Coastal Virginia Offshore Wind Commercial Project 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

BOEM	Bureau of Ocean Energy Management
CFR	Code of Federal Regulations
COP	Construction and Operations Plan
CRM	Collision Risk Model
CVOW-C	Coastal Virginia Offshore Wind Commercial
Dominion Energy	Dominion Energy Virginia
EFH	Essential Fish Habitat
EIS	Environmental Impact Statement
EJ	environmental justice
EMF	electromagnetic fields
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
GIS	geographic information system
ID	identification
MBTA	Migratory Bird Treaty Act
NAAQS	National Ambient Air Quality Standards
NARW	north Atlantic right whale
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NOI	Notice of Intent
NPS	National Park Service

PDE	Project Design Envelope
PDF	portable document format
SHPO	State Historic Preservation Office
USACE	U.S. Army Corps of Engineers, Norfolk District
USFWS	U.S. Fish and Wildlife Service
WTG	wind turbine generator

1. Draft Scoping Summary Statement for the Coastal Virginia Offshore Wind Commercial Project 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 the following.

- Determining the scope and the significant issues to be analyzed in depth in the Environmental Impact Statement (EIS).
- 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 Section 1501.7(a).

On June 29, 2021, Virginia Electric and Power Company, doing business as Dominion Energy Virginia (Dominion Energy), submitted a revised Construction and Operations Plan (COP) for the Coastal Virginia Offshore Wind Commercial (CVOW-C) Project to BOEM seeking approval to construct and operate up to 205 wind turbine generators (WTGs) with a capacity to generate between 2,500 to 3,000 megawatts (herein referred to as the proposed Project or Proposed Action) offshore of Virginia in federal waters. On July 2, 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 July 2 through August 2, 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 (NHPA) (54 United States Code § 300101 et seq.), as permitted by 36 CFR Section 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 CVOW-C COP. The NOI requested comments from the public in written form, delivered by mail, or through the regulations.gov web portal. The public could also submit oral comments at the three virtual scoping meetings hosted by BOEM.

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 provides a review and catalogue of the information and materials provided to BOEM during the scoping period for the proposed Project. The goal of scoping 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, *Methodology*, 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.** A submission is 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 are each considered to be a submission.
- **Comment.** A comment is a specific statement within a submission that expresses the individual's specific point of view, concern, question, or suggestion. One submission may contain multiple 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-2021-0040.
- Electronic submissions received via email to a BOEM representative.
- Hard-copy submissions received by mail to BOEM.
- Comments submitted verbally at each of the three public scoping meetings.

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 proposed Project were considered a valid comment submission.

Three virtual public scoping meetings were held on the following dates as outlined in Table 1-1.

Table 1-1 Public Scoping Meetings

Meeting Date	Time
July 12, 2021	5:00 p.m. Eastern Standard Time
July 14, 2021	1:00 p.m. Eastern Standard Time
July 20, 2021	5:00 p.m. Eastern Standard Time

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, mail, 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-2021-0040," 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, *Terminology*). 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-2021-0040-0022 was identified as comment BOEM-2021-0040-0022-1. 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 52 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 Method	Number of Submissions Received
Regulations.gov submissions	32
Email to BOEM representative	7
Verbal submission at a public meeting	10
Mail submission	2
Total	**51**

The 52 total submissions includes the following submissions by federal, state, local, and tribal government entities.

- Six submissions from federal agencies: The U.S. Army Corps of Engineers Norfolk District (USACE), U.S. Fish and Wildlife Service (USFWS), National Marine Fisheries Service (NMFS), National Park Service (NPS), U.S. Environmental Protection Agency (EPA), and U.S. Coast Guard (USCG).
- Four submissions from state agencies or representatives: The Commonwealth of Virginia, Virginia Department of Historic Resources, Virginia Department of Conservation and Recreation – Division of Natural Heritage, and Virginia Offshore Wind Development Authority.
- Two submissions from local governments: The Mayor of the City of Chesapeake.
- Two submissions from seven tribal governments: The Nansemond Indian Tribe and a joint submission from the Chickahominy Indian Tribe, the Chickahominy Indian Tribe Eastern Division, the Monacan Indian Nation, the Rappahannock Tribe, and the Upper Mattaponi Tribe.

In addition to the federal, state, local, and tribal government entities identified above, 29 submissions came from nongovernmental organizations, 1 submission came from a university, and 6 were provided by individuals. The 1 remaining comment was provided by an anonymous commenter.

2.2 Comments

BOEM identified a total of 559 unique comments. Table 2-2 shows the distribution of comments by resource and NEPA topic. Section 2.3, *Definition of Resource Areas and Common Topics Raised*, defines the resource areas to which comments were assigned and summarizes the comments by each topic. The most commonly addressed resource topics included mitigation and monitoring, NEPA and the public involvement process, and commercial fisheries and for-hire recreational fishing.

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

Resource	Number of Comments
Air Quality	3
Alternatives	
• Wind turbines	7
• Cables and landfalls	9
• Project relocation	0
• Alternate technology or energy sources	1
• Other comments on alternatives	19
Bats	8
Benthic resources	9

Resource	Number of Comments
Birds	32
Climate change	15
Coastal habitat and fauna	16
Commercial fisheries and for-hire recreational fishing	40
Cultural, historical, and archaeological resources	25
Demographics, Employment, and Economics	
• Recreation and tourism	2
• Employment and job creation	27
• Other	17
Environmental justice	21
Finfish, invertebrates, and Essential Fish Habitat (EFH)	34
Land use and coastal infrastructure	0
Marine mammals	22
Mitigation and monitoring	75
Navigation and vessel traffic	14
NEPA/public involvement process	45
Other Resources and Uses	
• Aviation	0
• Marine minerals	0
• Military	1
• Research activities	0
• Other	1
Other Topics not Listed	
• Coastal zone consistency	3
• Noise	10
• Materials and waste management	7
• General wildlife	6
• Electromagnetic fields (EMF)	2
• Other	3
Planned Activities Scenario/Cumulative Impacts	35
Proposed Action/Project Design Envelope (PDE)	5
Purpose and need	20
Sea turtles	3
Scenic and visual resources	2
Water quality	2
Wetlands and waters of the United States	13
General support or opposition	14

2.3 Definition of Resource Areas and Common NEPA Topics Raised

The following sections define each of the resource areas or NEPA topics under which the comments were categorized and summarizes the comments by each of the resource areas or topics listed. Comments are summarized below, as appropriate, particularly for concerns that were raised by several commenters. Appendix A, *List of Submissions and Individual Comments by Resource or NEPA Topic*, 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 here in Section 2.3.27, *General Support or Opposition*, and in Appendix A, Section A.2.27, *General Support or Opposition*.

2.3.1 Air Quality

Air quality comments included evaluating emissions from the proposed Project and air permitting regulatory requirements. Comments specific to climate change are described in Section 2.3.6, *Climate Change*.

Topics raised in this category included the following.

- Commenters noted that both inner and outer Continental shelf regulatory requirements will apply to the proposed Project, and all air permitting authority lies with EPA. Commenters noted that appropriate air permits must be obtained for the proposed Project.
- Commenters asked that the Clean Air Act and 40 CFR Part 93 general conformity be added to the Regulatory Framework section of the COP and that these general conformity requirements be followed. They stated that the COP is incorrect in stating that general conformity does not apply because no construction activities are located in any defined nonattainment or maintenance areas as the Norfolk-Virginia Beach - Newport News area (or the Hampton Roads area) is designated as maintenance of the 1997 8-hour ozone of the National Ambient Air Quality Standards (NAAQS).
- Commenters asked that the draft Modeling Protocol be developed and submitted to EPA for review.

2.3.2 Alternatives

Comments relating to alternatives included the evaluation of alternatives related to WTG locations and spacing, cable routing and landfall locations, and marine habitat impact avoidance. Additional comments related to alternatives and Project design are included in Section 2.3.20, *Proposed Action/Project Design Envelope*.

2.3.2.1 Wind Turbines

Topics raised in this category included the following.

- Commenters requested that the EIS evaluate alternatives with a reduced number of WTG locations, explain which turbines would be removed, and clearly specify how the reduced WTG locations support the goal of the alternative.
- A commenter asked that the EIS identify which combination(s) of alternatives would achieve the purpose and need of the proposed Project.
- A commenter supported the location of the spare WTG locations in the northwest corner of the Lease Area (as described in the COP) to increase the distance between the Lease Area and the proposed navigational access routes for vessels.
- An alternative was proposed with a transit corridor 2 to 4 miles wide that aligns with the line-of-sight transit from Rudee Inlet in Virginia Beach to the Norfolk Canyon to allow safer navigation of the Lease Area during times of low visibility.

- An alternative was proposed to site the proposed offshore substations in straight rows or columns in alignment with the proposed WTG layout to reduce impacts on surface and aerial navigation.
- An alternative was requested to minimize impacts on fisheries through a combination of the reduced number of WTGs, micrositing of WTGs based on fish habitats in the area, and wider spacing between turbines.
- An alternative was requested to avoid sensitive benthic habitats (including black sea bass critical habitat in the northeast corner and the central-east area near the easternmost proposed offshore substation, and whelk critical habitat in the northwest corner).

2.3.2.2 Cables and Landfalls

Topics raised in this category included the following.

- A commenter requested that the EIS evaluate alternative(s) to minimize impacts on complex or sensitive habitats along the offshore and inshore export cable routes. This could include modifications/expansions of cable corridors to route around sensitive habitat, using existing utility corridors/easements, methods to lay cable within or adjacent to complex habitats, avoiding/reducing/modifying scour protection, and full burial of cables.
- A commenter stated that the EIS should assess the potential impacts of permanent and temporary impacts on vegetation types, including wetlands, ecological cores, habitat for sensitive species, and rare community types. Recommendations for avoidance and minimization of impacts should be included for each alternative.
- A commenter requested that the EIS consider an alternative that orients inter-array cables with the direction of benthic features, such as sand ridges, to improve longitudinal movement of whelk species and orientation of whelk pot trawls.
- A commenter recommended that the EIS consider an alternative that arranges the inter-array cables in corridors, instead of a grid, to minimize isolation of sensitive benthic species.
- A commenter asked that the EIS analyze an alternative that combines offshore export cable routes for projects in adjacent lease areas, to increase efficiency and predictability for applicants and resource agencies.
- Support was provided for the proposed alternative to locate the Cable Landing Location at the State Military Reserve location instead of the Croatan Beach location.
- A commenter requested that the EIS compare alternatives for underground, overhead, and a hybrid of underground and overhead cables.
- Commenters requested that the EIS detail the alternatives evaluated for export cable corridors, including how those were selected and the minimum necessary components for a viable project.

2.3.2.3 Project Relocation

No comments were received on this topic.

2.3.2.4 Alternate Technology or Energy Source

Topics raised in this category included the following:

- A commenter was concerned about the cost efficiency of offshore wind compared to land-based wind and requested a cost analysis comparing these two technologies.

2.3.2.5 Other Comments on Alternatives

Topics raised in this category included the following.

- Commenters requested that the EIS include alternatives for siting offshore Project components to avoid marine monuments or sanctuaries, Seasonal Management Areas, Dynamic Management Areas (created to reduce risk of vessel collision with North Atlantic right whales) that are persistent or extended for more than 3 months in 1 year of the most recent 5 years, Essential Fish Habitat (EFH), Habitat Areas of Particular Concern (including areas with deep sea corals).
- Commenters requested that the EIS include alternative(s) to minimize impacts on sensitive habitats (including natural hard bottom complex substrates, eel grass, submerged aquatic vegetation, dense faunal beds, shellfish habitat and reefs, other biogenic reefs, prominent benthic features, coastal marshes, and subtidal and intertidal flats) and life states of species that rely on them (including Atlantic surfclam, scup, clearnose skate, spiny dogfish, and summer flounder).
- A commenter asked that the EIS include alternatives for each phase of the Project (siting, construction, operation, and decommissioning) to avoid environmental impacts to the extent possible.
- A commenter asked that the EIS include alternative(s) for removal or relocation WTG locations in sensitive areas based on high-resolution habitat mapping and analysis.
- A commenter was concerned that the lack of Project information available in the NOI limited the extent of technical assistance, including input on potential alternatives, that could be provided during the scoping process.
- Commenters requested that the EIS include an alternative to use stone for scour protection and WTG armoring to minimize impacts on habitat. Commenters stated that the EIS should evaluate the impacts of scour protection alternative(s) compared to natural structures and should consider the decommissioning and removal of structures in the analysis. Commenters requested that the EIS should also consider the potential for additional scour protection that may be required to address depressions left by vehicles used for pile installation.
- A commenter requested that the EIS consider alternative(s) for turbine foundation types.
- A commenter asked that the EIS include alternative(s) to avoid and minimize adverse effects on NMFS trust resources before identifying mitigation measures.
- Commenters requested that the EIS discussion of alternatives and analyses be grouped by Project element: offshore wind farm area, offshore export cable routes and associated corridors, inshore/landside export cable routes and associated corridors and landfall points, number of offshore substations, number of turbines, and capacity. The EIS should describe how these various alternatives could be used together in all possible combinations, rather than grouped into a limited set of predetermined combinations.
- A commenter asked that the EIS consider a full range of diverse and reasonable alternatives (more than a single action and no-action alternative), including all necessary mitigation and monitoring of environmental impacts.

- A commenter requested that the EIS evaluate alternative(s) based on the maximum foreseeable impacts for each alternative that are possible under the Project Design Envelope (PDE). Another commenter also asked for an evaluation of the minimum alternative(s) scenarios that would achieve the proposed Project's purpose and need.
- A commenter considered the amount of data and information included in the COP during scoping to be insufficient to fully formulate alternatives.
- Commenters requested that the EIS include a discussion of constraints, site requirements, and reasons alternatives have been rejected or would not meet the purpose and need for the proposed Project.
- A commenter asked that the EIS use site-specific data and analyses to inform the development of alternatives.

2.3.3 Bats

Bat comments included several references noting which species are found to forage or rest in the Lease Area, concern about cave-hibernating bats and migrating bats, and the need to evaluate and consider turbine risks to bats.

Topics raised in this category included the following.

- A commenter suggested that the EIS 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.
- A commenter suggested that Dominion Energy 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.
- A commenter expressed concern that all bat acoustic surveys provided in the COP were conducted in spring/summer, not during the fall migration period.
- A commenter expressed concern that the final 4(d) rule for northern long-eared bats is not due until November 2022.
- A commenter suggested that BOEM should account for migratory bats' potential attraction to, and increased risk of collision with, offshore wind turbines and should not rely on bat avoidance of turbine structures to minimize impacts.
- A commenter expressed concern that wind turbines would injure or kill bats moving through the Project area and that research has shown that bat mortality may increase with tower height.
- A commenter requested that potential impacts on bats consider the clearing of potential roost site habitat.

2.3.4 Benthic Resources

Comments regarding benthic resources included concerns over changes to habitat (including seasonal, long-term impacts, and minimization/mitigation for changes to the sea floor), along with several references to effects of lost benthic resources. Benthic habitat refers to habitat on the sea floor, including natural structures and vegetation.

Topics raised in this category included the following.

- A commenter suggested that the EIS discuss seasonal changes and long-term trends in the environment, as well as hydrodynamic regimes and how they influence the distribution and abundance of marine resources.

- A commenter suggested that additional details should be provided in relation to all habitat types located in the Project area that may be affected, directly or indirectly, by Project construction and operation. This analysis should include complex habitats and prominent benthic features in the Project area, which are more vulnerable to permanent impacts or may take years or decades from which to recover.
- A commenter suggested that the EIS should clearly acknowledge that the addition of new complex habitat would replace existing habitat types and that the EIS should analyze the impacts of such a change.
- A commenter requested that any place where bottom sediments would be disturbed be evaluated for sediment contamination to understand the potential for environmental effects associated with contaminant release of previously disposed contaminated materials.
- A commenter expressed concern over changes to benthic habitats of Virginia's nearshore coastal waters and the many significant ecosystem services provided by them.
- A commenter expressed concern that the lack of details in the COP on benthic habitat limits the usefulness of the public comment period to provide feedback on avoidance, minimization, or mitigation of habitat impacts.
- A commenter recommended that the EIS address how the installation of structure and scour protection is likely to affect the physical processes in the sand ridge environment and consider ways to minimize such impacts.
- A commenter expressed concern that the introduction of WTGs and offshore substation structures would effectively create artificial reefs, which would have impacts on a range of species and believes it is critical that the EIS fully evaluate the potential impacts of habitat conversion.
- A commenter suggested that detail be provided regarding the Project's offshore export cable crossings with the in-service telecom cables within the cable route corridor so that total extent of impacts from sand bottom habitat conversion may be assessed.
- A commenter suggested that the EIS address long-term impacts on the benthic community, including restoration measures, and that it be clarified what components are expected to remain after decommissioning.

2.3.5 Birds

Bird comments included the location of the proposed Project within the Atlantic Flyway, its proximity to the Virginia Eastern Shore, and the myriad migratory bird species it supports, the risk of collisions, the likely impacts on ESA-listed species, the requirements of the MBTA.

Topics raised in this category included the following.

- A commenter supported bat and bird surveys being conducted for the Project as outlined in the COP, Appendix O, *Avian and Bat Impact Assessment*.
- A commenter expressed concern that the COP does not indicate that the Lease Area is adjacent to one of the most important regions for migratory bird populations, designated a Western Hemisphere Shorebird Reserve Network site of International Importance and nominated for Hemispheric Importance and Audubon Important Bird Area of Global Status.
- Several commenters expressed concern that the COP understates the exposure risk and potential impacts on migratory bird populations, while decades of research and monitoring has uncovered the role that this region plays in supporting populations of migratory birds.
- A commenter requested that BOEM and Dominion Energy undertake every effort to develop the needed monitoring and research, including, but not limited to, additional satellite and nano-tagging efforts sufficient to detect movement of vulnerable species throughout the Lease Area. Research and

monitoring strategies and protocols should align with recommendations generated by the bird and bat subcommittees of the Regional Wildlife Science Entity and New York State Energy Research and Development Authority's State of the Science Bird Workgroup Report.

- A commenter stated that for some species, displacement effects have emerged as the most concerning impact of offshore wind development in Europe and that these effects would emerge as more turbines are installed along the Atlantic Coast.
- A commenter suggested that the EIS address population-level, cumulative impacts on avian populations (not limited to ESA-listed species) from developing the Project and other areas in the Atlantic Outer Continental Shelf expected to be developed in the reasonably foreseeable future.
- Several commenters suggested that the developer and agencies commit to addressing impacts on trans-Atlantic migratory birds and impacts on ESA-listed species, as well as conducting effective post-construction bird impact monitoring using radar and acoustic monitoring so that species can be identified along with compensatory mitigation.
- A commenter stated that the EIS must substantively evaluate the impacts of the proposed Project on trans-Atlantic migratory land birds, which are protected under the MBTA.
- A commenter noted that very little data exist regarding bird flight heights and behavior in the Project area.
- A commenter stated that studies must examine whether collision risk increases with different climatic conditions and must be conducted over multiple years to assess inter-annual variability.
- A commenter urged Dominion Energy to install digital video at the CVOW pilot project to document collisions with the existing pilot turbines.
- A commenter urged BOEM that best monitoring and management practices be incorporated into a regional adaptive management plan and promoted the adoption of recommended standards across all projects moving forward to ensure that inferences from collected data can be compared across projects.
- A commenter was concerned that BOEM and USFWS may rely on the Trump Administration's interpretation of the MBTA to limit its scope to the purposeful take of birds, even though it has been successfully challenged in court). The commenter requested that BOEM be consistent with the memorandum of understanding that BOEM signed with USFWS in 2009 to protect migratory bird populations. Any changes to the evaluation of impacts on migratory birds based on BOEM's interpretation of the MBTA should be explained in the EIS.
- A commenter suggested that in addition to ESA-listed species, at a minimum, the EIS should include analyses of the following priority species, which are likely to use the Project array, to fulfill BOEM's conservation obligations: least tern, gull-billed tern, black skimmer, band-rumped storm petrel, Fea's petrel, Cory's shearwater, manx shearwater, Audubon's shearwater, American golden-plover, Bicknell's thrush, bobolink, buff-breasted sandpiper, pectoral sandpiper, chimney swift, Connecticut warbler, semipalmated sandpiper, solitary sandpiper, upland sandpiper, whimbrel, black-legged kittiwake, horned grebe, leach's storm-petrel, long-tailed duck, Atlantic puffin, chimney swift, black scoter, common eider, semipalmated sandpiper, blackpoll warbler, razorbill, sooty shearwater, red knot, and buff-breasted sandpiper.
- A commenter stated that many of the species that may migrate through the Project area are also protected under various state regulations, in addition to the ESA and the MBTA. As a result, the commenter asked that the EIS consider impacts on species protected under Virginia's endangered species law, the species of greatest conservation need designated under Virginia's State Wildlife Action Plan, and 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) and the International Union for Conservation of Nature Red List status.

- Commenters were concerned that the COP does not provide adequate species-specific impact assessments, including ESA-listed species (piping plover, red knot, and roseate tern) and candidate species (black-capped petrel) and that the COP is currently lacking Appendix R, *Threatened and Endangered Species Review*. Commenters were concerned by the interpretation of available data when currently available survey data are limited. The commenter requested that the EIS evaluate the cumulative species-specific impacts in a manner that is appropriate for each species' ecology.
- A commenter requested that the EIS not minimize take of avian populations and that the EIS should acknowledge the limitations in survey methods and take a conservative approach as it evaluates risks to avian species (both listed and non-listed).
- A commenter recommended that BOEM work with Dominion Energy to institute digital aerial surveys pre- and post-construction and include this requirement in the EIS.
- Commenters were concerned that raw transect survey data alone were not appropriate, and instead recommended that the EIS incorporate distance sampling survey data and use models to predict distributions and migratory routes. Commenters requested that the EIS address the biases of each type of survey and model used and present published results from the associated studies that account for imperfect detection.
- A commenter urged BOEM to work with developers to continue aerial surveys over the Mid-Atlantic wind planning areas, including a 20-kilometer buffer, to capture this variation, beginning as soon as possible. Surveys should be repeated frequently enough to cover within the seasonal and annual variation in avian distribution, so that changes in distribution caused by offshore wind development can be discerned from other sources, and must be continued before, during, and after construction, as possible.
- A commenter stated that the Project would be placed within an essential migratory pathway for trans-Atlantic migratory songbirds and shorebirds and requested that the EIS evaluate the cumulative risk of collision as the total offshore wind footprint increases.
- Commenters felt that the EIS analysis must consider migration timing, variations in flight height, and the distance from shore at which migrants reach maximum migration height, and seasonal and daily variation. The EIS should explicitly outline BOEM's plan to implement collision detection and minimization measure during the operation of the Project and other planning areas.
- A commenter suggested that the EIS should include a Collision Risk Model (CRM)-driven analysis to evaluate avian impacts from the Project and be transparent regarding the input parameters use.
- A commenter suggested that 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.
- A commenter stated that EIS should not limit the impact assessment to the Project area.
- A commenter stated that while the Project's proposed cable landing on Virginia Beach is well sited to avoid major impacts on birds by avoiding the adjacent National Wildlife Refuge and Important Bird and Biodiversity Area, the onshore cable routes proposed may have significant impacts on birds depending on the route selected.
- A commenter felt that there is no substantial evidence to suggest that larger turbines, spaced farther apart, would reduce 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 EIS should include a risk assessment, considering the full range of the potential rotor swept zone provided in the COP, to assess impacts from collision and barrier effects on migrating birds, and potential increased habitat loss that may need to occur in order to reach offshore wind energy goals.
- A commenter stated that the proposed Project may increase the cumulative effects that could jeopardize recovery activities occurring within NPS units and throughout the region, and require

measures to avoid or minimize potential impacts that might overlap NPS management concerns for rate and imperiled bird species.

2.3.6 Climate Change

Climate change comments 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.

- Commenters noted that there are many climate-related issues that threaten this area, including sea level rise, recurrent flooding, increasing ocean temperatures, shifting species distribution, and severe weather. They felt that renewable energies are a helpful step to combatting climate change and lessening climate-related impacts, and asked that the benefits of the Project in reducing these climate change issues be evaluated in the EIS.
- Commenters noted that there are economic impacts associated with climate change and asked that the EIS include an analysis of the social cost of carbon showing the benefits of reducing carbon emissions.
- Commenters recommended the EIS indicate the durability of the offshore and onshore components of the Project in light of climate-related issues including sea level rise, severe weather events, saltwater intrusion, and increased flooding.
- Support for the proposed Project was expressed as a way to reduce fossil fuel emissions, diversify sources of energy, and provide a cleaner energy option.
- Commenters noted that the Project would be a key component of meeting the Biden administration's climate goals, which should be accounted for in the EIS.

2.3.7 Coastal Habitat and Fauna

Coastal habitat and fauna comments included those related to areas closer to the shoreline than offshore waters.

Topics raised in this category included the following.

- Commenters noted that special status species, conservation sites, and unique habitats may exist within proposed cable routes. Commenters requested inventory and surveys be conducted in the study area to determine and mitigate potential impacts on coastal habitats and fauna.
- A commenter requested that BOEM consider steps to reduce habitat fragmentation to preserve connectivity and protect biodiversity in coastal habitats.
- A commenter requested that control plans for invasive species include landscape and wetland restoration, as well as the establishment of native species.

2.3.8 Commercial Fisheries and For-Hire Recreational Fishing

Fisheries 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.

- Commenters stated that BOEM should conduct outreach and consultation with federal agencies as well as state and regional fisheries managers with authority for inshore fisheries to minimize impacts, collaborate, and use the best available information. The EIS should discuss limitations of data to avoid mischaracterization of information.

- Commenters requested that the EIS include an analysis of all biological, cultural, and socioeconomic issues related to fisheries and marine resources in the Affected Environment section. Specific topics may include historic and recent landings, revenue, and effort; fishery participants; changes in transit patterns; and impacts on coastal communities. The geographic scope for this analysis should be expanded to include vessels that port from outside of the Project area.
- A commenter stated that the EIS should include the best scientific information for all marine trust resources and include at least 10 years of data history in addition to recent data to account for natural variability of resource conditions and fishery operations. The EIS should not rely too heavily on ex-vessel values because this data can mask other important information.
- A commenter observed that conversion of soft bottom, construction activities, and the addition of structure may affect fishery processes and populations, as well as predator/prey relationships.
- A commenter stated that the EIS should contain a quantification of complex and non-complex habitats; examine additional alternatives focused on conserving commercial fisheries, minimizing or avoiding impacts on complex habitats; and include additional mitigation and monitoring requirements.
- Commenters highlighted that the Project would result in adverse impacts on scientific surveys and, therefore, would affect critical information used in fisheries management, recovery, and conservation throughout the lifetime of the operation. An analysis of impacts on fisheries-dependent data collections should be conducted.
- Commenters noted that turbine foundations and associated fouling communities would create artificial reef habitats and encourage valuable game fish congregation and requested that the EIS address artificial reef benefits to fisheries. The analysis should acknowledge that the impacts would differ depending on the fish species that used the artificial environment and the ability to harvest near turbine structures.
- Commenters requested that outreach and coordination with the fishing industry be adjusted to better elicit feedback, participation, and their ability to express concerns. Commenters feel there should be more of a fisherman presence on the BOEM Task Forces, such as the South and Mid-Atlantic Fishery Management Councils. Commenters requested continued conversations between the fishing industry and BOEM.
- A commenter asked that the EIS further evaluate and acknowledge the significance of the channeled whelk (conch) fishery and the potential impacts from the Project.
- A commenter felt that BOEM's Navigation Safety Risk Assessment does not sufficiently address commercial fishing in and around the Lease Area. The commenter requested that BOEM work with maritime safety experts at USCG and use fishing data to implement possible measures to reduce risks to fishing. The commenter noted that not all commercial fisheries in the Lease Area are captured in the Automatic Identification System data.
- Commenters expressed concerns related to the impacts of survey sounds, construction, and benthic habitat disturbance from the burial and operation of submarine cables emitting electromagnetic fields (EMF) on fisheries and harvests. Species-specific concerns were related to black sea bass and conch.
- A commenter requested that the EIS evaluate commercial, for-hire recreational, and private recreational fishing separately but in the same or adjacent sections to illustrate potential impacts on all fishery sectors.
- A commenter asked the EIS consider the economic importance of commercial fisheries and analyze the significant multiplier effect that make fisheries more valuable throughout the supply chain.

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.

- Commenters asked that BOEM ensure compliance with Section 106 of the NHPA including ensuring adequate consultation with State Historic Preservation Offices (SHPOs), tribes, and other stakeholders throughout the EIS process.
- Commenters stated that BOEM should recognize tribes' sovereign status and provide adequate government-to-government consultation with tribal governments throughout the EIS process.
- Commenters provided information sources from which BOEM could find data related to cultural, historical, and archaeological resources including the Virginia Department of Historic Resources data sharing system and the Virginia Department of Conservation and Recreation natural heritage search in Virginia.
- Commenters recommended that BOEM perform offshore and onshore archaeological and architectural surveys to identify historic properties that may be affected by the Project and coordinate these surveys with appropriate groups including SHPOs and tribes. Commenters noted that they expect adverse effects on historic properties be addressed through the development of appropriate avoidance, minimization, and mitigation measures with these groups.
- Commenters noted that pursuant to Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act, a permit would likely be required from USACE for the Project, and USACE has designated BOEM as the lead federal agency to fulfill federal responsibilities under NHPA Section 106.
- Commenters felt that the COP Visual Impact Assessment was not adequate and expressed concern over viewshed or visual impacts on historic properties from the proposed Project including lighting in general and at specific locations including the Bunder Overlook, Assateague Lighthouse, Colonial National Historic Park, the Cape Henry Memorial, and National Historic Landmarks including the Cape Henry Lighthouse. These commenters asked that these areas be included in the Area of Potential Effects.
- Commenters asked that the cultural reports associated with the Project be provided to consulting parties and tribes as soon as they are available.
- Commenters expressed concern over the methods presented in the COP for marine archaeological surveys in that the methods did not include significant reports related to Mid-Atlantic coastal shelf archaeology in the past decade. These commenters also requested that BOEM request and receive expert input from the State Underwater Archaeologist at the Virginia Department of Historic Resources during the scoping process.
- Commenters expressed concern over the methods presented in the COP for terrestrial archaeological surveys in that the methods did not include an evaluation of historic properties that might have associations with tribal families. Commenters stated that the methods should include a review of literature from Frank Speck and James Mooney's visits with specific tribes in the late nineteenth and early twentieth centuries. They also provided names of authors who recently published accounts focused on specific tribes.
- Commenters asked that the EIS include public and stakeholder review of the methods for examining and evaluating cultural landscapes.
- Commenters asked for more information regarding the location of underground cable paths coming onshore as historical archaeological material from habitats of African American and Native American people.

2.3.10 Demographics, Employment, and Economics

Comments related to recreation and tourism, as well as employment and job creation and other resources are captured in these subsections.

2.3.10.1 Recreation and Tourism

Topics raised in this category included the following.

- Commenters noted that the viewshed is of significant interest to the tourism industry, attracting masses of visitors each year.
- A commenter felt that the Project would not create any viewshed impacts since the turbines would be difficult to see at 27 miles or more offshore, even with the proposed increased height of the turbines.
- Commenters felt that the Project could benefit the tourism industry. One commenter stated that a previous wind project showed benefits to the tourism industry from increased revenues and Airbnb vacation rentals within the project's first year. A commenter felt that the Project would create a new coastal employment sector, allowing coastal residents to work outside of the seasonal confines in the tourism industry.

2.3.10.2 Employment and Job Creation

Topics raised in this category included the following.

- Several commenters discussed or quoted studies on the regional economic benefits of construction and operations of the Project, including the number of jobs that would be created, estimated new local and state tax revenues each year, and the estimated economic annual output. Commenters anticipated significant positive economic impacts in Virginia for decades to come.
- Commenters expressed support for the Project and stated it would help rebound the economy from the impacts of the coronavirus pandemic.
- Commenters felt that the Project would help the community realize its full potential as a mid-Atlantic regional hub for offshore wind development and operations by being poised to positively contribute to the developing supply chain due to its central geographic location, its rich maritime history, and its existing port facilities, exponentially increasing the region's economic benefit.
- A commenter felt that the Project would diversify and strengthen the economies of local communities by bringing high-paying jobs and attractive opportunities to the region in key strategic industries, such as renewable energy, advanced manufacturing, engineering, cybersecurity, and logistics.
- A commenter expressed support for Dominion Energy's commitment to building the first Jones-Act-compliant offshore wind turbine installation vessel, which they felt would bring more jobs while increasing capacity to construct more offshore wind platforms.
- Commenters requested that the EIS include a robust analysis of socioeconomic impacts and should consider Dominion Energy's commitments on the use of domestic content; Project Labor Agreements; Labor Peace Agreements; Community Benefits Agreements; the use of registered apprentices and other labor-management training programs; protection against worker misclassification and wage theft; neutrality agreements; local hires; and prevailing wage.
- Commenters requested that the EIS evaluate plans to support the use and growth of a domestic supply chain to maximize United States employment for the projected life cycle of the Project.
- Commenters asked that BOEM ensure beneficial economic impacts are fulfilled by taking efforts to increase job opportunities by creating a high-road offshore wind industry that maximizes the creation of quality, family-sustaining, union jobs; expanding domestic manufacturing along a robust domestic

supply chain; and delivering community benefits with attention to improving access to displaced energy workers, as well as low-income and minority populations.

- Commenters expressed support for Dominion Energy's attention to workforce development skills training.
- Commenters noted that the social cost of carbon can be used to illustrate the benefits of the Project and relative social cost of the alternatives.

2.3.10.3 Other

This category captures other economic topics that may not have been captured in the previous subcategories.

Topics raised in this category included the following.

- Commenters expressed support for the Project, anticipating that it would provide jobs, tax revenue, and economic output; align with the comprehensive energy policy to support economic growth; be an opportunity to further diversify and strengthen the national maritime and supply chain industry; and be strategically located to serve the offshore wind industry.
- Commenters expressed support for the Project because they felt it would play a prominent role in the full realization of the state of Virginia's clean energy policy framework under the Virginia Clean Economy Act.
- Commenters requested that the EIS consider all costs and benefits of available alternatives, including the No Action Alternative, in the cost-benefit analysis. The analysis should include both quantifiable and qualitative measures of costs and benefits to consider, including potential economic impacts.
- A commenter requested that the EIS not overly rely on ex-vessel value when assessing and weighting impacts across various fisheries.
- A commenter expressed concern that changes in transit patterns would also have economic impacts, which would be challenging to accurately quantify in the EIS.
- A commenter requested that the EIS should consider commercial, for-hire recreational and private recreational fishing separately for readers to understand the full picture of potential impacts on all fishery sectors.
- A commenter requested that the EIS consider that commercial and recreational fishermen choose where to fish based on many factors including, but not limited to, where target species are located and where regulations allow. Fishermen cannot necessarily relocate to a different area to avoid the Project area without socioeconomic impacts.
- Commenters stated that the EIS should consider commercial and recreational fisheries over a wide geographic area that may be affected by the Project.
- Commenters asked that the EIS account for adverse economic impacts from climate change including property or infrastructure damage, increased insurance costs, 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; and 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.
- Commenters were unsure how BOEM would conduct its economic analysis in the absence of a power purchase agreement.
- A commenter suggested that future public meetings address community concerns that may arise as the proposed Project progresses. The EIS should include a summary discussion of these efforts,

including how the Project has been modified in response to community concerns and input and, where possible, make specific commitments to the community to reduce potential impacts from the Project.

- A commenter recommended that the EIS evaluate the socioeconomic impacts within and surrounding the onshore Project area using a range of alternatives.
- A commenter requested that the EIS address any facility expansion or upgrades likely to be needed, changes to surrounding traffic or needed transportation improvements, and any other impacts on surrounding communities during operation and maintenance.
- A commenter supported the economic opportunity the Project would bring to underutilized minority populations.

2.3.11 Environmental Justice

Environmental justice (EJ) comments included opportunities from the Project to address effects on vulnerable communities that have been historically overburdened by energy production and environmental pollution, as well as suggestions to assess adverse impacts on and benefits to these communities.

Topics raised in this category included the following.

- Commenters stated that the EIS should consider Executive Orders 12898, 13985, 13175, and 14008; the Virginia Environmental Justice Act; the Virginia Clean Economy Act; and Council on Environmental Qualifications Environmental Justice Guidance when accounting for impacts on minority and low-income populations of local fishing, coastal, and tribal communities.
- A commenter observed that under the Virginia Clean Economy Act, BOEM should prioritize hiring of veterans, local workers, and workers from historically disadvantaged communities and should work with the Commonwealth of Virginia to enhance apprenticeship and job training opportunities.
- Commenters requested that the EIS assess potential EJ community impacts in the areas around the potential port facilities associated with the proposed Project.
- Commenters asked that the EIS include the full scope of benefits to EJ communities, including job creation, local and state tax revenues, and funding in communities that have experienced disproportional levels of environmental degradation.
- A commenter noted that there are reports and data showing that fossil fuel power plants are sited disproportionately close to EJ communities and that the EIS should incorporate this information as part of its analysis.
- A commenter observed that census tract data shows that a considerable proportion of the transmission line corridor would be built through minority and/or low-income communities. BOEM and Dominion Energy should work closely with the Virginal Environmental Justice Council and stakeholder advocacy groups to identify and resolve adverse impacts on these communities.
- A commenter stated that the EIS analysis should be built upon thorough identification of, and outreach to, potential EJ communities and neighborhoods, and analyze the extent to which those communities could be disproportionately affected by the proposed Project.
- A commenter urged BOEM to work closely with Dominion Energy during the NEPA process to ensure a sustained public outreach effort that would lead to the identification and meaningful participation of potential EJ communities, result in the avoidance or minimization of adverse impacts on such communities to the greatest extent possible, and result in the incorporation of specific measures into the Project to mitigate any unavoidable impacts.
- A commenter requested that the EIS use additional sources and methods to identify EJ populations, such as outreach to local resources (including community and public outreach groups, community

leaders, and state universities), to help accurately assess the proposed Project's adverse impacts on EJ populations and ways to avoid, minimize, and mitigate those impacts.

- A commenter stated that the EIS should incorporate the most recent available data to the extent feasible for EJ-related analyses and should consider using new online mapping tools, such as EJSCREEN or the Elizabeth River EJ tool, that provide data relevant to the assessment of direct and cumulative EJ impacts.
- A commenter requested that the EIS consider the potential for cumulative human health and environmental impacts on EJ populations.
- A commenter stated that analysis of any differing EJ impacts among the alternative cable routes in the EIS must be shared with the potentially affected EJ communities and made available for public review and comment.
- A commenter encouraged BOEM to provide notices of public meetings, notices of informational events, and/or other related resources at frequently visited community locations, such as schools, faith centers, community centers, barbershops, salons, and medical centers.
- Commenters recommended the continuation of outreach and community dialogue after the proposed Project is constructed to monitor the potential for adverse impacts.

2.3.12 Finfish, Invertebrates, and Essential Fish Habitat

Finfish, invertebrates, and 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 stated that BOEM is responsible for completing all coordination pursuant to Magnuson-Stevens Fishery Conservation and Management Act and recommended that all documentation and coordination be included in the NEPA document.
- Commenters requested that the EIS include a detailed assessment of the effects of the Project on various habitats, including EFH designated under the Magnuson-Stevens Fishery Conservation and Management Act, and a range of alternatives to conserve these habitats and minimize the effects of the Project on EFH and other marine habitats including Habitat Areas of Particular Concern and Species of Concern.
- A commenter noted that the EFH assessment should include analyses of all potential impacts, including temporary and permanent; direct and indirect; and individual, cumulative and synergistic impacts of the proposed Project.
- Commenters requested that the EFH assessment 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)).
- Commenters stated that an expanded EFH consultation, as described in 50 CFR Section 600.920(f), is necessary for the Project. As part of the expanded EFH consultation, 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.
- Commenters requested that BOEM consult with the Mid-Atlantic Fishery Management Council, New England Fishery Management Council, and NMFS to allow for clear mechanism for fisheries managers to comment and make recommendations regarding the Project.

- Commenters requested the use of the most current EFH, Habitat Areas of Particular Concern, and Highly Migratory Species designations.
- Commenters requested the EIS analyze the effects on the physical and biological habitat features and the biological consequences of those effects. The analysis should pay particular attention to impacts on all life stages (adults, juveniles, larvae, eggs) and focus on species and life stages that may be more vulnerable to impacts. Mitigation measures should be proposed and analyzed for impacts that are not feasible to avoid or minimize.
- Commenters requested that the analysis address the potential impact of converting unconsolidated soft-bottom and smaller-grained hard habitats that support distinct assemblages of fish and shellfish to artificial structures and masonry/quarry stone that may attract larger predatory species, as well as how that affects the invertebrate communities, establishment of invasive species, and predator-prey relationships.
- Commenters requested that the EFH assessment be provided in a separate section or appendix of the EIS and be clearly identified as an EFH assessment.
- Commenters requested that habitat mapping data be shared directly with NMFS in usable geographic information system (GIS) format for review.
- A commenter requested that the EFH assessment includes the impacts on recreational and commercial fishing communities that rely on affected species.
- Commenters requested that the discussion for Fish and Wildlife Coordination Act species be designed around an ecological guild model that uses locally important species to evaluate the Project impacts on organisms or populations associated with the various trophic levels and life history strategies exhibited by Fish and Wildlife Coordination Act species known to occupy the Project area as residents or transients.
- Commenters expressed their support for the use of shared cable routes and recommended that BOEM coordinate cable transmission that would reduce the number of cable installations required and reduced impacts on habitats.
- A commenter noted that the Norfolk Canyon 70 miles east of Virginia is being nominated for National Marine Sanctuary designation and is highly vulnerable to disturbance.
- Commenters requested that the EIS take into consideration already existing negative impacts on fish and EFH in the Project area including pollution, atmospheric deposition, habitat degradation, and other anthropogenic forces.
- Commenters requested that the EFH assessment take into consideration the cumulative impacts from habitat alteration, currents, and changes in predatory–prey relationships.
- A commenter was concerned about the lack of site-specific scientific data on how black sea bass conch would react to the deployment of the Project.
- Commenters requested that the EIS fully assess whether Project components are likely to introduce or encourage the spread of lionfish or other invasive species. This analysis should include the potential for invasive species to the brought into or taken from the Project area on materials or on/in vessels, including in bilge or ballast waters.
- Commenters requested that the EIS fully assess impacts on plankton and the food web.
- Commenters requested that the EIS fully assess impacts on currents, stratification, light penetration, and dispersion of ichthyoplankton regionally.
- Commenters requested that the EIS fully estimate the volume of water and resultant mortality of species likely to be entrained (e.g., species with demersal eggs and/or larva). Specifically, commenters requested that the EIS include details about water withdrawal from the jet plow, including where the intake is located relative to the sea floor, the intake velocity, area of bottom

potentially affected by the jet plow intake, and an estimate of possible entrainment loss given the total distance expected to be jet plowed, time of year jet plowing would take place, and the demersal species that would likely be present as eggs and larvae during the construction period.

- Commenters requested that the EIS analyze impacts on the following species: butterfish, summer flounder, windowpane flounder, clearnose skate, bluefish, black sea bass, scup, spiny dogfish, Atlantic surfclam, striped bass, American shad, alewife, blueback herring, Atlantic menhaden, Atlantic silversides, oyster, blue mussel, tautog, weakfish, tuna, swordfish, billfish, small and large coastal sharks, pelagic sharks, sandbar shark, sand tiger shark, bottlenose dolphin, cetacean, manatees, Atlantic sturgeon, winter skate, monkfish, red hake, spiny dogfish, witch flounder, longfin inshore squid, squid mops, and mackerel, shortnose sturgeon, giant manta ray, oceanic whitetip shark, scalloped hammerhead shark, Albacore tuna, Atlantic angel shark, Atlantic herring, Atlantic sea scallop, Atlantic sharpnose shark, bigeye tuna, bigeye thresher shark, blue marlin, blue shark, bluefin tuna dusky shark, night shark, northern shortfin squid, northeast skate complex, sailfish, scalloped hammerhead shark, scup, shortfin mako shark, silky shark, skipjack tuna, smooth dogfish, white hake, white marlin, witch flounder, windowpane flounder, yellowfin tuna, Atlantic surfclam, dwarf surfclam, flatfishes, polychaetes, and mollusks.

2.3.13 Land Use and Coastal Infrastructure

No comments were received on this topic.

2.3.14 Marine Mammals

Marine mammal comments included potential impacts on species or their habitat, and noted species listed under the ESA and Marine Mammal Protection Act.

Topics raised in this category included the following.

- Many commenters expressed concern that the Project would affect north Atlantic right whales (NARW) as well as humpback, fin, blue, sperm, minke, and sei whale populations and other marine mammals (e.g., harbor porpoise, bottlenose dolphins, manatees) that may be found in the Lease Area.
- A commenter stated that—although the Project location is not sited in a NARW aggregation or calving area and is, therefore, a better choice than other locations frequented more often and at higher densities by NARW—strong mitigation measures would still be needed to protect this critically endangered species.
- Commenters requested that the EIS include information on the seasonal abundance and distribution of marine mammals and other marine animals, anticipated habitat uses (e.g., foraging, migrating), threats, habitats, and prey that may be directly or indirectly affected by the Project.
- A commenter requested that the EIS specify between species groups (e.g., low-frequency versus mid-frequency cetaceans) of marine mammals and sea turtles. The commenter felt that a broad grouping approach (e.g., all marine mammals) would create uncertainty and gaps in the analysis and would not fully represent the variability of impacts amongst different taxa.
- A commenter asked that the EIS consider effects on all listed species using the best available scientific information to support any conclusions
- Commenters requested that the EIS implement measures to ensure no NARW are injured or killed as a result of the Project. One commenter requested specifically that the Project schedule minimize potential impacts on NARW, such as scheduling pile-driving to avoid the months when the density of NARW is highest in the Lease Area.
- A commenter asked that the EIS analyze impacts from noise pollution from activities, such as geotechnical surveys, pile-driving, and wind turbine operations and the risk of increased vessel strikes

from increases in vessel traffic and/or shifts in vessel traffic patterns due to the placement of structures.

- A commenter felt that BOEM has significantly downplayed the risk of vessel strike to endangered whales in previous offshore wind permitting documents and encouraged BOEM to provide a more robust quantitative analysis in its future EISs.
- A commenter requested that the EIS analyze impacts from potential interactions (e.g., entanglement, injury, mortality) of listed species from surveys or monitoring; activities that affect pelagic/benthic habitat, behavior, prey assemblages, water quality; and Project lighting and EMF/heat from inter-array and export cables.
- A commenter expressed concern that NARW distribution and habitat have shifted in response to climate change, resulting in NARW spending more time in the Mid-Atlantic year-round.
- Commenters requested that the EIS consider the full range of potential impacts on all marine mammal species and 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.
- A commenter stated that to adequately assess the occurrence of and potential impacts on marine mammals in the Project area, BOEM must consider a variety of local and regional data sources, such as the U.S. Navy Marine Mammal Species Monitoring Program studies.
- A commenter recommended that BOEM take a precautionary approach and acknowledge that it is not possible to assess all potential hazards of physical structures in the 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).
- A commenter requested that BOEM establish and help fund a robust, long-term scientific plan to monitor for effects of offshore wind development on marine mammals before the first large-scale commercial projects are constructed.
- A commenter felt that it was essential for BOEM to conduct a technical, quantitative analysis of the cumulative impacts of offshore wind development, against a baseline of other reasonably foreseeable actions, on the NARW population and other species of large whale found within the Mid-Atlantic Bight.

2.3.15 Mitigation and Monitoring

Mitigation and monitoring comments include comments on current proposed mitigation and monitoring measures, as well as suggestions for additional mitigation and monitoring strategies.

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. Monitoring planning should use an ecosystem-based approach with monitoring at multiple scales. Additionally, commenters requested ongoing transparency in mitigation and monitoring measures and that monitoring data be reported to other federal agencies and the public as appropriate.
- Commenters noted that the Project infrastructure should be charted on nautical maps and the Project-related infrastructure should use proper lighting to mitigate the risk of collision and allision.
- Commenters indicated that any mitigation should sequentially follow the full mitigation hierarchy, i.e., first avoid, then minimize, and finally offset impacts.
- Commenters felt that mitigation measures from the COP regarding collision detection are inadequate and requested that the EIS thoroughly outline BOEM's plan to implement collision detection and minimization measures during operation of the Project and other planning areas.

- To reduce the risk of collision with NARW and other large marine species, commenters indicated that vessels should be required to have protected species observers at all times and/or additional monitoring technology such as infrared detection devices and to limit vessels of all sizes to speeds less than 10 knots. Additionally, to increase transparency, commenters noted that all vessels associated with the Project should be equipped with and use and Automatic Identification System.
- Commenters requested that the EIS include an evaluation of how effects from scour protection areas can be minimized.
- Commenters requested that the EIS include a monitoring and research plan conducted transparently by an independent party to assess and report the effects of the Project on the ocean and coastal ecosystems, including marine habitats; bats; birds; marine wildlife, including their distributions and spawning sites; fishery resources; and protected species. Ecological monitoring should be completed pre-construction to develop a baseline, during construction, and post-construction to understand the effects of offshore wind development on marine and coastal resources.
- A commenter suggested that the monitoring program included in the EIS include chemical and sonic monitoring; mortality monitoring for collisions or bird strikes; and an assessment of the seafloor, currents, winds, and coastal resources such as wetlands.
- Commenters suggested monitoring technology such as nanotags and Motus receivers on WTGs, satellite and radio telemetry to track avian movement, avian behavior point count surveys, digital video monitoring, and acoustic monitoring to determine impacts on bird species. For impacts that cannot be mitigated or avoided, commenters noted that compensatory mitigation should be provided.
- Commenters requested that visual and acoustic surveying and monitoring be used to determine the presence of marine wildlife and protected species, especially prior to pile-driving. Seasonal and diel prohibitions, clearance and exclusion requirements, and shutdown requirements should be included in the EIS for situations where NARW are present during the construction of the Project. Commenters noted that near real-time detection of protected species would be necessary to properly implement the requirements above.
- Commenters requested that mitigation and monitoring efforts should be based on the best available science. The EIS should include alternatives to use the best commercially available technology and methods to minimize underwater sound levels associated with the construction of the Project and to avoid exposure of listed species to noise that could result in injury or behavioral disturbance.
- A commenter requested that the EIS include an evaluation of potential compensatory mitigation for unavoidable adverse impacts on fisheries habitats and the economic or social losses resulting from those impacts, including any loss to fisheries revenue resulting from the construction and operations of the Project.
- A commenter requested that the EIS should include a full description of scientific surveys to be affected, the history of each time series, and the relative importance of the affected scientific surveys on management advice, decision-making, and other end-users.
- A commenter requested that the EIS identify which mitigation measures are included as part of the Project and, thus, evaluated in the analysis, which measures are proposed as required, and which measures are optional and could be implemented by the developer to potentially reduce impacts.
- While BOEM should not rely on an adaptive management plan in place of mitigation measures, commenters requested that BOEM use supplemental mitigation measures if data or monitoring show unexpected negative impacts are occurring.

2.3.16 Navigation and Vessel Traffic

Navigation and vessel traffic comments included 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 future construction of Craney Island Marine Terminal would increase port capacity and result in increased traffic from Ultra Large Container Vessels that require deeper water. Commenters noted that WTGs encroaching into existing navigation channels could increase risk and inadvertently endanger the competitiveness of the port.
- Commenters expressed concern that the Navigation Safety Risk Assessment may not have fully considered future growth, known trends in shipping, key vessel characteristics, regional bathymetry, and navigational best practices in the post-farm rerouting modeling. Commenters were specifically concerned that the "shortest and therefore most likely" rerouting predictions did not accurately account for navigational best practices of large vessels needing to use the deepest water.
- A commenter requested that the EIS address vessel traffic and transportation impacts, including an evaluation of potential impacts associated with the construction of WTGs and offshore substations. The EIS should evaluate impacts of moving WTG components over water and/or over land.
- A commenter requested that the EIS evaluate the impacts of the Project on navigation and shipping lanes, search and rescue capabilities, commercial fishing, air traffic, and recreational use.
- Commenters expressed concern surrounding the proposal to reroute vessel traffic and indicated that a predictable, dedicated ocean space is necessary to reduce congestion and risk of collision. Commenters stated that existing navigation channels should be preserved and formal east–west routes north of the Project area must be established.
- A commenter noted that the USCG's preliminary port access route study indicates that the establishment of shipping safety fairways or routing measures within the proposed wind energy facility are not necessary.

2.3.17 NEPA/Public Involvement Process

NEPA and public involvement process comments included how public stakeholders, state and federal agencies, and tribes would be engaged.

Topics raised in this category included the following.

- Commenters provided NEPA information and weblinks to help facilitate the environmental review process and Project planning.
- Commenters noted that the EIS must be in alignment with the applicable state and federal laws in order for the Project to be fully compliant under NEPA.
- A few commenters expressed the need for as quick a time frame as reasonably possible and use of experience gained from earlier projects to expedite the process. BOEM is urged to use the FAST-41 expedited permitting process.
- Commenters expressed support toward Dominion Energy's efforts to provide transparency, seek public input, conduct early agency coordination, and engage with Virginia businesses, stakeholders, and communities throughout the process.
- A commenter requested that the EIS require all reports and data be accessible on a publicly available website.
- A commenter stated that BOEM should ensure decisions are being made with the best available science and recognize the limitations of such data to assess potential impacts.
- A commenter was concerned that thorough agency review is difficult due to the high number of BOEM NEPA projects between now and 2024, requiring agencies to take a more limited cooperating agency role in the process going forward.

- A commenter noted that the EIS should consider each phase of development including site exploration, construction, operation and maintenance, and decommissioning.
- A commenter felt that the environmental review process should continue the collaborative work and address comments made on previous BOEM offshore wind projects.
- A commenter requested that—if the COP is updated or changed at any time during the regulatory process—BOEM provide notice and make the most updated COP available to the agencies and the public.
- A commenter requested to review a detailed timeline with updated milestone dates for the permitting timeline, and was concerned that delays in the overall schedule may result if necessary information to initiate consultations is not received as outlined in the timeline.
- A commenter recommended using the ESA Information Needs document to identify information needs for considering effects as the EIS is developed.
- A commenter felt that the EIS should not use terms such as "beneficial" to describe changes in ecosystems or species, but instead remain objective in language used in its impact analysis (e.g., by using terminology such as "increase," "decrease," and "change").
- Commenters were uncertain how BOEM would conduct the upcoming NEPA review without a power purchase agreement.
- A commenter requested that BOEM coordinate with the fishing community regarding compensation on a project-specific or cumulative scale, or that BOEM develop an appropriate regional-scale fisheries compensatory mitigation plan.
- Commenters expressed concern regarding BOEM and Dominion Energy's ability to conduct an unbiased environmental review.
- USACE and EPA commented that they will participate as cooperating agencies for the development of the EIS and provided recommendations for BOEM to work with cooperating agencies.

2.3.18 Other Resources and Uses

Comments related to aviation, marine minerals, military, research activities, and other resources are captured in these subsections.

2.3.18.1 Aviation

No topics were raised in this category.

2.3.18.2 Military

Topics raised in this category included the following.

- A commenter noted that the Department of Defense is striving for clean, renewable, and resilient energy sources and this Project aligns with those aims.

2.3.18.3 Research Activities

No topics were raised in this category.

2.3.18.4 Other

Topics raised in this category included the following.

- A commenter provided a website resource to identify Virginia Outdoors Foundation-protected land.

2.3.19 Other Topics Not Listed

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

2.3.19.1 Coastal Zone Consistency

Coastal Zone Consistency comments addressed compliance with state Coastal Zone Management Act and Virginia Coastal Zone Management Program.

Topics raised in this category included the following.

- The Virginia Department of Environmental Quality, through its Office of Environmental Impact Review, coordinates Virginia's review of federal consistency documents prepared pursuant to the Coastal Zone Management Act. Requirements for submittal of the NEPA document and associated federal consistency documentation to the Virginia Department of Environmental Quality, through its Office of Environmental Impact Review, are specified in the comment.
- The Virginia Department of Environmental Quality, through its Office of Environmental Impact Review, provides databases that may assist the EIS, such as the Department of Environmental Quality Virginia Coastal Geospatial and Educational Mapping System and the Mid-Atlantic Ocean Data Portal.

2.3.19.2 Noise

Noise comments included impacts associated with construction, predominantly from pile-driving, and operations.

Topics raised in this category included the following.

- A commenter suggested that the EIS consider a non-pile-driven foundation alternative to avoid sound and vibration impacts on marine mammals (particularly NARW), sea turtles, fish, and other taxa.
- Commenters requested that direct and cumulative noise impacts on marine mammals, sea turtles, fish, and invertebrates should be examined in the EIS. Impacts assessed should include individual and population-level impacts in behavior.
- A commenter asked that the Project's Protected Species Monitoring and Management Plan include detailed mitigation measures that reflect the best available technology beyond the proposed daytime limit on pile-driving and take into account the cumulative impacts of pile-driving for multiple projects at the same time or in rapid succession. If monopiles are used, the best available technology for pile-driving noise mitigation should be required as part of the plan.
- A commenter urged BOEM to require testing of the efficacy of noise mitigation approaches in the Project's Protected Species Monitoring and Management Plan, mandatory public sharing of testing results, and using an adaptive management approach.
- A commenter recommended that BOEM support a network of sound monitoring stations to better understand the sound field around offshore wind projects to help inform best management practices, permit conditions, and other requirements for subsequent projects.
- A commenter requested that any portion of the Underwater Acoustic Assessment that is missing or inadequate be filled in with monitoring and research.
- A commenter requested that the EIS assess survey noise, which can induce flight responses, behavioral disturbances, habitat avoidance, and stress responses that reduce feeding rates and reproductive success of marine mammals.

- A commenter requested that the EIS consider the level and potential impacts of vessel-related noise on marine mammals and fish during construction, particularly by continuous underwater noise emitted by dynamic positioning systems.
- A commenter requested that BOEM should request new guidelines on noise impact thresholds for marine mammal behavioral disturbance from NMFS that are sufficiently protective and consistent with the best available science.
- A commenter suggested that, to date, injury and behavioral zones for sea turtles have not been calculated correctly for other offshore wind projects; therefore, at a minimum, 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.
- A commenter requested that the EIS consider impacts on harbor porpoises from noise.
- A commenter recommended that BOEM prohibit pile-driving during seasons when protected species are known to be present in the area.
- A commenter requested acoustic and visual clearance zones of 5,000 meters in all directions from any driven piles.
- One commented stated the EIS should consider the noise sensitivity of harbor porpoises during Project construction, operation, maintenance, and decommissioning. Acoustic monitoring should be used throughout the Project.

2.3.19.3 Materials and Waste Management

Materials and waste management comments addressed potential risks of hazardous materials, particularly during decommissioning the Project.

Topics raised in this category included the following.

- Commenters provided online sources and databases providing information on local hazardous waste materials sites and facilities.
- Commenters stated that it is essential that the Project remove all cables during decommissioning, as 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.
- EPA jointly manages the Dam Neck Ocean Dredged Material Disposal Site and Norfolk Ocean Dredged Material Disposal Site and requests to be included in future conversations regarding the potential crossing(s) of the Dam Neck Ocean Dredged Material Disposal Site.
- A commenter recommended that the EIS provide a map clearly showing existing managed and lease areas in proximity to the Project Lease Area, including Dam Neck Ocean Dredged Material Disposal Site and Norfolk Ocean Dredged Material Disposal Site, to fully evaluate the potential physical, chemical, and biological impacts of the proposed Project on aquatic resources.
- A commenter recommended that the EIS address any testing of sediments that has been conducted or is planned in offshore areas.
- A commenter suggested that the EIS indicate if additional studies are anticipated regarding the potential to encounter contaminated groundwater onshore near Battlefield Golf Club, and when the studies would be conducted.
- Commenters requested clarification on the anticipated activities for the decommissioning of the Project, including what components would be removed and where these components would likely be disposed or recycled.
- A commenter requested that the EIS include alternatives to ensure decommissioning removal and mitigation of the site occurs regardless of economic, political, or environmental factors. Developers

are to be explicitly responsible for removing offshore wind equipment regardless of bankruptcy, change of ownership, or lack of profitability.

- A commenter requested that the EIS assess sources of contamination regarding bottom sediments, sediment contamination, and dredging of spoils from inshore, nearshore, and harbor maintenance.

2.3.19.4 General Wildlife

General wildlife comments included harm or death to multiple types of species due to construction and operation.

Topics raised in this category included the following.

- A commenter provided the Virginia Department of Wildlife Resources, USFWS Information Service Information website.
- A commenter stated that USACE authorizes BOEM to conduct ESA Section 7 coordination with USFWS and NMFS on behalf of USACE.
- A commented suggested coordination with NMFS, the Virginia Department of Wildlife Resources, and USFWS.
- A commenter suggested implementing best management practices during horizontal directional drilling, including the development of a frac-out contingency plan and soil suitability testing.
- Commenters requested that resolution geophysical surveys and construction be prohibited during seasons when protected species are known to be present in the Project area.

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.

- A commenter expressed concern by the fishing community over the potential impacts of EMF on fishery species.
- A commenter expressed concern that cables carrying electric current may disrupt migrations of fish and other marine animals reliant on magnetic cues for orientation and navigation.

2.3.19.6 Other

Topics raised on other themes included the following.

- A commenter requested that clear terminology be used in the EIS for readability and that duration, magnitude, and direction be specified when characterizing impacts.
- A commenter provided their understanding of what responsible development of offshore wind energy entails, including avoiding, minimizing, and mitigating adverse impacts on marine and coastal wildlife and habitat; reducing negative impacts on other ocean uses; robust consultation with tribal governments and communities; meaningful engagement with state and local governments and other stakeholders; and use of best available scientific and technological data to ensure science-based and stakeholder-informed decision making.
- A commenter requested that the Virginian African American Cultural Center be listed as a stakeholder on the project website.

2.3.20 Planned Activities Scenario/Cumulative Impacts

Comments on planned activities and cumulative impacts suggested that the EIS include the full range of reasonably foreseeable projects, especially all potential offshore wind projects.

Topics raised in this category included the following.

- Commenters requested that the EIS analyze all Project activities and related areas including the Lease Area, cable corridors, landing sites, staging areas, and the use of ports outside of the Project area.
- A commenter noted that the cumulative impact analysis should consider the impacts from multiple projects along the Atlantic Coast that may have impacts on marine, terrestrial, and bird species, as well as cultural resources. Consideration should be given to all phases of the Project including construction, operation, maintenance, and decommission.
- A commenter requested that opportunities be identified to avoid and minimize impacts from future onshore interconnection and regional transmission.
- A commenter requested that BOEM collaborate with local, state, and federal agencies; scientists; nongovernmental organizations; associated industries; and stakeholders on using monitoring information, research, and practices to inform cumulative impacts.
- A commenter requested that the EIS include cumulative impacts on fisheries and fishing operations, including other socioeconomic impacts on surrounding communities related to all BOEM projects along the Atlantic Coast. The cumulative impacts assessment should account for the dynamic nature of fisheries.
- A commenter requested that the EIS consider possible mitigation measures to address cumulative impacts and that BOEM coordinate closely with other agencies for implementation. Integrated monitoring approaches should be used across offshore wind projects taking an adaptive management approach to account for new information and technology as it becomes available.
- A commenter stated that the cumulative impact analysis should incorporate the economic impacts from offshore wind development, as well as impacts on demographics and employment. Benefits to the climate, marine life, and jobs should also be considered in regard to being a net climate benefit project.
- A commenter requested that additional research and information be considered to sufficiently develop baseline data and determine effects, impacts, and appropriate mitigation strategies from the proposed Project and other regional projects.
- A commenter requested that the EIS consider all activities included in construction when evaluating impacts.
- A commenter requested that the EIS evaluate temporary, long-term, and permanent direct and indirect impacts on water quality, protected species, habitats, and fisheries throughout construction, operation, and decommissioning.
- A commenter requested that the EIS consider all relevant impact-producing factors affecting marine resources when evaluating impacts.
- A commenter requested that, to properly gage the potential for the Project to cause disproportionate impacts on environmental justice communities, BOEM must consider the potential for cumulative human health and environmental impacts on these communities.
- A commenter requested that BOEM perform a quantitative analysis on the cumulative impacts of wind projects on NARW and other large whale species with a focus on vessel collision risk for this EIS and other related projects.

2.3.21 Proposed Action/Project Design Envelope

Proposed Action and PDE comments included the scope of the PDE and other aspects of the proposed Project.

Topics raised in this category included the following.

- A commenter stated that minimum burial depth requirements would be determined on a site-specific basis by USACE Norfolk District.
- A commenter noted a reasonable PDE (i.e., one that is not too large) that remains consistent throughout the NEPA and consultation processes is needed. A maximum impact scenario based on an overly broad PDE may overestimate the environmental impacts of the proposed Projection and could result in mitigation measures that are too conservative. BOEM should notify the public when the PDE is updated (i.e., when a new COP is released).
- A commenter asked whether the PDE would be modified throughout the NEPA process.
- A commenter recommended BOEM reference an upcoming report by The Nature Conservancy and INSPIRE Environmental with additional approaches for scour protection.

2.3.22 Purpose and Need

Purpose and need comments included the goal of meeting state and federal goals and shifting focus from the applicant's interests.

Topics raised in this category included the following.

- Commenters expressed support for the proposed Project as a way to contribute to the state of Virginia's energy goals and meet the White House's call for renewable energy, associated job creation, and stronger domestic supply. Commenters were generally supportive of the proposed Project's purpose to provide clean energy to hundreds of thousands of homes and to provide tens of thousands of jobs while mitigating as many adverse environmental impacts and user conflicts as possible.
- Commenters noted that the purpose and need should focus on the state and federal purpose and the societal need for the proposed Project. Commenters suggested that it is not in the spirit of NEPA to focus the purpose and need on the applicant's interest.
- USACE commented that the purpose and need has been reviewed for NEPA purposes and that the agency intends to adopt the EIS to support future decisions on potential Clean Water Act Section 10 or 404 authorizations.
- A commenter requested that the purpose and need mention all jobs, not only union jobs.

2.3.23 Sea Turtles

Sea turtle comments included biological, structural, or habitat impacts on the species. Topics raised in this category included the following.

- A commenter noted the limitations of monitoring and detecting sea turtles, and requested that the EIS consider all regional data sources when assessing the occurrence and impacts in both nearshore and offshore areas.
- A commenter requested that the EIS consider the vulnerability of sea turtles and their habitats in Project design and implementation.
- Numerous ESA-listed species of sea turtle are known to occur in Virginia's waters both seasonally and year-round.

2.3.24 Scenic and Visual Resources

Scenic and visual resources comments included specific resources for consideration and requests for how impacts are analyzed in the EIS.

Topics raised in this category included the following.

- Commenters recommended including the Cape Henry Memorial and Cape Henry Lighthouse as Key Observation Points in the visual impacts assessment.
- A commenter requested that BOEM encourage measures to protect the night sky through mitigation measures and best practices for lighting associated with the proposed Project.
- The National Park Service requested the opportunity to analyze and provide additional comment on the complete COP Appendix I, *Visual Impact Assessment* when it is available.
- A commenter recommended that the completed visual impacts assessment evaluate the turbines under different lighting and atmospheric conditions and their movement, and include other related project equipment such as transmission substations that may be located near or along the shore.
- A commenter encouraged measures to protect the night sky and listed ways in which this could be accomplished.

2.3.25 Water Quality

Water quality comments included impacts that should be evaluated in the EIS.

Topics raised in this category included the following.

- A commenter requested that BOEM conduct an assessment on hydrodynamics, oceanographic, and atmospheric conditions on both a Project-specific and cumulative scale.
- A commenter requested that the EIS discuss the temporary and permanent impacts on biological, physical, and chemical characteristics of aquatic ecosystems that may be affected during the construction, operation, maintenance, and decommissioning phases of the Project. Assessments for the potential use of horizontal directional drilling should also be discussed.
- A commenter suggested that the EIS would benefit from a narrative discussion of impacts on biological, physical, and chemical characteristics of aquatic ecosystems from all phases of the Project.

2.3.26 Wetlands and Waters of the United States

Wetlands and waters of the United States comments included close coordination and compliance with laws and regulations and provided references for undisturbed marshes and wetlands in the proposed Project area.

Topics raised in this category included the following.

- A commenter noted that wetland delineation would be required for all onshore areas of disturbance, including laydown areas, as well as a Clean Water Act Section 408 review before a permit decision could be issued.
- A commenter stated that the EIS alternatives should include information regarding potential disturbance of wetlands and provide sufficient detail to meet requirements of the Clean Water Act Section 404(b)(1) Guidelines.
- A commenter observed that several proposed interconnection cable routes would cross important wetland habitat and could result in habitat fragmentation, erosion, and impacts on sensitive vegetation and wildlife. The commenter requested the EIS examine reasonable alternatives and measures to avoid, minimize, and mitigate such impacts.
- A commenter stated that the EIS should fully characterize aquatic resources on or surrounding project sites and include total area of wetland(s), vegetation, sources of hydrology, and areas of any direct or indirect impacts. Streams should be mapped and potential impacts such as crossings, roads, or construction of outfalls should be assessed. A detailed functional assessment is recommended for any potentially impacted wetlands to inform avoidance, restoration, and mitigation actions.

- A commenter requested that the EIS describe any locations for land-based activities, as well as any details relating to anticipated construction activities.
- A commenter expressed concerns that all of the proposed cable routes and alternative routes 1, 5, and 6 cross the headwaters or tributaries of the North Landing River, which are all swamp or wetland and have rare species of plants and animals.
- A commenter expressed concern that the loss of previously undisturbed habitat could lead to permanent fragmentation of such habitat.

2.3.27 General Support or Opposition

Many commenters expressed general support for the proposed Project. Some provided comments of support without providing justification. Others were supportive of the Project for specific reasons, which included the following.

- Commenters felt the Project would meet the energy needs and offshore wind commitments of the region in an affordable, reliable, and responsible way.
- Commenters thought the Project would advance the offshore wind industry and the state of Virginia's clean energy future.
- Commenters stated that the Project would demonstrate the Biden administration's interest in accelerating the United States offshore wind industry/market.
- Commenters felt that the Project would contribute toward national, state, and local offshore wind goals/commitments, while also driving development of a domestic offshore wind supply chain.
- Commenters appreciated Dominion Energy's efforts and due diligence in working with community organizations to ensure the Project creates a good game plan/footprint for other wind projects.
- Commenters supported BOEM's consideration and commitment to environmental protection.