endangered Species Act.

Comment Number: BOEM-2021-0024-TRANS-41321-0017-3
Commenter: Rick Robinson
Commenter Type: Individual

Comment Excerpt Text:

The second is we just don't know what the environmental impact is. It's just so clear from the presentations that I heard today, from the research that I read, the cold pool alone is a unique echo system that really is still relatively little understood, except that we know that it drives the recreational and commercial fishing industry.

Comment Number: BOEM-2021-0024-TRANS-41321-0021-2
Commenter: Tony Butch
Commenter Type: Individual

Comment Excerpt Text:

Some of the studies that are out there, like the one that Dr. Gill, I think he did his out of Cranford University, an actual physical pen, you know, pumping an electromagnetic field in there, tagging the fish and seeing the response to it clearly shows an aversion to electromagnetic fields and should this create significant problems with the fluke fisheries, other fisheries I think it will be a big issue.

Comment Number: BOEM-2021-0024-TRANS-41521-0002-1
Commenter: Kathleen Spaeth
Commenter Type: Individual

Comment Excerpt Text:

I am concerned about, in particular, about these turbines going in our for those of you who have not heard that and I haven't tonight, I want to go on record on that, that mid Atlantic bite has not only surf clams and fisheries but it has a variety of other aquatic speeches and mammals that are in that area and in particular, my concern, and I want to make sure that we are looking at the scallop nicheries that are there, JerseyShore Reporting, LLC 9 they have already decreased and are in the mid Atlantic bite, there have been some issues with them and in particular, they're losing habitat and they are losing biomass. So I want to make sure that when we look at these turbines and the construction for the turbines, that we don't remove any of those biomass or interfere with their habitat.

Comment Number: BOEM-2021-0024-TRANS-41521-0002-2
Commenter: Kathleen Spaeth
Commenter Type: Individual

Comment Excerpt Text:

I also wanted us to take a look at the horseshoe crabs that over winter off of our shores that are very important, not only for our bird populations who come down the Atlantic shore and eat them, like our dragnot birds, but also we as human harvest those horseshoe crabs and we need them particularly for scientific research and as we are, if you don't know or as you all know, we have been in the midst of Covid outbreak, and we have needed those, the materials that come from the horseshoe crabs to help develop the vaccinations that hopefully some of us or most of us are working on getting. So it's very important to take a look at the horseshoe crabs to make sure they are not disturbed in anyway.

Comment Number: BOEM-2021-0024-TRANS-41521-0010-4
Organization: Fishermen's Headquarters Bait and Tackle
Commenter: Greg Cudnik
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Barnegat Bay is a very shallow 42 mile long narrow estuary and the high voltage cables that are proposed running across it risk cutting off the vital fish migratory patterns. The irresponsible drilling under Island Beach State Park's bathers beach, in close proximity to Sedge Island's conservation zone, the 16,000 acre ecologically sensitive echo system must be protected and conserved because the health of Barnegat Bay depends on it, it's also protected under administrative code 2014-09. High voltage cables rip through the very sensitive estuaries which have, as per the environmental study, submerged aquatic vegetation and salt marshes.

Comment Number: BOEM-2021-0024-TRANS-41521-0010-5
Organization: Fishermen's Headquarters Bait and Tackle
Commenter: Greg Cudnik
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Barnegat Bay has lots of issues, many of which are being helped, however this puts a major hurt and puts the bay in jeopardy. Sharks are a very important critically endangered species, Brown Sharks, Duskies, Sandmars, Thrashes, Makos, while their life stages are all within the home of this lease site, appendix P table three lists the species which will not only be effected during construction but also during the operation since sharks are known to have sensitivity to EMF. Altering their patterns raises huge concerns for the sharks that are slow to reproduce. A shark born today will not be sexually mature until the decommissioning process of these projects nearly 20 years later.

Comment Number: BOEM-2021-0024-TRANS-41521-0010-6
Organization: Fishermen's Headquarters Bait and Tackle
Commenter: Greg Cudnik
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

V3, appendix P, 3.4.1.10 lists winter flounder as economically important flatfish. The project area is contained designated essential fish habitat for winter flounder eggs, larval, juvenile and adult stages. Appendix E, photo 7, the survey erroneously documents winter flounder as summer flounder. Relatively little is known about surf clams which have close to a 500 year life spans yet 100 turbines are slated to be put in their sandy homes.

Comment Number: BOEM-2021-0024-TRANS-41521-0013-2
Commenter: Richard Birch
Commenter Type: Individual

Comment Excerpt Text:

And that same feasibility study () states -- talks about Dusky Sharks as the nursery grounds running from New Jersey to South (Carolina near shore waters. They are also) considered globally vulnerable and endangered and (rediless threatened species, they can be found in () a range of shallow inshore waters to the outer) continental shelf. (Lastly, fishermen have had a) very valid concern and that was recently addressed in NOAH's letter to BOEM just two weeks ago on 3/29, and I quote, "as we discussed in our (May 27, 2020 letter to you, we have found that the existing guru of ocean energy management bensic (ph) survey guidelines for collecting (acoustic and bensic data across the lease area have not been applied consistently and are) inadequate to ensure the collection of sufficient site specific baseline data

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Comment Number: BOEM-2021-0024-TRANS-42021-0004-2
Organization: Anglers for Offshore Wind Power

Commenter: Paul Eidman
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

More structure in the water means more fish habitat and aggregation of key game fish species like black sea bass, summer flounder, blackfish, bluefish and Mahi Mahi

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Comment Number: BOEM-2021-0024-TRANS-42021-0004-5
Organization: Anglers for Offshore Wind Power
Commenter: Paul Eidman
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Looking at the long term gains instead of the short term profits, off short wind power could help stem the tide of rising water temperatures and help to hold the game fish species along our shores and slow many of the species northward progression.

Comment Number: BOEM-2021-0024-TRANS-42021-0010-3
Commenter: Joe De Finnis
Commenter Type: Individual

Comment Excerpt Text:

The vibration sounds during the construction process, that's been well noted. This could adversely effect the fish life in and around the areas where the wind turbines will be constructed. It could also effect the cold pool area.

Comment Number: BOEM-2021-0024-TRANS-42021-0012-2
Commenter: Greg Kudnik
Commenter Type: Individual

Comment Excerpt Text:

The close proximity to six of New Jersey's artificial reefs is bad. These are essential fish habitats that cannot be disturbed. Driving 30 foot diameter piles 50 foot into the seabed will violently quake and possibly collapse or damage these wrecks and reefs which are in very close proximity. The sediment plumes will also have detrimental effects silting in and covering up once vibrant fish habitats.

Comment Number: BOEM-2021-0024-TRANS-42021-0023-2
Commenter: David Monte
Commenter Type: Individual

Comment Excerpt Text:

Also a recent peer reviewed study indicates fish abundance inside European wind farms are far greater than the abundance of fish outside of the wind farm in controlled areas. This study was published in Science and Agriculture magazine. Another example of fish abundance and wind farms is the Block Island Wind Farm itself, recreational fishing there has been good perhaps a bit better even though fishing pressure in the area has increased 200 percent because now it's a destination. At the Block Island Wind Farm there are commercial gill nets set right in the wind farm up by the turbines, commercial fisherman trawl alongside of them and recreation, and rod and reel fisherman fish right up to the pylons, just as how fishing should occur in a wind farm.

Comment Number: BOEM-2021-0024-TRANS-42021-0028-2
Organization: Bad Fish Fishing Charters

Commenter: Brian Williams
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

But with that said, to remediate some of these effects, these pitfalls may have, I suggest firstly replanting eel grass beds along the proposed area behind Ocean City, Impacts Bay and Great Harbor Bay. This is the area that the cable lines are set to run to the BL England site. This area was historically a thriving ecosystem that once flourished with eel grass beds but in the early 1900s were wiped out by disease. Second, reseed some oysters and other shellfish in this area as well.

A.2.13 Land Use and Coastal Infrastructure

Comment Number: BOEM-2021-0024-DRAFT-0139-1
Commenter: Sharon M Boettcher
Commenter Type: Individual

Comment Excerpt Text:

I am concerned about the impact of installing electric cables underneath Ocean City (from turbine to BLEngland) in zones that are already subject to flooding. Have studies been done on the impact on the environment, flood mitigation efforts, and traffic?

Comment Number: BOEM-2021-0024-DRAFT-0295-14
Organization: New England Fishery Management and Mid-Atlantic Fishery Management Councils
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The EIS must complete a thorough evaluation of impacts at cable landfall sites, particularly in cases where complex, vegetated coastal habitats occur in both Barnegat Bay and Great Egg Harbor. The northern cable route could disturb 20 acres of submerged aquatic vegetation (SAV; table 2.2.5-6 in Volume 2 of the COP), while the proposed southern cable route is not expected to disturb SAV. Impacts to these habitats should be minimized by choosing burial approaches that limit disturbance of the seabed, and restoration of coastal habitats should occur if mitigation does not eliminate impacts during construction. We are encouraged to note that Ocean Wind surveyed SAV at both sites in 2019/2020, since such habitats can and do change in distribution over time. The Councils recommend that BOEM and Ocean Wind work with NOAA Fisheries and local coastal managers to craft an appropriate range of alternatives to minimize impacts within the estuarine portions of the cable routes.

Comment Number: BOEM-2021-0024-DRAFT-0366-41
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

G. BOEM MUST PROTECT THE INTEGRITY OF THE ISLAND BEACH STATE PARK AND THE BARRIER ISLANDS IN BARNEGAT BAY

BOEM should seek to avoid, and be sure to minimize and mitigate, impacts to the barrier islands. The offshore export cable corridor includes the barrier island region of Sedge Island, Island Beach State Park, and the Barnegat Lighthouse State Park.[Footnote 71: COP, Vol. II p.122, 333.] Island Beach State Park, the Holgate Unit of the Forsythe National Wildlife Refuge, and Barnegat Light State Park contain undisturbed areas consisting of low and high marsh, scrub-shrub wetlands, and vegetated dunes. [Footnote 72: COP Vol. 2 p.122.] These ecologically important, undisturbed areas receive federal and state protection from development, as they contain populations of several globally rare, federal and state

rare, endangered, and threatened animals, plants, and natural communities. [Footnote 73: COP. Vol. 2 p. 122.] Specific species of concern in the barrier islands region includes the American chaffseed, a federally endangered species; Knieskern's beakedrush; Seabeach amaranth; and swamp pink, a federally endangered species and state endangered species; and Sensitive joint-vetch, a federally threatened species. [Footnote 74: COP Vol. 2, Table 2.2.1-4 p.123.] The barrier islands are ecologically important and BOEM should avoid, and be sure to minimize and mitigate, impacts to the islands.

Comment Number: BOEM-2021-0024-DRAFT-0366-42
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The Biden Administration aims to develop offshore wind and protect biodiversity. [Footnote 75: Exec. Order No. 14008, 86 Fed. Reg. 7619 (Jan. 27, 2021).] Although meeting the Biden Administration's offshore wind goal is of great importance, this goal cannot be met at the expense of state parks, undisturbed areas, and rare and threatened species. In developing the Draft EIS, BOEM must protect the integrity of Island Beach State Park and other barrier islands that could be impacted by the Project's construction or operation.

A.2.14 Marine Mammals

Comment Number: BOEM-2021-0024-DRAFT-0025-4
Commenter: Devin Pantiliano
Commenter Type: Individual

Comment Excerpt Text:

I also understand the right whale population is endangered and this project falls right in the path of the migration and mating pattern.

Comment Number: BOEM-2021-0024-DRAFT-0090-9
Commenter: Louise Halprin
Commenter Type: Individual

Comment Excerpt Text:

We can see dolphins and porpoises regularly from our deck—it's the main reason we purchased a beachfront condo. We don't want to lose the gift God has given us of our ocean dolphins & porpoises, with the intrusion of wind turbines. The ocean mammals will be disrupted on many levels— starting with the pier placements that could easily cause death to them during the drilling and concrete pours, then the smaller fish that is their food have a high chance to face their demise as well.

Comment Number: BOEM-2021-0024-DRAFT-0111-3
Commenter: Natalie Thibault
Commenter Type: Individual

Comment Excerpt Text:

These proposed turbines will also be detrimental to migratory patterns and the mortality of the endangered North Atlantic right whale . There are currently only 300-350 right whales on our entire planet (World Wildlife Federation).

Comment Number: BOEM-2021-0024-DRAFT-0111-4
Commenter: Natalie Thibault
Commenter Type: Individual

Comment Excerpt Text:

The mere existence of these structures will kill bats and birds, and few studies have been done to examine the damage that the lights on these projects will cause to various marine species.

Comment Number: BOEM-2021-0024-DRAFT-0112-16
Commenter: Robert and Joann Zuczek
Commenter Type: Individual

Comment Excerpt Text:

Effect of offshore wind farms on marine animals and birds are not fully understood.

Comment Number: BOEM-2021-0024-DRAFT-0169-4
Commenter: Rick Robinson
Commenter Type: Individual

Comment Excerpt Text:

There are myriad other ecological considerations that are being minimized or entirely dismissed on little or no solid research. Birds, whales, porpoises will all be harmed.

Comment Number: BOEM-2021-0024-DRAFT-0175-1
Commenter: Krid Olson
Commenter Type: Individual

Comment Excerpt Text:

the wildlife and marine life that will most certainly be affected, and we know our marine life is already in peril due to humans compromising the oceans.

Comment Number: BOEM-2021-0024-DRAFT-0196-12
Commenter: Lisa Kazunas
Commenter Type: Individual

Comment Excerpt Text:

The proposed windfarm can also have a negative affect on the migration and mortality of the North Atlantic Right Whale which there are only about 300-350 left on the planet. See worldwildlife.org or World Wildlife Federation.

Comment Number: BOEM-2021-0024-DRAFT-0208-14
Organization: Long Beach Island, NJ Coalition for Wind Without Impact
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The NOI fails to mention the problem of potential harm to the critically endangered North Atlantic Right Whale as it migrates and feeds along and within the outer boundary of the lease area. This is a critical issue not only for the whales but for the wind energy that can be generated from the area, since an outer buffer zone will likely be required.

Comment Number: BOEM-2021-0024-DRAFT-0208-18
Organization: Long Beach Island, NJ Coalition for Wind Without Impact
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The expected impacts section also fails to mention potential adverse impact to the North Atlantic Right Whale which has a migratory path directly off and inside the outer perimeter of the lease area. An initial assessment of this crucial issue should be done as part of the scoping effort, and the impacts on these whales from construction-related and operational turbine noise should be fully analyzed in the EIS.

Comment Number: BOEM-2021-0024-DRAFT-0208-9
Organization: Long Beach Island, NJ Coalition for Wind Without Impact
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The North Atlantic Right Whale is a critically endangered species with less than 400 whales left in the world. It travels a migratory corridor beginning about 18.5 miles out, along and within apportion of the exterior portion of the lease area (1).

If turbines are placed no closer in than 17.3 miles for visible reduction, no further out than 18.5 miles to avoid the right whale's migratory path, and spaced a nautical mile (1.15 miles) apart per the applicant's public statements, that would leave room for only two rows of turbines with19 turbines in each row.

In addition, preliminary evidence and analysis suggests that for today's larger turbines an additional buffer zone of around 0.9 miles may be necessary to avoid stress on the right whales from operational noise (2)(3(4)(7). This may make even that outer row of 19 turbines not viable. Also, the noise pressure during construction from pile driving for monopile foundations can stress the whales at significant distances (5). Therefore, restrictions on when those activities can take place will also be required.

Comment Number: BOEM-2021-0024-DRAFT-0221-2
Commenter: Timothy Feeney
Commenter Type: Individual

Comment Excerpt Text:

Lastly I'm highly troubled by the possible affect on the health of the numerous marine mammals along the coast. I strongly feel much more research needs to be done before a project of the size goes forward and potentially creates irreversible damage.

Comment Number: BOEM-2021-0024-DRAFT-0233-4
Organization: City of Ocean City, Environmental Commission
Commenter Type: Local Agency

Comment Excerpt Text:

Migration of Whales, Cetacean and Sea Turtles - employ observation vessels for these animals, enforce work stoppages when encountered, especially to protect the endangered North Atlantic Right Whales.

Comment Number: BOEM-2021-0024-DRAFT-0278-4
Commenter: Gerald Thornton
Commenter Type: Individual

Comment Excerpt Text:

We cannot be sure how these windmills will interact with our whale population.

Comment Number: BOEM-2021-0024-DRAFT-0287-6
Organization: North Beach Taxpayers Association
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The impact to many threatened and endangered species, including the Right Whale, is unknown.

Comment Number: BOEM-2021-0024-DRAFT-0329-5
Commenter: Richard Bertsch
Commenter Type: Individual

Comment Excerpt Text:

MARINE ENVIROMENT: Block Island Wind Farm has been used as a comparison for expanded fishing in the areas near the Wind Turbines. There is a vast difference when comparing the Block Island and Ocean Wind. First the size of the Turbines, Block Island 600' Ocean Wind 900" a 50% increase, number Block Island 6 Ocean Wind 98 and location Block Island 3.8 off the Island Ocean Wind Minimum of 15 Miles off the Barrier Island. To use the experience to Block Island for Ocean Wind LLC is not suitable for the downside risk that could occur.

Right Whale- In the New Jersey BPU initial Feasibility Study done in November 2004 Page 66 Section 4.5 they state the "North Atlantic Right Whale can be found in found from coastal water to the continental shelf, and generally migrates within 20 miles of the shore. These wales are generally found in New Jersey's waters in the spring and fall." However, in Orsted published studies they claim few if any migrate in the proposed leased Windfarm Area. So there is a diffence of opinion on this. The North American right whale population per the Intenational Union for Conservation of Nature (ICUN) has estimated their population as of July 2020 at appproximately 350 with a mortality to birthrate ratio of 3 to 2. So numbers are still on the decline with ICUN now delaring the North Atlantic Right Whate as critically endangered. This is they are at a high risk of global extinction. There are planned 99 of these GE Haliade Turbines in just the Ocean Wind LLC leased areas. However up and down the Eastern Seaboard there could be potentially well over 500. In each lease area the turbines will be 1 miles apart. There mere existence as a structure alone is reason for concern for the Right Whale migration. Add on to that the potential of EMF frequencey and sonar disruption as no one has guaranteed that there will none poses the risk of complete extinction. If that was the case we can not bring them back.

Comment Number: BOEM-2021-0024-DRAFT-0332-8
Commenter: Suzanne Hornick
Commenter Type: Individual

Comment Excerpt Text:

The Right Whale is critically endangered and we need them to help keep our waters clean

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Comment Number: BOEM-2021-0024-DRAFT-0338-5
Organization: American Littoral Society
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The COP identifies that operation and maintenance of the Project may result in long term impacts to marine mammals and sea turtles "due to the potential for collision risks and disturbance associated with Project-related vessel traffic. " This is of great concern, particularly given the apparent increase in the presence and use of the region by whales and marine mammals.

Thank you for the opportunity to provide these comments.

Comment Number: BOEM-2021-0024-DRAFT-0345-17
Organization: U.S. Environmental Protection Agency, Region 2
Commenter Type: Federal Agency

Comment Excerpt Text:

BOEM will be required to consult with the National Oceanic and Atmospheric Administration (NOAA) regarding issues related to marine mammals, essential fish habitat, and threatened or endangered species. EPA hopes to participate in meetings related to marine mammals and threatened or endangered species and intends to work with BOEM as the "lead agency" for ESA consultation, with EPA as a listed "action agency", in support of our permitting responsibilities for the project.

Comment Number: BOEM-2021-0024-DRAFT-0346-1
Commenter: Martha Oldach
Commenter Type: Individual

Comment Excerpt Text:

We are home to the right whale the most endangered whale on the planet. There are approximately 350 left alive the disruption of the massive noise of the slamming of the pilings into the sea bed which will radiate for miles is just the beginning of the danger for the right whales and the other sea mammals and fish.

Comment Number: BOEM-2021-0024-DRAFT-0354-11
Organization: New York State Department of State
Commenter Type: State Agency

Comment Excerpt Text:

Six large whale species are commonly found in the New York Bight and also represent some of the most threatened species in the U.S. [Footnote 6: NYSDEC. https://www.dec.ny.gov/lands/113647.html The six large whale species include fin whale (Balaenoptera physalus), humpback whale (Megaptera novaeangliae), North Atlantic right whale (Eubalaena glacialis), blue whale (Balaenoptera musculus), sei whale (Balaenaoptera borealis), and sperm whale (Physeter macrocephalus).] New York has undertaken a multi-year baseline monitoring program that includes NYSERDA-sponsored aerial surveys, [Footnote 7: https://remote.normandeau.com/nys_aer_overview.php] DEC-sponsored aerial surveys, and DEC-sponsored acoustic monitoring. Data from these surveys indicate that fin and humpback whales can be found throughout the New York Bight during most times of the year, with the relatively large number of sightings and observed behaviors suggesting that the New York Bight is part of the fin and humpback whales' seasonal feeding grounds. [Footnote 8: Tetra Tech and LGL. 2020. Final Comprehensive Report for New York Bight Whale Monitoring Aerial Surveys, March 2017 – February 2020. Technical report prepared by Tetra Tech, Inc. and LGL Ecological Research Associates, Inc. 211 pp. + appendices. Prepared for New York State Department of Environmental Conservation, Division of Marine Resources, East Setauket, NY. May 18, 2020. https://www.dec.ny.gov/lands/113818.html.] DOS encourages these data and findings be incorporated into the environmental review and considered when developing project-specific environmental protections.

Comment Number: BOEM-2021-0024-DRAFT-0364-1
Organization: Oceana
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Oceana is supportive of offshore wind if it is responsibly sited, built and operated throughout its lifespan. Because the immediate proposals for offshore wind development are along the Atlantic seaboard in the areas that the critically endangered North Atlantic right whale (NARW) may frequent, offshore wind needs to consider, avoid, and mitigate effects to protected species, particularly the critically endangered North Atlantic right whale (NARW) to ensure that wind development will not come at the expense of the species. NARWs spend the majority of the year in the waters of New England and Eastern Canada with

mothers migrating south to have calves in the U.S. SE region. Wind development in persistent aggregation habitats and calving grounds pose particular issues with wind development but those where NARWs migrate are likely more appropriate because of the reduced frequency, intensity and duration of interactions with these areas. As offshore wind is developed along the eastern seaboard, strong are needed measures to protect this critically endangered species.

Comment Number: BOEM-2021-0024-DRAFT-0364-14
Organization: Oceana
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The project will be a private enterprise conducted on shared public waters and as such, the EIS must include alternatives to require all phases of the project to subscribe to the highest level of transparency, including frequent reporting to federal agencies, requirements to report all visual and acoustic detections of North Atlantic right whales and any dead, injured, or entangled marine mammals to NMFS or the Coast Guard as soon as possible and no later than the end of the Protected Species Observer shift.

Comment Number: BOEM-2021-0024-DRAFT-0364-16
Organization: Oceana
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The North Atlantic right whales travel from Canada to Florida on a regular basis. The NARW calves are born in southern waters and they travel north to feed and grow. In recent years, NARWs have shifted some of their aggregation areas. NOAA designates SMAs that are aligned to where whales are expected at certain times of the year and then creates DMAs when NARWs are present. As mentioned above, projects should not be sited in Seasonal Management Areas or in areas where persistent or long-duration DMAs are established and extended for more than 3 months in one year of the most recent five. The Ocean Wind EIS should analyze North Atlantic right whale abundance patterns to confirm that there is no overlap SMAs or persistent DMAs.

Comment Number: BOEM-2021-0024-DRAFT-0364-18
Organization: Oceana
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

High resolution geophysical (HRG) surveys are an essential part of offshore wind development but have noted environmental effects on the marine ecosystem. As such, the EIS should include a range of alternatives to prohibit HRG surveys during seasons when protected species are known to be present in the project area, in addition to any dynamic restrictions due to the presence of NARW or other endangered species.

Additionally, the EIS should include alternatives that require clearance zones for North Atlantic right whales that extend at least 1,000 meters with requirements for HRG survey vessels to use Protected Species Observers (PSOs) and Passive Acoustic Monitoring (PAM) to establish and monitor these zones with requirements to cease surveys if a NARW enters the clearance zone. When safe to begin, HRG surveys should use a soft start, ramp-up procedure to encourage any nearby marine life to leave the area.

Comment Number: BOEM-2021-0024-DRAFT-0364-3
Organization: Oceana
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Oceana notes that many of the wind development areas and projects were proposed more than 10 years ago. Prior to issuing permits, BOEW and the National Marine Fisheries Service (NMFS) must use the best available science that meets the information standards of these statutes. Oceana also suggests that BOEM require new biological and ecological surveys of all proposed lease areas where the data is over 5 years old due to changing ocean conditions and presence of ocean wildlife.

Comment Number: BOEM-2021-0024-DRAFT-0364-4
Organization: Oceana
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

[Bold: Endangered Species Act and Marine Mammal Protection Act-] The project must include current, robust analysis of the immediate and cumulative effects of the project on species listed under the ESA and MMPA. Additionally, the project must undergo consultation and permitting under the ESA and MMPA; including a Biological Opinion for all Endangered Species Act-listed species and an Incidental Harassment Authorizations under the Marine Mammal Protection Act.

Comment Number: BOEM-2021-0024-DRAFT-0364-9
Organization: Oceana
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Separation Distance- Consistent with NOAA regulations under the Endangered Species Act for all vessels, aircraft, the EIS should include requirements for all vessels must maintain a separation distance of at least 500m from North Atlantic right whales at all times.

Comment Number: BOEM-2021-0024-DRAFT-0366-113
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

F. IMPACTS TO SEA TURTLES

1. Status of Sea Turtles in the Project Area

Of the five sea turtle species known to occur in the Project area, only the loggerhead and leatherback turtles occur regularly, primarily during summer and fall. [Footnote 184: GMI (Geo-Marine Inc.). 2010. Ocean/Wind power ecological baseline studies January 2008 - December 2009. Final report. New Jersey Department of Environmental Protection, Trenton, New Jersey.] In addition to the sea turtle sightings data recorded during the New Jersey Ecological Baseline Study in 2008-2009, more recent AMAPPS and other regional data sources, [Footnote 185: Kraus, S., et al., "Northeast large pelagic survey collaborative aerial and acoustic surveys for large whales and sea turtles. Final Report," supra.] including stranding [Footnote 186: Sea Turtle Stranding and Salvage Network. https://www.fisheries.noaa.gov/state-coordinators-sea-turtle- stranding-and-salvage-network] and tagging data, [Footnote 187: Dodge, K.L., B. Galuardi, and M.E. Lutcavage. 2015. Orientation behaviour of leatherback sea turtles within the North Atlantic subtropical gyre. Proceedings of the Royal Society B 282:20143129.] should also be incorporated in order to assess the current occurrence of sea turtles in the Project area. The relative use of nearshore areas by sea turtle species should be accounted for in models of sea turtle density—and subsequent impact analysis—as this Project area is in nearshore waters.

Comment Number: BOEM-2021-0024-DRAFT-0366-114
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Given that the ability to detect sea turtles during aerial surveys is highly variable, increased investment in tagging and tracking studies [Footnote 188: See, e.g., Dodge, K.L., et al. id.; Dodge, K.L., Galuardi, B. and Lutcavage, M.E., "Orientation behaviour of leatherback sea turtles within the North Atlantic subtropical gyre," Proceedings of the Royal Society B, vol. 282, art. 20143129 (2015); Winton, M.V., Fay, G., Haas, H.L., Arendt, M., Barco, S., James, M.C., Sasso, C., and Smolowitz, R., "Estimating the distribution and relative density of satellite-tagged loggerhead sea turtles using geostatistical mixed effects models," Marine Ecology Progress Series, vol. 586, pp. 217-232 (2018).] would complement data collected via aerial surveys and provide a more complete picture of sea turtle occurrence and habitat use in the region. Additionally, increased sea turtle tagging and tracking studies, especially for green and hawksbill turtles, are needed to better understand movement, dive patterns and surface time, and habitat use which can, among other uses, help advise monitoring and avoidance, minimization, and mitigation strategies and generate more accurate estimates of sea turtle takes. Satellite telemetry data are available from rehabilitated and released Kemp's ridley and green turtles [Footnote 189: Robinson, N.J., Deguzman, K., Bonacci-Sullivan, L., DiGiovanni Jr., R.A., and Pinou, T., "Rehabilitated sea turtles tend to resume typical migratory behaviors: satellite tracking juvenile loggerhead, green, and Kemp's ridley turtles in the northeastern USA," Endangered Species Research, vol. 43, pp. 133-143 (2020); New England Aquarium, unpublished data.] that suggests rehabilitated turtles are a good proxy for wild-caught turtles. Considering the costs and probably limited success rate of in-water tagging work for these three species, acoustic telemetry of rehabilitated turtles may be an effective means of gathering useful data. There is already significant investment underway for acoustic telemetry arrays in WEAs for highly migratory fish species, presenting an opportunity for cost-effective data collection on sea turtles. Thus, a combination of satellite tags (to collect data on surface availability to parameterize density models) and acoustic telemetry will improve understanding of sea turtle habitat use in the New Jersey/New York Bight.

Comment Number: BOEM-2021-0024-DRAFT-0366-52
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

E. IMPACTS TO MARINE MAMMALS

1. Status of Marine Mammals in the Project Area

Eight marine mammal species occur regularly in nearshore waters off New Jersey. [Footnote 86: Whitt, A.D., J.A. Powell, A.G. Richardson, and J.R. Bosyk. 2015. Abundance and distribution of marine mammals in nearshore waters off New Jersey, USA. Journal of Cetacean Research and Management 15:45-59.] Of these species, two (North Atlantic right whale and fin whale) are listed as endangered under the ESA, and as depleted and strategic stocks under the Marine Mammal Protection Act (MMPA). In addition, humpback whales occurring off New Jersey are part of the Gulf of Maine stock which is considered strategic under the MMPA. [Footnote 87: National Marine Fisheries Service (NMFS). 2020. Draft U.S. Atlantic and Gulf of Mexico marine mammal stock assessments -- 2020.]

Comment Number: BOEM-2021-0024-DRAFT-0366-53
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

As the agency is aware, the conservation status of the North Atlantic right whale rests on a knife-edge. In October 2020, NMFS declared that since 2011, approximately 218 North Atlantic right whales died from fishing gear entanglements and vessel strikes—"a rate of roughly 24 whale deaths per year." [Footnote 88: Email from Colleen Coogan to the Atlantic Large Whale Take Reduction Team, Re: To ALWTRT: Preliminary January 2019 North Atlantic right whale population estimate, Oct. 26, 2020.] The agency noted that while it had anticipated the continuation of the population decline that began in 2011, the preliminary population estimate for the beginning of 2019 (366 right whales) and the preliminarily revised population estimate for the beginning of 2018 (383 right whale) [Footnote 89: Id] are lower than expected because of updated photo-identification data and the worse-than-expected impact of the ongoing Unusual Mortality Event (UME). [Footnote 90: Id] NMFS also stated that fewer than 94 breeding females remain. [Footnote 91: Id] Scientists from the New England Aquarium subsequently released a new population estimate of just 356 individuals at the end of 2019. [Footnote 92: Pettis, H.M., Pace III, R. M., and Hamilton, P.K., "North Atlantic Right Whale Consortium 2020 Annual Report Card," Report to the North Atlantic Right Whale Consortium (2020). Available at: https://www.narwc.org/uploads/1/1/6/6/116623219/2020narwcreport_cardfinal.pdf.] Additionally, these scientists believe that low birth rates coupled with whale deaths "means that there could be no females left in the next 10 to 20 years." [Footnote 93: Davie, E., "New population estimate suggests only 356 North Atlantic right whales left," CBC News (Oct. 29, 2020). Available at: https://www.cbc.ca/news/canada/nova-scotia/356-north-atlantic-right-whales-left- 2020-population-1.5779931]

Comment Number: BOEM-2021-0024-DRAFT-0366-54
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Since 2010, North Atlantic right whale distribution and habitat use has shifted in response to climate change-driven shifts in prey availability. [Footnote 94: Record, N., Runge, J., Pendleton, D., Balch, W., Davies, K., Pershing, A., Johnson, C., Stamieszkin, K., Ji, R., Feng, Z. and Kraus, S., "Rapid Climate-Driven Circulation Changes Threaten Conservation of Endangered North Atlantic Right Whales," Oceanography, vol. 32, pp. 162-169 (2019).] Best available scientific information, including regional shipboard and aerial surveys, [Footnote 95: Redfern, J., Pendleton, D., O'Brien, O., Ganley, L., Hodge, B. and McKenna, K., "Tools to identify and minimize risk to marine mammals," Presentation to the Massachusetts Habitat Working Group (Dec. 11, 2020); Kraus, S.D., Leiter, S., Stone, K., Wikgren, B., Mayo, C., Hughes, P., Kenney, R.D., Clark, C.W., Rice, A.N., Estabrok, B., and Tielens, J., "Northeast large pelagic survey collaborative aerial and acoustic surveys for large whales and sea turtles. Final Report," OCS Study, BOEM 2016-054, pp. 118 (2016); Leiter, S.M., Stone, K.M., Thompson, J.L., Accardo, C.M., Wikgren, B.C., Zani, M.A., Cole, T.V.N., Kenney, R.D., Mayo, C.A., and Kraus, S.D., "North Atlantic right whale Eubalaena glacialis occurrence in offshore wind energy areas near Massachusetts and Rhode Island, USA," Endangered Species Research, vol. 34, pp. 45-59 (2017); Quintana, E., "Monthly report No. 3: May 2017," Report prepared for the Massachusetts Clean Energy Center by the New England Aquarium, pp. 26 (May 15, 2017).] acoustic detections, [Footnote 96: Kraus, S.D., et al., id; Davis, G.E., Baumgartner, M.F., Bonnell, J.M., Bell, J., Berchick, C., Bort Thorton, J., Brault, S., Buchanan, G., Charif, R.A., Cholewiak, D., et al., "Long-term passive acoustic recordings track the changing distribution of North Atlantic right whales (Eubalaena glacialis) from 2004 to 2014," Scientific Reports, vol. 7, p. 13460 (2017).],[Footnote 97: Davis, G.E., M.F. Baumgartner, J.M. Bonnell, J. Bell, C. Berchok, J. Bort Thornton, S. Brault, G. Buchanan, R.A. Charif, D. Cholewiak, C.W. Clark, P. Corkeron, J. Delarue, K. Dudzinski, L. Hatch, J. Hildebrand, L. Hodge, H. Klinck, S. Kraus, B. Martin, D.K. Mellinger, H. Moors-Murphy, S. Nieukirk, D.P. Nowacek, S. Parks, A.J. Read, A.N. Rice, D. Risch, A. Širovic, M. Soldevilla, K. Stafford, J.E. Stanistreet, E. Summers, S. Todd, A. Warde, and S.M. Van

Parijs. 2017. Long-term passive acoustic recordings track the changing distribution of North Atlantic right whales (Eubalaena glacialis) from 2004 to 2014. Scientific Reports 7(1):13460.],[Footnote 98: Davis, G.E., M.F. Baumgartner, P.J. Corkeron, J. Bell, C. Berchok, J.M. Bonnell, J. Bort Thornton, S. Brault, G.A. Buchanan, D.M. Cholewiak, C.W. Clark, J. Delarue, L.T. Hatch, H. Klinck, S.D. Kraus, B. Martin, D.K. Mellinger, H. Moors-Murphy, S. Nieukirk, D.P. Nowacek, S.E. Parks, D. Parry, N. Pegg, A.J. Read, A.N. Rice, D. Risch, A. Scott, M.S. Soldevilla, K.M. Stafford, J.E. Stanistreet, E. Summers, S. Todd, and S.M. Van Parijs. 2020. Exploring movement patterns and changing distributions of baleen whales in the western North Atlantic using a decade of passive acoustic data. Global Change Biology 26(9):4812-4840.] photo-identification data, [Footnote 99: Hamilton, P., "North Atlantic Right Whale Catalog Update, Recent Genetic Findings and Whale Naming Results," Presentation at the North Atlantic Right Whale Consortium Annual Meeting (Oct. 29, 2020).] stranding data, [Footnote 100: Asaro, M.J., "Update on US Right Whale Mortalities in 2017," NOAA Fisheries, November 30, 2017. Available at: https://www.greateratlantic.fisheries.noaa.gov/protected/whaletrp/trt/meetings/2017%20Nov/asaro_usstranding s_nov2017.pdf.] a series of Dynamic Management Areas (DMAs) declared by NMFS pursuant to ship strike rule, [Footnote 101: NOAA Fisheries Interactive DMA Analyses: https://www.nefsc.noaa.gov/rcb/interactive-monthly-dma- analyses/.] and prey.

Comment Number: BOEM-2021-0024-DRAFT-0366-55
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Although there are challenges in the use of opportunistic sightings data (no area systematically surveyed, effort not corrected for, and potential for counting an individual whale more than once), they are a data, [Footnote 102: Pendleton, D.E., Pershing, A., Brown, M.W., Mayo, C.A., Kenney, R.D., Record, N.R., and Cole, T.V.N., "Regional- scale mean copepod concentration indicates relative abundance of North Atlantic right whales," Marine Ecology Progress Series, vol. 378, pp. 211-225 (2009); NOAA Northeast Fisheries Science Center, "Ecology of the Northeast US Continental Shelf – Zooplankton." Available at: https://www.nefsc.noaa.gov/ecosys/ecosystem- ecology/zooplankton.html] indicate that North Atlantic right whales now rely heavily on the waters within, and regionally proximate to, the Project Area year-round. Known to be part of the seasonal migratory pathway for North Atlantic right whales, New Jersey's nearshore waters also appear to be important year-round habitat for right whales. During the New Jersey Ecological Baseline Study conducted in nearshore waters (0-30 NM) off New Jersey monthly between January 2008 and December 2009, North Atlantic right whales were detected throughout the year. [Footnote 103: GMI (Geo-Marine Inc.). 2010. Ocean/Wind power ecological baseline studies January 2008 - December 2009. Final report. New Jersey Department of Environmental Protection, Trenton, New Jersey.],[Footnote 104: Whitt, A.D., K. Dudzinski, and J.R. Laliberté. 2013. North Atlantic right whale distribution and seasonal occurrence in nearshore waters off New Jersey, USA, and implications for management. Endangered Species Research 20:50-69; incorporated into Davis et al. (2017), supra.] Sightings included four groups of right whales, including a cow-calf pair, and occurred close to shore (10 – 17 NM) and in shallow waters (55 – 85 ft).

Comment Number: BOEM-2021-0024-DRAFT-0366-56
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Sightings of females and subsequent confirmations of these same individuals in the calving grounds a month or less later confirm that these waters are part of this species' migratory corridor. Observations of skim-feeding behavior suggest that feeding may also occur in areas farther south than the main feeding grounds.23 Therefore, this species should be expected to be present in the Project area year- round.

Comment Number: BOEM-2021-0024-DRAFT-0366-57
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Protection of North Atlantic right whale migration and foraging habitat is essential, and further research to determine whether North Atlantic right whales are engaging in foraging activity should be undertaken during site assessment, particularly in nearshore waters off New Jersey. Foraging areas with suitable prey density are limited relative to the overall distribution of North Atlantic right whales and a decreasing amount of habitat is available for resting, pregnant, and lactating females. [Footnote 105: Van der Hoop, J., Nousek-McGregor, A.E., Nowacek, D.P., Parks, S.E., Tyack, P., and Madsen, P, "Foraging rates of ram-filtering North Atlantic right whales." Functional Ecology, vol. 33, pp. 1290-1306 (2019); Plourde, S., Lehoux, C., Johnson, C. L., Perrin, G., and Lesage, V. "North Atlantic right whale (Eubalaena glacialis) and its food: (I) a spatial climatology of Calanus biomass and potential foraging habitats in Canadian waters." Journal of Plankton Research, vol. 41, pp. 667-685 (2019); Lehoux, C., Plourde S., and Lesage, V., "Significance of dominant zooplankton species to the North Atlantic Right Whale potential foraging habitats in the Gulf of St. Lawrence: a bioenergetic approach." DFO Canadian Science Advisory Secretariat (CSAS) Research Document 2020/033 (2020). Gavrilchuk, K., Lesage, V., Fortune, S., Trites, A.W., and Plourde, S., "A mechanistic approach to predicting suitable foraging habitat for reproductively mature North Atlantic right whales in the Gulf of St. Lawrence." DFO Canadian Science Advisory Secretariat (CSAS) Research Document 2020/034 (2020).] This means that unrestricted and undisturbed access to suitable areas, when they exist, is extremely important for the species to maintain its energy budget. [Footnote 106: Id] Scientific information on North Atlantic right whale functional ecology also shows that the species employs a "high-drag" foraging strategy that enables them to selectively target high-density prey patches, but is energetically expensive. [Footnote 107: Van der Hoop, J., et al., id.] Thus, if access to prey is limited in any way, the ability of the whale to offset its energy expenditure during foraging is jeopardized. In fact, researchers have concluded: "[R]ight whales acquire their energy in a relatively short period of intense foraging; even moderate changes in their feeding behavior or their prey energy proxy for habitat used by North Atlantic right whales, as validated by NMFS' management actions based on these data, including the implementation of DMAs.

Comment Number: BOEM-2021-0024-DRAFT-0366-58
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

North Atlantic right whales are already experiencing significant food-stress: juveniles, adults, and lactating females have significantly poorer body condition relative to southern right whales and the poor condition of lactating females may cause a reduction in calf growth rates. [Footnote 109: Christiansen, F., Dawson, S.M., Durban, J.W., Fearnbach, H., Miller, C.A., Bejder, L., Uhart, M., Sironi, M., Corkeron, P., Rayment, W., Leunissen, E., Haria, E., Ward, R., Warick, H.A., Kerr, I., Lynn, M.S., Pettis, H.M., & Moore, M.J., "Population comparison of right whale body condition reveals poor state of the North Atlantic right whale." Marine Ecology Progress Series, vol. 640, pp. 1-16 (2020).] Undisturbed access to foraging habitat is necessary to adequately protect the species, as is the minimization of disturbance during the species' energetically expensive migration.

Comment Number: BOEM-2021-0024-DRAFT-0366-59
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Detections of humpback whales and fin whales in nearshore New Jersey waters, particularly during times of the year when individuals are known to occur in geographically proximate areas (e.g., the New York Bight), demonstrate the potential year-round importance of this region. [Footnote 110: Whitt, A.D., J.A. Powell, A.G. Richardson, and J.R. Bosyk. 2015. Abundance and distribution of marine mammals in nearshore waters off New Jersey, USA. Journal of Cetacean Research and Management 15:45-59.] Humpback whales have been observed feeding in waters as shallow as 15 m, and cow-calf pairs have also been sighted in shallow New Jersey waters, suggesting that nearshore New Jersey waters may be important foraging and nursery habitats for this species.[Footnote 111: Id] The year-round presence of fin whales recorded during this same baseline study included a cow-calf pair, and the cow appeared to be making foraging dives.[Footnote 112: Id]

Ongoing UMEs exist for humpback and minke whales. There have been UMEs for the Atlantic population of minke whales since January 2017 and humpback whales since January 2016. Alarmingly, 105 minke whales have stranded between Maine and South Carolina from January 2017 to April 2021. [footnote 113: NOAA-NMFS, "2017-2021 Minke whale Unusual Mortality Event along the Atlantic Coast," supra; NOAA-NMFS, "2017-2021 North Atlantic right whale Unusual Mortality Event." Available at: https://www.fisheries.noaa.gov/national/marine-life-distress/2017-2021-minke-whale-unusual-mortality-event- along-atlantic-coast.] Elevated numbers of humpback whales have also been found stranded along the Atlantic Coast since January 2016 and, in a little over five years, 149 humpback whale mortalities have been recorded (data through April 20, 2021), with strandings occurring in every state along the East Coast. [Footnote 114: NOAA-NMFS, "2016-2021 Humpback whale Unusual Mortality Event along the Atlantic Coast." Available at: https://www.fisheries.noaa.gov/national/marine-life-distress/2016-2021-humpback-whale-unusual-mortality- event-along-atlantic-coast; NOAA-NMFS, "2017-2021 Minke whale Unusual Mortality Event along the Atlantic Coast." Available at: https://www.fisheries.noaa.gov/national/marine-life-distress/2017-2021-minke-whale- unusual-mortality-event-along-atlantic-coast, "2016-2021 Humpback whale Unusual Mortality Event along the Atlantic Coast," supra.] Partial or full necropsy examinations have been conducted on approximately half of the stranded animals and a significant portion showed evidence of pre-mortem vessel strikes. NMFS recently designated the Gulf of Maine humpback whale stock, which occurs off NJ, as a strategic stock under the MMPA based on the total estimated human-caused average annual mortality and serious injury to this stock, including from vessel strikes. [Footnote 115: National Marine Fisheries Service (NMFS). 2020. Draft U.S. Atlantic and Gulf of Mexico marine mammal stock assessments -- 2020.]

Comment Number: BOEM-2021-0024-DRAFT-0366-60
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Harbor porpoise also require special attention during offshore wind energy development because of their extreme sensitivity to noise. Harbor porpoise are substantially more susceptible to temporary threshold shift (i.e., hearing loss) from low-frequency pulsed sound than are other cetacean species that have thus far been tested. [Footnote 116: Lucke, K., Siebert, U., Lepper, P.A., and Blanchet, M.A., "Temporary shift in masked hearing thresholds in a harbor porpoise (Phocoena phocoena) after exposure to seismic airgun stimuli." Journal of the Acoustical Society of America, vol. 125 (2009): 4060-4070.] European studies demonstrate that harbor porpoises are easily disturbed by the low-frequency noise produced by pile driving operations during offshore wind energy development. Harbor porpoises have been reported to react to pile driving beyond 20 kilometers and may be displaced from areas for months or years after construction. [Footnote 117: See, e.g., Carstensen, J., Henriksen, O. D., and Teilmann, J., "Impacts of offshore wind farm construction on harbour porpoises: acoustic monitoring of echolocation activity using porpoise detectors (T-PODs)." Mar. Ecol. Prog. Ser. vol. 321 (2006): 295-308; Evans, P.G.H. (ed.),

"Proceedings of the ECS/ASCOBANS Workshop: Offshore wind farms and marine mammals: impacts and methodologies for assessing impacts." ESC Special Publication Series, no. 49 (2008): 50-59, 64-65, available at http://www.ascobans.org/sites/default/files/document/MOP6_5-06_WindFarmWorkshop_1.pdf ; Tougaard, J., Carstensen, J., Teilmann, J., Skov, H., and Rasmussen, P., "Pile driving zone of responsiveness extends beyond 20 km for harbor porpoises (Phocoena phocoena, (L.))." Journal of the Acoustical Society of America, vol. 126 (2009): 11-14.; Brandt, M. J., Diederichs, A., Betke, K., and Nehls, G., "Responses of harbor porpoises to pile driving at the Horns Rev II offshore wind farm in the Danish North Sea," Marine Ecology Progress Series, vol. 421 (2011): 205-216.; Dähne, M., Gilles, A., Lucke, K., Peschko, V., Adler, S., Krügel, K., Sunderleyer, J., and Siebert, U., "Effects of pile-driving on harbor porpoises (Phocoena phocoena) at the first offshore wind farm in Germany." Environmental Research Letters, vol. 8 (2013): 025002.] Both captive and wild animal studies show harbor porpoises abandoning habitat in response to various types of pulsed sounds at well below 120 dB (re 1 uPa (RMS)) [Footnote 118: See, e.g., Bain, D.E., and Williams, R., "Long-range effects of airgun noise on marine mammals: responses as a function of received sound level and distance" Report by Sea Mammal Research Unity (SMRU), 2006.; Kastelein, R.A., Verboom, W.C., Jennings, N., de Haan, D., "Behavioral avoidance threshold level of a harbor porpoise (Phocoena phocoena) for a continuous 50 kHz pure tone." Journal of the Acoustical Society of America, vol. 12, (2008): 1858-1861.; Kastelein, R.A., Verboom, W.C., Muijsers, M., Jennings, N.V., van der Heul, S., "The influence ofacoustic emissions for underwater data transmission on the behavior of harbour porpoises (Phocoena phocoena) in a floating pen." Mar. Enviro. Res. Vol. 59 (2005): 287-307; Olesiuk, P.F., Nichol, L.M., Sowden, M.J., and Ford, J.K.B., "Effect of the sound generated by an acoustic harassment device on the relative abundance and distribution of harbor porpoises (Phocoena phocoena) in Retreat Passage, British Columbia." Marine Mammal Science, vol. 18 (2002): 843-862.] and, in fact, evidence of the acoustic sensitivity of the harbor porpoise has led scientists to call for a revision to the NMFS acoustic exposure criteria for behavioral response. [Footnote 119: Tougaard, J., Wright, A. J., and Madsen, P.T., "Cetacean noise criteria revisited in the light of proposed exposure limits for harbor porpoises," Marine Pollution Bulletin. vol. 90 (2015): 196-208] Impacts to harbor porpoises must therefore also be minimized and mitigated to the full extent practicable during offshore wind siting and development in the waters off New Jersey.

Comment Number: BOEM-2021-0024-DRAFT-0366-61
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The agency is obligated by NEPA to consider the full range of potential impacts on all marine mammal species and to protect the critically endangered North Atlantic right whale from additional harmful impacts of human activities. Considering the elevated threat to federally protected large whale species and populations in the Atlantic, emerging evidence of dynamic shifts in the distribution of large whale habitat, and acoustic sensitivity of the harbor porpoise, BOEM must ensure that any potential stressors posed by site assessment activities on affected species and stocks are avoided, minimized, mitigated, and monitored to the full extent possible. [Footnote 120: 16 U.S.C. § 1371(a)(5)(D)(ii)(I)(2020).]

Comment Number: BOEM-2021-0024-DRAFT-0366-62
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

2. BOEM Must Use Best Available Scientific Information to Analyze Impacts to Marine Mammals

As stated in Section E.1 above, distribution and habitat use of North Atlantic right whales and other large whale species and stocks have undergone significant climate-driven shifts. Best available scientific information indicates that North Atlantic right whales now heavily rely on the waters off New Jersey

year-round and that the Mid-Atlantic Bight is an increasingly important seasonal foraging habitat for other species and stocks of endangered and strategic large whales.

Comment Number: BOEM-2021-0024-DRAFT-0366-63
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

To adequately assess the occurrence of and potential impacts to marine mammals, it is extremely important that BOEM consider a variety of local and regional data sources. For example, the NYSDEC aerial surveys and passive acoustic monitoring data must be combined to provide a comprehensive look at the recent occurrence of large whales in the geographically proximate New York Bight. Additional data sources that should be assessed include Atlantic Marine Assessment Program for Protected Species (AMAPPS) surveys, [Footnote 121: DWSF COP Appendix P2, at 6.] New York State Energy Research and Development Authority (NYSERDA) digital aerial surveys, and the New Jersey Ecological Baseline Study. [Footnote 122: GMI (Geo-Marine Inc.). 2010. Ocean/Wind power ecological baseline studies January 2008 - December 2009. Final report. New Jersey Department of Environmental Protection, Trenton, New Jersey; Whitt, A.D., K. Dudzinski, and J.R. Laliberté. 2013. North Atlantic right whale distribution and seasonal occurrence in nearshore waters off New Jersey, USA, and implications for management. Endangered Species Research 20:50-69.] Where possible, density estimate modeling for the WEAs should include these multiple data sources.

Comment Number: BOEM-2021-0024-DRAFT-0366-64
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

BOEM currently relies on estimates of marine mammal densities derived from the habitat-based density model (the "Roberts et al." model) produced by the Duke University Marine Geospatial Ecology Laboratory. [Footnote 123: Roberts, J.J., Best, B.D., Mannocci, L., Fujioka, E., Halpin, P.N., Palka, D.L., Garrison, L.P., Mullin, K.D., Cole, T.V., Khan, C.B. and McLellan, W.A., "Habitat based cetacean density models for the U.S. Atlantic and Gulf of Mexico," Scientific Reports, vol. 6, p.22615 (2016); Roberts J.J., Mannocci L., and Halpin P.N., "Final Project Report: Marine Species Density Data Gap Assessments and Update for the AFTT Study Area, 2016-2017 (Opt. Year 1)." Document version 1.4. Report prepared for Naval Facilities Engineering Command, Atlantic by the Duke University Marine Geospatial Ecology Lab, Durham, NC (2017); Roberts J.J., Mannocci L., Schick R.S., and Halpin P.N., "Final Project Report: Marine Species Density Data Gap Assessments and Update for the AFTT Study Area, 2017-2018 (Opt. Year 2)." Document version 1.2 - 2018-09-21. Report prepared for Naval Facilities Engineering Command, Atlantic by the Duke University Marine Geospatial Ecology Lab, Durham, NC. (2018).] While this model has been recently updated to incorporate additional data sources, [Footnote 124: Id] current density estimates rely entirely on shipboard and aerial line-transect surveys, meaning the models exclude data obtained through passive acoustic monitoring and other long-term sightings data, including for the waters off New Jersey and other regions of the East Coast. Recent aerial surveys [Footnote 125: Tetra Tech and LGL. 2020. Final comprehensive report for New York Bight Whale Monitoring Aerial Surveys, March 2017 – February 2020. Technical report prepared by Tetra Tech, Inc. and LGL Ecological Research Associates, Inc. Prepared for New York State Department of Environmental Conservation, Division of Marine Resources, East Setauket, NY.] and records available through additional sightings databases (e.g., NOAA Right Whale Sighting Advisory System; [Footnote 126: NOAA Fisheries, "NOAA Right Whale Sighting Advisory System." Available at:

https://fish.nefsc.noaa.gov/psb/surveys/MapperiframeWithText.html] Northeast Fisheries Science Center (NEFSC) Monthly DMA analysis [Footnote 127: Northeast Fisheries Science Center, "Interactive

Monthly DMA Analysis." Available at: https://apps- nefsc.fisheries.noaa.gov/psb/surveys/interactive-monthly-dma-analyses/]) and passive acoustic monitoring (e.g., Robots4Whales detections, [Footnote 128: Woods Hole Oceanographic Institution, "Robots4Whales." Available at: http://dcs.whoi.edu/.] Acoustic Right Whale Occurrence,[Footnote 129: Northeast Fisheries Science Center, "Acoustic Indicators of Right Whale Occurrence." Available at: https://apps-nefsc.fisheries.noaa.gov/psb/surveys/interactive-monthly-dma-analyses/.] large whale acoustics [Footnote 130: 130 Estabrook, B.J., K. B. Hodge, D. P. Salisbury, D. Ponirakis, D. V. Harris, J. M. Zeh, S. E. Parks, and A.N. Rice. 2020. Year-2 annual survey report for New York Bight whale monitoring passive acoustic surveys October 2018- October 2019. Contract C009925. Prepared for Division of Marine Resources, New York State Department of Environmental Conservation, Albany, NY by Bioacoustics Research Program, Cornell Lab of Ornithology, Cornell University, Ithaca, NY.][Footnote 131: Estabrook, B.J., K. B. Hodge, D. P. Salisbury, D. Ponirakis, D. V. Harris, J. M. Zeh, S. E. Parks, and A.N. Rice. 2019. Year 1 annual survey report for New York Bight whale monitoring passive acoustic surveys October 2017-October 2018. Contract C009925. Prepared for Division of Marine Resources, New York State Department of Environmental Conservation, Albany, NY by Bioacoustics Research Program, Cornell Lab of Ornithology, Cornell University, Ithaca, NY.] are not incorporated. As such, the estimated densities may significantly underrepresent the density and seasonal presence of large whales off New Jersey and the broader Mid-Atlantic. BOEM should not use the Duke University habitat-density models as the sole information source when estimating marine mammal occurrence, density, and impact.

Comment Number: BOEM-2021-0024-DRAFT-0366-65
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

We recognize that several of the data sources we recommend above are not yet published or publicly available. In light of the rapidly diminishing North Atlantic right whale, however, BOEM must require that all data are used to ensure that any potential shifts in habitat usage by North Atlantic right whales and other large whale species and stocks are reflected in sound exposure modeling associated with offshore wind development. We suggest one approach to achieving this would be to convene all data holders (e.g., NY DEC, NYSERDA, WCS, Northeast Fisheries Science Center, Woods Hole Oceanographic Institution) with the acoustic modeling team (e.g., JASCO) to collate an updated data set of best available scientific information in a format compatible with undertaking an updated acoustic impact analysis.

Comment Number: BOEM-2021-0024-DRAFT-0366-66
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

As a general matter, integration of local data sources, including opportunistic sightings data, that collect fine-scale information on factors driving marine mammal distribution, with those gathered through systematic broad-scale surveys better reflecting current marine mammal presence, abundance, and density, will provide a more accurate impact assessment. BOEM must take steps now, in coordination with NOAA, to develop a dataset that more accurately reflects marine mammal presence; this is crucial to guide the project-level EIS work to come.

Comment Number: BOEM-2021-0024-DRAFT-0366-8
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

UNEP/CMS Secretariat, Bonn, Germany, Migratory Species and Climate Change: Impacts of a Changing Environment on Wild Animals (2006) at 40-41 (available at http://www.cms.int/publications/pdf/CMS_CimateChange.pdf). "As a group, migratory wildlife appears to be particularly vulnerable to the impacts of Climate Change because it uses multiple habitats and sites and a wide range of resources at different points of their migratory cycle. They are also subject to a wide range of physical conditions and often rely on predictable weather patterns, such as winds and ocean currents, which might change under the influence of Climate Change. Finally, they face a wide range of biological influences, such as predators, competitors and diseases that could be affected by Climate Change. While some of this is also true for more sedentary species, migrants have the potential to be affected by Climate Change not only on their breeding and non-breeding grounds but also while on migration."

Comment Number: BOEM-2021-0024-DRAFT-0371-7
Commenter: Martha Wright
Commenter Type: Individual

Comment Excerpt Text:

The impact on marine life and water fowl cannot be under-estimated, and for this reason alone, the project must be stopped. Migrating birds and marine life have no voice, so we must speak for them. The disruption of the environment during construction, operation, maintenance and decommissioning of the turbines will have a devastating effect, and damage may well be irreversible.

Comment Number: BOEM-2021-0024-DRAFT-0374-2
Commenter: Patricia Conte
Commenter Type: Individual

Comment Excerpt Text:

One major environmental concern is for the severely endangered Atlantic Right Whale and other juvenile whales that regularly visit the Jersey Shore - of which there are currently only 360 Atlantic Right Whales in the entire world. Whales play a vital role in the marine ecosystem where they help provide at least half of the oxygen you breathe, combat climate change, and sustain fish stocks. ... Different species of whales feed on a range of marine creatures, including krill and fish, in the dark depths of the world's oceans. Whale feces fertilizes microscopic plants called phytoplankton. Phytoplankton absorbs carbon from the atmosphere hundreds of thousands of tons each year.

The loss of these whales will contribute to the ecological collapse of the Jersey Shore. Ocean noise from human activities such as shipping, boating, construction, and energy exploration and development has increased in the Northwest Atlantic. Noise from these activities can interrupt the normal behavior of right whales and interfere with their communication. It may also reduce their ability to detect and avoid predators and human hazards, navigate, identify physical surroundings, find food, and find mates. (https://www.fisheries.noaa.gov/species/north-atlantic-right-whale)

Sea turtles, lobsters and other marine animals will be negatively impacted by pile driving during construction and electromagnetic fields. (Electromagnetic fields influence the behavior of bottom-dwelling marine species, Hutchinson 2020).

A major economic concern is for the likely 25%-100% increases in our electric bills, which will cripple our New Jersey economy just as we begin recovering from the recession caused by the Covid lockdowns. Similar increases occurred in California, Germany and Denmark when they moved to wind power (https://www.forbes.com/sites/michaelshellenberger/2018/04/23/if-solar-and-wind-are-so-cheap-why-are-they-making-electricity-more-expensive/?sh=6ef9bf231dc6).

Comment Number: BOEM-2021-0024-DRAFT-0377-3
Commenter: Joseph Conte
Commenter Type: Individual

Comment Excerpt Text:

Atlantic right whales nearing extinction and what an important role whales play in our marine ecosystem - they help provide at least half of the oxygen you breathe, combat climate change, and sustain fish stocks and Whale feces fertilizes microscopic plants called phytoplankton. Phytoplankton absorbs carbon from the atmosphere hundreds of thousands of tons each year. The loss of these whales will contribute to the ecological collapse of the Jersey Shore. Ocean noise from human activities such as shipping, boating, construction, and energy exploration and development has increased in the Northwest Atlantic. Noise from these activities can interrupt the normal behavior of right whales and interfere with their communication. It may also reduce their ability to detect and avoid predators and human hazards, navigate, identify physical surroundings, find food, and find mates. (https://www.fisheries.noaa.gov/species/north-atlantic-right-whale)

Sea turtles, lobsters and other marine animals will be negatively impacted by pile driving during construction and electromagnetic fields. (Electromagnetic fields influence the behavior of bottom-dwelling marine species, Hutchinson 2020).

Comment Number: BOEM-2021-0024-DRAFT-0381-15
Organization: Clean Ocean Action
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

IMPACTS TO MARINE MAMMALS

1. Noise Pollution from Construction

a. Studies have shown that construction noise related to offshore wind farms (especially pile driving) may cause behavioral changes and negative impacts in seals, porpoises, dolphins, and whales.

b. Disruption effects have been measured up to 20 miles from the construction site.

2. Noise from Operation

a. This includes both the noise from the turbines themselves which emit a constant low-frequency noise and also the increased vessel traffic from operations and maintenance (O&M) activities.

b. The operational noise stems from vibrations in the tower caused by the gearbox mesh in addition to the generator, causing underwater noise.

3. Vessel Strikes

a. Increased vessel activities may result in increased strikes with marine mammals, such as the Northern Atlantic right whale. This includes from construction and O&M.

b. There is also concern that the wind farms will displace other marine commerce and transit funneling those vessels into narrower lanes which may increase strikes.

c. The COP EIS must account for competing uses and navigation impacts of offshore wind facilities. With increased or altered traffic patterns, the risk of collisions and spills of gas, oil, and chemicals may increase, with negative effects to water quality and marine life. Exposure to oil and other hydrocarbons from oil spills can drastically affect marine mammals and ecosystems. Further, vessel strike mitigation is vital to reducing collision between both commercial and noncommercial vessels and North Atlantic right

whales.10 The COP EIS should also consider spacing between offshore wind turbines and high-traffic areas through either increased spacing or based on consultation with the National Marine Fisheries Service and the United States Coast Guard.

Comment Number: BOEM-2021-0024-DRAFT-0381-16
Organization: Clean Ocean Action
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

4. More Protective Consideration of the North Atlantic Right Whale

a. This highly endangered species is exceptionally vulnerable to additional barriers in its migratory patterns and prime foraging habitat. While BOEM requires mandatory minimization procedures and marine mammal observers for construction and operation of offshore wind farm, it is not enough. Current minimization measures, including passive acoustic monitoring (PAM) via glider [Footnote 10: Moscrop et al., Vocalization rates of the North Atlantic right whale, J. CETACEAN RES. MANAGE. 3(3):271–282, 2001, available at https://www.researchgate.net/publication/268273193_Vocalisation_rates_of_the_North_Atlantic_right_whale] do not account for when marine mammals are not vocalizing. Right whales vocalize frequently. But these vocalizations tend to be "irregular and non- repetitive" and based on activity level. [Footnote 11: Id] Further, it is likely that most known marine mammal mortalities occur via ship-strike. [Footnote 12: Ship Strikes and Right Whales, Marine Mammal Commission (last accessed 4/28/2012), available at https://www.mmc.gov/priority-topics/species-of-concern/north-atlantic-right-whale/ship-strikes/] While PAM, marine mammal observers, shut-down procedures, and other mitigation measures can be useful during construction and building spatio-temporal baseline data, there is uncertainty regarding right whale behavior and offshore wind foundations and vessel activity. The COP EIS needs to address this problem.

Comment Number: BOEM-2021-0024-EMAIL-003-15
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

The section describing the "Affected Environment" for protected species should include information on the seasonal abundance and distribution of marine mammals, sea turtles, ESA- listed marine fish, anticipated habitat uses (e.g., foraging, migrating), threats, and the habitats and prey these species depend on throughout the area that may be directly or indirectly impacted by the project. The status of marine mammal stocks (see our stock status reports), [Link: https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-stock-assessments] population trends, and threats should also be identified. Similar information should also be provided for all ESA listed species (see relevant status reviews on our ESA Species Directory). [Footnote 2: Please note that NOAA Fisheries biological opinions should not be used as a reference unless referring to specific conclusions for which the particular project that the biological opinion was issued. We do not recommend relying on NOAA Fisheries Biological Opinions to support conclusions reached by BOEM for other projects that were not the subject of that Opinion.] As the EIS is developed, specificity between species groups (e.g., low frequency vs. mid frequency cetaceans) of marine mammals and sea turtles should be incorporated. A broad grouping approach (e.g., all marine mammals) creates uncertainty and gaps in the analysis and does not fully represent the variability of impacts amongst different taxa. As species within these taxa have different life histories, biology, hearing capabilities, behavioral and habitat use patterns, distribution, etc., project effects may not have the same degree of impact across all species. Thus, the impact conclusions (e.g., minor, moderate) are clearer and better supported if the document describes the degree of impacts to each species (e.g., green sea turtle vs. hawksbill) or groups of species (e.g., mysticetes, odontocetes,

pinnipeds). Additionally, for some marine mammal species (e.g., harbor porpoise), data from European wind farms can be used to support each determination.

This approach also allows the analysis to better identify the ability of those species or groups to compensate when exposed to stressors and better identify the benefit from mitigation and monitoring measures. This approach would ensure the analysis reduces uncertainty and reflects the best available scientific information. Also, wherever possible, we encourage you to identify effects to individuals (e.g., injury, behavioral disturbance, disrupted foraging), as well as impacts at the population level.

Comment Number: BOEM-2021-0024-EMAIL-003-34
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

Endangered Species Act

The following listed species may be found in the Ocean Wind lease area: Endangered North Atlantic right (Eubalaena glacialis), fin (Balaenoptera physalus), sei (Balaenoptera borealis), and sperm (Physeter macrocephalus) whales; endangered Kemp's ridley (Lepidochelys kempii) and leatherback (Dermochelys coriacea) sea turtles; threatened North Atlantic distinct population segment (DPS) of green (Chelonia mydas) sea turtles and Northwest Atlantic DPS of loggerhead (Caretta caretta) sea turtles; and five DPSs of Atlantic sturgeon (Acipenser oxyrinchus oxyrinchus). Sea turtles are present in the project area seasonally, with occurrence largely limited to May - November. Additionally, oceanic whitetip shark (Carcharhinus longimanus) and giant manta ray (Manta birostris) may occasionally occur in the more offshore portions of the project area. More information on these species is available on our regional ESA information site. [Link: https://www.greateratlantic.fisheries.noaa.gov/protected/section7/listing/index.html] North Atlantic right whale sightings are available at our NOAA Right Whale Sightings Map page. [Link: https://apps-nefsc.fisheries.noaa.gov/psb/surveys/MapperiframeWithText.html] Please note, we anticipate that the new population estimate for North Atlantic right whales will be significantly lower than the 2019 estimate. Additionally, we would like to alert you that the 2020 draft marine mammal Stock Assessment Reports [Link: https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-stock-assessment-reports] are available, and we aim to publish the final drafts in May 2021. Additionally, a tech memo containing the new North Atlantic right whale population number will be available in a similar timeframe. There is no designated critical habitat that overlaps with the lease area. We do not have sufficient information on the project to determine if any vessel transit routes would overlap with any designated critical habitat. Depending on vessel traffic routes, additional ESA species may occur in the project area. Please see Attachment 1 to this letter for a list of recommended scientific references for consideration related to the presence of ESA-listed species in or near the lease area.

Comment Number: BOEM-2021-0024-EMAIL-003-42
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

Marine Mammal Protection Act

Section 101(a) of the MMPA (16 U.S.C. 1361) prohibits persons or vessels subject to the jurisdiction of the United States from taking any marine mammal in waters or on lands under the jurisdiction of the United States or on the high seas (16 U.S.C. 1372(a)(1), (a)(2)). Sections 101(a)(5)(A) and (D) of the

MMPA provide exceptions to the prohibition on take, which give us the authority to authorize the incidental but not intentional take of small numbers of marine mammals, provided certain findings are made and statutory and regulatory procedures are met. Incidental Take Authorizations (ITAs) may be issued as either (1) regulations and associated Letters of Authorization (LOA) or (2) an Incidental Harassment Authorization (IHA). LOAs may be issued for up to a maximum period of five years; IHAs may be issued for a maximum period of one year. We also promulgated regulations to implement the provisions of the MMPA governing the taking and importing of marine mammals (50 Code of Federal Regulations (CFR) part 216) and published application instructions that prescribe the procedures necessary to apply for an ITA. U.S. citizens seeking to obtain authorization for the incidental take of marine mammals under NOAA Fisheries' jurisdiction must comply with these regulations and application instructions in addition to the provisions of the MMPA.

Information about the MMPA and 50 CFR part 216 is available on our website at https://www.fisheries.noaa.gov/topic/laws-policies#marine-mammal-protection-act. Information on the application process is available at https://www.fisheries.noaa.gov/node/23111 and the application along with detailed instructions is available at https://www.fisheries.noaa.gov/national/marine-mammal-protection/apply-incidental-take- authorization.

Comment Number: BOEM-2021-0024-EMAIL-004-11
Organization: Long Beach Island (LBI) New Jersey Coalition for Wind Without Impact
Commenter: Bob Stern
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The North Atlantic Right Whale is a critically endangered species with less than 400 whales left in the world. It travels a migratory corridor beginning about 18.5 miles out, along and within apportion of the exterior portion of the lease area (1).

If turbines are placed no closer in than 17.3 miles for visible reduction, no further out than 18.5 miles to avoid the right whale's migratory path, and spaced a nautical mile (1.15 miles) apart per the applicant's public statements, that would leave room for only two rows of turbines with19 turbines in each row.

In addition, preliminary evidence and analysis suggests that for today's larger turbines an additional buffer zone of around 0.9 miles may be necessary to avoid stress on the right whales from operational noise (2l)(3)(4)(7) This may make even that outer row of 19 turbines not viable. Also, the noise pressure during construction from pile driving for monopile foundations can stress the whales at significant distances (5). Therefore, restrictions on when those activities can take place will also be required.

Comment Number: BOEM-2021-0024-EMAIL-004-17
Organization: Long Beach Island (LBI) New Jersey Coalition for Wind Without Impact
Commenter: Bob Stern
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The NOI fails to mention the problem of potential harm to the critically endangered North Atlantic Right Whale as it migrates and feeds along and within the outer boundary of the lease area. This is a critical issue not only for the whales but for the wind energy that can be generated from the area, since an outer buffer zone will likely be required.

Comment Number: BOEM-2021-0024-EMAIL-004-20
Organization: Long Beach Island (LBI) New Jersey Coalition for Wind Without Impact
Commenter: Bob Stern
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The expected impacts section also fails to mention potential adverse impact to the North Atlantic Right Whale which has a migratory path directly off and inside the outer perimeter of the lease area. An initial assessment of this crucial issue should be done as part of the scoping effort, and the impacts on these whales from construction-related and operational turbine noise should be fully analyzed in the EIS.

Comment Number: BOEM-2021-0024-EMAIL-005-21
Organization: City of Beach Haven, New Jersey
Commenter: Colleen Lambert
Commenter Type: Local Agency

Comment Excerpt Text:

The expected impacts section also fails to mention potential adverse impact to the North Atlantic Right Whale which has a migratory path directly off and inside the outer perimeter of the lease area.

Comment Number: BOEM-2021-0024-EMAIL-005-3
Organization: City of Beach Haven, New Jersey
Commenter: Colleen Lambert
Commenter Type: Local Agency

Comment Excerpt Text:

In addition, there may be a need to apply an exterior buffer zone to avoid distress to the endangered North American Right Whale as it migrates along the outer perimeter of the lease area.

Comment Number: BOEM-2021-0024-TRANS-41321-0002-8
Commenter: Louise Halprin
Commenter Type: Individual

Comment Excerpt Text:

I mean the Dolphin situation I just, you know, I really don't think we are taking that into account. I mean we don't want to lose the gift God has given us of our ocean and dolphins and with the intrusion of wind turbines and you know, that's all I can say.

Comment Number: BOEM-2021-0024-TRANS-41321-0014-1
Organization: Shoreline New Jersey
Commenter: Tricia Conte
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

We are concerned with the severely endangered Atlantic Right Whale and other juvenile whales that regular visit the Jersey Shore, the loss of which would contribute to the ecological collapse of the Jersey Shore. The Atlantic Right Whale, there are 360 whales in the entire world, so that's a major concern for us and they really positively effect the ecological ocean, portions of the ocean. Sea turtles, lobsters and other marine animals will also be negatively impacted with pile driving during the construction and the electromagnetic fields.

Comment Number: BOEM-2021-0024-TRANS-41521-0013-1
Commenter: Richard Birch
Commenter Type: Individual

Comment Excerpt Text:

So I am going to refer to the New Jersey Offshore Wind Energy Feasibility Study done by the BPU in 2004 and where they talking about on page 66 Right Whales, "The North) Atlantic Right Whales are the most endangered of the large whales, can be found in Coastal waters) to the Continental shelf and generally migrates) within 20 miles of the shore during the spring (and fall." () So this 230 page in depth studyclearly states that these Right Whales can be found from our shoreline out to the Continental shelf a distance of 75 miles or so. So if I read correctly the slide you have, with this meeting, on marine mammal sightings actually reflects sigtings within that leasing area and many more just north in the Atlantic shores area off LBI. Though also just 356 Right Whales alive in the world with detected mortalities outnumbering births by three to two and the populations (continue to decline, and July 2020 the International Union of Conservative Nature) changed the Right Whales status from endangered) to critically endangered. That is they are at (high risk for global extinction. ()

Comment Number: BOEM-2021-0024-TRANS-42021-0019-4
Commenter: Rick Birch
Commenter Type: Individual

Comment Excerpt Text:

As for the marine environment, once this is done, there is no going back. You can't bring back the Right Whales that we might lose. So ask you, seriously consider the consequences of fast tracking and that's what this is, it's fast tracking all of a sudden of Ocean Wind, LLC, limited liability company, as there are many other renewable energy sources in play right now.

Comment Number: BOEM-2021-0024-TRANS-42021-0024-1
Organization: Save our Shoreline New Jersey
Commenter: Tricia Conte
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

One major environmental concern is for the severely endangered Atlantic Right Whale and other juvenile whales that regularly visit the Jersey Shore, of which there are only 360 Atlantic Right Whales in the entire world. The loss of these whales will contribute to the ecological collapse of the Jersey Shore, whales play a significant part of the ecosystem of the ocean.

A.2.15 Mitigation and Monitoring

Comment Number: BOEM-2021-0024-DRAFT-0137-1
Commenter: Carol Ho
Commenter Type: Individual

Comment Excerpt Text:

Many of these permits include mitigation measures, including compensatory mitigation. I would like to suggest an approach for compensatory mitigation for unavoidable impacts to birds: (1) estimate how many birds will be impacted by the wind project (2) estimate how many birds are killed by outdoor cats each year, and (3) provide funding to groups that do Trap-Neuter-Return (TNR) for feral cats, also called community cats. Through humane trapping and sterilization of feral cats, TNR has become a successful way to reduce outdoor cat populations over time. I understand there is opposition to TNR, but as a long term approach along with education, it works (see https://www.humanesociety.org/outdoor-cats). While trapping and euthanizing cats has a more immediate impact, it is controversial, and not many people would volunteer for such a task. However, there are many organizations with volunteers doing TNR in New Jersey and around the country already. Through TNR as well as education, cat-bird conflicts can be reduced, and the unavoidable wind farm impacts can be mitigated. The mitigation measure could be

applied under the Endangered Species Act, Migratory Bird Treaty Act, or as a biological mitigation measure in the NEPA.

Comment Number: BOEM-2021-0024-DRAFT-0295-5
Organization: New England Fishery Management and Mid-Atlantic Fishery Management Councils
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The EIS should also be clear on which mitigation measures will be required as opposed to discretionary. Only required mitigation measures should influence the impacts conclusions in the EIS.

Comment Number: BOEM-2021-0024-DRAFT-0297-14
Organization: Responsible Offshore Development Alliance
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

D. Impact Fees

All offshore development projects should first and foremost strive to minimize conflicts, include design measures to support existing ocean uses, and follow cooperative research and planning practices. Once these have been exhausted, developers must be required to pay impacts fees (or compensatory mitigation) that fully offset fisheries losses. This should not be limited to landings values but also include value added multiplier effects and shoreside and supporting infrastructure losses.

Ocean Wind has not, to our knowledge, proposed any impact fee structure nor have the state or federal governments given any indication whether this will be required nor how fishermen can participate in the development of these plans. BOEM must require full, transparent, equitable, and science-based impact fees as a mitigation alternative for analysis in the DEIS.

Comment Number: BOEM-2021-0024-DRAFT-0309-6
Organization: Surfside Foods LLC
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Biomass abundance surveys and monitoring of surfclam stocks withing the Ocean Wind, and the adjoining Atlantic Shores lease area is extremely important to the surfclam fishery participants. Without proper survey and monitoring plans that give NOAA the data necessary to determine the biomass abundance within the wind energy area the fishery risks not only losing access to the fish stocks within the area but also losing fishing quota attributed to the biomass found within the area. The impacts resulting from the loss of clam grounds off New Jersey may severely impacting catch quotas and have repercussions throughout New Jersey coastal communities.

There is only one technique known to accurately sample for surfclams and that is using a hydraulic clam dredge and the generally accepted survey protocols. BOEM's guidance on sampling benthic habitat is not appropriate for sampling Atlantic surfclams (or ocean quahogs). We strongly urge BOEM to require Ørsted to get detailed Atlantic surfclam survey guidance from the NOAA Survey Branch, partner with the fishing industry and credible independent scientists, and co-develop cooperative monitoring and research plans for the Ocean Wind lease area. All project research should be well coordinated with NOAA Survey Branch's survey goals.

Comment Number: BOEM-2021-0024-DRAFT-0309-7
Organization: Surfside Foods LLC

Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Wind energy project developers must minimize conflicts to the maximum extent practical, employ design measures to support reasonable access of existing ocean uses, and provide all the needed research and monitoring necessary to minimize impacts on fisheries. Developers must be required to pay compensatory mitigation that fully offset fisheries losses. This must not be limited to the value of landings but include all shoreside and supporting infrastructure losses.

Comment Number: BOEM-2021-0024-DRAFT-0309-8
Organization: Surfside Foods LLC
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Ocean Wind hasn't proposed any impact fee structure nor have the state regulatory agencies given any indication whether this will be required. BOEM must require full, transparent, equitable, and science-based compensatory mitigation alternatives for analysis in the Draft EIS.

Comment Number: BOEM-2021-0024-DRAFT-0335-11
Organization: The Nature Conservancy
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

In addition, the mitigation measured proposed the COP should be considered a starting point for consideration, with additional mitigation measures added as appropriate based on reasonably anticipated impacts on environmental resources. As one example, BOEM should mitigate the potential impacts to complex fish habitat through the use of Nature-Inclusive Design where appropriate, especially when mitigation measures are employed at the exact site of impact. This would allow for the potential to not only restore, but even enhance, the habitat value of the area impacted. In the ocean environment there are few examples of this, but there is new research looking at how to maximize ecological value of offshore wind scour protection in the North Sea. The focus is on species "that need hiding places, shelter, feeding area or use the area as a nursery area and species that will profit from creating additional smaller and larger crevices", [Footnote 3: https://edepot.wur.nl/518699, Sec. 2.4] such as Atlantic cod, loligo squid, crab, lobster, and Eastern oysters, all of which are of interest here in the Northeastern US. The general approach is to integrate objects like pipes, reef balls, cages and other space producing items into the standard scour protection to improve the beneficial impact that is described in the COP. Another approach for enhancing ecological value of structures has been demonstrated by adjusting concrete mixes to increase species richness of encrusting organisms. [Footnote 4: McManus, Ryan S., et al. "Partial replacement of cement for waste aggregates in concrete coastal and marine infrastructure: a foundation for ecological enhancement?." Ecological Engineering 120 (2018): 655-667] The Nature Conservancy is currently working with Inspire Environmental on tailoring the Nature-Inclusive Design technical report and catalog recently produced by The Ministry of Agriculture, Nature, and Food Quality in the Netherlands to be relevant to conditions and marine communities in the US Atlantic offshore wind energy areas, and US-based materials suppliers. We expect this information to be available for review and use later in 2021.

Comment Number: BOEM-2021-0024-DRAFT-0335-13
Organization: The Nature Conservancy
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

As this project will be the first offshore wind project constructed in the New Jersey wind energy areas, where many other projects are planned, it is critically important to closely monitor and rapidly report out on successes and challenges of construction and early operation. Information gained via monitoring of early projects should be used to assist other future offshore wind projects in selecting the least impactful methods. To meaningfully inform a rapid progression of projects needed to achieve NJ's goal of 7,500MW by 2035, the developers (or others given the responsibility for monitoring) should be required (as a permit condition or contractual funding agreement) to analyze and report on construction and operations monitoring data at least every 6 months for the first three years of the project. We urge BOEM include this as a permit condition for the Ocean Wind COP and to develop a proposed methodology and aggressive timeline for the public, BOEM, and its consultive federal agencies to review this information and apply it to support an adaptive management approach.

This rapid reporting will be a significant requirement for the developer; therefore, there should be a commensurate commitment of time and resource investment by federal and state agencies. Once BOEM receives these monitoring reports, federal agencies would need to conduct a rapid evaluation to determine "If data collected are sufficiently robust, BOEM or other resource agencies could use the information obtained to support potential regulation changes, or new mitigation measures for future projects." [Footnote 5: Vineyard Wind SEIS Appendix A] We agree strongly with this statement from the Vineyard Wind 1 SEIS and thus urge that a process be outlined for these evaluations to take place. Added information should also inform regular revisions and updates to the now dated best management practices, which are based on the 2007 BOEM Programmatic EIS. [Footnote 6: https://www.boem.gov/renewable-energy/guide-ocs-alternative-energy-final-programmatic-environmental-impact-statement-eis]

Comment Number: BOEM-2021-0024-DRAFT-0335-15
Organization: The Nature Conservancy
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

BOEM must also collaborate with state efforts scientists, NGOs, the wind industry, and other stakeholders to use information from monitoring and other research and evolving practices and technology to inform cumulative impacts analyses moving forward. Likewise, the draft EIS must include more specific information related to how monitoring impacts of offshore wind development and operation on wildlife and their habitats will inform management practices as new information becomes available. As monitoring informs management practices, BOEM must require continued monitoring and employment of adaptive management practices in the EIS as a condition of continued operation and maintenance by Ocean Wind. This will ensure that BOEM can swiftly minimize damages of unintended or unanticipated impacts to coastal ecosystems or wildlife and inform strategies for future wind projects to avoid potential impacts.

Comment Number: BOEM-2021-0024-DRAFT-0335-16
Organization: The Nature Conservancy
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

We appreciate ongoing efforts by BOEM and others to compel developers to conduct ecological monitoring in their lease area, and to contribute funds to both regional fisheries research and long-term regional monitoring of wildlife impacts. Conducting scientific research and preconstruction, during construction and post- construction monitoring to advance understanding of the effects of offshore wind development on marine and coastal resources and ocean uses is essential. Science should be conducted in

a collaborative and transparent manner, utilizing recognized marine experts, engaging relevant stakeholders, and making results publicly available in a timely manner, as appropriate, on the Northeast and Mid-Atlantic Ocean Data Portals and other public platforms.

Comment Number: BOEM-2021-0024-DRAFT-0335-19
Organization: The Nature Conservancy
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Thoughtful consideration for integrating efforts that under other circumstances might be done on a project-by- project bases has potential to simultaneously increase cost efficiency and improve the scientific integrity of the information obtained. Large-scale and long-term monitoring is essential to track both environmental and human features of the ecosystem that overlap multiple planning areas and leases. We are encouraged by the overwhelming alignment of purpose among state and federal agencies, developers, and stakeholders for the regional vision set forth by the Responsible Offshore Science Alliance (ROSA) and the Regional Wildlife Science Entity (RWSE). The Nature Conservancy is committed to continue leaning in to help those efforts succeed and we encourage BOEM to maintain the strong support your team has already shown for these efforts.

Comment Number: BOEM-2021-0024-DRAFT-0335-20
Organization: The Nature Conservancy
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Finally, we believe there are several opportunities in the next couple of years where the installation of a network of non-proprietary oceanographic monitoring arrays could facilitate a variety of ancillary research and monitoring efforts aimed at improving our understanding of the ecosystems on the outer continental shelf, assess changes related to early wind farm construction and operations, and better predict cumulative impacts of projects slated to be constructed in the latter half of the 2020s. These include (1) an ambient sound field array with sensors capable of detecting construction noise (including pile driving) and sensors for Passive Acoustic Monitoring for marine mammals, a more sophisticated acoustic network could also locate through triangulation a sound source received by multiple receivers, (2) an expanded above-water Motus receiver array network for detection of micro-tagged birds, and (3) an expanded network of acoustic receivers capable of detecting marine life that are affixed with transponder tags. In addition, strategic investment in basic physical oceanographic sensors on these arrays can help oceanographers interpret marine life and bird observations in ways that better allow for predicting impacts of additional expansions of offshore wind energy generation along the US Atlantic coast.

Comment Number: BOEM-2021-0024-DRAFT-0335-5
Organization: The Nature Conservancy
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The development of the PSMMP will be key to meeting the intent of the mitigation hierarchy when it comes to the harm associated with pile driving. This plan should include detailed mitigation measures that reflect the best available technology, beyond the proposed daytime limit on pile driving; take into account the cumulative impacts of pile driving for multiple projects at the same time or in rapid succession, since construction of these projects could overlap both temporally and spatially; and provide a construction noise threshold standard, including impact pile driving specifically, with a predicted extent of potential impacts to marine life. Ideally BOEM would clearly articulate a pile driving noise threshold aimed at avoiding physiological impacts to marine mammals from cumulative exposure to pile driving noise as has been used in Germany. We also urge BOEM to require testing of the efficacy of noise mitigation

approaches included in the PSMMP, mandatory public sharing of testing results, and making continual adjustments and improvements within and among projects using an adaptive management approach.

Comment Number: BOEM-2021-0024-DRAFT-0348-1
Organization: American Bird Conservancy
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Offshore wind energy development can make significant contributions in the fight against climate change, particularly for energy-intensive population centers near the coast. However, we have serious outstanding concerns about what we see as insufficient protective measures, monitoring, and compensatory mitigation for impacts to birds as this new industry gets underway.

Comment Number: BOEM-2021-0024-DRAFT-0348-13
Organization: American Bird Conservancy
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

COMPENSATORY MITIGATION MUST BE PROVIDED FOR IMPACTS TO BIRDS

It appears likely that a significant number of birds protected by federal laws will be killed in collisions with turbines at Ocean Wind, and at a much larger scale under the currently anticipated industry build-out scenario. Compensatory mitigation should be provided for this loss, and particularly for species of conservation concern and those impacted in greater numbers.

In our view, mitigation more effectively compensates for impacts when conducted on a project-, species- and population-specific basis. However, if a project-by-project approach proves difficult to implement, a compensatory mitigation fund could be developed and administered by trustees of federal agencies. Following the model of other forms of development, this would most appropriately be funded by the developers whose actions are resulting in the impacts, with funding amounts based on likely or actual impacts (see below).

Comment Number: BOEM-2021-0024-DRAFT-0348-14
Organization: American Bird Conservancy
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Quantifying compensatory mitigation for birds should initially be based in a conservative estimate of the number of birds that will be killed in collisions with turbines, including ESA-listed species and nocturnal migrants. Evaluating mitigation necessary to effectively compensate for these losses should use resource equivalency analysis, which accounts for the fact that birds at different life stages do not functionally equate in conservation importance (e.g., one additional hatchling does not functionally replace a breeding adult bird). Quantities and supporting analyses should be re-evaluated as collision monitoring data become available, and additional mitigation provided as necessary.

Given that compensatory mitigation is time-consuming from concept to success, we urge the developers and agencies to initiate action as soon as possible.

Comment Number: BOEM-2021-0024-DRAFT-0351-3
Organization: Barnegat Bay Partnership
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Impacts to Sensitive, Protected Habitats Requiring Mitigation

While not specifically stated in the COP, unavoidable impacts to protected habitats that will require mitigation (i.e., submerged aquatic vegetation [SAV], coastal wetlands, shellfish beds) appears likely; thus, potential mitigation efforts (types, amounts, locations) should be identified in the EIS to provide the public with a complete view of the benefits/costs of the project. The BBP's 2021 Comprehensive Conservation and Management Plan identifies wetland, SAV, and shellfish targets (see Ecosystem-Based Targets) which are protective of the existing acreage of SAV and coastal wetlands and support steps to increase shellfish populations, which remain substantially below previous levels.

Comment Number: BOEM-2021-0024-DRAFT-0354-13
Organization: New York State Department of State
Commenter Type: State Agency

Comment Excerpt Text:

Implementing an adaptive management plan and on-going citizen participation throughout operation.

Comment Number: BOEM-2021-0024-DRAFT-0354-7
Organization: New York State Department of State
Commenter Type: State Agency

Comment Excerpt Text:

A suite of potential mitigative measures with the goal of reducing navigation risks, identifying process and procedures to overcome impacts to search and rescue, methods to correct for anticipated radar interference, and mandatory cable monitoring and maintenance.

Comment Number: BOEM-2021-0024-DRAFT-0355-3
Organization: Anglers for Offshore Wind Power
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Fisheries management needs are specific and often hard to understand. Some combination of staff from the NOAA Northeast Fisheries Science Center, The New England and Mid-Atlantic Fisheries Management Councils, and the Atlantic States Marine Fisheries Commission must be involved in determining what types of monitoring should be required of the Ocean Wind proposal. In addition, we suggest a mechanism be created where these same fisheries management agencies have opportunities to review results and make further recommendations.

We further request that the Draft EIS reflect consideration of fisheries science data from the Virginia Institute of Marine Science's Northeast Area Monitoring and Assessment Program and the National Oceanic and Atmospheric Administration's Northeast Fisheries Science Center Bottom Trawl Survey.

Comment Number: BOEM-2021-0024-DRAFT-0358-3
Organization: American Saltwater Guides Association
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The individual turbine structures and associated scour protection will create artificial reefs that will likely attract popular target species for fishermen. This will most likely increase and concentrate fishing effort. In the coming years, this could certainly be a boost for the fishermen and the economy. However, we must be able to quantify the potential increase in fishing effort and efficiency and the resulting impacts to

fish stocks. Now is the time to address this issue so we can take full advantage of these structures while also maintaining sustainable fisheries. We suggest an ongoing and robust monitoring and data collection plan to account for these changes to our fisheries.

Comment Number: BOEM-2021-0024-DRAFT-0364-11
Organization: Oceana
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Constructing an industrial facility in public federal waters will have effects on the marine environment. Some of these effects can be forecast and others are uncertain. To ensure effective oversight and administration of this project, the EIS must include a monitoring and research plan conducted transparently by NOAA or an independent party to assess and report the effects of the project on the ocean ecosystem including marine habitats, wildlife, fishery resources and protected species and changes compared to the baseline study.

Types of monitoring- The monitoring program included in the EIS should include, but should not be limited to, chemical and sonic monitoring, assessment of physical alteration of the seafloor, currents and winds, visual and acoustic surveys for protected species, and biological/ecological surveys for marine wildlife presence and abundance.

Response plan-The EIS must also include a detailed plan to respond to unintended and unforeseen effects on the marine environment and marine wildlife. This response plan must include thresholds for modification of the project's scope and duration if these conditions are met. There must also be a threshold for possible decommissioning if the project has unexpected effects.

Comment Number: BOEM-2021-0024-DRAFT-0366-100
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Fourth, BOEM's assertion that existing federally required mitigation measures will "minimize" collision risk is flawed. Beyond mandatory vessel speed restrictions within Seasonal Management Areas (SMAs), there are currently no federal requirements to reduce the speed of vessels associated with offshore wind development to 10 knots or less. Voluntary 10 knot speed reduction zones (i.e. NOAA DMAs and North Atlantic right whale "Slow Zones") offer an additional layer of protection, but a recent analysis undertaken by NMFS shows that compliance with voluntary speed reductions is woefully low. [Footnote 164: National Marine Fisheries Service, "North Atlantic Right Whale (Eubalaena glacialis) Vessel Speed Rule Assessment," supra.] PSOs stationed aboard a vessel may increase the likelihood that a whale is detected, but this approach cannot be relied upon particularly in periods of darkness or reduced visibility, and the whale would need to be detected with adequate time for the vessel captain to be alerted and to undertake evasive action (which may inadvertently strike another undetected whale). The use of vessel based PSOs may therefore provide some additional benefit when a vessel is already traveling at slow speeds (i.e., less than 10 knots), but will provide little benefit for faster vessels.

Comment Number: BOEM-2021-0024-DRAFT-0366-101
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Vessel speed restrictions and additional mitigation and monitoring measures must therefore be explicitly required as part of the permitting process. BOEM should acknowledge the significant risk vessel strikes

pose to North Atlantic right whales and other large whales and require the industry to reduce vessel speeds to 10 knots or less and take further measures to mitigate vessel collision risk.

Comment Number: BOEM-2021-0024-DRAFT-0366-105
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

b. BOEM Should Analyze Large-scale Habitat Displacement for the North Atlantic Right Whale

We recommend that BOEM take a precautionary approach and acknowledge that it is not possible to assess all of the potential hazards of physical structures in water column at the current time and commit to an explicit monitoring plan that will allow for future assessment (i.e., pre-, during-, and post-construction monitoring). The report, "A framework for studying the effects of offshore wind development on marine mammals and turtles," [Footnote 169: Kraus, S.D., et al., "A Framework for Studying the Effects of Offshore Wind Development on Marine Mammals and Turtles," supra.] outlines detailed recommendations for monitoring the potential impacts of offshore wind on marine mammals, including long-term avoidance and/or displacement, by the top scientists and experts working in this field. It is vital that we gain an understanding of baseline environmental conditions prior to large-scale offshore wind development in the United States. To this end, BOEM must establish and fund a robust, long-term scientific plan to monitor effects of offshore wind development on marine mammals before the first large-scale commercial projects are constructed. Without this in place, we risk losing the ability to detect and understand potential impacts and set an under-protective precedent for future offshore wind development.

Comment Number: BOEM-2021-0024-DRAFT-0366-117
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

3. Vessel Strike Mitigation

Mitigation measures for sea turtles should include a speed restriction of 10 knots for all vessels associated with the Project at all times, regardless of whether vessels are transiting or on site. Risk of collision with sea turtles is greatest when vessels are traveling at speeds greater than 10 knots [Footnote 198: Hazel, J., I.R. Lawler, H. Marsh, and S. Robson. 2007. "Vessel speed increases collision risk for the green turtle Chelonia mydas," Endangered Species Research 3:105–113.] While vessels may be directed to slow speeds to 4 knots if a sea turtle is sighted within 100 m of the vessel's path, this is not a foolproof solution. Sea turtle detection – even when conducted by dedicated observers – is difficult unless the turtle surfaces close to the vessel, at which point it may not be possible to course-correct in time to prevent collision. Keeping ship speed to 10 knots improves the ability to adjust speeds. [Footnote 199: Kelley, D. E., Vlasic, J. P. and Brilliant, S. W., "Assessing the lethality if ship strikes on whales using simple biophysical models," Marine Mammal Science, vol. 37, pp. 251-267 (2020).] Slowing to 4 knots from June 1 to November 30 while transiting through areas of visible jellyfish aggregations or floating vegetation lines or mats will improve protection for sea turtles, but the speed should be reduced from an upper limit of 10 knots. [Footnote 200: See, e.g., South Fork DEIS, at G-13.] A standard 10-knot vessel speed limit ensures protections for a wide array of ocean wildlife and should be incorporated into the Draft EIS.

Comment Number: BOEM-2021-0024-DRAFT-0366-118
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

4. Pile Driving & HRG Survey Mitigation

No fewer than four PSOs should be available to monitor all exclusion zones for sea turtles – for both impact pile-driving and High Resolution Geophysical and Geotechnical Survey Plan (HRG) survey activities, as well as for vibratory driving. The vantage points and number of PSOs are critical factors for effective exclusion zone monitoring for sea turtles. To effectively monitor the full exclusion zone, multiple PSOs must be stationed at several vantage points at the highest level to allow each to continuously scan a section of the exclusion zone; a limited number of PSOs – even continuously moving around the vantage point – would still not be able to scan the entire exclusion zone. A minimum of four PSOs for all exclusion zone monitoring is recommended. [Footnote 201: Infrared (IR) cameras and wearable night vision scopes at night and during low-visibility conditions are unlikely to be effective at detecting sea turtles. IR systems detect the temperature difference between body and environment when the animal is at the sea surface; however, sea turtles spend relatively little time at the water's surface where they could be detected and do not expel a lot of air or exhibit a lot of surface behavior which would enable IR detection. See, Verfuss, U.K., D. Gillespie, J. Gordon, T. Marques, B. Miller, R. Plunkett, J. Theriault, D. Tollit, D.P. Zitterbart, P. Hubert, and L. Thomas. 2017. Low visibility real-time monitoring techniques review. Report SMRUM-OGP2015-002 provided to IOGP.] Monitoring reports must be made publicly available.

Moreover, PSOs must be NOAA-certified, and solely focused on monitoring for protected species. While training vessel crew members to additionally watch is beneficial, we caution this cannot be a substitution for trained PSOs as the vessel crew's top priority is vessel operations.

Comment Number: BOEM-2021-0024-DRAFT-0366-120
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Recognizing that much remains unknown regarding the impacts of offshore wind to avian species in the United States, BOEM's evaluation of the Project in the Draft EIS must be based on an explicitly defined monitoring and adaptive management plan. This must include a commitment to sufficient standardized monitoring before and after construction.

Most importantly, the adaptive management plan must explicitly outline a strategy to employ adequate mitigation measures, based on the impacts observed through monitoring efforts. In this manner, the Draft EIS can account for the reasonably foreseeable impacts of developing this and future projects and a commitment to addressing those impacts. Further, BOEM should incorporate best monitoring and management practices into a regional adaptive management plan to adequately measure and mitigate cumulative impacts to birds from offshore wind developments expected across the Atlantic OCS for the reasonably foreseeable future.

Comment Number: BOEM-2021-0024-DRAFT-0366-143
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Additionally, the Draft EIS should explicitly outline BOEM's plan to implement collision detection and minimization measures during the operation of the Project and other planning areas. Under the ESA and MBTA, developers are responsible for any take of migratory birds and ESA-listed species. However, without appropriate monitoring for collision detection, large collision events could have serious

population-level impacts to migratory songbirds and shorebirds without any recourse. This is not an acceptable outcome, and BOEM must be clear in the Draft EIS of its plans to address this concern.

Comment Number: BOEM-2021-0024-DRAFT-0366-154
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

7. The Draft EIS Should Outline BOEM's Expectation for Monitoring and Adaptive Management Meant to Address Realized Impacts to Birds Resulting from Project Construction and Operation

In addition to accounting for potential avian impacts in the Draft EIS, as we have reiterated repeatedly herein, BOEM must provide its plan to monitor bird activity in the Project and surrounding area before, during, and after construction. We suggest that BOEM clearly outline monitoring requirements and coordinate with other stakeholders, including the Project developer, NJDEP, and the Regional Wildlife Science Entity, to support the development of a regional monitoring plan for birds and other wildlife.

Monitoring for adverse effects requires multiple modes of evaluation in a coordinated framework pre- and post-construction. Radar, vessel and aerial surveys, acoustic monitoring, and telemetry are all complimentary tools that provide data necessary for evaluating impacts, though none of these tools provides the full picture when used alone.

Comment Number: BOEM-2021-0024-DRAFT-0366-155
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

a. Collision Monitoring

Post-construction fatality monitoring onshore is a key component of Tier 4 of the FWS Land-Based Wind Turbine Guidelines. [Footnote 249: U.S. Fish and Wildlife Service. 2012. U.S. Fish and Wildlife Service land-based wind energy guidelines. OMB Control No, 10180148. U.S. Department of Interior, Fish and Wildlife Service, Hadley, MA. Available from https://www.fws.gov/ecologicalservices/es-library/pdfs/WEG_final.pdf. Many wind projects onshore conduct post-construction monitoring, especially on public lands managed by the Department of Interior's Bureau of Land Management. Developers survey for carcasses around a radius from the turbines, under an a priori protocol, to determine avian mortality rates. The data are adjusted for searcher efficiency, carcass persistence, and other sources of bias.

This practice is entirely impractical at sea for obvious reasons, however, that does not relieve BOEM from post-construction fatality monitoring—an obligation that the onshore wind industry has committed to and is required to fulfill. There is ongoing, rapid development of imaging and bird strike technologies used in the European Union and the United Kingdom, and such technologies are also being developed in the United States. Grant funding from the Department of Energy (DOE) Office of Energy Efficiency and Renewable Energy (EERE), state energy agencies, and others supports technical and economic advancement of offshore and onshore wind. The DOE Wind Energy Technologies Office invests in energy science research and development activities that enable the innovations needed to advance wind systems, reduce the cost of electricity, and accelerate the deployment of wind power.

Comment Number: BOEM-2021-0024-DRAFT-0366-156
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The DOE has recently funded development of collision detection technology from the Albertani Lab at Oregon State University. The Albertani group is continuing to test and modify its design to detect small object collisions with wind turbines at the National Renewable Energy Lab. [Footnote 250: Wind turbine sensor array for monitoring wildlife and blades collisions, http://research.engr.oregonstate.edu/albertani/wind-turbine-sensor-array-monitoring-wildlife-and-blades-collisions(last visited 2/20/21).] Similar technologies are being tested at Block Island Wind Project and other offshore locations in the European Union and United Kingdom and are making rapid gains in being effective, officially verified, commercially available, and affordable at scale in the near future, possibly at the same time as the Project would be ready for construction and operation. However, these technologies must be fully integrated into turbine design before they can be deployed. BOEM must support the development of these technologies and must drive turbine developers to integrate these systems into their turbine designs. We cannot wait on offshore wind project developers to drive the market, BOEM must require this type of collision monitoring and work with the industry to support the development of these technologies to make deploying them a reality.

Comment Number: BOEM-2021-0024-DRAFT-0366-157
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The incorporation of these new monitoring technologies, and hopefully a standardized technology, should be a required element in the post-construction monitoring plan for the Project. BOEM should standardize the methodology for using these new technologies across all projects in the Atlantic OCS to incorporate mortality data, and possibly displacement data, into ongoing cumulative effects analyses and adaptive management strategies, to validate collision risk models, and to measure impacts on ESA- listed species and species of conservation obligation by augmenting tracking data with data from on-site detection technology.

Comment Number: BOEM-2021-0024-DRAFT-0366-158
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Many of the offshore wind projects to date have suggested in their COPs that mortality monitoring rely on carcass monitoring around the base of the offshore wind turbines. This is contrary to the standard protocol for post-construction monitoring at onshore wind projects, where a radius from the turbine is prescribed as the search area and includes where birds may be propelled or thrown from the actual turbine structure and blades after collision. The offshore structures anticipated to be installed have very little available structure on which a dead or injured bird could land. Defining the structure as a search area, if it means the turbine base or nacelle (since no injured or dead birds could be found on the blades), is woefully inadequate. Only updated technology will detect bird strikes or mortalities in the appropriate range established by onshore post-construction mortality studies. The Project COP currently under consideration does not include this or any specific monitoring to assess direct mortality. The Draft EIS must address this inadequacy in the COP and mandate a protocol for adequately monitoring mortality events.

The Draft EIS should specifically include the adoption of collision detection technologies when they are verified and commercially available and BOEM's support for their development and testing. The shared cost of development and implementation of these technologies across all lessees and with BOEM, if standardized, would avoid an undue economic burden on individual projects.

Additionally, BOEM must require that lease applicants report mortality events promptly and publicly.

Comment Number: BOEM-2021-0024-DRAFT-0366-159
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

b. Monitoring for Displacement and Barrier Effects

Within the Draft EIS for South Fork and the FEIS for Vineyard Wind I, BOEM proposed that the industry develop a monitoring framework in coordination with the federal and state jurisdictions, to include, at a minimum:

Acoustic monitoring for birds and bats

Installation of Motus receivers on WTGs in the wind development area (WDA) and support with upgrades or maintenance of two onshore Motus receivers

Deployment of up to 150 Motus tags per year for up to 3 years to track roseate terns, common terns, and/or nocturnal passerine migrants

Pre- and post-construction boat surveys

Avian behavior point count surveys at individual WTGs

Annual monitoring [Footnote 251: South Fork DEIS, Table G-2.]

We support these admirable expectations and expect that BOEM will expand on this framework in the Draft EIS to specify how this monitoring should be carried out to collect the best available data.

Monitoring pre- and post-construction should be designed in such a way as to be able to discern any changes to avian spatial distribution that might be a result of construction and operation of the Project.

Comment Number: BOEM-2021-0024-DRAFT-0366-160
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

A monitoring plan should incorporate the suggestions previously provided to BOEM on October 23, 2020 via the Avian Considerations recommendations.

More specifically, we recommend that efforts to track avian movement include both satellite and automated radio telemetry, as appropriate, and these efforts should not be limited to Roseate Terns, Common Terns, and nocturnal passerine migrants. Technically speaking, while the passive radio telemetry receivers for these efforts are considered part of the Motus network, the tags themselves are VHF and UHF radio transmitters. BOEM and developers should follow recommendations by USFWS Northeast Migratory Bird Office when deploying receivers and tags, using the specifications best able to capture migratory routes in the offshore environment.

Comment Number: BOEM-2021-0024-DRAFT-0366-161
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

As we have specified to BOEM previously, we further suggest that transect surveys be accompanied by telemetry and radar studies. Radar surveys can provide a broad overview for comparison of flight paths, especially for nocturnal migrants which could not be captured during daytime survey efforts [Footnote 252: Desholm M, Kahlert J. 2005. Avian collision risk at an offshore wind farm. Biology Letters 1:296–298. Royal Society.], while telemetry, especially satellite telemetry with pressure sensors, can gather high resolution distribution and flight path data for priority species.

Comment Number: BOEM-2021-0024-DRAFT-0366-168
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

10. Adaptive Management and Mitigation for Birds

The Draft EIS should provide more certainty that the developer will use adaptive management for birds and collect "sufficiently robust" data to inform mitigation strategies to avoid and minimize impacts to birds.

According to USFWS Wind Turbine Guidelines (2012), [Footnote 264: 264 USFWS (2012). U.S. Fish and Wildlife Service Land-Based Wind Energy Guidelines. p. 8. Available at https://www.fws.gov/ecological-services/es-library/pdfs/WEG_final.pdf.] DOI has adopted the National Research Council's 2004 definition of adaptive management, which states:

"Adaptive management promotes flexible decision making that can be adjusted in the face of uncertainties as outcomes from management actions and other events become better understood. Careful monitoring of these outcomes both advances scientific understanding and helps adjust policies or operations as part of an iterative learning process. Adaptive management also recognizes the importance of natural variability in contributing to ecological resilience and productivity. It is not a 'trial and error' process, but rather emphasizes learning while doing. Adaptive management does not represent an end in itself, but rather a means to more effective decisions and enhanced benefits. Its true measure is in how well it helps meet environmental, social, and economic goals, increases scientific knowledge, and reduces tensions among stakeholders."

Comment Number: BOEM-2021-0024-DRAFT-0366-169
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Further, the Supplement to the Draft EIS for the Vineyard Wind I project acknowledged that:

"Adaptive management could be used for many resources, particularly regulated fisheries and wildlife resources (including birds, benthic resources, finfish, invertebrates, essential fish habitat, marine mammals, and sea turtles), which would be closely monitored for potential impacts. If data collected are sufficiently robust, BOEM or other resource agencies could use the information obtained to support potential regulation changes, or new mitigation measures for future projects. [Footnote 265: Vineyard Wind 1 Offshore Wind Energy Project Supplement to the Draft Environmental Impact Statement, Table A-10, 85 Fed. Reg. 35952 (Posted June 6, 2020) (emphasis added).]"

Comment Number: BOEM-2021-0024-DRAFT-0366-170
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The Draft EIS for the South Fork stated:

"BOEM worked with USFWS to develop standard operating conditions for commercial leases and as terms and conditions of plan approval and are intended to ensure that the potential for adverse impacts on birds is minimized. The standard operating conditions have been analyzed in recent EAs and consultations for lease issuance and site assessment activities, and BOEM's recent approval of the Virginia Offshore Wind Technology Advancement Project (BOEM 2016a). Some of the standard operating conditions originated from best management practices in the ROD for the 2007 Programmatic Environmental Impact Statement for Alternative Energy Development and Production and Alternate Use of Facilities on the Outer Continental Shelf (MMS 2007:Section 2.7). BOEM and USFWS work with the lessees to develop post- construction plans aimed at monitoring the effectiveness of measures considered necessary to minimize impacts to migratory birds with the flexibility to consider the need for modifications or additions to the measures. [Footnote 266: South Fork DEIS, Table H-40.]"

To provide regulatory certainty to lease applicants, the EA should explicitly outline protocols for monitoring, adaptive management, and mitigation.

Comment Number: BOEM-2021-0024-DRAFT-0366-171
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The South Fork Draft EIS suggested the following minimization measures:

"Install bird deterrent devices (including painting a turbine blade black [May et al. 2020]) to minimize bird attraction to operating turbines and on the offshore substations (OSSs), where appropriate and where DWSF determines such devices can be employed safely...The SFWF wind turbine generators (WTGs) would be widely spaced apart allowing bird species to avoid individual WTGs and minimize risk of potential collision. [Footnote 267: Id., Table G-1.]"

While painting turbines black is an admirable action, the proposed action was hardly a commitment. Additionally, the referenced study by May et al. (2020) suggests that the efficacy of this deterrent requires further study. [Footnote 268: May R, Nygård T, Falkdalen U, Åström J, Hamre Ø, Stokke BG. 2020. Paint it black: Efficacy of increased wind turbine rotor blade visibility to reduce avian fatalities. Ecology and Evolution n/a. Available from https://onlinelibrary.wiley.com/doi/abs/10.1002/ece3.6592 (accessed August 24, 2020).] Should BOEM make this a requirement, this could provide an excellent opportunity to institute adaptive management—studying the efficacy of black turbine blades in reducing collisions in order to inform best management at future wind farms. As we have addressed previously, widely spacing turbines is not a minimization strategy, as there is little evidence to suggest that turbine spacing reduces risks to birds. However, this too could provide an opportunity to learn from this management practice and adapt management for future wind developments from this knowledge.

Comment Number: BOEM-2021-0024-DRAFT-0366-172
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Instituting adaptive management, using the two strategies above as examples, will require robust collision monitoring. As we have noted in this document and in other letters to BOEM, collecting bird carcasses is an inadequate method for estimating collisions in the offshore environment. Instead, collision monitoring

will need to use technology from which we can rapidly learn the variables contributing to collision risk and adjust management accordingly—including informed curtailment strategies as necessary.

Comment Number: BOEM-2021-0024-DRAFT-0366-173
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The framework for adaptive management should include operational adjustments that are reasonable and cost effective and include advances in detection and avoidance technology. For example, the adaptive management framework should include "smart curtailment" to contain reasonable loss of energy production, seasonal adjustments based on mortality data as needed to compare with defined thresholds, and other operations that are proven to be effective in case of a rare event of mortality of a significant species or number of birds. These are practices used in adaptive management at some onshore wind facilities and in European Union offshore wind facilities. Their incorporation into the leasing process early will permit BOEM to require their adoption as new technologies become available.

An adaptive management framework requires a level of coordination and commitment that goes well beyond the Project under consideration. BOEM and USFWS must commit to providing a structure that ensures this across the offshore wind landscape.

Comment Number: BOEM-2021-0024-DRAFT-0366-174
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

11. Compensatory Mitigation for Birds

Compensatory mitigation is another tool that should be used to offset adverse impacts of the Project.

Given the current technology, there are no viable options for effectively minimizing the impacts of developing the Project to the extent needed to protect birds from harmful and long-term impacts. Furthermore, migratory birds pose significant conservation challenges, as many originate from other regions and actions to increase their populations require significant investment of time and resources to restore equivalent habitat. The breadth of species potentially affected, and the migratory nature of these species will require environmental compensatory mitigation.

The number of birds affected is uncertain due to the lack of available technology to accurately measure impacts (e.g., collisions) on a species level or the fate of those birds after a collision event (e.g., injury, morbidity, or mortality). We further note that, as discussed above, the agencies still have conservation obligations under frameworks, including ESA and MBTA. Based on studies of ESA listed species alone (discussed above), it seems likely that birds protected by federal laws will be killed in collisions with turbines under the currently anticipated industry build-out scenario. As such, compensatory mitigation should be provided for bird mortality resulting from development of the WEAs, and particularly for species of conservation concern.

Comment Number: BOEM-2021-0024-DRAFT-0366-175
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Directed mitigation can result in meaningful beneficial outcomes. For example, the Montrose restoration, a $63 million mitigation package compensated for migratory seabirds in Mexico, efforts in part which led

to the recovery and delisting of Pacific Brown Pelican. [Footnote 269: Endangered and Threatened Wildlife and Plants; Removal of the Brown Pelican (Pelecanus occidentalis) From the Federal List of Endangered and Threatened Wildlife, 74 Fed. Reg. 59444 (November 17, 2009). https://www.federalregister.gov/documents/2009/11/17/E9-27402/endangered-and-threatened-wildlife-and- plantsremovalof-the-brown-pelican-pelecanus-occidentalis.]

Mitigation more effectively compensates for impacts when conducted on a project and population-specific basis. This model is encouraged for offshore wind energy development impacts. However, if a project-by-project approach proves difficult to operationalize, a compensatory mitigation fund could be developed and administered by trustees of federal agencies. Following the model of other forms of development, this would most appropriately be funded by the developers whose actions are resulting in the impacts, with funding amounts based on likely or actual impacts (see below).

Comment Number: BOEM-2021-0024-DRAFT-0366-176
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Quantifying compensatory mitigation for birds should initially be based on a generous estimate of the number of birds that could be killed in collisions with turbines, including ESA listed species and nocturnal migrants. Evaluating mitigation necessary to effectively compensate for these losses should utilize resource equivalency analysis, which accounts for the fact that birds at different life stages do not functionally equate in conservation importance (e.g., one additional hatchling does not functionally replace a breeding adult bird). This approach has been used extensively for addressing bird losses resulting from losses of birds to oil spills and contaminants in California. For example, under NEPA, the Damage Assessment and Restoration Plan / Environmental Assessment for the Luckenbach Spill called for a number of mitigation projects to compensate for the losses of migratory birds in distant countries where those species originate, such as Mexico, Canada and New Zealand, in the amount of $21M. [Footnote 270: Luckenbach Trustee Council. 2006. S.S. Jacob Luckenbach and Associated Mystery Oil Spills Final Damage Assessment and Restoration Plan/`Environmental Assessment. Prepared by California Department of Fish and Game, National Oceanic and Atmospheric Administration, United States Fish and Wildlife Service, National Park Service.] Quantities and supporting analyses should be re-evaluated as collision monitoring data become available and additional mitigation provided as necessary.

Comment Number: BOEM-2021-0024-DRAFT-0366-177
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Compensatory mitigation requirements under the ESA were essentially ignored by the previous administration. We urge the current administration to observe compensatory mitigation requirements for species currently listed and under listing consideration for the ESA which may be impacted by offshore wind development: Piping Plover, Red Knot, Roseate Tern, and Black-capped Petrel.

Comment Number: BOEM-2021-0024-DRAFT-0366-183
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The COP acknowledges the potential presence of some of these bat species in the onshore coastal areas of the Project but assumes that since “Project activities are co-located with existing disturbed areas, there is expected to be limited disruption of bat habitat” and concludes that “[T]herefore individual impacts to

northern long-eared bats from the onshore components of the project are expected to be minimal to low; and the likelihood of population level impacts for non-listed species are expected to be minimal to low." [Footnote 288: Id., Vol. II, P. 28.] The COP offers limiting the times of tree clearing in coastal areas of the Project as the one mitigation measure to minimize adverse impacts to bats. [Footnote 289: Id]

Comment Number: BOEM-2021-0024-DRAFT-0366-184
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The two mitigation measures offered by Ocean Wind do not adequately address potential impacts to bats from collisions with operating (discussed further below). The COP also does not account for the cumulative adverse impacts to bats from regional offshore wind energy buildout as well as from non-wind energy related activities on the coastal and marine environments around the Project area. In the following sections, we present a summary of these impacts and make several recommendations to BOEM to avoid, minimize, and mitigate adverse impacts to bats from the Ocean Wind Project development.

Comment Number: BOEM-2021-0024-DRAFT-0366-187
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

3. Recommendations to BOEM on Bat Conservation Measures

Better understanding of bat presence and behavior in the Ocean Wind Project area is needed to understand potential impacts and afford protection to the cave-dwelling and migratory tree-roosting bats of NJ. Lack or insufficiency of data on impacts to bats from offshore wind energy development does not imply that impacts are unlikely. As such, BOEM must be deliberate and conservative in its assessment of risk to bats from the Project's development in order to avoid, minimize, and mitigate adverse impacts to the only flying mammals on the planet.

Comment Number: BOEM-2021-0024-DRAFT-0366-188
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

We make the following recommendations for BOEM's consideration at all steps of offshore wind energy development in the Project area, from pre- construction through post-construction operation, maintenance, and decommissioning phases:

BOEM must ensure that its analyses and decisions are informed by the most current scientific and technical data. Motus Wildlife Tracking System contains data on bat movements, including along the Atlantic coast [Footnote 298: Bird Studies Canada. 2018. "Motus Wildlife Tracking System." 2018. https://motus.org/ which could inform which species need to be considered in the Draft EIS.]

Comment Number: BOEM-2021-0024-DRAFT-0366-189
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

BOEM should consult with the USFWS regarding potential impacts to the listed Indiana bats and northern long-eared bats and develop and implement protocols to avoid, minimize, and mitigate impacts.

Comment Number: BOEM-2021-0024-DRAFT-0366-190
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

BOEM must consider the evidence of impacts to both migratory tree-roosting bats and cave-dwelling bats from land-based wind energy development when permitting offshore wind energy projects. Although more research is needed to characterize how bats are using the Project area and the OCS, it would be reasonable to assume that the migratory tree-roosting species, which seem to be particularly attracted to land-based wind turbines, may experience a similar attraction to offshore WTGs due to sparse resources in the marine environment. As discussed earlier, cave-dwelling bats are also found more often and further offshore than previously known thus putting them at potential risk for collision.

Comment Number: BOEM-2021-0024-DRAFT-0366-191
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

BOEM's assessment of the impacts to bats must be conservative, and must employ the best available scientific methods in real-time detection and continued monitoring to establish pre-construction baseline data, fill gaps in existing datasets, and develop methods to assess impacts, including:

-acoustic monitoring at the height of turbine nacelles [Footnote 299: Peterson et al.'s (2016) survey work, which is relied on heavily by NYSERDA, did not conduct acoustic monitoring at nacelle height; no acoustic monitor was mounted higher than 45m and more than half were at 10m or less. These low altitude surveys may not adequately assess risk at nacelle height. Eastern red bats have been detected offshore of New Jersey, Delaware, and Virginia flying at heights in excess of 200m. Hatch, Shaylyn K., Emily E. Connelly, Timothy J. Divoll, Iain J. Stenhouse, and Kathryn A. Williams. 2013. "Offshore Observations of Eastern Red Bats (Lasiurus Borealis) in the Mid-Atlantic United States Using Multiple Survey Methods." Justin David Brown, ed. PLoS ONE, vol. 8, no. 12 (2013): e83803. https://doi.org/10.1371/journal.pone.0083803]

-autodetection, as it becomes available for offshore WTGs

-targeted tagging

-use of thermal imaging technology to detect collisions, as it becomes available for offshore WTGs

Comment Number: BOEM-2021-0024-DRAFT-0366-192
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

e. BOEM should support research into development of monitoring methods for bats that are suited for assessing risk to bats in the offshore environment.

i. Considerable research is needed to understand how the impacts to bats from land- based wind energy development translate to offshore wind energy facilities.

ii. Determining risk and adaptively managing to avoid and minimize impacts relies on monitoring, but traditional fatality assessments (which rely on searching for carcasses beneath and around WTGs) are not feasible at offshore sites. [Footnote 300: Kunz, T.H., Arnett, E.B., Cooper, B.M., Erickson, W.P., Larkin, R.P., Mabee, T., Morrison, M.L., Strickland, M.D., and Szewczak,

J.D., "Assessing impacts of wind energy development on nocturnally active birds and bats: a guidance document," Journal of Wildlife Management, vol. 71, pp. 2449-2486 (2007); Rydell, J., Bach, L., Dubourg-Savage, M., Green, M., Rodrigues, L., and Hedenstrom, A., "Bat mortality at wind turbines in northwestern Europe." Acta Chiropterologica, vol. 12, pp. 261–274 (2009).] As such, many dead or injured bats would most likely go undetected, either falling into the water or becoming prey to marine scavengers or predators.

iii. Research is also needed to improve acoustic monitoring, which cannot currently be used to distinguish between calls from the ESA-listed northern long-eared bat and other Myotis species. [Footnote 301: Peterson et al. 2016.]

iv. Determining whether and how bats are attracted to offshore WTGs will be critical to assessing potential impacts of the Project development. Differences in turbine height and environmental surroundings between land-based and offshore WTGs increase the uncertainty about how bat behavior and impacts from land-based wind energy will translate to offshore wind development. Offshore wind turbines are larger than land-based ones and research onshore has shown that bat mortality increases with tower height, [Footnote 302: Barclay, Robert M.R., E.F. Baerwald, and J.C. Gruver. "Variation in Bat and Bird Fatalities at Wind Energy Facilities: Assessing the Effects of Rotor Size and Tower Height." Canadian Journal of Zoology, vol. 85, no. 3 (2007): 381–87. https://doi.org/10.1139/Z07-011; Rydell, Jens, Lothar Bach, Marie-Jo Dubourg-Savage, Martin Green, Luisa Rodrigues, and Anders Hedenström. "Bat Mortality at Wind Turbines in Northwestern Europe." Acta Chiropterologica, vol. 12, no. 2 (2010): 261–74. https://doi.org/10.3161/150811010X537846] meaning that development approaches that favor fewer, larger turbines may be detrimental to bats. Additionally, mortality at land- based facilities is partially attributed to bats' attraction to turbines. Limited research from Europe suggests that bats may be attracted to offshore wind turbines as foraging and roosting habitat, [Footnote 303: Ahlén et al. (2009)166 observed the common noctule (Nyctalus noctule) changing altitude near turbines in the Baltic Sea, moving from flying near the sea surface to the top of the turbine. Bats were observed attempting to land on turbines, presumably to either glean insects or roost. In the same study, three bat species were found roosting on nearshore (5.8 km offshore) turbines, including in the nacelles. Ahlén, Ingemar, Hans J. Baagøe, and Lothar Bach. "Behavior of Scandinavian Bats during Migration and Foraging at Sea." Journal of Mammalogy, vol. 90, no. 6 (2009): 1318–23. https://doi.org/10.1644/09-MAMM-S-223R.1.] but this research was for nearshore wind facilities and a different group of bat species.

Comment Number: BOEM-2021-0024-DRAFT-0366-193
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

4. Adoption of Mitigation Measures if Monitoring Reveals Bat Risk Offshore

The New York State Offshore Wind Master Plan Birds and Bats Study [Footnote 304: Ecology and Environment Engineering, P.C. "New York State Offshore Wind Master Plan Birds and Bats Study: Final Report." Prepared for: New York State Energy Research and Development Authority. NYSERDA Report 17- 25d, 2017. Hereafter "NYSERDA BBS."] offers several recommendations for possible avoidance, minimization, and mitigation measures for bats at offshore wind facilities in the Project area. These measures could be applied to the Ocean Wind Project, used singly or in tandem to effectively avoid or reduce potential adverse impacts on bats.

Comment Number: BOEM-2021-0024-DRAFT-0366-194
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

a. Deploying deterrent technologies to prevent bats from approaching wind turbines could be useful in minimizing bat fatalities. Deterrent technologies are being developed for land-based turbines, including turbine coatings (to counteract any attraction to smooth surfaces which might be perceived as water),[Footnote 305:Texturizing Wind Turbine Towers to Reduce Bat Mortality DE-EE0007033, https://www.energy.gov/sites/prod/files/2019/05/f63/TCU%20-%20M17%20-%20Hale-Bennett.pdf 306 NREL Wind Research, Technology Development and Innovation Research Projects https://www.nrel.gov/wind/technology-development-innovation-projects.html] ultraviolet lighting (which many bat species can see),306 and ultrasonic noise emitters (to effectively "jam" bats' radars and make wind facilities unappealing to bats). [Footnote 307: https://www.osti.gov/biblio/1484770; Weaver, S. P., Hein, C. D., Simpson, T. R., Evans, J. W., & Castro-Arellano, I. (2020). Ultrasonic acoustic deterrents significantly reduce bat fatalities at wind turbines. Global Ecology and Conservation, e01099. https://doi.org/10.1016/j.gecco.2020.e01099; Arnett, E. B., Hein, C. D., Schirmacher, M. R., Huso, M. M. P., & Szewczak, J. M. (2013). Evaluating the Effectiveness of an Ultrasonic Acoustic Deterrent for Reducing Bat Fatalities at Wind Turbines. PLoS ONE, 8(6), e65794. https://doi.org/10.1371/journal.pone.0065794. 308 NRG Systems, Bat Deterrent Systems, https://www.nrgsystems.com/products/bat-deterrent- systems/detail/bat-deterrent-systems (visited Apr. 29, 2021).] One of the ultrasonic deterrent technologies, NRG Systems,308 has been commercially deployed at land-based wind facilities. [Footnote 309: Duke Energy, Duke Energy Renewables to use new technology to help protect bats at its wind sites, https://news.duke-energy.com/releases/duke-energy-renewables-to-use-new-technology-to-help-protect-bats- at-its-wind-sites (visited Apr. 29, 2021).] None of these technologies have been assessed yet in the offshore environment nor on turbines with such large swept areas, which may present a challenge for effective deterrent use offshore.

Comment Number: BOEM-2021-0024-DRAFT-0366-195
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

b. If offshore wind energy generation is shown to have significant impacts on bats, feathering turbine blades at high risk periods for bats, known as targeted or smart operational curtailment, could be a useful tool for minimizing bat fatalities from WTG collisions. This approach has proven to be an effective strategy for minimizing bat fatalities at land-based wind facilities and has achieved a greater than 90% reduction in some cases. [Footnote 310: Arnett, E. B., Huso, M. M., Schirmacher, M. R., & Hayes, J. P. "Altering turbine speed reduces bat mortality at wind-energy facilities." Frontiers in Ecology and the Environment, vol. 9, no. 4 (2011): 209–214. https://doi.org/10.1890/100103] Its effectiveness in the offshore environment has yet to be determined. [Footnote 311: Borssele Wind Farm in the Netherlands is the first proposed offshore wind farm in Europe with a bat mitigation requirement for migratory bats. One proposed mitigation measure is targeted operational curtailment. https://www.rvo.nl/sites/default/files/2015/09/33953992.pdf]

Comment Number: BOEM-2021-0024-DRAFT-0366-196
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

c. Increasing the cut-in speed could likely reduce bat mortality from WTG collisions. While higher cut-in speeds would likely translate to greater reductions in bat mortality, if turbines are feathered to wind speeds higher than the manufacturer's cut-in speed, energy production at the turbines will decrease. [Footnote 312: Although it varies considerably by facility, for land-based wind, a 50% reduction in bat fatalities is associated with a ~1% decrease in energy production and a 90% reduction in bat fatalities is

associated with a ~3.5% decrease in energy production, although similar reductions with less energy loss may be possible with more targeted operational curtailment. Good, R.E., Merrill, A., Simon, S., Murray, K. and Bay, K. "Bat Monitoring Studies at the Fowler Ridge Wind Farm, Benton County, Indiana. Final Report: April 1 – October 31, 2011." Prepared for Fowler Ridge Wind Farm, Fowler, Indiana, 2012.; Arnett, E.B., Johnson, G.D., Erickson, W.P., and Hein, C.D. "A Synthesis of Operational Mitigation Studies to Reduce Bat Fatalities at Wind Energy Facilities in North America." A report submitted to the National Renewable Energy Laboratory. Bat Conservation International. Austin, Texas, 2013.; Arnett, E. B., Huso, M.M., Schirmacher, M.R., & Hayes, J.P. "Altering turbine speed reduces bat mortality at wind-energy facilities." Frontiers in Ecology and the Environment, vol. 9, no. 4 (2011): 209–214.; Tidhar, D., Sonnenberg, M., & Young, D. 2012 "Post-construction Carcass Monitoring Study for the Beech Ridge Wind Farm Greenbrier County, West Virginia. FINAL REPORT." Prepared by Western EcoSystems Technolocy, Inc. for Beech Ridge Wind Far, Beech Ridge Energy, LLC, 2013; Ostridge, C. and Framer, C. "Understanding the costs of bat curtailment." Presentation at AWEA Siting Conference. 20 Mar. 2018.] However, reductions in fatalities have been achieved at land-based WTGs by feathering turbines only to the manufacturer's cut-in speed: one study revealed feathering blades up to the manufacturer's cut-in speed reduced overall bat fatalities by 36% and decreased eastern red bat fatalities, although there were no reductions in fatalities of either hoary or silver-haired bats. [Footnote 313: Good, Rhett E, Andy Merrill, Sandra Simon, Kevin Murray, and Kimberly Bay. "Bat Monitoring Studies at the Fowler Ridge Wind Farm, Benton County, Indiana. Final Report: April 1 – October 31, 2011." Prepared for Fowler Ridge Wind Farm, Fowler, Indiana, 2012. https://tethys.pnnl.gov/sites/default/files/publications/Good%20et%20al.%202012_Fowler%20Report.pdf . As a caveat, as turbine technology advances and turbines become efficient at lower wind speeds, the manufacturer's cut-in speed will decrease, thereby limiting reductions in bat fatalities from feathering only to the manufacturer's cut-in speed.] In Europe, WTGs in the North Sea have operational curtailment between August 15 and October 1 to reduce impacts on the Nathusius's pipistrelle (Pipistrellus nathusii) during their summer/autumn migration. [Footnote 314: South Fork DEIS, Table H-36.] If monitoring efforts reveal that offshore wind energy development in the NY Bight is having a significant impact on bat populations, a similar strategy could be explored for use for Ocean Wind, targeting warm, slow wind speed nights during migration when bat activity is highest.315 If bat mitigation measures are needed and targeted curtailment is shown to be effective in the Ocean Wind Project's offshore environment, periods of operational curtailment could be restricted to these highest risk times to minimize loss in energy generation.

Comment Number: BOEM-2021-0024-DRAFT-0366-21
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

C. BOEM MUST REQUIRE MONITORING AND ADAPTIVE MANAGEMENT

BOEM must consider strong and intentional action in the preparation of the Environmental Impact Statement to advance robust monitoring, which will assess impacts and enable adaptive management. As previously noted, offshore wind remains a relatively nascent technology in the United States and, as such, BOEM must closely monitor the impact of offshore wind construction and operations on marine wildlife and the ocean ecosystem to guide its adaptive management and future development. It is necessary to understand baseline environmental conditions prior to large-scale offshore wind development in the United States, so offshore wind impacts can be clearly understood with relation to pre-development environments. To this end, BOEM must establish and ensure a robust, long-term scientific plan to monitor the effects of offshore wind development on marine mammals, sea turtles, fish, bats, birds, and other species and their habitats before, during, and after the first large-scale commercial projects are constructed. This monitoring data must be made readily available to stakeholders and the public to inform

future decisions in the growing offshore wind industry and minimize risks associated with offshore development. Without strong monitoring in place, we lose the ability to detect and understand potential impacts. It also risks setting an under-protective precedent for offshore wind development generally, and future offshore wind development in particular. Monitoring must inform and drive future project siting, design, implementation, and mitigation as well as potential changes to existing operations to avoid or minimize any negative impacts to wildlife and other natural resources.

Comment Number: BOEM-2021-0024-DRAFT-0366-22
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

BOEM must also collaborate with state efforts (e.g., NJ Board of Public Utilities, NJ Department of Environmental Protection), scientists, NGOs, the wind industry, and other stakeholders to use information from monitoring and other research and evolving practices and technology to inform cumulative impacts analyses moving forward. Likewise, the Draft EIS must include more specific information related to how monitoring impacts of offshore wind development and operation on wildlife and their habitats will inform management practices as new information becomes available. As monitoring informs management practices, BOEM must require continued monitoring and employment of adaptive management practices in the Draft EIS as a condition of continued operation and maintenance by Ocean Wind. This will ensure that BOEM can swiftly minimize damages of unintended or unanticipated impacts to coastal ecosystems or wildlife and inform strategies for future wind projects to avoid potential impacts.

Comment Number: BOEM-2021-0024-DRAFT-0366-45
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

C. THE DRAFT EIS SHOULD ACCOUNT FOR ECOSYSTEM UNCERTAINTY

BOEM should adopt a precautionary approach to account for fundamental gaps in our understanding of species and their behavioral responses and employ the best available scientific methods to monitor and, if necessary, design mitigation strategies. As a general matter throughout the development and operation of offshore wind projects, BOEM should ensure the necessary research and monitoring is carried out to address the substantial uncertainties regarding offshore wind and wildlife interactions.

For instance, we do not know the degree to which bats, marine birds, and nocturnal migrants may interact with offshore wind turbines in U.S. waters and whether those interactions will lead to population-level impacts. Many of these species are currently facing stressors on land, which may make their populations more vulnerable to additional take. Based on this research, mitigation options may be needed to ensure species' health and provide the certainty that will allow for further ramp up of the industry. Improved and sustained data compilation before and after construction as well as during operation would also advance understanding of species' occurrence in the Project area and region. As the United States offshore wind industry moves forward, we recommend BOEM support the comprehensive analysis of these baseline data and ongoing data compilation and analyses and undertake a regional approach to data analysis to enhance collaboration with developers, scientists, managers, and other stakeholders.

Comment Number: BOEM-2021-0024-DRAFT-0366-47
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

BOEM also retains the ability to consider adoption of supplemental mitigation measures if monitoring or the agency's data collection efforts identify an unexpected negative impact. While it would be inappropriate for BOEM to rely on an adaptive management plan to address environmental considerations in lieu of necessary mitigation measures, the agency is allowed and encouraged to adopt further adaptive management measures if needed.

Comment Number: BOEM-2021-0024-DRAFT-0366-50
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

BOEM and Ocean Wind should work closely with New Jersey fishery managers and NMFS to consider and implement appropriate mitigation measures to avoid, minimize, and mitigate potential adverse impacts to EFH, finfish, benthic resources, and invertebrate populations which may be affected by construction activities, particularly during vulnerable times of spawning, larval settlement, and juvenile development. Mitigation measures should reduce impacts to benthic habitat, EFH, invertebrates, and finfish including: (1) minimizing impacts to complex bottom habitats and important habitats for finfish to the extent practicable (and to the extent that such habitats exist in the project area); (2) conducting site-specific benthic habitat assessments to inform siting of the Project; and (3) committing to collaborative science with fishing industries, non-governmental organizations, agencies, and scientists to better understand the interactions between marine species and habitats and their interaction with offshore wind development.[Footnote 85: Id. at G-3.] While these measures are necessary, we also encourage BOEM to require Ocean Wind to undertake several additional mitigation and monitoring actions including but not limited to (1) requiring an anchoring plan for all areas where anchoring is being used to avoid construction impacts on sensitive habitats, including hard bottom and structurally complex habitats; and (2) requiring post- construction monitoring to document habitat disturbance and recovery and require that Ocean Wind consult with NMFS and BOEM before conducting monitoring to address agency comments prior to implementation.

Comment Number: BOEM-2021-0024-DRAFT-0366-51
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Given that the offshore wind industry is in its infancy, a comprehensive monitoring effort is crucial. Thus, BOEM and/or Ocean Wind, in consultation with New Jersey fishery managers and NMFS, should conduct long-term monitoring before, during, and after construction to document impacts to benthic habitat and EFH, and habitat recovery, and if necessary, design appropriate adaptive mitigation strategies to address the impacts identified. Monitoring data should be made readily available to stakeholders and the public.

Comment Number: BOEM-2021-0024-DRAFT-0366-67
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

3. Advancing Monitoring and Mitigation During Offshore Wind Energy Development

While the best available scientific information justifies the use of seasonal restrictions to temporally separate survey activity from North Atlantic right whales in some areas, it is becoming increasingly clear

that there may not be a time of "low risk" for this species. The population size is now so small that any individual-level impact is of great concern. In addition, climate-driven changes in oceanographic conditions, and resulting shifts in prey distribution, are rapidly changing the spatial and temporal patterns of habitat use for North Atlantic right whales and other large whale species. [Footnote 132: Davis, G.E., et al., "Exploring movement patterns and changing distributions of baleen whales in the western North Atlantic using a decade of passive acoustic data," supra note 87; Davis, G.E., Baumgartner, M.F., Bonnell, J.M., Bell, J., Berchick, C., Bort Thorton, J., Brault, S., Buchanan, G., Charif, R.A., Cholewiak, D., et al., "Long-term passive acoustic recordings track the changing distribution of North Atlantic right whales (Eubalaena glacialis) from 2004 to 2014," Scientific Reports, vol. 7, p. 13460 (2017); Record, N., Runge, J., Pendleton, D., Balch, W., Davies, K., Pershing, A., Johnson, C., Stamieszkin, K., Ji, R., Feng, Z. and Kraus, S., "Rapid Climate-Driven Circulation Changes Threaten Conservation of Endangered North Atlantic Right Whales," Oceanography, vol. 32, pp. 162-169 (2019).] Therefore, we recommend BOEM work with NMFS and other relevant agencies, experts, and stakeholders, towards developing a robust and effective near real-time monitoring and mitigation system for North Atlantic right whales and other endangered and protected species (i.e., fin, sei, minke, and humpback whales) during all phases of offshore wind energy development.

Comment Number: BOEM-2021-0024-DRAFT-0366-68
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The ability to reliably detect North Atlantic right whales and other species on a near real-time basis and adjust survey (and future construction) activities accordingly (e.g., if an endangered whale species is detected within X meters distance of the survey/construction area then no survey/construction activity will be undertaken within a defined time period) would enable BOEM and NMFS to adaptively manage and mitigate risks to protected species in near real-time while affording flexibility to offshore wind energy developers. This approach could be used in conjunction with seasonal restrictions in North Atlantic right whale foraging areas (e.g., off southern New England), or potentially year-round in the Mid-Atlantic region where a changing climate is leading to novel spatial and temporal habitat-use patterns. A near real-time monitoring and mitigation approach would also minimize risks posed by North Atlantic right whale seasonal restrictions to other protected species that may be present at high densities at times when North Atlantic right whales are expected to be present in lower numbers (e.g., humpback whale and fin whale foraging aggregations that occur in the summer months in the New York Bight when North Atlantic right whale presence may be relatively low). An added benefit is that the biological data collected could be used to inform future wind energy development activities and adaptive management.

Comment Number: BOEM-2021-0024-DRAFT-0366-69
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

There are several technologies in various stages of development that would allow near real-time detection of protected species (e.g., Robots4Whales [Footnote 133: Woods Hole Oceanographic Institution WHOI and WHOI/WCS, "Robots4Whales," supra note 39.]) and convey that information to decision makers (e.g., "Mysticetus" [Footnote 134: Available at: https://www.mysticetus.com/.]) to inform mitigation action. Near real-time monitoring systems are already being deployed to mitigate risks to North Atlantic right whales. For example, an unmanned acoustic glider capable of auto-detecting North Atlantic right whale calls is currently informing decisions being made by Transport Canada on when to impose vessel speed restrictions in the Laurentian Channel. Ten-knot speed limits can be issued within an hour of North Atlantic right whales being detected. [Footnote 135: See, e.g., CBC News, "Underwater glider helps save

North Atlantic Right Whales from Ship Strikes" (Aug. 30, 2020). Available at: https://www.cbc.ca/news/canada/new-brunswick/nb-north-atlantic-right-whales-underwater- glider-1.5701984.] BOEM should coordinate with NMFS to evaluate the current status of near real-time detection technologies and develop recommendations for an integrated near real-time monitoring and mitigation system that combines, at minimum, both visual and acoustic detections.

Comment Number: BOEM-2021-0024-DRAFT-0366-7
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Against this backdrop of unprecedented climate change risks threatening species extinction and shifts in distribution, it is imperative that all offshore wind development activities move forward with strong protections in place for coastal and marine habitat and wildlife, using science-based measures to avoid, minimize, mitigate, and monitor impacts on valuable and vulnerable wildlife and ecosystems. BOEM must consider sufficient measures to protect our most vulnerable threatened and endangered species and a robust plan for pre-, during, and post-construction monitoring that can enable effective adaptive management strategies.

Comment Number: BOEM-2021-0024-DRAFT-0366-70
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

It is also of paramount importance that BOEM encourage and promote adaptive management and robust long-term monitoring to assess impacts as offshore wind energy is developed and operational. This is imperative considering the effects of a changing climate on large whale species and other cumulative anthropogenic stressors. With U.S. Offshore wind energy in its infancy in the U.S. and it is therefore imperative that the impact of offshore wind operations on marine wildlife and the ocean ecosystem be closely monitored to guide the industry's adaptive management and future development. It is vital that we gain an understanding of baseline environmental conditions prior to large-scale offshore wind energy development in the United States. To this end, BOEM must coordinate with NMFS to establish and fund a robust, long-term scientific plan to monitor the effects of offshore wind energy development on marine mammals and other species before, during, and after large-scale commercial projects are constructed. Without strong baseline data collection and environmental monitoring in place, we risk losing the ability to detect and understand potential impacts and risk setting an under- protective precedent for future offshore wind energy development. Such monitoring must inform and drive future mitigation as well as potential practical changes to existing operations to reduce any potential impacts to natural resources and wildlife.

Comment Number: BOEM-2021-0024-DRAFT-0366-71
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

4. The Project Must Adopt Strong Measures to Protect the North Atlantic Right Whale and Other Large Whales

The imperiled status of the North Atlantic right whale demands the implementation of strong protective measures to safeguard this species during site characterization and assessment activities and during subsequent construction and operations of the Project. BOEM must also require strong protections for other endangered and threatened marine mammal species, including those currently experiencing a UME.

BOEM must take all necessary precautions to reduce the number of Level A takes (any act of pursuit, torment, or annoyance that has the potential to injure a marine mammal or marine mammal stock in the wild) and Level B takes (any act that has the potential to disturb [but not injure] a marine mammal or marine mammal stock in the wild by disrupting behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering) [Footnote 136: 16 U.S.C. 1361 §§ 101(a)(5)(A) and (D), 86 Fed. Reg. 1520 (Posted January 4, 2021)] for large whales to be as close to zero as possible.

Comment Number: BOEM-2021-0024-DRAFT-0366-72
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Based on the best scientific information available for the North Atlantic right whale and other large whale species (as summarized in Section E.1 above), we recommend the following mitigation measures be required. We note that a number of these measures were specifically designed to protect the North Atlantic right whales, but several offer benefits to other large whale species (e.g., vessel speed restrictions). In general, when designing mitigation, BOEM must require the most protective measures possible for all endangered and at-risk species, including fin whales, humpback whales, and minke whales, as well as harbor porpoises. BOEM should also work with NMFS to advance a robust and effective near real-time monitoring and mitigation system for North Atlantic right whales and other endangered and protected species (see Section E.3: "Advancing Monitoring and Mitigation During Offshore Wind Energy Development").

Comment Number: BOEM-2021-0024-DRAFT-0366-73
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

a. North Atlantic Right Whale Mitigation Recommendations During Construction and Operations

The mitigation measures below reflect our current (April 2021) set of recommendations for North Atlantic right whales during construction and operations of fixed foundation turbines in the New York Bight and Mid-Atlantic. Please note that these recommendations may be subject to change as new information becomes available, mitigation measures for other large whale species are incorporated, and a near real-time monitoring and mitigation system for large whales is advanced (see Section E.3).

Comment Number: BOEM-2021-0024-DRAFT-0366-74
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

a. Prohibition on pile driving during times of highest risk:

i. Pile driving should not occur during periods of highest risk to North Atlantic right whales, defined as times of highest relative density of animals during their migration, and times when mother-calf pairs, pregnant females, surface active groups (indicative of breeding or social behavior), or aggregations of three or more whales (indicative of feeding or social behavior) are, or are expected to be, present, as supported by review of the best available science at the time of the activity.

ii. If a near real-time monitoring system and mitigation protocol for North Atlantic right whales and other large whale species is developed and scientifically validated, the system and protocol may be used to

dynamically manage the timing of pile driving and other construction activities to ensure those activities are undertaken during times of lowest risk for all relevant large whale species.

Comment Number: BOEM-2021-0024-DRAFT-0366-75
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

b. Diel restrictions on pile driving:

i. Pile driving shall not be initiated within 1.5 hours of civil sunset or in times of low visibility when the visual "clearance zone" and "exclusion zone" (as hereinafter defined) cannot be visually monitored, as determined by the lead Protected Species Observer (PSO)[Footnote 137: The term "PSO" refers to an individual with a current National Marine Fisheries Service (NMFS) approval letter as a Protected Species Observer.] on duty.

ii. Pile driving may continue after dark only if the activity commenced during daylight hours and must proceed for human safety or installation feasibility reasons. [Footnote 138: Installation feasibility refers to ensuring that the pile installation event results in a usable foundation for the wind turbine (i.e., foundation installed to the target penetration depth without refusal and with a horizontal foundation/tower interface flange).]

Comment Number: BOEM-2021-0024-DRAFT-0366-76
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

c. Clearance Zone distances:

i. A visual clearance zone and exclusion zone shall extend at minimum 5,000 meters (m) in all directions from the location of the driven pile.

ii. An acoustic clearance zone shall extend at minimum 5,000 m in all directions from the location of the driven pile.

iii. An acoustic exclusion zone shall extend at minimum 2,000 m in all directions from the location of the driven pile.

Comment Number: BOEM-2021-0024-DRAFT-0366-77
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

d. Shutdown requirements:

i. When the application of monitoring methods defined in subsection (E.4.A.e), below, results in either an acoustic detection within the minimum 5,000 m acoustic clearance zone or a visual detection within the minimum 5,000 m visual clearance zone of one or more North Atlantic right whales, pile driving should not be initiated.

ii. When the application of monitoring methods defined in subsection (E.4.A.e) results in a visual detection within the minimum 5,000 m visual exclusion zone or an acoustic detection within the minimum 2,000 m acoustic exclusion zone, piling shall be shut down unless continued pile driving activities are necessary for reasons of human safety or installation feasibility. [Footnote 139: In the event

that the lead PSO directs that impact pile driving be halted because of a visual observation or acoustic detection of a North Atlantic Right Whale within the Clearance Zone, installation feasibility shall be determined by the lead engineer on duty.]

iii. In the event that a North Atlantic right whale is visually detected by PSOs at any distance from the pile, piling activities shall be shut down unless continued pile driving activities are necessary for reasons of human safety or installation feasibility.

iv. Once halted, pile driving may resume after use of the methods set forth in subsection (e) and the lead PSO confirms no North Atlantic right whales have been detected within the acoustic and visual clearance zones.

Comment Number: BOEM-2021-0024-DRAFT-0366-78
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

e. Real-time monitoring requirements and protocols during pre-clearance and when pile driving activity is underway:

i. Monitoring of the acoustic clearance and exclusion zone will be undertaken using near real-time passive acoustic monitoring (PAM), [Footnote 140: Throughout these comments "PAM" refers to a real-time passive acoustic monitoring system, with equipment bandwidth sufficient to detect the presence of vocalizing North Atlantic right whales and/or if available at the time of construction other similar high performance sound monitoring systems and arrays). assuming a detection range of at least 10,000 m, and should be undertaken from a vessel other than the pile driving vessel, or from a stationary unit, to avoid the hydrophone being masked by the pile driving vessel or development-related noise.

ii. Monitoring of the visual clearance and exclusion zone will be undertaken by vessel- based PSOs stationed at the pile driving site and on additional vessels, as appropriate, to enable monitoring of the minimum 5,000 m clearance zone within pre-clearance monitoring period and during pile driving activity. On each vessel, there must be a minimum of four PSOs following a two-on, two-off rotation, each responsible for scanning no more than 180° of the horizon per pile driving location. Additional vessels must survey the clearance and exclusion zones at speeds of 10 knots or less.

iii. Acoustic and visual monitoring should begin at least 60 minutes prior to the commencement or re-initiation of pile driving and should be conducted throughout the duration of pile driving activity. Visual observation of the minimum 5,000 m visual clearance zone should continue until 30 minutes after pile driving.

iv. The deployment of additional observers and monitoring technologies (e.g., infrared, drones, hydrophones) should be undertaken, as needed, to ensure the ability to monitor the established clearance zones.

Comment Number: BOEM-2021-0024-DRAFT-0366-79
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

f. Vessel speed restrictions:

i. All Project-associated vessels should adhere to a 10-knot speed restriction at all times except in limited circumstances where the best available scientific information demonstrates that whales do not use the area.

ii. The Project may develop, in consultation with NOAA, an "Adaptive Plan" that modifies these vessel speed restrictions. However, the monitoring methods that inform the Adaptive Plan must be proven effective using vessels traveling 10 knots or less and following a scientific study design. If the resulting Adaptive Plan is scientifically proven to be equally or more effective than a 10-knot speed restriction, the Adaptive Plan could be used as an alternative to a 10-knot speed restriction.

Comment Number: BOEM-2021-0024-DRAFT-0366-80
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

g. Other vessel-related measures:

i. All personnel working offshore should receive training on observing and identifying North Atlantic right whales and other large whale species.

ii. Vessels must maintain a separation distances of 500 m for North Atlantic right whales, maintain a vigilant watch for North Atlantic right whales and other large whale species, and slow down or maneuver their vessels as appropriate to avoid a potential interaction with a North Atlantic right whale or other large whale species.

iii. All vessels responsible for crew transport (i.e., service operating vessels) should carry automated thermal detection systems.

Comment Number: BOEM-2021-0024-DRAFT-0366-81
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

h. Underwater noise reduction:

i. BOEM should require a combination of near field (e.g., reduced blow energy, Hydrosound Damper) and far field noise mitigation (e.g., single bubble curtain), and/or a combination system (double bubble curtain), expected to achieve at least 15dB (SEL) noise attenuation taking, as a baseline, projections from prior noise measurements of unmitigated piles from Europe and North America. A minimum of 10 dB (SEL) must be attained in the field during construction in combined noise reduction and attenuation.

ii. Field measurements should be conducted on at least the first pile installed. We do not, however, support sound source verification using unmitigated piles.

Comment Number: BOEM-2021-0024-DRAFT-0366-82
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

i. Reporting:

i. BOEM should require the Project report all visual observations and acoustic detections of North Atlantic right whales to NMFS or the Coast Guard as soon as possible and no later than the end of the PSO shift. We note that, in some cases, such as with the use of near real-time autonomous buoy systems, the detections will be reported automatically on a preset cycle.

ii. The Project must immediately report an entangled or dead North Atlantic right whale or other large whale species to NMFS, the Marine Animal Response Team (1-800-900- 3622) or the United States.

Coast Guard immediately via one of several available systems (e.g., phone, app, radio). Methods of reporting are expected to advance and streamline in the coming years, and BOEM should require projects to commit to supporting and participating in these efforts.

Comment Number: BOEM-2021-0024-DRAFT-0366-83
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

b. Large Whale Mitigation Recommendations During Site Assessment and Characterization

The following site assessment and characterization mitigation measures would help ensure adequate protections for the North Atlantic right whale and other endangered and protected species and stocks:

a. Prohibition on site assessment and characterization during times of highest risk:

i. Site assessment and characterization activities involving geophysical survey equipment with noise levels that could cause injury or harassment to large whales (defined throughout this section as: source levels > 180 dB re 1 µPa (SPL) at 1 meter at frequencies between 7 and 35 kHz) should not occur during periods of highest risk to North Atlantic right whales or other large whale species, defined as times of highest relative density of animals during their migration, and times when mother-calf pairs, pregnant females, surface active groups (indicative of breeding or social behavior), or aggregations of three or more whales (indicative of feeding or social behavior) are, or are expected to be, present, as supported by review of the best available science at the time of the activity.

ii. If a near real-time monitoring system and mitigation protocol for North Atlantic right whales and other large whale species is developed and scientifically validated (see Section E.3), the system and protocol may be used to dynamically manage the timing of site assessment and characterization activities to ensure those activities are undertaken during times of lowest risk.

Comment Number: BOEM-2021-0024-DRAFT-0366-84
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

b. Diel restrictions on site assessment and characterization:

i. Site assessment and characterization activities shall not be initiated within 1.5 hours of civil sunset or in times of low visibility when the visual "clearance zone" and "exclusion zone" (as hereinafter defined) cannot be visually monitored, as determined by the lead Protected Species Observer (PSO) [Footnote 141: The term "PSO" refers to an individual with a current National Marine Fisheries Service ("NMFS") approval letter as a Protected Species Observer] on duty.

Comment Number: BOEM-2021-0024-DRAFT-0366-85
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

c. Clearance zone and exclusion zone distances:

i. A visual clearance zone and exclusion zone of at least 500 m for all large whale species and ideally 1,000 m for North Atlantic right whales must be established around each vessel conducting activities with noise levels that could result in injury or harassment to large whales.

ii. An acoustic clearance zone and exclusion zone of at least 500 m and ideally 1,000 m must be established for North Atlantic right whales around each vessel conducting activities with noise levels that could result in injury or harassment to large whales.

Comment Number: BOEM-2021-0024-DRAFT-0366-86
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

d. Shutdown requirements:

i. If a North Atlantic right whale or other large whale species is visually or acoustically detected within the relevant clearance zone, site assessment and characterization with noise levels that could result in injury or harassment to large whales should not be initiated.

ii. If a North Atlantic right whale or other large whale species is visually detected within the visual exclusion zone, site assessment and characterization with noise levels that could result in injury or harassment to large whales must be halted.

iii. If a North Atlantic right whale is acoustically detected within the acoustic exclusion zone, site assessment and characterization with noise levels that could result in injury or harassment to large whales must be halted.

iv. Once halted, site assessment and characterization activities may resume after use of the methods set forth in subsection (E.4.B.e) and the lead PSO confirms no North Atlantic right whales or other large whale species have been detected within the relevant acoustic and visual clearance zones.

Comment Number: BOEM-2021-0024-DRAFT-0366-87
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

e. Monitoring requirements and protocols during pre-clearance and when site assessment and characterization activity is underway:

i. Monitoring of the acoustic clearance zone will be undertaken using near real-time passive acoustic monitoring (PAM) [Footnote 142: Throughout these comments "PAM" refers to a real-time passive acoustic monitoring system, with equipment bandwidth sufficient to detect the presence of vocalizing North Atlantic right whales and/or if available at the time of construction other similar high performance sound monitoring systems and arrays).] and should be undertaken from a vessel other than the survey vessel, or from a stationary unit, to avoid the hydrophone being masked by the survey vessel or development-related noise.

ii. Monitoring of the visual clearance zone will be undertaken by vessel based PSOs stationed on the survey vessel to enable monitoring of the entire 1,000 m clearance zone for North Atlantic right whales and other large whale species. On each vessel, there must be a minimum of four PSOs following a two-on, two-off rotation, each responsible for scanning no more than 180° of the horizon.

iii. Acoustic and visual monitoring should begin at least 30 minutes prior to the commencement or re-initiation of site assessment and characterization activity and should be conducted throughout the duration of activity.

Comment Number: BOEM-2021-0024-DRAFT-0366-88
Organization: National Wildlife Federation

Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

f. Vessel speed restrictions:

i. All Project-associated vessels should adhere to a 10-knot speed restriction at all times except in limited circumstances where the best available scientific information demonstrates that whales do not use the area.

ii. The Project may develop, in consultation with NOAA, an "Adaptive Plan" that modifies these vessel speed restrictions. However, the monitoring methods that inform the Adaptive Plan must be proven effective using vessels traveling ten knots or less and following a scientific study design. If the resulting Adaptive Plan is scientifically proven [Footnote 143: I.e., via a peer-reviewed scientific study] to be equally or more effective than a 10-knot speed restriction, the Adaptive Plan could be used as an alternative to a 10-knot speed restriction.

Comment Number: BOEM-2021-0024-DRAFT-0366-89
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

g. Other vessel-related measures:

i. All personnel working offshore should receive training on observing and identifying North Atlantic right whales and other large whale species.

ii. Vessels must maintain a separation distances of 500 m for North Atlantic right whales, maintain a vigilant watch for North Atlantic right whales and other large whale species, and slow down or maneuver their vessels as appropriate to avoid a potential interaction with a North Atlantic right whale or other large whale species.

iii. All vessels responsible for crew transport should carry thermal detection systems to support visual monitoring for marine mammals.

Comment Number: BOEM-2021-0024-DRAFT-0366-90
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

h. Underwater noise reduction:

i. BOEM should require the impacts of underwater noise to be minimized to the fullest extent feasible, including through the use of technically and commercially feasible and effective noise reduction and attenuation measures. For example, developers should select sub-bottom profiling systems and operate those systems at power settings that achieve the lowest practicable source level for the objective.

Comment Number: BOEM-2021-0024-DRAFT-0366-91
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

i. Reporting:

i. BOEM should require the Project report all visual observations and acoustic detections of North Atlantic right whales or other large whale species to NMFS or the Coast Guard as soon as possible and no later than the end of the PSO shift. We note that, in some cases, such as with the use of near real-time autonomous buoy systems, the detections will be reported automatically on a preset cycle.

ii. The Project must immediately report an entangled or dead North Atlantic right whale to NMFS, the Marine Animal Response Team (1-800-900-3622) or the United States Coast Guard immediately via one of several available systems (e.g., phone, app, radio). Methods of reporting are expected to advance and streamline in the coming years, and the Project should commit to supporting and participating in these efforts.

Comment Number: BOEM-2021-0024-DRAFT-0366-94
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Vessel strikes are one of the two main factors driving the North Atlantic right whale to extinction. North Atlantic right whales are particularly prone to vessel strike given their slow speeds, their occupation of waters near shipping lanes, and the extended time they spend at or near the water's surface. [Footnote 150: NOAA-NMFS, "Recovery plan for the North Atlantic right whale" (August 2004).] Some types of anthropogenic noise have been shown to induce sub-surface positioning in North Atlantic right whales, increasing the risk of vessel strike at relatively moderate levels of exposure. [Footnote 151: Nowacek, D.P., Johnson, M.P., and Tyack, P.L., "Right whales ignore ships but respond to alarm stimuli," Proceedings of the Royal Society of London B: Biological Sciences, vol. 271, no. 1536 (2004).] Scientists have deemed it "likely" that noise from pile driving during offshore wind development could lead to displacement of large whales and that this potential impact should be treated as "high importance." [Footnote 152: Kraus, S.D., Kenney, R. D. and Thomas, L., "A Framework for Studying the Effects of Offshore Wind Development on Marine Mammals and Turtles," Report prepared for the Massachusetts Clean Energy Center, Boston, MA 02110, and the Bureau of Ocean Energy Management (May 2019).] It is possible that noise from large-scale site assessment and characterization activities will have the same effect. BOEM should therefore act conservatively and implement mitigation measures to prevent any further vessel collisions for North Atlantic right whales or other species of large whale currently experiencing an UME (i.e., humpback whales and minke whales), as well as species such as fin whales, which, in light of the broad distributional shifts observed for multiple species, may be at potential future risk of experiencing an UME.

Comment Number: BOEM-2021-0024-DRAFT-0366-95
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

BOEM has significantly downplayed the risk of vessel strike to endangered whales in previous offshore wind permitting documents. [Footnote 153: See, e.g., BOEM, "Draft Environmental Impact Statement for the South Fork Wind Farm and South Fork Export Cable Project." Available at: https://www.boem.gov/renewable-energy/state-activities/south-fork.] For example, in the recent South Fork Draft EIS, the agency notes that up to an additional 207 construction vessels associated with offshore wind development may be operating within the geographic analysis area at the peak of projected offshore wind farm development in 2025. [Footnote 154: Id. 3-50.] Without further quantitative analysis of relative risk, BOEM states that "the overall increase in vessel activity is small relative to the baseline level and year to year variability of vessel traffic in the analysis area. In addition, the risk of marine mammal collisions is negligible for most wind farm construction activities." [Footnote 155: Id] BOEM then cites supposed mitigation as a means to minimize the potential for vessel collisions:

"Timing restrictions, use of PSOs, and other mitigation measures required by BOEM and NMFS would further minimize the potential for fatal vessel interactions. These measures would effectively minimize but not completely avoid collision risk. Any incremental increase risk must be considered relative to the baseline level of risk associated with existing vessel traffic. Project O&M would involve fewer vessels that are smaller in size, and the level of vessel activity would be far lower than during construction. Smaller vessels (i.e., less than 260 feet in length) pose a lower risk of fatal collisions than larger vessels (Laist et al. 2001).[Footnote 156: Id]"

Comment Number: BOEM-2021-0024-DRAFT-0366-97
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

These arguments are flawed and do not represent current understanding of the vessel collision risk to large whales.

First, any interaction between a vessel and whale poses a risk of serious injury or mortality. This is true irrespective of the number of other vessels operating in the same location. As demonstrated by the documented deaths of North Atlantic right whale calves in July 2020 and February 2021, and the serious injury, thus, likely death of a third calf in January 2020, an addition of even a single vessel traveling at speeds over ten knots poses an unacceptable risk. Thus, when analyzing impacts from vessel traffic, BOEM should concern itself less with "relative risk" and instead focus on the actual risk to the animal and the offshore wind project vessel.

Comment Number: BOEM-2021-0024-DRAFT-0366-98
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Second, even through the lens of relative risk, the North Atlantic right whale cannot currently withstand a single vessel strike if the species is to survive. Reasonably foreseeable wind development activities will primarily occur off New Jersey, New York, and just outside this region, meaning that vessel activity associated with construction, including vessel transits, will be similarly concentrated in that region. As previously discussed (see Section E.1 above), New Jersey waters represent an important year-round habitat for the North Atlantic right whale, a species for which vessel strike is a leading factor in its trajectory towards extinction. Vessel strikes therefore pose an unacceptable risk in this region and BOEM must acknowledge that any vessel operating in that region has the potential to strike a North Atlantic right whale and, in doing so, expedite the species' decline.

Comment Number: BOEM-2021-0024-DRAFT-0366-99
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Third, BOEM's assumptions about smaller vessels posing lower risk of a fatal collision are not supported by best available science. Vessel strikes can result in either "blunt force trauma," where injuries can range from non-lethal superficial abrasions and contusions to severe lethal impact wounds resulting from contact with a non-rotating feature of the vessel, or "propeller-induced trauma," that results in incising wounds resulting from contact with the sharp, rotating, propeller of the vessel (also termed "sharp force trauma"). [Footnote 157: Van der Hoop, J., Barco, S.G., Costidis, A.M., Gulland, F.M., Jepson, P.D., Moore, K.T., Raverty, S. and McLellan, W.A., "Criteria and case definitions for serious injury and death of pinnipeds and cetaceans caused by anthropogenic trauma," Diseases of Aquatic Organisms, 103(3),

pp.229-264 (2013);; Sharp, S.M., McLellan, W.A., Rotstein, D.S., Costidis, A.M., Barco, S.G., Durham, K., Pitchford, T.D., Jackson, K.A., Daoust, P.Y., Wimmer, T. and Couture, E.L., "Gross and histopathologic diagnoses from North Atlantic right whale Eubalaena glacialis mortalities between 2003 and 2018," Diseases of Aquatic Organisms, 135(1), pp.1-31 (2020).] Observations compiled by Laist et al. (2001) [Footnote 158: Laist, D.W., Knowlton, A.R., Mead, J.G., Collet, A.S. and Podesta, M., "Collisions between ships and whales," Marine Mammal Science, 17(1), pp.35-75 (2001).]—the primary reference cited by BOEM—suggest that the most severe injuries occur as a result of vessel strikes by large ocean-going vessels; this research has led to a number of mitigation and management actions in the United States and internationally. However, there is increasing recognition that smaller vessels can also cause lethal injury, even when traveling at relatively low speeds (i.e., below ten knots). [Footnote 159: Kelley, D.E., Vlasic, J.P. and Brillant, S.W., "Assessing the lethality of ship strikes on whales using simple biophysical models," Marine Mammal Science, 37(1), pp.251-267 (2021).] The NMFS Large Whale Ship Strike Database reveals that blood was seen in the water— indicative of serious injury—in at least half of the cases where a vessel known to be less than 65 feet in length struck a whale. [Footnote 160: Jensen, A.S. and Silber, G. K., "Large Whale Ship Strike Database," U.S. Department of Commerce, NOAA Technical Memorandum NMFS-OPR-25 (Jan. 2004) at 12–37.] This is likely an underestimate of the magnitude of the threat, as small vessel collisions with whales are underreported. [Footnote 161: Hill, A.N., et al., "Vessel collision injuries on live humpback whales, Megaptera novaeangliae, in the southern Gulf of Maine," Marine Mammal Science, vol. 33, pp. 558–573 (2017).] [Footnote 162: A.S. Jensen and G.K. Silber, Large Whale Ship Strike Database, U.S. Department of Commerce, NOAA Technical Memorandum NMFS-OPR-25 (Jan. 2004), at 12–37.] Passengers have been knocked off their feet or thrown from the boat upon impact with a whale [Footnote 163: Bigfish123, Comment to Collision at Sea, The Hull Truth (May 1, 2009, 5:44 am), http://www.thehulltruth.com/boating-forum/222026-collision-sea.html.] demonstrating this is also a significant human safety issue.

Comment Number: BOEM-2021-0024-DRAFT-0367-7
Organization: Atlantic Shores Offshore Wind
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Development of regional mitigation and monitoring requirements. Atlantic Shores anticipates that certain mitigation and monitoring measures may be developed on a regional basis for the New Jersey wind development area, rather than for either the Ocean Wind or Atlantic Shores lease area activities specifically. Regional measures identified in developing the Ocean Wind EIS also may be applied in the Atlantic Shores EIS. For this reason, Atlantic Shores requests that it be afforded an opportunity to provide technical and other input on the development of such regional measures, to the extent appropriate.

Comment Number: BOEM-2021-0024-DRAFT-0372-5
Organization: Garden State Seafood Association
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

BOEM, through this document and working with the developers must ensure the NMFS Survey is fully funded going forward and must account for the mitigation to amend this historic scientific study. Without this mitigation the resulting survey and supporting data will result in additional uncertainty which will directly impact fish stocks and allocations to the State's and the commercial and recreational fishing industries relaying on these allocations. These natural resources are a common good and impacts on new development must address these historic uses.

There is also a lack of science as to the longer-term impacts of these proposed industrial scale developments in US Waters. At a minimum BOEM working with the developers must require scientific

fisheries monitoring for the life of the project. This will help address data gaps identified above, but also help address un expected effects of turbine placement and development in these waters.

Comment Number: BOEM-2021-0024-DRAFT-0381-23
Organization: Clean Ocean Action
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Working to avoid and minimize impacts on the ocean and coastal environment is essential and must be a main goal of offshore wind energy development, as it is with any offshore or onshore activity. Therefore, the COP EIS must identify measurable, meaningful, and actionable effective mitigation measures for when impacts cannot be avoided or minimized.

For example, Volume 1 of the COP asserts that Ocean Wind needs to mitigate cable exposure by re-burying multiple cables over the lifetime of the project. The COP also indicates that impacts to onshore and coastal ecosystems is likely. Specific mitigation of impacts to wetlands, seagrass beds, and other habitat should be specifically analyzed in the EIS. Particular attention should be paid to the seasonality of seagrass beds. Further, analysis of the impacts to seagrass beds should be analyzed beyond turbidity. The spatio-temporal variability in the distribution of vulnerable species should also be considered.

Ocean Wind's COP states that they will be applying for authorizations under the Endangered Species Act, Magnuson-Stevens Fishery Conservation and Management Act, Marine Mammal Protection Act, Rivers and Harbors Act, Clean Water Act, Coastal Zone Management Act, and more. COA will provide feedback on these permitting decisions to the relevant authority as they become available.

Comment Number: BOEM-2021-0024-EMAIL-003-26
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

Mitigation

NEPA requires consideration of potential mitigation from adverse impacts resulting from the construction and operation of the wind energy facility and associated cable installation. The EIS must clearly identify what mitigation measures are included as part of the proposed action and thus evaluated in the analysis, which measures are proposed as required, and measures that are optional and could be implemented by the developer to potentially reduce impacts. The document should provide information on how mitigation measures are considered in the context of the definition of effects levels (e.g. negligible, minor, moderate, major), and how mitigation would offset those levels of effect. An analysis of the effectiveness of any proposed mitigation should also be evaluated in the NEPA document. Measures to avoid and minimize impacts such as speed restrictions for project vessels, soft start procedures, noise dampening technologies, construction timing, anchoring plans, or micro-siting should be discussed in detail, including what resources would benefit from such mitigative measures and how/when such benefits (or impact reductions) would occur. The EIS should analyze temporary effects and anticipated recovery times for marine resources within the impacts analysis.

Comment Number: BOEM-2021-0024-EMAIL-003-27
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

While the project should be planned and developed to avoid and minimize adverse effects to marine resources and existing uses (fishing and NOAA Fisheries survey operations) to the greatest extent practicable, compensatory mitigation should be proposed to offset unavoidable permanent and temporary impacts. Compensatory mitigation for social and economic losses and ecological losses should be discussed in the EIS, including. This includes any loss of fisheries revenue resulting from the construction and operation of the project, along with any measures to compensate for such losses. Details of compensation plans describing qualifying factors, time constraints, allowed claim frequency, etc. should also be included when possible, particularly if used as mitigation measures to reduce economic impacts from access loss/restriction, effort displacement, or gear damage/loss. Finally, mitigation necessary to offset negative impacts to longstanding marine survey operations (e.g., loss of access to project areas, changes to sampling design, habitat alterations, and reduced sampling due to increased transit time) must also be considered and evaluated in the document.

Comment Number: BOEM-2021-0024-EMAIL-003-33
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

Project-specific Monitoring Programs and Regional Surveys

Given the extent of potential offshore wind development on the outer continental shelf and in this region in particular, the cumulative effects analysis will be a critical component of the EIS. The establishment of a regional monitoring program will be important to help understand potential impacts of wind energy projects and identify potential mitigation measures for any future projects. As BOEM is aware, we have been working with state agencies, developers, and research institutions through the Responsible Offshore Science Alliance to develop a regional scientific research and monitoring framework, including project-specific monitoring plan/study guidance to better identify and understand cumulative impacts and interactions between marine resources, fisheries, and offshore wind energy. Similarly, we are engaged in the development of the Regional Wildlife Science Entity in an effort to address regional science and monitoring around impacts to wildlife and protected species. It is imperative that project-specific monitoring efforts are compatible with and can be integrated into existing regional monitoring programs throughout the outer continental shelf. We encourage BOEM to consider requiring monitoring at all scales and take an ecosystem-based approach to assessing monitoring needs of fisheries, habitat, and protected species. This will be important to not only assess the cumulative impacts of project development, but also to help inform any future development.

Comment Number: BOEM-2021-0024-EMAIL-003-40
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

Through the EIS, BOEM should consider requiring the development of minimization and monitoring measures that minimize the risk of exposure to potentially harassing or injurious levels of noise to marine mammals, sea turtles, and Atlantic sturgeon. Mitigation measures should be required during pile driving that will act to reduce the intensity and extent of underwater noise and avoid exposure of listed species to noise that could result in injury or behavioral disturbance. The use of protected species observers to establish and monitor clearance zones prior to pile driving is essential and project scheduling should take into account the need for adequate visibility during the pre-pile driving clearance period, as well as for the

duration of pile driving activities. Real-time and archival passive acoustic monitoring should also be used as a secondary detection/monitoring system during construction, to increase situational awareness in vessel corridors and around the project area, and to monitor the distribution of marine mammals in the lease area during construction and operations. We encourage BOEM to work with Ocean Wind to develop a project schedule that minimizes potential impacts to North Atlantic right whales. Specifically, BOEM should consider time of year restrictions for pile driving that would avoid pile driving during the months when the density of North Atlantic right whales is highest in the lease area and the development of robust measures for other times of year that would minimize the exposure of right whales to noise that could result in behavioral disturbance. Marine mammal responses to sound can be highly variable, depending on the individual hearing sensitivity of the animal, the behavioral or motivational state at the time of exposure, past exposure to the noise which may have caused habituation or sensitization, demographic factors, habitat characteristics, environmental factors that affect sound transmission, and non-acoustic characteristics of the sound source, such as whether it is stationary or moving (NRC 2003). While BOEM and Ocean Wind will need to consider effects to all listed species, given the imperiled status of North Atlantic right whales, implementing measures to ensure that no right whales are injured or killed as a result of the Ocean Wind project is critical.

Comment Number: BOEM-2021-0024-EMAIL-003-41
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

Mitigation measures should also be included that minimize the risk of vessel strike for whales, sea turtles, and Atlantic sturgeon, including consideration of vessel speed restrictions regardless of vessel size and robust measures to monitor vessel transit routes for North Atlantic right whales. Recent events and new information (see, https://doi.org/10.1111/mms.12745) demonstrate that large whales are susceptible to lethal vessel strikes from vessels of all sizes.

Any surveys or monitoring that are carried out related to the project (e.g., gillnet or trap surveys to document fisheries resources) must carefully consider the effects to North Atlantic right whales and other ESA-listed species, and mitigation measures should be considered to eliminate the potential for entanglement of whales and to minimize risk to sea turtles and Atlantic sturgeon during such activities.

Comment Number: BOEM-2021-0024-EMAIL-003-64
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

Given the anticipated development of offshore wind in our region, it is critical to expeditiously establish and implement a regional federal survey mitigation program to address this significant issue. Such a survey mitigation program would include the following elements:

1. Evaluation of survey designs;

2. Identification and development of new survey approaches;

3. Calibration of new survey approaches;

4. Development of interim provisional survey indices;

5. Integration of project-specific monitoring plans to address regional survey needs; and

6. Development of new data collection, analysis, management, and dissemination systems.

Comment Number: BOEM-2021-0024-EMAIL-003-65
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

Information from project-specific mitigation plans will be critical inputs to the development and implementation of any future regional survey mitigation program. As project monitoring plans are further considered and developed, these approaches should be standardized, meet existing survey protocols, and calibrated to and integrated with federal regional surveys until such time as a programmatic federal survey mitigation program is established. Text provided in documents prepared for other projects with similar impacts can be used to inform the assessment of survey impacts for this project. We encourage BOEM to work closely with us to ensure potential impacts to our survey operations and consequent effects to fisheries stock assessments, fishery management measures, and protected species conservation efforts are evaluated in the EIS for this and other projects, including any efforts to mitigate such impacts.

Comment Number: BOEM-2021-0024-TRANS-42021-0023-4
Commenter: David Monte
Commenter Type: Individual

Comment Excerpt Text:

the EIS should ensure that a research and monitoring plan is developed for Ocean Wind and all wind farms and I believe there is one scheduled for Ocean Wind.

Comment Number: BOEM-2021-0024-TRANS-42021-0028-4
Organization: Bad Fish Fishing Charters
Commenter: Brian Williams
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Third, convert the remains of the unused portion of the BL England Power Plant into public lands, a park if you will. The area this power plant sits on has one of the most unique views and adding access for anglers and the general public there will go a long way in the hearts of the residents and the anglers of the region as this area currently is nicknamed locally as Chernobyl or the Ocean City Lighthouse. It has been an eye sore for far too long and its runoff as polluted the nearby waters for decades.

A.2.16 Navigation and Vessel Traffic

Comment Number: BOEM-2021-0024-DRAFT-0094-4
Commenter: Eric Ediger
Commenter Type: Individual

Comment Excerpt Text:

How are the danger to leisure craft being mitigated?

Comment Number: BOEM-2021-0024-DRAFT-0100-3
Commenter: Alexander Ross
Commenter Type: Individual

Comment Excerpt Text:

They will also pose a hazard to navigation and commercial as well as recreational fisheries in the area.

Comment Number: BOEM-2021-0024-DRAFT-0101-1
Commenter: Richard Zinck
Commenter Type: Individual

Comment Excerpt Text:

I live in Avalon, NJ and do a lot of offshore fishing. For purely selfish reasons I worry about collisions with the turbines since I run at night.

Comment Number: BOEM-2021-0024-DRAFT-0113-5
Commenter: Meaghan Zanfardino
Commenter Type: Individual

Comment Excerpt Text:

This will also crest radar and navigational hazards, including search and rescue operations by the USCG.

Comment Number: BOEM-2021-0024-DRAFT-0185-4
Commenter: Ronald Hammell
Commenter Type: Individual

Comment Excerpt Text:

Also, the danger it will most likely present to barges and boats for navigation, especially in fog or inclement weather.

Comment Number: BOEM-2021-0024-DRAFT-0204-3
Organization: United Boatmen of NJ
Commenter Type: Undetermined Organization

Comment Excerpt Text:

Navigation issues with the proximity of the wind farms off the coast with commercial and recreational traffic.

Comment Number: BOEM-2021-0024-DRAFT-0208-10
Organization: Long Beach Island, NJ Coalition for Wind Without Impact
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Further, after the BOEM released the request for competitive bids for the lease area, they received comments from the tug and barge shipping interests requesting a wider buffer zone around the existing tug/barge shipping lane to ensure navigation safety.

So, at most, the area remaining could accommodate 38 turbines, well below the 98-turbine limit proposed. Even with 14 megawatt turbines, the project could only provide 532 megawatts of power, about half of the company's agreement with the New Jersey BPU. Therefore, this project has very limited wind energy potential to begin with, and this illustrates the shortsightedness of the BOEM in leasing areas without any NEPA review of turbine construction and operational impacts, and of the New Jersey BPU in reaching power agreements before an EIS is even begun.

Comment Number: BOEM-2021-0024-DRAFT-0278-3
Commenter: Gerald Thornton
Commenter Type: Individual

Comment Excerpt Text:

Other issues that I have heard is regarding access lanes within the turbines not being large enough or enough of them. There have been questions raised about how construction will impact the area. They also question if enough research has been done on the overall impacts to sea life. The fishing community has a lot of questions that they feel have not been properly answered.

Comment Number: BOEM-2021-0024-DRAFT-0279-4
Commenter: Victor Gano
Commenter Type: Individual

Comment Excerpt Text:

There is going to be adverse side affects if these windmills if built off our coast of South New Jersey. For one, it will be a navigational hazard to vessels during storms.

Comment Number: BOEM-2021-0024-DRAFT-0297-12
Organization: Responsible Offshore Development Alliance
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

B. Transit

RODA members have continually explained the importance of continued safe navigation and sufficiently wide transit lanes to allow for other ocean users to safely transit through wind lease areas. Transit requirements are separate from those related to whether a vessel can actively fish in an area. Since the direct risks associated with turbines, cables, and associated protection methods mean that commercial fishing operations are unlikely to continue within a wind array unless conditions are ideal, the maintenance of safe transiting conditions to access fishing grounds outside of the project area is of paramount importance.

Lease area OCS-A 0498 (Ocean Wind) is directly adjacent to OCS-A 0499 (Atlantic Shores Offshore Wind) and the two areas together cover 343,833 acres. Directly at the lease boundary between the two is an area heavily transited by multiple vessels primarily from Atlantic City and Cape May. The need for a transit lane in this location is supported by the "Fishing Route Analytics Reports" produced by Last Tow, LLC previously submitted to BOEM, the New York Bight Transit Lanes Surveys, Workshop, and Outreach Summary prepared by NYSERDA, NY State Department of Environmental Conservation, and RODA (2020), [Footnote 14: https://www.nyftwg.com/wp-content/uploads/2020/06/NY-Bight-Transit-Lanes-Workshop-and-Outreach- Summary_-Final-Draft.pdf. This effort primarily focused on NY Bight and not the area further south in NJ; however, survey responses indicate transit in the referenced area.] and the aforementioned summary of the RODA/Ocean Wind workshops.

A transit corridor of no less than two nautical miles between the two leases would need to be included in these projects' designs to safely preserve these traditional transit paths based on the distance and use patterns of the area. However, due to a high presence of recreational fishing vessels for much of the year, submerged materials, overall port traffic, radar interference associated with OSW structures, and other factors, four nautical miles is appropriate.

Comment Number: BOEM-2021-0024-DRAFT-0300-1
Commenter: Howard Marshall
Commenter Type: Individual

Comment Excerpt Text:

Wind turbines off the coast. I find problems with these as they will be located in shipping lanes and even though most large ships have radar systems,many smaller ones are not equipped with good avoidance equipment.

Comment Number: BOEM-2021-0024-DRAFT-0320-4
Commenter: Sarah Jordan
Commenter Type: Individual

Comment Excerpt Text:

In addition to the unknown impacts on the fish living in these areas, recreational and commercial fisherman will now have the added challenge for navigation! Not only going around the turbines, but in times of rough seas (have you ever seen the Atlantic ocean during hurricane season in the fall or during a nor'easter??) this will make navigation back home to the docks much more difficult. If a coast guard rescue was needed - this would also make air and sea rescues harder or impossible as well. My cousin, who captains a commercial boat out of Viking Village in Barnegat Light just recently lost all steering in his boat while out to sea, and had to be brought back in by another fishing vessel, and then by the coast guard once getting close to the inlet. If this had happened with all the turbines, I do not want to think about what might have happened to his crew or boat.

Comment Number: BOEM-2021-0024-DRAFT-0330-2
Commenter: Stacey Jordan
Commenter Type: Individual

Comment Excerpt Text:

Not only do we not know the impact on the marine life living in these areas, our commercial fisherman will now have added challenges of navigation - especially in times of rough seas from nor'easters and hurricanes.

Comment Number: BOEM-2021-0024-DRAFT-0354-16
Organization: New York State Department of State
Commenter Type: State Agency

Comment Excerpt Text:

The Ocean Wind project has the potential of posing an increased risk to New York's mariners in federal waters. An allision between a vessel and offshore wind turbine or an anchor strike that damages the cable could result in a loss of energy generation for a prolonged period, threaten mariners' safety, and increase liability to mariners. Therefore, DOS requests the COP review to ensure that:

1. Appropriate measures to address increased navigational risks are incorporated in the project; and

2. Use conflicts between offshore wind and mariners en route to and from New York are minimized to the extent possible.

Comment Number: BOEM-2021-0024-DRAFT-0354-21
Organization: New York State Department of State
Commenter Type: State Agency

Comment Excerpt Text:

The U.S. Coast Guard's Atlantic Coast Port Access Route Study (ACPARS), finalized in 2017, discusses the vessel traffic along the eastern seaboard and highlights the importance of the tug and barge coastwise route from the Delaware Bay to the NY/NJ Harbor. [Footnote 8: US Coast Guard. 2016. Atlantic Coast

Port Access Route Study: Final Report. Docket Number USCG-2011-0351. Available at https://www.navcen.uscg.gov/?pageName=PARSReports. See pages i and 11, and Appendix VII (p. 7).] Among the report's many recommendations was detailed justification for establishing safety fairways of appropriate widths for seagoing towing vessels. In 2020, the Coast Guard initiated formal designation of a series of safety fairways through an Advance Notice of Proposed Rulemaking. Figure 2 shows the proposed safety fairways in relation to the proposed activity.

POTENTIAL IMPACTS TO NAVIGATION

The COP identifies potential impacts of the proposed activity to vessel traffic by "creating obstructions that may impact safe navigation, affecting the traditional uses of the waterway, and impacting Coast Guard search and rescue or other Coast Guard missions." [Footnote 9: COP Volume II, p.348.] DOS believes that these issues can be addressed in ways that will provide for a successful outcome for the project, but achieving this requires coordination among the parties and including DOS and New York mariners. For ease of review, the increased risks to New York can be broadly classified into two categories related to vessel traffic and submarine cables.

VESSEL TRAFFIC

As illustrated in Figure 1, tug transits between the Delaware Bay and Harbor predominantly occur west of the lease area and in what will soon be a narrow swath of available sea space between the wind farms and coastline. Even with the proposed fairways (Figure 2) and other PARS being developed, [Footnote 10: 85 FR 26695 [May 5, 2020]: Seacoast of New Jersey PARS and 85 FR 38907 [June 29, 2020]: Northern NY Bight PARS.] there will still be an unavoidable convergence of various vessel types that are anticipated to produce complex vessel interactions and result in increased navigational safety risk.

Added to the mix, the COP estimates that in nearly 95 percent of tugs operating in the vicinity of the project are classified as tug-with-tow (vs. tugs without barges). Moreover, about half of the tug-with-tow are actually the larger Articulated Tug Barges (ATBs) and Integrated Tug Barges (ITBs). [Footnote 11: COP Volume III, Appendix M2, p.35] This is noteworthy because ATBs and ITBs are becoming more commonly used [Footnote 12: USCG-2020-0172-0005: E. Johansson comments dated May 27, 2020 on Seacoast of New Jersey PARS.] and are larger, heavier, and more challenging to maneuver compared to the traditional tug-with-tow.

These patterns of increased vessel volume and density in the vicinity of the project lead to heightened risks of allisions and collisions, and thus, a foreseeable effect to New York mariners and the transport of waterborne goods.

[See original attachment for Figure 1. Increased Navigation Risks to Tug-Tow Traffic, and Figure 2. Potential Conflicts with Proposed Safety Fairways]

Ocean Wind developed a numeric model to calculate navigation safety risks, which is a valuable predictive tool that can be refined based upon assumptions and as vessel traffic patterns in the region evolve. The COP's Navigation Safety Risk Assessment (NSRA) modeled the increased risk of collision, allision, or grounding due to the proposed activity to be 0.4 accidents per year. Of this, tugs represented 23% of the increase in incidents (Table 1). This is a more significant risk than the number portrays because it would be borne by tug operators that routinely travel this route, exposing them to increased risks and potential delays on a weekly or more frequent basis. [Footnote 13: This article is an example of an enterprise that makes four trips per week between New York City and the Delaware Bay: Professional Mariner. "Sand-running tug and barge keep the concrete flowing in NYC." 2019 July 31, https://www.professionalmariner.com/sand-running-tug-and-barge-keep-the-concrete-flowing-in-nyc/.] New York tug operators would be directly affected.

Additionally, there could be indirect effects to New York ports and businesses if the increased risks translate into shipping delays due to reduced speeds through the area and/or higher operating costs that get carried through the supply chain.

These direct and indirect effects should be evaluated in greater detail as part of a federal consistency review to determine what measures may be needed to offset impacts to achieve an acceptable level of risk.

DOS is also concerned that the NSRA could under-represent the risks to certain types of tugs, which would result in a greater effect on traffic bound to/from New York. First, these results assumed all tugs were operating as tugs without barges, when Ocean Wind cited the opposite to be true. Second, despite undertaking a separate "tug with towlines" scenario, there was no attempt to model the increased prevalence of ATBs and ITBs. Given that ATBs and ITBs "maneuver more like larger ships", it seems plausible that transits through narrower and more congested sea space could alter the accident frequencies. DOS seeks a federal consistency review to more thoroughly evaluate and engage on this analysis.

Table 1. Modeled Change in Accident Frequencies from the Ocean Wind Project

Source: Ocean Wind COP, Appendix M2

Comment Number: BOEM-2021-0024-DRAFT-0354-22
Organization: New York State Department of State
Commenter Type: State Agency

Comment Excerpt Text:

Because the COP represents a starting point in the design phase of the project, there are opportunities for potential impacts to be addressed before the design is fully matured. Environmental protection measures are typically developed and/or refined through the regulatory review. At this time, the Ocean Wind COP appears to discount the increased risk of a vessel allision by explaining that the selected monopile foundations would not immediately collapse from a vessel allision. [Footnote 14: COP Volume II, p.349.] This does not explain nor address the resultant impact to the vessel and vessel traffic – including impacts to vessels and disruptions to traffic travelling to/from New York – in response to such an incident. Rather, it appears to shift the burden of addressing increased risk onto vessel operators. The increased risk of accidents is compounded by potential disruptions to U.S. Coast Guard search and rescue missions, most notably limiting helicopter-aided search and rescue during periods of low visibility. Collectively, if these risks are not addressed through targeted measures and stakeholder outreach (including to New York mariners), the perception of increased risk could have longer-term consequences affecting the desirability of doing business in certain ports. New York has a direct interest in coordinating with the developer through the federal consistency review process to identify solutions early in the design phase that ensure offshore wind development occurs with minimal long-term disruption to New York's ports and mariner safety.

Based upon the Department's review of the COP, the reasonably foreseeable effects from the proposed activity to New York's commercial shipping industry include temporary disruptions during construction and long-term effects to vessel traffic patterns, congestion, and navigation safety. An increased frequency of incidents to tugs, such as collisions, allisions, and groundings, would affect New York outbound and inbound vessels. The reasonably foreseeable effects of increased risks at sea include potential crew member injury, possible cargo damage, operational delays, vessel maintenance and repairs, and lost revenue during the downtime. Increased vessel congestion along these important tug- tow routes could cause delays requiring slower vessel speeds, more time on the open seas, increased fuel consumption, higher operational costs, and the potential to alter traditional routes (based upon actual or perceived risks). New safety concerns could also arise as vessels venture farther offshore and become exposed to complex

vessel interactions from different sized vessels travelling at different speeds. While the proposed fairways, if implemented, are expected to address some of these risks, the project area is still located among some of the busiest navigation corridors on the East Coast, and, as such, the siting of the project requires careful consideration to appropriately balance the increased risks of **v**essel interactions.

Comment Number: BOEM-2021-0024-DRAFT-0354-23
Organization: New York State Department of State
Commenter Type: State Agency

Comment Excerpt Text:

SUBMARINE CABLES

Another hazard to navigation occurs from submarine cables that are poorly sited or have shallow burial depths. In addition to the risk of an anchor strike faulting or breaking the cable, there is also a corresponding risk to the vessel operator where a cable can foul a vessel's anchor, threaten the crew's safety and cargo if there is a hang-up, and even create a financial burden if the operator faces liability claims. It is in the best interest of all parties to ensure cables are routed appropriately to minimize occupation with heavily trafficked areas and are capable of being buried to adequate depths.

The proposed Oyster Creek route (northern cable corridor) would contain two (2), 143-mile cables located within and parallel to the high-density tug-tow traffic for approximately 35 miles (56 km; Figure 1). The COP acknowledges that a cable burial risk assessment would be developed at a later stage as the design is finalized; however, early planning should still be undertaken to deconflict the route and evaluate threats to the cables. [Footnote 15: Sharples (2011), p.87: "Understanding the risks together with the Burial Assessment will find the optimum cable route which will give maximum security and safety to the installed cable whilst delivering the most economical solution for burial.] The proposed Oyster Creek route would contain two (2), 143-mile cables located within and parallel to the high-density tug-tow traffic for approximately 35 miles (56 km; Figure 1). Nearly all tugs transiting along the Oyster Creek route are tugs-with-tow that are larger and heavier and, thus, would take longer to stop in an emergency situation. Recognizing that anchor strikes are a relatively rare occurrence and that there are many factors that dictate anchor penetration depths, anchors dropped by large commercial vessels have been demonstrated to penetrate deeper than Ocean Wind's target 4 to 6 ft cable burial depth even in very firm sediments. [Footnote 16: See Sharples (2011): Table 7.2 shows anchor penetration depths in firm soils of 2.1 to 2.9 m () for cargo and tanker vessels. See a lso South Fork Wind COP (July 2020), Volume 1 available at https://www.boem.gov/renewable-energy/state-activities/south-fork: Table 3.1-7 estimates maximum penetration depths for tugs during emergency situations. The table presents the maximum seabed disturbance for the "Towing Tug" as having an anchor penetration depth of 15 ft (4.6 m).] As proposed, the Oyster Creek route presents an increased risk to New York's shipping industry because there would be two parallel cables occupying a heavily trafficked route with burial depths that could result in an anchor strike.

Maintaining cable burial depth is also an important consideration when siting export cables because high seabed mobility, among other factors, can lead to future cable exposures that increase the risk of interactions. The COP provides a brief summary of physical seabed conditions, with all detailed information contained in a confidential appendix. The main body of the COP does not appear to contain an assessment of geology and seabed features for the 143-mile Oyster Creek cable route (northerly). [Footnote 17: COP Volume II, p.38 and 39, Figure 2.1.1-2 that does not map seabed features for the Oyster Creek corridor] If periodic cable exposures occur, New York's shipping industry could be directly affected by the increased risk of interactions, maintenance and remedial burial activities, and potential vessel congestion and delays during maintenance.

DOS seeks a federal consistency review, in part, to evaluate whether the Ocean Wind cable corridors proposed in the COP are planned in a manner that minimizes risks to mariners bound to/from New York. The Department understands that cable burial and maintenance are topics that would be reviewed in greater detail as part of a future U.S. Army Corps of Engineers' application.

Comment Number: BOEM-2021-0024-DRAFT-0354-6
Organization: New York State Department of State
Commenter Type: State Agency

Comment Excerpt Text:

Potential impacts to commercial shipping and safe navigation, search and rescue operations, and offshore and land-based radar. BOEM's analysis should incorporate findings from the Northern New York Bight and Seacoast New Jersey PARS, which should be available by mid- to late 2020. The analysis should include the potential for anchor strikes from vessels, fishing gear snags, and a range of possible cable protection (e.g., natural materials vs. artificial materials).

Comment Number: BOEM-2021-0024-DRAFT-0364-10
Organization: Oceana
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Vessel Transparency- To support oversight and enforcement of the conditions on the project the EIS should include alternatives requiring all vessels to be equipped with and using an Automatic Identification System (AIS) devices at all times while on the water. This should apply to all vessels, regardless of size, associated with the offshore wind siting, development, and operations of the project.

Applicability and Liability- The EIS must include alternatives to specify and require all vessels associated with the project, at all phases of development, follow the vessel plan and rules including vessels owned by the developer, contractors, employees, and others regardless of ownership, operator, contract. Exceptions and exemptions will create enforcement uncertainty and incentives to evade regulations through reclassification and redesignation. BOEM can simplify this by requiring all vessels to abide by the same requirements, regardless of size, ownership, function, contract or other specifics.

The EIS must also include an alternative to specify that developers are explicitly liable for behavior of all employees, contractors, subcontractors, consultants, and associated vessels and machinery.

Comment Number: BOEM-2021-0024-DRAFT-0364-8
Organization: Oceana
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Expanded industrial activities in and around the project area will undoubtedly increase the amount of vessel traffic in the area. The EIS must include alternatives for a vessel traffic plan to minimize the effects of service vessels on marine wildlife. These alternatives should include requirements for all vessels associated with the project, regardless of function, ownership or operator including:

Observers-Vessels should be required to carry and use protected species observers at all times when under way. Additionally, because visual sighting of whales, including North Atlantic right whales is difficult, particularly in low light conditions, the EIS should include alternatives to require service vessels to complement observer coverage with additional monitoring technologies such as, infrared (IR) detection devices for whales and other protected species when under way. Recent research has suggested that a complementary approach combining human and technological tools is most effective in capturing the most detections. [Footnote 7: Smith, et al. 2020. A field comparison of marine mammal detections via

visual, acoustic, and infrared (IR) imaging methods offshore Atlantic Canada. Marine Pollution Bulletin. 154 (2020) 111026.] The EIS should include IR camera requirements this in the range of wildlife observing alternatives.

Speed- A significant amount of research suggests that reducing vessel speed will reduce risk of vessel collision mortality up to 86 percent for large whales like the North Atlantic right whale. [Footnote 8: Conn and Silber. 2013. Vessel speed restrictions reduce risk of collision-related mortality for North Atlantic right whales. Ecosphere (4)4. April, 2013. 1-16.] Due to the risk of ship strikes to North Atlantic right whales in the project area, the EIS must include alternatives to limit vessels of all sizes associated with the offshore wind project to speeds less than 10 knots at all times during seasonal migration periods. The EIS should explore a range of alternatives for these identified migration periods in the project area informed by the best available science, sightings data and recent surveys.

If and when a North Atlantic right whale is sighted, regardless of season, speeds should be reduced for all project vessels for at least 48 hours. Additionally, if a large whale is sighted and cannot be identified, it should be assumed to be a NARW and speeds reduced for at least 48 hours. If and when a Dynamic Management Area is created by the National Marine Fisheries Service, all vessels associated with offshore wind must comply, regardless of vessel size.

Comment Number: BOEM-2021-0024-DRAFT-0365-7
Commenter: Anthony Butch
Commenter Type: Individual

Comment Excerpt Text:

Navigational Hazard: I know you've looked at the maps, I know you and Orsted (As well at Atlantic Shoes to come) know this is a major issue. No one runs in a straight line E to W of N to S, running out to the fishing grounds, the canyons, the wrecks etc etc will be a nightmare. There WILL BE collisions, there WILL BE the need for the USCG to rescue people. I just pray there is no loss of life.

Comment Number: BOEM-2021-0024-DRAFT-0370-9
Organization: Recreational Fishing Alliance
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

RFA also believes that the Ocean Wind EIS must look into how this project and the other projects will impact the navigation for recreational fishermen and boaters. There are historic and important fishing grounds that are east of the offshore wind lease areas. It will be necessary for fishermen to transit through the wind lease areas to get to these areas. How the offshore wind facilities are designed and laid out will have an impact on how recreational anglers navigate these waters which may force them to alter routes, increase their steam time and log more hours on their engines. In addition, adding offshore structures such as wind turbines imposes new safety-at-sea risks that did not exist prior to their construction. RFA is adamant that these navigational issues, concerns and risks must be fully vetted in the Ocean Wind EIS.

Comment Number: BOEM-2021-0024-DRAFT-0372-8
Organization: Garden State Seafood Association
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The GSSA has always supported the need for transit lanes proposed in the lease area. Sadly, Orsted and BOEM erroneously reported that the commercial fishing industry impacted and supported the design of the array now being considered. Based on our experience transit corridors of a minimum of 2nm are necessary in order to keep our state's fishermen safe at sea and to lessen the economic impact. It is also

worth noting that without transit corridors there is a significant impact to fishermen who operate under a day's at sea quota. Specifically, in the case of Scallop fishery identified a lack of a transit corridor would have direct impact on the time constrained permit of the industry with a limited number of days at sea and running 24-hour clocks. Therefore, we strongly support the inclusion of an alternative with transit lanes from Atlantic City, NJ.

Comment Number: BOEM-2021-0024-DRAFT-0381-21
Organization: Clean Ocean Action
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The Port of New York and New Jersey is a massive economic enterprise that is a hub for vessel traffic. There are four container terminals in the port, whose combined volume makes it the largest on the East Coast, the third busiest in the United States.

A large area of the Outer Continental Shelf (OCS) has been leased for offshore wind development without any comprehensive analysis of the fishing industry's need for safe transit or how the installation of large numbers of offshore structures will impact the operations of fishing vessels.

The port imports petroleum, plastics, chemicals, oils and perfumes, pharmaceuticals, and other materials that if spilled into the ocean would be devastating. The port of NY/NJ is the largest U.S. petroleum product port.

There is also concern that the development of these wind projects in close proximity will displace transit corridors and create narrow lanes where vessels are expected to travel. This could lead to increase accidents and spills.

One danger is that vessel density – ships operating within the same sea space – would be increased by the funneling effect of constricting traffic between turbine arrays.

Another consideration is the radar shadow effect of rotating turbine blades that can affect navigation radars.

Consider these port statistics: 577,649 vehicles • 6.3 Million TEUs of containerized cargo • 730,617 cruise ship passengers • 8,596 deep-sea vessel transits • Over 4,000,000 smaller vessel harbor transits.

Another consideration is the speed and agility of large ships maneuvering a small, competitive space. For example, it can take an ultra large 2.5 miles of full astern to brake to a halt.

Comment Number: BOEM-2021-0024-DRAFT-0384-12
Commenter: Gregory Cudnik
Commenter Type: Individual

Comment Excerpt Text:

The 0.8 NM x 1NM spacing is too close. It must be further apart to allow safe navigation. In foul weather and times of limited visibility avoiding turbine structures, other vessels making course changes as mariners attempt to zig zag through the sites will be challenging. There must be one or two transit lanes added. Recreation vessels leaving out of Little Egg must have a safe fairway to the Baltimore Canyon as well as Ocean City to the Lindenkohl.

Appendix M2 Figure 2-3 & 2-4 shows there is significant traffic that transits and fishes these waters. Vessels not under AIS requirements as well as the many smaller private and for hire recreational fishing boats without AIS are not accounted for. Even Figure 2-23 & 2-24 fails to include inshore, mid-shore and offshore recreational fishing vessels.

Turbine blades interfere with radar transmitters, clutter, saturation, and shadowing therefore AIS must be on each and every turbine.

Comment Number: BOEM-2021-0024-EMAIL-004-12
Organization: Long Beach Island (LBI) New Jersey Coalition for Wind Without Impact
Commenter: Bob Stern
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Further, after the BOEM released the request for competitive bids for the lease area, they received comments from the tug and barge shipping interests requesting a wider buffer zone around the existing tug/barge shipping lane to ensure navigation safety.

So, at most, the area remaining could accommodate 38 turbines, well below the 98-turbine limit proposed. Even with 14 megawatt turbines, the project could only provide 532 megawatts of power, about half of the company's agreement with the New Jersey BPU. Therefore, this project has very limited wind energy potential to begin with, and this illustrates the shortsightedness of the BOEM in leasing areas without any NEPA review of turbine construction and operational impacts, and of the New Jersey BPU in reaching power agreements before an EIS is even begun.

These exclusion zone restrictions above should be part of the proposed action in the EIS, should the BOEM decide to proceed with it.

Comment Number: BOEM-2021-0024-EMAIL-006-1
Organization: U.S. Coast Guard
Commenter: Michael D Emerson
Commenter Type: Federal Agency

Other Sections: 2.4

Comment Excerpt Text:

The Ocean Wind Construction and Operations Plan (COP) includes several wind turbine generators (WTG) constructed in close proximity to the lease area border it shares with lease OCS-A 0499

(Atlantic Shores Offshore Wind, LLC). When multiple lease areas share borders, the Coast Guard recommends a common turbine spacing and layout throughout all adjoining wind projects. This will have the cumulative effect of presenting one wind farm with consistent straight-line routes for the mariner through the entire area. The common turbine spacing and layout will help facilitate navigation safety, consistent and continuous marking and lighting, search and rescue, and where necessary, other uses such as commercial fishing.

In the absence of a common spacing and orientation between adjacent wind projects, the Coast Guard recommends setbacks from the shared border to create a gap between projects. The space between projects should be greater than any turbine spacing within either wind farm to provide a clear visual reference to easily distinguish them as two separate projects. A change in orientation or spacing without this separation will increase risk for surface and aerial navigation through the wind farms, and could inhibit an aerial search within the wind farms. Spacing along the shared border and the subsequent impacts to navigation and Coast Guard missions should be addressed in each individual Navigation Safety Risk Assessment (NSRA) and Emergency Response Considerations for Search and Rescue.

Comment Number: BOEM-2021-0024-TRANS-41321-0016-2
Organization: Ocean City Council
Commenter: Michael DeVilager

Commenter Type: Local Agency

Comment Excerpt Text:

That's not to mention safety issues, the radar from the ships for both the Coast Guard and the fisheries and the small fishermen are effected by all these turbines, it can effect their ability to navigate and, you know, it can -- yeah, it can be tuned out but it creates interference that can make this -- the radars less sensitive which means sailboats and small motor boats and things which can be in harm's way and God forbid an accident takes place, we are going to have a big big problem on our hands. The turning radius of the fishery's boats are effected by the closeness of the windmills, it doesn't sound like it but it certainly is, particularly if one of them has a mechanical problem and they have to be rescued, so for safety reasons, I just think that they have to be spread further apart

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Comment Number: BOEM-2021-0024-TRANS-42021-0012-8
Commenter: Greg Kudnik
Commenter Type: Individual

Comment Excerpt Text:

The navigational hazards that 9 you guys are throwing at us are very concerning to me as well. The point eight nautical mile by one nautical mile spacing is far too close. It should be much further apart to allow safe navigation Appendix M2, figure 2-3 and 2-4 show the significant traffic that transits and fishes these waters. Vessels not under the AIS requirements as well as the many smaller private boats are for hire recreational fishing vessels without AIS are not accounted for Figure 2-23 and 2-24 fails to include inshore, midshore and offshore recreational fishing vessels. In foul weather and times of limited visibility avoiding turbine structures and other vessels making course changes as mariners attempt to zigzag through the site will be challenging.

Comment Number: BOEM-2021-0024-TRANS-42021-0018-1
Commenter: Will Rush
Commenter Type: Individual

Comment Excerpt Text:

I am a local fisherman and I did buy a boat a couple of years ago, and I am scared about navigating through these turbines. I am scared if I have a mechanical failure for my safety, myself, my kids or my passengers that if something were to happen to my boat and I was anywhere near this vicinity, drifting and wind can take you right into one of these structures and I am really not sure what type of recourse I would have at that point besides dropping an anchor into fairly deep water. So that is a very concerning thing for me. I don't have a lot of that safety gear that you have, because my boat is limited to kind of a 25, 30 mile range, so this is right in the center of the area of where I would be fishing.

A.2.17 NEPA/Public Involvement Process

Comment Number: BOEM-2021-0024-DRAFT-0021-1
Commenter: Lee Evans
Commenter Type: Individual

Comment Excerpt Text:

I feel these wind farms are being pushed through for political reasons with not enough research as to the possible damages they could cause to our area. I feel the citizens of South Jersey should have s say in all of this and we have had none.

Comment Number: BOEM-2021-0024-DRAFT-0025-6
Commenter: Devin Pantiliano

Commenter Type: Individual

Comment Excerpt Text:

Please reconsider the industrialization of our NJ coastline. Please allow a few more years of study like Maine is doing before we make a mistake that will be the point of no return.

Comment Number: BOEM-2021-0024-DRAFT-0063-1
Commenter: Joseph DeFinis
Commenter Type: Individual

Comment Excerpt Text:

Another issue is how this was brought to public attention after the contracts were awarded and this project is far down the path. Completely unfair to the citizens that occupy this area.

I have no doubt that if knowledge of these turbines were made public earlier there would have been much protest earlier than now

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Comment Number: BOEM-2021-0024-DRAFT-0072-3
Commenter: Susan Schwartz
Commenter Type: Individual

Comment Excerpt Text:

As a homeowner in New Jersey I feel like this project was sprung on us and the appropriate due diligence was not completed. That is not fair and it is not American.

Comment Number: BOEM-2021-0024-DRAFT-0072-5
Commenter: Susan Schwartz
Commenter Type: Individual

Comment Excerpt Text:

Why havent the appropriate studies been done to determine how this project will affect the fishing industry and wildlife? What does the EPA say about this project?

Comment Number: BOEM-2021-0024-DRAFT-0095-1
Commenter: Alejandro Meseguer
Commenter Type: Individual

Comment Excerpt Text:

General comment, please consider and respect the environment identified by he various Environmental Impact Statement (EIS) / Reports. In general, wild life, fisheries, impact to human populations.

We look forward to responsible environmental impact and preservation.

Comment Number: BOEM-2021-0024-DRAFT-0096-1
Commenter: Maureen Larkin
Commenter Type: Individual

Comment Excerpt Text:

I believe that the state of NJ needs to do more due diligence before proceeding with this project. A number of articles talk about all of the positive benefits but gloss over what the impact is to the ocean and the life that calls the ocean their home. While I am all for alternative sources of clean energy, it should not be shoved down the publics throat without being fully vetted. There are so many issues/topics that have

not been fully explored and answered to the satisfaction of the public and in particular, people who live along the NJ coast line.

Comment Number: BOEM-2021-0024-DRAFT-0104-2
Organization: Manora USA, LLC
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Manora Logistics is excited to contribute to the future of US offshore wind, but recognizes our participation in project logistics and construction activity can only be realized if the necessary permitting occurs in a timely and reasonable manner.

Comment Number: BOEM-2021-0024-DRAFT-0104-3
Organization: Manora USA, LLC
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Given Manora Logistics' decade of experience with European offshore wind, we understand the critical role early projects such as Ocean Wind play in developing a new market. When a transparent, reasonable, and timely permitting process is followed, these early projects serve as a stepping stone to future development by offering regulatory certainty, investor confidence, and supply chain advancement. Manora is eager to support the construction 30,000 MW of offshore wind along the East Coast, and the $25 billion in annual economic output that will come with this build out by 2030; and we see early projects such as Ocean Wind as a critical first step in sustainably building the US offshore wind industry.

We are committed to supporting the US offshore wind market by lending our logistics and transport expertise. However, clear project timelines and permitting certainty is needed in order for Manora to appropriately staff our US team, invest resources, and focus our business efforts. Manora strives to hire local employees and enter contracts with local partners in support of all projects. As the offshore wind industry grows, we expect the supply chain to fully mature. While often overlooked, the growth of a sustainable, national supply chain will bring economic benefits to many different parts of the country – not just the Northeast. With regulatory certainty, projects can progress as planned, leading to a national supply chain fully supporting the renewable energy transition and post-COVID economic recovery.

Comment Number: BOEM-2021-0024-DRAFT-0108-2
Commenter: Jennifer Trofa
Commenter Type: Individual

Comment Excerpt Text:

First, we, as citizens-residents-taxpayers-property owners-employers-workers-voters, need to be given and allowed to analyze all data, reports, filings, citations, notifications, studies, and/or any administrative or court actions now pending or existing that pertain to the windmill farm that currently exists just north of us in Atlantic City, NJ. This information is critical to our understanding.

Comment Number: BOEM-2021-0024-DRAFT-0112-8
Commenter: Robert and Joann Zuczek
Commenter Type: Individual

Comment Excerpt Text:

There is legal precedence that if there is a strong mandate from the local community to refuse the application, if enough people oppose the application, it should be denied.

Comment Number: BOEM-2021-0024-DRAFT-0116-1
Commenter: Maureen Reilly
Commenter Type: Individual

Comment Excerpt Text:

The communities most affected by the wind farms have been completely left out of this conversation.

Comment Number: BOEM-2021-0024-DRAFT-0116-3
Commenter: Maureen Reilly
Commenter Type: Individual

Comment Excerpt Text:

If it so wonderful and will not be a problem for sea life and the ocean environment..why the secrecy, why not go to these shore towns and talk directly to the residents?

Comment Number: BOEM-2021-0024-DRAFT-0122-3
Organization: Monmouth-Ocean Development Council (MODC)
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Ørsted has committed to working with all stakeholders to assure that the project has a minimal impact during the construction and lifespan of the wind farm.

Comment Number: BOEM-2021-0024-DRAFT-0129-2
Commenter: Gerry Lucidi
Commenter Type: Individual

Comment Excerpt Text:

I was baffled to learn that there are still issues such as migratory patterns of endangered birds, impact of Electro Magnetic Fields on fish and boater safety due to navigational challenges yet to be resolved but yet leases have been awarded to the wind farm companies and manufacturing locations have been awarded by the state of New Jersey. This project has the green light without properly completing due diligence. Baffling still is the fact that the wind farm companies themselves are performing the studies themselves to prove one way or the other the impact of the wind farms. They have a vested interest in the project proceeding so their studies are far from objective.

Comment Number: BOEM-2021-0024-DRAFT-0129-4
Commenter: Gerry Lucidi
Commenter Type: Individual

Comment Excerpt Text:

Local liaisons are being used by the wind farm companies to promote input from surrounding communities. Atlantic Shores for example promoted the use of a local captain who is acting as a liaison for the recreational fishing community. When asked, Atlantic Shores confirmed that the local Captain is being paid by Atlantic Shores. Towns or communities have no say on what is going on.

Comment Number: BOEM-2021-0024-DRAFT-0133-1
Commenter: James Hutchinson
Commenter Type: Individual

Comment Excerpt Text:

I have been actively following the discussion and debate for several years. I've seen meetings promoted as "listening sessions" and "public forums" aimed at allowing stakeholders like me to ask questions. And I have been personally and professionally vilified and attacked following these events for doing just that.

Comment Number: BOEM-2021-0024-DRAFT-0133-3
Commenter: James Hutchinson
Commenter Type: Individual

Comment Excerpt Text:

Coastal stakeholders have been invited to open forums, encouraged to ask questions, and urged to be as open and honest as possible during the listening sessions. Weeks, sometimes months after, the same meeting hosts have been published in numerous journals and newspapers around the state, calling the same stakeholders flat-earthers, climate change deniers, part-time residents and liars. That is not an open process; it's a stampede over the will of the people.

Comment Number: BOEM-2021-0024-DRAFT-0208-11
Organization: Long Beach Island, NJ Coalition for Wind Without Impact
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Process: This NOI is premature and vague and should be withdrawn. According to NEPA rule §1501.9(d), a NOI should be published when a proposal is sufficiently developed to allow for meaningful public comment. The NOI only says that that "up to 98 wind turbine generators" will be installed. The public cannot meaningfully comment without knowing whether we are talking about 10, 38 (see above) or 98 turbines.

The NOI is required to provide a preliminary description of the proposed action but "preliminary" still requires an actual proposal, not just a limit of "up to 98 wind turbine generators". The number of turbines proposed needs to be specified, as well as their proposed size, dimensions, spacing and approximate location. It should state whether direct drive turbines as opposed to gearbox will be used to reduce operational noise and impact on the North Atlantic Right Whale. These are critical parameters necessary to describe the environmental impact. If the applicant does not know them or wish to share them, this EIS cannot logically proceed.

As a key issue, the NOI should have summarized the expected socioeconomic impacts from visible turbines realistically. It should have informed the public that concern over visible impact has caused the BOEM to adopt a 15 nautical mile turbine exclusion zone for New York State projects, and that New York is seeking a greater exclusion zone.

Comment Number: BOEM-2021-0024-DRAFT-0208-5
Organization: Long Beach Island, NJ Coalition for Wind Without Impact
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The BOEM's NEPA strategy this far is lacking, both from a logical decision-making and legal standpoint. The BOEM did a programmatic EIS back in 2007. It looked at different sources of energy, for example, offshore wind versus coal, versus natural gas in a generic sense and concluded that offshore wind was viable and should be pursued. The BOEM did an internal analysis of different wind energy areas, like Hudson South, outside of the NEPA process and closed to the general public that considered significant environmental impact differences among potential lease areas. Then it leases those areas identified and

does an environmental assessment on insignificant impacts related only to site survey activities, that may have public review.

In other words, the BOEM does a NEPA document often with public review on insignificant environmental impacts and an internal document without general public review outside of the NEPA on significant impacts. This is backwards.

Comment Number: BOEM-2021-0024-DRAFT-0208-6
Organization: Long Beach Island, NJ Coalition for Wind Without Impact
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The fundamental environmental review problem here is that for an agency whose main function is to lease areas, the BOEM never does an EIS analysis of turbine operation in alternative areas. This should have been done to support BOEM's adoption of the Wind Energy Areas for New Jersey in 2010. If it had done that and selected areas to lease that did not have unacceptable visible or other environmental impacts, we wouldn't be facing the unreasonable closest lease areas of any in the world.

The identification of areas suitable for leasing is a major federal action significantly affecting the environment and therefore requires an EIS.

Pursuant to NEPA rules, §1508.1(q)(3)(ii), a major federal action includes the:

"Adoption of formal plans, such as official documents prepared or approved by federal agencies which prescribe alternative uses of Federal resources, upon which future agency actions will be based."

This definition certainly applies to the narrowing by the BOEM internally of broader call areas into the adoption of specific Wind Energy Areas to be leased in the future for offshore wind development, and such identification of certain wind energy areas versus others clearly has significant environmental and ocean resource use impacts.

Further, the BOEM itself states in its Outer Continental Shelf Alternative Energy Programmatic EIS in Section 5.2.21.6 that the choice of location for an offshore wind facility is the single most important opportunity for visual impact mitigation. The same is true for other impacts.

A precedent for doing such an EIS can be found in the recent one prepared by the Bureau of Land Management on oil and gas leasing area alternatives in the Coastal Plain of the Alaska Arctic Refuge. The BOEM should have followed the example of its sister agency.

Therefore, the adoption by the BOEM of Wind Energy Areas for the New York Bight, which includes the Hudson South area, should have been supported by an EIS and general public input.

Comment Number: BOEM-2021-0024-DRAFT-0217-5
Commenter: Christine Naisby
Commenter Type: Individual

Comment Excerpt Text:

Will the residents be made aware of future meetings and decisions made? None of us were aware that our streets were potential landfall sites until an article was published in a local newspaper. We should have received written correspondence in the mail. In the future, all residents deserve to receive written correspondence of all public meetings. We should not have to find out "through the grapevine" on social media sites.

Comment Number: BOEM-2021-0024-DRAFT-0220-16
Commenter: Joann Zuczek
Commenter Type: Individual

Comment Excerpt Text:

We strongly urge the Bureau of Ocean Energy Management (BOEM) to carefully weigh all the detrimental effects the proposed Ocean Winds, LLC offshore windfarm will have on the environment and the way of life that we have all been accustomed to. We urge the Bureau of Ocean Energy Management to recommend the appropriate actions to further study to mitigate or eliminate all the undesirable environmental effects or, at the very least, recommend that the proposed project not move forward until all available alternatives or solutions to these problems have been exhausted.

Comment Number: BOEM-2021-0024-DRAFT-0220-5
Commenter: Joann Zuczek
Commenter Type: Individual

Comment Excerpt Text:

There is legal precedence that if there is a strong mandate from the local community to refuse the application, if enough people oppose the application, it should be denied

Comment Number: BOEM-2021-0024-DRAFT-0235-7
Organization: NJ State Chamber of Commerce
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

We strongly support BOEM and the federal government moving forward on its permitting processes in a responsible and rapid manner.

Comment Number: BOEM-2021-0024-DRAFT-0239-1
Organization: Greater Toms River Chamber of Commerce
Commenter: Ralph Wolff
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

We are writing you today to show our support for the offshore wind industry here in the U.S. and thank your agency for its work in the preparation of the Environmental Impact Statement for the Construction and Operations Plan submitted by Ocean Wind LLC. This report is a crucial step for this industry in their federal permitting process.

Comment Number: BOEM-2021-0024-DRAFT-0256-1
Commenter: Capt. Paul Eidman
Commenter Type: Individual

Comment Excerpt Text:

To all the recreational fisherman out there: We all need to stand together and make sure that the offshore wind developers take our input during the early planning stages and site turbines correctly. We should be using our collective voice to ensure we have open access to fish the turbines, take advantage of opportunities to provide public input and Fisheries science before during and after construction.

Comment Number: BOEM-2021-0024-DRAFT-0257-2
Commenter: Angela Trampota
Commenter Type: Individual

Comment Excerpt Text:

Many in our community feel we have not been properly informed of the size, scope and overall impact to our area.

Comment Number: BOEM-2021-0024-DRAFT-0264-2
Commenter: Leslie Houston
Commenter Type: Individual

Comment Excerpt Text:

Please PAUSE this project until the impacts are known. Not one EIS has been completed. The impact to many threatened and endangered species is also unknown. Lets do offshore energy right, not fast.

Comment Number: BOEM-2021-0024-DRAFT-0276-2
Commenter: Susan Kirkpatrick
Commenter Type: Individual

Comment Excerpt Text:

The placement of the wind turbines will have a negative impact to the environment. I believe that they have not done the enough testing and investigation into the impact.

Comment Number: BOEM-2021-0024-DRAFT-0278-2
Commenter: Gerald Thornton
Commenter Type: Individual

Comment Excerpt Text:

The discussions I have had with our fishing community is that they do not feel like they are being heard. They believe they have not been given a proper seat at the table.

Comment Number: BOEM-2021-0024-DRAFT-0278-8
Commenter: Gerald Thornton
Commenter Type: Individual

Comment Excerpt Text:

To this point, I have not seen enough information to convince me that our sea life wont be harmed by this development. Equally as important, I cannot support a project who is not listening to our people. The fishing community should be better represented in development of these plans to alleviate their concerns. Since it has been relayed to me by many within the fishing community that they feel silenced, I must stand against these plans for Ocean Wind, LLC's Proposed Wind Energy Facility Offshore New Jersey.

Comment Number: BOEM-2021-0024-DRAFT-0287-10
Organization: North Beach Taxpayers Association
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

We need to get this right. We cannot jeopardize the Atlantic seaboard. We must slow down and properly and thoroughly investigate and evaluate the impacts of offshore wind before we industrialize the ocean. We implore you to collect the data, analyze the impacts, then formulate a plan for offshore wind before any construction.

Comment Number: BOEM-2021-0024-DRAFT-0287-3
Organization: North Beach Taxpayers Association
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Has there been one Environmental Impact Statement been completed?

Comment Number: BOEM-2021-0024-DRAFT-0291-2
Commenter: Linden Gruver
Commenter Type: Individual

Comment Excerpt Text:

I understand that EIS is in the making and would like very much to see what the experts have to say about this project, even though the statement will most likely be biased by the company that pays for the study. My hope is that it will be as unbiased as possible.

Comment Number: BOEM-2021-0024-DRAFT-0294-5
Organization: Eastern Atlantic State Regional Council of Carpenters
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

A thorough federal analysis is necessary for this project to move through the permitting process in compliance with state and federal laws and for offshore wind projects to rise to this industry's potential as a transformational solution to the intersecting environmental, public health, and economic crises of our time.

Comment Number: BOEM-2021-0024-DRAFT-0295-2
Organization: New England Fishery Management and Mid-Atlantic Fishery Management Councils
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The pace and number of offshore wind projects in development in our region pose challenges for thorough analysis of potential impacts, informed public input, and adopting lessons learned from each project. There are over a dozen projects for which survey, design, and environmental review are already occurring and multiple additional areas in the New York Bight are planned to be leased. Work on these projects is already taxing available resources in the fishing, fishery management, and fishery science communities, and we expect at BOEM as well. Consistency in approaches and adopting lessons learned from one project to the next will benefit stakeholders who seek to engage in the review process for these complex projects.

Comment Number: BOEM-2021-0024-DRAFT-0297-1
Organization: Responsible Offshore Development Alliance
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

RODA and its members have submitted dozens, if not hundreds, of comment letters outlining significant concerns associated with offshore wind energy (OSW) development to BOEM and its cooperating federal and state agencies. As the issues outlined in those letters have not been addressed to date, we incorporate all past correspondence by reference and do not repeat the entirety of the consistent, clear, and reasonable requests our members have previously raised. [Footnote 2: The latest comprehensive letter pertained to the South Fork project; the entire letter is applicable to preparation of a DEIS for the Ocean Wind project owned by the same company and is therefore incorporated here by reference.] These comments therefore only include: (1) a reiteration of the importance of adequate scoping and framing for an EIS; and (2) a

description of items that are geographically specific to the Ocean Wind project and previously raised to the developer.

Comment Number: BOEM-2021-0024-DRAFT-0297-5
Organization: Responsible Offshore Development Alliance
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

B. The DEIS Must Adhere to Current Policy Frameworks

In July 2020, the Council on Environmental Quality (CEQ) updated the NEPA implementing regulations for the first time in over forty years. A new section at 40 C.F.R. § 1502.16(a)(10) requires consideration of "economic and technical considerations, including the economic benefits of the proposed action" when evaluating the environmental consequences of major federal action under NEPA.

CEQ added this language to clarify the statutory authority that "presently unquantified environmental amenities and values may be given appropriate consideration in decision-making along with economic and technical considerations."8 While congressional intent may have been to ensure that environmental values were not overlooked, in previous OSW documents prepared under NEPA it is the economic and technical considerations for which BOEM has provided no detail. Regardless, the regulations explicitly require the agency to "identify environmental effects and values in adequate detail so the decision maker can appropriately consider such effects and values alongside economic and technical analyses." [Footnote 9: 40 C.F.R. § 1501.2(b)(2).] The regulatory revisions make clear that an agency's obligation under NEPA is to provide the public with comprehensive information regarding the economic and technical details of a project itself, in addition to a full analysis of its potential environmental impacts.

Just last week, in an extremely unusual announcement, Secretary Haaland directed the following to Department of Interior agencies"

Bureaus/Offices will not apply the 2020 Rule in a manner that would change the application or level of NEPA that would have been applied to a proposed action before the 2020 Rule went into effect on September 14, 2020. [Footnote 10: Secretarial Order No. 3399, "Department-Wide Approach to the Climate Crisis and Restoring Transparency and Integrity to the Decision-Making Process" (April 16, 2021).]

It is impossible for the public to determine the meaning of this, much less its legality. CEQ regulations are not optional for agencies; they cannot cherry-pick whether to apply them or not. Does this imply that BOEM intends to continue operating its OSW leasing program under outdated NEPA regulations?

Comment Number: BOEM-2021-0024-DRAFT-0297-6
Organization: Responsible Offshore Development Alliance
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Additionally, in January of this year the Biden Administration revoked Executive Order (EO) 13807 ("One Federal Decision'') and announced that the Director of the Office of Management and Budget and the Chair of the Council on Environmental Quality are currently considering whether to recommend that a replacement order be issued. [Footnote 11: Exec. Order 14008 § 7(b) (Jan. 27, 2021).] Despite this, BOEM has proceeded to carry out its regulatory policies promulgated under EO 13807 without clarifying how its rescission will be implemented. Certain provisions of EO 13807 are now codified in the revised NEPA regulations, but others with significant repercussions for the OSW regulatory process are not, including instructions for interagency coordination, roles, and responsibilities.

The public cannot be prepared to offer public comment—and BOEM cannot be release a DEIS for such comment—when there is no certainty as to what laws and policies will apply to the agency's review. Did the revocation of EO 13807 affect interagency Memoranda of Understanding executed under that policy that applies to review of various project elements? Have BOEM and/or DOI's NEPA handbooks been updated to reflect the changes to the NEPA implementing regulations? Now is not the time to rush to decisions that will have major identified adverse consequences on marine resources and fishing communities without proper planning and clarity. Again, we call on BOEM to provide this transparency and initiate a balanced and coherent planning process. Partisan politics must not lead to biased, rushed, or chaotic decisions about a matter as important as our entire ocean commons.

Comment Number: BOEM-2021-0024-DRAFT-0297-7
Organization: Responsible Offshore Development Alliance
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

A recent letter to members of BOEM's Intergovernmental Task Force on the New York Bight from RODA stated:

Fishermen have shown up for years to 'engage' in processes where spatial constraints and, often, the actors themselves are opposed to their livelihood . . . This time and effort have resulted in effectively no accommodations to mitigate impacts from individual developers of the supposedly unbiased federal and state governments.

Unfortunately, this sentiment applies to the Ocean Wind project and fishermen's attempts to work directly with the developer have not led to any project changes or "voluntary" mitigation measures. The following information is provided for context on why BOEM's oversight and thoughtful framing of the Ocean Wind DEIS is a critical step in addressing fisheries impacts.

Comment Number: BOEM-2021-0024-DRAFT-0297-8
Organization: Responsible Offshore Development Alliance
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

A. Task Force

In 2019, at the request of fishery leaders, eight developers joined a Joint Industry Task Force administered by RODA. Ørsted was the first developer to sign on and played a pivotal role in generating interest from other developers, and RODA was grateful for this commitment and shared vision. The goal was to provide a forum to identify areas of cooperation and solutions for areas of conflict. Despite some early focused successes, such as joint recommendations for aids to navigation, [Footnote 12: https://rodafisheries.org/wp-content/uploads/2020/07/200723-FINAL-JITF-Navigational-Aids-recommendations.pdf.] the Task Force struggled due to the developers' overall narrow interest in permitting requirements, disagreements among developers on Task Force scope, and unwillingness to work directly with RODA's members if they expressed concerns about OSW outside of the Task Force collaborative space. In an attempt to salvage this important forum, RODA agreed to add the Special Initiative on Offshore Wind in early 2020 as a Task Force co-planner, but was never given clear direction as to how to meet the developers' shifting demands for how to make the effort merit their participation.

Ørsted withdrew its Task Force membership in September 2020, and the other developer members followed prior to the beginning of 2021. This termination of the Task Force left no regional forum for fisheries problem-solving and ended the only viable solution developed to date to ensure fishermen can participate in OSW planning in any manner except one that is entirely controlled by these multinational corporations.

Comment Number: BOEM-2021-0024-DRAFT-0297-9
Organization: Responsible Offshore Development Alliance
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

B. RODA/Ocean Wind Workshops

In January 2020, RODA held several joint workshops at NJ ports with Ørsted under the umbrella of the Joint Industry Task force efforts (a summary of those workshops, as approved by both RODA and Ørsted, is appended). It was mutually agreed that this summary would serve as the only official record of the meetings.

The large numbers of NJ fishermen in attendance provided clear guidance during these workshops, as included in the summary and referenced in the following section, on design considerations that would reduce or mitigate impacts to fishing from this project. The summary also indicates that broader fishing outreach was not yet conducted by the fishing industry leaders in attendance, and that there would be additional opportunities for information gathering and follow-up. This did not happen. Ørsted offered only one short follow-up phone conference in the summer of 2020, in which fishermen requested additional conversations that never occurred.

Comment Number: BOEM-2021-0024-DRAFT-0298-1
Organization: New Jersey Department of Transportation
Commenter Type: State Agency

Comment Excerpt Text:

NJDOT has reviewed the notice and requests to be noted as a consulted agency as the project moves through the planning, design and permitting process.

Comment Number: BOEM-2021-0024-DRAFT-0309-4
Organization: Surfside Foods LLC
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The Biden Administration revoked Executive Order (EO) 13807 ("One Federal Decision'') in January of this year and it is not yet known to the public whether a replacement order will be issued. We will be unable to offer informed public submission to a EIS when we have no insight as to the regulations and policies that will apply to the agency's review process and we have a reasonable expectation that BOEM will make clear all NEPA implementing regulations before moving forward with a Draft EIS.

Comment Number: BOEM-2021-0024-DRAFT-0314-1
Commenter: Joseph DeFinis
Commenter Type: Individual

Comment Excerpt Text:

I find it unfair as to the lack of notice that the public was notified about concerning this project. Not to mention our voices not being heard by a vote on this project.

Comment Number: BOEM-2021-0024-DRAFT-0345-1
Organization: U.S. Environmental Protection Agency, Region 2
Commenter Type: Federal Agency

Comment Excerpt Text:

The construction and operation of the Ocean Wind project 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. The COP identifies many of the major environmental issues that should be fully examined during the NEPA process. Our scoping comments are offered to help BOEM develop a comprehensive EIS that informs project permitting that occurs after the NEPA process concludes. Our attached comments are also intended to be consistent with our ongoing work in the region to support local communities and reduce environmental impacts.

Comment Number: BOEM-2021-0024-DRAFT-0345-11
Organization: U.S. Environmental Protection Agency, Region 2
Commenter Type: Federal Agency

Comment Excerpt Text:

The COP describes efforts by Ocean Wind to engage tribes that claim cultural affiliation to the potentially affected area. The consultation and engagement included potential terrestrial and marine archaeological resources, survey design, execution and interpretation of results. We commend the consultation and engagement efforts to date and encourage BOEM to replicate this engagement and to continue to fully consider tribal interests in the project.

Comment Number: BOEM-2021-0024-DRAFT-0345-2
Organization: U.S. Environmental Protection Agency, Region 2
Commenter Type: Federal Agency

Comment Excerpt Text:

In addition to close coordination with 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 EIS. 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. BOEM's efforts to date to include our agency in meetings and discussions regarding the NEPA process and associated permitting are appreciated and should be continued throughout the environmental review and permitting stages of the project.

Comment Number: BOEM-2021-0024-DRAFT-0345-3
Organization: U.S. Environmental Protection Agency, Region 2
Commenter Type: Federal Agency

Comment Excerpt Text:

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.

Comment Number: BOEM-2021-0024-DRAFT-0346-6
Commenter: Martha Oldach
Commenter Type: Individual

Comment Excerpt Text:

This is an experiment being shoved down the residence of Southern Jersey because we have fewer voters. The state of New York rejected this plan. As a citizen of New Jersey I feel this is unfair. Most people

arent even aware that this is happening. Only one of the questions that I officially submitted to the BOEM zoom meeting was answered . The moderator asked them but the man that answered ignored the two most pertinent to me. I was very dissatisfied with the three public zoom events! I do not feel like they were advertised enough and I do not feel that the continent of the material was adequate. I believe there has not been nearly enough research done by the government to protect the citizens of southern New Jersey.

Comment Number: BOEM-2021-0024-DRAFT-0347-4
Organization: NJ Work Environment Council
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

We thank you in advance for your review of this project's socioeconomic and environmental impacts, and early consideration of stakeholder input. A thorough federal analysis is necessary for this project to move nimbly through the permitting process in compliance with state and federal laws, and for all offshore wind projects to rise to this industry's potential as a transformational solution to the intersecting environmental, public health, and economic crises of our time.

Comment Number: BOEM-2021-0024-DRAFT-0347-8
Organization: NJ Work Environment Council
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

To comply with state and federal policies and achieve all necessary permits, all offshore wind energy must be developed in an environmentally responsible manner that avoids, minimizes and mitigates impacts to ocean wildlife and habitat and traditional ocean uses, meaningfully engages stakeholders from the start, and uses the best available science and data to ensure science-based and stakeholder-informed decision making. This includes analysis of cumulative impacts and adaptive management strategies, obtaining all necessary and relevant data, and requires BOEM to identify all methodologies, and indicate when information is incomplete or unavailable, acknowledge scientific disagreement and data gaps, and evaluate intermediate adverse impacts based on approaches or methods generally accepted in the scientific community. Avoiding sensitive habitat areas, requiring strong measures to protect wildlife throughout each state of the development process, and comprehensive monitoring of wildlife and habitat before, during, and after construction, are all essential for the responsible development of offshore wind energy.

Comment Number: BOEM-2021-0024-DRAFT-0353-10
Organization: New Jersey Resource Project
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

I urge you to act expediently and with thorough care to complete the environmental review of New Jerseys Ocean Wind project and ensure that responsibly developed offshore wind power plays a major role in our nations energy future.

Comment Number: BOEM-2021-0024-DRAFT-0354-14
Organization: New York State Department of State
Commenter Type: State Agency

Comment Excerpt Text:

To support informed and meaningful stakeholder engagement, BOEM is strongly encouraged to make the proposed Ocean Wind work area and cable corridors available on the Mid-Atlantic and Northeast data portals, as applicable. [Footnote 9: https://portal.midatlanticocean.org/ and

https://www.northeastoceandata.org/] BOEM has done this for all other offshore wind projects when they were undertaking the environmental review (i.e., Vineyard Wind, South Fork Wind, Virginia Offshore). It would be prudent to continue this practice by posting these data layers at the Notice of Intent phase for all Atlantic Coast COPs.

Comment Number: BOEM-2021-0024-DRAFT-0354-19
Organization: New York State Department of State
Commenter Type: State Agency

Comment Excerpt Text:

PARTICIPATION THROUGH NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)

Notwithstanding New York's right to request a federal consistency review of the proposed activity, New York also has the ability to provide input during the NEPA public comment periods (see enclosed NEPA scoping comments). While BOEM works diligently to respond to all public comments, there is no guarantee that the State's NEPA comments would be implemented in the same manner as State involvement during a federal consistency review. The Ocean Wind COP is of great interest to New York State for the potential impacts to the State's coastal resources and uses and because the proposed activity carries the possibility for precedent on mitigating navigation impacts when offshore development occurs adjacent to high density vessel routes (e.g., Wind Energy Areas of NY, NJ, and NY Bight). It is incumbent upon New York to seek a federal consistency review given the need for commercial shipping and offshore wind industries to not only co-exist but thrive. Therefore, DOS is not of the opinion that to rely upon participation through the NEPA process is the appropriate and sole method of protecting the state's coastal uses and resources.

Comment Number: BOEM-2021-0024-DRAFT-0355-2
Organization: Anglers for Offshore Wind Power
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Public Input:

We acknowledge and applaud the efforts of Ørsted and other developers to build relationships and learn about potential impacts to both commercial and recreational fishing. While we encourage each developer to continue their individual outreach, we do feel that a more formal and enduring forum for gathering input from the recreational fishing community is needed.

We agree that developing offshore wind energy is essential to protecting our nation and planet from the impacts of climate change and ocean acidification, and feel that all parties need a clearly defined seat at the table to ensure that such potentially massive development is undertaken as responsibly as possible. The opportunity for fisheries experts and the general public to provide input must be hardwired into the system.

We suggest each region establish a fisheries advisory body made up of various stakeholder groups that must be consulted on a regular basis. We feel the Federal Advisory Committee Act lays out a potential model for the type of formal process we are proposing.

Comment Number: BOEM-2021-0024-DRAFT-0358-1
Organization: American Saltwater Guides Association
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

ASGA understands the need for offshore wind energy development but insists that decision- making be based on the best available science and considerate of diverse stakeholder needs. Balancing the pace of development with the pace of the research and peer review process, coupled with meaningful stakeholder engagement throughout, is key to ensuring that sustainable fisheries, healthy marine ecosystems, and offshore wind power can successfully coexist in U.S. waters.

These projects are incredibly complex. We must adopt a consistent approach for all lease areas. We must also apply the lessons learned from initial projects to future ones. The commitment to consistency will benefit the developers, government agencies, the fishing community, and our marine resources.

Comment Number: BOEM-2021-0024-DRAFT-0358-5
Organization: American Saltwater Guides Association
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

We believe that coordination with and transparency to the public are key to successful integration of offshore wind energy and fisheries. We are encouraged at the level of public input and outreach in the early stages of Ocean Wind. It is critical that we minimize impacts, provide funding for ongoing monitoring and research, and incorporate local knowledge as we move forward with these efforts.

Comment Number: BOEM-2021-0024-DRAFT-0363-5
Organization: Jersey Renews
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

We appreciate your work to prepare a DEIS, informed by early-stakeholder input, and thorough and diligent socioeconomic and environmental review of this project, to support swift permitting of New Jersey's first large-scale offshore wind project, so that we may realize the thousands of jobs and millions of dollars in economic benefits that will be provided by the development of Ørsted's Ocean Wind.

Comment Number: BOEM-2021-0024-DRAFT-0364-7
Organization: Oceana
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

As BOEM develops the mandated full range of alternatives for the Ocean Wind project, Oceana encourages BOEM to include the following concepts, strategies, tools, and safeguards for consideration. These elements will improve the project, minimize its effects, and ensure that the government and all concerned stakeholders can properly oversee the project as it is developed on shared public waters.

Oceana recognizes that these proposals represent the state of the issues at this time and the environmental review and permitting can take years. BOEM should ensure that the final EIS for this project is updated with current knowledge, science, technology, and practices that may emerge during development of the document.

Comment Number: BOEM-2021-0024-DRAFT-0364-12
Organization: Oceana
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

To foster stakeholder relationships and allow public engagement and oversight of the permitting, construction, and operation of the project the EIS must include alternatives to require all reports and data accessible on a publicly available website.

Comment Number: BOEM-2021-0024-DRAFT-0364-2
Organization: Oceana
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

To ensure that the Ocean Wind LLC project is developed in a responsible manner BOEM must ensure that the project complies with existing laws including the National Environmental Policy Act (NEPA), the Endangered Species Act (ESA), the Marine Mammal Protection Act (MMPA) and the Magnuson Stevens Act (MSA). Oceana appreciates the urgency that the administration has expressed to get projects like this under way quickly, but that cannot come at the expense of a full review and assessment. Oceana expects that some of the reviews and permitting may be concurrent, offshore wind development must adhere to the rigorous review process that uses best available science to consider immediate and cumulative impacts to ocean wildlife.

Comment Number: BOEM-2021-0024-DRAFT-0364-6
Organization: Oceana
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Oceana also encourages BOEM to conduct similar outreach and consultation with state and regional managers at the Atlantic States Marine Fisheries Commission with authority and responsibility for inshore fisheries to ensure effects on inshore habitats are minimized.

Comment Number: BOEM-2021-0024-DRAFT-0366-10
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

II. BOEM'S OBLIGATIONS PURSUANT TO THE NATIONAL ENVIRONMENTAL POLICY ACT

The National Environmental Policy Act (NEPA)[Footnote 9: 42 U.S.C. § 4321 et seq.] is one of the most important laws for ensuring the Project is developed in an environmentally responsible and beneficial manner. NEPA is the fundamental tool for ensuring a proper vetting of the impacts of major federal actions on wildlife, natural resources, and communities; for ensuring reasonable alternatives are considered and identifying the most environmentally preferable alternative; and for giving the public a say in federal actions that can have a profound impact on their lives and livelihoods.

For over a half-century, NEPA has ensured that federal agency decision-making is based on a thorough consideration of the environmental impacts of federal decisions. NEPA requires "efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man" [Footnote 10: Id. § 4321.] and mandates that "to the fullest extent possible" the "policies, regulations, and public laws of the United States shall be interpreted and administered in accordance with [NEPA]." [Footnote 11: Id. § 4332] To comply with NEPA, an EIS must, inter alia, include a "full and fair discussion" of environmental impacts, [Footnote 12: 40 C.F.R. § 1502.1.] including positive as well as negative impacts, and assess possible conflicts with other federal, regional, state, Tribal, and local authorities. [Footnote 13: Id. § 1502.16(a)(5).]

Comment Number: BOEM-2021-0024-DRAFT-0366-11
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

It is important to note that in July 2020, the Council of Environmental Quality (CEQ) published a final rule revising long-standing NEPA regulations. These regulations went into effect on September 14, 2020. [Footnote 14: Federal Register, The Daily Journal of the United States Government, Council on Environmental Quality (July 16, 2020), https://www.federalregister.gov/documents/2020/07/16/2020-15179/update-to-the-regulations- implementing-the-procedural-provisions-of-the-national-environmental] Pursuant to President Biden's Executive Order 13990, these rules are being reviewed for possible repeal or replacement. They have also been challenged as illegal by several groups, including many signed onto these comments. [Footnote 15: See, e.g., Wild Virginia v. Council on Environmental Quality, No. 3:20-cv-00045-NKM (W.D. Va. July 29, 2020). Attorneys for the DOJ requested that the United States District Court for the Western District of Virginia stay proceedings in this lawsuit while the Biden Administration reviews the NEPA revisions, including the repeal of 40C.F.R. §1508.7.] Just recently, Department of the Interior Secretary Haaland issued a Secretarial Order stating that the 2020 rule will not be applied "in a manner that would change the application level of NEPA that would have been applied to a proposed action before the 2020 Rule went into effect on September 14, 2020."

Comment Number: BOEM-2021-0024-DRAFT-0366-13
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Courts recognized the requirement to examine the cumulative impacts of a project well before regulations requiring a cumulative impacts analysis were promulgated in 1978. For instance, in 1972, the U.S. Court of Appeals for the Second Circuit found that when making a determination regarding whether or not an action is subject to NEPA, agencies should consider, inter alia, "the absolute quantitative adverse environmental effects of the action itself, including the cumulative harm that results from its contribution to existing adverse conditions or uses in the affected area." Hanly v. Kleindienst, 471 F.2d 823, 830-31 (2d Cir. 1972). The Court went on to highlight that, "[I]t must be recognized that even a slight increase in adverse conditions that form an existing environmental milieu may sometimes threaten harm that is significant. One more factory polluting air and water in an area zoned for industrial use may represent the straw that breaks the back of the environmental camel. Hence the absolute, as well as comparative, effects of a major federal action must be considered." Hanly v. Kleindienst, 471 F.2d at 831.]

Likewise, in 1975, the U.S. Court of Appeals for the Seventh Circuit stated that, "NEPA is clearly intended to focus concern on the 'big picture' relative to environmental problems. It recognizes that each 'limited' federal project is part of a large mosaic of thousands of similar projects and that cumulative effects can and must be considered on an ongoing basis." Swain v. Brinegar, 517 F.2d 766 (7th Cir. 1975) (recognizing that an EIS should consider comprehensive, cumulative impacts, but resolving the case on the grounds that the federal agency had impermissibly delegated the EIS to Illinois state authorities.) Similarly, in 1976, the U.S. Supreme Court acknowledged the importance of examining cumulative effects under NEPA, concluding that, "Cumulative environmental impacts are, indeed, what require a comprehensive impact statement." Kleppe v. Sierra Club, 427

U.S. 390, 413 (1976). Although 40 C.F.R. §1508.7 currently remains repealed, in a January 20, 2021 executive order, President Biden ordered the "immediate review of agency actions taken between January 20, 2017, and January 20, 2021" that are inconsistent with his Administration's policies of "promot[ing] and protect[ing] our public health and the environment"; conserving, "restor[ing] and expanding our national treasures and monuments"; "listen[ing] to the science"; and "reduc[ing] greenhouse gas

emissions." Exec. Order No. 13,990, 86 Fed. Reg. 7037 (Jan. 20, 2021). President Biden directed the heads of agencies to immediately review all regulations and other agency actions promulgated, issued, or adopted between January 20, 2017, and January 20, 2021, that are inconsistent with these Administration policies, and for any such actions identified, "the heads of agencies shall, as appropriate and consistent with applicable law, consider suspending, revising, or rescinding the agency actions." Id. It is possible that the Biden Administration's review of Trump Administration regulatory actions will result in a reinstatement of 40 C.F.R. §1508.7.

Comment Number: BOEM-2021-0024-DRAFT-0366-14
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Additionally, under NEPA, BOEM must make every attempt to obtain and disclose data necessary to its analysis in order to provide a "full and fair discussion of significant environmental impacts."[Footnote 19: 40 C.F.R. § 1502.1.] Under previous regulations, the simple assertion that no information or inadequate information exist will not suffice. Unless the costs of obtaining the information are exorbitant, NEPA requires that it be obtained. [Footnote 20: 40 C.F.R. § 1502.22 (repealed 2020); see also 42 U.S.C. §4332(G)(agencies shall "'make available to states, counties, municipalities, institutions, and individuals, advice and information useful in restoring, maintaining, and enhancing the quality of the environment "). The current regulations require that such information be obtained if "the overall costs of obtaining it are not unreasonable." 40 C.F.R. § 1502.21(b).] Under the previous regulations, agencies were further required to identify their methodologies, indicate when necessary information is incomplete or unavailable, acknowledge scientific disagreement and data gaps, and evaluate indeterminate adverse impacts based upon approaches or methods "generally accepted in the scientific community." [Footnote 21: 40 C.F.R. §§ 1502.22(b)(2), (b)(4), 1502.24 (repealed 2020). Current regulations at 40 C.F.R. §§ 1502.21(c), 1502.23 have similar provisions that are not inconsistent with the application of the more robust previous regulations.] Such requirements become acutely important in cases where, as here, so much about an activity's impacts depend on newly emerging science. Finally, NEPA does not permit agencies to "ignore available information that undermines their environmental impact conclusions."

Comment Number: BOEM-2021-0024-DRAFT-0366-15
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

A. RESPONSIBLE DEVELOPMENT OF OFFSHORE WIND POWER

The NEPA process should inform BOEM, stakeholders, and the public about how to responsibly proceed with developing the promising and abundant resource of offshore wind power. Several decades of offshore wind development in Europe have shown that offshore wind power can be developed responsibly with regard to wildlife, provided that all siting and permitting decisions are based on sound science and informed by key experts and stakeholders. The European experience shows us that avoiding sensitive habitat areas, requiring strong measures to protect wildlife throughout each stage of the development process, and comprehensive monitoring of wildlife and habitat before, during, and after construction are essential for the responsible development of offshore wind energy.

Comment Number: BOEM-2021-0024-DRAFT-0366-16
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Despite offshore wind's rapid growth in Europe, United States offshore wind remains a new industry, with the nation's first commercial project – the Block Island Wind Farm (30 MW) – only coming online in December 2016. BOEM is also examining the impacts of two major projects further north and east of this project – Vineyard Wind 1 Offshore Wind Energy Project (Vineyard Wind 1) and the South Fork Wind Farm and South Fork Export Cable Project (South Fork) – and commenters have provided ample comments on those projects which should provide guidance for this NEPA process as well. As a result, BOEM needs to rigorously review the potential impacts of offshore wind development on marine wildlife and habitat including potential impacts related to future projects at the scale envisioned by the President's offshore wind goals, to ensure appropriate mitigation measures are developed and adopted. Various potential impacts associated with offshore wind construction and operations could directly, indirectly, and cumulatively impact marine species and habitats in the coastal zone and offshore environment along the coast. In addition to a thorough examination of direct and indirect impacts, as well as mitigation measures, assessing cumulative impacts is essential to understanding the impact of offshore wind on species and ecosystems along the coast.

Comment Number: BOEM-2021-0024-DRAFT-0366-198
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

We urge BOEM to move forward and issue the Draft EIS for the Project, incorporating our recommendations in these comments. We also urge BOEM to undertake the broader suite of actions outlined in these comments to ensure that the United States' offshore wind industry as a whole advances in a responsible and sustainable manner. [Footnote 317:Vermont Law School Environmental Advocacy Clinic students Julia Guerrein, Peter Malicky, Taylor Tavormina, and Veronica Ung-Kono contributed to the research and writing of these comments.]

Comment Number: BOEM-2021-0024-DRAFT-0366-30
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

E. THE DRAFT EIS MUST CONSIDER A REASONABLE RANGE OF ALTERNATIVES AND MITIGATION

An EIS must "inform decision makers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment."[Footnote 53: 40 C.F.R. § 1502.1.] This requirement has been described in former regulations as "the heart of the environmental impact statement."[Footnote 54: 40 C.F.R. § 1502.14 (repealed 2020).] The courts describe the alternatives requirement equally emphatically, citing it as the "linchpin" of the EIS. [Footnote 55: Monroe County Conservation Council v. Volpe, 472 F.2d 693 (2d Cir. 1972).] Even under current regulations, which several commenters are challenging as illegal, the agencies must therefore "[e]valuate reasonable alternatives to the proposed action, and, for alternatives that the agency eliminated from detailed study, briefly discuss the reasons for their elimination." [Footnote 56: 40 C.F.R. § 1502.14(a).] Consideration of alternatives is required by (and must conform to the independent terms of) both sections 102(2)(C) and 102(2)(E) of NEPA.

Comment Number: BOEM-2021-0024-DRAFT-0366-43
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

A. BOEM MUST BE TRANSPARENT AS TO HOW IMPACTS ARE QUANTITATIVELY OR QUALITATIVELY ASSESSED

The definitions of potential adverse and beneficial impact levels (i.e., negligible, minor, moderate, and major) includes language that provides minimal guidance on how impacts may be quantified. For example, adverse moderate and major impact levels in previous analyses include "notable and measurable" and "regional or population-level impact."[Footnote 76: 76 E.g., South Fork DEIS at 3.1.1, Tbl 3.1.1-1 and 3.1.1-2.] In addition, the definitions of negative factors included in previous analyses specify "habitat" and "species common to the proposed Project area," which places the impact analyses in an ecosystem context instead of a species-by-species context.[Footnote 77: 77 E.g., id.] For example, "The extent and quality of local habitat for both special-status species and species common to the Lease area," and "The richness or abundance of local species common to the Lease Area."[Footnote 78: 78 E.g., id. (emphasis added).] The terms "richness" and "abundance" are both quantifiable ecological terms that have been described in decades of ecological literature.

More transparent information on how the level of an IPF is quantitatively or qualitatively assessed is needed. As a general matter, the impact analysis should be undertaken in an objective, transparent, and, where possible, quantitative manner. In the absence of available data, BOEM should acknowledge that an IPF is indeterminate and that additional research is needed. BOEM should provide detail on how IPFs and associated criteria have been quantitatively or qualitatively measured in the FEIS.

Comment Number: BOEM-2021-0024-DRAFT-0366-44
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

B. ECOSYSTEM CHANGE SHOULD NOT BE FRAMED AS "BENEFICIAL"

The Draft EIS should not use value-laden terms (e.g., "beneficial") to describe changes in ecosystems or species. It should instead be objectively described as ecosystem change. While we agree that some offshore wind activities may result in a change in the ecosystem and, in some cases, an increase in the abundance of certain species or in overall diversity, we caution against the Draft EIS representing these changes as "beneficial." This is especially the case because it is unclear what implications these changes may have on the wider ecosystem. We recommend that the Draft EIS remain objective in language used in its impact analysis (e.g., by using terminology such as "increase," "decrease," and "change").

Comment Number: BOEM-2021-0024-DRAFT-0366-46
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

As a general matter, BOEM should also take immediate measures to address data uncertainty related to the influence of climate change on coastal and marine species and habitats (e.g., range shifts).

Acknowledging global climate change as a potential cumulative impact is not enough. BOEM should act expeditiously to obtain additional empirical data on current shifts in species and habitat distributions and work to improve its predictive modeling of future species distributions and factor this information into offshore wind project siting, construction, and operations to account for uncertainty related to climate-induced dynamic shifts in distribution (e.g., marine mammals, birds, forage fish, and sharks). [Footnote 79: 40 C.F.R. § 1502.21(b) (Explaining the propositions that the agency has an obligation to obtain

information essential to a reasoned choice among alternatives, unless the cost of doing so is unreasonable).]

Comment Number: BOEM-2021-0024-DRAFT-0366-9
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

We submit the following comments to guide BOEM in meeting its obligations under the National Environmental Policy Act in preparing a Draft EIS for the Project. Our recommendations include, inter alia, the obligation to analyze cumulative impacts, the need to require monitoring and adaptive management, and the requirement to examine a reasonable range of alternatives and mitigation strategies. We also discuss the need to have robust consultation with impacted tribes and states. We then discuss specific necessary considerations to species and resources including benthic resources, essential fish habitat, finfish and invertebrates; marine mammals; sea turtles; birds; bats; and, finally, the need to comprehensively examine the economic benefits of developing offshore wind power.

Comment Number: BOEM-2021-0024-DRAFT-0368-2
Organization: New Jersey Department of Environmental Protection
Commenter Type: State Agency

Comment Excerpt Text:

Further, NJDEP has been actively engaged with stakeholders through its Offshore Wind Environmental Resources Working Group (Working Group). This stakeholdering is a necessary component of our process, and we are committed to being transparent and accessible as offshore wind development proceeds in New Jersey. It is critical that BOEM and Ocean Wind continue stakeholder engagement with the commercial and recreational fisheries groups, as well as the local municipalities who may be impacted by the development of the windfarm. Our fishing communities and seafood industries are important parts of New Jersey's identity, and crucial components of our state's economy. We strongly encourage BOEM to engage with industry representatives now as the environmental review begins. In addition, the NJDEP suggests that BOEM and Ocean Wind continue to consult with stakeholders regarding navigational and safety concerns, including transit through and around the windfarm and between the adjacent windfarms. The NJDEP would be happy to assist with this engagement.

Comment Number: BOEM-2021-0024-DRAFT-0369-1
Commenter: Kathleen McGuire
Commenter Type: Individual

Comment Excerpt Text:

I feel the impact of installing turbines as large as the ones planned for this site really needs to be studied before they are approved. The environment impacts to the sea floor from drilling has not been studied to understand the impacts.

Comment Number: BOEM-2021-0024-DRAFT-0372-3
Organization: Garden State Seafood Association
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Finally, the pace and number of offshore wind projects in development in our region pose challenges for thorough analysis of potential impacts, informed public input, and adopting lessons learned from each project. There are over a dozen projects for which survey, design, and environmental review are already occurring and multiple additional areas in the New York Bight are planned to be leased. Work on these

projects is already taxing available resources in the commercial fishing community and we expect at BOEM as well. Consistency in approaches and adopting lessons learned from one project to the next will benefit stakeholders who seek to engage in the review process for these complex projects.

Comment Number: BOEM-2021-0024-DRAFT-0378-1
Commenter: Kim Galatro
Commenter Type: Individual

Comment Excerpt Text:

None of the "studies" that were quoted on the presentation on the 24th,, had ANYTHING to do with the Atlantic Ocean off the coast of New Jersey,,, Studies were quoted from the UK and other places.

Comment Number: BOEM-2021-0024-DRAFT-0381-10
Organization: Clean Ocean Action
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The deficiencies in the applicant's COP are directly related to BOEM's own interpretation of the National Environmental Policy Act (NEPA). Ocean Wind states in their COP that the offshore and onshore export cable routes, substations, and connections will be determined only after the draft EIS is completed. While this is technically NEPA-compliant, [Footnote 1: National Environmental Policy Act of 1969 § 102, 42 U.S.C. § 4332(C).] the public, policymakers, appropriate research entities, and organizations will not be informed of construction details until the permitting process is near completion. BOEM should seek to include impacts associated with onshore and offshore construction and operation in the draft EIS.

Comment Number: BOEM-2021-0024-DRAFT-0381-5
Organization: Clean Ocean Action
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

transparency to the public at all levels of design, construction, operation and maintenance, which means more disclosure of activities onshore and offshore with minimal redaction,

Comment Number: BOEM-2021-0024-DRAFT-0381-7
Organization: Clean Ocean Action
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Meaningful interagency review is essential at the local, state and federal level; this is especially important during the EIS development with natural resource agencies, also community and citizen resources agencies to ensure environmental justice, public health, or over-development issues are identified and addressed;

Comment Number: BOEM-2021-0024-DRAFT-0381-9
Organization: Clean Ocean Action
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Meaningful public involvement —not just hosting meetings but actual measurable evidence of project modification to meet public concerns.

Comment Number: BOEM-2021-0024-DRAFT-0384-13
Commenter: Gregory Cudnik
Commenter Type: Individual

Comment Excerpt Text:

The development of offshore wind must incorporate the voices of the communities and the industries (both tourism and fishing) that will be directly affected. Outreach and collaboration has been poor at best. No open house - town hall meeting in 6 months. Most fishing clubs I talk to are unaware. The very poor advertisement sessions do not offer answers to legitimate concerns from the public and stakeholders.

Comment Number: BOEM-2021-0024-EMAIL-003-1
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

In our role as a Cooperating Agency under NEPA, we offer the following comments and technical assistance related to significant issues, information and analysis needs for the EIS related to resources in the project area over which we have special expertise or legal jurisdiction, including associated consultation and authorization requirements. Data related to the occurrence and status of these resources, evaluation of effects to them, and development of responsive mitigation are critical elements of the NEPA process, which require early identification of such issues in the scoping process and full evaluation throughout the NEPA process.

Comment Number: BOEM-2021-0024-EMAIL-003-19
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

It is important that the analysis provides a sufficient evaluation of baseline conditions and uses the best available information to evaluate the alternatives and support the analysis of effects.

Comment Number: BOEM-2021-0024-EMAIL-003-20
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

Any conclusions related to the level and direction of project impacts should be fully supported by the analysis in the EIS and be consistent with impact definitions identified in the EIS. Importantly, the significance criteria definitions identifying the level of impacts from the project (e.g., negligible, minor, moderate, major) should not embed terms defined by other statutes (e.g., the definition of minor should not refer to the MMPA definition of “level A harassment”) or apply other statute definitions to the impact criteria used for NEPA purposes. Rather, these definitions should be written in a way that it is clear to a reader how these impact determinations consider the spectrum of effects to individual animals (e.g., temporary behavioral disturbance, injury). We also encourage you to use definitions that are appropriate for the resource being considered (e.g., benthic habitat vs. marine mammals). To the extent that any conclusions are based on inclusion of mitigation measures, those measures must be clearly defined and include an indication as to whether the measure is considered part of the proposed action and will be required upon approval, or an option that may be implemented by the developer at their own discretion. In preparation of the NEPA document for Ocean Wind, we recommend you review and incorporate

comments we have made on previous BOEM documents to ensure a robust and sufficient analysis of NOAA trust resources.

Comment Number: BOEM-2021-0024-EMAIL-003-21
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

Using the best scientific information available for all marine trust resources is critical to analyzing the impacts resulting from this project. Data used should include a sufficient range of years to reflect natural variability in resource conditions and fishery operations, but also current conditions. We recommend that fisheries and marine resource survey analysis consider at least 10 years of data up to and including data within the past two years. This is especially important for marine mammals given recent distribution and habitat utilization shifts.

Comment Number: BOEM-2021-0024-EMAIL-003-22
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

Temporary, long-term, and permanent direct and indirect impacts to water quality, protected species, habitats, and fisheries (ecological and economic) throughout construction, operation, and decommissioning should be addressed in the EIS. The temporal classification (e.g., short-term or long-term) should be appropriate for the species and types of impacts considered and should be clearly and consistently defined. The time of year that construction activities occur is also an important factor in evaluating potential biological, economic, and social impacts of the project.

Comment Number: BOEM-2021-0024-EMAIL-003-35
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

ESA Section 7 Consultation

Under section 7(a)(2) of the ESA, each Federal agency is required to ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of any endangered or threatened species. Because the activities that are reasonably certain to occur following the proposed approval of the Ocean Wind COP (including surveys, construction, operation, and decommissioning) may affect ESA-listed species and/or designated critical habitat, section 7 consultation is required. It is our understanding BOEM will be the lead Federal agency for this consultation, and that BOEM will coordinate with any other Federal agencies that may be issuing permits or authorizations for this project, as necessary, so that we can carry out one consultation that considers the effects of all relevant Federal actions (e.g., issuance of permits by the U.S. Army Corps of Engineers and/or the U.S. Environmental Protection Agency and issuance of any MMPA take authorization by NOAA Fisheries) regarding any wind energy facility proposed in the lease area.

Comment Number: BOEM-2021-0024-EMAIL-003-36
Organization: NOAA Fisheries
Commenter: Michael Pentony

Commenter Type: Federal Agency

Comment Excerpt Text:

Considerations for the EIS

We expect that any environmental documentation regarding a proposed wind facility in the lease area will fully examine all potential impacts to our listed species, the ecosystems on which they depend, and any designated critical habitat within the action area. We have developed a checklist (ESA Information Needs document) to identify information needs for considering effects of wind projects on ESA-listed species and critical habitats and encourage you to use that as you develop the EIS.We also strongly urge you to carefully consider the information we have provided for the Vineyard Wind and South Fork NEPA documents and to incorporate that into this EIS as appropriate.

Comment Number: BOEM-2021-0024-EMAIL-003-39
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

It is our understanding BOEM will develop a Biological Assessment (BA) to support BOEM's eventual request for ESA section 7 consultation. While we understand that you intend to prepare the BA as a stand-alone document (i.e., you are not planning for the EIS to serve as the BA), we anticipate and expect that the BA will be an appendix to the EIS. We are not opposed to an approach whereby the EIS would serve as the BA, provided sufficient detail and analyses can be included. We understand the BA and the NEPA document are likely to evaluate effects of activities consistent with a design envelope and are likely to take a "maximum impact scenario" approach to assessing impacts to listed species that may occur. We encourage early coordination with us to determine which impact-producing factors should be analyzed based on a "worst case" or "maximum impact" scenario and which parts of the design envelope would need to be narrowed to carry out a reasonable analysis that would support your request for section 7 consultation.

Comment Number: BOEM-2021-0024-EMAIL-003-44
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

Because activities associated with the construction of Ocean Wind have the potential to result in the harassment [Footnote 3: 2 Harassment, (as defined in the MMPA for non-military readiness activities (Section 3(18)(A)), is any act of pursuit, torment, or annoyance that has the potential to injure a marine mammal or marine mammal stock in the wild (Level A harassment) or any act of pursuit, torment, or annoyance that has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns (Level B harassment). Disruption of behavioral patterns includes, but is not limited to, migration, breathing, nursing, breeding, feeding or sheltering.] of marine mammals, we anticipate that a request for an ITA pursuant to section 101(a)(5) of the MMPA may be submitted to us by the project proponent. NOAA Fisheries' proposal to issue an ITA that would allow for the taking of marine mammals, consistent with provisions under the MMPA and incidental to an applicant's lawful activities, is a major federal action under 40 CFR 1508.1(q), [Footnote 4: All references to the Council on Environmental Quality NEPA regulations included in this letter apply to the 2020 regulations effective September 14, 2020.] requiring NEPA review. Rather than prepare a separate NEPA document, NOAA Fisheries, consistent with the CEQ regulations at 40 CFR 1506.3, intends to adopt BOEM's Final EIS to support its decision to grant or deny Ocean Wind LLC's request for an ITA

pursuant to section 101(a)(5)(A) or (D) of the MMPA. When we serve as a cooperating agency and we are adopting another agency's EIS, we ensure all resources under our jurisdiction by law and over which we have special expertise are properly described and the effects sufficiently evaluated, documented, and considered by the lead agency EIS. Of particular importance is that the Draft and Final EIS address comments and edits NOAA Fisheries provides in developing the documents. As a cooperating agency per 40 CFR 1501.8, we must determine that the Final EIS properly addresses our comments and input in order for NOAA Fisheries to determine the EIS is suitable for adoption per 40 CFR 1506.3 and NOAA's NEPA procedures. [Footnote 5: NOAA Administrative Order (NAO) 216-6A "Compliance with the National Environmental Policy Act, Executive Orders 12114, Environmental Effects Abroad of Major Federal Actions; 11988 and EO 13690, Floodplain Management; and 11990, Protection of Wetlands" issued April 22, 2016 and the Companion Manual for NAO 216- 6A "Policy and Procedures for Implementing the National Environmental Policy Act and Related Authorities" issued January 13, 2017.].

A summary of NOAA's adoption requirements is below, and the procedures are available at https://www.nepa.noaa.gov/docs/NOAA-NAO-216-6A-Companion-Manual-01132017.pdf.

Comment Number: BOEM-2021-0024-EMAIL-003-45
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

We may adopt all or portions (e.g., specific analyses, appendices, or specific sections) of the NEPA document prepared by another federal agency, regardless of cooperating agency status, if the action addressed in the adopted document (or portion) is substantially the same as that being considered or proposed by NOAA, and NOAA determines the document (or portion) satisfies 40 CFR 1506.3. Subsequently, we must determine BOEM's EIS addresses the following to be considered adequate for adoption for the issuance of ITAs:

- The other agency EIS (or portion thereof) fully covers the scope of our proposed action and alternatives and environmental impacts;

- An adequate evaluation of the direct, indirect, and cumulative impacts on marine mammals and the marine environment, including species listed under the ESA;

- An adequate discussion of the MMPA authorization process necessary to support implementation of the action;

- A reasonable range and evaluation of alternatives to the proposed action, including a no action alternative and alternatives to mitigate adverse effects to marine mammals, including species listed under the ESA;

- There is a thorough description of the affected environment including the status of all marine mammals species likely to be affected;

- There is a thorough description of the environmental impacts of the proposed action and alternatives, including direct, indirect, and cumulative impacts on marine mammals and projected estimate of incidental take;

- Identification and evaluation of reasonable mitigation measures to avoid or minimize adverse impacts to marine mammals, including species listed under the ESA; and

- The listing of agencies consulted.

Comment Number: BOEM-2021-0024-EMAIL-003-52
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

The EFH expanded consultation process allows the maximum opportunity for NOAA Fisheries and the Federal action agency - in this case, BOEM - to work together to review the action's impacts on EFH and federally managed species, and for NOAA Fisheries to develop EFH conservation recommendations (EFH CRs). Although the EFH consultation is a separate review mandated pursuant to the MSA, our EFH regulations encourage the consolidation of the EFH consultation with other interagency consultation, coordination, and environmental review procedures required by other statutes, such as NEPA, where appropriate. Because the information contained within the EIS is needed to support a complete EFH Assessment, we request BOEM use the NEPA document as the vehicle within which to present the EFH assessment. The EFH Assessment should be included within a separate section or appendix of the document and be clearly identified as an EFH assessment.

Comment Number: BOEM-2021-0024-EMAIL-003-54
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

As stated in our habitat mapping recommendations, EFH checklist, and through regular communication with BOEM, early coordination in the consultation process, particularly for projects at the size and scale of offshore wind development, is essential. We are concerned about the lack of early coordination and communication for the Ocean Wind project, particularly the lack of coordination on habitat mapping and data collection. As we have previously discussed, early coordination on proposed habitat mapping procedures, including: 1) data collection (sampling design, sites, replication, and sampling methodology); 2) data processing and interpretation; and 3) the development of maps that accurately characterize and delineate fish habitat, benefits all parties and will help avoid unnecessary delays in project development and consultations. It is critical that the data being collected can be used to accurately characterize and delineate fish habitat within the lease area and cable corridors to ensure we can differentiate areas of sensitive and complex habitats and provide appropriate conservation recommendations. Adjustments to early survey plans based on our input will likely result in significantly better habitat data, which will streamline project review. Moving forward with habitat mapping efforts without appropriate coordination may result in the need for additional field seasons/sampling to collect and interpret additional data to accurately map fish habitat for consultation purposes.

Comment Number: BOEM-2021-0024-EMAIL-003-55
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

In the absence of accurate fish habitat data, we must take a conservative approach to our assessment of project impacts and development of conservation recommendations for the project. We recommend a habitat mapping-specific meeting be scheduled with us for the Ocean Wind Project as soon as practicable. Additionally, we recommend all data related to habitat mapping (acoustic survey results, seafloor sampling data, GIS data, figures/maps, etc.) be shared with us as soon as practicable (once it is processed), so we can begin reviewing and providing comments, which will allow for more streamlined

project review and consultation. To further assist you in the development of a complete and sufficient EFH Assessment and to inform the Fish and Wildlife Coordination Act (FWCA) consultation, we plan to provide additional technical assistance in a separate letter.

Comment Number: BOEM-2021-0024-EMAIL-003-56
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

Fish and Wildlife Coordination Act

The FWCA provides authority for our involvement in evaluating impacts to fish and wildlife from proposed federal actions that may affect waters of the United States. The FWCA requires that wildlife conservation be given equal consideration to other features of water resource development programs through planning, development, maintenance and coordination of wildlife conservation and rehabilitation. The Act does this by requiring federal action agencies to consult with us "with a view to the conservation of wildlife resources by preventing loss of and damage to such resources as well as providing for the development and improvement thereof in connection with such water-resource development" (16 USC 662.) One of the reasons that Congress amended and strengthened the FWCA in 1958 was that it recognized that "[c]ommercial fish are of major importance to our nation[,]" and that federal permitting agencies needed general authority to require "in project construction and operation plans the needed measures for fish and wildlife conservation" S.Rep. 85-1981 (1958). As a result, our FWCA recommendations must be given full consideration by federal action agencies. BOEM's consultation with us under the FWCA may occur concurrently with the EFH consultation under the MSA.

Comment Number: BOEM-2021-0024-EMAIL-003-66
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

Moving forward, we have serious concerns that the high number of projects BOEM intends to initiate and potentially approve by the end of 2024 will make it very difficult for NOAA Fisheries to provide the detailed level of review and interagency cooperation we have provided to date given existing resources. The extensive interagency coordination we have done with BOEM to improve the NEPA documents for other wind projects will no longer be feasible, and we will be required to take a more limited cooperating agency role in the process. To ensure we can continue to meet our collective objectives and ambitious timelines, it is imperative that we capitalize and build upon our successful collaboration on recent projects and integrate lessons learned into future project development and review. This will improve the quality of future projects, expedite review, and maximize the utility of available resources.

Comment Number: BOEM-2021-0024-EMAIL-004-13
Organization: Long Beach Island (LBI) New Jersey Coalition for Wind Without Impact
Commenter: Bob Stern
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Process: This NOI is premature and vague and should be withdrawn. According to NEPA rule §1501.9(d), a NOI should be published when a proposal is sufficiently developed to allow for meaningful public comment. The NOI only says that that "up to 98 wind turbine generators" will be installed. The

public cannot meaningfully comment without knowing whether we are talking about 10, 38 (see above) or 98 turbines.

The NOI is required to provide a preliminary description of the proposed action but "preliminary" still requires an actual proposal, not just a limit of "up to 98 wind turbine generators". The number of turbines proposed needs to be specified, as well as their proposed size, dimensions, spacing and approximate location. It should state whether direct drive turbines as opposed to gearbox will be used to reduce operational noise and impact on the North Atlantic Right Whale. These are critical parameters necessary to describe the environmental impact. If the applicant does not know them or wish to share them, this EIS cannot logically proceed.

Comment Number: BOEM-2021-0024-EMAIL-004-29
Organization: Long Beach Island (LBI) New Jersey Coalition for Wind Without Impact
Commenter: Bob Stern
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The BOEM has not responded to, and apparently ignored many previous letters and requests, including those from LSI mayors, to provide early input to the Atlantic Shores Offshore Wind project off of LBI. It did not respond to our letter of March 1, 2021 recommending specific alternatives for these projects 1e1 We hope that in the future the Bureau will begin to take public comments seriously, and create a dialogue with us in a respectful, professional manner.

Comment Number: BOEM-2021-0024-EMAIL-004-7
Organization: Long Beach Island (LBI) New Jersey Coalition for Wind Without Impact
Commenter: Bob Stern
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The BOEM's NEPA strategy this far is lacking, both from a logical decision-making and legal standpoint. The BOEM did a programmatic EIS back in 2007. It looked at different sources of energy, for example, offshore wind versus coal, versus natural gas in a generic sense and concluded that offshore wind was viable and should be pursued. The BOEM did an internal analysis of different wind energy areas, like Hudson South, outside of the NEPA process and closed to the general public that considered significant environmental impact differences among potential lease areas. Then it leases those areas identified and does an environmental assessment on insignificant impacts related only to site survey activities, that may have public review.

In other words, the BOEM does a NEPA document often with public review on insignificant environmental impacts and an internal document without general public review outside of the NEPA on significant impacts. This is backwards.

Comment Number: BOEM-2021-0024-EMAIL-004-8
Organization: Long Beach Island (LBI) New Jersey Coalition for Wind Without Impact
Commenter: Bob Stern
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The Missing Link

The fundamental environmental review problem here is that for an agency whose main function is to lease areas, the BOEM never does an EIS analysis of turbine operation in alternative areas. This should have been done to support BOEM's adoption of the Wind Energy Areas for New Jersey in 2010. If it had done

that and selected areas to lease that did not have unacceptable visible or other environmental impacts, we wouldn't be facing the unreasonable closest lease areas of any in the world.

The identification of areas suitable for leasing is a major federal action significantly affecting the environment and therefore requires an EIS.

Pursuant to NEPA rules, §1508.1 (q)(3)(ii), a major federal action includes the:

"Adoption of formal plans, such as official documents prepared or approved by federal agencies which prescribe alternative uses of Federal resources, upon which future agency actions will be based."

This definition certainly applies to the narrowing by the BOEM internally of broader call areas into the adoption of specific Wind Energy Areas to be leased in the future for offshore wind development, and such identification of certain wind energy areas versus others clearly has significant environmental and ocean resource use impacts.

Further, the BOEM itself states in its Outer Continental Shelf Alternative Energy Programmatic EIS in Section 5.2.21.6 that the choice of location for an offshore wind facility is the single most important opportunity for visual impact mitigation. The same is true for other impacts.

A precedent for doing such an EIS can be found in the recent one prepared by the Bureau of Land Management on oil and gas leasing area alternatives in the Coastal Plain of the Alaska Arctic Refuge. The BOEM should have followed the example of its sister agency.

Therefore, the adoption by the BOEM of Wind Energy Areas for the New York Bight, which includes the Hudson South area, should have been supported by an EIS and general public input.

Comment Number: BOEM-2021-0024-EMAIL-005-10
Organization: City of Beach Haven, New Jersey
Commenter: Colleen Lambert
Commenter Type: Local Agency

Comment Excerpt Text:

Reasonable alternatives are the lynchpin of any EIS and it is the BOEM's responsibility to describe such alternatives in the NOI. But the BOEM has provided no alternatives at all to what it calls the applicant's goals. While new National Environmental policy Act (NEPA) regulations do call for, where applicable, that the goals of the applicant be considered in the crafting of alternatives, it also requires that the BOEM exercise its authority to develop offshore wind in a safe and environmentally responsible manor, and define federal actions and alternatives to the company's proposal that do so.

Here the BOEM has abrogated its responsibility entirely to the applicant by providing no alternative at all to the applicant's plan. Assuming that there is a substantive public purpose and benefit to secure the level of offshore wind power to the affected electric utilities from the up to 98 turbines proposed (which has not yet been described, see comment below on purpose and need) there are reasonable alternatives to the company's proposal that will produce that same power level, avoid the severe socioeconomic harm to shore communities described below, and therefore must be included in the draft EIS.

Comment Number: BOEM-2021-0024-EMAIL-005-17
Organization: City of Beach Haven, New Jersey
Commenter: Colleen Lambert
Commenter Type: Local Agency

Comment Excerpt Text:

The BOEM's NEPA strategy is lacking, both from a logical decision-making and possibly legal standpoint. The BOEM did a programmatic EIS back in 2007. That looked at different sources of energy, for example, offshore wind versus coal, versus natural gas in a generic sense and concluded that offshore wind was viable and should be pursued. It has done an internal assessment of different wind energy areas, like Hudson South, outside of the NEPA and closed to the general public that considered significant environmental impact differences among potential lease areas. Now it will do a shorter environmental assessment on insignificant impacts related only to site survey activities, that will have public review.

So, the BOEM does a NEPA document with public review on insignificant environmental impacts and an internal document without general public review outside of the NEPA on significant impacts. This is backwards.

The BOEM has just concluded its screening and identification of areas for wind energy development in the New York Bight, which includes the Hudson South area, and adopted those areas as the basis for future lease sales. That was a positive technical effort, but It should have done an EIS on that effort with public review.

The identification of areas suitable for leasing is a major federal action significantly affecting the environment and therefore requires an EIS.

Comment Number: BOEM-2021-0024-EMAIL-005-27
Organization: City of Beach Haven, New Jersey
Commenter: Colleen Lambert
Commenter Type: Local Agency

Comment Excerpt Text:

For all the reasons explained above, this NOI is inadequate. It should be revised and reissued following a 60-day public comment period.

Comment Number: BOEM-2021-0024-EMAIL-005-6
Organization: City of Beach Haven, New Jersey
Commenter: Colleen Lambert
Commenter Type: Local Agency

Comment Excerpt Text:

The NOI does not provide adequate time for review, provides no alternatives to the proposal, and must be revised and re-issued.

Comment Number: BOEM-2021-0024-EMAIL-005-7
Organization: City of Beach Haven, New Jersey
Commenter: Colleen Lambert
Commenter Type: Local Agency

Comment Excerpt Text:

The adoption by BOEM of recommended Wind Energy Areas for the New York Bight, which includes the Hudson South area, should have been supported by environmental impact statement (EIS) and public input.

Since that EIS was not done, NEPA compliance requires at a minimum that any of those NY Bight areas Identified serving the same electric market as this proposal be included as reasonable alternatives in this project EIS.

Comment Number: BOEM-2021-0024-EMAIL-005-9
Organization: City of Beach Haven, New Jersey
Commenter: Colleen Lambert
Commenter Type: Local Agency

Comment Excerpt Text:

Regarding the process, the BOEM allows only thirty days for public to review and comment on a NOI and Construction and Operations Plan consisting of over 600 pages and 31 Appendices, something that the applicant and the BOEM have had five years to work on. That is an inadequate period of time and a slight to the general public. The BOEM must allow at least another30 days for review and comment on this notice.

A NOI requires a brief description of the alternatives to be analyzed in the EIS. Since, as discussed below, the BOEM has improperly identified no alternatives at all to the company's proposal and asked the public to define those alternatives, it must issue a revised NOI before proceeding to the draft EIS. Otherwise, the purpose of the NOI which is to let the public know what the scope of the EIS will be, is defeated. Under the BOEM process here no one will know what alternatives, if any, will be included in the draft EIS until itis issued and then it will be too late to change the scope of the EIS and provide a reasonable set of alternatives for informed decision-making. Therefore, the BOEM must issue a revised NOI soon after the 60-day comment period closes.

Comment Number: BOEM-2021-0024-TRANS-41321-0001-3
Organization: Garden State Seafood Association
Commenter: Scott Mackey
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

regarding the NEPA process and BOEM's presentation today, they clearly stated that the NEPA process was to be used prior to making decision. Obviously lots of decisions have been made without the use of the NEPA process to date. The original design envelope and all of the meetings between the developers and BOEM getting to this point would have had better results if the public could have provided input into that process. And I specifically believe the section 106 substitution is a result of not using the NEPA process earlier as we move through this phase.

Comment Number: BOEM-2021-0024-TRANS-41321-0003-1
Organization: Pinelands Preservation Alliance
Commenter: Andrew Gold
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

PPA supports wind energy development as a means of reducing carbon emissions and reaching New Jersey's clean energy goals, but these projects must be done in compliance with Pinelands, CAFRA and all other applicable environmental regulations.

Comment Number: BOEM-2021-0024-TRANS-41321-0005-5
Organization: Laborers International Union of North America, LIUNA
Commenter: Ciro Scalera
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

I have listened to all the presentations this afternoon, and it is fairly clear that over the past decade, numerous studies have been done by BOEM, NJDEP, Orsted, looking at virtually every aspect of this

proposed project. Our ask would be that you consider and recognize these studies and the modifications that were made from these studies as you finalize an impact statement.

Comment Number: BOEM-2021-0024-TRANS-41321-0015-3
Organization: Fishermen's Headquarters Bait and Tackle
Commenter: Greg Cudnik
Commenter Type: Individual

Comment Excerpt Text:

Communications, community outreach, collaboration has been poor at best. The truth is the majority do not know about the full scope of the project and exactly what is taking place.

Comment Number: BOEM-2021-0024-TRANS-41321-0018-1
Commenter: Martha
Commenter Type: Individual

Comment Excerpt Text:

I only just heard of this meeting because I happen to open my mayor's newsletter so I agree with Scott Mackey who was representing the fishermen, that this hasn't been advertised enough and I am just appalled that this is even proposed.

Comment Number: BOEM-2021-0024-TRANS-41321-0020-7
Commenter: Suzanne Hornik
Commenter Type: Individual

Comment Excerpt Text:

We were not consulted. Nobody asked us anything but you want to destroy our entire community and quality of life by putting this here? That doesn't make sense. A lot of the people still don't know this is happening, our second homeowners because nobody is saying anything about it down here, and we are not even going to benefit from the electric as I understand, it's going to go north. This makes no sense and I am very against it.

Comment Number: BOEM-2021-0024-TRANS-41521-0010-2
Organization: Fishermen's Headquarters Bait and Tackle
Commenter: Greg Cudnik
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

So for outreach and collaboration at this point has been poor at best. No open houses in six months, why the silence. Legitimate concerns and questions were raised about larval distribution, cold pool disruption and the radical changes to essential fish habitats which change migratory patterns. They are still unanswered, drawing parallels from two different systems is unacceptable.

Comment Number: BOEM-2021-0024-TRANS-42021-0008-1
Organization: Urban Coast Institute at Monmouth University
Commenter: Tony McDonald
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

First I want to recognize that this is really a scoping session for the development of the information within the environmental impact statement, so I do recognize that there is a variety of kind of different issues that are kind of being discussed today, but I am trying to think most specifically about the environmental

impact statement and one thought is that I do think that we need to be very cognizant that this is not a replacement as we heard from the NJDEP and other presenters for the other environmental reviews, and so there are many opportunities in which we should continue as a community to track the environmental impacts and ensure that they are done thoroughly.

Comment Number: BOEM-2021-0024-TRANS-42021-0009-6
Organization: Cape May County Chamber of Commerce
Commenter: Vicky Clark
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

We also acknowledge the concerns that have been voiced by major stakeholders in these industries and believe that continued dialogue at every stage of the offshore wind production is required for these industries to coexist in the Atlantic and along our coast line for the betterment of our economy and environment both for today and for future generations.

Comment Number: BOEM-2021-0024-TRANS-42021-0010-8
Commenter: Joe De Finnis
Commenter Type: Individual

Comment Excerpt Text:

One last comment is that I am not really thrilled about the lack of information on this project up until the last five to six months it seems like, and I have spoken to Ocean City New Jersey Council people and they told me they only learned about it within the last four to five months. I think that that's not good.

Comment Number: BOEM-2021-0024-TRANS-42021-0016-5
Commenter: Chris Gasman
Commenter Type: Individual

Comment Excerpt Text:

Third, sequencing, with other requirements I realize those are other tasks forces with other decisions about, you know, when do we retire this coal plant or nuclear power or natural gas or whatever would have you, I'd be curious how the analyses and it's important to me how this project is thinking about those other analyses, again, we can't wait for them and that's part of the trade off to me of the do nothing scenario.

Comment Number: BOEM-2021-0024-TRANS-42021-0027-1
Organization: Research and Development Council of New Jersey
Commenter: Anthony Ciatello
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

They have briefed all the stakeholders about this new energy source and they have established working relationships with academia, labor and manufacturing operations. There have been many briefings for the public who were interested they have worked hard to establish a good working relationship with the legislature in the process.

Comment Number: BOEM-2021-0024-TRANS-42021-0028-3
Organization: Bad Fish Fishing Charters
Commenter: Brian Williams
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Fourth, be fully transparent in the process of all phases of development on both the ocean and the bay front and finally assure full access around the wind farm structure for the angling, diving and tourism community. Thank you for your time and please consider the needs of the recreational angling and public land use community while moving forward with this project.

Comment Number: BOEM-2021-0024-TRANS-42021-0029-2
Commenter: Allison Arne
Commenter Type: Individual

Comment Excerpt Text:

So once again, I just wanted to say that I do definitely support offshore wind, I do want to see it done responsibly and hopefully we will continue to have the amount of public comment hearings and periods as well as the ability to ask questions and really be part of the process and not apart from it.

Comment Number: BOEM-2021-0024-TRANS-42021-0031-3
Organization: Greater Atlantic City Chamber
Commenter: Michael Chate
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Ocean Wind is engaged in extensive dialogue to understand the local considerations and sensitivities of offshore wind farms locations. These communications efforts and will continue to be critical as they engage in public education and public outreach efforts designed to help New Jersey stakeholders understand the complexities and timing involved with building the state's first offshore wind farm. Orsted is constantly communicating with elected officials, residents, wildlife advocates, fishing communities and other key stakeholders to ensure the flow of accurate information.

A.2.18 Other Resources and Uses

Comments associated with this issue appear in the sub-issues below.

A.2.18.1. Aviation

Comment Number: BOEM-2021-0024-DRAFT-0090-7
Commenter: Louise Halprin
Commenter Type: Individual

Comment Excerpt Text:

Ocean City has a small airport that doesn't always have the most experienced pilots (a pilot crashed their single engine on the beach in 2019). Will the wind turbines be illuminated at night? If so, what is the distance (Topo/from above) and what is the distance from the shoreline that will be visible? A "Photometric Study" should be provided to residents, as well as to City management.

7. Atlantic City Airport (ACY), which is an international airport would be affected by the wind turbines both at night and daylight hours.

Comment Number: BOEM-2021-0024-TRANS-41321-0002-6
Commenter: Louise Halprin
Commenter Type: Individual

Comment Excerpt Text:

you know you did address that to a point, but I really worry about what impact that's going to have on, you know, the airplanes, traffic that we have a lot of Coast Guard traffic.

A.2.18.2. Military

Comment Number: BOEM-2021-0024-DRAFT-0316-5
Commenter: M McCarroll
Commenter Type: Individual

Comment Excerpt Text:

In a coast once guarded by bunkers, does it make any sense for a foreign owned corporation to establish so close to the homeland?

A.2.18.3. Other

Comment Number: BOEM-2021-0024-DRAFT-0111-6
Commenter: Natalie Thibault
Commenter Type: Individual

Comment Excerpt Text:

Please halt these projects which will also affect current air traffic patterns, Coast Guard rescue missions and Military defense endeavors.

Comment Number: BOEM-2021-0024-DRAFT-0342-1
Commenter: John Feairheller, Jr.
Commenter Type: Individual

Comment Excerpt Text:

The list of Regulatory Permits and Approvals on page 40 of 159 of the Construction Operations Plan does not include Cape May County road opening and closing permits of Ocean City road Opening and road closing permits. This in turn distorts the Construction schedule Figure 4.5-1 on page 61.

Road Opening Permits are for digging up the street and road closings are limitations to normal traffic in the street or on the sidewalk.

Given the locations of the Onshore export cables permits for work during the 2nd and 3rd quarters of the year are unlikely. Access at all three locations is necessary during the 2nd quarter to prepare for the 3rd quarter use by the public.

Road closing plans must include provisions for handicapped accessible pedestrian detours unless all construction activity is limited to the cartway, between the curbs.

Comment Number: BOEM-2021-0024-DRAFT-0354-2
Organization: New York State Department of State
Commenter Type: State Agency

Comment Excerpt Text:

Offshore wind development continues to be increasingly regional and interconnected in nature, with export cables and port and support facilities spanning a broad geography. The potential for interaction with State uses and resources is significant, and even greater when considering that maritime industries like shipping and commercial fishing are themselves regional and interconnected in nature. And as our knowledge of ocean ecosystems increases, the connections between New York and the ecologically diverse ocean resources in the New York Bight have only become more complex.

Just as New York's review is predicated on better understanding and minimizing the potential effects on its uses and resources, federal agencies are compelled to provide for such a review when the available information supports a reasonably foreseeable effect.

A.2.19 Other Topics Not Listed

Comments associated with this issue appear in the sub-issues below.

A.2.19.1. Coastal Zone Consistency

Comment Number: BOEM-2021-0024-DRAFT-0354-1
Organization: New York State Department of State
Commenter Type: State Agency

Comment Excerpt Text:

DOS requests that BOEM's EIS evaluate potential impacts to New York's coastal uses and resources as described in the enclosed letter (see enclosure). The Department's request to undertake a federal consistency review of the proposed activity is being submitted to BOEM in accordance with federal procedures. [Footnote 1: Pursuant to 15 CFR §§ 930.53(a)(2) and 930.54.] The Department requests that BOEM consider this demonstration of coastal effects in its scoping phase of the EIS.

Comment Number: BOEM-2021-0024-DRAFT-0354-15
Organization: New York State Department of State
Commenter Type: State Agency

Comment Excerpt Text:

The New York State Department of State (DOS or Department), as the administrator of the State's federally-approved Coastal Management Program (CMP), requests approval to undertake a federal coastal consistency review of the Ocean Wind Construction and Operations Plan (COP) as a listed activity that does not have a described geographic location, pursuant to 15 CFR §§ 930.53(a)(2) and 930.54 and in accordance with the procedural requirements of 15 CFR Part 930, Subpart E. [Footnote 1: 1 "The term 'OCS plan' means any plan for the exploration or development of, or production from, any area which has been leased under the Outer Continental Shelf Lands Act (43 U.S.C. 1331 et seq.), and the regulations under that Act, which is submitted to the Secretary of the Interior or designee following management programapproval and which describes in detail federal license or permit activities." 15 CFR § 930.73. The preparation of a COP is a plan for renewable energy projects on the OCS and is reviewed for federal consistency review in accordance with the procedural requirements in 15 CFR Part 930 Subpart E. See 43 U.S.C. § 1337(p); see also 30 CFR § 585.620. The NYS CMP list the following activities, in relevant part at pp. II-9-20: "…exploration and development plans, and any other permits or authorizations granted for activities described in detail in OCS exploration, development, and production plans." See also 15 CFR § 930.74. In the alternative, if the review of a COP for the Ocean Wind lease area is deemed to be an unlistedactivity in the NYS CMP, then DOS submits this request in accordance with 15 CFR § 930.54 only.]

DOS seeks a review of activities and federal permits described in detail in the Ocean Wind COP occurring on the Outer Continental Shelf (OCS) outside of the State of New Jersey's territorial waters. Offshore wind development continues to be increasingly regional and spanning a broad geography with the potential for interactions with State uses and resources in large part due to their own inherent regional and interconnected nature. As demonstrated in this letter, New York's review of the Ocean Wind COP is warranted to better understand and address these potential effects in close coordination with federal agencies, the State of New Jersey, and the developer Ocean Wind, LLC (Ocean Wind or developer), who all share a common desire to advance appropriate development in furtherance of the region's ambitious renewable energy goals.

Comment Number: BOEM-2021-0024-DRAFT-0354-17
Organization: New York State Department of State
Commenter Type: State Agency

Comment Excerpt Text:

TIMELINE

As the Department received an electronic copy of the BOEM Notice of Intent to prepare an Environmental Impact Statement (EIS) for the Ocean Wind project on March 30, 2021, [Footnote 2: 86 FR 16630 [March 30, 2021], Docket No. BOEM-2021-0024] the Department submits this letter within the statutory timeframe in accordance with 15 CFR § 930.54 (a) and (b) to National Oceanic and Atmospheric Administration's (NOAA) Office for Coastal Management (OCM), the Bureau of Ocean Energy Management (BOEM), and the developer, for review of the COP. Prior to this date, the Department was unaware of the status of this proposed activity. Therefore, the publication of the Notice of Intent in the Federal Register initiates the 30-day period for DOS to request review of the proposed activity.

There are additional requirements and timeframes resulting from the Department's written notice. BOEM and the developer have 15 days from receipt of the State's notice to provide comments to OCM regarding the Department's request. OCM will issue a decision to approve or disapprove the Department's request. BOEM may not authorize the activity unless OCM denies the Department's request or, if OCM approves the Department's request, the Department concurs with the developer's consistency certification. [Footnote 3: 15 CFR § 930.54] If OCM approves the Department's request, the developer is responsible for amending their COP to include a consistency certification to New York State and providing a copy to the Department along with all necessary data and information, as set forth in 15 CFR §§ 930.57, 930.58(a), and 15 CFR § 930.76. [Footnote 4: See 15 CFR § 930.58(a)(2). "The management program as originally approved or amended (pursuant to 15 CFR part 923, subpart H) may describe data and information necessary to assess the consistency of federal license or permit activities."; see NYS CMP, pp. II - 9-15 and II-9-16.]

Comment Number: BOEM-2021-0024-DRAFT-0354-18
Organization: New York State Department of State
Commenter Type: State Agency

Comment Excerpt Text:

REASONABLY FORESEEABLE EFFECTS TO NEW YORK'S COASTAL USES AND RESOURCES

The Ocean Wind project is located in the New York Bight, approximately 40 nautical miles (74 km) south of New York's Coastal Zone. The proposed activity in federal waters, as characterized in the COP, would have reasonably foreseeable effects to New York's commercial shipping and navigation. This analysis, created with federal data, demonstrates potential direct and indirect effects to coastal uses and resources located outside of New York's coastal zone.

A.2.19.2. Noise

Comment Number: BOEM-2021-0024-DRAFT-0008-2
Commenter: Robin McConekey
Commenter Type: Individual

Comment Excerpt Text:

-Construction Methods Length: its been proven to be detrimental and even deadly to marine life. The on going noise and vibrations of working turbines are also an issue.

Comment Number: BOEM-2021-0024-DRAFT-0112-10
Commenter: Robert and Joann Zuczek
Commenter Type: Individual

Comment Excerpt Text:

The wind industry does not want the general public and responsible public officials to know that there is much evidence on infra-and LFN wind turbine noise including the facts that: More megawatts produced by more powerful wind turbines means a greater proportion of infrasound low frequency noise is generated and this infrasound is known to travel very, very long distances.

Comment Number: BOEM-2021-0024-DRAFT-0112-11
Commenter: Robert and Joann Zuczek
Commenter Type: Individual

Comment Excerpt Text:

Stronger winds, higher air moisture, lower background noise in and ocean environment, temperature inversions, etc. can mean greater adverse impacts from relatively higher levels of infra-and LFN noise pollution.

Comment Number: BOEM-2021-0024-DRAFT-0112-12
Commenter: Robert and Joann Zuczek
Commenter Type: Individual

Comment Excerpt Text:

There are currently no known models that can accurately predict real wind farm infrasound and low frequency noise pollution

Comment Number: BOEM-2021-0024-DRAFT-0112-17
Commenter: Robert and Joann Zuczek
Commenter Type: Individual

Comment Excerpt Text:

One of the main issues caused by the construction and operation of offshore wind farms (OWF's) is that they emit a lot of noise into the marine environment. Known as marine noise pollution, this can affect the behaviors of marine animals as well as potentially causing serious injury. Pile-driving during the construction of OWF's [bold: can generate noise up to 200 dB], while the operation generates up to 120 dB. This noise is mainly generated above the water but transmits through the tower and is then radiated into the surrounding water. Adding to pre-existing noise from other sources. This can ffect animal behavior, particularly those that are more sensitive to sound, that rely on their use of vocalization for communication and those that use echolocation for navigation, such as cetaceans (whales, dolphins and porpoises).

Comment Number: BOEM-2021-0024-DRAFT-0113-2
Commenter: Meaghan Zanfardino
Commenter Type: Individual

Comment Excerpt Text:

The on going noise and vibrations of working turbines are also an issue to marine life.

Comment Number: BOEM-2021-0024-DRAFT-0134-4
Commenter: Kate Hayden
Commenter Type: Individual

Comment Excerpt Text:

If this project is approved, it will be extremely disruptive to the marine environment and the animals that make their homes in these waters. The sound of the piles being driven into the seabed can be heard within 7 nautical miles, which is extremely disturbing to the sea life.

Comment Number: BOEM-2021-0024-DRAFT-0146-1
Commenter: Angelo Lovallo
Commenter Type: Individual

Comment Excerpt Text:

The 2018 World Health Organization Guidelines strengthened evidence for cardiovascular and metabolic health effects from wind turbine noise. Wind companies are not meeting noise guidelines. While the Globe Gazette editorial does acknowledge some may find life near a turbine annoying, it does not address that sleep deprivation no matter the reason is known to cause a number of health problems including hypertension, diabetes and heart disease.

While sound lower then 20mHz cannot be heard by the human ear, this sound termed infrasound is a type of energy and needs to be more thoroughly studied. The wind companies contest infrasound being of any consequence and yet in the draft contract we were given one must agree to noise, vibration, air turbulence, wake and other effects attributable to wind turbines.

Comment Number: BOEM-2021-0024-DRAFT-0197-1
Commenter: Joe Wilson
Commenter Type: Individual

Comment Excerpt Text:

I am concerned about the amount of noise both above and below the surface of the water, plus the affect the vibrations may have on marine life and recreational fishing.Please advise if the noise from the mono-pile installation is expected to be heard from the beach and how many nautical miles it will travel underwater to affect fishing.

Comment Number: BOEM-2021-0024-DRAFT-0220-10
Commenter: Joann Zuczek
Commenter Type: Individual

Comment Excerpt Text:

One of the main issues caused by the construction and operation of offshore wind farms (OWF's) is that they emit a lot of noise into the marine environment. Known as marine noise pollution, this can affect the behaviors of marine animals as well as potentially causing serious injury. Pile-driving during the construction of OWF's can generate noise up to 200 dB, while the operation generates up to 120 dB. This noise is mainly generated above the water but transmits through the tower and is then radiated into the surrounding water. Adding to pre-existing noise from other sources. This can affect animal behavior, particularly those that are more sensitive to sound, that rely on their use of vocalization for communication and those that use echolocation for navigation, such as cetaceans (whales, dolphins and porpoises).

Comment Number: BOEM-2021-0024-DRAFT-0220-2
Commenter: Joann Zuczek
Commenter Type: Individual

Comment Excerpt Text:

There have been documented studies that people have experienced serious problems with smaller turbines even at greater distances than those proposed, including but not limited to sleep disturbances, panic episodes, sensations of internal pulsation which arise while awake or asleep, nausea, racing heartbeats, ringing or buzzing in the ears (tinnitus). Doctors have called it "wind turbine syndrome" and determine that its primary cause is the effect of low-frequency wind turbine noise on the organs.

Comment Number: BOEM-2021-0024-DRAFT-0220-7
Commenter: Joann Zuczek
Commenter Type: Individual

Comment Excerpt Text:

The wind industry does not want the general public and responsible public officials to know that there is much evidence on infra-and LFN wind turbine noise including the facts that: More megawatts produced by more powerful wind turbines means a greater proportion of infrasound low frequency noise is generated and this infrasound is known to travel very, very long distances.

3. Stronger winds, higher air moisture, lower background noise in and ocean environment, temperature inversions, etc. can mean greater adverse impacts from relatively higher levels of infra-and LFN noise pollution.

4. There are currently no known models that can accurately predict real wind farm infrasound and low frequency noise pollution

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Comment Number: BOEM-2021-0024-DRAFT-0226-1
Commenter: Denise Philipp
Commenter Type: Individual

Comment Excerpt Text:

Please stop the wind farms in NJ. The harmful impact that this will cause is unacceptable. We have protected and endangered species that this will harm kill. The noise that the pile driving will create involves sound pressure levels that are high enough to impair the hearing of marine mammals. We do not know the full effects of this harmful disruption.

Comment Number: BOEM-2021-0024-DRAFT-0335-3
Organization: The Nature Conservancy
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

TNC is particularly concerned about the use of monopiles for the Ocean Wind Project and the pile driving necessary to install 98 wind turbine generators (WTGs) and associated offshore substations. Pile driving noise is not only a major impact of concern for North Atlantic Right Whale (NARW), it also is an impact of concern for all marine mammals, sea turtles, and virtually all other taxa of marine life. Populations of marine mammals, sea turtles, fish and invertebrates stand to experience cumulative impacts resulting from chronic exposure to pile driving noise during construction of this project, and all the other projects in the construction pipeline.

Comment Number: BOEM-2021-0024-DRAFT-0335-8
Organization: The Nature Conservancy
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Finally, TNC is aware that there are still some uncertainties around the magnitude and extent of the sound fields that will be generated by the first full-scale offshore wind projects constructed in the United States. In addition to the sound propagation modeling being conducted by Ørsted for anticipated pile driving activities associated with construction, we recommend use of applicable sound field measurements from other locations that could help more clearly articulate anticipated pile driving noise for this project. This includes analyses of sound field measurements taken earlier this year during the installation of the two turbine CVOW project in federal waters off Virginia. Monitoring the magnitude and extent of sound propagation during construction of the first US wind farms is critical and should be financially supported by BOEM to facilitate the growth of responsible offshore wind energy development in the US. A thorough network of non-proprietary sound monitoring stations around an early wind farm construction project can become a framework for multiple concurrent research and monitoring projects on several key taxa of marine life that can help inform refinement, through an adaptive management approach, of the best management practices, permit conditions and other requirements for subsequent projects. This was a topic of broad agreement in a workshop recently hosted by NYSERDA on setting research and monitoring priorities for cumulative impacts of offshore wind power generation on fish and mobile invertebrates, with equal applicability to marine mammals and sea turtles.

Comment Number: BOEM-2021-0024-DRAFT-0340-1
Commenter: John Feairheller, Jr., PP
Commenter Type: Individual

Comment Excerpt Text:

Living in the Historic District of Ocean City year-round there are instances where weather conditions align, and the passing ship is clearly and briefly heard. The ship is in motion and the noise disappears. This usually occurs at night in the winter when competing noise sources are absent.

Appendix R Noise Supplementary Material is inadequate. The section on operational noise is conjecture and should be revised to include operating noise levels of the wind turbines to be used and the expected level at the shoreline and within the historic district of Ocean City calculated. The frequency of such occurrences if at all will be a function of wind direction, speed which also control the wind turbine operation. The calculation should demonstrate that nodes of sound reinforcement are absent from the historic district. Attached are published values for Sound Absorption.

Appendix R Noise Supplementary Material is inadequate. First the typical noise levels for construction equipment is given for a distance of 50 feet. The proposal to use 50-foot-wide rights of way paces the equipment no more than 25 feet from the property line and in specific instances within the historic distances within 29 feet of window groups of Key historic buildings [See original attachment for photocopy excerpts of “Handbook of Chemistry and Physics, A ready-Reference Book of Chemical and Physical Data.”

Comment Number: BOEM-2021-0024-DRAFT-0364-26
Organization: Oceana
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The EIS should include alternatives to use best commercially available technology and methods to minimize sound levels from pile driving coupled with a robust monitoring and reporting program to ensure compliance.

The EIS should include alternatives to require noise reduction technologies such as bubble curtains, noise mitigation systems, or sound dampeners. The projects shall achieve no less than 10dB (SEL) in combined

noise reduction and attenuation, taking as a baseline, projections from prior noise measurements of unmitigated piles from Europe and North America.

Compliance with these requirements is critically important and the EIS should include alternatives to require field measurements to be taken throughout the construction process including on the first pile installed. These compliance measurements should be taken by independent evaluators at intervals established to reduce observer bias and ensure full compliance with noise reduction requirements.

Comment Number: BOEM-2021-0024-DRAFT-0365-8
Commenter: Anthony Butch
Commenter Type: Individual

Comment Excerpt Text:

Constant vibration given off will drive out sea life, sea bass (a BIG fishery off NJ) have shown avoidance to turbine vibrations.

Comment Number: BOEM-2021-0024-DRAFT-0366-103
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Additionally, BOEM should consider the level and potential impacts of vessel-related noise during construction, particularly noise emitted by dynamic positioning systems. Reported sources levels of noise from dynamical positioning system (DPS) vary among 177, 162–180, and 121–197 dB re 1 µPa (SPL) at 1 meter. [Footnote 166: MMO, 2015. Modelled mapping of continuous underwater noise generated by activities. A report produced for the marine management organisation, technical annex, MMO Project, 1097. ISBN: 978-1-909452-87-9. Tech. rep. 43 pp.] The latter intensity range reports frequencies in the 50–3,200 Hz range, within the hearing frequency of large whales and fish, and may have biologically significant effects. For example, research has shown mesopelagic fish migrate deeper in the water column upon exposure of DPS noise, [Footnote 167: Peña, M., 2019. Mesopelagic fish avoidance from the vessel dynamic positioning system. ICES Journal of Marine Science, 76(3), pp.734-742.] and there is extensive scientific literature on the impacts of continuous low frequency vessel noise on marine mammals and fish. [Footnote 168: Erbe, C., Marley, S.A., Schoeman, R.P., Smith, J.N., Trigg, L.E. and Embling, C.B., 2019. The effects of ship noise on marine mammals—a review. Frontiers in Marine Science, 6, p.606.]

Comment Number: BOEM-2021-0024-DRAFT-0366-104
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

DPS and other vessel noise differs from pile driving noise in its frequency spectrum and the fact it is continuous rather than impulsive noise. DPS and vessel noise will also occur in the construction area during times when pile driving is not occurring (i.e., before and after a pile is driven). Thus, it should not be expected that the noise from pile driving will simply negate the effects of vessel-related noise. BOEM should undertake an analysis of DPS and vessel-related noise associated with the construction of Ocean Wind, as well as cumulatively for existing and reasonably foreseeable projects in the New York-New Jersey Bight (a similar analysis should be undertaken for lease areas south of New England).

Comment Number: BOEM-2021-0024-DRAFT-0366-108
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

BOEM should conservatively assess the potential loss to the right whale of communication and listening range and assume that any substantial decrement will result in adverse impacts on the species' foraging, mating, or other vital behavior. A conservative approach is justified given the species' extreme vulnerability, where any additional stressor may potentially result in population-level impacts, and the difficulty in obtaining empirical data on population-level impacts on wild animals.

Comment Number: BOEM-2021-0024-DRAFT-0366-112
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

e. BOEM Should Address Limitations of NMFS' Acoustic Thresholds

In determining the potential impact of noise from geophysical surveys, and construction and operations activities, BOEM should request new guidelines on thresholds for marine mammal behavioral disturbance from NMFS that are sufficiently protective and consistent with the best available science. Multiple marine species have been observed to exhibit strong, and in some cases lethal, behavioral reactions to sound levels well below the 160 dB threshold defined by NMFS for Level B take, [Footnote 182: As defined pursuant to the Marine Mammal Protection Act "any act of pursuit, torment, or annoyance which has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering but which does not have the potential to injure a marine mammal or marine mammal stock in the wild." 50 C.F.R. § 216.3.] leading to calls from the scientific community for the Agency to revise its guidelines. [Footnote 183: E.g., Evans, D.L. and England, G.R., "Joint interim report: Bahamas marine mammal stranding event of 15-16 March 2000" (2001); Nowacek, D.P., Johnson, M.P., and Tyack, P.L., "Right whales ignore ships but respond to alarm stimuli," Proceedings of the Royal Society of London B: Biological Sciences, vol. 271, no. 1536 (2004): 227- 231; Parsons, E.C.M., Dolman, S.J., Wright, A.J., Rose, N.A., and Burns, W.C.G., "Navy sonar and cetaceans: Just how much does the gun need to smoke before we act?" Marine Pollution Bulletin, vol. 56 (2008): 1248-1257; Tougaard, J., Wright, A.J., and Madsen, P.T., "Cetacean noise criteria revisited in the light of proposed exposure limits for harbour porpoises," Marine Pollution Bulletin, vol. 90 (2015): 196-208; Wright, A.J., "Sound science: Maintaining numerical and statistical standards in the pursuit of noise exposure criteria for marine mammals," Frontiers in Marine Science, vol. 2, art. 99 (2015).] Acceptance of the current NMFS' acoustic threshold for Level B take will result in BOEM's significant underestimation of the impacts to marine mammals and potentially the permitting, recommendation, or prescription of ineffective mitigation measures (e.g., under-protective exclusion zones).

Comment Number: BOEM-2021-0024-DRAFT-0366-115
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

2. Acoustic Impact Considerations for Sea Turtles

To date, the injury and behavioral zones for sea turtles have not been calculated correctly for other offshore wind projects. [Footnote 190: See, e.g., DEIS at H-58 (footnote stating: "Short-term, underwater noise from Project construction, specifically from pile driving and vessels supporting installation is the most extensive potential Project effect and is therefore used to define the analysis area based on current behavioral effects thresholds for these activities. This area extends approximately 1,716 feet from each monopile foundation, 175 feet from vibratory pile driving, and approximately 300 feet from the SFEC corridor and vessel transit lanes.") See also, e.g., DEIS at H-66 (stating, "Vibratory pile-driving noise can

exceed levels associated with behavioral disturbance in sea turtles but only within a short distance (i.e., less than 200 feet) from the source. Given this low exposure probability to vibratory pile- driving noise and the fact that vibratory pile-driving activities would be limited in extent, short term in duration, and widely separated, vibratory pile-driving noise effects on sea turtles would be negligible at the individual and population levels.”)] In assessing the level of impact from the Project, BOEM must use NMFS’s most recent pile driving calculator to obtain an accurate injury and behavioral radii for sea turtles during impact and vibratory pile driving. BOEM should also avoid making conclusions about impact level in the absence of information. Fundamental gaps remain in our knowledge of the sensory (e.g., hearing and navigation) ecology of sea turtles. [Footnote 191: See, e.g, DEIS at H-765, H-70, H-76.] It has been determined that sea turtle hearing sensitivity overlaps with the frequencies and source levels produced by many anthropogenic sources; however, more research is needed to determine the potential physiological and behavioral impacts of these noise sources on sea turtles. [Footnote 192: Ridgway, S.H., E.G. Wever, J.G. McCormick, J. Palin, and J.H. Anderson. “Hearing in the giant sea turtle, Chelonia mydas.” Proceedings of the National Academy of Sciences of the United States of America, vol. 64, no. 3 (1969):884-890.; Bartol, S.M., J.A. Musick, and M.L. Lenhardt. “Auditory evoked potentials of the loggerhead sea turtle (Caretta caretta).” Copeia, vol. 3 (1999):836-840.; Dow Piniak, W.E., S.A. Eckert, C.A. Harms, and E.M. Stringer. 2012. Underwater hearing sensitivity of the leatherback sea turtle (Dermochelys coriacea): Assessing the potential effect of anthropogenic noise. OCS Study BOEM 2012-01156. Herndon, VA: U.S. Department of the Interior, Bureau of Ocean Energy Management.; Martin, K.J., S.C. Alessi, J.C. Gaspard, A.D. Tucker, G.B. Bauer, and D.A. Mann. “Underwater hearing in the loggerhead turtle (Caretta caretta): A comparison of behavioral and auditory evoked potential audiograms.” The Journal of Experimental Biology, vol. 215, no. 17(2012):3001-3009.; Piniak, W.E.D., D.A. Mann, C.A. Harms, T.T. Jones, and S.A. Eckert. “Hearing in the juvenile green sea turtle (Chelonia mydas): A comparison of underwater and aerial hearing using auditory evoked potentials.” PLoS ONE, vol. 11, no. 10 (2016):e0159711.] Currently, BOEM’s standard operating conditions for activities such as pile driving are based on a 180 dB (RMS) re 1 uPa exclusion zone, [Footnote 193: BOEM. 2016. Commercial wind lease issuance and site assessment activities on the Atlantic Outer Continental Shelf offshore New York. Environmental assessment. OCS EIS/EA BOEM 2016-042. Herndon, Virginia: United States Department of the Interior, Bureau of Ocean Energy Management, Office of Renewable Energy Programs.] which is the original generic acoustic threshold for assessing permanent threshold shift onset for cetaceans. [Footnote 194: NMFS. 2018. 2018 Revision to: Technical guidance for assessing the effects of anthropogenic sound on marine mammal hearing (Version 2.0). Underwater acoustic thresholds for onset of permanent and temporary threshold shifts. NOAA Technical Memorandum NMFS-OPR-59. U.S. Department of Commerce, National Oceanic and Atmospheric Administration.]

Comment Number: BOEM-2021-0024-DRAFT-0366-116
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

As the offshore wind industry advances, studies are needed to determine critical ratios and temporary and permanent threshold shifts so that accurate acoustic threshold limits for anthropogenic sound sources can be added to NMFS’s sound exposure guidelines for protected species like sea turtles, and additional monitoring and avoidance, minimization, and mitigation protocols can be developed to minimize impacts to sea turtles during offshore wind development and operation and other anthropogenic activities. Experiments are also needed to: (i) spatially separate acoustic pressure and intensity to determine which component(s) of sound sea turtles detect to determine if hearing sensitivity changes under pressure; [Footnote 195: Piniak, W.E.D. “Acoustic ecology of sea turtles: Implications for conservation.” PhD dissertation, Duke University, 2012.] and, (ii) conduct underwater audiograms of sea turtle species of all age classes, as hearing sensitivity is known to change with age. [Footnote 196: Popper, A.N., A.D. Hawkins, R.R. Fay, D.A. Mann, S. Bartol, T.J. Carlson, S. Coombs, W.T. Ellison, R.L. Gentry, M.B.

Halvorsen, S. Løkkeborg, P.H. Rogers, B.L. Southall, D.G. Zeddies, and W.N. Tavolga. "Sound exposure guidelines for fishes and sea turtles." A technical report prepared by ANSI-Accredited Standards Committee S3/SC1 and registered with ANSI. ASA S3/SC1.4 TR-2014, 2014.] Given this, not only should monitoring of sea turtle sensory ecology be conducted, but a conservative approach should be adopted in the meantime to guard against potential impacts to these threatened and endangered species. [Footnote 197: See, for example, Schoeman, R.P., C. Patterson-Abrolat, and S. Plön. "A global review of vessel collisions with marine animals," Frontiers in Marine Science, vol. 7 (2020).]

Comment Number: BOEM-2021-0024-EMAIL-003-46
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

As part of our review, we must also determine if your EIS meets the requirements of 40 CFR Part 1500-1508, specifically basic requirements for an EIS as described in 40 CFR 1506.3.

Therefore, the EIS must contain an adequate evaluation of the impacts on all marine mammals that may be present in the project area. In order to take a requisite "hard look" at environmental impacts, the analysis should consider the affected environment and degree of impact on each resource which involves an evaluation of direct and indirect effects, as well cumulative effects; the duration of the impact; whether it is beneficial or adverse and the geographic scale in which the action is occurring (e.g., local, regional). Specifically, the EIS must include an analysis of the impacts of elevated underwater noise on marine mammals resulting from pile driving, site characterization surveys, and other project-related activities; the risk of vessel strike due to increases in vessel traffic and/or changes in vessel traffic patterns; any activities that may increase the risk of entanglement; any activities that may result in the displacement of individuals or changes to migratory behavior; any activities that may result in altered prey assemblages or changes in feeding behavior; and any other activities that may result in harassment, injury or mortality to marine mammals.

Comment Number: BOEM-2021-0024-TRANS-41521-0017-2
Commenter: Martha Oldach
Commenter Type: Individual

Comment Excerpt Text:

The extreme vibration found in turbulence during construction and after will be devastating. Driving 36 feet in diameter steel piles 150 feet into the sea floor will radiate for 7.5 miles. The construction process will take many years. What will the impact be? Devastating permanently.

Comment Number: BOEM-2021-0024-TRANS-42021-0010-2
Commenter: Joe De Finnis
Commenter Type: Individual

Comment Excerpt Text:

I would also say that there is studies out there that say it will adversely effect mammal life, whales, porpoises, seals due to the noise and sensitivity during the construction period, it could permanently damage these mammals.

A.2.19.3. Materials and Waste Management

Comment Number: BOEM-2021-0024-DRAFT-0003-2
Commenter: Al Paulson
Commenter Type: Individual

Comment Excerpt Text:

What about the impact on the environment from the batteries used to store this energy? Is there a possibility of the batteries over heating and exploding? Where will the batteries be disposed of?

Comment Number: BOEM-2021-0024-DRAFT-0008-5
Commenter: Robin McConekey
Commenter Type: Individual

Comment Excerpt Text:

* Disposal of turbine blades - having only a 15-25 year lifespan - after which each 351 foot non-recyclable blade gets buried in the ground

* Leakage of hazardous materials - oil leakage from turbines is not uncommon

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Comment Number: BOEM-2021-0024-DRAFT-0072-1
Commenter: Susan Schwartz
Commenter Type: Individual

Comment Excerpt Text:

Every project such as this has a useful life. When this windmill project no longer produces energy what happens to the windmills and concrete foundations in the ocean floor?

Who is responsible for removing equipment that has come to the end of its useful life? Will there be a escrow account where the builder is required to put sufficient dollars aside that would cover the removal of the equipment if the project should not work or if it does work has come to the end of its useful life. If there will be no proceeds set aside to remove this project at some point in the future then the burden falls to the New Jersey taxpayers and that is wrong.

Comment Number: BOEM-2021-0024-DRAFT-0074-1
Commenter: Carol Behl
Commenter Type: Individual

Comment Excerpt Text:

When a disaster strikes (natural or man made) what will happen to the turbines oil? Grease? And other chemicals used to power the windmills?

Comment Number: BOEM-2021-0024-DRAFT-0081-2
Commenter: Marie Donlevie
Commenter Type: Individual

Comment Excerpt Text:

The impact on their environment will be great and not ever recover.

The turbines have proven to be detrimental to the environment as they breakdown and need to be replaced or destroyed. They take up valuable space in our western states as they struggle to destroy them.

Comment Number: BOEM-2021-0024-DRAFT-0084-3
Commenter: Greg Noll
Commenter Type: Individual

Comment Excerpt Text:

What happens to the turbines when they need to be replaced? Buried in the ground?

Comment Number: BOEM-2021-0024-DRAFT-0089-3
Commenter: Beth DiFrangia
Commenter Type: Individual

Comment Excerpt Text:

The turbines are filled with petroleum which will most definitely leak into the ocean at some point. The turbines break and have a useful life of 20 years where they will go into a landfill.

Comment Number: BOEM-2021-0024-DRAFT-0090-6
Commenter: Louise Halprin
Commenter Type: Individual

Comment Excerpt Text:

After the 20 year lifespan, what happens to the stanchions and propellers? Is that 20 year a proven lifespan or is that from turbines on land. Salt water corrodes stainless steel, even when just close to the ocean. (An example of this is we need to replace our stainless steel grill that sits on our deck every 3 years or so & the grill is not standing in the ocean.)

Comment Number: BOEM-2021-0024-DRAFT-0101-4
Commenter: Richard Zinck
Commenter Type: Individual

Comment Excerpt Text:

Additionally, the maintenance and amount of petroleum products to make the turbines operational, year-in-year-out, in a salty marine environment has been totally concealed from the public.

Comment Number: BOEM-2021-0024-DRAFT-0110-1
Commenter: Paul Livore
Commenter Type: Individual

Comment Excerpt Text:

The extensive damage and risk of pollution including oil spills is great with the amount of resources, construction equipment and manpower that will be brought to our fragile coastal environment.

Comment Number: BOEM-2021-0024-DRAFT-0113-6
Commenter: Meaghan Zanfardino
Commenter Type: Individual

Comment Excerpt Text:

How are the turbine blades disposed? Disposal of turbine blades - having only a 15-25 year lifespan - after which each 351 foot non-recyclable blade gets buried in the ground.

Comment Number: BOEM-2021-0024-DRAFT-0113-7
Commenter: Meaghan Zanfardino
Commenter Type: Individual

Comment Excerpt Text:

It is unclear how Orsted will stop oil leakage from turbines.

Comment Number: BOEM-2021-0024-DRAFT-0116-4
Commenter: Maureen Reilly
Commenter Type: Individual

Comment Excerpt Text:

The blades are not recyclable and the turbines use hundreds of gallons oil! Are they guaranteed not to leak?

Comment Number: BOEM-2021-0024-DRAFT-0119-3
Commenter: Catherine DeMaio
Commenter Type: Individual

Comment Excerpt Text:

Looking forward, there may be issues with the disposal of damaged turbine blades that would be environmentally detrimental.

Comment Number: BOEM-2021-0024-DRAFT-0119-4
Commenter: Catherine DeMaio
Commenter Type: Individual

Comment Excerpt Text:

The issue of possible leakage of hazardous material into the ocean from the apparatuses is a great concern.

Comment Number: BOEM-2021-0024-DRAFT-0129-8
Commenter: Gerry Lucidi
Commenter Type: Individual

Comment Excerpt Text:

There is no plan on how to recycle the turbines at the end of their lifespan. The meeting last week confirmed that the wind farm companies are still studying how to recycle the blades, etc. These companies with all likelihood will be gone in 25-30 years. How can it be permitted to install these monstrosities without knowing how to safely disassemble them?

Comment Number: BOEM-2021-0024-DRAFT-0134-2
Commenter: Kate Hayden
Commenter Type: Individual

Comment Excerpt Text:

The construction, transport, maintenance and eventual decommissioning of hundreds of 853 foot monopiles and blades will waste more fossil fuels than the turbines will save. After their useful life, monopiles and blades will eventually fill up a landfill.

Comment Number: BOEM-2021-0024-DRAFT-0169-6
Commenter: Rick Robinson
Commenter Type: Individual

Comment Excerpt Text:

What will wash up on the beaches during construction?

Comment Number: BOEM-2021-0024-DRAFT-0175-2
Commenter: Krid Olson
Commenter Type: Individual

Comment Excerpt Text:

In addition how will these be maintained? Once the company has installed them and made their profit, I fear years from know our waters will be full of these rusted hulking turbines, abandoned and left to be eyesores on our waters.

Comment Number: BOEM-2021-0024-DRAFT-0196-4
Commenter: Lisa Kazunas
Commenter Type: Individual

Comment Excerpt Text:

The natural and manmade resources needed to build these structures also has not been made known to the public.

Comment Number: BOEM-2021-0024-DRAFT-0196-5
Commenter: Lisa Kazunas
Commenter Type: Individual

Comment Excerpt Text:

The amount of fossil fuels required to build, transport, and erect the turbines is also not forthcoming. And certainly not green.

Comment Number: BOEM-2021-0024-DRAFT-0196-6
Commenter: Lisa Kazunas
Commenter Type: Individual

Comment Excerpt Text:

The lubrication of each turbine and the potential for leakage into the ocean has not been quantified. Each turbine will contain hazardous chemicals, such as, lubricating oil, fuels, and coolants. What is the impact of polluting the ocean and the fossil fuels needed for the clean up process of these leakages?

Comment Number: BOEM-2021-0024-DRAFT-0196-7
Commenter: Lisa Kazunas
Commenter Type: Individual

Comment Excerpt Text:

The fact that these turbines have a shelf life of 15 - 20 years and are not recyclable due to the toxicity of the blades and structure, means that they have to be dismantled, cut due to size, transported (again using fossil fuels emitting carbon gases) and then buried in the earth. I point you to the windfarm burial site in Casper, Wyoming.

Comment Number: BOEM-2021-0024-DRAFT-0204-4
Organization: United Boatmen of NJ
Commenter Type: Undetermined Organization

Comment Excerpt Text:

These wind farms are not Green energy because they such a tie to fossil fuels. This is a farse and has not been proven to be a viable option for energy.

Comment Number: BOEM-2021-0024-DRAFT-0220-6
Commenter: Joann Zuczek
Commenter Type: Individual

Comment Excerpt Text:

The lifetime span of wind-turbines is only from 20 up to 25 years.

Comment Number: BOEM-2021-0024-DRAFT-0227-3
Commenter: Gerald Raab
Commenter Type: Individual

Comment Excerpt Text:

Then there are the carbon fiber blades that are made from petroleum which are non recyclable. Its also estimated that the heavy equipment used to construct these turbines will use 18,000 barrels of oil per turbine.

Comment Number: BOEM-2021-0024-DRAFT-0228-1
Commenter: John Philipp
Commenter Type: Individual

Comment Excerpt Text:

How is the ocean available for Lease?

No one should be allowed to cause such damage and destruction to our ocean and marine life! The turbines require 70 gallons of oil to lubricant the turbine. Where will that oil go and how great will the damage be? The harmful impact of ruining our ocean and marine life is unacceptable.

Why not put the turbines down the center of the garden state parkway?

Comment Number: BOEM-2021-0024-DRAFT-0233-6
Organization: City of Ocean City, Environmental Commission
Commenter Type: Local Agency

Comment Excerpt Text:

Blade Recycling - we anticipate technology to accommodate reuse of blade materials in the coming years rather than land filling. Investigate recyclable materials now for blade design.

Comment Number: BOEM-2021-0024-DRAFT-0246-3
Commenter: Al Caesar
Commenter Type: Individual

Comment Excerpt Text:

While operational, the risk of oil leaks, fires, and other contaminating events increases as the turbines age.

Comment Number: BOEM-2021-0024-DRAFT-0246-4
Commenter: Al Caesar
Commenter Type: Individual

Comment Excerpt Text:

Third, surprisingly when compared to other sources of power within 20 years these wind turbines will need to be disassembled at significant cost and, likely again, Significant disruption to the environment around them.

Comment Number: BOEM-2021-0024-DRAFT-0281-3
Commenter: Jorge Constantino
Commenter Type: Individual

Comment Excerpt Text:

4. Will Orsted be responsible for environmental cleanup at the BBL power plant site that is intended for use in electrical power storage with this project?

Comment Number: BOEM-2021-0024-DRAFT-0292-2
Commenter: John Feairheller, Jr., PE, PP
Commenter Type: Individual

Comment Excerpt Text:

The windmills and substations will at times be manned. What provisions are to be made for sanitary facilities and how will plastics be kept from entering the marine environment?

Comment Number: BOEM-2021-0024-DRAFT-0293-2
Commenter: Diane Wieland
Commenter Type: Individual

Comment Excerpt Text:

The gears of the turbines all need to be lubricated to operate. The 5-10 substations that will be built in the ocean to tie the 97 turbines together will all be using fuel engines to move the energy onto land and to the transfer stations. The potential of an oil leak from a storm or human error is huge. Who will clean it up and how will the turbines generate energy when they are down?

Comment Number: BOEM-2021-0024-DRAFT-0293-4
Commenter: Diane Wieland
Commenter Type: Individual

Comment Excerpt Text:

The actual turbines will need to be replaced often and are not recyclable and will end up rotting in landfills for years to come. Where will they be permitted to go when they are no longer used? Will we be stuck with them in our landfills?

Comment Number: BOEM-2021-0024-DRAFT-0295-15
Organization: New England Fishery Management and Mid-Atlantic Fishery Management Councils
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The COP states that offshore cables may or may not be removed during decommissioning, depending on regulatory requirements at the time. It is essential that cables be removed during decommissioning. Abandoned, unmonitored cables could pose a significant safety risk for fisheries that use bottom-tending gear and the long-term risks to marine habitats are unknown.

Comment Number: BOEM-2021-0024-DRAFT-0300-3
Commenter: Howard Marshall
Commenter Type: Individual

Comment Excerpt Text:

Storms can knock out wind turbines and when one goes down it would be abandoned.

Comment Number: BOEM-2021-0024-DRAFT-0301-4
Commenter: Andrew Pockl
Commenter Type: Individual

Comment Excerpt Text:

a catastrophic event in the ocean like an oil link will have a larger impact than a similar event on land.

Comment Number: BOEM-2021-0024-DRAFT-0315-2
Commenter: Regina Alfonso
Commenter Type: Individual

Comment Excerpt Text:

these windmills have at least 80 -100 gallons of oil in each of them that have to be changed yearly. The chance of this contaminating our waters by not only the yearly change of this oil but a major storm / hurricane are very great. Mother Nature will destroy these during a major storm and it will just be a matter of time and it will be devastating.

Comment Number: BOEM-2021-0024-DRAFT-0327-1
Commenter: William Leighton
Commenter Type: Individual

Comment Excerpt Text:

As I look through the documentation, one thing I don't see is a Life Cycle Assessment (LCA) of the proposed wind turbines for this project. A properly performed LCA analyzes the environmental impacts for the entire lifecycle from raw material extraction, manufacturing, construction, operation, decommissioning, and disposal and provides a scientific based analysis and an established factual basis for discussions around environmental impacts. I strongly recommend that you require a properly performed LCA as part of the permitting process.

Comment Number: BOEM-2021-0024-DRAFT-0327-2
Commenter: William Leighton
Commenter Type: Individual

Comment Excerpt Text:

Although a LCA for the specific wind turbines being proposed here does not seem to be readily available, numerous LCAs of both onshore and o?shore wind turbines have been performed [Footnote 1: https://www.wind-energy-the-facts.org/lca-in-wind-energy.html] [Footnote 2: https://www.sciencedirect.com/science/article/abs/pii/S0960148111002254] [Footnote 3: https://www.sciencedirect.com/science/article/pii/S0960148108002218] I would expect the LCA of the Ocean Wind turbines would show similar results to the LCAs which are currently available. These LCAs show that the vast majority (approximately 80%) of the environmental impacts for wind turbines occur in the construction phase due to the large energy inputs used for resource extraction, manufacturing, transport and construction given the large amounts of concrete, steel, aluminum, and copper used in the technology. Despite the public concerns about the rotor blades themselves, they are a relatively small contributor (~10%) and, once they are safely and properly disposed of, their carbon content is sequestered back in the ground where it came from.

Comment Number: BOEM-2021-0024-DRAFT-0327-3
Commenter: William Leighton
Commenter Type: Individual

Comment Excerpt Text:

These are big machines and the amounts of steel, concrete, aluminum and copper used is large and the resulting impacts are large. However, when taken over their lifecycle, these impacts and all other lifecycle impacts show wind turbines generally contribute around 5-10 grams of carbon dioxide equivalent per

kiloWatt hour (kWh) of power generated. (Ironically, if all the energy used in construction was from renewable sources, even the 5-10 grams would be significantly reduced.) 5-10 grams is in sharp contrast to a natural gas power plant in which the fuel alone generates over 400 grams of carbon dioxide per kWh. Considering that a natural gas power plant, the current next best alternative, is also constructed with large amounts of concrete, steel, aluminum and copper, we're probably looking at o?shore wind showing at least factor of 100 less environmental impact than natural gas.

The other way these factors are also looked at is called energy balance - how long does it take for the power plant to "pay back" all the energy used in it's manufacturing and construction. For wind turbines, generally that is around 3-6 months of operation [Footnote 4: https://www.wind-energy-the-facts.org/energy-balance-analysis-6.html].

Comment Number: BOEM-2021-0024-DRAFT-0332-4
Commenter: Suzanne Hornick
Commenter Type: Individual

Comment Excerpt Text:

the EPA has said there will be emissions on land as well as in the water. There is no level safe enough to satisfy us when youre talking about our home environment. The many chemicals being used inside the turbines that Orsted is not releasing the spec sheets on such as SF6 that we know are being used and rare earth minerals in the nacelle.

Comment Number: BOEM-2021-0024-DRAFT-0336-2
Commenter: John Feairheller, Jr., PP
Commenter Type: Individual

Comment Excerpt Text:

the vault will need a method to empty with water prior to maintenance unless it is kept dry continuously in which case additional equipment inside this structure will be needed. It is unlikely that the City will permit discharge into the City Streets where it would find its way to municipal stormwater pumping station. An outfall dewatering force main to the Bay would then be needed. Permission to discharge onto the beach is unlikely as discharging water onto the beach would exacerbate sand loss and a discharge pipe would be an additional hazard to swimmers.

Comment Number: BOEM-2021-0024-DRAFT-0343-2
Commenter: John Feairheller, Jr., PE, PP
Commenter Type: Individual

Comment Excerpt Text:

Cut and fill construction on the barrier island will require dewatering operations and the construction plans must include a dewatering plan. Given that the existing municipal stormwater system does not have sufficient capacity to prevent flooding during rainfall events in should be anticipated that the contractor will need to convey the water to the bay.

Comment Number: BOEM-2021-0024-DRAFT-0345-12
Organization: U.S. Environmental Protection Agency, Region 2
Commenter Type: Federal Agency

Comment Excerpt Text:

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 DEIS include language that identifies both federal authorities regulating these discharges where applicable.

Comment Number: BOEM-2021-0024-DRAFT-0345-13
Organization: U.S. Environmental Protection Agency, Region 2
Commenter Type: Federal Agency

Comment Excerpt Text:

We also note that the discharge of ballast water from foreign vessels could introduce non-native marine organisms into US coastal waters. The EIS 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 EIS describes how the project will be consistent with state requirements related to vessel discharges.

Comment Number: BOEM-2021-0024-DRAFT-0345-8
Organization: U.S. Environmental Protection Agency, Region 2
Commenter Type: Federal Agency

Comment Excerpt Text:

Based on information provided in the COP, it appears that offshore construction and operation activities will not likely result in discharges requiring NPDES authorization. It would be helpful if the EIS contains information to specifically determine whether the project will result in discharges of pollutants to waters of the United States requiring authorization.

Comment Number: BOEM-2021-0024-DRAFT-0364-27
Organization: Oceana
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Offshore energy projects will install hundreds of pilings and thousands of miles of cable in public waters . All offshore wind projects have a finite duration and will ultimately need to be decommissioned and removed from the ocean. The EIS must include alternatives to ensure decommissioning, removal and mitigation of the site occurs regardless of economic, political, or environmental factors. The EIS must therefore include alternatives to make developers explicitly responsible for removing offshore wind equipment if and when their project ends and further include alternatives to require offshore wind developers and operators to place adequate resources in trust to ensure that decommissioning will occur regardless of bankruptcy, change of ownership or lack of profitability. American taxpayers should not be responsible for decommissioning of this or any offshore wind project.

Comment Number: BOEM-2021-0024-DRAFT-0379-2
Commenter: Frances France
Commenter Type: Individual

Comment Excerpt Text:

These turbines are not recyclable and the cost will be astronomical.

Comment Number: BOEM-2021-0024-DRAFT-0384-3
Commenter: Gregory Cudnik
Commenter Type: Individual

Comment Excerpt Text:

Table 8.1-1 details the maximum potential of almost 400,000 gallons of hazardous materials (grease, oil and fuels) that will be in our oceans which should never be allowed! SF6 is overlooked on the table however, it is one of the most potent greenhouse gases with extreme effects on global warming, much more than CO2.

Comment Number: BOEM-2021-0024-TRANS-41321-0002-5
Commenter: Louise Halprin
Commenter Type: Individual

Comment Excerpt Text:

After the 20 year life span, what happens to the stanchions and propellors, is that a proven life span and is that only on land that it's been proven because you are sitting in the middle of the ocean now.

Comment Number: BOEM-2021-0024-TRANS-41321-0003-2
Organization: Pinelands Preservation Alliance
Commenter: Andrew Gold
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

use of horizontal directional drilling or HDD should require individual permits and receive the most rigorous scrutiny from regulators. A question I raised in the Q&A box is whether HDD is occurring only under the sea bed or on land as well. Despite industry claims that HDD is a superior method to open trenching, we have seen very recently the risks and environmental impacts of HDD and in particularly inevitability of inadvertent returns where drilling fluid escapes the bore hole and travels elsewhere without predictability or control. In the case of the construction of the SRL pipeline in New Jersey, most recently, inadvertent returns of impacted wetlands and even destroyed a residence. Depending on subsurface conditions, inadvertent returns can be likely and the potential impact of such events during this project in particular should be well understood in advance of construction beginning.

Comment Number: BOEM-2021-0024-TRANS-41321-0021-3
Commenter: Tony Butch
Commenter Type: Individual

Comment Excerpt Text:

As this keeps getting painted as being a green picture, I look at other pictures, like chopped up, you know, turbine blades being buried in Wyoming, that will remain there in essence forever. The blades, once going, decommissioned 25 years from now give or take if they make it that far, you know, they are 351 feet long, I believe from Orsted's site, if those blades are laying end to end, you will have just over 17 miles worth of blades. You talk about reducing the reliance the reliance on fossil fuels and what not, but based on the information released when the NOI came out, you know, I looked at the maxcapacity of oils and fuels and lubricants on each offshore substation it's very crazy, you have transfomer oil, 79,000 gallons and change, over 52,000 gallons of diesel fuel, sulphur hexafluoride, 793 gallons, and hydraulic oil, 317 gallons. Between the three substations that leads to about -- comes out to about 400,000 gallons of these fuel that will be stored there at any given time. The one there, the diesel fuel, 52,000 gallons stored for generators, my question about that, is why aren't these generators powered by wind, why aren't they powered by solar panels, why aren't they powered by some type of clean energy. You talk about the reliance of fossil fuels needing to fall away, I just don't see how that is going to happen. Fossil fuels props up this industry, without that, due to the inconsistency of wind energy, this could not survive. Even if we just went with gas, that would cut the emissions in half immediately.

Comment Number: BOEM-2021-0024-TRANS-41521-0006-1
Commenter: Randall Pearson
Commenter Type: Individual

Comment Excerpt Text:

One of the things I wondered is ten years ago I worked for a global industrial company that was starting to look at cradle to grave environmental analysis. So from the veryJerseyShore Reporting, LLC start of the project to the very end of the project when things were being dismantled, discarded, reused, that sort of thing and I am wondering if that type of lifetime impact analysis has been done on wind energy versus natural gas versus nuclear, if so, can you point me to that study that you might be aware of and if not, why would that study not have been done because I think that would go a long way towards answering some of the questions that are out there, the pictures of the blades and landfills for examples, that sort of thing and whether the project is really truly efficient and environmentally superior in the end rather than just a lot of claims as it is, that it is and it -- for many people it seems like it should be, but I am just wondering about the science behind the lifetime environmental impact of projects like these versus other sources of energy.

Comment Number: BOEM-2021-0024-TRANS-41521-0009-1
Commenter: Kathleen Hayden
Commenter Type: Individual

Comment Excerpt Text:

I do have some concerns about the project and one of them being just the environmental impact of the -- just kind of, somebody mentioned before the cradle to grave) idea of this, like everything that's going to go into construction, constructing these turbines as well as when they are eventually decommissioned, are they going to be ending up in a landfill and) is that going to be kind of cancelling out their, you know, their worth.

Comment Number: BOEM-2021-0024-TRANS-41521-0012-5
Organization: Ocean City Environmental Commission
Commenter: Rick Bernardini
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

We'd like to see a statement on carbon neutrality, there is no plan for that that I have been able to see and it'll basically from concept to decommissioning, we should have a study that shows the entire plan. Blade recycling is big issue, we don't want to see them in landfills, but we expect technology in the next 25 years to accommodate the reuse of those materials and hopefully the blade could be designed currently with materials that won't be as dangerous as just putting them in a landfill.

Comment Number: BOEM-2021-0024-TRANS-41521-0018-1
Commenter: Chris Platicella
Commenter Type: Individual

Comment Excerpt Text:

Obviously earlier was mentioned, the blade, you know, disposal, you know, being chopped up, taken to areas like Wyoming and buried. I know the areas in Europe that have a lot of turbine fields out there, they are facing the issue as they are coming to the end of their life span, where they are going to put the blades, what they are going to do with them. I think I heard a comment of hopefully in 20 years to 30 years from now I hope we have an idea and better technology, and I would rather not hope and wish and say well, hopefully it comes along,

Comment Number: BOEM-2021-0024-TRANS-42021-0005-2
Organization: Central Jersey Electrical Association
Commenter: Stanislav Jarizak
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

And I also want to say that based on some studies, in case that the wind turbines need to be decommissioned and it will be take a long time because the technology went so far, that it's also much cheaper and much more response -- environmentally responsible to decommission those versus let's say the nuclear power plant which is substantial environmental hazard and it creates liability for generations to come to maintain decommissioned nuclear power plants. So nothing like that is happening with wind power.

A.2.19.4. General Wildlife

Comment Number: BOEM-2021-0024-DRAFT-0008-7
Commenter: Robin McConekey
Commenter Type: Individual

Comment Excerpt Text:

Wildlife and their habitats

* Negative effects to marine mammals during construction and operation.

* Negative effects on protected species - brown sharks sand tiger sharks

* Harm or death to birds (estimated up to 500k/year in the USA), bats, fish, dolphins, sharks, sea turtles, whales, etc.

Comment Number: BOEM-2021-0024-DRAFT-0010-1
Commenter: Keith Neill
Commenter Type: Individual

Comment Excerpt Text:

Also turbines kill migratory birds and the affect on our fishing industry as well as the affects on fish populations is unknown.

Comment Number: BOEM-2021-0024-DRAFT-0025-7
Commenter: Devin Pantiliano
Commenter Type: Individual

Comment Excerpt Text:

I am all for green energy, but not at the expense of impacting our beautiful ocean and marine wild life we love so much. Theres seems to be a lot of push from the current government administration for Green Energy. I am petrified the long term impacts of this form of Green Energy will be far worse then any gain the public will see.

Comment Number: BOEM-2021-0024-DRAFT-0071-1
Commenter: Jeremiah Crean
Commenter Type: Individual

Comment Excerpt Text:

They will greatly impact the marine life in the area of the wind farm.

Comment Number: BOEM-2021-0024-DRAFT-0081-1
Commenter: Marie Donlevie
Commenter Type: Individual

Comment Excerpt Text:

Our beautiful habitat will suffer greatly from the destruction of miles of construction and noise from the turbines. The marine mammals and many different species of sharks and birds travel through this area and these monstrosities will kill or injure many of them.

Comment Number: BOEM-2021-0024-DRAFT-0088-1
Commenter: Nancy Rosman
Commenter Type: Individual

Comment Excerpt Text:

There should also be proof that it does not interfere in any negative way with sea life.

Comment Number: BOEM-2021-0024-DRAFT-0089-2
Commenter: Beth DiFrangia
Commenter Type: Individual

Comment Excerpt Text:

These will kill many birds, marine life, destroy the ocean floor and be devastating to the fisherman.

Comment Number: BOEM-2021-0024-DRAFT-0093-1
Commenter: Thomas Duffy
Commenter Type: Individual

Comment Excerpt Text:

Known fact that Windmills kill wildlife, birds by the thousands, causes noise pollution and could interfere with aquatic animal communications.

Comment Number: BOEM-2021-0024-DRAFT-0097-2
Commenter: Anthony Jackson
Commenter Type: Individual

Comment Excerpt Text:

As well as ocean pollution and risk for migrating birds

Comment Number: BOEM-2021-0024-DRAFT-0170-2
Commenter: Calvin Douglass
Commenter Type: Individual

Comment Excerpt Text:

The well known Edwin B. Forsythe National Wildlife Refuge encompasses a huge land mass in Ocean and Monmouth Counties and is only a short distance from these proposed wind farms and is directly parallel to the entire turbine farm. A true threat to the Refuge.

Comment Number: BOEM-2021-0024-DRAFT-0196-13
Commenter: Lisa Kazunas
Commenter Type: Individual

Comment Excerpt Text:

No studies have been performed on how the necessary aviation and marine vessel lights required for each turbine will affect the bird, fish and marine wildlife.

Comment Number: BOEM-2021-0024-DRAFT-0196-8
Commenter: Lisa Kazunas
Commenter Type: Individual

Comment Excerpt Text:

The effects on the fish and wildlife are also concerning.

Comment Number: BOEM-2021-0024-DRAFT-0208-19
Organization: Long Beach Island, NJ Coalition for Wind Without Impact
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The need for and impact of Incidental Harassment or Take Authorizations from the National Oceanic and Atmospheric Administration (NOAA) for potentially affected marine species should be presented in the EIS using the best information and mitigation measures available. THE NOAA should be a cooperating agency in this EIS preparation to assure an adequate level of NEPA review of these issues.

Comment Number: BOEM-2021-0024-DRAFT-0220-12
Commenter: Joann Zuczek
Commenter Type: Individual

Comment Excerpt Text:

One of the more overlooked issues associated with OWF's is the introduction of non-indigenous and invasive species, which presents a threat to biodiversity. Artificial structures (including OWF's, oil rigs, breakwaters and ports), are known to promote the spread of no-indigenous species, which can disrupt trophic webs and cause shifts in the populations of native species, normally with a negative impact on the overall ecosystem.

Comment Number: BOEM-2021-0024-DRAFT-0220-9
Commenter: Joann Zuczek
Commenter Type: Individual

Comment Excerpt Text:

Effect of offshore wind farms on marine animals and birds are not fully understood.

Comment Number: BOEM-2021-0024-DRAFT-0251-2
Commenter: Paul E Towhey Sr
Commenter Type: Individual

Comment Excerpt Text:

It will cause irreparable harm to the migration patterns of birds and sea animals.

Comment Number: BOEM-2021-0024-DRAFT-0282-4
Commenter: James Fritsch
Commenter Type: Individual

Comment Excerpt Text:

During the BOEM briefing, the topic of impact on wildlife and migration routes was cursory. Upon reading the COP (Vol 2, Sec. 2.2) submitted by Ocean Wind to BOEM, the impacts on wildlife and migration routes are even more cursory with comments such as "impacts would be short term" and broad overreaching comments such as "a new, more diverse community of finfish and invertebrates" but with little to no supporting evidence. The majority of the COP laid out in great detail the wildlife that are in the area, but didn't mention how they expect to minimize impact on the majority of the sea life that isn't listed as protected or endangered. The few that were listed as protected or endangered are in the area of concern, and are merely listed to comply with the application process. Given the breadth of the wildlife that could be impacted, even in the short term, this project needs be rejected, not just for location, but for scope and scale

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Comment Number: BOEM-2021-0024-DRAFT-0296-2
Commenter: Anthony Feenick
Commenter Type: Individual

Comment Excerpt Text:

LBI is well known for its wildlife including numerous bird species as well its variety of fish. The large area being considered, as well as the huge number of turbines WILL have a negative impact on by killing thousands of birds and disrupting the natural migration of fish in this area.

Comment Number: BOEM-2021-0024-DRAFT-0315-1
Commenter: Regina Alfonso
Commenter Type: Individual

Comment Excerpt Text:

The proposed wind farms would negatively impact the ocean life and birds and the migration patterns. We have finally started seeing many types of sea life in the ocean off the coast of NJ and this will just devastate it and kill numerous beautiful creatures.

Comment Number: BOEM-2021-0024-DRAFT-0320-1
Commenter: Sarah Jordan
Commenter Type: Individual

Comment Excerpt Text:

New Jersey is home to many wildlife species, and is a starting/stopping/landing zone for many other sea creatures, mammals and birds who migrate and live and around our waters. Marine mammals like whales, seals, dolphins and sharks who use sound and vibration (such as the endangered North Atlantic Right Whale - with estimated only 366 remaining according to NOAA) to communicate and travel to feeding grounds and breeding grounds. The proposed turbines are located in migration pathways. They are also located in the Atlantic Flyway, which is again a migration route for thousands of sea and shore birds traveling north and south. According to the Audubon Society, wind turbines kill up to 500,000 birds a year!

Comment Number: BOEM-2021-0024-DRAFT-0326-1
Commenter: Andrew Jordan
Commenter Type: Individual

Comment Excerpt Text:

The incredible sea life/ ecosystem, including scallop beds and longer term impact on the surrounding environment are too important to NJ. When can we stop bothering our oceans-- plastics, trash, waste,

dredging, etc... and now we need to put up wind farms, what's next, off shore housing developments and basically nothing is protected from human development. The mere thought that wind farms are supposed to be helpful for environmental energy consumption is completely contrary to disturbing and uprooting the ocean eco system and underwater life to do so.

Comment Number: BOEM-2021-0024-DRAFT-0332-9
Commenter: Suzanne Hornick
Commenter Type: Individual

Comment Excerpt Text:

Its planned for an area in the Midatlantic flyway near 3 wildlife preserves. Thousands of birds will die, drop into our water, wash ashore and between the current and the EMFs and electricity emitted through the cables we will have many more predators in the water such as sharks and eels closer to bathers, fishers, boaters, wind surfers and so many other who recreate in our ocean.

Comment Number: BOEM-2021-0024-DRAFT-0333-2
Commenter: Orlando Candelori
Commenter Type: Individual

Comment Excerpt Text:

I fish along Long Beach Island and in the spring and fall enormous fish and whale migrations are in the proposed area for the windmills. These proposed sites are also along the Atlantic flyaway and also in the path of the Monarch Butterfly migration route.

Comment Number: BOEM-2021-0024-DRAFT-0334-3
Commenter: Peter Straub
Commenter Type: Individual

Comment Excerpt Text:

The COP has identified a number of environmental concerns and the potential mitigation strategies during the construction and operations phases. There will be undoubted environmental effects of construction in particular during localized insertion of the monopile bases on the seafloor and trenching for cable paths. Of immediate concern will be protecting marine mammal and sensitive fish species during this phase. The plan addresses these issues and identifies best practices for construction and protection of observed locally transiting species. The plan has been modified in response to input from the maritime community and orientation of the wind turbine units and distance from shore has been modified from initial plans to optimize transit and increase distance as possible.

Comment Number: BOEM-2021-0024-DRAFT-0334-6
Commenter: Peter Straub
Commenter Type: Individual

Comment Excerpt Text:

The COP has listed a number of studies on avian flora, bats, marine mammals, fish and other species either planned or ongoing by the developer that will inform this EIS. The COP lays out continuing monitoring and the EIS should ensure that the new information collected is used to evaluate both this and future proposed projects in the NJ offshore region.

Comment Number: BOEM-2021-0024-DRAFT-0354-12
Organization: New York State Department of State
Commenter Type: State Agency

Comment Excerpt Text:

Potential behavioral and physiological impacts from noise, altered water quality, foundation lighting, and electromagnetic/magnetic fields on biological resources. Additionally, the effect of turbine and cable installation and operation and their potential to alter existing or create new habitats should be evaluated. BOEM should identify measures that minimize individual and population-level impacts to biological resources, such as seasonal construction windows (e.g., time-of-year and time-of-day) and operational restrictions (e.g., cut-in wind speeds).

Comment Number: BOEM-2021-0024-DRAFT-0354-8
Organization: New York State Department of State
Commenter Type: State Agency

Comment Excerpt Text:

Potential interference with known migratory pathways, flyways, and overwintering sites of Rare, Threatened and Endangered Species, as well as important coastal habitats. Habitat loss and changes resulting from scour protection, altered currents, electromagnetic fields, and new permanent offshore structures may affect the composition of marine communities and fragment important habitat or finfish migratory corridors. Acoustic impacts can cause displacement or avoidance of marine organisms within the affected area. Depending on the timing and scale, a reasonably foreseeable effect is disrupted use of feeding, migratory and overwintering habitats that could alter local species assemblages, lower recruitment, and stress already vulnerable populations. Benthic disruptions could create feeding opportunities that attract or cause species to remain in an area longer, exposing them to increased noise and risk of vessel strikes.

Comment Number: BOEM-2021-0024-DRAFT-0365-6
Commenter: Anthony Butch
Commenter Type: Individual

Comment Excerpt Text:

Construction Methods and length of construction (pile driving can be heard above water 7.5 miles away and FURTHER below. This will devastate marine life and push them out of our waters)

Comment Number: BOEM-2021-0024-DRAFT-0372-7
Organization: Garden State Seafood Association
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Finally, this area is the site of right whale, Atlantic sturgeon and other endangered turtle species for a portion of the year. Fisheries are held to significant regulatory restrictions to minimize potential impact. BOEM must develop a similar system to ensure the whales, Atlantic sturgeon, and other marine endangered species continued protection prior to approving this project with possible significant acoustic impacts during construction and operation. This must address the cumulative effects of these projects on right whales during all phase of the projects through decommissioning.

Comment Number: BOEM-2021-0024-DRAFT-0380-5
Commenter: Jennifer Trofa
Commenter Type: Individual

Comment Excerpt Text:

Construction will include an unimaginable cost to be paid by ocean creatures; the most peaceful and least bothersome creatures on the planet. Ancient habitats will be decimated. Underground electric cables will

disrupt the life-cycles of countless species. Animals with hearing capabilities that we barely understand, will be subjected to onslaughts of noise. Echolocation relied upon by the dolphins everyone loves, will be disrupted. Unexpected extinctions could occur from the noise alone.

Comment Number: BOEM-2021-0024-DRAFT-0381-11
Organization: Clean Ocean Action
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The NY/NJ Bight is rich with diverse species and extraordinary natural features. Species diversity in the NY/NJ Bight include over 30 species of whales and dolphins, including the endangered Northern Atlantic right whale; 5 species of sea turtles; 300 species of fish; 350 species of birds; 4 species of seals; hundreds of invertebrates [Footnote 2: Hutchison et al., The Interaction Between Resource Species and Electromagnetic Fields Associated with Electricity Production by Offshore Wind Farms, 96 Oceanography Vol. 33, No. 4 (December 2020).] eels and other species; and 20 threatened and endangered species.

Comment Number: BOEM-2021-0024-EMAIL-004-21
Organization: Long Beach Island (LBI) New Jersey Coalition for Wind Without Impact
Commenter: Bob Stern
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The need for and impact of Incidental Harassment or Take Authorizations from the National Oceanic and Atmospheric Administration (NOAA) for potentially affected marine species should be presented in the EIS using the best information and mitigation measures available. THE NOAA should be a cooperating agency in this EIS preparation to assure an adequate level of NEPA review of these issues.

Comment Number: BOEM-2021-0024-TRANS-41521-0012-4
Organization: Ocean City Environmental Commission
Commenter: Rick Bernardini
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Migration of whales, dolphins,crustaceans, sea turtles, we'd like to see arigid observation program and work stoppages so particularly we protect the Right Whales totransfer, transmit, migrate through the area.

Comment Number: BOEM-2021-0024-TRANS-41521-0017-1
Commenter: Martha Oldach
Commenter Type: Individual

Comment Excerpt Text:

It will destroy much of what we know and love of our coast line. The giant and I mean giant turbines will kill the birds. The U.S. Fish and Wildlife Service acknowledges they kill up to 500,000 birds a year. These monstrosities will impact the migratory routes of many shore birds, sea mammals like the Right Whale, dolphins and even Monarch butterflies.

Comment Number: BOEM-2021-0024-TRANS-42021-0017-3
Commenter: Brenda Briton
Commenter Type: Individual

Comment Excerpt Text:

And outside of that, when we address the environmental impacts, they also want to understand what will happen to our fish and to our birds and to our fishing as far as whether it's recreational, commercial, or just the avid person that likes to put their boots on and go out and throw there fishing line in.

A.2.19.5. Electromagnetic Fields (EMF)

Comment Number: BOEM-2021-0024-DRAFT-0003-1
Commenter: Al Paulson
Commenter Type: Individual

Comment Excerpt Text:

Is anyone studying the impact on humans? Id suspect the cable from these turbines will create an electric magnetic field. What impact will it have on human health to those in close proximity of the cable. Will the field attack sharks? Theyre are reports of sharks biting these cables.

Comment Number: BOEM-2021-0024-DRAFT-0090-4
Commenter: Louise Halprin
Commenter Type: Individual

Comment Excerpt Text:

How will the "Electromagnetic Field" lines running back to shore affect pacemaker patients/wearers? (People w/pacemakers cannot be within two feet of an Induction Cooktop, due to the electromagnetics of Induction.)

Comment Number: BOEM-2021-0024-DRAFT-0111-2
Commenter: Natalie Thibault
Commenter Type: Individual

Comment Excerpt Text:

Sea turtles, lobsters and other marine animals will be impacted by pile driving and electromagnetic fields. (Electromagnetic fields influence the behavior of bottom-dwelling marine species, Hutchinson 2020).

Comment Number: BOEM-2021-0024-DRAFT-0112-18
Commenter: Robert and Joann Zuczek
Commenter Type: Individual

Comment Excerpt Text:

Another potential issue with OWF's is electromagnetic fields (EMF's), which are generated by the transportation of the acquired energy through electric cables that are built into the seabed. They could have an effect of the behavior or physiology of fauna which use electroreception for detecting prey or conspecifics such as sharks and rays.

Comment Number: BOEM-2021-0024-DRAFT-0113-1
Commenter: Meaghan Zanfardino
Commenter Type: Individual

Comment Excerpt Text:

It is unclear how the electromagnetic field will effect the fish in our ocean and our fisheries.

Comment Number: BOEM-2021-0024-DRAFT-0120-1
Commenter: Justin Matczak

Commenter Type: Individual

Comment Excerpt Text:

Please do not put these wind farms up the electronic field it puts out will disrupt all kinds of fisheries

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Comment Number: BOEM-2021-0024-DRAFT-0129-5
Commenter: Gerry Lucidi
Commenter Type: Individual

Comment Excerpt Text:

The effect of EMF on fish around wind turbines is simply not known.

Comment Number: BOEM-2021-0024-DRAFT-0129-9
Commenter: Gerry Lucidi
Commenter Type: Individual

Comment Excerpt Text:

Health Safety issues related to the EMF from the cables planned for the ocean bottom, through inlets, under roads, etc. all are unknown. EMF may effect the fish we eat and the environment we live. None of this is known yet the project marches on.

Comment Number: BOEM-2021-0024-DRAFT-0133-2
Commenter: James Hutchinson
Commenter Type: Individual

Comment Excerpt Text:

When I really began delving into the subject of offshore wind development and its impact on coastal fisheries and fishermen, one of the very first reports I found was authored by staff at the Massachusetts Division of Marine Fisheries titled [Italics: Recommended Regional Scale Studies Related To Fisheries In The Massachusetts And Rhode Island-Massachusetts Offshore Wind Energy Areas] from November of 2018.

The information was comprised of input and review provided by individual staff members at the Rhode Island Division of Marine Fisheries, NOAA National Marine Fisheries Service, and the Bureau of Ocean Energy Management (BOEM). At the top of page 8 of that report, inside a description box on the right hand side of the page, is the following passage related to wind energy areas (WEAs):

[Italics: "Flounder species were some of the only species to show correlations between the strength of electromagnetic fields from cables and increasing avoidance behaviors around cables, as their catches decreased around charged cables in Denmark (McCann, 2012)."]

In another Danish study called [Italics: Fish Benefits From Offshore Wind Farm Development] published in 2013, researchers Leonhard, Stenberg, Støttrup, van Deurs, Christensen, and Pederson found "Data documented some effects from the cable route on fish behaviour, with some species avoiding the cable, while other species were attracted." According to this particular report on offshore windfarms near Denmark, researchers noted [Italics: "only flounder (Platichthys flesus) showed correlation between the phenomena observed and the strength of the magnetic fields."]

It should be noted of course that Ørsted is the Denmark producer of windfarms studied extensively in Danish waters. Two years ago, BOEM released a study called [Italics: Evaluation of Potential EMF Effects on Fish Species of Commercial or Recreational Fishing Importance in Southern New England] in which our own government stated "surveys have overwhelmingly shown that offshore wind energy projects and undersea power cables have no effect on fish populations," while citing a 2006 study by

researcher A. Vattenfall for DONG Energy in Denmark (DONG being the former name of Ørsted). However, in personally reviewing the Vattenfall study [Italics: (Danish Offshore Wind – Key Environmental Issues)] researchers actually found direct correlation between the strength of the EMF field and the behavior in one critically important species in particular. [Italics: "A significant correlation was found only for flounder," the study noted, adding "Flounder primarily crossed the cable when the strength of the electromagnetic fields was estimated to be low, ie during calm periods."]

After first being told that these studies don't exist, I published the various findings on potential EMF impacts to key Atlantic species, most notably summer flounder (fluke) which is arguably New Jersey's most critically important recreational fishery. Again, the wind advocates and activists did not react well, calling the published article [Italics: (The Fisherman, December 2019)] little more than "rumor" and "innuendo" while leaning on the "fake news" argument within public and private lobbying circles.

Comment Number: BOEM-2021-0024-DRAFT-0169-7
Commenter: Rick Robinson
Commenter Type: Individual

Comment Excerpt Text:

What will EMFs do to the movement of flounder?

Comment Number: BOEM-2021-0024-DRAFT-0185-1
Commenter: Ronald Hammell
Commenter Type: Individual

Comment Excerpt Text:

I am opposed to windfarms offshore. I believe the EMF may disturb fish migration patterns.

Comment Number: BOEM-2021-0024-DRAFT-0204-1
Organization: United Boatmen of NJ
Commenter Type: Undetermined Organization

Comment Excerpt Text:

EMF signal given off from the transmission cables to land and between the wind farms. Not enough research and science has been given to prove otherwise

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Comment Number: BOEM-2021-0024-DRAFT-0220-11
Commenter: Joann Zuczek
Commenter Type: Individual

Comment Excerpt Text:

Another potential issue with OWF's is electromagnetic fields (EMF's), which are generated by the transportation of the acquired energy through electric cables that are built into the seabed. They could have an effect of the behavior or physiology of fauna which use electroreception for detecting prey or conspecifics such as sharks and rays.

Comment Number: BOEM-2021-0024-DRAFT-0222-2
Commenter: John Berlingis
Commenter Type: Individual

Comment Excerpt Text:

In addition, there is much concern over EMF and the uncertain health problems EMF transmits into the ecosystem of fish in the ocean. But the EMF problem is not just limited to the ocean. There is going to be a High Voltage line run under the Ocean City beach that vacationers will sit or stand on top of as they

spend their hours on the beach. This High Voltage line will transmit EMF, adversely impacting the health of the tourists (people).

Comment Number: BOEM-2021-0024-DRAFT-0256-3
Commenter: Capt. Paul Eidman
Commenter Type: Individual

Comment Excerpt Text:

Regarding the submarine cable electromagnetic field concern and its potential impact on New Jerseys vital summer flounder fishery, we must carefully acknowledge concerns which are based on direct observation, history, facts, and studies. There has been some creative reporting by people opposed to offshore wind to elicit fear and create doubt about the future of wind farms is intentional and hollow. Few studies have been done on the effects of submarine power EMF on bottom-dwelling fish such as flounder because no significant observable impacts have ever been reported with the existing offshore wind farms or submarine power cable systems, anywhere around the world.

If reporters choose to dig a little deeper, and not extract incomplete sentences they would conclude exactly what the 2006 Danish study found as well. The study concluded that there were no definitive responses or significant negative impacts observed. Flounder continued to cross the cable but may have been observed at times to go slower across the cable during the study, but it never interrupted the fishs travel.

It is important to note that the scientists could not conclusively attribute changes in behavior to the EMF. observation methods. Fish may have sensed a slight remnant of a This can be for a host of reasons. Perhaps fish were reacting to the cable trench (structure) or even some thermal effects of the cable. Speaking with someone who is in the submarine cable industry, they have personally witnessed thousands of flatfish in the North Sea crossing submarine power cables, swimming along them, and even using the remains of the cable trench as structure to hunt and hide for prey.

Comment Number: BOEM-2021-0024-DRAFT-0284-8
Commenter: Denise Kubaska
Commenter Type: Individual

Comment Excerpt Text:

Will there be a way to neutralize or insulate the EM (electromagnetic fields) that will be generated by the flow of electricity?

Comment Number: BOEM-2021-0024-DRAFT-0320-3
Commenter: Sarah Jordan
Commenter Type: Individual

Comment Excerpt Text:

The electro magnetic radiation from all the cables that will run from the wind turbines to the shore has never seen this magnitude and we don’t know the level of effect it will have. But we DO know that electromagnetic radiation will have a negative effect on bottom dwelling marine life - such as (the endangered) horseshoe crab, flounder, sharks, skates and (endangered) sturgeon. In NJ flounder fishing contributes millions of dollars to our economy.

Comment Number: BOEM-2021-0024-DRAFT-0330-1
Commenter: Stacey Jordan
Commenter Type: Individual

Comment Excerpt Text:

I believe the environmental impact these turbines have will be detrimental to so many of our wildlife species. New Jersey is home to a vast array of mammals, sea creatures and birds which use our waterways to live and to migrate. Our marine species such as whales, sharks, dolphins and seals use sound and vibration to communicate and travel to both breeding and feeding grounds. The proposed Wind Energy Facility is located right in that migration pathway and the vibrations they produce will interfere with the marine life. They are also located in the Atlantic Flyway; a migration route for thousands of sea and shore birds traveling North and South. I believe the wind turbines will also be detrimental to our Commercial Fishing Industry. The electro magnetic radiation that comes from the cables has never been done on this big of a scale before. The effect this would have on our bottom dwelling marine life such as horseshoe crabs (which are endangered) as well as as sharks, crabs, flounder and skates just to name a few, has not been studied to the extent we have reliable information.

Comment Number: BOEM-2021-0024-DRAFT-0332-3
Commenter: Suzanne Hornick
Commenter Type: Individual

Comment Excerpt Text:

some of our MANY objections are; EMFs

Comment Number: BOEM-2021-0024-DRAFT-0346-4
Commenter: Martha Oldach
Commenter Type: Individual

Comment Excerpt Text:

The electromagnetic energy coming from the wind turbines and the cables that will run right underneath the sea bed for miles and our beach our island our roads are causeway. Not only is the electromagnetic energy proven to deeply harm the sonar navigating abilities of the whale in the dolphin (many scientists believe this is why there are more beached whales and mammals than in the past) This is an experiment. Who knows what effect it will have on people that are swimming in the ocean on the beaches. No other state in the country has a massive field of turbines offshore. The five off Block Island have been stopped for further building. There is only one off Virginia for a reason.

Comment Number: BOEM-2021-0024-DRAFT-0350-1
Commenter: John Feairheller
Commenter Type: Individual

Comment Excerpt Text:

There is concern that the lector magnetic field that surround the interconnection cables and export cables will disturb the life cycle of the horseshoe crab. In turn this would adversely impact the red knot bird population.

The impact on the Horseshoe crab falls under the general heading of Benthic Resources and the phrase on page 10 of 159 the benefit of offering hard substrate habitats for a new, more diverse community also means loss of habitat and competition by invasive species.

A study should be undertaken to determine the sensitivity of the horse crab to EMF fields and the cable installation be designed so as not to impact this vital species. In the absence of hard data, the issue can be addressed by determining the seasonal variation in the magnetic field at the ocean floor than then placing the cable at a depth reduces the EMF at the floor bottom to less than the seasonal variation. Directional drilling could be utilized to install a portion of the export cable so that the EMF would not be a fence dividing the habitat.

Comment Number: BOEM-2021-0024-DRAFT-0365-4
Commenter: Anthony Butch
Commenter Type: Individual

Comment Excerpt Text:

EMF- studies have been done overseas showing this IS an issue- more research needs to be done and I am not talking about 2 years worth so Orsted can say they did it, good to go and put their turbines in.

Comment Number: BOEM-2021-0024-DRAFT-0370-3
Organization: Recreational Fishing Alliance
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Based on studies conducted at overseas offshore wind facilities, RFA has considerable concerns about the effect of electromagnetic fields on important recreational fisheries. Those studies were conclusive that certain species of fish demonstrated avoidance behavior in response to the presence of EMF associated with offshore wind cables. Among those species identified to display avoidance behavior to EMF was flounder. While BOEM did conduct a literature review on this topic, the findings of that review failed to address the most pressing concern with EMF. That review failed to evaluate and attempt to quantify the how EMF might alter migratory patterns and behavior of founder species. No one reasonably expects EMF associated with offshore wind facilities to cause mortality of fin fish or result in any measurable mortality at the stock level. However, disruption to migrations and subsequent availability to recreational anglers is an incredibly important issue that the BOEM review failed to adequately investigate. Summer flounder is the most popular recreational fishery in New Jersey. Summer flounder display season migrations where they move offshore in the fall to spawn and then move back inshore in the spring and populate inshore bays and estuaries and in turn, become available to recreational anglers. This migration traverses the Ocean Wind offshore wind lease area along with numerous other wind lease areas along the Atlantic Coast that are posed for development. If EMF associated with inter-array and transmission cables of the Ocean Wind project cause any disruption to this migration, the socioeconomic impacts could be significant. There are numerous other important species that display similar behavior. RFA understands that the cables will be buried which can minimize the detection of EMF on the substrate and reduce negative effects on organisms. However, as demonstrated at the Block Island wind facility, cables can become uncovered. RFA suggests that the EIS must spend considerable time investigating this issue and determine what methods or practices will eliminate all detectable EMF at the substrate level for both inter-array and transmission cables.

Comment Number: BOEM-2021-0024-DRAFT-0374-3
Commenter: Patricia Conte
Commenter Type: Individual

Comment Excerpt Text:

A major environmental and economic concern is for the fluke fishery because studies in Europe show that similar fish will not cross the electromagnetic fields created by miles of buried cables. Fluke is a major commercial and recreational fishing draw and the negative effects of the fish not crossing the electromagnetic fields (fish fence) will affect not only the fishing community, but also have a significant negative impact on tourism in our coastal communities - which rely on tourism to survive.

Comment Number: BOEM-2021-0024-DRAFT-0381-19
Organization: Clean Ocean Action
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

1. Electromagnetic Fields

a. Two main cables associated with the Ocean Wind project include an interarray cable and the larger export cable. The orientation of fish may be impaired by the magnetic fields surrounding electric cables and thus impact migration patterns.

b. Electricity produced at offshore wind farms is usually transmitted to shore through high voltage alternating or direct current cables. The current in these cables creates electric and magnetic fields (EMF). While the electric field generated by the current is isolated within the cable, the magnetic field is measurable around the cable.

c. There has been significant concern about the impact on crustaceans and their sensibility to EMF as it can impact their ability to locate food and may cause avoidance or large areas.

d. Fish species that employ electrical currents for orientation such as sharks and rays, eels and electric fish are the most sensitive. It has been suggested that many such species may be able to detect EMF at a distance over 1,000 ft.

Comment Number: BOEM-2021-0024-TRANS-41321-0002-3
Commenter: Louise Halprin
Commenter Type: Individual

Comment Excerpt Text:

how will the electromagnetic fields running back to shore effect pacemaker patients and wearers, people with pacemakers cannot be within two feet of an induction cooktop due to the electromagnetics of induction.

Comment Number: BOEM-2021-0024-TRANS-41321-0014-3
Organization: Shoreline New Jersey
Commenter: Tricia Conte
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

We also have significant fishing concerns, like fluke and flounder, studies in Europe, wind farms, ocean wind farms in Europe show that similar fish will not cross the electromagnetic fields created by the miles of the buried cables.

Comment Number: BOEM-2021-0024-TRANS-41521-0012-3
Organization: Ocean City Environmental Commission
Commenter: Rick Bernardini
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The export and array cables are going to have an EMF that needs to be designed according to the COP so therefore let’s design it so it has no impact on the bottom life of the ocean.

Comment Number: BOEM-2021-0024-TRANS-41521-0017-4
Commenter: Martha Oldach
Commenter Type: Individual

Comment Excerpt Text:

The electromagnetic field from hundreds of turbines and the immense web of cabling are an obvious risk. The studies have proven they will harm bottom dwelling species also sharks, skates, sturgeons which have special organs making them highly sensitive to EMF. Dr. John King who was a specialist writes on this topic, and I quote, "right now the government is pushing full speed ahead to get these things built and I don't think they really care that much about the impacts." More studies need to be done.

Comment Number: BOEM-2021-0024-TRANS-42021-0010-4
Commenter: Joe De Finnis
Commenter Type: Individual

Comment Excerpt Text:

There is a couple of other things, the EMF, the high voltage cables effect fish adversely.

Comment Number: BOEM-2021-0024-TRANS-42021-0024-4
Organization: Save our Shoreline New Jersey
Commenter: Tricia Conte
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

We are also concerned about the cables crossing our Ocean City Island and the EMFs emitted from them effecting the health of our residents and of our visitors.

Comment Number: BOEM-2021-0024-TRANS-42021-0032-2
Commenter: Anthony Etidali
Commenter Type: Individual

Comment Excerpt Text:

And one of the presenters made a comment that electromagnetic fields generated is the same as the one generated by dryer, a hair dryer. The electromagnetic field generated by 1,100 megawatt is a lot more than what is generated by a hair dryer which is the claim that she made, it's a misrepresentation of proven science which makes me suspect of all other claims made by speakers.

A.2.19.6. Other

Comment Number: BOEM-2021-0024-DRAFT-0080-3
Commenter: Donna McManus
Commenter Type: Individual

Comment Excerpt Text:

Do not let foreigners take over the waterways for their profit.

Comment Number: BOEM-2021-0024-DRAFT-0112-5
Commenter: Robert and Joann Zuczek
Commenter Type: Individual

Comment Excerpt Text:

There have been documented studies that people have experienced serious problems with smaller turbines even at greater distances than those proposed, including but not limited to sleep disturbances, panic episodes, sensations of internal pulsation which arise while awake or asleep, nausea, racing heartbeats, ringing or buzzing in the ears (tinnitus). Doctors have called it "wind turbine syndrome" and determine that its primary cause is the effect of low-frequency wind turbine noise on the organs.

Comment Number: BOEM-2021-0024-DRAFT-0153-1
Commenter: Mark OMalley
Commenter Type: Individual

Comment Excerpt Text:

what military protection will the proposed wind farm have?

Comment Number: BOEM-2021-0024-DRAFT-0217-2
Commenter: Christine Naisby
Commenter Type: Individual

Comment Excerpt Text:

Can you provide me with research on the impact on human life living on top of high voltage lines (if they are buried) or living under high voltage lines?

Comment Number: BOEM-2021-0024-DRAFT-0305-1
Commenter: Jeff Straton
Commenter Type: Individual

Comment Excerpt Text:

Yet Ocean Wind wants to dig deep and wide trenches in the ocean floor 100 miles long and somehow this is okay for our water animals?

Comment Number: BOEM-2021-0024-DRAFT-0320-6
Commenter: Sarah Jordan
Commenter Type: Individual

Comment Excerpt Text:

There is also NO guarantee that this will be reliable. Last summer - we had a heat wave - and we lost power for over 36 hours. And that was with our current system. With relying more on an unreliable source of energy, I have no doubt we will be facing more blackouts and power outages as wind power cannot be stored for future use. When the wind goes flat - which it will multiple times a year, we will be without power and faced with no other option but to live in the dark. In California (the nations leader in wind/solar energy), since 2011, electricity prices have risen 30%. And while Californians as a whole typically use less energy due to their mild climate, here in NJ we would be devastated if we had blackouts in the winter or spring when temperatures are freezing and we couldn’t power our homes, our heating systems and more.

Comment Number: BOEM-2021-0024-DRAFT-0332-5
Commenter: Suzanne Hornick
Commenter Type: Individual

Comment Excerpt Text:

We suspect this will exacerbate our already severe flooding.

Comment Number: BOEM-2021-0024-DRAFT-0349-2
Commenter: Rand Pearsall
Commenter Type: Individual

Comment Excerpt Text:

In the field opposite LBI, there is a little notch closest to the Holgate section of LBI, putting it at 9.5 miles which apparently is the closest of any wind farm (excluding Block Island which is an aberration). And

yet, where this notch juts out, there is a corresponding notch that juts in just to the east. Any reason for this? Treating Holgate as the closest will increase public opposition.

Comment Number: BOEM-2021-0024-DRAFT-0351-2
Organization: Barnegat Bay Partnership
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Climate Change and Sea Level Rise

It is unclear if the plan takes sea level rise (SLR) during the proposed lifetime of the project into account for siting landfalls/TJBs. Certain climate change features (i.e., larger and more frequent storms and SLR) have been recognized to have significant impacts to coastal communities and vulnerable infrastructure, including utility facilities. The impacts of SLR should be discussed in the EIS.

Comment Number: BOEM-2021-0024-DRAFT-0368-5
Organization: New Jersey Department of Environmental Protection
Commenter Type: State Agency

Comment Excerpt Text:

As the State pursues the responsible development of OSW, the NJDEP is obligated, pursuant to the federal Coastal Zone Management Act, 16 U.S.C. § 1451, et seq., and related state laws, to preserve, protect, restore, and enhance the resources of the State's coastal zone. As an affected state, we look forward to coordinating with BOEM as the Ocean Wind EIS is developed to ensure that impacts to natural resources are avoided, minimized where avoidance is not possible, and appropriately mitigated for when necessary.

Comment Number: BOEM-2021-0024-DRAFT-0380-3
Commenter: Jennifer Trofa
Commenter Type: Individual

Comment Excerpt Text:

BOEM must consider if this is actually the correct site for a windmill farm. The best resources available must be consulted. The professionals at the National Oceanic and Atmospheric Administration (NOAA) must be allowed to advise and consult. It is undeniable that sands will shift, and currents will be altered. Modeling must be done to predict with any certainty the impact of shifting sands and changed ocean currents. Without experienced, expert, structural and mechanical modeling at-hand, how does BOEM even know what environmental impacts to consider?

Comment Number: BOEM-2021-0024-DRAFT-0384-11
Commenter: Gregory Cudnik
Commenter Type: Individual

Comment Excerpt Text:

The Outer Continental Shelf Lands Act 1953 defines any man made object affixed to the seabed a US point; therefore, the Jones Act would apply to the movement of anything between US port and any work site once one turbine base is constructed. At that point everything brought to that piling to complete work would have to be brought in a Joines Act qualified vessel. Vessels must be registered in the US, built in the US and owned and operated by US citizens. This must be upheld to protect American as the Jones Act was intended!

Comment Number: BOEM-2021-0024-TRANS-41521-0015-1
Commenter: John Berlingis

Commenter Type: Individual

Comment Excerpt Text:

one of the concerns I am really having right now as I envision the diagram that was presented is that cable line, there is going to be a single cable line that's going to run from the farm and it's going to run through the water into the Ocean City Beach, and that cable line is either going to tap into Fifth Street, 13th Street or 35th Street. Now, there is going to be beach goers there and they are going to be on top of that cable and that cable is going to run I guess over to Roosevelt Boulevard and we don't know what the ramifications are about beach goers laying on cable like that. I don't hear any studies that were done for this, and I think this is a major concern of humanity. We don't want to lose people over this. So a study needs to be done in order to ensure the beach goers are safe with that cable going on the beach.

Comment Number: BOEM-2021-0024-TRANS-42021-0013-1
Organization: Heavy and General Construction Laborers Local 172
Commenter: Chris Cole
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

I am here today to support the Orsted Ocean Wind Construction Operation Plan to develop New Jersey's first offshore wind farm to generate 1,100 megawatts of power for New Jersey homes and business. Environmentally, New Jersey Strong 7,500 megawatts of clean energy goal by 2035 will never be met without a project like Ocean Wind. This project will replace current fossil fuel burnt energy with clean energy and enormous benefit to the environment. Orsted has created environmental partnerships and the communication system with environmental, Union fishing industry and other key groups. They view environmental protection as an important part of their operational being and work support.

Comment Number: BOEM-2021-0024-TRANS-42021-0016-2
Commenter: Chris Gasman
Commenter Type: Individual

Comment Excerpt Text:

I haven't heard a lot in this -- I may have missed it, my apologies if I did, around the health impacts from these environmental considerations. The pollution that will be abated that will be minimized

A.2.20 Planned Activities Scenario/Cumulative Impacts

Comment Number: BOEM-2021-0024-DRAFT-0112-22
Commenter: Robert and Joann Zuczek
Commenter Type: Individual

Comment Excerpt Text:

The cumulative environmental impacts of multiple offshore wind projects along the Atlantic Coast including on fisheries and endangered species-may be significant and irreversible. Also, mining the raw materials of offshore wind turbines, especially rare-earth minerals, has significant environmental impact because those materials primarily are mined overseas, where environmental regulations are less stringent than in the United States. Dismissing environmental impacts that occur outside the U.S. while championing offshore wind's alleged worldwide climate-change benefits is hypocritical.

Comment Number: BOEM-2021-0024-DRAFT-0220-14
Commenter: Joann Zuczek
Commenter Type: Individual

Comment Excerpt Text:

The cumulative environmental impacts of multiple offshore wind projects along with Atlantic Coast-including on fisheries and endangered species-may be significant and irreversible. Also, mining the raw materials of offshore wind turbines, especially rare-earth minerals, has significant environmental impact because those materials primarily are mined overseas, where environmental regulations are less stringent than the United States. Dismissing environmental impacts that occur outside the U.S. while championing offshore wind's alleged worldwide climate-change benefits is hypocritical.

Comment Number: BOEM-2021-0024-DRAFT-0264-3
Commenter: Leslie Houston
Commenter Type: Individual

Comment Excerpt Text:

What are the cumulative impacts to natural resources, marine life, mammals, birds, endangered species, and navigation with wind energy areas in the already busy port region ?

Comment Number: BOEM-2021-0024-DRAFT-0287-8
Organization: North Beach Taxpayers Association
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Determine the cumulative effects to natural resources, marine mammals, birds, endangered species, and navigation.

Comment Number: BOEM-2021-0024-DRAFT-0295-16
Organization: New England Fishery Management and Mid-Atlantic Fishery Management Councils
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The EIS must include a meaningful cumulative impacts assessment. We supported the criteria used in the Vineyard Wind EIS for defining the scope of reasonably foreseeable future wind development; however, that scope should now be expanded to include the anticipated New York Bight lease areas, especially because they are in relatively close proximity to this lease.

Comment Number: BOEM-2021-0024-DRAFT-0295-17
Organization: New England Fishery Management and Mid-Atlantic Fishery Management Councils
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

We have significant concerns about the cumulative impacts of offshore wind development on fishery independent surveys. Major negative impacts to these surveys could translate into greater uncertainty in stock assessments, the potential for more conservative fisheries management measures, and resulting impacts on fishery participants and communities. We are encouraged by BOEM's commitment to working with NOAA on long term solutions to this challenge.

Comment Number: BOEM-2021-0024-DRAFT-0295-18
Organization: New England Fishery Management and Mid-Atlantic Fishery Management Councils
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The EIS should also consider how the Ocean Wind project and the other offshore wind projects planned for the east coast may impact the Mid-Atlantic Cold Pool. Impacts to this unique oceanographic feature have implications for stratification and mixing of the water column, primary productivity, and recruitment and migration of many species, including those targeted by commercial and recreational fisheries, as well as protected species. Climate change will also be an essential consideration in the cumulative effects analysis.

Comment Number: BOEM-2021-0024-DRAFT-0297-13
Organization: Responsible Offshore Development Alliance
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

C. Cooperative Monitoring and Research

Ocean Wind will not be developed in isolation and cannot be treated as a stand-alone project. To date, RODA is not aware of any plans for the project to coordinate cooperative research and monitoring plans with developers of geographically relevant lease areas, including Atlantic Shores Offshore Wind. The environmental impacts of Ocean Wind will be cumulative to those of other projects for multiple fish stocks (and oceanographic processes) and these must be coordinated to maximize the utility of any data that is collected.

In particular, given the importance of the Ocean Wind and Atlantic Shores Offshore Wind projects areas to the clam fishery, these projects must work together to provide relevant information for testing scientific hypotheses about the impacts of OSW to the clam resource and fishery. We strongly urge BOEM to require these developers to partner with the fishing industry and credible independent scientists to co-develop cooperative monitoring and research plans for the leases and ensure that each project's research is well coordinated with the other. This should be common practice for all wind development lease areas but particularly for abutting leases such as these.

Comment Number: BOEM-2021-0024-DRAFT-0301-3
Commenter: Andrew Pockl
Commenter Type: Individual

Comment Excerpt Text:

there will be a negative impact to the environment to construct the turbines. Since the turbines will be constructed off shore, the area of disturbance will be much larger during construction than a similar wind farm constructed on land.

Comment Number: BOEM-2021-0024-DRAFT-0316-3
Commenter: M McCarroll
Commenter Type: Individual

Comment Excerpt Text:

Every aspect of life and lives in these areas will be impacted without any explicit requirement to analyze cumulative impacts by its projected management.

Comment Number: BOEM-2021-0024-DRAFT-0332-10
Commenter: Suzanne Hornick
Commenter Type: Individual

Comment Excerpt Text:

With the number of hurricanes and storms we have increasing year this is not practical. They dont store energy like solar does so what happens if we have sustained winds as we often do for several days? NJ can and MUST do better than this terrible plan!

Comment Number: BOEM-2021-0024-DRAFT-0335-12
Organization: The Nature Conservancy
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

BOEM should include in the draft EIS an full analysis of cumulative impacts, to look at the incremental impacts of the Ocean Wind project in relation to other past, current and foreseeable activities. As BOEM is now moving ahead with plans to lease roughly 8 new wind areas in New York Bight totaling roughly 630,000 acres, we believe that the supplemental Environmental Impact Assessment originally completed for Vineyard Wind 1 concerning cumulative impacts of offshore wind energy development on the east coast should be updated to include build- out of these additional lease areas. This updated cumulative impact assessment should then be applied to the Ocean Wind EIS, as well as other pending project specific impact studies. While we are supportive of the Biden Administration's goal of 30,000MW of wind energy by 2030, this cannot be achieved without a full assessment of the cumulative, and potentially irreversible, impacts on the environmental resources, especially managed and protected resources. In addition, as part of this assessment, BOEM should take into account technical advancements that will affect how future wind sites may be constructed, operated, and sited. Changes in turbine types, sizes and efficiencies will result in different environmental impacts in the future.

Comment Number: BOEM-2021-0024-DRAFT-0335-17
Organization: The Nature Conservancy
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

We recognize that evaluating cumulative impacts is a challenging and emerging science, but the magnitude of development anticipated in the Atlantic over the next 10-15 years demands an aggressive approach to determining impacts and adaptive management. This is the kind of opportunity that if not addressed now will pass us by and we can be sure that down the road all stakeholders will suffer from not having this information. We point to a few relevant papers describing the challenges and possible approaches to offshore wind cumulative impact analysis, [Footnote 13: Goodale, M. W., & Milman, A. (2016). Cumulative adverse effects of offshore wind energy development on wildlife. Journal of Environmental Planning and Management, 59(1), 1-21. Boehlert, G. W., & Gill, A. B. (2010). Environmental and ecological effects of ocean renewable energy development: a current synthesis. Oceanography, 23(2), 68-81. Bailey, H., Brookes, K. L., & Thompson, P. M. (2014). Assessing environmental impacts of offshore wind farms: lessons learned and recommendations for the future. Aquatic biosystems, 10(1), 8. Wright, A. J., & Kyhn, L. A. (2015). Practical management of cumulative anthropogenic impacts with working marine examples. Conservation biology, 29(2), 333-340.] impacts on avian species specifically, [Footnote 14: Masden, E. A., et al. (2010). Cumulative impact assessments and bird/wind farm interactions: Developing a conceptual framework. Environmental Impact Assessment Review, 30(1), 1-7. Masden, E. A., et al. (2015). Renewable energy developments in an uncertain world: the case of offshore wind and birds in the UK. Marine Policy, 51, 169-172.] and challenges assessing fisheries impacts. [Footnote 15: Berkenhagen, J., et al. (2010). Decision bias in marine spatial planning of offshore wind farms: Problems of singular versus cumulative assessments of economic impacts on fisheries. Marine policy, 34(3), 733-736. Hoagland, P., et al. (2015). An approach for analyzing the spatial welfare and distributional effects of ocean wind power siting: The Rhode Island/Massachusetts area of mutual interest. Marine Policy, 58, 51-59.] Impacts for particularly vulnerable species, such as the

critically endangered NAWR should be prioritized and expedited through aggressive funding. This species is already in severe decline even before being impacted by the additional stresses that can be reasonably expected to result from offshore wind energy development.

Comment Number: BOEM-2021-0024-DRAFT-0335-18
Organization: The Nature Conservancy
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Conducting ecological monitoring inside the individual project sites is one key component for assessing potential impacts of these projects. But there needs to be more clarity on priorities, standardization of methods, and transparent and rapid sharing of information. With so many projects set to be built concurrently, the adaptive approach we are recommending for management and permitting projects at BOEM must also apply to how developers and researchers prioritize, plan, conduct, analyze and share monitoring results. There is clear overlap between site specific monitoring and regional monitoring, and they should not be considered as separate silos. The proximity of multiple large planned projects in the New Jersey Wind Energy Areas, not to mention the New York Bight and Southern New England, calls out for an integrated monitoring approach. Monitoring to assess potential impacts to migratory birds and other avian species certainly falls in this category.

Comment Number: BOEM-2021-0024-DRAFT-0335-21
Organization: The Nature Conservancy
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

As part of the development of the EIS, BOEM should consider the implications of future regional transmission. As BOEM is aware, at the request of the NJPBU, PJM Interconnection, LLC (PJM) recently released a solicitation on behalf of NJBPU for qualified developers to submit potential transmission solutions that would help deliver offshore wind energy to the existing power grid in a more coordinate and, ideally, environmentally sensitive manner. Therefore, we recommend that the alternatives assessed in the EIS allow for future, potential modifications to the project that could allow for its inclusion in a regionally planned approach to landing transmission cables in coordination with other proposed wind energy projects.

Comment Number: BOEM-2021-0024-DRAFT-0335-6
Organization: The Nature Conservancy
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The cumulative impacts of pile driving on marine mammals, sea turtles and other taxa of marine life (including the five endangered marine mammals known or expected to occur off the coast of New Jersey) may be more significant than the impacts to the seabed once mitigation measures related to seabed habitat are factored in.

Comment Number: BOEM-2021-0024-DRAFT-0345-10
Organization: U.S. Environmental Protection Agency, Region 2
Commenter Type: Federal Agency

Comment Excerpt Text:

Our experience with other ongoing offshore wind projects leads us to encourage BOEM to consider important and relevant intra-lease issues in the upcoming EIS. These issues include how each wind power project relates to other planned adjacent projects (and lease areas) with respect to orientation of the WTG

layout, spacing of WTG's, access and egress to fishing grounds within and beyond the limits of the lease areas, and how overall navigation through and around the lease areas can be coordinated in an effort to avoid or minimize conflicts. The EIS should consider how regional transit lanes can be identified and the process that will be necessary to obtain stakeholder input and how best to memorialize these areas for future use. An adequate scope of analysis for the EIS on these issues will likely require consideration of areas outside of the Ocean Wind lease area. BOEM is uniquely positioned to conduct such an analysis.

Comment Number: BOEM-2021-0024-DRAFT-0345-16
Organization: U.S. Environmental Protection Agency, Region 2
Commenter Type: Federal Agency

Comment Excerpt Text:

The EIS should include and analyze impacts from current and reasonably foreseeable projects and activity near the Ocean Wind project area. 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.

Comment Number: BOEM-2021-0024-DRAFT-0349-4
Commenter: Rand Pearsall
Commenter Type: Individual

Comment Excerpt Text:

Most importantly, I seem to be the only one who keeps asking for the cradle to grave, environmental life-cycle analysis as I was exposed to this when I worked for BASF for 4 years. It has the potential to provide a scientific basis that could debunk some of the misinformation. The absence of such an analysis raises grave concerns. Is there any chance this has been done or will be done?

Comment Number: BOEM-2021-0024-DRAFT-0355-4
Organization: Anglers for Offshore Wind Power
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Finally, we request a more comprehensive discussion of cumulative impacts on fisheries from continued offshore wind power development. It is essential we have a well-established framework for monitoring cumulative impacts now to avoid consequences for fisheries down the line.

Comment Number: BOEM-2021-0024-DRAFT-0366-102
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

In addition, data are readily available (e.g., on the Mid-Atlantic Data Portal [Footnote 165: See https://portal.midatlanticocean.org/.]) to undertake a quantitative analysis of additional vessel strike risk posed by vessels associated with the offshore wind industry (i.e., total number of vessels, proportion of vessels associated with reasonably foreseeable offshore wind activities, locations of the primary route between ports and WEAs, and marine mammal occurrence and density). We encourage BOEM to undertake this quantitative analysis to provide a more robust analysis in its future environmental impact statements.

Comment Number: BOEM-2021-0024-DRAFT-0366-106
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Given the acute vulnerability of the North Atlantic right whale, it is essential that, at a minimum, BOEM conduct a technical, quantitative analysis of the cumulative impacts of offshore wind development against a baseline of other reasonably foreseeable actions on the North Atlantic right whale population. This analysis should be incorporated into the agency's NEPA compliance documents. We note that the analyses proposed below are also relevant for other species of large whale found within the Mid- Atlantic Bight. We recommend that the analysis quantify the percentage of the North Atlantic right whale population potentially exposed to conceivable impacts from offshore wind development on an annual basis [Footnote 170: For example, by following the approach of Dr. Wing Goodale, Biodiversity Research Institute, in the analysis of "cumulative adverse effects" on four bird taxa. See, Goodale, W. (2018). Cumulative adverse effects of offshore wind energy development on wildlife. Presentation at the New York State Energy Research and Development Authority "State of the Science Workshop on Wildlife and Offshore Wind Development," Fox Hollow, Woodbury, New York, Nov. 14, 2018. Available at: http://www.briloon.org/uploads/BRI_Documents/Wildlife_and_Renewable_Energy/NYSERDA_workshop_WingGo odale_CumulativeImpacts.pdf.] and, as a worse-case scenario, the potential impact on population viability of a permanent loss of foraging and other habitat within all lease areas expected to be developed. The analysis should also examine the additional energetic expenditure experienced if right whales were to avoid all lease areas expected to be developed during their migration. This is particularly important in light of new scientific information indicating the need for North Atlantic right whales to undertake efficient and uninterrupted foraging in order to maintain their energy budget. [Footnote 171: Van der Hoop, J., et al., "Foraging rates of ram-filtering North Atlantic right whales," supra.] The energetic implications for displacement of pregnant females during their southern migration (e.g., offshore into the Gulf Stream) should also be taken into consideration.

Comment Number: BOEM-2021-0024-DRAFT-0366-107
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Habitat avoidance may also result in North Atlantic right whales being displaced into shipping lanes, thereby increasing their risk of vessel strike. The analysis should therefore estimate the additional potential risk that habitat displacement into shipping lanes and the increased vessel traffic directly resulting from wind development activities may pose in terms of serious injury and mortality along the East Coast and evaluate that risk against that of species extinction. Such an analysis will allow BOEM to determine if existing mitigation measures are adequate or if potential impacts need to be managed as projects are developed concurrently and sequentially. For example, considering vessel collision risk for

the entire East Coast may illuminate that more comprehensive vessel speed mitigation measures need to be in place at the project level in order to reduce the overall cumulative risk.

Comment Number: BOEM-2021-0024-DRAFT-0366-109
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

c. BOEM Should Develop Regional Construction Calendars to Reduce Cumulative Noise Impacts

Building out offshore wind energy in the Mid-Atlantic Bight will likely lead to multiple leaseholders developing individual projects on parallel timelines (as currently being demonstrated in the RI/MA and MA WEAs). If not well coordinated, these combined activities have the potential to lead to significant cumulative noise impacts on marine mammals and other marine life. BOEM should proactively address this issue and develop regional construction calendars in coordination with its sister agencies that schedule (spatially and/or temporally) noisy pre-construction and construction development activities in a way that reduces cumulative noise impacts.

Comment Number: BOEM-2021-0024-DRAFT-0366-110
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

d. BOEM Should Monitor for Oceanographic Changes Caused by Large-Scale Build-Out of Offshore Wind Energy That May Affect the Marine Mammal Prey Base

The design of an offshore wind farm, such as the location, number of turbines, and foundation types, may affect local and regional hydrodynamics. [Footnote 172: Segtnan OH, Christakos K. 2015. Effect of offshore wind farm design on the vertical motion of the ocean. Energy Procedia 80(2015): 213-222.] As tidal currents move past the offshore wind foundations they generate a turbulent wake that will contribute to a mixing of the stratified water column. [Footnote 173: Schultze, L. K. P., L. M. Merckelbach, J. Horstmann, S. Raasch, and J. R. Carpenter. "Increased mixing and turbulence in the wake of offshore wind farm foundations." Journal of Geophysical Research: Oceans 125, no. 8(2020): e2019JC015858.] The loss of stratification within the wake of a single offshore wind turbine has been observed in the German Bight, a relatively shallow area of the North Sea with typical water depths between 20 and 50 meters. [Footnote 174: Id] A single monopile was found to be responsible for 7-10 % additional mixing to that of the bottom mixed layer, whereby approximately 10% of the turbulent kinetic energy generated by the structure is used in mixing.[Footnote 175: Id] Although the effect of a single turbine on stratification is relatively low, large-scale build-out of offshore wind energy (i.e., 100 km2) could significantly affect the vertical structure of a weakly stratified water column, and could modify the stratification regime and water column dynamics on a seasonal scale, depending on local conditions and turbine layout. [Footnote 176: Id.; Carpenter JR, Merckelbach L, Callies U, Clark S, Gaslikova L, Baschek B (2016) Potential Impacts of Offshore Wind Farms on North Sea Stratification. PLoS ONE 11(8): e0160830. https://doi.org/10.1371/journal.pone.0160830 177 NOAA Fisheries, "State of the Ecosystem New England," Presentation to the New England Fishery Management Council, 15 April 2021.] NOAA Fisheries recently acknowledged that large-scale build out of offshore wind energy in the Northeast region may cause local oceanographic changes that may affect the distribution of North Atlantic right whale prey.

Comment Number: BOEM-2021-0024-DRAFT-0366-111
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The "Cold Pool '' is a highly variable 20-60 m thick band of trapped cold, near-bottom water that exists during the spring, summer, and fall in the mid- and outer-shelf of the Mid-Atlantic Bight and Southern flank of Georges Bank. The Cold Pool has been shown to be one of a number of factors affecting phytoplankton productivity and the behavior and recruitment of pelagic and demersal fish. [Footnote 178: Malone TC, Hopkins TS, Falkowski PG, Whitledge TE. 1983. Production and transport of phytoplankton biomass over the continental shelf of the New York Bight. Continental Shelf Research 1: 305-337; Sullivan MC, Cowen RK, Steves BP. 2005. Evidence for atmosphere-ocean forcing of yellowtail flounder (Limanda ferruginea) recruitment in the Middle Atlantic Bight. Fisheries Oceanography 14: 386-399.] Due to the Cold Pool's effects of fish, an important prey base for marine mammals in the New York and Mid- Atlantic Bights, it is important to understand the oceanographic processes that influence it and whether OSW may alter its presence.

BOEM should explicitly consider the cumulative effects of offshore wind on oceanographic conditions, including stratification, and the resulting effects on fish habitat, as part of the Ocean Wind NOI. NYSERDA is funding research to model the effects of offshore wind development on Cold Pool stratification. [Footnote 179: See, https://portal.nyserda.ny.gov/servlet/servlet.FileDownload?file=00Pt000000DS6ouEAD.] BOEM should incorporate the results of this study and findings from Europe [Footnote 180: Schultze, L. K. P., et al. "Increased mixing and turbulence in the wake of offshore wind farm foundations," supra; Carpenter JR,,et al., Potential Impacts of Offshore Wind Farms on North Sea Stratification, supra.] into the analysis for the Ocean Wind. In addition, BOEM, in collaboration with NOAA and the states of New York and New Jersey, should establish baseline stratification conditions for the Mid-Atlantic Bight and design and implement a monitoring system capable of detecting deviations from that baseline. In addition, BOEM should undertake research similar to that conducted in Europe [Footnote 181: See, e.g., chultze, L. K. P., et al. "Increased mixing and turbulence in the wake of offshore wind farm foundations," id.] to better understand the effects of individual turbines and the cumulative effects of large-scale build out of offshore wind energy on mixing and stratification in the Mid-Atlantic Bight.

Comment Number: BOEM-2021-0024-DRAFT-0366-119
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

G. IMPACTS TO BIRDS

The Draft EIS must address population level, cumulative impacts to avian populations from developing the Project and other areas in the Atlantic outer continental shelf (OCS) expected to be developed in the reasonably foreseeable future. In doing so, BOEM must consider impacts to a broader range of avian species which may be impacted by the Project, and not limit its evaluation to federally listed species.

Comment Number: BOEM-2021-0024-DRAFT-0366-12
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Consistent with the Secretary's order, in drafting the Draft EIS, BOEM should ignore the Trump Administration's repeal of 40 C.F.R. §1508.7, which required the consideration of cumulative impacts. Rather, BOEM should include an analysis of cumulative impacts, as defined under the former 40 C.F.R. §1508.7:

Cumulative impact is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

BOEM must include a robust cumulative impacts analysis in the Draft EIS, which is required by longstanding case law interpreting NEPA and in no way prohibited by the current regulations.[Footnote 16: The Secretary of the Interior, Secretarial Order No. 3399, § 5 (a) (Apr. 16, 2021)] While the notice of intent stated that "the description of the affected environment in the EIS will include reasonably foreseeable environmental trends and planned actions other than the Project,"18 it did not clearly state that there would be a full cumulative impacts analysis.

Comment Number: BOEM-2021-0024-DRAFT-0366-151
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

6. The Draft EIS Cannot Ignore the Habitat Loss that Birds May Experience Beyond the Footprint of the Project Construction and Operation

As we have mentioned above and in previous comments regarding Vineyard Wind and South Fork Wind Farm, BOEM should not limit the impact assessment to the project footprint. Birds are not only disturbed from foraging, staging, roosting, and nesting habitat in the immediate vicinity. Evidence from construction and operation at offshore wind farms suggest that marine birds may be disturbed up to at least 20 km from an operating wind farm. [Footnote 244: Peschko V, Mendel B, Müller S, Markones N, Mercker M, Garthe S. 2020. Effects of offshore windfarms on seabird abundance: Strong effects in spring and in the breeding season. Marine Environmental Research:105157. 245 Glover HK, Weston MA, Maguire GS, Miller KK, Christie BA. 2011. Towards ecologically meaningful and socially acceptable buffers: Response distances of shorebirds in Victoria, Australia, to human disturbance. Landscape and Urban Planning 103:326– 334.] Though flight-initiation distances are highly variable, nesting and foraging shorebirds can be disturbed from coastal anthropogenic activities more than 200 meters away.245 Diving marine birds may also be heavily impacted from the noises associated with pile driving. [Footnote 246: Anderson Hansen K, Hernandez A, Mooney TA, Rasmussen MH, Sørensen K, Wahlberg M. 2020. The common murre (Uria aalge), an auk seabird, reacts to underwater sound. The Journal of the Acoustical Society of America 147:4069–4074.] Underwater noise impacts to diving birds must be considered in the Draft EIS, and cannot be limited to an assessment of the Project footprint. Additionally, vessel traffic can largely disrupt wintering marine birds [Footnote 247: Mendel B, Schwemmer P, Peschko V, Müller S, Schwemmer H, Mercker M, Garthe S. 2019. Operational offshore wind farms and associated ship traffic cause profound changes in distribution patterns of Loons (Gavia spp.). Journal of Environmental Management 231:429–438.], and construction activities can have impacts to birds and their prey which will not end immediately after construction—these are modifications to the habitat which will not return to a healthy state until long after construction activities.[Footnote 248: Perrow MR, Gilroy JJ, Skeate ER, Tomlinson ML. 2011. Effects of the construction of Scroby Sands offshore wind farm on the prey base of Little tern Sternula albifrons at its most important UK colony. Marine Pollution Bulletin 62:1661–1670.] Given the avian distribution off New Jersey's coast, it is likely that marine bird communities will be heavily disturbed during construction activities.

Comment Number: BOEM-2021-0024-DRAFT-0366-162
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

8. The Draft EIS Should Evaluate Cumulative Impacts to Avian Populations from the Project and All Other Foreseeable Development Offshore

In the past BOEM has failed to provide any reasonable scientific evidence to support its cumulative impact assessment for birds resulting from wind farm construction and operation in the Atlantic OCS.

In regard to the South Fork project, BOEM assessed only localized impacts to forests from construction, stating, "through the removal of 2.4 acres of deciduous forest for the interconnection facility and a small area (0.1 acre) of upland wildlife habitat at the selected O&M facility." [Footnote 253: South Fork DEIS, at H-48.] BOEM further asserted that the resulting impacts would be "localized and temporary, including avoidance and displacement, although no individual fitness or population-level effects would be expected." [Footnote 254:Id.] The assumption that removal of deciduous forest only creates short-term impacts and that displacement and habitat loss do not impact survival and fecundity is simply false. BOEM must take a full annual and life cycle approach in the Draft EIS, addressing the various population vital rates which may be affected for species potential impacted from build out of the Project.

Comment Number: BOEM-2021-0024-DRAFT-0366-163
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Loss et al. (2013) estimates that the average annual mortality rate for birds from turbines onshore is 3.58 birds/MW (95% C.I.=3.05-4.68). [Footnote 255: Loss SR, Will T, Marra PP. 2013. Estimates of bird collision mortality at wind facilities in the contiguous United States. Biological Conservation 168:201–209.] The Draft EIS must use this range to estimate potential cumulative impacts from the Project over, at minimum, the predicted 30-year lifespan of the Project. While the exact turbine models to be deployed are not yet known, BOEM should provide, at minimum, estimates based on the specifications provided in the COP. [Footnote 256: COP, Vol. I, Table 4.4-1, p. 58]

These calculations only address direct mortality from collisions and do not include the rates of mortality driven by barrier effects and habitat loss. Barrier effects and displacement can have significant energetic costs for birds and can additionally result in increased foraging rates. Both can have consequences for individual survival and can decrease rates of egg laying and fledging.

Comment Number: BOEM-2021-0024-DRAFT-0366-164
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The Draft EIS must provide a quantitative assessment of the cumulative effects from wind farm build out in the OCS, including population viability analyses which consider changes in vital rates that result from both direct and indirect impacts. BOEMs cumulative impact level should reflect these estimates. In the past, BOEM has prescribed impact levels to birds based on immediate impacts or impacts to species detected during surveys within the proposed development footprint. These limited evaluations are not acceptable. We expect BOEM to be fully transparent in its impact level assignments in the Draft EIS, clearly outlining the best available science and analyses that lead to each impact level assignment.

Comment Number: BOEM-2021-0024-DRAFT-0366-17
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

B. ANALYSIS OF CUMULATIVE IMPACTS

1. Scope of Reasonably Foreseeable Offshore Wind Development

Critical to a proper cumulative impacts analysis is its scope. In Vineyard Wind 1's (VW) June 2020 SEIS, BOEM greatly expanded the "scope for future offshore wind development . . . from what was considered in the Draft EIS, which only considered in detail projects that had submitted construction plans (approximately 130 MW) in federal waters at that time)."[Footnote 24: Vineyard Wind 1 Offshore Wind Energy Project, Supplement to the Draft Environmental Impact Statement (June 2020), at ES-2.] BOEM kept this scope for the Final EIS, issued on March 12, 2021.[Footnote 25: Vineyard Wind 1 Offshore Wind Energy Project, Final Environmental Impact Statement (Mar. 2021), at 1-5. (Vineyard Wind FEIS).] Likewise, the January 2021 South Fork Project Draft EIS also used this broad scope for its cumulative impact analysis.[Footnote 26: South Fork Wind Farm and South Fork Export Cable Project, Draft Environmental Impact Statement (Jan. 4, 2021), at 1-6. (South Fork DEIS).] This scope is described as the state capacity planned commitment for existing Atlantic leases (21.8 GW, or approximately 22 GW). While this was a reasonably foreseeable scope for offshore wind development for those projects, the Ocean Wind Draft EIS should be expanded to at least include the Administration's goal of building 30 GW of offshore wind within the next nine years including future development in the newly identified Wind Energy Areas (WEAs) in the New York Bight.

Comment Number: BOEM-2021-0024-DRAFT-0366-18
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

a. BOEM Should Account for Increased Offshore Wind Development Targets

As part of his offshore wind commitment, President Biden has committed to advance offshore wind leasing in the New York and New Jersey Bight as a priority zone.[Footnote 27: FACT SHEET: Biden Administration Jumpstarts Offshore Wind Energy Projects to Create Jobs, (Mar. 29, 2021), https://www.whitehouse.gov/briefing-room/statements-releases/2021/03/29/fact-sheet-biden-administration- jumpstarts-offshore-wind-energy-projects-to-create-jobs/, (last visited Apr. 20, 2021); and see Lisa Friedman and Brad Plumer, The Biden administration makes a swath of ocean between New York and New Jersey an offshore wind zone, THE N.Y. TIMES, (Mar. 29, 2021), https://www.nytimes.com/2021/03/29/us/wind-power-ny-nj.html.] This increases the likelihood of further pledges of state capacity and commitment, much of this likely along the Atlantic continental shelf, given existing lease areas and interest, making this development reasonably foreseeable. BOEM should thus account for the Biden Administration's commitment to offshore wind energy and plans to advance permitting, upgrade ports to support construction, and offer federal loan guarantees for offshore wind projects in determining what is reasonably foreseeable wind energy development.

Comment Number: BOEM-2021-0024-DRAFT-0366-20
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

c. BOEM Must Consider the Cumulative Impacts of Reasonably Foreseeable Activities Other Than Offshore Wind Development

In addition to other reasonably foreseeable offshore wind development, the cumulative impact analysis should adequately consider seismic surveys for oil and gas. This is particularly relevant to the consideration of cumulative impacts to marine mammals and is discussed below in more detail.

Comment Number: BOEM-2021-0024-DRAFT-0366-24
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Additionally, as BOEM has already observed, offshore wind generation will likely directly displace fossil fuel generation. Due to offshore wind's ability to displace more highly polluting fossil resources, the climate impacts of the proposed offshore wind buildout would be net climate beneficial. Consequently, cumulative effects of offshore wind development may result in long-term, low-intensity beneficial cumulative impacts on marine mammals and sea turtles and long-term beneficial impacts on demographics, employment, and economics.[Footnote 42: E.g., id. at H-68, E3-25, E3-29.]

Comment Number: BOEM-2021-0024-DRAFT-0366-92
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

5. Cumulative Impacts - Marine Mammals

a. BOEM Should Prepare a Programmatic EIS for the North Atlantic Right Whale

To best account for the impacts of the simultaneous development of multiple lease areas on the North Atlantic right whale, we stress that the agency must prepare a full Programmatic EIS encompassing all United States' East Coast renewable energy development as soon as possible to inform future offshore wind development. Currently, impact analyses are undertaken, and mitigation measures prescribed, on a project-by-project basis leading to inconsistency and inefficiency. It would be highly beneficial to collectively consider available information on North Atlantic right whales in United States' waters to build a picture of responsible development accounting for the lifespan and migratory movements of the species, which have the potential to overlap with every WEA along the United States' East Coast on a twice-yearly basis (i.e., northern and southern migration). A Programmatic EIS is also particularly timely given the climate-driven shifts in North Atlantic right whale habitat use observed over the past decade [Footnote 144: 144 Albouy, C., Delattre, V., Donati, G. et al. "Global vulnerability of marine mammals to global warming" Scientific Reports, vol. 10, No. 548 (2020); Silber, G.K., Lettrich, M.D., Thomas, P.O., et al., "Projecting Marine Mammal Distribution in a Changing Climate," Frontiers of Marine Science, vol. 4, no. 413 (2017).] as well as significant changes in their conservation status and major threats. [Footnote 145: EarthTalk, January 18, 2010, "Despite Gains, One Third of the World's Marine Mammals Seen at Greater Risk," Scientific American, https://www.scientificamerican.com/article/earth-talks-marine-mammals/, accessed July 22, 2020.; Marine Mammal Commission, "Status of Marine Mammal Species and Populations," https://www.mmc.gov/priority-topics/species-of-concern/status-of-marine-mammal-species-and-populations/. 146 NOAA-NMFS, "Reducing ship strikes to North Atlantic right whales." Available at: https://www.fisheries.noaa.gov/national/endangered-species-conservation/reducing-ship-strikes-north-atlantic-right-whales#:~:text=All%20vessels%2065%20feet%20(19.8,endangered%20North%20Atlantic%20right%20whales. To reflect the risk posed by vessels of any length, the Commonwealth of Massachusetts established a mandatory vessel speed restriction for all vessels (including under 20 meters) in the Cape Cod Bay SMA.] Such an approach will ensure that alternatives and mitigation measures are considered at the scale at which impacts would occur and may potentially help increase the pace of environmentally responsible offshore wind development along the United States' East Coast.

Comment Number: BOEM-2021-0024-DRAFT-0366-93
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Notwithstanding the preparation of a Programmatic EIS, all future cumulative impact analysis must include the following considerations concerning vessel speed restrictions and vessel noise reduction:

Vessel strikes remain one of the leading causes of large whale injury and mortality and are a primary driver of the existing UMEs. Serious injury or mortality can occur from a vessel traveling above 10 knots irrespective of its length,146 and vessels of any length travelling below this speed still pose a serious risk. [Footnote 147: Kelley, D. E., Vlasic, J. P. and Brilliant, S. W., "Assessing the lethality if ship strikes on whales using simple biophysical models," Marine Mammal Science, vol. 37, pp. 251-267 (2020).] The number of recorded vessel collisions on large whales each year likely grossly underestimates the actual number of animals struck, as animals struck but not recovered, or not thoroughly examined, cannot be accounted for.148 In fact, observed carcasses of North Atlantic right whales from all causes of death may have only accounted for 36% of all estimated death during 1990-2017. [Footnote 149: 148 Reeves, R.R., Read, A.J., Lowry, L., Katona, S.K., and Boness, D.J., "Report of the North Atlantic Right Whale Program Review." 13–17 March 2006, Woods Hole, Massachusetts (2007) (prepared for the Marine Mammal Commission); Parks, S.E., Warren, J.D., Stamieszkin, K., Mayo, C.A., and Wiley, D., "Dangerous dining: surface foraging of North Atlantic right whales increases risk of vessel collisions." Biology Letters, vol. 8, p. 57-60 (2011). 149 Pace III, R. M., Williams, R., Kraus, S. D., Knowlton, A. R. and Pettis, H. M.," Cryptic mortality of North Atlantic right whales," Conservation Science and Practice, e346 (2021).]

Comment Number: BOEM-2021-0024-DRAFT-0370-11
Organization: Recreational Fishing Alliance
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

With regard to the request for information on other current or planned activities, RFA reiterates its previous comments that any elevation of the Ocean Wind project must take into consideration development of all 16 offshore wind lease areas. The impact of 5 wind turbines or even 98 might be negligible but when hundreds of wind turbines are built along the coast the cumulative or synergistic impact could be disruptive on an ecosystem scale. One wind farm does not make any real impact on our energy needs but a series of 16 fully built out wind farms can produce ecosystem and shelf-wide impacts. RFA does not view offshore wind as a benign activity where it makes sense to give it a try. The potential impacts, based on research from overseas facilities, appear far too consequential to process on a 'lets try and see what happens' approach. The Ocean Wind EIS must look at all the pros and cons of this project and so the public can determine if the benefits outweigh the risks

Comment Number: BOEM-2021-0024-DRAFT-0370-2
Organization: Recreational Fishing Alliance
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

RFA acknowledges that this notice is specific to the Ocean Wind project and that the Ocean Wind project, as described in this notice, will be limited to 98 turbines, several offshore substations and inter-array and transmission cables. However, RFA believes you can't view this project or the potential impacts of the project without consideration of the larger federal and state energy policies that seek to advance the development of offshore wind. Therefore, the preparation of the EIS must also include the potential impacts of 7,500 megawatts of offshore wind generation off of the New Jersey coast as well as the

development of all federal lease areas along the Atlantic Coast. While the impact of one offshore wind facility of 98 may be negligible or hard to quantify, the cumulative impact of offshore wind as part of a long-term energy plan must be evaluated. As described, one offshore wind facility will not make any meaningful impact in moving the nation toward the use of renewable energy, thus, it will take the full development of all identified lease areas to make any significant progress towards that goal. And for that reason, the EIS must consider the cumulative impacts of the Atlantic coast with over 1,000 turbines, not just the 98 proposed turbines associated with the Ocean Wind project.

Comment Number: BOEM-2021-0024-DRAFT-0372-4
Organization: Garden State Seafood Association
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The impact of this site and cumulative impact of others will limit the NMFS historic survey locations resulting in impacts to the data and the industry this science supports specifically the nations commercial and recreational sectors. Cumulative impacts of these projects must be considered in this EIS!

Comment Number: BOEM-2021-0024-DRAFT-0381-2
Organization: Clean Ocean Action
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The Ocean Wind project is the first of five offshore wind facilities to be developed in a 400,000-acre area off NJ's Ocean, Atlantic, and Cape May Counties. Given the scope and magnitude of this infrastructure, both on and offshore, it is imperative that not only each project be environmentally responsible, but the cumulative impacts considered and avoided, minimized or mitigated.

Comment Number: BOEM-2021-0024-DRAFT-0381-24
Organization: Clean Ocean Action
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

In an alternative analysis, BOEM should utilize an extensive cumulative impact analysis based on the potential harm to sensitive areas in the NY/NJ Bight, especially in light of the unprecedented footprint for offshore wind energy proposed across the East Coast. During the leasing and planning phases of offshore wind development, BOEM only reviews impacts that are "reasonably foreseeable." [Footnote 13: Vineyard Wind Supplemental Environmental Impact Statement, p 1-2] As a result, cumulative effects and extensive, precautionary steps have taken a back seat. Even though BOEM expanded the scope of their cumulative impact analysis during the Vineyard Wind programmatic review, there could still be cascading effects to vulnerable New Jersey and New York ecosystems, wildlife, and communities along the Mid- Atlantic Bight. Siting offshore wind turbines in the WEAs may affect these species, many of which are already "on the brink."

Echoed in COA and other organization's prior comments, the siloed nature of BOEM's approach to Section 102 of the National Environmental Policy Act (NEPA) could prevent proper siting, construction, and analysis. Section 102 states simply that a "detailed statement be prepared by the responsible official" when appropriate for "actions significantly affecting [Footnote 14: Id]." For instance, the Supplemental Environmental Impact Statement (SEIS) from Vineyard Wind 1 "assumes that best management practices (BMPs) incorporated from the [Record of Decision] on the 2007 Final Programmatic Environmental Impact Statement for Alternative Energy Development and Production and Alternate Use of Facilities on the Outer Continental Shelf, will be implemented.

BOEM finally shifted their analysis from the 2007 Record of Decision during the Vineyard Wind extended environmental review process. [Footnote 16: Vineyard Wind 1 Offshore Wind Supplemental Environmental Impact Statement, 1-2 (2020).] In July of 2020, the Bureau of Ocean Energy Management ("BOEM") published the SEIS, which exclusively focused on cumulative impacts from the project in relation to others in the same geographical area. The results of the SEIS detailed the importance of early planning and a robust cumulative impact analysis. The SEIS concluded that the proposed action, as well as all six alternatives, would result in "major impacts" to both commercial and recreational fishing as well as navigation. [footnote 17: Vineyard Wind Supplemental Environmental Impact Statement (2020), p. ES-5.] The previous project-specific Environmental Impact Statement found that, individually, Vineyard Wind would only result in "minor" to "moderate" impacts to these industries. [Footnote 18: Bureau of Ocean Energy Management, Vineyard Wind – Draft Environmental Impact Statement, Docket No. BOEM 2018-060, at ES-8.] The SEIS and a cumulative impact approach illustrate how the impacts change when viewed in relation to the surrounding developments. Further, the SEIS outlined why it is essential that regulators engage in increased cumulative impact analyses that focus on the development of the offshore wind industry holistically, as well as on an individual project-by-project basis.

With the Vineyard Wind project, BOEM changed their tiered analysis of "reasonably foreseeable" impacts to include "those proposed offshore wind projects with COPs submitted or approved at the time of analysis."19 BOEM expanded their "quantitative cumulative impacts analysis" in their SEIS to include all projects with submitted or approved COPs, all projects with onshore energy awarded, and all announced and future solicitations and lease sales. However, BOEM still did not expand this to apply to transmission, interconnection, or onshore impacts.

Nor did they cover the full extent of navigation and transit concerns as "reasonably foreseeable." COA supports the continued application of BOEM's "quantitative cumulative impact analysis" and urges BOEM to continue revising their approach to include the aforementioned additional cumulative impacts.

Comment Number: BOEM-2021-0024-DRAFT-0381-4
Organization: Clean Ocean Action
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

identifying and assessing cumulative environmental impacts from the first and each successive project as well as for the cumulative impacts from all five projects being considered in the region. The land use experience over the last 200 years has proven that piecemeal development will lead to mistakes and ecological harm.

Comment Number: BOEM-2021-0024-EMAIL-003-10
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

The "Affected Environment" section of the EIS should cover a sufficient geographic area to fully examine the impacts of the proposed project and support an analysis of the cumulative effects. It is important that the geographic area encompass all project related activities, including the lease area, cable corridors, landing sites, and the use of ports outside of the immediate project area.

Comment Number: BOEM-2021-0024-EMAIL-003-28
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

Cumulative Effects

The EIS should include a complete analysis of the cumulative impacts of the project. This analysis should describe the effects of the proposed project, which in combination with any past, present, and reasonably foreseeable future actions, may result in cumulative impacts on the ecosystem and human environment. This analysis should include a broad view of all reasonably foreseeable activities, including but not limited to, energy infrastructure (including future wind energy projects), sand mining, aquaculture, vessel activity, fisheries management actions, disposal sites, and other development projects. Consistent with efforts to evaluate the cumulative effects for both the Vineyard Wind and South Fork Wind projects, offshore wind development projects that have been approved and those in the leasing or site assessment phase should also be evaluated. Specifically, the cumulative effects analysis should consider all 16 COPs BOEM recently announced it plans to process by 2025. We encourage BOEM to use the final cumulative impact analysis from the Vineyard Wind and South Fork Wind projects to inform discussions of cumulative effects on marine resources from other offshore wind development projects for this EIS. Although BOEM has not conducted lease auctions for the New York Bight, consideration of the impacts from potential projects in the New York Bight Wind Energy Areas may be warranted, particularly if the lease areas are defined and auctions completed before the EIS for this project has been finalized.

Comment Number: BOEM-2021-0024-EMAIL-003-29
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

The EIS should evaluate cumulative impacts of project construction, operation and decommissioning. Consideration of impacts from multiple projects is particularly important for migrating species, such as marine mammals, sea turtles, fish, and invertebrates that may use or transit multiple proposed project areas. The potential cumulative impacts on the migration and movements of these species resulting from changes to benthic and pelagic habitats and potential food sources due to the presence of multiple projects should be evaluated in the cumulative effects analysis, including potential effects on the Mid-Atlantic cold pool from cumulative project development in this region.

Comment Number: BOEM-2021-0024-EMAIL-003-30
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

Assessment of Hydrodynamics and Oceanographic Conditions

An assessment of the potential impacts of the Ocean Wind project-specific (turbine level) and the full build-out/cumulative offshore wind scenario on hydrodynamics and oceanographic and atmospheric conditions will help evaluate impacts on species distribution and the effects to the Mid-Atlantic cold pool. Offshore habitat for a host of commercial and prey species is defined by the formation and breakdown of the cold pool and the water column stratification associated with this physical oceanographic feature. The potential impact of offshore wind development is not well known, but large scale energy extraction from wind farms and the physical presence of wind turbine foundations could have a significant impact on stratification in this region and therefore the ecology, habitat, and prey distribution of a number of protected species and federally managed fish species. We recognize there is uncertainty regarding the scope and scale of impacts that may result from the introduction of new structures into the offshore environment and related energy extraction from the wind turbines; however, it is critical that this issue is

thoroughly addressed and that the EIS considers the best available scientific information to support any conclusions regarding these impacts. In particular, the EIS should contain a robust assessment of the potential effects of both the Ocean Wind project and the full build-out scenario on prey resources for North Atlantic right whales and other species. Potential impacts to plankton distribution should be clearly discussed as their distribution, aggregation, and possible abundance may shift, and this could have a significant impact on North Atlantic right whales, among other large whales and plenty of planktivorous pelagic fish, as zooplankton are the primary source of prey for many higher trophic level organisms. In addition, consideration of impacts to species recruitment and larval distribution due to changes to ocean stratification and circulatory patterns resulting from the development of wind projects should be discussed in this section.

Comment Number: BOEM-2021-0024-EMAIL-003-31
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

Assessment of Overlapping Activities

The EIS should evaluate, in detail, the cumulative impacts on protected species and fisheries resources associated with overlapping construction activity of adjacent projects, including elevated noise levels, displaced fishing effort, cable routing and burial, and changes in species abundance, among other impacts. Specific information related to the timing of the construction activity and the expected number of proposed construction seasons is important, particularly for evaluating cumulative impacts to marine mammals, sea turtles, and spawning activity of fish and invertebrates. Vessel strikes are a documented threat to a number of protected species including Atlantic sturgeon, sea turtles, and large whales, including critically endangered North Atlantic right whales. The EIS should evaluate, in detail, the cumulative effects of increased vessel traffic during all phases of the project. In addition, an assessment of cumulative impacts of existing and proposed transmission cables should also be considered. Based on the proposed wind development projects in this region, there is the potential for substantial additive impacts associated with the number of required cables. As part of the cumulative effects analysis, measures to minimize the additive impacts should be considered, including the evaluation of designated cable routes and coordination and consolidation with adjacent projects to minimize cumulative impacts.

Comment Number: BOEM-2021-0024-EMAIL-003-32
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

Assessment of Regional Fishery Impacts

The EIS should evaluate the cumulative impacts of multiple projects on fishing operations, such as changes to time and area fished, gear type used, fisheries targeted, and landing ports. Some fishing vessels operate in multiple areas that may be subject to wind project development, while others may be displaced from one project area and fish in different areas outside the project areas. Therefore, it is important to evaluate how all existing and potential future wind projects could affect overall fishing operations due to effort displacement, shifts from one fishery to another, changes to gear usage and frequency, changes to fishery distribution and abundance, and increased fishing effort due to fishing in less productive areas. The EIS should consider the socio-economic impacts on fishing communities that cannot relocate fishing activity due to cultural norms (fishing grounds claimed or used by others), cost limitations (too expensive to travel greater distances to other fishing areas), and other relevant limiting factors. Shifts in fishing

behavior, including location and timing, may result in cumulative impacts to habitat as well as target and bycatch species (both fish and protected species) that have not been previously analyzed in fishery management actions. Accordingly, the analysis should also consider cumulative impacts of this project in the context of existing fisheries management measures. As noted above, the number, layout, and spacing of WTGs in relation to adjacent projects should also be considered in detail and modifications should be made to minimize cumulative impacts of adjacent projects on fishing operations and vessel transit. This is particularly relevant in the absence of an agreement for uniform WTG orientation and spacing with the Atlantic Shores project to the north of Ocean Wind.

Comment Number: BOEM-2021-0024-TRANS-42021-0008-2
Organization: Urban Coast Institute at Monmouth University
Commenter: Tony McDonald
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Secondly, I want to recognize that a lot of this as was also explained is happening within the broader context of national and regional and state goals with regard to the development of renewable energy. Again that is an objective and there are public policy outcomes that are significant and important with regard to that but I think we have to look at how that also might within the context of this specific project might have short term impacts on communities and we need to consider within the EIS, not only the broader positive objectives but also the impacts that this project might have.

A.2.21 Proposed Action/Project Design Envelope

Comment Number: BOEM-2021-0024-DRAFT-0003-3
Commenter: Al Paulson
Commenter Type: Individual

Comment Excerpt Text:

How about the likelihood of turbines freezing during the winter how will that impact energy supply.

Comment Number: BOEM-2021-0024-DRAFT-0090-2
Commenter: Louise Halprin
Commenter Type: Individual

Comment Excerpt Text:

How long/width is each propeller? Confirm there are 3 propellers per stanchion.

3. How deep below ocean floor do piers need to be drilled? (One item on your website listed 11 meters but I'd like that that verified & in measurements the USA uses—feet and inches.) How many yards of concrete will be poured (per pier casing)? How will all that concrete affect the rise of the ocean (as in # of feet)?

Comment Number: BOEM-2021-0024-DRAFT-0093-3
Commenter: Thomas Duffy
Commenter Type: Individual

Comment Excerpt Text:

Wind power has shown to be incapable of producing sufficient power for needs, is susceptible to failure in inclement cold weather conditions as proven in the State of Texas 2021 winter. There is no backup sufficient power for this system, and no alternative backup systems for the Windmill system which is destined to fail as proven by similar systems already existing but failing to feasibly produce.

Comment Number: BOEM-2021-0024-DRAFT-0108-4
Commenter: Jennifer Trofa
Commenter Type: Individual

Comment Excerpt Text:

Third, we need to be given meaningful and easily understood information with regard to the electricity that is to be generated: specifically, to whom will this energy be sold and distributed - will it power our houses, or those of our fellow Americans; how will it affect our choices with regard to energy provision – will we be able to keep our current Atlantic Electric provider or choose solar; how can we expect our energy costs to change; is simply paying more for our existing providers an option for us, regionally (with associated reduction in demand (and carbon emission) as price increases); and what are our other available options with regard to our use of electricity. See below.

Comment Number: BOEM-2021-0024-DRAFT-0112-13
Commenter: Robert and Joann Zuczek
Commenter Type: Individual

Comment Excerpt Text:

Offshore wind farms are expensive and difficult to build and maintain. It is very hard to build robust and secure wind farms in water.

Comment Number: BOEM-2021-0024-DRAFT-0112-14
Commenter: Robert and Joann Zuczek
Commenter Type: Individual

Comment Excerpt Text:

Wave action, and even very high winds, particularly during heave storms or hurricanes, can and will damage the wind turbines.

Comment Number: BOEM-2021-0024-DRAFT-0112-15
Commenter: Robert and Joann Zuczek
Commenter Type: Individual

Comment Excerpt Text:

The production and installation of power cables under the seafloor to transmit electricity back to land is very expensive.

Comment Number: BOEM-2021-0024-DRAFT-0112-9
Commenter: Robert and Joann Zuczek
Commenter Type: Individual

Comment Excerpt Text:

The lifetime span of wind-turbines is only from 20 up to 25 years.

Comment Number: BOEM-2021-0024-DRAFT-0113-12
Commenter: Meaghan Zanfardino
Commenter Type: Individual

Comment Excerpt Text:

The NJ grid is currently incapable of handling a new flow of energy. Without having both short term and long duration storage solutions (technology isn't there yet) as well as an updated grid the development of offshore wind farms faces major transmission issues.

Comment Number: BOEM-2021-0024-DRAFT-0116-2
Commenter: Maureen Reilly
Commenter Type: Individual

Comment Excerpt Text:

The effectiveness of this green energy has not truly been proven.

Comment Number: BOEM-2021-0024-DRAFT-0123-2
Commenter: Joseph Gartland
Commenter Type: Individual

Comment Excerpt Text:

They are adjunct power sources at best. Theres no long term study of their ability to withstand hurricanes.

Comment Number: BOEM-2021-0024-DRAFT-0125-1
Commenter: Mitch Bernstein
Commenter Type: Individual

Comment Excerpt Text:

1. What town(s) will construction come ashore on?

2. What / When will that impact take place?

Comment Number: BOEM-2021-0024-DRAFT-0169-2
Commenter: Rick Robinson
Commenter Type: Individual

Comment Excerpt Text:

First is that there really is no comparison anywhere in the world to the proposed turbine farms. There are none of similar size when fully developed, having the same quantity of mono-piles, similar size of towers, proximity to shore and placement density. To make comparisons to Block Island is disingenuous at best and actually probably intentionally misleading. So we are trying something unproven in a highly vulnerable setting. It was clear to me after yesterdays presentation that when the lease areas were established some years ago it was never contemplated that the turbines would be visible because the technology of similar size did not exist at the time. There were no 800 foot high turbines being made then. So the entire premise upon which the determination of the leases and their location was false. I would liken it to getting zoning approval for a development of 2,000 square foot residential homes and then later deciding your instead going to build ten story office buildings.

Comment Number: BOEM-2021-0024-DRAFT-0169-5
Commenter: Rick Robinson
Commenter Type: Individual

Comment Excerpt Text:

Just a few weeks ago I heard an Orsted representative talk about some technology involving bubble curtains that they MIGHT be able to use to mitigate the noise of construction which they KNOW will disturb, disrupt or destroy wildlife. They MIGHT use some technology that MIGHT work to mitigate something they KNOW will be harmful. Wouldnt you rather have them saying, if they must proceed, that they WILL use technology that is PROVEN to mitigate effects that might be harmful.

Comment Number: BOEM-2021-0024-DRAFT-0175-4
Commenter: Krid Olson

Commenter Type: Individual

Comment Excerpt Text:

I believe also that 15 miles offshore is not enough, and the proposed amount of turbines excessive.

Comment Number: BOEM-2021-0024-DRAFT-0208-8
Organization: Long Beach Island, NJ Coalition for Wind Without Impact
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The Wind Energy Potential of this Project is Very Limited: The NOI states that the turbines will not be placed closer than 15 miles offshore. But the BOEM has already applied an inner turbine exclusion zone of 17.3 miles to New York State wind energy projects based on visible impact. As a matter of equity, it should apply that same exclusion zone to New Jersey or explain to the public why New York's tourism and visual beauty interests are greater than New Jersey's.

Comment Number: BOEM-2021-0024-DRAFT-0217-1
Commenter: Christine Naisby
Commenter Type: Individual

Comment Excerpt Text:

If Lighthouse Drive is chosen as the Interconnection Landfall Site will these high voltage power lines be buried or placed on utility poles? How much energy will be transmitted through these lines?

Comment Number: BOEM-2021-0024-DRAFT-0220-8
Commenter: Joann Zuczek
Commenter Type: Individual

Comment Excerpt Text:

Offshore wind farms are expensive and difficult to build and maintain. It is very hard to build robust and secure wind farms in water.

6. Wave action, and even very high winds, particularly during heave storms or hurricanes, can and will damage the wind turbines.

7. The production and installation of power cables under the seafloor to transmit electricity back to land is very expensive.

Comment Number: BOEM-2021-0024-DRAFT-0233-7
Organization: City of Ocean City, Environmental Commission
Commenter Type: Local Agency

Comment Excerpt Text:

Landfall in Ocean City should be located at 35th Street, not 5th or 13th Streets. Cable beach depth at 30' so there is no chance of exposure.

PenJerDel Grid infrastructure improvement cost should be considered in economic benefit versus risk analysis.

Comment Number: BOEM-2021-0024-DRAFT-0251-4
Commenter: Paul E Towhey Sr
Commenter Type: Individual

Comment Excerpt Text:

There will be great harm to not only the ocean, but also to the cable landing areas.

Comment Number: BOEM-2021-0024-DRAFT-0255-2
Commenter: Arthur Peterson
Commenter Type: Individual

Comment Excerpt Text:

The wind mills will freeze, the ocean temp. may be above freezing but the air temp. will be well below freezing ocean spray, freezing rain and snow they will freeze.

Comment Number: BOEM-2021-0024-DRAFT-0276-3
Commenter: Susan Kirkpatrick
Commenter Type: Individual

Comment Excerpt Text:

I also believe that the planned hook up to the old electrical plant is not efficient nor is the impact completely thought out.

Comment Number: BOEM-2021-0024-DRAFT-0278-6
Commenter: Gerald Thornton
Commenter Type: Individual

Comment Excerpt Text:

I also have questions to how the transmission lines will come on shore, which appears likely to be through one of our busiest shore towns in Ocean City.

Comment Number: BOEM-2021-0024-DRAFT-0284-1
Commenter: Denise Kubaska
Commenter Type: Individual

Comment Excerpt Text:

1. Ecosystem Analysis

a. Establish baseline ecosystem analysis with comprehensive survey before work begins. This must be very comprehensive and include details of all current human environmental impacts.

b. Thorough analysis of projected ecosystem impacts based on comparable projects.

c. Plans for continued comprehensive analysis of the ecosystem as part of project.

d. Analysis must include not only the site of the turbines but locations of all infrastructure, i.e. transmission lines to proposed sites of connection to current grid and any ecosystem impacts that result along these routes and at these locations.

Comment Number: BOEM-2021-0024-DRAFT-0284-10
Commenter: Denise Kubaska
Commenter Type: Individual

Comment Excerpt Text:

How will the manufacturer work in coordination with current suppliers/distributors/regulators/communities to be able to react to changing conditions and make any needed adjustments?

Comment Number: BOEM-2021-0024-DRAFT-0284-6
Commenter: Denise Kubaska
Commenter Type: Individual

Comment Excerpt Text:

Will there be special lighting to warn off birds in flight?

Comment Number: BOEM-2021-0024-DRAFT-0284-7
Commenter: Denise Kubaska
Commenter Type: Individual

Comment Excerpt Text:

Will all underwater structures be encased in non-plastic substances that will not leach or corrode?

Comment Number: BOEM-2021-0024-DRAFT-0287-4
Organization: North Beach Taxpayers Association
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The effects and performance of a tiny five turbine experiment off Block Island cannot possibly be extrapolated to confidently forecast the impacts of a single project that is 20, 40 or more times larger than Block Island. It is just not believable.

Comment Number: BOEM-2021-0024-DRAFT-0287-9
Organization: North Beach Taxpayers Association
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Do the research to determine what areas are amenable to offshore wind:

-Fully understand impacts to the sea floor, migratory patterns of marine and bird populations.

-Fully understand disruptions to the Mid-Atlantic Cold Pool.

--Determine the impacts that the construction, operation, maintenance, decommissioning and dismantling of these projects will have on those who make their livelihood harvesting the ocean to feed us all.

Determine the onshore impacts to coastal communities – infrastructure, environmental considerations, impacts to tourism and local economies.

Comment Number: BOEM-2021-0024-DRAFT-0290-1
Commenter: John Feairheller, Jr., PP
Commenter Type: Individual

Comment Excerpt Text:

The offshore export cable is usually two independent operating cables from offshore substation to the land sea junction.

Figure 1 of the Ocean Wind Project Location Notice shows a single offshore Cable Route Corridor from Offshore substation C with three land fall locations leading to the B. L. England Site. Landfalls are shown at 5th Street, 13th Street and 34th Street in Ocean City, New Jersey.

Each proposed route will have different impacts.

The 5th and 13th Street Routes must be clear of the boardwalk and the reinforced concrete foundations of the prior boardwalk structure. The 5th street route is within 35 feet of historic structures constructed on 140-year-old brick and mortar foundations as well as within 60 feet of an elementary school. All three pass through are subject to local public Green Acres open space review.

Does the operating plan propose use of all tree land fall locations of 5th Street, 13th street and 34th street or are these alternate locations?

Will the BOEM approval specific or all routes?

The City of Ocean City at present controls access to the Municipal Rights-of-Way, that were created by simultaneous subdivision. Will the BOEM reopen this review to comments if the City access granted does not align with the routes shown in Figure No. 1?

The City of Ocean City at present controls access to the Municipal Rights-of-Way, that were created by simultaneous subdivision. Will the BOEM reopen this review to comments if the City access granted does not align with the routes shown in Figure No. 1?

The County of Cape May at present controls access to the County Routes 656, 619 and 623. If the County prefers an inshore Export Cable from 13th Street to the B.L. England rather than granting access to Route 656 would the BOEM reopen review of this project?

The Onshore Export Route Options do not extend to the Ocean City Substation would using a route not shown reopen review of this project?

Does this BOEM review consider the Onshore Impacts or is it part of a separate review?

Comment Number: BOEM-2021-0024-DRAFT-0295-19
Organization: New England Fishery Management and Mid-Atlantic Fishery Management Councils
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The Councils recommend that BOEM require that this project, future projects in the segmented lease area, and projects in the adjacent Atlantic Shores lease area use standardized turbine layouts, consistent survey methodologies, and shared cable routes to the extent possible. This will provide efficiencies for analysis and development and will also help minimize impacts to commercial and recreational fishing, vessel transit, and habitats. In Southern New England, developers voluntarily agreed to a consistent array configuration spanning all lease areas; in the absence of such an agreement here BOEM must take a strong leadership role.

Comment Number: BOEM-2021-0024-DRAFT-0298-2
Organization: New Jersey Department of Transportation
Commenter Type: State Agency

Comment Excerpt Text:

As a maritime state, New Jersey's marine transportation system (MTS) infrastructure, including navigation channels, port infrastructure, marinas, maritime businesses, confined disposal facilities and dredged material placement projects, have the potential to support wind project development and grid integration. The cabling and grid connectivity however must be planned and coordinated so as to ensure the minimization of impacts to state channels, dredged material placement facilities and NJDOT infrastructure.

Comment Number: BOEM-2021-0024-DRAFT-0298-3
Organization: New Jersey Department of Transportation
Commenter Type: State Agency

Comment Excerpt Text:

The following comments are in relation to cabling related to off-shore wind projects generally, that are expected to have cabling that makes landfall in New Jersey:

1. Planning and permit coordination with the United States Army Corps of Engineers (USACE) should specifically include NJDOT Office of Maritime Resources. This coordination is vital to reduce impacts and coordinate operations on planned, future and existing navigation projects, and cooperative marsh restoration projects within the back bay regions.

Comment Number: BOEM-2021-0024-DRAFT-0298-4
Organization: New Jersey Department of Transportation
Commenter Type: State Agency

Comment Excerpt Text:

2. Cable placement needs to take into account all state and federal navigation channels, safe harbor and anchoring areas. Cables and their corridors should be a minimum of, and be maintained at a depth to, minimize construction impacts in these areas.

Comment Number: BOEM-2021-0024-DRAFT-0298-5
Organization: New Jersey Department of Transportation
Commenter Type: State Agency

Comment Excerpt Text:

3. Cable placement needs to take into account all state and federal dredged material management locations, so as not to impact active or future operations. For this reason, NJDOT needs to understand the width and impact of any associated easements, right-of- ways or security zones.

Comment Number: BOEM-2021-0024-DRAFT-0298-6
Organization: New Jersey Department of Transportation
Commenter Type: State Agency

Comment Excerpt Text:

4. Cable placement should be deep enough to account for safe navigation, anchoring of large or commercial vessels, channel maintenance and construction equipment. How will cable scour be monitored along proposed corridors, and at what timeframes and intervals?

Comment Number: BOEM-2021-0024-DRAFT-0298-7
Organization: New Jersey Department of Transportation
Commenter Type: State Agency

Comment Excerpt Text:

5. What restrictions, if any, will be imposed on anchoring or navigation around cables/corridors in New Jersey's back-bay environment?

Comment Number: BOEM-2021-0024-DRAFT-0298-8
Organization: New Jersey Department of Transportation
Commenter Type: State Agency

Comment Excerpt Text:

6. What happens to the cables after the useful life of the windfarm and/or with decommissioning? Will cables be removed or remain in place? Who will monitor the equipment that is determined to remain in place? If left in place, who will monitor and maintain the infrastructure?

Comment Number: BOEM-2021-0024-DRAFT-0298-9
Organization: New Jersey Department of Transportation
Commenter Type: State Agency

Comment Excerpt Text:

7. There are numerous NJDOT managed outfalls, bulkheads, and various other bridge and transportation projection structures along the coast with various footprints and depths. These structures should be avoided, protected and monitored for potential impacts during cable installation.

Comment Number: BOEM-2021-0024-DRAFT-0300-4
Commenter: Howard Marshall
Commenter Type: Individual

Comment Excerpt Text:

Cables have to be run to distribution centers. Right now there are only two on our coast.

Comment Number: BOEM-2021-0024-DRAFT-0329-2
Commenter: Richard Bertsch
Commenter Type: Individual

Comment Excerpt Text:

CONSTRUCTION: In the attached NY Times article on 1/21/2021 by Stanley Reed titled “A Monster Wind Turbine is Upending an Industry” he writes that GE has a skimpy record and no experience of installing one GE Haliade Turbine in open ocean waters in rough weather and that they need to show that is can reliably install them.

Comment Number: BOEM-2021-0024-DRAFT-0329-4
Commenter: Richard Bertsch
Commenter Type: Individual

Comment Excerpt Text:

The attached letter from NOAA to BOEM dated March 20, 2021 supports the failure to implement consistent baseline studies by developer applicants.

Comment Number: BOEM-2021-0024-DRAFT-0336-3
Commenter: John Feairheller, Jr., PP
Commenter Type: Individual

Comment Excerpt Text:

the locations of the onshore export cable routes will preclude construction activities in the 2nd and 3rd quarters of the year.

Fourth, two vaults will be needed one for each cable and the width of the right-of-way together with other uses in the rights-of-way would allow for one vault.

Fifth, the vault entry if in the roadway must be rather for traffic. It is likely that this access point will be permitted within a sidewalk area and will likely be required to be non-conductive in a community occupied by people with wet bare feet. The number of cable faults in Table 6.1.2-12 is 3.

Comment Number: BOEM-2021-0024-DRAFT-0343-1
Commenter: John Feairheller, Jr., PE, PP
Commenter Type: Individual

Comment Excerpt Text:

It is expected that the Onshore export cable will be laid at an elevation below other existing cables and perhaps to an additional depth to dampen the EMF field. If placed overhead, they would need to be more than 40 feet from occupied structures. Needing clearance and having an easement are distinctly separate issues so it is reasonable to expect that prior to making an allowance for dampening of EMF fields by wet sand a 30 feet depth of cover should be expected.

Comment Number: BOEM-2021-0024-DRAFT-0345-9
Organization: U.S. Environmental Protection Agency, Region 2
Commenter Type: Federal Agency

Comment Excerpt Text:

Volume I, Section 5 thoroughly evaluates various development locations and design alternatives that were considered for the Ocean Wind project for optimizing wind generation while minimizing environmental impacts and stakeholder conflicts.

Comment Number: BOEM-2021-0024-DRAFT-0351-1
Organization: Barnegat Bay Partnership
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Inadequate Detail Regarding Construction Methodologies and Routes

The applicant indicates throughout the COP that the construction methodologies to be utilized at the landfall locations and the inshore export cable routes will be determined prior to construction, but apparently after the draft EIS is completed. It is not clear if the resources agencies and the public can accurately assess the impacts of the project without a clear identification of what the construction methodologies and routes will be. The impacts associated with each construction/installation method and route should be clearly identified in the draft EIS so that a reasonable projection of impacts and assessment of the alternatives can be made.

In Volume 1 of the COP the placement of cables within the Barnegat Bay is identified as “inshore export cable route,” but in Volume 2 that designation is not used. It is not clear if disturbances to the environment associated with these routes are included in the discussions of “Offshore export cable route,” “onshore export cable route,” or omitted completely. The terminology used throughout the draft EIS should be consistent. For example, what impacts can be anticipated on Island Beach State Park west of the transition joint bay (TJB) but east of the Barnegat Bay? Will the cable be laid via trenching or horizontal directional drilling, and where are these disturbances described or calculated?

Comment Number: BOEM-2021-0024-DRAFT-0353-4
Organization: New Jersey Resource Project
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

We want to see:

A coordinated efficient grid constructed between turbines and the shore with a minimum of cables that is as safe as possible. Local community input into onshore connections is critical.

Comment Number: BOEM-2021-0024-DRAFT-0353-7
Organization: New Jersey Resource Project
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

We want to make sure construction also doesnt happen during primary tourist season and is planned to take seasonal flooding and storms into effect.

Comment Number: BOEM-2021-0024-DRAFT-0353-9
Organization: New Jersey Resource Project
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

We want confirmation that the turbines will remain at a minimum of 15 miles off-shore.

Comment Number: BOEM-2021-0024-DRAFT-0354-5
Organization: New York State Department of State
Commenter Type: State Agency

Comment Excerpt Text:

Evaluate deeper cable burial depths when crossing the existing tug-tow traffic route to minimize risks to the cable from a dropped anchor. See enclosure for discussion of potential effects on submarine cables.

Comment Number: BOEM-2021-0024-DRAFT-0364-15
Organization: Oceana
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Some areas of the oceans have higher levels of protections due to their importance to fisheries, wildlife, or other reasons. Offshore wind development should not occur in marine monuments or sanctuaries; habitat areas of particular concern including areas that include deep sea corals; Seasonal Management Areas (SMAs), or persistent Dynamic Management Areas (DMAs) created to reduce risk of vessel collision with North Atlantic right whales. When SMAs or persistent DMAs cannot be avoided, the most stringent mitigation measures will be required.

Comment Number: BOEM-2021-0024-DRAFT-0364-19
Organization: Oceana
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The EIS must be include alternatives to schedule construction activities to minimize interactions with migratory species, spawning, feeding aggregations and breeding activity and specific seasonal and reactive restrictions on construction activity during times when North Atlantic right whales and other protected species may be present.

Comment Number: BOEM-2021-0024-DRAFT-0364-20
Organization: Oceana
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Offshore wind development will include installation of equipment at the project site and may include both driven piles and piles installed using vibratory techniques. Each of these produce disruptive noise in and around the project area and BOEM should include clear requirements on these activities to minimize the effects of the project. Specifically, the EIS should include a range of alternatives to prohibit pile driving during seasons when protected species are known to be present or migrating in the project area, in addition to any dynamic restrictions due to the presence of NARW or other endangered species.

Comment Number: BOEM-2021-0024-DRAFT-0364-25
Organization: Oceana
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Despite the best information informing seasonal restriction on construction, it is likely interactions with North Atlantic right whales will occur in and around the project site. The EIS must include alternatives to use effective reactive restrictions on construction that are triggered by visual or acoustic presence or other means of detection for protected species before or during piling installation. These alternatives should include:

- A prohibition on initiating pile driving if a North Atlantic right whale or other protected species is detected by visual or acoustic surveys within the acoustic or visual clearance zones.

- A shutdown requirement if a NARW or other protected species is detected in the clearance zones, unless continued pile driving are necessary for safety. If and when this exemption occurs the project must immediately notify NMFS with reasons and explanation for exemption and a summary of the frequency of these exceptions must be publicly available to ensure that these are the exception rather than the norm for the project.

- Condition for resumption of pile driving after the lead Protected Species Observer confirms that no North Atlantic right whale or other protected species have been detected within the acoustical and visual clearance zones.

Comment Number: BOEM-2021-0024-DRAFT-0365-9
Commenter: Anthony Butch
Commenter Type: Individual

Comment Excerpt Text:

Relative short lifespan vs enormous cost and construction period

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Comment Number: BOEM-2021-0024-DRAFT-0366-19
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

b. BOEM Should Account for Technological Changes in Future Evaluations

As acknowledged in previous environmental reviews of offshore wind projects, [Footnote 29: See South Fork DEIS at E4-10 ("it is difficult to accurately predict future technology for . . . offshore wind").] in assessing how future wind sites may be constructed, operated, and sited, it is reasonable to assume that future projects will employ higher output turbines that can generate more power with fewer physical turbines of larger size. This could change impacts around hub height, rotor diameter, and total height of turbines for future projects, as well as, inter alia, the number of turbines and the length of interarray cables. [footnote 30: See South Fork DEIS at E4. 31 South Fork DEIS at E4-10. 32 Id. at Tbl. A-4.]

Projects, particularly projects further on the time horizon, may have increasingly larger turbines that could impact the design and layout of the operation. As BOEM has already noted, for future projects, BOEM should assume that "the largest turbine that is presently commercially available" be used to evaluate potential impacts.31 Changes in turbine size could have beneficial impacts (such as fewer turbines spaced further apart) as well as potentially negative impacts (larger rotation zones that could impact certain species like higher flying birds). The Vineyard Wind 1 project is one example of successfully incorporating evolving technological changes. Vineyard Wind is proposing to use 13 MW turbines, which are larger than the turbines originally planned for the project, because of rapid technology advancements.32 In the Draft EIS, we urge BOEM to ensure that future cumulative impact models continue to keep pace with technology.

Comment Number: BOEM-2021-0024-DRAFT-0366-2
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Responsible development of offshore wind energy: (i) avoids, minimizes, mitigates, and monitors adverse impacts on marine and coastal wildlife and their habitats, (ii) reduces negative impacts on other ocean uses, (iii) includes robust consultation with Native American Tribes and communities, (iv) meaningfully engages state and local governments and stakeholders from the outset, and (v) uses the best available scientific and technological data to ensure science-based and stakeholder-informed decision making. These comments seek to provide BOEM with recommendations for what legal and environmental factors must be considered to ensure a responsibly developed project as the agency drafts an Environmental Impact Statement.

Comment Number: BOEM-2021-0024-DRAFT-0366-31
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

As organizations, we are eager to see responsibly developed offshore wind power advance in the Atlantic and recognize that a carefully implemented project design envelope (PDE) approach could provide both environmental and economic benefits. Offshore wind energy technology and construction practices are evolving rapidly, and project design and planning takes years. A flexible permitting system that ensures developers can capitalize on new opportunities for environmental impact mitigation or cost reduction is beneficial for both the industry and wildlife. Project developers must not be discouraged from pursuing opportunities to take advantage of technologies and practices currently progressing through the research and development process that could help facilitate the increasingly responsible development of offshore wind energy.

Comment Number: BOEM-2021-0024-DRAFT-0366-32
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

However, to ensure BOEM can perform a sufficient NEPA review of a project, a project's COP must provide enough specifics on each possible configuration covered by the proposed envelope to enable evaluation of impacts on affected species and to fully evaluate the proposal. For example, it would be insufficient to simply identify the total number of turbines that might be built, because the timing of pile driving is also critical to evaluating noise-related impacts to marine mammals and other species.

Comment Number: BOEM-2021-0024-DRAFT-0367-1
Organization: Atlantic Shores Offshore Wind
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Accordingly, Atlantic Shores anticipates that certain siting, construction, and operational activities addressed in Atlantic Shores' and Ocean Wind's COPs may proceed concurrently or under a staggered schedule. On that basis, Atlantic Shores requests that the Ocean Wind EIS evaluate those areas where potential coordination and cooperation between Atlantic Shores and Ocean Wind may be required with respect to siting, construction, and operational activities.

Comment Number: BOEM-2021-0024-DRAFT-0367-3
Organization: Atlantic Shores Offshore Wind
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Lease area boundary minimum surface structure setback requirements. The Ocean Wind EIS should analyze the need and, if applicable, recommended distance for any surface structure setback requirement along the shared boundary for the Ocean Wind and Atlantic Shores lease areas. The siting of surface structures, primarily wind turbine generators (WTGs), close to the shared boundary area within either lease area may affect the ability to site WTGs or other surface infrastructure within the adjacent lease area. If BOEM determines that a minimum separation distance between surface structures in adjacent leases is appropriate, the separation distance should be apportioned equitably between the affected leases based on consideration of valid scientific data and other factors within BOEM's jurisdiction. See 30 C.F.R. §585.102.

Comment Number: BOEM-2021-0024-DRAFT-0367-6
Organization: Atlantic Shores Offshore Wind
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Other lease area shared boundary construction and operations activities. In addition to export cable installation, it would be beneficial for the Ocean Winds EIS to evaluate the extent to which coordination may be required regarding proposed construction and operations activities. Such coordination primarily would encompass marine vessel staging and transit activities; BOEM previously has recognized the need for coordination of these activities between collocated lease areas. See, e.g., Vineyard Wind 1 Offshore Wind Energy Project, Final Environmental Impact Statement (March 2021) (Vineyard Wind 1 FEIS), at Vol. 1, Sections 3.11 and 3.12. Atlantic Shores requests that BOEM evaluate this factor in further detail in the Ocean Wind EIS.

Comment Number: BOEM-2021-0024-DRAFT-0369-2
Commenter: Kathleen McGuire
Commenter Type: Individual

Comment Excerpt Text:

Also the size of these turbines rising so high above the ocean needs to be better understood.

Comment Number: BOEM-2021-0024-DRAFT-0372-2
Organization: Garden State Seafood Association
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Additionally, we question how BOEM can rule out lease locations within the past few weeks in the NY Bight for viewshed concerns, which are further from land than this proposed site off of New Jersey? There should be consistency for all citizens of the United Stated related to the impacts of these proposed project locations.

Comment Number: BOEM-2021-0024-DRAFT-0372-10
Organization: Garden State Seafood Association
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

While we understand the goals and timelines laid out by the BOEM process, there is still a lack of transparent information on power generation, pricing and economic impacts. This information would help identify the number of turbines necessary to meet the capacity goal. It also could impact cabling, site layout and many other possible issues including impacted habitat.

Current plans also call for separate transmission infrastructure for each project which should be negotiated to minimize the potential impact to commercial and recreational fishing grounds. Existing projects have already shown the problems that can arise when cables are only minimally buried. The need for deep cable burial suggests that a 6foot burial depth be maintained and micro-siting with fishers' input is required in order to build these projects with limited impacts on fishing.

The COP proposes connecting the project to shore via three cables along two distinct cable routes one 72 miles and other 32 miles to reduce impacts to the onshore power grid. The EIS should explain why the use of multiple cables is necessary, and acknowledge that the use of two cable routes greatly increases offshore impacts, including habitat disturbance and modification, as well as safety concerns for fisheries that use bottom tending mobile gear and cost to consumers.

Comment Number: BOEM-2021-0024-DRAFT-0380-2
Commenter: Jennifer Trofa
Commenter Type: Individual

Comment Excerpt Text:

I implore BOEM to take its time on this project. A hastily constructed facility built over the next ten years yields a vastly different outcome from a well-thought-out next generation wind solution built ten years from now. We must construct a facility that cements a path to sustainability. Planned obsolescence is not appropriate here.

Comment Number: BOEM-2021-0024-DRAFT-0380-6
Commenter: Jennifer Trofa
Commenter Type: Individual

Comment Excerpt Text:

With so much wind-farming recently online in Europe, we should be, at this stage, gathering data, trying to minimize facility size and trying to maximize output/flexibility of output, in our design; to lock us in to one design at this point, is illogical, and irresponsible. Windmills off the coast of Western Europe are not analogous to windmills off the coast of Eastern America because the Ocean is different there, the currents are different there, the ecosystems are different there. But their data and experience are relevant and must be considered.

This project has been contemplated for a few years now and wind technologies have improved significantly since the plans were drawn.A few years is a long time in the world of new technologies - we

live at a time when brilliant minds create and perfect new technologies every day. Bladeless windmills are the future; floating windmills are the future; increased storage capacity is the future. Only "next generation" technologies should be employed. We need BOEM and the builder of the windmills to take the time needed to consider the data and designs available to ensure that a windfarm built off New Jersey's shores is literally the best that has ever been built, will be perfectly operational for multiple generations, and is as unobtrusive to and symbiotic with the existing ecosystem as possible. Let's not saddle ourselves – or let the government put pressure on the windmill builders to deliver - a product that is rushed to market in the race to be "first".

Comment Number: BOEM-2021-0024-DRAFT-0281-4
Commenter: Jorge Constantino
Commenter Type: Individual

Comment Excerpt Text:

5. Who will pay to pass the cables from the wind farm to the BBL plant as it goes through Ocean City and Uppertownship? How long will this construction take, especially in Ocean City, which will be transected during this part of the project?

Comment Excerpt Text:

7. What is the expected lifespan of the project? Will the wind mills then be replaced or retrofitted for further use, or will the project then be terminated, as was the BBL power plant?

Comment Number: BOEM-2021-0024-DRAFT-0381-22
Organization: Clean Ocean Action
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Another area of consideration is the onshore infrastructure necessary to manage this new coastal-dependent industry. Each offshore wind energy project will need operation and maintenance facilities. Further, there is the need for larger manufacturing centers and marshalling ports.

In Volume 1, Section 6, the COP gives a woefully inadequate description of necessary onshore facilities and appears to suggest it has no obligation to provide a detailed analysis of the comprehensive onshore facilities that will accommodate their project and that are needed to support the construction, operation, and maintenance of the offshore facilities. The COP states:

The primary ports that are expected to be used during construction, but which have independent utility and are not dedicated to the Project, are as follows:

Atlantic City, NJ - construction management base. The site area is intended to offer an opportunity for a combined base for crew transfer vessel (CTV) operations for the construction phase.

Paulsboro, NJ or Europe (directly) - for foundation scope. The port area is intended to offer an opportunity for both foundation fabrication facilities as well as staging and load-out operations in collaboration with a key subcontractor.

Norfolk, VA or Hope Creek, NJ - for WTG scope. The port area is intended to offer an opportunity for WTG pre-assembly and load-out facility without any air draft clearance restrictions covering jack-up installation vessel assets.

Port Elizabeth, NJ, Charleston, SC, or Europe (directly) - cable staging (unless transported directly from the cable supplier). The intended terminal area and quay infrastructure will be used for various cable staging and operation activities, if required.

During operations, Ocean Wind intends to utilize an O&M Facility in Atlantic City that will serve as a regional operations and maintenance center for multiple Orsted projects in the mid-Atlantic, including the Project.

Again, these port facility descriptions are unacceptably vague, and the COP EIS must require specific and clear descriptions of the potential onshore facilities. Of special note, it appears that Ocean Wind may not require any construction port facilities, relying on European sources for construction materials to be shipped. The COP EIS must account for all potential port activities at the various proposed locations.

The COP EIS must also include the following for operation and maintenance:

Type of maintenance approach (ship-based, air support);

Land use requirements;

Proximity to the offshore wind farm ;

Storage capabilities for spare components;

Wharf area required Bearing capacity;

Ship depth requirements; and

Secondary impacts from influx of workers and support services

Specifically, COA advocates that the COP-EIS include land-based facilities that are or may be used for development of wind turbine generators as well as operation and management. These are:

To reduce the overall footprint; and

To be climate resilient; and

To be as energy efficient as possible; and

Sited in environmentally friendly locations.

The COP appendices focusing on port operations and maintenance activities are largely redacted. The COP EIS must require more disclosure while understandably protecting sensitive legal and financial information.

Comment Number: BOEM-2021-0024-DRAFT-0284-5
Commenter: Denise Kubaska
Commenter Type: Individual

Comment Excerpt Text:

Could the structure include generation of electricity based on tidal movements thus adding to the output for the similar environmental impact from the structure?

Comment Number: BOEM-2021-0024-EMAIL-003-11
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

This analysis should also include any necessary landside facilities and the staging locations of materials to be used in construction. BOEM should ensure that findings for each effect/species are supported by

references where possible and in context of the proposed project to allow for a well reasoned and defensible document.

Comment Number: BOEM-2021-0024-EMAIL-003-12
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

The description of the "Affected Environment" should recognize the ocean environment is not static, and the environment and species within the environment vary over time and seasons. This section should include information on the physical oceanography (temperature, salinity, depth, and dissolved oxygen). It is important that the EIS discuss seasonal changes in the environment or other factors such as the changes in the "cold pool" due to altered hydrodynamic regimes and how they influence the distribution and abundance of marine resources. Within this section, the EIS should include results of on-site surveys, site-specific habitat information, and characterization of benthic communities. Additional details should be provided related to sensitive habitats in the project area, as described above, particularly once new information is available in the updated COP.

Comment Number: BOEM-2021-0024-EMAIL-003-16
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

The "Environmental Consequences" section of the EIS must consider impacts resulting from the construction, operation and maintenance, and decommissioning of the proposed facility, including survey and monitoring activities that are anticipated to occur following approval of a COP. Impact descriptions should include both magnitude (negligible, minor, moderate, major) and direction (beneficial or negative). This section should consider all of the individual, direct, and indirect effects of the project, including those impacts that may occur offsite as a result of the proposed project, such as construction of landside facilities necessary to construct and support operations of the Ocean Wind project. Impact producing factors from each phase of development should be considered, including site exploration, construction, operation and maintenance, and decommissioning.

Comment Number: BOEM-2021-0024-EMAIL-003-17
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

All activities included in construction of the project should be considered, including the deposition of fill material, dredging, water withdrawals, pile driving, increased vessel traffic, anchoring, and transmission cable installation. All relevant impact producing factors affecting marine resources should be evaluated, including, but not limited to, elevated noise levels, increased vessel traffic, turbidity and sedimentation, electromagnetic fields (EMF), habitat alteration, presence of structures (WTGs, substations, and cables), and localized changes in currents.

Comment Number: BOEM-2021-0024-EMAIL-003-2
Organization: NOAA Fisheries
Commenter: Michael Pentony
Commenter Type: Federal Agency

Comment Excerpt Text:

General Comments on the COP

We rely on the information in the Ocean Wind COP to help inform the comments and technical assistance provided during the scoping process. Changes and updates to the COP will affect our ability to provide detailed, site-specific information to assist in the development of the EIS and undertake the required consultations. During a March 2, 2021, interagency meeting, BOEM indicated that the March 2021 COP will be updated in August 2021 to include additional information on submerged aquatic vegetation (SAV), marine archeological surveys, and acoustic modeling data. While the absence of this information may be sufficient to meet BOEM's regulations regarding the COP completeness and sufficiency review, this information is a critical component for our consultations and project review and will require additional staff time to evaluate. We may need to provide additional comments and technical assistance upon review of the updated information, including potential alternatives to minimize and mitigate impacts of the project on marine and estuarine resources. To reduce the potential need for multiple reviews, supplemental technical assistance comments, and project delays, we recommend BOEM ensure that project information is complete before initiating future projects or continuing to advance the process for existing projects. Early coordination with us to discuss information needs would help prevent inefficiencies and confusion that can result from multiple reviews.

Critical information is missing from the March 2021 COP that is necessary to evaluate this project and help inform the development of the EIS. For example, WTG capacity is not specifically identified, and the design envelope is not defined (e.g., there is no lower limit to anticipated WTG numbers or WTG foundation size). This limits our ability to assess the number and placement of WTGs necessary to meet the project purpose and need while also minimizing impacts to marine resources and existing fishing operations. Further, this information will help determine foundation diameter for WTGs and substations and inform considerations of impacts to marine resources and potential mitigation needs.

Comment Number: BOEM-2021-0024-EMAIL-004-18
Organization: Long Beach Island (LBI) New Jersey Coalition for Wind Without Impact
Commenter: Bob Stern
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The NOI should also commit the BOEM to provide initial visual renditions of the turbines, done by an independent third party, during the scoping process and to do full visual renditions and a detailed study of the specific adverse impacts to New Jersey shore communities of visible turbines on local rentals, property values, and tourism in the draft EIS. The BOEM has failed the public by standing idly by in Virginia while the company has presented flawed and implausible visual renditions, and false statements that the turbines will be "barely" and "rarely" visible. This needs to end.

Comment Number: BOEM-2021-0024-TRANS-41321-0002-1
Commenter: Louise Halprin
Commenter Type: Individual

Comment Excerpt Text:

how much of 860 foot height is above the water line, at high tide, at low tide, you should try real elevations not the ones that we saw today. They should include, you know, sections cut through the middle from the highest propellor stanchion to the ocean floor and include all the materials, how -- I am not saying answer all these right now. How long width is each propellor, confirm their -- it looks like three propellor per stanchion

Comment Number: BOEM-2021-0024-TRANS-41321-0004-3
Organization: New Jersey Coalition for Wind Without Impact
Commenter: Bob Stern
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

this project itself, just in terms of power is very limited.

Comment Number: BOEM-2021-0024-TRANS-41321-0009-1
Organization: Special Initiative on Offshore Wind
Commenter: Kris Ohleth
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

In terms of energy systems, offshore wind delivers reliable energy that is close to the demand for electricity. Energy that is produced right off the coast of America's largest and most energy hungry cities and states like New Jersey.

Comment Number: BOEM-2021-0024-TRANS-41321-0011-1
Commenter: Frank Giordano
Commenter Type: Individual

Comment Excerpt Text:

I am concerned about the cable connection and the other alternatives so my question on the northern end is when will a decision be made on where that cable connection will be? If so, what will be the impact to the community when it comes to the cable depth and size, you know it's very shallow here, and four to six feet, you know, is not going to work. Also concerned about the electromagnetic field, the noise and of course the local construction. Of the three choices, there is already an intake and outflow estuary coming out of the Oyster Creek plant when it was operational. It would be so much easier to just go down the road and pull in, the cables right through an existing waterway and avoid all of the construction activity and interference with peoples' lives. Along our shoreline here I live right on Barnegat Bay, the swans, the clams, the crabs, the swimming, the boating, I am sure we are all in favor of the clean energy but I just don't know about the size of these cables, the depths of these cables and the impact it has to our home value and our neighborhood. So I'd like to learn a whole lot more about when that decision is going to be and to speak out not only in favor of the project but against doing something that's harmful to a community that doesn't really need it when down the road there is a much better choice.

Comment Number: BOEM-2021-0024-TRANS-41321-0018-2
Commenter: Martha
Commenter Type: Individual

Comment Excerpt Text:

I'll be looking into New Jersey Windmills and the other website, but I have looked at some information about -- that there is only five windmills off the cost of Block Island and two in Virginia and none in the rest of the country, not even in California and there is many in Europe and every study I looked at said they interrupted whales, dolphins, sealife, of course when they are building it but they then continue to make noise and there have been, every study says we need more time, we need long range studies. Well, I don't want my Ocean City to be the head, the spear of this experiment with unintended consequences.

Comment Number: BOEM-2021-0024-TRANS-41521-0002-3
Commenter: Kathleen Spaeth
Commenter Type: Individual

Comment Excerpt Text:

Then the second -- the third I JerseyShore Reporting, LLC 10 am concerned about is the construction of the monopoles. And I have heard different things during different hearings, you know, on these projects, but in particular, I want us to look at the jacket feet with the steel pins. Can we develop something else that will allow some of our species like our crabs and our shellfish to attach to those feet instead of leaving them in such a way that I think that nothing is going to attach to them, especially when you are disturbing those things already in the ocean.

Comment Number: BOEM-2021-0024-TRANS-41521-0012-6
Organization: Ocean City Environmental Commission
Commenter: Rick Bernardini
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

We support, if landfall is going to be occurring in Ocean City, in order to be at the 35th Street Station entryway, 5th Street and 13th Streets are not appropriate in terms of traveling through the entire city instead of just right out Roosevelt Boulevard and then any transfer of cable under the beach in our swimming areas ought to be 30 feet deep and put in through horizontal drilling chniques.

Comment Number: BOEM-2021-0024-TRANS-42021-0001-1
Commenter: Steven Cabano
Commenter Type: Individual

Comment Excerpt Text:

I did hear that the construction time period for the project was roughly a year, if I'm not mistaken. What is the expected start date and end date for construction?

Comment Number: BOEM-2021-0024-TRANS-42021-0011-1
Commenter: Peggy Worthington
Commenter Type: Individual

Comment Excerpt Text:

I have a question and that regards, actually I have been following the wind farm off the coast of Block Island which I think has certainly been an asset to that area. I have learned recently that the windmills had to be shut down for a few months because the cable that was to be buried deep under the sand actually has now gotten uncovered on the beach because apparently was not buried deeply enough. So I am wondering what will happen in Ocean City. If this is approved and the cables are indeed buried, will they be buried deeply enough that they won't be disruptive and be visible.

Comment Number: BOEM-2021-0024-TRANS-42021-0012-1
Commenter: Greg Kudnik
Commenter Type: Individual

Comment Excerpt Text:

I oppose Ocean Wind's intent and plans. The rapid rate and massive scale of both 498 and 499 are extremely concerning. The footprint of Ocean Wind far exceeds the 160,000 acres issued in 498 lease. Over 140 miles of cabling to the turbine site of Oyster Creek, lassoes Long Beach Island and rips right through Island Beach State Park's bathers beach and the Barnegat Bay.

Comment Number: BOEM-2021-0024-TRANS-42021-0016-3
Commenter: Chris Gasman
Commenter Type: Individual

Comment Excerpt Text:

finally one aspect that I haven't heard about, apologies if I missed it on the technical side would be the environmental impacts of vertical access wind turbines in the bit of research that I have done on those on my own for my commercial sector, I found that they have often have lower impacts, so I am curious, I haven't looked at them for the ocean side but I'd be curious about and be eager to learn from the team about those kind of comparisons and tradeoffs.

Comment Number: BOEM-2021-0024-TRANS-42021-0018-3
Commenter: Will Rush
Commenter Type: Individual

Comment Excerpt Text:

I have seen some structure inconsistency. These were originally supposed to be cylindrical structures that passed through the surface of the water. They now seem like they are on this meeting bright yellow metal structures that look like some type of trapezoidal bar structure, that is very different than what I saw in the original Orsted projects. I have also seen some inconsistencies with what the bases look like. I was originally told they were cylindrical passing through the floor of the ocean, now they seem to be like some type of structure but it's really undetermined. I think before anybody should comment from the environmental impacts we should know exactly what these structures look like.

Comment Number: BOEM-2021-0024-TRANS-42021-0019-2
Commenter: Rick Birch
Commenter Type: Individual

Comment Excerpt Text:

I think last week I spoke about the -- some of the marine life and also the mention that we are quite concerned about what may occur by having so many turbines out there, every mile for ten miles. You think of Ocean City as eight miles long, each turbine a mile apart they have to be, basically 100 of them, so you got a ten by ten area going on.

A.2.22 Purpose and Need

Comment Number: BOEM-2021-0024-DRAFT-0108-5
Commenter: Jennifer Trofa
Commenter Type: Individual

Comment Excerpt Text:

We need to know that other, simpler, alternatives (which do not threaten precious and irreplaceable natural resources) that reduce carbon emissions and/or reduce electricity consumption have been thoroughly and objectively considered; such as: incrementally-effective, organized, municipal-county-state-wide voluntary programs to incentivize reduction in electricity use (cash-back/gift programs from existing providers for reduced energy consumption; voluntary participation in periodic blackouts; hospitality-industry driven incentives for reducing vehicle emissions (e.g., free beach tags or city-bucks for visitors who agree to leave their cars at home or parked during visits, etc.); whether or not existing solar energy providers can offer us alternatives that do not injure wildlife or disturb the fragile ocean ecosystem (free panels, cash-back/gift ideas, municipal-county-state-federal subsidies to solar distributors); whether or not there currently exist or are expected to exist home-sized or small-scale community-sized wind technology machinery that might better serve us and our ecosystem.

Comment Number: BOEM-2021-0024-DRAFT-0110-2
Commenter: Paul Livore
Commenter Type: Individual

Comment Excerpt Text:

Add to that the vast amount of factual evidence that wind power is a very inefficient generation source due to the hugh expense and limited life of such structures.

Comment Number: BOEM-2021-0024-DRAFT-0122-2
Organization: Monmouth-Ocean Development Council (MODC)
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

With a renewed emphasis on offshore wind energy coming from both a national and state level, it is important that we take advantage of the resources that are sure to become available to move forward with these types of projects. Ocean Wind will contribute significantly to New Jersey's offshore wind energy goals, and help the state reduce reliance on fossil fuels.

Comment Number: BOEM-2021-0024-DRAFT-0126-2
Commenter: Frank Gallo
Commenter Type: Individual

Comment Excerpt Text:

New Jerseys energy grid would be much more robust with a commitment to nuclear power and natural gas with a small percentage of renewables if it makes sense.

Comment Number: BOEM-2021-0024-DRAFT-0126-4
Commenter: Frank Gallo
Commenter Type: Individual

Comment Excerpt Text:

Offshore turbines are expensive, unreliable and unsightly. We have a better option - add to our already existing nuclear power utility.

Comment Number: BOEM-2021-0024-DRAFT-0131-3
Commenter: Walter Korfmacher
Commenter Type: Individual

Comment Excerpt Text:

Governor Murphy of NJ has established initial offshore wind goals for New Jersey. In 2018, Gov Murphy signed executive order 8 which committed NJ to 3,500 MW of offshore wind by 2030 and in 2019, he signed executive order 92 increasing that goal to 7,500 MW by 2035. These goals will help NJ reach our 50% renewable energy mandate laid out in the 2018 Clean Energy Act and will help protect NJ communities from the existential threat of climate change.

These goals are a good start. I would like to see NJ become even more aggressive in pursuing offshore wind power as an important part of replacing making electricity from burning coal or natural gas with making electricity from renewable sources such as offshore wind power.

NJ could easily provide over 3x its 2019 electrical needs with offshore wind power alone and more than 100% of its projected 2050 electrical needs solely with offshore wind power.

Comment Number: BOEM-2021-0024-DRAFT-0133-5
Commenter: James Hutchinson
Commenter Type: Individual

Comment Excerpt Text:

The White House's bold new infrastructure plan includes support for nuclear power and carbon capture technologies. So perhaps I'm just looking out for my own personal fishing interests again, but wouldn't it be less risky to invest in overhauling Oyster Creek (closed loop cooling) and/or Beesley's Point (carbon capture) to bring in line with the president's "clean energy" infrastructure plan?

Comment Number: BOEM-2021-0024-DRAFT-0134-3
Commenter: Kate Hayden
Commenter Type: Individual

Comment Excerpt Text:

Wind energy has shown to be unreliable and merely a supplemental form of energy, which cannot be depended on.

Comment Number: BOEM-2021-0024-DRAFT-0208-13
Organization: Long Beach Island, NJ Coalition for Wind Without Impact
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The NOI does not present the purpose of the project. It provides broad Presidential goals but provides no linkage of this project to those goals. As discussed in the Purpose and Need section comments below, that can mislead the public into thinking that some benefit of the project exists when it in fact does not.

Comment Number: BOEM-2021-0024-DRAFT-0208-15
Organization: Long Beach Island, NJ Coalition for Wind Without Impact
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

This NOI des not present a clear proposed action, the project's purpose and need, any reasonable alternatives to the company proposal, and obscures critical environmental issues. While it is appropriate to ask for suggestions, the vagueness of this NOI will not provide the general public a picture of what the EIS will look like until the draft EIS, which is too late to make corrections, and therefore defeats the purpose of the scoping effort. [Bold: The BOEM should re-issue a revised NOI. If it does not, it should provide a report soon after the close of the NOI comment period describing the EIS scope, including reasonable alternatives.]

Comment Number: BOEM-2021-0024-DRAFT-0208-22
Organization: Long Beach Island, NJ Coalition for Wind Without Impact
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The purpose and need for the proposed action are unclear. The NOI refers to a President Biden Executive Order which may well have laudable policy goals, but they are extremely general and high level. It is the BOEM's responsibility to clearly state a federal purpose, not the applicant purpose, for this project and not leave it to the imagination of the reader, or worse mislead the reader by implying without evidence that a link exists between this project and those goals.

For example, the document implies that the project will have some substantive mitigative benefit to climate change but upon scientific-based examination, the impact of this and similar projects on climate change would be quite different than expected, as described below.

The greenhouse gas reductions from offshore wind are tiny compared to global omissions. Even more important, on the path the world is headed now such reductions do not result in any mitigation at all of the coming impacts but merely delay those impacts by a very short period. It's only if and when you can get the rest of the world to reduce emissions to a point where the coming temperature rise in 2100 is close to that two-degree centigrade number that you've heard the scientists talk about, that projects like this will actually have some mitigating effect, even though very small. Unless the world can head toward that lower temperature rise, which now does not appear likely, the only climate change impact of this and similar projects is a very small delay in the impacts that are coming, as shown below for sea level rise.

Those relationships can be seen for sea level rise in the chart below that was created from data in the IPCC Fifth Assessment Report, Chapter 13, including Table 13.8. The chart shows the expected sea level rise for various future years versus the temperature rise that could occur by 2100. From it, it can be seen that there is only a small increase in future sea level rise from a 2.5-degree centigrade increase compared to 2 degrees, but above 2.5 degrees, sea level rise increases dramatically, becomes unmanageable, and eventually will result in extraordinary human dislocation and $ trillions of real property and infrastructure loss from coastal inundation.

[See original attachment A1 for a graph "Sea Level Rise vs. Temperature Increase in 2100 and City Flooding"]

Because global greenhouse gas emissions have not been significantly reduced, we are currently headed towards a 3.3-degree centigrade temperature rise in 2100 as shown by the black vertical line below. The sea level rise from that in 2200 would be about 0.8 meters or 2.6 feet. The chart also shows that if the temperature rise in 2100 were reduced by 0.65 degrees to 2.65° that same sea level rise would occur 100 years later.

So, the question is how much does the offshore wind program actually delay sea level rise. The program claims a reduction of 78 million metric tons of greenhouse gases for the full 30,000-megawatt effort. But global omissions are 36 billion metric tons per year and a 95 percent reduction of that is necessary to bring the 3.3° to 2°. So, with a little math, a 78-million-ton reduction from the full offshore wind program results in a temperature decrease of 0.003 degrees centigrade.

Going back to the 0.65-degree reduction resulting in a 100-year delay that means that a 0.003 Degree reduction from the full offshore wind program results in a 6 month delay in sea level rise. [Bold: This project, as 3.7 percent of the full program will delay the coming sea level rise by 7 days.] There may be other benefits to the program and project, but while the world is headed toward that higher temperature rise, climate change benefit is not a significant purpose of this project.

[Bold: This assessment is not to suggest that greenhouse gas reductions should not be pursued. Addressing the climate change problem will involve many actions by many players. But rather that John Kerry, the White House official charged to secure the international agreements to head us towards the lower temperature rise shown in the figure, be given a chance to do so. And once that happens the U.S. proceed to do its share of those reductions.]

Comment Number: BOEM-2021-0024-DRAFT-0208-23
Organization: Long Beach Island, NJ Coalition for Wind Without Impact
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Then the BOEM states that the purpose of its action is to decide whether to approve Ocean Wind's proposal. But that is not a project purpose either, simply a decision to be made by the BOEM.

This illustrates the danger in relying on broad Presidential directions or solely on the applicant's interest in defining the purpose for the project.

THE BOEM needs to do its own review and state clearly what the substantive purpose of the project is. The applicant's proposal is to construct and operate turbines to supply electric power for profit, but the actual societal need and benefit of supplying that power from this project versus some other way is unclear. Without that clear purpose crafting relevant alternatives and preparing a satisfactory EIS is very difficult.

In addition, the lack of a clear purpose and need reduces the description of the no action to a meaningless exercise. The need for a serious description of the no action alternative is especially crucial here because at this point the EIS proposed has no alternatives to the proposed action, making it a rather unique document in the NEPA history books.

Comment Number: BOEM-2021-0024-DRAFT-0230-1
Organization: Chamber of Commerce Southern New Jersey
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The Ocean Wind project will significantly contribute to achieving New Jersey's clean energy goals. In 2019, Governor Phil Murphy unveiled his ambitious renewable energy goals with the NJ Energy Master Plan, which included the target of 7,500 MW of offshore wind energy by 2035 in New Jersey. As the largest offshore wind site on the East Coast, New Jersey is situated to be a leader in the wind energy industry for the region. Additionally, President Biden's administration announced it would speed permitting for projects off the East Coast, invest in research and development, provide low-interest loans to industry and fund changes to U.S. ports. New Jersey is a target state for additional offshore wind farms, which aligns perfectly with the timing and incredible aspirations of this project.

Comment Number: BOEM-2021-0024-DRAFT-0235-4
Organization: NJ State Chamber of Commerce
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Ocean Wind will contribute significantly to the state's ambitious renewable energy goals by generating more than 1,100 MW of power for New Jersey homes and businesses which will provide enough clean energy to power an average of 500,000 homes annually.

Comment Number: BOEM-2021-0024-DRAFT-0239-3
Organization: Greater Toms River Chamber of Commerce
Commenter: Ralph Wolff
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

the excellent lobbying of Orsted, in forging a relationship with PSE&G only increases the infrastructure of renewable energy and together, with the leadership in New Jersey, greatly reduces the reliance on fossil fuels.

Comment Number: BOEM-2021-0024-DRAFT-0243-6
Commenter: James Binder
Commenter Type: Individual

Comment Excerpt Text:

The no action alternative should address changes that have occurred since the Programmatic EIS was prepared by BOEM in 2007. The purpose and need for the proposed project has changed. The U.S. is now energy independent due to the increased supply of natural gas. The increased use of natural gas in power

generation, replacing coal and oil, has resulted in significant reductions in emissions of greenhouse gas emissions below 1990s levels. In addition, there are other renewable, carbon free technologies that have advanced since the Programmatic EIS was prepared, including use of hydrogen as a fuel for transportation and power generation and anaerobic digestion of organics for power generation. So, if the purpose and need of offshore wind is to provide needed power and to reduce greenhouse gas emissions, that has already or is in the process of happening. In addition, the reliability of wind power was recently called into question with the power outages in Texas this past winter. A reassessment of comparative costs is also needed.

Comment Number: BOEM-2021-0024-DRAFT-0255-3
Commenter: Arthur Peterson
Commenter Type: Individual

Comment Excerpt Text:

There is no reason for this project other than to satisfy a small group. By the time this project will pay for it self it will need to be torn down and replaced.

Comment Number: BOEM-2021-0024-DRAFT-0297-2
Organization: Responsible Offshore Development Alliance
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

A. The "Purpose and Need" Must Not Predetermine the Agency's Decision

The National Environmental Policy Act (NEPA) must be approached to fulfill the agency's purpose and need, not that of a project applicant (although the applicant's interests and objectives may be taken into account). [Footnote 3: See 40 C.F.R. § 1501.7(h)] The purpose of NEPA is "to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man; to enrich the understanding of the ecological systems and natural resources important to the Nation." [Footnote 4: 42 U.S.C. § 4321] Typically a purpose and need statement must incorporate this overarching purpose in conjunction with action-specific legislation, which in this case is the Outer Continental Shelf Lands Act (OCSLA). Such an approach is evidenced by BOEM's 5-year plan for oil and gas, which has the stated purpose to implement requirements of OCSLA Sec. 18(a)(3) to "balance the potential for environmental damage, the potential for the discovery of oil and gas, and the potential for adverse impacts to the coastal zone." Following from this correctly framed purpose and need, the 5-year plan then provides a thorough analysis of relevant energy demands and future needs forecasts. [Footnote 5: BOEM, Outer Continental Shelf Oil and Gas Leasing Program: 2017-2022 Final PEIS (Nov. 2016) p. 1-2.]

Comment Number: BOEM-2021-0024-DRAFT-0297-3
Organization: Responsible Offshore Development Alliance
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

An appropriate purpose and need statement for this action would lead BOEM to prioritize OCSLA and NEPA's focus on environmental safeguards and eliminating damage to the environment. It would not be based on achieving states' OSW goals or the terms of private power purchase agreements executed outside of the NEPA process, as those would predispose the outcome of environmental review. If anything, the NEPA environmental analysis should have inform power purchase contracts, not the inverse. [Footnote 6: This point highlights the need for a Programmatic EIS for the U.S. offshore wind leasing program. 7 Nat'l Parks & Conservation Ass'n v. Bureau of Land Mgmt., 606 F.3d 1058, 1072 (9th Cir. 2010). 8 42 U.S.C. § 4332(B).] Regardless, an agency cannot circumvent its NEPA obligations "by adopting private interests to draft a narrow purpose and need statement that excludes alternatives that

fail to meet specific private objectives" nor can it "craft a purpose and need statement so narrowly drawn as to foreordain approval of" a project proposed by a private party.7

Comment Number: BOEM-2021-0024-DRAFT-0297-4
Organization: Responsible Offshore Development Alliance
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

It is also important to note that the purpose and need for action under this section of OCSLA—as defined and as it should be defined—differs vastly from public messaging by OSW developers, states, and even the Administration. The two justifications cited for such projects are mitigation of climate change and job creation. If these are priorities of the permitting entities, they should be stated as such and thoroughly evaluated in this and other DEIS documents. If not, they should not be cited as the basis for these projects.

Comment Number: BOEM-2021-0024-DRAFT-0325-2
Organization: Environment New Jersey
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Governor Murphy has established aggressive offshore wind goals for the state of New Jersey which will help us reach our 50% renewable energy by 2030 mandate laid out in the 2018 Clean Energy Act, and help protect both the Shore and inland communities from the existential threat of climate change.

In January 2018, Governor Murphy signed Executive Order 8, which committed New Jersey to 3,500 MW of offshore wind by 2030, and in 2019 he signed Executive Order 92, which increased that goal to 7,500 MW by 2035. New Jersey is second, behind only New York, in its ambitious offshore wind generation goals amongst the 50 states, and strives to be a national leader in offshore wind.

Comment Number: BOEM-2021-0024-DRAFT-0325-4
Organization: Environment New Jersey
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

New Jersey ranks 7th amongst Atlantic coastal states for its technical potential for total offshore wind power, but first in the states for current projects in the pipeline, according to a new report from Environment New Jersey Research & Policy Center. The report says that New Jersey could provide 379% of its 2019 electrical needs and 167% of its 2050 electrical usage with offshore wind alone. For projections of the 2050 electricity demand, this assumes that buildings, industry, and transportation are all powered by electricity rather than fossil fuels.

Comment Number: BOEM-2021-0024-DRAFT-0331-1
Organization: Business Network for Offshore Wind
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

BOEM commencing the EIS process for the Ocean Wind COP is another demonstration of the Biden Administration's clear interest in advancing the U.S. offshore wind industry. Joining Vineyard Wind and the South Fork Wind Farm, Ocean Wind is now the third commercial-scale offshore wind project planned for U.S. federal waters. Ocean Wind was the first competitively awarded U.S. offshore wind project larger than one gigawatt. It is the largest offshore wind facility in U.S. waters to have reached this phase of the federal permitting process. The Network supports BOEM's deliberate consideration and commitment to environmental protection, including during the development of the Ocean Wind EIS. The

Network also encourages BOEM to continue moving Ocean Wind forward through the federal permitting process so that it can commence operations soon and avoid delays. By meeting these crucial timelines, BOEM will foster greater certainty in the U.S. offshore wind market. This certainty drives investment decisions that benefit New Jersey residents and businesses.

Comment Number: BOEM-2021-0024-DRAFT-0331-2
Organization: Business Network for Offshore Wind
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The construction of the 1,100 MW Ocean Wind offshore wind energy facility will have substantial positive impacts upon New Jersey. First, the completion of this single project will signal the beginning of a wholesale shift in New Jersey's electricity supply. Ocean Wind will be the first offshore wind project off the New Jersey coast. As of 2019, nuclear power and natural gas generation made up 94% of New Jersey's utility-scale electricity net generation. With an overall capacity of 1,100 MW, Ocean Wind's annual production will be enough to power more than 500,000 New Jersey homes.

Moreover, upon completion, Ocean Wind will fulfill 15% of New Jersey's overall offshore wind goal of 7,500 MW by 2035. Ocean Wind represents just the beginning of New Jersey's offshore wind endeavors, as New Jersey's 2019 Energy Master Plan concluded that the state's lowest-cost pathway to meeting its 2050 decarbonization goals will require nearly 11 GW of offshore wind capacity. By moving forward with the preparation of Ocean Wind's EIS, BOEM is driving New Jersey's offshore wind program one step closer to having steel in the water.

Comment Number: BOEM-2021-0024-DRAFT-0335-2
Organization: The Nature Conservancy
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The Nature Conservancy recognizes that, on the Atlantic coast of the United States, offshore wind offers incredible potential to generate clean, renewable energy nearby to the cities and communities that need it most. We also understand that to achieve our deep decarbonization goals, we will need to deploy significantly more renewable energy than we currently have. The Nature Conservancy supports the rapid deployment of renewable energy resources with a sharp focus on ensuring that renewable energy infrastructure is appropriately and sustainably sited, constructed, and operated to avoid or minimize environmental impacts. Inappropriately sited and operated energy facilities can have adverse effects on locally and globally significant biodiversity (species and ecosystems) by damaging or fragmenting natural habitats, disrupting wildlife behavior and ecological functions, and decreasing fitness and/or increasing mortality rates of vulnerable species.

Inappropriately sited and operated energy facilities can also hinder our ability to meet our decarbonization goals by causing or contributing to user conflicts and opposition from stakeholders that can delay or derail projects – ultimately increasing renewable energy investment risks. The Nature Conservancy believes that the offshore wind industry is critical for setting us on the path toward attaining decarbonization AND that ensuring proper siting, monitoring, mitigation, and environmental protections are in place will enable projects to be developed in a sustainable manner.

Comment Number: BOEM-2021-0024-DRAFT-0347-1
Organization: NJ Work Environment Council
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The expeditious permitting of this project is critical to meet New Jersey's ambitious goal to deploy 7,500 megawatts of offshore wind by 2035. The roadmap to achieving this goal is detailed in the NJ Offshore Wind Strategic Plan.

Comment Number: BOEM-2021-0024-DRAFT-0347-5
Organization: NJ Work Environment Council
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

As the White House released in its recent offshore wind Fact Sheet: [Footnote 2 White House, FACT SHEET: Biden Administration Jumpstarts Offshore Wind Energy Projects to Create Jobs, https://www.whitehouse.gov/briefing-room/statements-releases/2021/03/29/fact-sheet-biden-administration- jumpstarts-offshore-wind-energy-projects-to-create-jobs/]

"The President recognizes that a thriving offshore wind industry will drive new jobs and economic opportunity up and down the Atlantic Coast, in the Gulf of Mexico, and in Pacific waters. The industry will also spawn new supply chains that stretch into America's heartland, as illustrated by the 10,000 tons of domestic steel that workers in Alabama and West Virginia are supplying to a Texas shipyard where Dominion Energy is building the Nation's first Jones Act compliant turbine installation vessel.

Comment Number: BOEM-2021-0024-DRAFT-0347-6
Organization: NJ Work Environment Council
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

"Federal leadership, in close coordination with states and in partnership with the private sector, unions and other key stakeholders is needed to catalyze the deployment of offshore wind at scale.

"…the Administration is taking coordinated steps to support rapid offshore wind deployment and job creation:

1. Advance ambitious wind energy projects to create good-paying, union jobs

2. Investing in American infrastructure to strengthen the domestic supply chain and deploy offshore wind energy

3. Supporting critical research and data-sharing."

Comment Number: BOEM-2021-0024-DRAFT-0352-1
Organization: National Wildlife Federation Action Fund and New Jersey Audubon
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

New Jersey is one of the fastest warming states in the Northeast – the most densely populated region in the country. While energy demand is high and new energy options are few, we are within reach of one of the strongest offshore wind resources in the world. The Bureau of Ocean Energy Management's swift and thorough review of Ocean Wind's Construction and Operations Plan is critical for us to stand up this clean energy solution in a responsible way at a time when we need it most.

Offshore wind energy is in a unique position to address the unprecedented and intersecting environmental, public health, and economic crises that exacerbate racial and social injustices. We can transition away from fossil fuels that are concentrated in low-income and communities of color, and

develop this renewable energy resource with attention to stakeholder input, improving access to public comment opportunities to ensure that impacts are properly evaluated. We can prioritize training a local workforce and people that have been the hardest hit by the COVID-19 pandemic, and revitalize U.S. manufacturing to maximize economic benefits from this industry. And we can protect wildlife and ecosystems while we do it, requiring the use of best management practices informed by the latest science. We can do all of this – and we must.

Comment Number: BOEM-2021-0024-DRAFT-0352-5
Organization: National Wildlife Federation Action Fund and New Jersey Audubon
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

New Jersey is one of the fastest warming states in the Northeast – the most densely populated region in the country. While energy demand is high and new energy options are few, we are within reach of one of the strongest offshore wind resources in the world. The Bureau of Ocean Energy Management's swift and thorough review of Ocean Wind's Construction and Operations Plan is critical for us to stand up this clean energy solution in a responsible way at a time when we need it most. Offshore wind energy is in a unique position to address the unprecedented and intersecting environmental, public health, and economic crises that exacerbate racial and social injustices. We can transition away from fossil fuels that are concentrated in low-income and communities of color, and develop this renewable energy resource with attention to stakeholder input, improving access to public comment opportunities to ensure that impacts are properly evaluated. We can prioritize training a local workforce and people that have been the hardest hit by

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Comment Number: BOEM-2021-0024-DRAFT-0353-1
Organization: New Jersey Resource Project
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

As New Jersey moves forward in reaching its offshore wind goals, it is crucial that we have a clear path forward for ensuring that development is fair to the greatest extent possible, minimizes impact on our wildlife, and creates new opportunities for work and business which are needed more than ever amidst the devastation of COVID.

Comment Number: BOEM-2021-0024-DRAFT-0363-1
Organization: Jersey Renews
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The expeditious permitting of this project is critical to meet New Jersey's ambitious goal to deploy 7,500 megawatts of offshore wind by 2035 as well as the Biden Administration's commitment to reduce carbon emissions by more than 50% by 2030 and achieve 30 gigawatts from offshore wind in the next decade. [Footnote 1: FACT SHEET: Biden Administration Jumpstarts Offshore Wind Energy Projects to Create Jobs. March 29, 2021, bitly: https://bit.ly/3nyV6uo]

We are strongly in favor of offshore wind off the Jersey Shore and in favor of the Ocean Wind project. Governor Murphy has established aggressive offshore wind goals for the state of New Jersey which will help us reach our 50% renewable energy by 2030 mandate laid out in the 2018 Clean Energy Act and help protect both the Shore and inland communities from the existential threat of climate change.

Comment Number: BOEM-2021-0024-DRAFT-0365-10
Commenter: Anthony Butch

Commenter Type: Individual

Comment Excerpt Text:

If we want to cut emission nuclear would be the CLEANER option.

Comment Number: BOEM-2021-0024-DRAFT-0365-2
Commenter: Anthony Butch
Commenter Type: Individual

Comment Excerpt Text:

The earth doesnt need us to industrialize more of it to save it, what it needs is for us to take better care of the 915 million acres of farmland that we are destroying. If we do nothing else but that, we will put a very serious dent in reducing the carbon in our atmosphere without destroying our oceans.

Comment Number: BOEM-2021-0024-DRAFT-0366-1
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The Biden Administration has set forth an ambitious and necessary goal for the nation to have net-zero global greenhouse gas emissions by mid-century or before [Footnote 2: Proclamation No. 14008, 86 Fed. Reg. 7619 (EO 14008).] and committed the U.S. to reducing net greenhouse gas emissions by 50-52% below 2005 levels in 2030.3 [Footnote 3: https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/United%20States%20of%20America%20First/Un ited%20States%20NDC%20April%2021%202021%20Final.pdf] As the Administration has recognized, offshore wind energy is one of the most abundant sources of zero emissions energy and it must play a significant role if the nation is going to meet these goals. Our organizations are united in support of responsibly developed offshore wind. We have long advocated for policies and actions needed to bring it to scale in an environmentally protective manner. Offshore wind provides a tremendous opportunity to fight climate change, reduce local and regional air pollution, and grow a new industry that will support thousands of well-paying jobs in both coastal and inland communities.

Comment Number: BOEM-2021-0024-DRAFT-0366-3
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

This is a pivotal moment in America's nascent offshore wind story and the fight to reduce greenhouse gas emissions and mitigate the impacts of climate change. The Biden Administration's new offshore wind goals plan to deploy 30 gigawatts (GW) of offshore wind by 2030, creating more than 44,000 good-paying union jobs and triggering over $12 billion per year in capital investment in offshore wind projects on both coasts. [Footnote 4: FACT SHEET: Biden Administration Jumpstarts Offshore Wind Energy Projects to Create Jobs, 2021 White House Statements and Releases (Mar. 29, 2021).] Meeting this objective unlocks a larger, long term goal of expanding offshore wind to 110 GW by 2050, generating more economic opportunity, and conveying the benefits of clean energy and renewable power to future generations. [Footnote 5: Id] The Ocean Wind Draft EIS is the first opportunity for this Administration to conduct an analysis of a major offshore wind project from Draft EIS to a Record of Decision and presents an opportunity to set a standard for how to develop a responsible project that protects wildlife and their habitats. Setting the right standard here will help future projects come on line more quickly with strong protections, supporting the Administration's goals.

Comment Number: BOEM-2021-0024-DRAFT-0366-4
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

In addition to these robust federal goals, many east coast states, including New Jersey, are rapidly mobilizing to tap into the booming offshore wind global industry and harness the abundant, clean energy available off their shores. In 2019, New Jersey Governor Murphy signed Executive Order No. 92 that set a goal for the state of 7,500 megawatts of offshore wind generation by 2030. Done responsibly, this project and other offshore wind projects will serve to meet New Jersey's goal.

Comment Number: BOEM-2021-0024-DRAFT-0366-5
Organization: National Wildlife Federation
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Ocean Wind's offshore wind project, if responsibly developed to avoid, minimize, mitigate, and monitor potential environmental, cultural, and economic impacts, will provide substantial benefits to society and the environment. The Project is part of the urgent transition away from dirty, climate-altering fossil fuels to the clean energy economy envisioned by the Biden Administration that is necessary to avoid catastrophic warming. This rapid transition to a clean energy economy is paramount to preserving wildlife and the environment. Absent a substantial shift from carbon intensive sources of energy to solutions like offshore wind, we face climate change that will drive countless species to extinction in both marine and terrestrial environments, threatening entire ecosystems. These complicated biological support systems enable the United States' continued success across commercial and social sectors.

Protecting these complicated webs of biology for future generations is vital to preserving the economic, social, and environmental well-being that our society relies on for our health and survival. [Footnote 6: World Institute for Development Economics Research, The Economics of Transnational Commons 97-102, Clarendon Press, (1997)]

Comment Number: BOEM-2021-0024-DRAFT-0371-2
Commenter: Martha Wright
Commenter Type: Individual

Comment Excerpt Text:

The concept is similar to the notion of cutting down a forest to install solar panels.

Comment Number: BOEM-2021-0024-DRAFT-0374-1
Commenter: Patricia Conte
Commenter Type: Individual

Comment Excerpt Text:

I dont believe that offshore wind farms are the solution to our energy issues and climate change. There are many other alternatives that more consistently produce energy and that are more environmentally friendly and cost effective.

Comment Number: BOEM-2021-0024-DRAFT-0377-1
Commenter: Joseph Conte
Commenter Type: Individual

Comment Excerpt Text:

Offshore wind farms are not the answer. They are more costly, destroy the environment and will not solve our energy issues or climate change. There are many other alternatives that more consistently produce energy and that are more environmentally friendly and cost effective such as nuclear and natural gas. With todays technology, nuclear power can be made incredibly safe, efficient and produces energy when we need it, not just when the wind blows.

Comment Number: BOEM-2021-0024-DRAFT-0377-5
Commenter: Joseph Conte
Commenter Type: Individual

Comment Excerpt Text:

There are so many better alternatives - nuclear, natural gas, soil conservation to fight global warming, etc.

Please consider alternatives before industrializing our oceans.

Comment Number: BOEM-2021-0024-DRAFT-0382-4
Commenter: Sandra Maxson
Commenter Type: Individual

Comment Excerpt Text:

If you really insist on making wind energy we would think you could push the turbines further out in the ocean where they can't be seen from the shoreline and will not draw predators to the swimming areas of the beach. We feel the amount of energy you are going to create will not offset the harm you will cause to nature and the environment and to actual living, breathing, hardworking human beings who have invested into these coastal towns.

If you insist on creating "green" energy in this area of the country, why not install solar panels, they will not hurt the beauty of the shoreline or ruin the environment. Or build you wind farm on land where it will not affect tourism and the beauty of the ocean.

Comment Number: BOEM-2021-0024-DRAFT-0466-2
Commenter: City of Ventnor City
Commenter Type: Local Agency

Comment Excerpt Text:

Now partnering with PSEG, New Jersey's largest utility and clean energy provider, Ocean Wind will help our state meet its current and future energy needs by significantly contributing to the state's ambitious renewable energy goals by generating more than 1,100 MW of power for New Jersey homes and businesses which will provide enough clean energy to power an average of 500,000 homes annually.

Additionally, the State of New Jersey set a goal for 7,500 MW of offshore wind energy by 2035, for which Ocean Wind will play a key role and provide clean, renewable energy to more than 3.2 million New Jersey homes by the set goal date.

Comment Number: BOEM-2021-0024-DRAFT-0466-3
Commenter: City of Ventnor City
Commenter Type: Local Agency

Comment Excerpt Text:

I believe that Ocean Wind is not merely just helpful to New Jersey's environment, but necessary for New Jersey to reach its renewable energy goals.

Comment Number: BOEM-2021-0024-EMAIL-004-16
Organization: Long Beach Island (LBI) New Jersey Coalition for Wind Without Impact
Commenter: Bob Stern
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The NOI does not present the purpose of the project. It provides broad Presidential goals but provides no linkage of this project to those goals. As discussed in the Purpose and Need section comments below, that can mislead the public into thinking that some benefit of the project exists when it in fact does not.

Comment Number: BOEM-2021-0024-EMAIL-004-25
Organization: Long Beach Island (LBI) New Jersey Coalition for Wind Without Impact
Commenter: Bob Stern
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

The purpose and need for the proposed action are unclear. The NOI refers to a President Biden Executive Order which may well have laudable policy goals, but they are extremely general and high level. It is the BOEM's responsibility to clearly state a federal purpose, not the applicant purpose, for this project and not leave it to the imagination of the reader, or worse mislead the reader by implying without evidence that a link exists between this project and those goals.

For example, the document implies that the project will have some substantive mitigative benefit to climate change but upon scientific-based examination, the impact of this and similar projects on climate change would be quite different than expected, as described below.

The greenhouse gas reductions from offshore wind are tiny compared to global omissions. Even more important, on the path the world is headed now such reductions do not result in any mitigation at all of the coming impacts but merely delay those impacts by a very short period. It's only if and when you can get the rest of the world to reduce emissions to a point where the coming temperature rise in 2100 is close to that two-degree centigrade number that you've heard the scientists talk about, that projects like this will actually have some mitigating effect, even though very small. Unless the world can head toward that lower temperature rise, which now does not appear likely, the only climate change impact of this and similar projects is a very small delay in the impacts that are coming, as shown below for sea level rise.

Those relationships can be seen for sea level rise in the chart below that was created from data in the IPCC Fifth Assessment Report, Chapter 13, including Table 13.8. The chart shows the expected sea level rise for various future years versus the temperature rise that could occur by 2100. From it, it can be seen that there is only a small increase in future sea level rise from a 2.5-degree centigrade increase compared to 2 degrees, but above 2.5 degrees, sea level rise increases dramatically, becomes unmanageable, and eventually will result in extraordinary human dislocation and $ trillions of real property and infrastructure loss from coastal inundation.

[See original attachment for graph titled, "Sea Level Rise vs. Temperature Increase in 2100 and City Flooding."]

Because global greenhouse gas emissions have not been significantly reduced, we are currently headed towards a 3.3-degree centigrade temperature rise in 2100 as shown by the black vertical line below. The sea level rise from that in 2200 would be about 0.8 meters or 2.6 feet. The chart also shows that if the temperature rise in 2100 were reduced by 0.65 degrees to 2.65° that same sea level rise would occur 100 years later.

So, the question is how much does the offshore wind program actually delay sea level rise. The program claims a reduction of 78 million metric tons of greenhouse gases for the full 30,000-megawatt effort. But global omissions are 36 billion metric tons per year and a 95 percent reduction of that is necessary to bring the 3.3° to 2° . So, with a little math, a 78-million-ton reduction from the full offshore wind program results in a temperature decrease of 0.003 degrees centigrade.

Going back to the 0.65-degree reduction resulting in a 100-year delay that means that a 0.003 Degree reduction from the full offshore wind program results in a 6 month delay in sea level rise. This project, as 3.7 percent of the full program will delay the coming sea level rise by 7 days. There may be other benefits to the program and project, but while the world is headed toward that higher temperature rise, climate change benefit is not a significant purpose of this project.

This assessment is not to suggest that greenhouse gas reductions should not be pursued. Addressing the climate change problem will involve many actions by many players. But rather that John Kerry, the White House official charged to secure the international agreements to head us towards the lower temperature rise shown in the figure, be given a chance to do so. And once that happens the U.S. proceed to do its share of those reductions.

Comment Number: BOEM-2021-0024-EMAIL-004-26
Organization: Long Beach Island (LBI) New Jersey Coalition for Wind Without Impact
Commenter: Bob Stern
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Then the BOEM states that the purpose of its action is to decide whether to approve Ocean Wind's proposal. But that is not a project purpose either, simply a decision to be made by the BOEM.

This illustrates the danger in relying on broad Presidential directions or solely on the applicant's interest in defining the purpose for the project.

THE BOEM needs to do its own review and state clearly what the substantive purpose of the project is. The applicant's proposal is to construct and operate turbines to supply electric power for profit, but the actual societal need and benefit of supplying that power from this project versus some other way is unclear. Without that clear purpose crafting relevant alternatives and preparing a satisfactory EIS is very difficult.

Comment Number: BOEM-2021-0024-EMAIL-004-27
Organization: Long Beach Island (LBI) New Jersey Coalition for Wind Without Impact
Commenter: Bob Stern
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

In addition, the lack of a clear purpose and need reduces the description of the no action to a meaningless exercise. The need for a serious description of the no action alternative is especially crucial here because at this point the EIS proposed has no alternatives to the proposed action, making it a rather unique document in the NEPA history books.

Comment Number: BOEM-2021-0024-EMAIL-004-5
Organization: Long Beach Island (LBI) New Jersey Coalition for Wind Without Impact
Commenter: Bob Stern
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

In addition, until the purpose and need of this project is made clear (see comment below) it will not be possible to assess the impacts of the no action alternative properly. Whether the purpose is energy security, climate change, air quality, or electric power reliability or some other makes a big difference on what the impacts of the no action alternative are.

Comment Number: BOEM-2021-0024-EMAIL-005-24
Organization: City of Beach Haven, New Jersey
Commenter: Colleen Lambert
Commenter Type: Local Agency

Comment Excerpt Text:

The purpose and need for the proposed action is unclear. It refers to a President Biden Executive Order which may well have laudable policy goals, but they are extremely general and high level. It is the BOEM's responsibility to clearly state a federal purpose for this project and not leave it to the imagination of the reader.

Comment Number: BOEM-2021-0024-EMAIL-005-26
Organization: City of Beach Haven, New Jersey
Commenter: Colleen Lambert
Commenter Type: Local Agency

Comment Excerpt Text:

THE BOEM needs to do its own analysis and state clearly what the substantive purpose of the project is. The applicant's proposal is to construct and operate turbines to supply electric power for profit, but the actual societal need and benefit of supplying that power from this project versus some other way is unclear. Without that clear purpose crafting relevant alternatives and preparing a satisfactory EIS is very difficult.

Comment Number: BOEM-2021-0024-TRANS-41321-0005-1
Organization: Laborers International Union of North America, LIUNA
Commenter: Ciro Scalera
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

We support the proposed Orsted Wind 1100 megawatt project as it is an absolutely essentially step to implement Governor Murphy's energy master plan and achieve our state's ambitious goal of 7,500 megawatts from wind by 2035. Our energy mix is in a significant and long term transition from fossil fuels to renewables.

Comment Number: BOEM-2021-0024-TRANS-41321-0005-4
Organization: Laborers International Union of North America, LIUNA
Commenter: Ciro Scalera
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

project will also provide major environmental benefits in how we power New Jersey's homes and businesses in the future. We need to increase renewable energy sources to meet our energy demands while protecting our environment, and offshore wind is the most significant opportunity to do this on the east coast. Simply put, it will greatly reduce our reliance on carbon admitting sources of energy.

Comment Number: BOEM-2021-0024-TRANS-41321-0006-1
Organization: Environmental New Jersey
Commenter: Hailey Berlinger
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

I am commenting strongly in favor of offshore wind off the Jersey Shore and in favor of the Ocean Wind Project. Governor Murphy has established aggressive offshore wind goals for the State of New Jersey which will help us reach our 50 percent renewable energy by 2030 mandate laid out in the 2018 Clean Energy Act and help protect both shore and inland communities from the existential threat of climate change. In 2018, Governor Murphy signed Executive Order 8 which committed New Jersey to 3,500 megawatts of offshore wind by 2030, and in 2019 he signed executive order 92 which increased that goal to 7,500 megawatts by 2035. New Jersey is second behind only New York in its ambitious offshore wind generation goals amongst the 50 states, and strives to be a national leader in offshore wind. Rutgers University scientists estimate that sea levels along the Jersey Shore could rise one foot from 2,000 levels by 2030, two feet by 2050 and six feet by 2100. And that sunny day flooding in Atlantic City could increase from 20 days in 2019 to 35 days in 2030, up to 70 days in 2040 all due to climate change. The Department of Environmental Protection estimated that the real estate loss from sea level rise in flooding in New Jersey not to mention the hardship and quality of life issues that come with it. New Jersey ranks seventh amongst Atlantic coast states for its technical potential for total offshore wind power but first in the states recurrent projects in the pipeline. According to a new report from our sister organization, Environment New Jersey Research and Policy Center, the report says that New Jersey could provide 379 percent of its 2019 electrical needs and 167 percent of it's 2050 electrical usage with offshore wind alone. For projections of the 2020 electricity demand, this assumes that buildings, industry and transportation are all powered by electricity rather than fossil fuels. So rather than continue down the path towards catastrophic sea level rise and flooding, we could instead start to mitigate that by replacing our fossil fuel power with clean renewable offshore wind power, that New Jersey is uniquely positioned to lead the country in. For all of these reasons, we need to move forward in environmentally sensitive matter with offshore wind.

Comment Number: BOEM-2021-0024-TRANS-41321-0007-1
Organization: Chamber of Commerce Southern New Jersey
Commenter: Christina Renna
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

As you know this project will provide 1,100 megawatts of clean and reliable energy and as a result will be a major player in achieving the goal of 7,500 megawatts of offshore wind energy in New Jersey by 2035. Back in 2019, New Jersey Governor Phil Murphy unveiled his ambitious renewable energy goals with his energy master plan. This in addition to President Biden's commitment to similar energy goals and the recent announcement from Washington that New Jersey is a target state for additional offshore wind farms aligns perfectly with the timing and the incredible aspirations of this project.

Comment Number: BOEM-2021-0024-TRANS-41521-0004-1
Organization: Long Beach Island Coalition for Wind Without Impact
Commenter: Bob Stern
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

I heard a number of speakers talking about the NEPA process which I am familiar with because I used to manage that process for the Department of Energy, and all the speakers presented things very well, the

need for a purpose and need, the need for alternatives and so on, but I don't -- I don't see that in this notice of intent and I don't see a clear description of the action up to 98 turbines is more like a guessing game.

The purpose and need, it talks in very general terms about climate change, environmental justice and so on, but there is no linkage of this project to any of those goals so we in our comments, we are going to do it for you for climate change and we did an analysis based on the science, and a project like this has virtually no impact on reducing future sea level rise. The science of it actually says that it will only delay the impacts that are coming and this project in particular will delay those impacts for about a week.

So I am sorry, but people who are relying on this to fix our sea level rise, that's just disingenuous and I would urge BOEM to be very careful about raising false hopes.

Comment Number: BOEM-2021-0024-TRANS-42021-0021-2
Organization: New Jersey Alliance for Action
Commenter: Christian Hartman
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

New Jersey has an aggressive master plan with a goal of going 100 percent clean energy by the year 2050 and that's ambitious, but in order to get there, the state will need to invest in and improve renewable energy projects such as offshore wind, and the state's plan to have 7,500 megawatts of offshore wind energy by 2035 is a large part of the clean energy initiative and the Ocean Wind project is a critical first step.

Comment Number: BOEM-2021-0024-TRANS-42021-0021-3
Organization: New Jersey Alliance for Action
Commenter: Christian Hartman
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Eventually it looks like offshore wind could potentially power over three million homes in New Jersey, not going to happen overnight, so the projects have to start moving forward soon. One note too, in order to diversify the state's energy generation in the near future, we think that's important as well, because percent of our energy generation currently comes from natural gas and nuclear power.

Comment Number: BOEM-2021-0024-TRANS-42021-0022-1
Organization: Chamber of Commerce, Southern New Jersey
Commenter: Hillary Shebra
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

This project will advance not only the state's clean energy goals but it's economic goals as well. This project will provide 1,100 megawatts of clean energy and reliable energy enough to power half a million homes.

A.2.23 Sea Turtles

Comment Number: BOEM-2021-0024-DRAFT-0196-9
Commenter: Lisa Kazunas
Commenter Type: Individual

Comment Excerpt Text:

BOEM has already acknowledged in its "Notice of Intent" document that sea turtles and other marine wildlife will be negatively affected during the construction phase of the project.

A.2.24 Scenic and Visual Resources

Comment Number: BOEM-2021-0024-DRAFT-0002-1
Commenter: Kenneth Houseman
Commenter Type: Individual

Comment Excerpt Text:

I am ok with the wind farm off of Ocean City, NJ however it needs to be moved out further so it can not bee seen by people on the beach. It is what everyone seems to be asking for, so why is this so difficult?

Comment Number: BOEM-2021-0024-DRAFT-0006-1
Commenter: Donald Cocozza
Commenter Type: Individual

Comment Excerpt Text:

Now you want to destroy our ocean view with some ugly wind structures across our view!!! This is not acceptable! Please do not install these structures or wind energy facility offshore.

Comment Number: BOEM-2021-0024-DRAFT-0009-2
Commenter: Karen Barlow
Commenter Type: Individual

Comment Excerpt Text:

Some on Ocean City council still cling to the idea that these windmills will be eyesores. I reject that and point to the smokestack at Beesleys Point as an eyesore. And climate related disasters are truly eyesores.

Comment Number: BOEM-2021-0024-DRAFT-0010-2
Commenter: Keith Neill
Commenter Type: Individual

Comment Excerpt Text:

I do not support the construction of a wind farm only 15 miles off the Ocean City NJ shore. The turbines will be visible from the beach. This will be a blight that will exist forever.

Comment Number: BOEM-2021-0024-DRAFT-0064-3
Commenter: John Atkinson
Commenter Type: Individual

Comment Excerpt Text:

Please move the wind/energy facility further out. There is a community of locals who live on LBI who do not want this and whose lives will be directly impacted.

Comment Number: BOEM-2021-0024-DRAFT-0071-2
Commenter: Jeremiah Crean
Commenter Type: Individual

Comment Excerpt Text:

Please do not litter our ocean landscape with these hideous looking wind turbines.

Comment Number: BOEM-2021-0024-DRAFT-0077-1
Commenter: Robert Henry
Commenter Type: Individual

Comment Excerpt Text:

Is it possible to render a scene, as viewed from our beaches, as to how how the wind turbine appear? It would be helpful to understand what a wind farm would look like from 15 miles away. We paid a lot for ocean view property. We'd like understand any impact on our view.

From what I know of CAD, this should not be too hard of a task and would answer many questions.

Comment Number: BOEM-2021-0024-DRAFT-0078-1
Commenter: Chris Genaro
Commenter Type: Individual

Comment Excerpt Text:

Absolutely NOT! If you would like to build a wind farm, please do not desecrate the view from the NJ shoreline. You can move it out 100 miles if you have to, but it should absolutely not be visible from the shore.

Comment Number: BOEM-2021-0024-DRAFT-0088-3
Commenter: Nancy Rosman
Commenter Type: Individual

Comment Excerpt Text:

The idea that wind farms are unsightly is ridiculous. Wind turbines turning is actually relaxing to the point of hypnotic. So it's a shame, really, that no one sitting on the beach is going to be able to see them. It would be a rare say that we could see 15 miles out to sea.

Comment Number: BOEM-2021-0024-DRAFT-0089-1
Commenter: Beth DiFrangia
Commenter Type: Individual

Comment Excerpt Text:

The thought of sitting on the beach looking out in the Ocean at wind turbines makes us very upset.

Comment Number: BOEM-2021-0024-DRAFT-0090-1
Commenter: Louise Halprin
Commenter Type: Individual

Comment Excerpt Text:

How much of the 860 foot height is above the water at high tide, at low tide? You should provide a (true) elevation showing what will be visible at 15 miles offshore (the "proposed" distance from shore) from grade/beach level, at 10 feet (1st floor condo) 20 feet (2nd floor condo), 55' (5th floor condo)—both day & night. You should also provide a "Plan View" of the locations from the ACTUAL Shoreline. The Elevations should include piers below ocean level to ocean floor. Sections should be cut through the middle, from top of highest propeller/stanchion to the ocean floor and include ALL materials.

Comment Number: BOEM-2021-0024-DRAFT-0092-1
Commenter: William Shillingford
Commenter Type: Individual

Comment Excerpt Text:

WIND Mills will destroy ocean views as they will be seen on horizon at 15 miles.

Comment Number: BOEM-2021-0024-DRAFT-0094-3
Commenter: Eric Ediger
Commenter Type: Individual

Comment Excerpt Text:

Can they be seen form the shore?

Comment Number: BOEM-2021-0024-DRAFT-0100-2
Commenter: Alexander Ross
Commenter Type: Individual

Comment Excerpt Text:

The reality is that the turbines are extremely ugly, enormous and will likely cause untold damage to migrating birds and sea life which will only become apparent after the devastation to these ecosystems has already occurred.

Comment Number: BOEM-2021-0024-DRAFT-0101-3
Commenter: Richard Zinck
Commenter Type: Individual

Comment Excerpt Text:

From a less provincial position, the turbines will totally affect the vista and serenity afforded beach goers.

Comment Number: BOEM-2021-0024-DRAFT-0102-2
Commenter: Robert Pordon
Commenter Type: Individual

Comment Excerpt Text:

The ocean and the ocean view from the beach provide the backdrop for calming, mental health-promoting walks and relaxation without most of our man made interferences. The visibility of the wind farm destroys that tranquility. While Im sure there are many other scientific impacts more easily proven both against and in support of the project, the value of our pristine ocean view on the mental health of our citizens should not be minimized.

Comment Number: BOEM-2021-0024-DRAFT-0112-2
Commenter: Robert and Joann Zuczek
Commenter Type: Individual

Comment Excerpt Text:

The proposed turbines will be visible for a significant distance from the shoreline and have a detrimental visual impact.

Comment Number: BOEM-2021-0024-DRAFT-0112-3
Commenter: Robert and Joann Zuczek
Commenter Type: Individual

Comment Excerpt Text:

The proposed turbines will dramatically alter the landscape and character of the area both in the immediate locality and from important vantage points.

Comment Number: BOEM-2021-0024-DRAFT-0113-9
Commenter: Meaghan Zanfardino
Commenter Type: Individual

Comment Excerpt Text:

Night skies will include blinking continuous lighting (required for navigation) creating visual pollution

Comment Number: BOEM-2021-0024-DRAFT-0115-1
Commenter: Thom Bonan
Commenter Type: Individual

Comment Excerpt Text:

I am more than a little perturbed that that view will be marred by massive windmills which will clearly be visible the majority of the time during the day, and then also at night where the unusually dark for the area and lovely stargazing will now be ruined by incessantly blinking lights.

Comment Number: BOEM-2021-0024-DRAFT-0118-2
Commenter: Cindy Sykes
Commenter Type: Individual

Comment Excerpt Text:

The light pollution, and the impact on our pristine views will also be negatively impacted.

Comment Number: BOEM-2021-0024-DRAFT-0138-4
Organization: Vacation Rentals Jersey Shore, LLC
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

It's just common sense NOT to have those turbines visible from the shore. To us Jersey folks, the Jersey Shore is our Grand Canyon! If you have never seen a sunrise on our shore, I encourage you to get up early one morning and watch one. No two are ever the same. If our horizon was picketed with wind turbines, this sight will forever be ruined. I am sure you wouldn't approve wind turbines on the rim of the Grand Canyon. Please don't ruin our Jersey Shore with them either.

Comment Number: BOEM-2021-0024-DRAFT-0140-2
Commenter: Mike Mrazek
Commenter Type: Individual

Comment Excerpt Text:

Its just common sense NOT to have those turbines visible from the shore. To us Jersey folks, the Jersey Shore is our Grand Canyon! If you have never seen a sunrise on our shore, I encourage you to get up early one morning and watch one. No two are ever the same. If our horizon was picketed with wind turbines, this sight will forever be ruined. I am sure you wouldnt approve wind turbines on the rim of the Grand Canyon. Please dont ruin our Jersey Shore with them either.

Comment Number: BOEM-2021-0024-DRAFT-0143-4
Commenter: Janis Fahey
Commenter Type: Individual

Comment Excerpt Text:

Its just common sense NOT to have those turbines visible from the shore. To us Jersey folks, the Jersey Shore is our Grand Canyon! If you have never seen a sunrise on our shore, I encourage you to get up early

one morning and watch one. No two are ever the same. If our horizon was picketed with wind turbines, this sight will forever be ruined. I am sure you wouldnt approve wind turbines on the rim of the Grand Canyon. Please dont ruin our Jersey Shore with them either.

Comment Number: BOEM-2021-0024-DRAFT-0150-1
Commenter: Rahul Deo
Commenter Type: Individual

Comment Excerpt Text:

Putting wind turbines within the visible distance from the shore will spoil the view

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Comment Number: BOEM-2021-0024-DRAFT-0152-1
Commenter: Scott Tzorfas
Commenter Type: Individual

Comment Excerpt Text:

I do not want wind farms or anything of this type off my beautiful shoreline. I am not a proponent of this in any way shape or form.

Comment Number: BOEM-2021-0024-DRAFT-0164-1
Commenter: Raymond Carile
Commenter Type: Individual

Comment Excerpt Text:

I am opposed, however, to your proposal to put them within sight of the shoreline. What a horrible idea to support our planet by destroying the beauty witnessed by a morning sunrise.

Please put these turbines far enough offshore that they are not visible from the Oceans edge.

Comment Number: BOEM-2021-0024-DRAFT-0165-1
Commenter: Teri Weidlein
Commenter Type: Individual

Comment Excerpt Text:

We have gotten to know many of our renters and they have become like family. In speaking with them about the visual pollution of the wind turbines, they have expressed concern about the beautiful views that they feel will ruin one of the main reasons they rent on Long Beach Island

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Comment Number: BOEM-2021-0024-DRAFT-0174-1
Commenter: Chris Haimbach
Commenter Type: Individual

Comment Excerpt Text:

I am all for finding new ways to harness power, but why would we want to disrupt our beautiful Jersey shore with wind turbines that can be seen from the shore.

Comment Number: BOEM-2021-0024-DRAFT-0188-1
Commenter: Donald Horner
Commenter Type: Individual

Comment Excerpt Text:

I'm for solar and wind energy but make the turbines invisible to beach goers. Just go out the necessary distance to make the turbines invisible and I will embrace with open arms. I own a property in Long Beach Island New Jersey and I DO NOT WANT TO SEE YOUR TURBINES FROM MY BEACH!!!!!

Comment Number: BOEM-2021-0024-DRAFT-0220-3
Commenter: Joann Zuczek
Commenter Type: Individual

Comment Excerpt Text:

The proposal contravenes a key principle of trying to protect an area for the sake of its intrinsic character and beauty, the diversity of its landscape, heritage, wildlife, etc.

Comment Number: BOEM-2021-0024-DRAFT-0257-3
Commenter: Angela Trampota
Commenter Type: Individual

Comment Excerpt Text:

Although I believe in the development of wind energy, I feel it needs to be balanced with preserving some of our few natural vistas along the Jersey shore where people can come to enjoy a piece of nature unadulterated by industry.

Comment Number: BOEM-2021-0024-DRAFT-0260-3
Commenter: Geraldine Scarpa
Commenter Type: Individual

Comment Excerpt Text:

Its just common sense NOT to have those turbines visible from the shore. To us Jersey folks, the Jersey Shore is our Grand Canyon as my friends like to say. We can NOT let our open space be violated by such a project. While I'm sure we can all agree that alternative energy/wind power is important, I am also sure it can be achieved without compromising our national treasure: the seacoast.

Comment Number: BOEM-2021-0024-DRAFT-0266-1
Commenter: John Scarpa
Commenter Type: Individual

Comment Excerpt Text:

I can think of nothing worse that to be looking at the horizon and seeing anything but water and sky. Please please please make sure the turbines get moved out beyond sight of land. The analogy of this being our Grand Canyon fits very well. Please don't ruin it!!!

Comment Number: BOEM-2021-0024-DRAFT-0268-1
Commenter: Tim Coughlin
Commenter Type: Individual

Comment Excerpt Text:

This proposal has not been fairly represented in the renderings of the view impact from the shoreline. This installation, as proposed, will leave a scar on the shoreline views for generations.

Comment Number: BOEM-2021-0024-DRAFT-0277-1
Commenter: Rachelle Steen
Commenter Type: Individual

Comment Excerpt Text:

While I am enthusiastic about the possibility of there being a renewable, clean fuel source in wind energy being available to LBI, I am disappointed that it would be at the cost of the beauty of one of the few natural wonders left in New Jersey.

Comment Number: BOEM-2021-0024-DRAFT-0277-3
Commenter: Rachelle Steen
Commenter Type: Individual

Comment Excerpt Text:

Disrupting this beauty would truly be a loss of one of the main things a beach vacation offers; vacating a busy crowded environment to experience the open freedom of the ocean. Why ruin that view if there are other options?

Comment Number: BOEM-2021-0024-DRAFT-0282-2
Commenter: James Fritsch
Commenter Type: Individual

Comment Excerpt Text:

The visual representations were cursory at best and are completely downplayed in the COP (Vol 2, Sec. 2.3.3.2). As a homeowner on LBI, I can easily see Atlantic City when I cross the causeway, even on a cloudy day, and that is 24 miles away. The proposal to drop hundreds of windmills 9 miles off the LBI shoreline is disgusting, laughable at best.

Comment Number: BOEM-2021-0024-DRAFT-0302-1
Commenter: Kristina Pockl
Commenter Type: Individual

Comment Excerpt Text:

I wholly believe in alternative energy solutions and the absolute need for them but I cannot get past the cons of having a wind farm off of the NJ coast. The shoreline and our beaches are an amazingly beautiful natural wonder. This wind farm would wreck the peace and tranquillity I personally feel when I have the opportunity to visit the NJ beaches, which has been consistently over the last 40 years.

Comment Number: BOEM-2021-0024-DRAFT-0326-2
Commenter: Andrew Jordan
Commenter Type: Individual

Comment Excerpt Text:

their is a priceless benefit that so many NJ beach goers/ shore lovers have which is a beautiful, peaceful coastline, with an amazing horizon... this project promises to continue to deteriorate all that so many of us have come to love and cherish about the NJ coast line. For so many years, NJ has gotten such a bad rap--whether it was hypodermic needles on beaches, reality TV shows, etc. This project is sure to ruin the daily amazing views of the ocean, and who knows the long-term impact on the regional environment this will have. I vote 100% against this proposal.

Comment Number: BOEM-2021-0024-DRAFT-0327-6
Commenter: William Leighton
Commenter Type: Individual

Comment Excerpt Text:

Some people have complained about being able to see the wind farm on the far horizon. The reason they're so tall is that it makes them more e?cient. If they were half the proposed size, rather than roughly 100 turbines, we would need between 400 and 800 turbines to generate the same amount of power.

Comment Number: BOEM-2021-0024-DRAFT-0334-4
Commenter: Peter Straub
Commenter Type: Individual

Comment Excerpt Text:

Although there may remain some opposition to the visual sight lines from beach communities, the visualization studies indicate that this project will have only moderate to minimal effects on scenic views and it is unclear if they will have any impact on tourism or the value of oceanfront property.

Comment Number: BOEM-2021-0024-DRAFT-0341-1
Commenter: John Feairheller, Jr.
Commenter Type: Individual

Comment Excerpt Text:

The visual assessment provided Appendix L as well as exhibits seen at community meeting do not show the visual impact on sun rise or moon rise during October or other non-summer months when the air is clear.

It is asked that a similar exhibit be prepared that shows a full moon rise on a clear night, and a sun rise on a clear morning.

Comment Number: BOEM-2021-0024-DRAFT-0344-1
Commenter: Julie D
Commenter Type: Individual

Comment Excerpt Text:

The NJ shoreline is a natural sanctuary to the residents of this state and having an eyesore out along the horizon would do more harm than good. Adding more light pollution to this area would not be advantageous. I am personally for renewable energy, but sacrificing the natural beauty of our land doesnt make too much sense. Another location could possibly be considered at this point.

Comment Number: BOEM-2021-0024-DRAFT-0349-3
Commenter: Rand Pearsall
Commenter Type: Individual

Comment Excerpt Text:

What is the exact status today of the radar-assisted night lighting? It sounds like a possibility but with no guarantee. Plus, we have no idea just how often the lights would be activated. Frankly, I think this will be one of the biggest issues in the end.

4. Following on the last question, what is the status of the Rutgers study on visibility? I believe it might be ready in July? Why is this taking so long? The visibility issue is the easiest to understand and may create the greatest doubts.

Comment Number: BOEM-2021-0024-DRAFT-0370-7
Organization: Recreational Fishing Alliance
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

Potential effects on the alternation of the ocean view following the construction of offshore wind facilities should not be dismissed as trivial. It is accepted that industrial development should not take place in areas of significant natural beauty such as Grand Canyon, Yosemite, Niagra Falls, or around areas of significant cultural importance such as the National Mall or Gettysburg. RFA suggests that the EIS conduct extensive research and surveys to evaluate the social and economic value of the current underdeveloped view of the ocean and what the cost might be if the view is altered.

Comment Number: BOEM-2021-0024-EMAIL-002-2
Commenter: Matthew Bisicchia
Commenter Type: Individual

Comment Excerpt Text:

-Other images regarding the extent of the visual impact seem to minimize the impact of the turbines, and also seemed to be images from a hazy/cloudy sky day, as opposed to a beautiful clear blue sky day (which is really important to note when considering what the true visual impact will be).

-For example, another image of the turbines shows a large cloud right where the wind turbines are which therefore makes the turbines seem less noticeable. This wrongly leads to thinking that the turbines will be less noticeable at any given time.

-Rather, the image attached to this comment shows the true extent more clearly, which appears even more grave and more realistic, and on a beautiful blue sky day- such a day with weather that we associate as the best for being at this Natural Wonder. This image is a screenshot from the video of a CBS news segment (https://philadelphia.cbslocal.com/2021/04/20/proposed-wind-farm-stretching-from-atlantic-city-to-stone-harbor/)

Also consider:

-What will happen at night? A long string of bright lights along the beautiful night sky?

-"Asked how much regulators considered the possibility of marred beach views when establishing the areas suitable to wind farms, BOEM's project coordinator for Ocean Wind's lease area, Will Waskes, said 'Surprisingly, visual impact concerns were not heavily raised during the planning process for the New Jersey lease areas.'"(https://pressofatlanticcity.com/news/local/residents-officials-reiterate-concerns-about-wind-farm-off-atlantic-city/article_74573d16-0196-5c6a-a98d-0a0bbc1cac75.html).

Comment Number: BOEM-2021-0024-EMAIL-002-3
Commenter: Matthew Bisicchia
Commenter Type: Individual

Comment Excerpt Text:

I have heard of the offshore windfarm quite some time ago, but it was not until now that I saw renderings of the visual pollution. I am surprised to learn that the farm is directly straight ahead all along the horizon- clearly visible. I thought it would cover a smaller area off northern Atlantic City. And, I believe that many people do not know of the extent of the visual impact.

Comment Number: BOEM-2021-0024-EMAIL-002-4
Commenter: Matthew Bisicchia
Commenter Type: Individual

Comment Excerpt Text:

I think that many of us are not realizing the extent of the visual pollution. Perhaps many are seeing images that are not showing the true visual impact of the turbines (example, images of the turbines on a cloudy day- one image shows a large cloud right where the wind turbines are which therefore makes the turbines seem less noticeable), which seem to wrongly show a less grave picture. I believe that not many know. My family members and friends who are shore residents did not know of this.

Comment Number: BOEM-2021-0024-EMAIL-005-11
Organization: City of Beach Haven, New Jersey
Commenter: Colleen Lambert
Commenter Type: Local Agency

Comment Excerpt Text:

Assessment of alternatives is especially needed for this project and EIS because this lease area is exceptionally close to shore and would create one of the most visible wind turbine complexes in the entire world, with associated severe socio-economic impacts to the local shore communities that depend on tourism for their survival.

The turbines off of Atlantic City are proposed as close as 15 miles and go out to 20 miles. For the newer, very large turbines to be used, almost all the turbine tower and the blades would be clearly visible for anything closer than 15 miles. Even at the 17.3- mile turbine exclusion zone limit that the BOEM has proposed for New York State projects, a good portion of the tower and the blades would still be visible.

Comment Number: BOEM-2021-0024-EMAIL-005-13
Organization: City of Beach Haven, New Jersey
Commenter: Colleen Lambert
Commenter Type: Local Agency

Comment Excerpt Text:

So, for lease areas this close to shore the socio-economic impact is an obvious one and perhaps the worst environmental impact of the project. Inexplicably visible and associated socio-economic impact was apparently never even considered in the process leaving to the definition of this lease area. There is no mention of visible impact in the feasibility study done by Rutgers University nor in efforts like the Atlantic Wind Energy Workshop held in September of 2011. The failure by the BOEM to even consider such an obvious Impact of this proposal, in or out of the NEPA process, raises serious concerns about the reasonableness of this project and cries out for an analysis of alternatives.

Comment Number: BOEM-2021-0024-EMAIL-005-14
Organization: City of Beach Haven, New Jersey
Commenter: Colleen Lambert
Commenter Type: Local Agency

Comment Excerpt Text:

At about 28 miles the tower disappears from view but the blades rotating above it are still visible. Visual renderings from the Vineyard Wind project off of Martha's Vineyard show the entire turbine-tower and blades- not visible from the mainland beyond 33.6 miles. Therefore, to avoid the unacceptable socio-economic impacts described above, a suitable lease area starting at least 30 miles offshore is needed.

Comment Number: BOEM-2021-0024-EMAIL-005-2
Organization: City of Beach Haven, New Jersey
Commenter: Colleen Lambert
Commenter Type: Local Agency

Comment Excerpt Text:

The BOEM has applied an inner turbine exclusion zone of 17.3 miles to New York State wind energy projects based on visible impact As a matter of equity, it must apply that exclusion zone to New Jersey.

Comment Number: BOEM-2021-0024-EMAIL-005-20
Organization: City of Beach Haven, New Jersey
Commenter: Colleen Lambert
Commenter Type: Local Agency

Comment Excerpt Text:

This section needs to summarize the expected socioeconomic impacts from visible turbines realistically, and certainly not as a tourist attraction. It should also commit to provide visual renditions of the turbines, done by an independent third party, and to do a detailed study of the specific adverse impacts of visible turbines on local rentals, property values, and tourism in the draft EIS.

Comment Number: BOEM-2021-0024-EMAIL-005-28
Organization: City of Beach Haven, New Jersey
Commenter: Colleen Lambert
Commenter Type: Local Agency

Comment Excerpt Text:

This proposed project shouId be recast with a sensible approach that places the turbines further out where they can’t be seen and uses the current lease areas as the transmission hub to bring all that power to shore.

A minimum turbine exclusion zone of 17.3 miles should be applied to the project consistent with that for New York.

Comment Number: BOEM-2021-0024-EMAIL-005-32
Organization: City of Beach Haven, New Jersey
Commenter: Colleen Lambert
Commenter Type: Local Agency

Comment Excerpt Text:

In March,2018 the University of Delaware published a report titled Atlantic Offshore Wind Energy Development-Values and Implications for Recreation and Tourism that was sponsored by the BOEM. It assessed the impact on shore visits from visible turbines at various distances.

It interviewed 1,725 shore goers utilizing visuals of 5 MW turbines that were two-thirds the height of a 12 MW turbine. So, a 12 MW turbine at 10 miles would have about the same visual impact as data in the report for a 5 MW turbine at 6.6 miles. For that distance, it concluded (from Report Figure 3 below)that 40 percent of those surveyed will have a worse experience at the shore with turbines visible.

That negative reaction would result in 18 percent (from Report Figure 4 below) less visits to the shore, clearly an unacceptable impact on shore communities.

Comment Number: BOEM-2021-0024-EMAIL-005-33
Organization: City of Beach Haven, New Jersey
Commenter: Colleen Lambert
Commenter Type: Local Agency

Comment Excerpt Text:

In 2015, the BOEM published the results of a viewshed analysis it did for the New York Outer Continental Shelf Area (Renewable Energy Viewshed Analysis and Visual Simulation for the New York Outer Continental Shelf Call Area: Compendium Report OCS Study, BOEM 2015- 044).

It simulated the visual impact of one hundred and fifty-two6.2 MW wind turbines from 16 observation points in New York and New Jersey. The simulation most relevant to LBI is the Jones Beach observation point because the turbine array was roughly parallel to that shore. The closest point of the turbine array to Jones Beach was 15 miles.

It ranked the visible impact on a scale from 1 to 6. The visual impact from Jones Beach scored a 6, its highest rating. A 6 rating was defined as; "Dominates the view because the study subject fills most of the field for views in its general direction. Strong contrast in font, line, color, texture, luminance, or motion may contribute to view dominance".

Since the height of a 6.2 MW turbine is two-thirds that of a 12 MW, that visual impact would be equivalent to a 12 MW turbineat23 miles. So even placing 12 MW turbines at the outer most points of the current lease area would still register a major visual impact, based on the BOEM study.

Comment Number: BOEM-2021-0024-EMAIL-005-34
Organization: City of Beach Haven, New Jersey
Commenter: Colleen Lambert
Commenter Type: Local Agency

Comment Excerpt Text:

The BOEM also conducted an extensive visualization study for the Massachusetts And Rhode Island Wind Energy Areas in 2015. Based on these visualization studies and other outreach conducted by the State of New York, New York adopted a 20-mile exclusion distance for wind energy development. (FR Notice, Commercial leasing for Wind Power in the Outer Continental Shelf In the New York Area, April 18, 2018). The BOEM chose to temporarily use a 17.3-mile exclusion distance. Either way if these exclusions were applied to the New Jersey lease area they would remove most of the lease area from turbine placement

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Comment Number: BOEM-2021-0024-TRANS-41321-0013-3
Organization: Southern New Jersey Development Council
Commenter: Jane Asselta
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

We are encouraged that at a break even point at 15 miles out, Ocean Wind at its closest point is in the break even point where turbines will likely appear to be approximately a quarter inch above the horizon. Atlantic City is already host to five on shore wind turbines and the Philadelphia Inquirer has reported on casino hotel guests requesting rooms with a view of the turbines.

Comment Number: BOEM-2021-0024-TRANS-41321-0017-1
Commenter: Rick Robinson
Commenter Type: Individual

Comment Excerpt Text:

I think the Atlantic Ocean, when I stand on the beach and look out is the Grand Canyon of the eastern seaboard. I have stood on the rim of the Grand Canyon and I am just as much in awe when I stand and

look out at the ocean. And to take that view, to take that incredible natural resource and industrialize it is nothing short of sinful in my opinion. Especially when there is so many older alternatives.

Comment Number: BOEM-2021-0024-TRANS-42021-0018-2
Commenter: Will Rush
Commenter Type: Individual

Comment Excerpt Text:

Photo simulations, it is quite interesting to me that you have 26 mile vantage points, AC, Stone Harbor, but you don't have -- you don't have any of the Sea Isle, Ocean City or Avalon vantage points. I'd like to see what those are because those are the closest from what I can tell from the big pictures to the shorelines. So I'd like to see a vantage point from miles, I think everyone deserves to see a vantage point of from 15 miles of what these wind turbines would look like from the closest point not from 26 miles away.

Comment Number: BOEM-2021-0024-TRANS-42021-0026-2
Commenter: Dwayne Waddlington
Commenter Type: Individual

Comment Excerpt Text:

What a great analogy the caller last week used to putting the turbines in the visible sigh to our beaches to putting them on the rim of the Grand Canyon. You just wouldn't do that. So why are you putting them in view of our beaches on the Jersey Shore.

A.2.25 Water Quality

Comment Number: BOEM-2021-0024-DRAFT-0253-3
Commenter: Susan Shirk
Commenter Type: Individual

Comment Excerpt Text:

second, polluting the waters with 90 metal towers can not have a positive effect on the water quality and the marine life.

A.2.26 Wetlands and Waters of the U.S.

Comment Number: BOEM-2021-0024-DRAFT-0345-14
Organization: U.S. Environmental Protection Agency, Region 2
Commenter Type: Federal Agency

Comment Excerpt Text:

The COP includes a thorough discussion of existing wetlands, streams and other waters of the United States that may potentially be directly or indirectly affected by the proposed infrastructure or activities associated with the project. It appears that the project as designed will largely avoid these types of impacts. We recommend that the discussion in the EIS include the range of design/construction measures highlighted in the COP that can be implemented to avoid and minimize impacts of transmission cables as they transition to shore from the marine environment.

Where fill is proposed or will otherwise impact wetlands or other waters of the United States, the EIS should explain how the activity will comply with EPA's Clean Water Act regulations issued under Section 404 (b)(l), referred to as "EPA's 404 (b)(l) Guidelines." The EIS should include an evaluation of ways in which each alternative can be designed to avoid, or where unavoidable, minimize direct and indirect impacts to wetlands and other waters. The evaluation of direct and indirect impacts should fully

consider both temporary and permanent impacts as well as future impacts from necessary upgrades or maintenance.

The evaluation of indirect impacts should include any clearing impacts for the proposed terrestrial construction activities resulting in a change (either permanent or temporary) of cover type within a wetland (e.g., converting a forested wetland to an emergent or scrub/shrub wetland). In addition, construction related indirect impacts, including water quality impacts and erosion or sedimentation impacts to wetlands or waterbodies should be analyzed.

Close coordination with the U.S. Army Corps of Engineers, National Marine Fisheries Service, appropriate state Coastal Zone Management offices, EPA, and others, will be essential for the portions of the proposed work that falls under their respective jurisdictions.

Comment Number: BOEM-2021-0024-DRAFT-0351-6
Organization: Barnegat Bay Partnership
Commenter Type: Non-Governmental Organization

Comment Excerpt Text:

There is no mention of restoration and/or mitigation for permanent impacts to wetlands associated with offshore and inshore export cable landfall and onshore export cable routes, particularly at the Holtec Property in Lacey Township. It is clear that impacts to wetlands cannot be completely avoided/ minimized, so any potential restoration and/or mitigation plan should be discussed in the EIS.

A.2.27 General Support or Opposition

Many comments expressed general support or opposition for the Project. Some commenters provided comments of support or opposition without providing a justification. Other commenters referred to generic resource topics as a justification for their support or opposition. Table A-2 provides a list of submissions that contained statements of general support or opposition. Commenters are generally supportive of the proposed Project because it may reduce fossil fuel dependance, reduce climate change impacts, increase job opportunities, add to the aesthetics of the ocean view, or add habitat for marine fisheries. Commenters are generally opposed to the proposed Project because it may adversely affect: commercial fisheries, cold pools, navigation, marine wildlife and habitat, visual quality, the local economy, or electricity rates. Commenters proposed moving the Project farther from shore, conducting long-term studies to assess potential ecosystem impacts, and adjusting the number and placement of turbines to reduce long-term impacts.

Table A-2 List of Submissions Containing Statements of General Support or Opposition

Submission ID	Name	Government or Non-Governmental Organization Name
BOEM-2021-0024-DRAFT-0021	Lee Evans	
BOEM-2021-0024-DRAFT-0060	Lynn Duffy	
BOEM-2021-0024-DRAFT-0063	Joseph DeFinis	
BOEM-2021-0024-DRAFT-0065	Andy Giordano	
BOEM-2021-0024-DRAFT-0069	John Giordano	
BOEM-2021-0024-DRAFT-0075	Jude Kulp	
BOEM-2021-0024-DRAFT-0076	Kathleen Johnson	
BOEM-2021-0024-DRAFT-0080	Donna McManus	
BOEM-2021-0024-DRAFT-0085	Robert Lewis	
BOEM-2021-0024-DRAFT-0098	Mike Fischer	

Submission ID	Name	Government or Non-Governmental Organization Name
BOEM-2021-0024-DRAFT-0099	Dave Kurtz	
BOEM-2021-0024-DRAFT-0101	Richard Zinck	
BOEM-2021-0024-DRAFT-0102	Robert Pordon	
BOEM-2021-0024-DRAFT-0103	Katherine Prassas	
BOEM-2021-0024-DRAFT-0104	Manora USA, LLC	
BOEM-2021-0024-DRAFT-0107	Regina Warren	
BOEM-2021-0024-DRAFT-0109	William Warren	
BOEM-2021-0024-DRAFT-0110	Paul Livore	
BOEM-2021-0024-DRAFT-0111	Natalie Thibault	
BOEM-2021-0024-DRAFT-0112	Robert and Joann Zuczek	
BOEM-2021-0024-DRAFT-0114	Sal Sal Vitiello	
BOEM-2021-0024-DRAFT-0118	Cindy Sykes	
BOEM-2021-0024-DRAFT-0119	Catherine DeMaio	
BOEM-2021-0024-DRAFT-0121	Kevin Clarke	
BOEM-2021-0024-DRAFT-0122		Monmouth-Ocean Development Council (MODC)
BOEM-2021-0024-DRAFT-0123	Joseph Gartland	
BOEM-2021-0024-DRAFT-0126	Frank Gallo	
BOEM-2021-0024-DRAFT-0127	Stephen Granieri	
BOEM-2021-0024-DRAFT-0128	Margaret Doyle	
BOEM-2021-0024-DRAFT-0130	Barbara J Henderson	
BOEM-2021-0024-DRAFT-0131	Walter Korfmacher	
BOEM-2021-0024-DRAFT-0132	William Morrill	
BOEM-2021-0024-DRAFT-0133	James Hutchinson	
BOEM-2021-0024-DRAFT-0134	Kate Hayden	
BOEM-2021-0024-DRAFT-0138		Vacation Rentals Jersey Shore, LLC
BOEM-2021-0024-DRAFT-0143	Janis Fahey	
BOEM-2021-0024-DRAFT-0157	Andrew Rackow	
BOEM-2021-0024-DRAFT-0167	concerned citizen	
BOEM-2021-0024-DRAFT-0169	Rick Robinson	
BOEM-2021-0024-DRAFT-0170	Calvin Douglass	
BOEM-2021-0024-DRAFT-0175	Krid Olson	
BOEM-2021-0024-DRAFT-0184	Christopher Delancey	
BOEM-2021-0024-DRAFT-0186	Sherril BeMent	
BOEM-2021-0024-DRAFT-0187	Arthur Peterson	
BOEM-2021-0024-DRAFT-0189	Donma Haas	
BOEM-2021-0024-DRAFT-0190	Lou Savastani	
BOEM-2021-0024-DRAFT-0191	Patrick Adams	
BOEM-2021-0024-DRAFT-0193	Matthew UebeleUebele	
BOEM-2021-0024-DRAFT-0201	Jasper Kolimago	

Submission ID	Name	Government or Non-Governmental Organization Name
BOEM-2021-0024-DRAFT-0205	Molly Grover	
BOEM-2021-0024-DRAFT-0206	Caitlin Liston	
BOEM-2021-0024-DRAFT-0209	Jacqueline Marie McAndrew	
BOEM-2021-0024-DRAFT-0215	Gerald T. Keenan	New Jersey Alliance for Action
BOEM-2021-0024-DRAFT-0216	Andrew Ezzell	
BOEM-2021-0024-DRAFT-0231	Mark Talbot	
BOEM-2021-0024-DRAFT-0235		New Jersey State Chamber of Commerce
BOEM-2021-0024-DRAFT-0242	John Kauterman	
BOEM-2021-0024-DRAFT-0244	Zachary Nickerson	
BOEM-2021-0024-DRAFT-0249	Tina Shearer	
BOEM-2021-0024-DRAFT-0250	Rick Shearer	
BOEM-2021-0024-DRAFT-0253	Susan Shirk	
BOEM-2021-0024-DRAFT-0256	Capt. Paul Eidman	
BOEM-2021-0024-DRAFT-0258	Vincent Miraglia	
BOEM-2021-0024-DRAFT-0264	Leslie Houston	
BOEM-2021-0024-DRAFT-0265	Walter A Rockey, 3rd	
BOEM-2021-0024-DRAFT-0267	Linda Clemente	
BOEM-2021-0024-DRAFT-0271	William O'Neill	
BOEM-2021-0024-DRAFT-0272	William Roache	
BOEM-2021-0024-DRAFT-0273	Jeffrey Eidman	
BOEM-2021-0024-DRAFT-0274	Linda Scavello	
BOEM-2021-0024-DRAFT-0279	Victor Gano	
BOEM-2021-0024-DRAFT-0282	James Fritsch	
BOEM-2021-0024-DRAFT-0283	Hector Rivera	
BOEM-2021-0024-DRAFT-0284	Denise Kubaska	
BOEM-2021-0024-DRAFT-0285	Victor Gano	
BOEM-2021-0024-DRAFT-0287		North Beach Taxpayers Association
BOEM-2021-0024-DRAFT-0291	Linden Gruver	
BOEM-2021-0024-DRAFT-0294		Eastern Atlantic State Regional Council of Carpenters
BOEM-2021-0024-DRAFT-0303	Joseph Bisicchia	
BOEM-2021-0024-DRAFT-0304	Tammy Murray	
BOEM-2021-0024-DRAFT-0307	Pamela Owsik	
BOEM-2021-0024-DRAFT-0309		Surfside Foods LLC
BOEM-2021-0024-DRAFT-0310	Sandy Prout	
BOEM-2021-0024-DRAFT-0311	Sam D'Amore	
BOEM-2021-0024-DRAFT-0312	B Caldwell	
BOEM-2021-0024-DRAFT-0314	Joseph DeFinis	
BOEM-2021-0024-DRAFT-0316	M McCarroll	
BOEM-2021-0024-DRAFT-0317	Brigid Caricich	

Submission ID	Name	Government or Non-Governmental Organization Name
BOEM-2021-0024-DRAFT-0324	Rosemary Mancinelli	
BOEM-2021-0024-DRAFT-0325		Environment New Jersey
BOEM-2021-0024-DRAFT-0329	Richard Bertsch	
BOEM-2021-0024-DRAFT-0332	Suzanne Hornick	
BOEM-2021-0024-DRAFT-0338		American Littoral Society
BOEM-2021-0024-DRAFT-0348		American Bird Conservancy
BOEM-2021-0024-DRAFT-0353	Patricia Dorr-Lewin	
BOEM-2021-0024-DRAFT-0353	Kathleen Hardeker	
BOEM-2021-0024-DRAFT-0353	Celso Valente	
BOEM-2021-0024-DRAFT-0353	Lisa Bonanno	
BOEM-2021-0024-DRAFT-0353	Maryjane Genestra	
BOEM-2021-0024-DRAFT-0353	Karen Barlow	
BOEM-2021-0024-DRAFT-0353	Colleen Forest	
BOEM-2021-0024-DRAFT-0353		New Jersey Resource Project
BOEM-2021-0024-DRAFT-0356	Katie Feairheller	
BOEM-2021-0024-DRAFT-0357	Jean Gatti	
BOEM-2021-0024-DRAFT-0360	Jennifer Livak	
BOEM-2021-0024-DRAFT-0361	Susan Matthews	
BOEM-2021-0024-DRAFT-0362	Anthony Gatti	
BOEM-2021-0024-DRAFT-0363	Jersey Renews	
BOEM-2021-0024-DRAFT-0367		Atlantic Shores Offshore Wind
BOEM-2021-0024-DRAFT-0369	Kathleen McGuire	
BOEM-2021-0024-DRAFT-0371	Martha Wright	
BOEM-2021-0024-DRAFT-0373	John Helbig	
BOEM-2021-0024-DRAFT-0374	Patricia Conte	
BOEM-2021-0024-DRAFT-0378	Kim Galatro	
BOEM-2021-0024-DRAFT-0379	Frances France	
BOEM-2021-0024-DRAFT-0380	Jennifer Trofa	
BOEM-2021-0024-DRAFT-0381	Clean Ocean Action	
BOEM-2021-0024-DRAFT-0382	Sandra Maxson	
BOEM-2021-0024-DRAFT-0383	Jeanne Connelly	
BOEM-2021-0024-DRAFT-0384	Gregory Cudnik	
BOEM-2021-0024-DRAFT-0465	City of Ventnor City	
BOEM-2021-0024-DRAFT-0466	City of Ventnor City	
BOEM-2021-0024-EMAIL-001-	Jean Publiee	
BOEM-2021-0024-EMAIL-005-	Colleen Lambert	City of Beach Haven, New Jersey
BOEM-2021-0024-TRANS-4132	Scott Mackey	Garden State Seafood Association
BOEM-2021-0024-TRANS-4132	Max Slusher	Atlantic County Economic Alliance
BOEM-2021-0024-TRANS-4132	Jane Asselta	Southern New Jersey Development Council
BOEM-2021-0024-TRANS-4132	Michael DeVilager	Ocean City Council

Submission ID	Name	Government or Non-Governmental Organization Name
BOEM-2021-0024-TRANS-4132	Rick Robinson	
BOEM-2021-0024-TRANS-4132	Martha	
BOEM-2021-0024-TRANS-4132	Mike Fischer	
BOEM-2021-0024-TRANS-4152	Eric Ediger	
BOEM-2021-0024-TRANS-4152	Eric Ford	New Jersey Energy Coalition
BOEM-2021-0024-TRANS-4152	Manny Amador	LOCAL 472 Laborer's Internatinoal Union of North America (LIUNA)
BOEM-2021-0024-TRANS-4152	Greg Cudnik	Fishermen's Headquarters Bait and Tackle
BOEM-2021-0024-TRANS-4202	Debra Coyle McFadden	New Jersey Work Environmental Council
BOEM-2021-0024-TRANS-4202	Michael Egenton	New Jersey State Chamber of Commerce
BOEM-2021-0024-TRANS-4202	Vicky Clark	Cape May County Chamber of Commerce
BOEM-2021-0024-TRANS-4202	Joe De Finnis	
BOEM-2021-0024-TRANS-4202	Greg Kudnik	
BOEM-2021-0024-TRANS-4202	Jodi Stuart	
BOEM-2021-0024-TRANS-4202	Rick Birch	
BOEM-2021-0024-TRANS-4202	Christian Hartman	New Jersey Alliance for Action
BOEM-2021-0024-TRANS-4202	David Monte	
BOEM-2021-0024-TRANS-4202	Danielle Fury	
BOEM-2021-0024-TRANS-4202	Anthony Ciatello	Research and Development Council of New Jersey
BOEM-2021-0024-TRANS-4202	Brian Williams	Bad Fish Fishing Charters
BOEM-2021-0024-TRANS-4202	Allison Arne	
BOEM-2021-0024-TRANS-4202	Michael Chate	Greater Atlantic City Chamber
BOEM-2021-0024-TRANS-4202	Anthony Etidali	

A.2.28 Submissions from Anonymous Commenters

BOEM received 73 submissions from anonymous commenters. Table A-3 provides the Submission ID numbers associated with the anonymous submissions. Submissions from anonymous commenters focused on high-level impacts on tourism and fishing industries, local residents, environment, and visual resources. Key topics raised by these commenters included the following: impacts on fisheries, tourism, real estate, electricity rates, jobs, and local economies; construction noise and vibration; Project relocation farther offshore; impacts on habitat and wildlife; visual impacts; waste disposal; and navigation.

Table A-3 List of Submissions from Anonymous Commenters

Submission IDs	
BOEM-2021-0024-DRAFT-0005	BOEM-2021-0024-DRAFT-0050
BOEM-2021-0024-DRAFT-0011	BOEM-2021-0024-DRAFT-0051
BOEM-2021-0024-DRAFT-0012	BOEM-2021-0024-DRAFT-0052
BOEM-2021-0024-DRAFT-0013	BOEM-2021-0024-DRAFT-0053

Submission IDs	
BOEM-2021-0024-DRAFT-0014	BOEM-2021-0024-DRAFT-0054
BOEM-2021-0024-DRAFT-0015	BOEM-2021-0024-DRAFT-0055
BOEM-2021-0024-DRAFT-0016	BOEM-2021-0024-DRAFT-0056
BOEM-2021-0024-DRAFT-0017	BOEM-2021-0024-DRAFT-0057
BOEM-2021-0024-DRAFT-0018	BOEM-2021-0024-DRAFT-0058
BOEM-2021-0024-DRAFT-0019	BOEM-2021-0024-DRAFT-0059
BOEM-2021-0024-DRAFT-0020	BOEM-2021-0024-DRAFT-0061
BOEM-2021-0024-DRAFT-0022	BOEM-2021-0024-DRAFT-0062
BOEM-2021-0024-DRAFT-0023	BOEM-2021-0024-DRAFT-0066
BOEM-2021-0024-DRAFT-0024	BOEM-2021-0024-DRAFT-0070
BOEM-2021-0024-DRAFT-0026	BOEM-2021-0024-DRAFT-0073
BOEM-2021-0024-DRAFT-0027	BOEM-2021-0024-DRAFT-0079
BOEM-2021-0024-DRAFT-0028	BOEM-2021-0024-DRAFT-0087
BOEM-2021-0024-DRAFT-0029	BOEM-2021-0024-DRAFT-0135
BOEM-2021-0024-DRAFT-0030	BOEM-2021-0024-DRAFT-0141
BOEM-2021-0024-DRAFT-0031	BOEM-2021-0024-DRAFT-0177
BOEM-2021-0024-DRAFT-0032	BOEM-2021-0024-DRAFT-0182
BOEM-2021-0024-DRAFT-0033	BOEM-2021-0024-DRAFT-0183
BOEM-2021-0024-DRAFT-0034	BOEM-2021-0024-DRAFT-0195
BOEM-2021-0024-DRAFT-0035	BOEM-2021-0024-DRAFT-0203
BOEM-2021-0024-DRAFT-0036	BOEM-2021-0024-DRAFT-0212
BOEM-2021-0024-DRAFT-0037	BOEM-2021-0024-DRAFT-0213
BOEM-2021-0024-DRAFT-0038	BOEM-2021-0024-DRAFT-0229
BOEM-2021-0024-DRAFT-0039	BOEM-2021-0024-DRAFT-0240
BOEM-2021-0024-DRAFT-0040	BOEM-2021-0024-DRAFT-0245
BOEM-2021-0024-DRAFT-0041	BOEM-2021-0024-DRAFT-0262
BOEM-2021-0024-DRAFT-0042	BOEM-2021-0024-DRAFT-0263
BOEM-2021-0024-DRAFT-0044	BOEM-2021-0024-DRAFT-0280
BOEM-2021-0024-DRAFT-0045	BOEM-2021-0024-DRAFT-0306
BOEM-2021-0024-DRAFT-0046	BOEM-2021-0024-DRAFT-0313
BOEM-2021-0024-DRAFT-0047	BOEM-2021-0024-DRAFT-0319
BOEM-2021-0024-DRAFT-0048	BOEM-2021-0024-DRAFT-0376
BOEM-2021-0024-DRAFT-0049	