Record of Decision

SouthCoast Wind Project
Construction and Operations Plan

December 20, 2024

U.S. Department of the Interior
Bureau of Ocean Energy Management

U.S. Department of the Army
U.S. Army Corps of Engineers

U.S. Department of Commerce
National Oceanic and Atmospheric Administration
National Marine Fisheries Service

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List of Abbreviations and Acronyms

ACHP	Advisory Council on Historic Preservation
ADLS	Aircraft Detection Lighting System
AOC	Area(s) of Concern
BiOp	Biological Opinion
BOEM	Bureau of Ocean Energy Management
BSEE	Bureau of Safety and Environmental Enforcement
CEQ	Council on Environmental Quality
COP	Construction and Operations Plan
CR	Conservation recommendation(s)
CSE	Council of Science Editors
CWA	Clean Water Act
DOI	US Department of the Interior
ECC	Export Cable Corridor
EIS	Environmental Impact Statement
EMF	Electromagnetic frequencies
ESA	Endangered Species Act
ESP	Environmental Studies Program
ESPIS	Environmental Studies Program Information System
GBS	Gravity-based structure
HAPCs	Habitat Areas of Particular Concern
HRG	High-resolution geophysical
ITR	Incidental Take Regulations
ITS	Incidental Take Statement
km	kilometer(s)
KOP	Key Observation Points
kV	kilovolt
LEDPA	least environmentally damaging practicable alternative
LOA	Letter of Authorization
LSZ	landscape similarity zones
MA CZM	Massachusetts Office of Coastal Zone Management
MEC	munitions and explosives of concern
MMPA	Marine Mammal Protection Act
MOA	Memorandum of Agreement
MPRSA	Marine Protection, Research, and Sanctuaries Act
MW	megawatt
NARW	North Atlantic Right Whale
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
nmi	nautical mile(s)
NOI	Notice of Intent
NOAA	National Oceanic and Atmospheric Administration

NPDES	National Pollutant Discharge Elimination System
NPS	National Park Service
NYDOS	New York Department of State
OCS	Outer Continental Shelf
OCSLA	Outer Continental Shelf Lands Act
O&M	Operations and maintenance
OREC	Offshore Wind Renewable Energy Credit
OSP	Offshore substation platform
PAM	Passive Acoustic Monitoring
PDE	Project Design Envelope
PSO	Protected Species Observers
RI CRMC	Rhode Island Coastal Resources Management Council
RHA	Rivers and Harbors Act of 1899
ROD	Record of Decision
ROW	Right-of-Way
USACE	U.S. Army Corps of Engineers
USCG	U.S. Coast Guard
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
UXO	unexploded ordnance
WTG	Wind turbine generator

1 INTRODUCTION

This document constitutes the Bureau of Ocean Energy Management's (BOEM), the National Ocean and Atmospheric Administration (NOAA) National Marine Fisheries Service's (NMFS)[1], and the United States Army Corps of Engineers' (USACE) joint record of decision (ROD) for the final environmental impact statement (EIS) prepared for the SouthCoast Wind Project construction and operations plan (COP) submitted to BOEM by SouthCoast Wind Energy LLC (SouthCoast Wind). The ROD addresses BOEM's action to approve with conditions the COP under Subsection 8(p)(4) of the Outer Continental Shelf Lands Act (OCSLA), 43 U.S.C. § 1337(p)(4)); NMFS' action to issue a Letter of Authorization (LOA) to SouthCoast Wind under Section 101(a)(5)(A) of the Marine Mammal Protection Act (MMPA), as amended, 16 U.S.C. § 1371(a)(5)(A); and USACE's action to issue a permit under Section 10 of the Rivers and Harbors Act of 1899 (RHA; 33 U.S.C. § 403) and Section 404 of the Clean Water Act (CWA; 33 U.S.C. § 1344). This ROD was prepared following the requirements of the National Environmental Policy Act (NEPA), 42 U.S.C. §§ 4321 *et seq*. and 40 CFR §§ 1500-1508.[2] [3]

BOEM prepared the final EIS with the assistance of a third-party contractor, ICF Jones & Stokes, Inc. The Bureau of Safety and Environmental Enforcement (BSEE), NMFS, USACE, U.S. Coast Guard (USCG), and U.S. Environmental Protection Agency (EPA) were cooperating agencies during the development and review of the document. Cooperating state agencies included the Massachusetts Office of Coastal Zone Management, the Rhode Island Coastal Resources Management Council, and the State of New York Department of State. The U.S. Fish and Wildlife Service (USFWS), National Park Service, U.S. Department of Navy, U.S. Department of Defense, and the Advisory Council on Historic Preservation (ACHP) supported the environmental review as participating agencies.

NMFS received a request for authorization to take marine mammals incidental to construction activities related to the Project, which NMFS may authorize under the MMPA. NMFS' issuance of an MMPA incidental take authorization in the form of a LOA issued pursuant to the promulgation of Incidental Take Regulations (ITRs) is a major federal action and, in relation to BOEM's action, is considered a connected action (40 CFR § 1501.9(e)(1)). The purpose of NMFS' proposed action—which is based on SouthCoast Wind's request for authorization to take marine mammals incidental to specified activities associated with the Project (i.e., pile driving (impact and vibratory), unexploded ordnance or munitions and explosives of concern detonation,

[1] For purposes of this ROD, NMFS is exercising authority under the Marine Mammal Protection Act to promulgate marine mammal incidental take regulations.
[2] The associated final EIS was prepared using the 2020 Council on Environmental Quality (CEQ) NEPA Regulations. Therefore, this ROD follows the 2020 CEQ Regulations.
[3] BOEM is aware of the November 12, 2024 decision in *Marin Audubon Society v. Federal Aviation Administration*, No. 23-1067 (D.C. Cir. Nov. 12, 2024). To the extent that a court may conclude that the Council on Environmental Quality (CEQ) regulations implementing NEPA are not judicially enforceable or binding on this agency action, BOEM has nonetheless elected to follow those regulations at 40 CFR Parts 1500–1508, in addition to DOI's regulations implementing NEPA at 43 CFR Part 46, to meet the agency's obligations under NEPA, 42 U.S.C. §§ 4321 et seq.

and site assessment surveys using high-resolution geophysical (HRG) equipment)—is to evaluate SouthCoast Wind's request pursuant to specific requirements of the MMPA and its implementing regulations administered by NMFS, considering impacts of the applicant's activities on relevant resources, and if appropriate, issue the authorization. NMFS needs to render a decision regarding the request for authorization due to NMFS' responsibilities under the MMPA (16 U.S.C. § 1371(a)(5)(A)) and its implementing regulations.

In addition to analyzing potential impacts resulting from BOEM's approval of the COP pursuant to Subsection 8(p)(4) of OCSLA, the final EIS also analyzes impacts resulting from the proposed action that are relevant to USACE permitting actions under Section 10 of the RHA, 33 U.S.C. § 403; Section 404 of the CWA, 33 U.S.C. § 1344; and NMFS' action of promulgating regulations and issuing an LOA for incidental harassment of small numbers of marine mammals during construction activities to SouthCoast Wind under the MMPA, 16 U.S.C. § 1371(a)(5)(A). See also (40 CFR § 1501.9(e)(1)).

1.1 BACKGROUND

In 2009, the U.S. Department of the Interior (DOI) announced final regulations for the Outer Continental Shelf (OCS) Renewable Energy Program, which was authorized by the Energy Policy Act of 2005.[4] These implementing regulations, codified in 30 CFR Part 585, provide a framework for BOEM to issue renewable energy leases, easements, and rights-of-way (ROWs) for OCS activities (Section 1.3, *Regulatory Framework*). BOEM's renewable energy program occurs in four distinct phases: (1) planning and analysis, (2) lease issuance, (3) site assessment, and (4) construction and operations. The history of BOEM's planning and leasing activities offshore Massachusetts is summarized in Table 1-1.

[4] Pub. L. No. 109-58, 119 Stat. 594 (2005).

Table 1-1. History of BOEM planning and leasing activities offshore Massachusetts

Year	Milestone
2009	BOEM began evaluating potential OCS wind energy leasing and development offshore Massachusetts in 2009 by establishing an intergovernmental renewable energy task force comprised of elected officials from state, local, and Tribal governments and other Federal agency representatives. After extensive consultation with the task force, BOEM removed areas within 12 nautical miles (nmi) of inhabited coastline from further consideration for offshore wind leasing to reduce visual impacts. In addition, areas beyond the 60-meter water depth contour were removed due to technological limitations.
2010	On December 29, 2010, BOEM published a Request for Interest (RFI) in the *Federal Register* to gauge commercial interest in wind energy development offshore Massachusetts (75 Fed. Reg. 82,055). BOEM also invited the public to comment and provide information on environmental issues and data that should be considered in the development of the area of interest for wind energy development offshore Massachusetts. The public comment period closed on April 18, 2011, and BOEM received 11 indications of interest from 10 companies wishing to obtain a commercial lease for a wind energy project and received approximately 260 public comments. After consideration of public comments and input from BOEM's intergovernmental Massachusetts Renewable Energy Task Force, BOEM modified the area of interest for commercial development offshore Massachusetts.
2012	On February 6, 2012, BOEM published a Call for Information and Nominations (Call) for commercial leasing for wind power on the OCS offshore Massachusetts in the *Federal Register* (77 Fed. Reg. 5820). The public comment period for the Call closed on March 22, 2012. In response, BOEM received 32 comments and ten nominations of interest. After considering comments, BOEM excluded an area of high sea duck concentration, as well as an area of high-value fisheries to reduce conflict with commercial and recreational fishing activities.
2012	In May 2012, BOEM identified a wind energy area (WEA) offshore Massachusetts, excluding additional areas from commercial leasing, and addressed comments from the Call.[5]
2012	On November 2, 2012, BOEM published a notice of availability (NOA) of an EA in accordance with NEPA for potential commercial wind lease issuance and site assessment activities on the OCS offshore Massachusetts for public review and comment (77 Fed. Reg. 66,185).
2014	On June 18, 2014, BOEM published in the *Federal Register* a Notice of Availability of a Revised Environmental Assessment and Finding of No Significant Impact for commercial wind lease issuance and site assessment activities on the Atlantic OCS offshore Massachusetts (79 Fed. Reg. 34,781).
2014	On June 18, 2014, BOEM published a Proposed Sale Notice (PSN) for Commercial Leasing for Wind Power on the Outer OCS Offshore Massachusetts in the *Federal Register* for Leases OCS-A 0500, OCS-A 0501, OCS-A 0502, and OCS-A 0503 (79 Fed. Reg. 34,771).
2014/ 2015	On November 26, 2014, BOEM published a Final Sale Notice (FSN) for Commercial Leasing for Wind Power on the OCS Offshore Massachusetts in the *Federal Register* for Atlantic Wind

[5] BOEM works with its Federal, state, local, and Tribal partners to identify WEAs of the OCS that appear most suitable for commercial wind energy activities, while presenting the fewest apparent environmental and user conflicts (BOEM 2022). After WEAs are identified, BOEM prepares an Environmental Assessment (EA) under NEPA to determine potential impacts associated with activities reasonably expected to follow the issuance of one or more leases within a WEA. BOEM may then move forward with steps to hold a competitive lease sale for commercial wind development within the WEAs. The Project is located in BOEM Lease Area OCS-A 0534, which is located in the RI/MA WEA. The RI/MA WEA is adjacent to and west of the MA WEA. More information on BOEM WEAs, including maps, are found at https://www.boem.gov/renewable-energy/state-activities.

Year	Milestone
	Lease Sale-4 (ATLW-4) that covered the same four lease areas covered by the 2014 PSN (79 Fed. Reg. 70,545). The sale for ATLW-4 was held on January 29, 2015. Lease areas OCS-A 0502 and OCS-A 0503 went unsold during the lease sale.
2018	On April 11, 2018, BOEM published a PSN requesting public comments on the proposal to auction Leases OCS-A 0502 and OCS-A 0503 offshore Massachusetts for commercial wind energy development, the same lease areas unsold during the ATLW-4 lease sale (83 Fed. Reg. 15,618).
2018	On October 19, 2018, BOEM published an FSN in the *Federal Register*, which stated a commercial lease sale would be held December 13, 2018, for the Wind Energy Area offshore Massachusetts (83 Fed. Reg. 53,089). BOEM offered three leases, including OCS-A 0521, which are located within the former Leases OCS-A 0502 and OCS-A 0503 that were unsold during the ATLW-4 sale on January 29, 2015. Mayflower Wind Energy LLC was the winner of Lease OCS-A 0521; the lessee later changed its name in 2023.[6]
2019	On April 1, 2019, BOEM and SouthCoast Wind executed the lease agreement for Lease OCS-A 0521.
2019	On July 29, 2019, SouthCoast Wind submitted a Site Assessment Plan for commercial wind Lease OCS-A 0521, which was subsequently revised with a complete Site Assessment Plan submitted on December 12, 2019. BOEM approved the Site Assessment Plan on May 26, 2020.
2021	On February 15, 2021, SouthCoast Wind submitted its COP for the construction, operations, and conceptual decommissioning of the Project within the Lease Area. SouthCoast Wind submitted two updated versions of the COP in 2021, one on August 30 and another on October 28.
2021	On November 1, 2021, BOEM published a Notice of Intent to Prepare an EIS for SouthCoast Wind's Proposed Wind Energy Facility Offshore Massachusetts (86 Fed. Reg. 60,270).
2022	On March 16, 2022, and December 22, 2022, SouthCoast Wind submitted updated versions of the COP.
2023	On February 17, 2023, BOEM published a Notice of Availability of a Draft EIS (88 Fed. Reg. 10,377). On September 19, 2023, SouthCoast Wind submitted an updated version of the COP.
2023	On September 1, 2023, USFWS issued a BiOp for Endangered Species Act (ESA)-listed species within its jurisdiction.
2024	On July 31, 2024, SouthCoast Wind submitted an updated version of the COP.
2024	On November 7, 2024, NMFS issued a BiOp for ESA-listed species and designated critical habitat within its jurisdiction.
2024	On November 15, 2024, BOEM published an NOA for a final EIS (89 Fed. Reg. 90316) initiating a minimum 30-day mandatory waiting period, during which BOEM is required to pause before issuing a Record of Decision.
2024	On December 16, 2024, BOEM published an errata on its website that included certain edits to the Executive Summary, Chapter 2, Chapter 3, Appendix F, Appendix G, Appendix I, Appendix N, and Appendix O. None of these edits are substantive or affect the analysis or conclusions in the final EIS.

[6] On March 17, 2023, Mayflower Wind Energy, LLC changed its name to SouthCoast Wind Energy LLC (SouthCoast Wind).

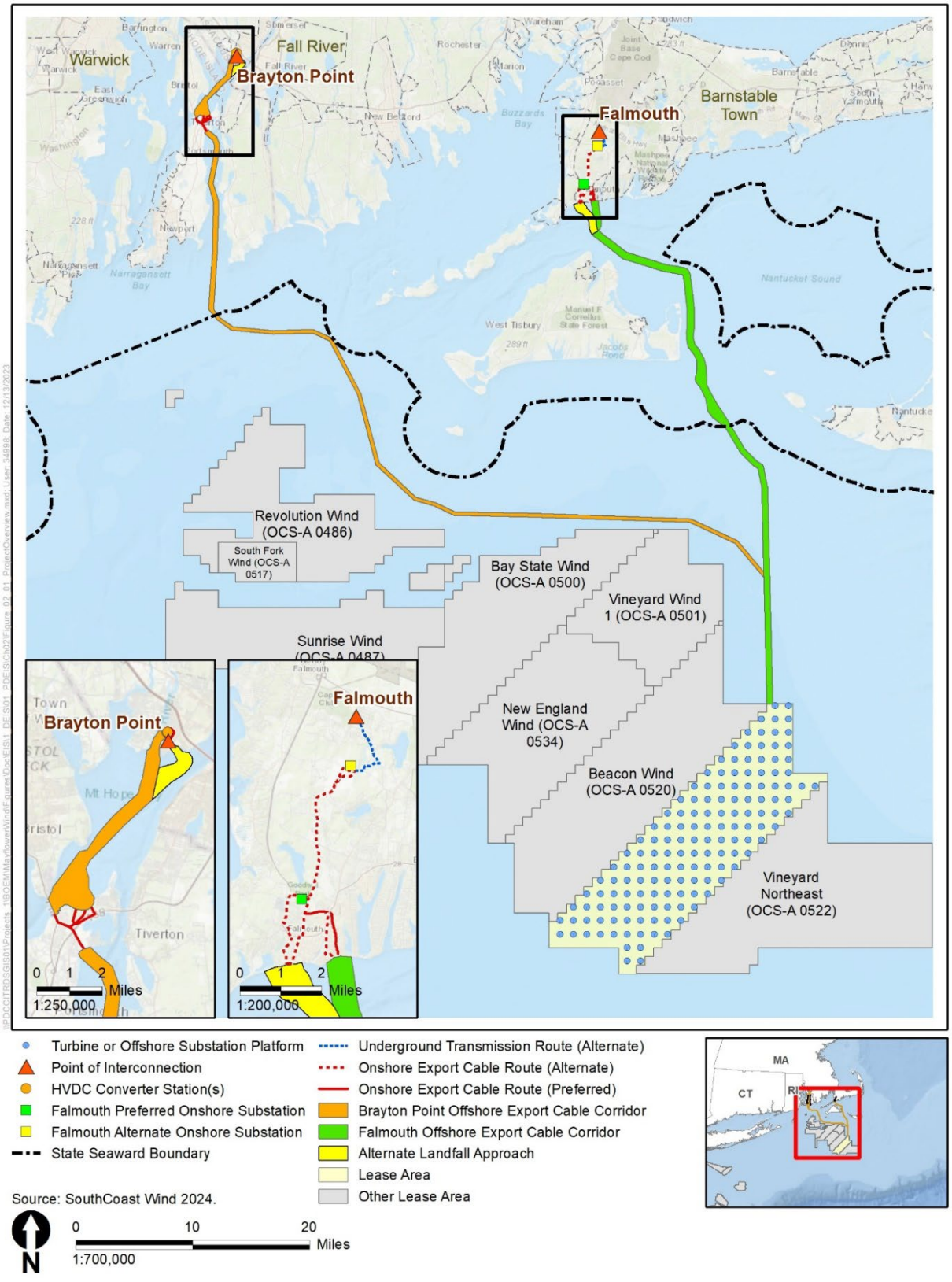

Figure 1-1: SouthCoast Wind Project area

1.2 AUTHORITIES

The following summarizes BOEM's authority regarding the approval of the proposed Project; NMFS' authority to authorize the take, by harassment, of marine mammals incidental to the proposed Project; and USACE's authority under Section 10 of the RHA to authorize work and structures within navigable waters of the United States and structures affixed to the OCS, and to authorize the discharge of dredged or fill material into waters of the United States under Section 404 of the CWA. The final EIS includes a list of approvals, authorizations, and permits for the Project in Appendix A, Table A-1, and a description of consultations in Appendix A, Section A.2. The agencies adopting the final EIS are those agencies that have defined authorizations and permitting responsibilities for the Project itself or for effects related to the Project. The NMFS MMPA LOA is briefly discussed here; its decision and supporting rationale are discussed in Section 5.2 of this ROD. NMFS is serving as a cooperating agency pursuant to 40 CFR § 1501.8 because the scope of the Proposed Action and alternatives involves activities that could affect marine resources, and due to its jurisdiction by law and special expertise. Promulgation of an ITR and issuance of an LOA under the MMPA triggers independent NEPA compliance obligations, which may be satisfied by adopting the final EIS prepared by BOEM. USACE is serving as a cooperating agency pursuant to 40 CFR § 1501.8 because the scope of the Proposed Action, and alternatives involve activities that could affect resources and due to its jurisdiction by law and due to its special expertise pursuant to Section 10 of the RHA and Section 404 of the CWA. Issuance of Section 10 and Section 404 permits requires NEPA compliance, which will be met via adoption of BOEM's final EIS and issuance of the ROD. The USACE permitting action is briefly discussed here; its decision and supporting rationale are discussed in Section 5.3 of this ROD. Other agencies either are not required to authorize the Project or have completed any authorizations that are required of them, or their actions are exempt from NEPA (e.g., EPA's Clean Air Act permitting) and are, therefore, reviewed separately.

1.2.1 BOEM Authority

The Energy Policy Act of 2005, Pub. L. No. 109-58, amended OCSLA, (43 U.S.C. §§ 1331 *et seq*).[7] by adding new Subsection 8(p) to authorize the Secretary of the Interior (Secretary) to issue leases, easements, and ROWs on the OCS for renewable energy development, including wind energy projects.

The Secretary delegated to BOEM the authority to decide whether to approve COPs. Final regulations implementing OCSLA were promulgated by the Department of the Interior on April 29, 2009 (74 Fed. Reg. 19,637).[8] These regulations describe BOEM's process for determining

[7] Pub. L. No. 109-58, 119 Stat. 594 (2005).

[8] On January 31, 2023, the Department of the Interior (Department) issued the "Reorganization of Title 30-Renewable Energy and Alternative Uses of Existing Facilities on the Outer Continental Shelf" direct final rule, which transferred existing safety and environmental oversight and enforcement regulations governing OCS renewable energy activities from 30 CFR Part 585, under BOEM's purview, to 30 CFR Part 285, under the purview of BSEE. Finally, the Department published the Renewable Energy Modernization Rule on May 15, 2024, which became effective on July 15, 2024. This final rule not only finalized amendments to the Department's existing

whether to approve, approve with conditions, or disapprove the SouthCoast Wind COP. In accordance with Council on Environmental Quality (CEQ) NEPA regulations (40 CFR Part 1501), BOEM served as the lead federal agency for the preparation of the EIS.

The Secretary's actions must comply with OCSLA Subsection 8(p)(4), 43 U.S.C. § 1337(p)(4), which "imposes a general duty on the Secretary to act in a manner providing for the subsection's [various policy] goals."[9] According to M-Opinion 37067, "[t]he subsection does not require the Secretary to ensure that the goals are achieved to a particular degree, and she retains wide discretion to determine the appropriate balance between two or more goals that conflict or are otherwise in tension."[10]

1.2.2 NMFS Authority

Sections 101(a)(5)(A) and (D) of the MMPA allow NMFS to authorize, upon request, the incidental, but not intentional, take of small numbers of marine mammals, including incidental take by harassment, provided certain determinations are made and statutory and regulatory procedures are met. 16 U.S.C. § 1371(a)(5)(A), (D). To authorize the incidental take of marine mammals, NMFS evaluates the best available scientific and commercial information to determine whether the take would have a negligible impact on affected species or stocks and whether the activity would have an unmitigable adverse impact on the availability of the species or stocks for subsistence use (if applicable). NMFS cannot issue an authorization if NMFS finds the taking would result in more than a negligible impact on marine mammal species or stocks or would result in an unmitigable adverse impact on the species or stocks for subsistence uses. NMFS must also prescribe the permissible methods of take and other means of effecting the least practicable adverse impact on the species or stocks of marine mammals and their habitat, paying particular attention to rookeries, mating grounds, and other areas of similar significance. All incidental take authorizations include additional requirements pertaining to monitoring and reporting.

Pursuant to Section 7(a)(2) of the Endangered Species Act (ESA), NMFS must also ensure that issuing the marine mammal incidental take authorization is not likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat. 16 U.S.C. § 1536(a)(2).

For those marine mammal species that are listed under the ESA, NMFS Office of Protected Resources (NMFS-OPR) must also consult with NMFS Greater Atlantic Regional Fisheries Office (GARFO) Protected Resources Division (GARFO-PRD) to receive an exemption for the

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renewable regulations administered by BOEM, but also regulatory amendments previously proposed by BOEM that are now administered by BSEE.

[9] Sol. Op. M-37067, "Secretary's Duties under Subsection 8(p)(4) of the Outer Continental Shelf Lands Act When Authorizing Activities on the Outer Continental Shelf," available at http://doi.gov/sites/doi.gov/files/m-37067.pdf (Apr. 9, 2021). The recent decision in *Seafreeze Shoreside v. United States DOI,* Nos. 23-1853, 23-2051, 2024 U.S. App. LEXIS 30741, at *43-48 (1st Cir. Dec. 5, 2024), is consistent with conclusions in this M-Opinion.

[10] M-Opinion 37067 at p. 5.

incidental take of those species and adhere to the requirements listed under Section 7 of the ESA to ensure that the MMPA-authorized incidental take is not likely to jeopardize the continued existence of those species. The ESA Section 7 consultation for this action resulted in issuance of a BiOp that concluded the proposed federal action is likely to adversely affect some ESA-listed species but is not likely to jeopardize the continued existence of any ESA-listed species or result in the destruction or adverse modification of any critical habitat. The BiOp includes an Incidental Take Statement (ITS), which exempts an identified amount and extent of incidental take from the ESA Section 9 prohibitions on take subject to specified reasonable and prudent measures and implementing terms and conditions considered necessary and appropriate for the action agencies, including NMFS OPR, to minimize the effects of take on ESA-listed marine mammals. The BiOp and ITS also identify measures, which may be specific to the regulatory authorities of each action agency, to ensure compliance with the MMPA ITA with respect to the incidental take of ESA-listed marine mammals (i.e., measures in the Proposed Action and those identified as reasonable and prudent measures and terms and conditions, respectively).

NMFS promulgated regulations to implement the MMPA (50 CFR Part 216), including application instructions for incidental take authorizations. Applicants must comply with these regulations, application instructions, and the MMPA. The decision being made by NMFS, including its decision to adopt BOEM's final EIS, is discussed in Section 5.2 of this ROD.

1.2.3 USACE Authority

This permit action is being undertaken through authority delegated to the District Engineer by 33 CFR § 325.8 pursuant to Section 10 of the RHA and Section 404 of the CWA. Section 10 of the RHA prohibits the obstruction or alteration of navigable waters of the United States without a permit from USACE. USACE also issues permits under Section 404 of the CWA authorizing the discharge of dredged or fill material into waters of the United States. The applicant proposes to perform work and place structures below the mean high-water line of navigable waters of the United States, and to discharge fill into waters of the United States, including wetlands. These activities require authorization from USACE under Section 10 of the RHA and Section 404 of the CWA.

USACE participated in development of the SouthCoast Wind EIS as a cooperating agency under the CEQ NEPA regulations. USACE has reviewed and evaluated the information in the final EIS, including all supplemental data provided, in accordance with 40 CFR § 1506.3, and 33 CFR § 325, Appendix B. USACE found the information to be a sufficient and accurate assessment. Therefore, USACE adopts the final EIS, as appropriate, for the purposes of NEPA, Section 404(b)(1) guidelines evaluation, and the public interest review required by 33 CFR § 325, Appendix B, 40 CFR § 230, and 33 CFR § 320.4.

2 PROPOSED PROJECT

2.1 PROJECT DESCRIPTION

The Proposed Action is to construct, operate, maintain, and eventually decommission an up to 2,400-MW wind energy facility on the OCS offshore Massachusetts within the range of design parameters described in Volume 1 of the SouthCoast Wind COP (SouthCoast Wind 2024) and summarized in Appendix C of the final EIS, *Project Design Envelope and Maximum-Case Scenario*. The Project would be developed in two parts or projects: Project 1 refers to the development in the northern portion of the Lease Area and associated interconnection, and Project 2 refers to the development in the southern portion of the Lease Area and associated interconnection. The Project would consist of up to 149 structure positions to be occupied by up to 147 wind turbine generators (WTGs) and up to 5 offshore substations (OSPs) connected by inter-array cables in the Lease Area, and 1 preferred offshore export cable corridor (ECC) making landfall at Brayton Point, Massachusetts with an intermediate landfall on Aquidneck Island, Rhode Island. This preferred ECC to Brayton Point would be used for both Project 1 and Project 2 in the Lease Area. The Project would also include one variant ECC which, if used, would make landfall and interconnect to the ISO New England Inc. (ISO-NE) grid in the town of Falmouth, Massachusetts. In the event that technical, logistical, grid interconnection, or other unforeseen challenges arise during the design and engineering phase that prevent Project 2 from making interconnection at Brayton Point, Project 2 would use the Falmouth variant ECC[11] and make landfall and interconnect in Falmouth, Massachusetts. Onshore facilities would include landfall locations, onshore export cables, up to two converter stations, up to one substation, underground transmission lines, and the utilities' points of interconnection (POI). The Project would be built within the range of the design parameters outlined in the SouthCoast Wind COP (SouthCoast 2024), as found on BOEM's webpage at https://www.boem.gov/renewable-energy/state-activities/southcoast-wind-formerly-mayflower-wind subject to applicable mitigation measures.

2.2 PURPOSE AND NEED FOR THE PROPOSED ACTION

Through a competitive leasing process under 30 CFR § 585.211, BOEM awarded to SouthCoast Wind commercial Renewable Energy Lease OCS-A 0521 covering an area offshore Massachusetts (Lease Area). Under the terms of the lease, SouthCoast Wind has the exclusive right to submit a COP for activities within the Lease Area. SouthCoast Wind submitted a COP to BOEM proposing the construction and installation, operations and maintenance (O&M), and conceptual decommissioning of an offshore wind energy facility in the Lease Area in accordance with BOEM's COP regulations under 30 CFR §§ 585.620-585.628.

[11] There are outstanding consultations and permits for the Falmouth variant ECC, so this route is not part of project approval at this time.

SouthCoast Wind's goal is to develop a commercial-scale offshore wind energy facility in the Lease Area with up to 149 total foundation locations to be occupied by a combination of up to 147 WTGs and up to 5 OSPs. The Project includes one preferred ECC making landfall and interconnecting to the ISO-NE grid at Brayton Point, in Somerset, Massachusetts and one variant ECC which, if used, would make landfall and interconnect to the ISO-NE grid in the town of Falmouth, Massachusetts (Figure 1-1). The Project would provide up to 2,400 MW of clean, renewable wind energy to the northeast United States, including Massachusetts, Connecticut, and/or Rhode Island, which each have existing state offshore wind procurement laws in place, as well as decarbonization goals and targets. As an example, Massachusetts, in accordance with Section 83C of the Massachusetts' Green Communities Act, allows Electric Distribution Companies (EDCs) to solicit proposals for offshore wind energy generation (*Chapter 188 of the Acts of 2016, An Act to Promote Energy Diversity*). On September 10, 2024, SouthCoast Wind was awarded 1,287 MW of offshore wind capacity in a multi-state offshore wind solicitation with Massachusetts selecting 1,087 MW and Rhode Island the remaining 200 MW. SouthCoast Wind is actively exploring offtake opportunities in Massachusetts and the New England region for the remaining wind capacity.

Based on BOEM's authority under the OCSLA to authorize renewable energy activities on the OCS, and Executive Order 14008; the shared goals of the federal agencies to deploy 30 GW of offshore wind energy capacity in the United States by 2030, while protecting biodiversity and promoting ocean co-use;[12] and in consideration of SouthCoast Wind's goals, the purpose of BOEM's action is to determine whether to approve, approve with conditions, or disapprove SouthCoast Wind's COP. BOEM will make this determination after weighing the factors in Subsection 8(p)(4) of the OCSLA that are applicable to plan decisions and in consideration of the above goals. BOEM's action is needed to fulfill its duties under the lease in accordance with the applicable regulations in 30 CFR Part 585, which require BOEM to make a decision on South Coast Wind's plan to construct and operate two commercial-scale offshore wind energy facilities within the Lease Area.

NMFS, which has MMPA authorization decision responsibilities and is serving as a cooperating agency, has reviewed BOEM's purpose and need statement above, and has determined that it aligns with NMFS' purpose and need (more specific statements of the purpose and need for the actions by NMFS are found in Section 5.2 of this ROD).

USACE, which has Sections 10 RHA and Section 404 CWA authorization decision responsibilities and is serving as a cooperating agency, has reviewed BOEM's purpose and need statement above, and has determined that it aligns with USACE's purpose and need (more

[12] Fact Sheet: Biden Administration Jumpstarts Offshore Wind Energy Projects to Create Jobs | The White House. Interior, Energy, Commerce, and Transportation Departments Announce New Leasing, Funding, and Development Goals to Accelerate and Deploy Offshore Wind Energy and Jobs: https://www.whitehouse.gov/briefing-room/statementsreleases/2021/03/29/fact-sheet-biden-administration-jumpstarts-offshore-wind-energy-projects-to-create-jobs/. See also § 207 of E.O. 14008, Tackling Climate Change at Home and Abroad, 86 Fed. Reg. 7619 (Feb. 1, 2021) ("doubling offshore wind by 2030 while ensuring robust protection for our lands, waters, and biodiversity and creating good jobs").

specific statements of the purpose and need for the actions by USACE are found in Section 5.3 of this ROD).

3 ALTERNATIVES

The final EIS considered a reasonable range of alternatives to the Proposed Action.[13] BOEM considered a total of 17 alternatives (inclusive of the No Action Alternative) during preparation of the final EIS and carried forward for detailed analysis five action alternatives and the No Action Alternative (Table 4-1). The other 11 alternatives were not further analyzed because they did not meet the purpose and need or did not meet other screening criteria. Refer to final EIS Section 2.2, *Alternatives Considered but not Analyzed in Detail.*

3.1 ALTERNATIVES CARRIED FORWARD FOR DETAILED ANALYSIS

Table 3-1. Description of alternatives

Alternative	Description
Alternative A: No Action	Under Alternative A, BOEM would not approve the COP; the Project's construction and installation, operations and maintenance, and conceptual decommissioning would not occur; and no additional permits or authorizations for the Project would be required. Any potential environmental and socioeconomic impacts, including benefits, associated with the Project as described under the Proposed Action would not occur. Under the No Action Alternative, impacts on marine mammals incidental to construction activities would not occur. Therefore, NMFS would not issue the requested authorization under the MMPA to the applicant. The current resource condition, trends, and impacts from ongoing activities under the No Action Alternative serve as the baseline against which the direct and indirect impacts of all action alternatives are evaluated. Over the life of the proposed Project, other reasonably foreseeable future impact-producing offshore wind and non-offshore wind activities are expected to occur, which would cause changes to the existing baseline conditions even in the absence of the Proposed Action. The continuation of all other existing and reasonably foreseeable future activities described in Appendix D, *Planned Activities Scenario,* without the Proposed Action serves as the baseline for the evaluation of cumulative impacts.
Alternative B: Proposed Action	Under Alternative B, the construction, operations and maintenance, and eventual decommissioning of the Project on the OCS offshore of Massachusetts would occur within the range of design parameters outlined in the SouthCoast Wind COP (SouthCoast Wind 2024), subject to applicable mitigation measures. The Project would have a capacity of up to 2,400 MW and would consist of up to 147 WTGs in the Lease Area, up to

[13] DOI's implementing NEPA regulations state that the term "reasonable alternatives" "includes alternatives that are technically and economically practical or feasible and meet the purpose and need of the proposed action." 43 CFR § 46.420(b).

Alternative	Description
	5 OSPs and associated export cables. SouthCoast Wind would space WTGs in a 1-by-1-nmi offset grid pattern (east–west-by-north–south-gridded layout). The Project would include one preferred ECC, making landfall and interconnecting to the ISO New England Inc. (ISO-NE) power grid at Brayton Point, in Somerset, Massachusetts. The ECC to Brayton Point would have an intermediate landfall on Aquidneck Island, Rhode Island. The Project would also include one variant ECC which, if used, would make landfall and interconnect to the ISO-NE grid in the town of Falmouth, Massachusetts.
Alternative C Fisheries Habitat Impact Minimization	Under Alternative C, the construction, operations and maintenance, and eventual decommissioning of the Project on the OCS offshore Massachusetts would occur within the range of the design parameters outlined in the SouthCoast Wind COP, subject to applicable mitigation measures. However, the Project would include an onshore export cable route that would avoid placing the offshore export cable in the Sakonnet River to avoid impacts on fisheries habitats. Alternative C includes two possible onshore export cable routes. • Alternative C-1: Aquidneck Island, Rhode Island Route • Alternative C-2: Little Compton/Tiverton, Rhode Island Route
Alternative D – Nantucket Shoals (Preferred Alternative)	Under Alternative D, the construction, operations and maintenance, and eventual decommissioning of the Project on the OCS offshore Massachusetts would occur within the range of the design parameters outlined in the SouthCoast Wind COP, subject to applicable mitigation measures. However, six WTGs (AZ-47, BA-47, BB-47, BC-47, BF-48, and BF-49) would be eliminated in the northeastern portion of the Lease Area to reduce potential impacts on foraging habitat and potential displacement of wildlife from this habitat adjacent to Nantucket Shoals.
Alternative E – Foundation Structures	Under Alternative E, the construction and installation, operations and maintenance, and eventual decommissioning of the Project on the OCS offshore Massachusetts would include a range of foundation types (monopile, piled jacket, suction bucket, and gravity based), subject to applicable mitigation measures. This alternative includes three foundation options, which assume the maximum use of piled (monopile and piled jacket), suction bucket, and gravity-based foundation structures to assess the extent of potential impacts from each foundation type. • Alternative E-1: Piled Foundations (monopile and piled jacket) only • Alternative E-2: Suction Bucket Foundations only • Alternative E-3: Gravity-based Foundations only
Alternative F – Muskeget Channel Cable Modification	Under Alternative F, the construction, operations and maintenance, and eventual decommissioning of the Project on the OCS offshore Massachusetts would occur within the range of the design parameters outlined in the SouthCoast Wind COP, subject to applicable mitigation measures. However, to minimize seabed disturbance in the Muskeget Channel, the Falmouth offshore export cable route would use ±525kV HVDC cables connected to an HVDC converter station, instead of HVAC cables connected to offshore substations, and would only use up to 3 offshore export cables, instead of up to 5 offshore export cables.

3.2 Environmental Consequences of Alternatives

Table 3-2 summarizes and compares the impacts from the proposed Project under each action alternative assessed in Chapter 3 of the final EIS. Under the No Action Alternative, BOEM would not approve the COP and any potential environmental and socioeconomic impacts associated with the Project, including both adverse impacts and benefits, would not occur. However, as described under the cumulative impact analysis in Chapter 3, impacts from other activities could still occur.

Table 3-2. Summary and comparison of impacts among alternatives

Resource	Alternative A No Action	Alternative B Proposed Action	Alternative C Fisheries Habitat Impact Minimization	Alternative D Nantucket Shoals	Alternative E Foundation Structures	Alternative F Muskeget Channel Cable Modification
3.4.1 Air Quality	*No Action Alternative:* Continuation of existing environmental trends and activities under the No Action Alternative would result in **minor to moderate adverse** impacts on air quality. *Cumulative Impacts of the No Action Alternative:* The No Action Alternative combined with all other planned activities (including other offshore wind activities) would result in **minor to moderate adverse** impacts due to emissions of criteria pollutants, volatile organic compounds, hazardous air pollutants, and greenhouse gases, mostly released during construction and decommissioning, and **minor** to **moderate beneficial** impacts on regional air quality after offshore wind projects are operational.	*Proposed Action:* The Proposed Action would have **minor to moderate adverse** impacts attributable to air pollutant, greenhouse gas emissions and accidental releases. The Project may lead to reduced emissions from fossil-fueled power-generating facilities and consequently **minor to moderate beneficial** impacts on air quality and climate. *Cumulative Impacts of the Proposed Action:* Overall impacts associated with the Proposed Action when combined with the impacts from ongoing and planned activities including other offshore wind activities would result in **minor to moderate adverse** impacts and **minor to moderate beneficial** impacts.	*Alternative C:* Increased length of the onshore export cable routes would increase localized air quality impacts compared to the Proposed Action, with Alternative C-2 having the greatest potential for onshore air quality impacts followed by Alternative C-1. However, the overall impact level would be the same as for the Proposed Action: **minor to moderate adverse** and **minor to moderate beneficial**. *Cumulative Impacts of Alternative C:* Impacts of Alternative C when combined with impacts from ongoing and planned activities including other offshore wind activities would be the same as the Proposed Action.	*Alternative D:* Alternative D could have slightly lower emissions from offshore construction and operation compared to the Proposed Action due to the installation of six fewer WTGs. Impact magnitude would remain **minor to moderate adverse** and **minor to moderate beneficial**. *Cumulative Impacts of Alternative D:* Impacts of Alternative D when combined with impacts from ongoing and planned activities including other offshore wind activities would be the same as the Proposed Action.	*Alternative E:* Emissions from construction of different foundation types would not differ substantially among Alternatives E-1, E-2, and E-3 and would be similar to the Proposed Action. Impact magnitude would remain **minor adverse** and **minor beneficial**. *Cumulative Impacts of Alternative E:* Impacts of Alternative E when combined with impacts from ongoing and planned activities including other offshore wind activities would be the same as the Proposed Action.	*Alternative F:* Restricting the number of Falmouth offshore export cables to three may slightly reduce emissions associated with cable-laying activity, but the emissions would not differ substantively from the Proposed Action and would not change the impact magnitude. Impact magnitude would remain **minor** adverse and **minor beneficial**. *Cumulative Impacts of Alternative F:* Impacts of Alternative F when combined with impacts from ongoing and planned activities including other offshore wind activities would be the same as the Proposed Action.
3.4.2 Water Quality	*No Action Alternative:* Continuation of existing environmental trends and activities under the No Action Alternative would result in **minor adverse** impacts on water quality. *Cumulative Impacts of the No Action Alternative:* The No Action Alternative combined with all planned activities (including other offshore wind activities) would result in **minor adverse** impacts because any potential detectable impacts are not anticipated to exceed water quality standards.	*Proposed Action:* The Proposed Action would result in **minor adverse** impacts on water quality primarily due to sediment resuspension, discharges, and accidental releases. The impacts are likely to be temporary or small in proportion to the geographic analysis area and the resource would recover completely after decommissioning. *Cumulative Impacts of the Proposed Action:* Impacts of the Proposed Action when combined with the impacts from ongoing and planned activities including other offshore wind activities would be **minor adverse** primarily due to short-term, localized effects from increased turbidity and sedimentation.	*Alternative C:* Alternatives C-1 and C-2 would slightly reduce the potential for offshore water quality impacts but would slightly increase the potential for onshore water quality impacts from re-routing the Brayton Point export cables onshore. Because the cables would be installed largely within existing road rights-of-way, Alternative C would have the same **minor adverse** impacts as the Proposed Action. *Cumulative Impacts of Alternative C:* Impacts of Alternative C when combined with impacts from ongoing and planned activities including other offshore wind activities would be the same as the Proposed Action.	*Alternative D:* The reduced number of structures under Alternative D may slightly reduce localized water quality impacts during construction and operation, but the difference in impacts compared to the Proposed Action would not be materially different and would result in **minor adverse** impacts. *Cumulative Impacts of Alternative D:* Impacts of Alternative D when combined with impacts from ongoing and planned activities including other offshore wind activities would be the same as the Proposed Action.	*Alternative E:* The gravity-based structure (GBS) foundations proposed under Alternative E-3 would require larger disturbance footprints than the piled foundations and suction bucket foundations under Alternatives E-1 and E-2, but the total difference is small and there would be no meaningful change in impacts on water quality and would result in **minor adverse** impacts. *Cumulative Impacts of Alternative E:* Impacts of Alternative E when combined with impacts from ongoing and planned activities including other offshore wind activities would be the same as the Proposed Action.	*Alternative F:* The reduced number of Falmouth offshore export cables may slightly reduce localized water quality impacts during construction. The additional HVDC converter OSP would increase the discharge of warm water, but the difference in impacts compared to the Proposed Action would not be materially different and would result in **minor adverse** impacts. *Cumulative Impacts of Alternative F:* Impacts of Alternative F when combined with impacts from ongoing and planned activities including other offshore wind activities would be the same as the Proposed Action.
3.5.1 Bats	*No Action Alternative:* Continuation of existing	*Proposed Action:* The Proposed Action would result in **minor**	*Alternative C:* Alternative C would have the same **minor adverse**	*Alternative D:* Alternative D would reduce the number of WTGs and	*Alternative E:* The different foundation types under Alternative	*Alternative F:* Alternative F would result in the same **minor adverse**

Resource	Alternative A No Action	Alternative B Proposed Action	Alternative C Fisheries Habitat Impact Minimization	Alternative D Nantucket Shoals	Alternative E Foundation Structures	Alternative F Muskeget Channel Cable Modification
	environmental trends and activities under the No Action Alternative would result in **minor adverse** impacts on bats. *Cumulative Impacts of the No Action Alternative:* The No Action Alternative combined with all planned activities (including other offshore wind activities) would result in **minor adverse** impacts on bats because bats infrequently occur offshore where offshore wind infrastructure would be installed.	**adverse** impacts on bats. Primary risks would be from potential onshore removal of habitat and operation of the offshore WTGs. *Cumulative Impacts of the Proposed Action:* Impacts of the Proposed Action when combined with the impacts from ongoing and planned activities including other offshore wind activities would be **minor adverse** primarily through the permanent onshore habitat loss.	impacts as the Proposed Action. While the longer onshore cable routes would result in more habitat disturbance, the overall affected area would still be small. *Cumulative Impacts of Alternative C:* Impacts of Alternative C when combined with impacts from ongoing and planned activities including other offshore wind activities would be the same as the Proposed Action.	noise impacts compared to the Proposed Action in the northern Lease Area but would have similar overall **minor adverse** impacts on bats. *Cumulative Impacts of Alternative D:* Impacts of Alternative D when combined with impacts from ongoing and planned activities including other offshore wind activities would be the same as the Proposed Action.	E are not expected to change the impacts on bats compared to the Proposed Action; the same **minor adverse** impacts would occur. *Cumulative Impacts of Alternative E:* Impacts of Alternative E when combined with impacts from ongoing and planned activities including other offshore wind activities would be the same as the Proposed Action.	impacts on bats as the Proposed Action. *Cumulative Impacts of Alternative F:* Impacts of Alternative F when combined with impacts from ongoing and planned activities including other offshore wind activities would be the same as the Proposed Action.
3.5.2 Benthic Resources	*No Action Alternative:* Continuation of existing environmental trends and activities under the No Action Alternative would result in **moderate adverse** impacts on benthic resources. *Cumulative Impacts of the No Action Alternative:* The No Action Alternative combined with all planned activities (including other offshore wind activities) would result in **moderate adverse** impacts from habitat degradation and conversion and **moderate beneficial** impacts from offshore wind structures that provide new habitat for benthic species.	*Proposed Action:* The Proposed Action would result in **moderate adverse** impacts from habitat disturbance; permanent habitat conversion; and behavioral changes, injury, and mortality of benthic fauna. **Moderate beneficial** impacts would result from new hard surfaces that could provide new benthic habitat. *Cumulative Impacts of the Proposed Action:* Impacts of the Proposed Action when combined with the impacts from ongoing and planned activities including other offshore wind activities would be **moderate adverse** and **moderate beneficial**.	*Alternative C:* Alternative C would reduce the length of the Brayton Point offshore export cable route, thereby reducing total seabed disturbance and associated benthic habitat disturbance, with Alternative C-2 having the greatest reduction followed by Alternative C-1. Impacts would remain **moderate adverse** and **moderate beneficial**. *Cumulative Impacts of Alternative C:* Impacts of Alternative C when combined with impacts from ongoing and planned activities including other offshore wind activities would be the same as the Proposed Action.	*Alternative D:* Alternative D would install six fewer WTGs than the Proposed Action, which would reduce total long-term seabed disturbance and benthic habitat impacts. Impacts would remain **moderate adverse** and **moderate beneficial**. *Cumulative Impacts of Alternative D:* Impacts of Alternative D when combined with impacts from ongoing and planned activities including other offshore wind activities would be the same as the Proposed Action.	*Alternative E:* Alternative E-1 would result in similar impacts as the Proposed Action from installing only piled foundations. Alternatives E-2 and E-3 would avoid pile-driving noise impacts from installing GBS and suction-bucket foundations but would result in increased habitat conversion from larger foundations. Impacts would remain **moderate adverse** and **moderate beneficial**. *Cumulative Impacts of Alternative E:* Impacts of Alternative E when combined with impacts from ongoing and planned activities including other offshore wind activities would be the same as the Proposed Action.	*Alternative F:* Alternative F, which would reduce the number of Falmouth offshore export cables from five to three, would reduce seafloor and benthic habitat disturbance compared to the Proposed Action. The additional HVDC converter OSP would result in increased potential for entrainment of eggs and larval life stages, as well as increased thermal impacts due to heated discharge effluent; however, as a whole the difference in impacts compared to the Proposed Action would not be materially different and would remain **moderate adverse** and **moderate beneficial**. *Cumulative Impacts of Alternative F:* Impacts of Alternative F when combined with impacts from ongoing and planned activities including other offshore wind activities would be the same as the Proposed Action.
3.5.3 Birds	*No Action Alternative:* Continuation of existing environmental trends and activities under the No Action Alternative would result in **minor adverse** impacts on birds. *Cumulative Impacts of the No Action Alternative:* The No Action	*Proposed Action:* The Proposed Action would result in **minor adverse** impacts on birds associated with habitat loss and collision-induced mortality from rotating WTGs. **Minor beneficial** impacts would occur from	*Alternative C:* Alternative C would have the same **minor adverse** and **minor beneficial** impacts as the Proposed Action. While the longer onshore cable routes would result in more habitat disturbance, the overall affected area would still be small.	*Alternative D:* Alternative D would remove six WTGs nearest to Nantucket Shoals, which may lessen impacts on collision- and displacement-sensitive avian species that frequent this area. The same **minor adverse** and **minor beneficial** impacts on birds are anticipated.	*Alternative E:* Larger foundations may increase foraging opportunities and foundations that require no pile driving would reduce underwater noise, but these differences would be small and the same **minor adverse** and **minor beneficial** impacts on birds are anticipated.	*Alternative F:* Alternative F would reduce cable-laying activity, which could slightly lessen impacts on birds, but the same **minor adverse** and **minor beneficial** impacts on birds would occur. *Cumulative Impacts of Alternative F:* Impacts of Alternative F when

Resource	Alternative A No Action	Alternative B Proposed Action	Alternative C Fisheries Habitat Impact Minimization	Alternative D Nantucket Shoals	Alternative E Foundation Structures	Alternative F Muskeget Channel Cable Modification
	Alternative combined with all planned activities (including other offshore wind activities) would result in **moderate adverse** impacts due to increased collision risk from offshore structures and **minor beneficial** impacts from increased foraging opportunities.	increased foraging opportunities for marine birds. *Cumulative Impacts of the Proposed Action:* Impacts of the Proposed Action when combined with the impacts from ongoing and planned activities including other offshore wind activities would be **moderate adverse** and **minor beneficial**.	*Cumulative Impacts of Alternative C:* Impacts of Alternative C when combined with impacts from ongoing and planned activities including other offshore wind activities would be the same as the Proposed Action.	*Cumulative Impacts of Alternative D:* Impacts of Alternative D when combined with impacts from ongoing and planned activities including other offshore wind activities would be the same as the Proposed Action.	*Cumulative Impacts of Alternative E:* Impacts of Alternative E when combined with impacts from ongoing and planned activities including other offshore wind activities would be the same as the Proposed Action.	combined with impacts from ongoing and planned activities including other offshore wind activities would be the same as the Proposed Action.
3.5.4 Coastal Habitat and Fauna	*No Action Alternative:* Continuation of existing environmental trends and activities under the No Action Alternative would result in **moderate adverse** impacts on coastal habitat and fauna. *Cumulative Impacts of the No Action Alternative:* The No Action Alternative combined with all planned activities (including other offshore wind activities) would result in **moderate adverse** impacts due to onshore coastal construction and climate change.	*Proposed Action:* The Proposed Action would result in **moderate adverse** impacts because most potential effects associated with habitat disturbance would be localized, short-term, and can be minimized with best management practices. *Cumulative Impacts of the Proposed Action:* Impacts of the Proposed Action when combined with the impacts from ongoing and planned activities including other offshore wind activities would be **moderate adverse**.	*Alternative C:* Alternative C would result in slightly greater impacts on coastal habitats than the Proposed Action from longer onshore cable routes, with Alternative C-2 having the greatest impact followed by Alternative C-1. The overall impact level would be the same as the Proposed Action: **moderate adverse**. *Cumulative Impacts of Alternative C:* Impacts of Alternative C when combined with impacts from ongoing and planned activities including other offshore wind activities would be the same as the Proposed Action.	*Alternative D:* Because Alternative D would involve modifications only to offshore components, impacts on coastal habitat and fauna would be the same as the Proposed Action: **moderate adverse**. *Cumulative Impacts of Alternative D:* Impacts of Alternative D when combined with impacts from ongoing and planned activities including other offshore wind activities would be the same as the Proposed Action.	*Alternative E:* Because Alternative E would involve modifications only to offshore components, impacts on coastal habitat and fauna would be the same as the Proposed Action: **moderate adverse**. *Cumulative Impacts of Alternative E:* Impacts of Alternative E when combined with impacts from ongoing and planned activities including other offshore wind activities would be the same as the Proposed Action.	*Alternative F:* Because Alternative F would involve modifications only to offshore components, impacts on coastal habitat and fauna would be the same as the Proposed Action: **moderate adverse**. *Cumulative Impacts of Alternative F:* Impacts of Alternative F when combined with impacts from ongoing and planned activities including other offshore wind activities would be the same as the Proposed Action.

Resource	Alternative A No Action	Alternative B Proposed Action	Alternative C Fisheries Habitat Impact Minimization	Alternative D Nantucket Shoals	Alternative E Foundation Structures	Alternative F Muskeget Channel Cable Modification
3.5.5 Finfish, Invertebrates, and Essential Fish Habitat	*No Action Alternative:* Continuation of existing environmental trends and activities under the No Action Alternative would result in **moderate adverse** impacts on finfish, invertebrates, and EFH. *Cumulative Impacts of the No Action Alternative:* The No Action Alternative combined with all planned activities (including other offshore wind activities) would result in **moderate adverse** impacts primarily through cable emplacement and maintenance, noise, presence of structures, regulated fishing efforts, and climate change.	*Proposed Action:* The Proposed Action would result in **moderate adverse** and **minor beneficial** impacts on finfish, invertebrates, and essential fish habitat, primarily due to the disturbance of seafloor during cable emplacement and the presence of structures. *Cumulative Impacts of the Proposed Action:* Impacts of the Proposed Action when combined with the impacts from ongoing and planned activities including other offshore wind activities would be **moderate adverse**.	*Alternative C:* Avoiding cable installation in the Sakonnet River would reduce impacts on EFH and HAPC for juvenile Atlantic cod from cable laying activity and long-term O&M impacts from presence of cable protection. While impacts would be reduced in the Sakonnet River, overall impact levels would be the same as the Proposed Action: **moderate adverse** and **minor beneficial.** *Cumulative Impacts of Alternative C:* Impacts of Alternative C when combined with impacts from ongoing and planned activities including other offshore wind activities would be the same as the Proposed Action.	*Alternative D:* Removal of six WTGs may slightly reduce impacts but would not likely result in a meaningful change in impacts associated with construction (primarily pile-driving noise) or the presence of structures. Impact levels would be the same as the Proposed Action: **moderate adverse** and **minor beneficial**. *Cumulative Impacts of Alternative D:* Impacts of Alternative D when combined with impacts from ongoing and planned activities including other offshore wind activities would be the same as the Proposed Action.	*Alternative E:* Alternative E-1 would result in similar impacts as the Proposed Action from all piled foundations. Alternatives E-2 and E-3 would avoid underwater noise impacts. Larger foundations under Alternatives E-2 and E-3 would cause more habitat conversion but also greater beneficial artificial reef effects. Overall impacts would be the same as the Proposed Action: **moderate adverse** and **minor beneficial**. *Cumulative Impacts of Alternative E:* Impacts of Alternative E when combined with impacts from ongoing and planned activities including other offshore wind activities would be the same as the Proposed Action.	*Alternative F:* The reduced number of Falmouth offshore export cables would reduce seafloor and benthic habitat disturbance compared to the Proposed Action. Because cable installation would still occur in the same corridor, the same overall impacts are expected. The additional HVDC converter OSP would increase the potential for entrainment of fish larvae at cooling water intakes and thermal plume discharge impacts. Overall impacts would remain **moderate adverse** and **minor beneficial**. *Cumulative Impacts of Alternative F:* Impacts of Alternative F when combined with impacts from ongoing and planned activities including other offshore wind activities would be the same as the Proposed Action.
3.5.6 Marine Mammals	*Direct and Indirect Impacts (without baseline):*[14] None *No Action Alternative:* Continuation of existing environmental trends and activities under the No Action Alternative would result in **moderate adverse** impacts on pinnipeds, odontocetes, and mysticetes (except for North Atlantic Right Whale (NARW)) and **major adverse** impacts on NARW and could include **minor beneficial** impacts on odontocetes and pinnipeds. *Cumulative Impacts of the No Action Alternative:* The No Action Alternative combined with all planned activities (including other offshore wind activities) would result in **moderate adverse** impacts on mysticetes, odontocetes, and pinnipeds, with the exception of the NARW, on which impacts	*Direct and Indirect Impacts (without baseline):* **Moderate adverse** for mysticetes (including NARW), odontocetes, and pinnipeds. *Proposed Action:* The Proposed Action would result in **moderate adverse** impacts on pinnipeds, odontocetes, and mysticetes (except for NARW) and **major adverse** impacts on NARW and could include **minor beneficial** impacts on odontocetes and pinnipeds. Adverse impacts are expected to result mainly from underwater noise (e.g., impact pile-driving) and the presence of structures (NARWs). Beneficial impacts for odontocetes and pinnipeds are expected to result from the presence of structures. *Cumulative Impacts of the Proposed Action:* The Proposed	*Direct and Indirect Impacts (without baseline):* **Moderate adverse** for mysticetes (including NARW), odontocetes, and pinnipeds. *Alternative C:* Routing the Brayton Point export cable onshore may slightly reduce impacts on marine mammals occurring in the Sakonnet River. However, because the presence of most marine mammals in the Sakonnet River is uncommon, and cable installation impacts outside of the river would still occur, BOEM anticipates impacts would be the same as the Proposed Action. *Cumulative Impacts of Alternative C:* Impacts of Alternative C when combined with impacts from ongoing and planned activities including other offshore wind	*Direct and Indirect Impacts (without baseline):* **Moderate adverse** for mysticetes (including NARW), odontocetes, and pinnipeds. *Alternative D:* The removal of six WTGs may lessen the impacts on marine mammals by providing more area of open ocean nearest to Nantucket Shoals, which provides important foraging habitat for marine mammals. Impacts from noise, electromagnetic frequencies (EMF), and vessel traffic would also be reduced. However, because Alternative D only represents a reduction of six WTGs, impact levels would be the same as the Proposed Action. *Cumulative Impacts of Alternative D:* Impacts of Alternative D when combined with impacts from ongoing and planned activities	*Direct and Indirect Impacts (without baseline):* **Moderate adverse** for mysticetes (including NARW), odontocetes, and pinnipeds. *Alternative E:* Alternative E-1 would result in similar impacts as the Proposed Action from all piled foundations. Alternatives E-2 and E-3 would avoid piled foundations, reducing underwater noise impacts and resulting in greater artificial reef effects from larger foundations. The overall impact level would be the same as the Proposed Action. *Cumulative Impacts of Alternative E:* Impacts of Alternative E when combined with impacts from ongoing and planned activities including other offshore wind activities would be the same as the Proposed Action.	*Direct and Indirect Impacts (without baseline):* **Moderate adverse** for mysticetes (including NARW), odontocetes, and pinnipeds. *Alternative F:* The reduced number of Falmouth offshore export cables would reduce seafloor disturbance and vessel activity compared to the Proposed Action. Because cable installation would still occur, the overall impact level would be the same as the Proposed Action. *Cumulative Impacts of Alternative F:* Impacts of Alternative F when combined with impacts from ongoing and planned activities including other offshore wind activities would be the same as the Proposed Action.

[14] 4 Incremental impacts (i.e., alternative impacts without the baseline) were included at NMFS' request in order to support determinations under the MMPA

Resource	Alternative A No Action	Alternative B Proposed Action	Alternative C Fisheries Habitat Impact Minimization	Alternative D Nantucket Shoals	Alternative E Foundation Structures	Alternative F Muskeget Channel Cable Modification
	could be **major adverse**. Impacts would primarily result from underwater noise, entanglement, and seabed disturbance associated with offshore wind activities and could include **minor beneficial** impacts for odontocetes and pinnipeds	Action when combined with the impacts from ongoing and planned activities including other offshore wind activities would result in **moderate adverse** impacts on mysticetes, odontocetes, and pinnipeds, with the exception of the NARW, on which impacts could be **major adverse**. Cumulative impacts may also include minor beneficial impacts for odontocetes and pinnipeds.	activities would be the same as the Proposed Action.	including other offshore wind activities would be the same as the Proposed Action.		
3.5.7 Sea Turtles	*No Action Alternative:* Continuation of existing environmental trends and activities under the No Action Alternative would result in **minor adverse** impacts on sea turtles. *Cumulative Impacts of the No Action Alternative:* The No Action Alternative combined with all planned activities (including other offshore wind activities) would result in **minor adverse** impacts primarily related to the presence of structures and pile-driving noise.	*Proposed Action:* The Proposed Action would result in **minor adverse** impacts on sea turtles from habitat disturbance, noise impacts, water quality degradation, vessel strikes, and potential discharges/spills and trash. **Minor beneficial** impacts would result from the reef effect created by the presence of structures. *Cumulative Impacts of the Proposed Action:* The Proposed Action when combined with the impacts from ongoing and planned activities including other offshore wind activities would be **minor adverse**.	*Alternative C:* Alternative C would lessen impacts on sea turtles in the Sakonnet River by routing the cable onshore. However, sea turtle presence in the Sakonnet River is uncommon and cable emplacement impacts along the rest of the Brayton Point corridor would still occur. Impacts would remain **minor adverse** with **minor beneficial** impacts. *Cumulative Impacts of Alternative C:* Impacts of Alternative C when combined with impacts from ongoing and planned activities including other offshore wind activities would be the same as the Proposed Action.	*Alternative D:* Installation of six fewer WTGs would reduce impacts from noise, vessel traffic, and anchoring when compared to the Proposed Action. However, since the number of WTGs to be removed would be small relative to the total number of WTGs, the same **minor adverse** with **minor beneficial** impacts are expected. *Cumulative Impacts of Alternative D:* Impacts of Alternative D when combined with impacts from ongoing and planned activities including other offshore wind activities would be the same as the Proposed Action.	*Alternative E:* Alternative E-1 would result in similar impacts as the Proposed Action from all piled foundations. Alternatives E-2 and E-3 would avoid piled foundations, reducing underwater noise impacts and resulting in greater artificial reef effects from larger foundations. The overall impact level would be the same as the Proposed Action: **minor adverse** with **minor beneficial** impacts. *Cumulative Impacts of Alternative E:* Impacts of Alternative E when combined with impacts from ongoing and planned activities including other offshore wind activities would be the same as the Proposed Action.	*Alternative F:* The reduced number of Falmouth offshore export cables would reduce seafloor disturbance compared to the Proposed Action. Because cable installation would still occur in the same corridor, the same **minor adverse** with **minor beneficial** impacts are expected. *Cumulative Impacts of Alternative F:* Impacts of Alternative F when combined with impacts from ongoing and planned activities including other offshore wind activities would be the same as the Proposed Action.
3.5.8 Wetlands	*No Action Alternative:* Continuation of existing environmental trends and activities under the No Action Alternative would result in **moderate adverse** impacts on wetlands. *Cumulative Impacts of the No Action Alternative:* The No Action Alternative combined with all planned activities (including other offshore wind activities) would result in **moderate adverse** impacts on wetlands, primarily because of land disturbance and in consideration of regulatory requirements for avoiding,	*Proposed Action:* The Proposed Action would result in **moderate adverse** impacts on wetlands through short-term or permanent disturbance from activities within or adjacent to these resources and in consideration of avoidance, minimization, and mitigation measures for wetlands required under federal and state statutes. *Cumulative Impacts of the Proposed Action:* The Proposed Action when combined with the impacts from ongoing and planned activities including other offshore	*Alternative C:* Alternative C would result in slightly greater impacts on wetlands than the Proposed Action from longer onshore cable routes, with Alternative C-2 having the greatest impacts followed by Alternative C-1. The overall impact level would be the same as for the Proposed Action: **moderate adverse**. *Cumulative Impacts of Alternative C:* Impacts of Alternative C when combined with impacts from ongoing and planned activities including other offshore wind	*Alternative D:* The impacts associated with the Proposed Action would not change under Alternative D because the alternative only differs in offshore components, and offshore components would not contribute to impacts on wetlands; the same **moderate adverse** impacts on wetlands are anticipated. *Cumulative Impacts of Alternative D:* Impacts of Alternative D when combined with impacts from ongoing and planned activities including other offshore wind	*Alternative E:* The impacts associated with the Proposed Action would not change under Alternative E because the alternative only differs in offshore components, and offshore components would not contribute to impacts on wetlands; the same **moderate adverse** impacts on wetlands are anticipated. *Cumulative Impacts of Alternative E:* Impacts of Alternative E when combined with impacts from ongoing and planned activities including other offshore wind	*Alternative F:* The impacts associated with the Proposed Action would not change under Alternative F because the alternative only differs in offshore components, and offshore components would not contribute to impacts on wetlands; the same **moderate adverse** impacts on wetlands are anticipated. *Cumulative Impacts of Alternative F:* Impacts of Alternative F when combined with impacts from ongoing and planned activities including other offshore wind

Resource	Alternative A No Action	Alternative B Proposed Action	Alternative C Fisheries Habitat Impact Minimization	Alternative D Nantucket Shoals	Alternative E Foundation Structures	Alternative F Muskeget Channel Cable Modification
	minimizing, and mitigating impacts on wetlands.	wind activities would be **moderate adverse**.	activities would be the same as the Proposed Action.	activities would be the same as the Proposed Action.	activities would be the same as the Proposed Action.	activities would be the same as the Proposed Action.
3.6.1 Commercial Fisheries and For-Hire Recreational Fishing	*No Action Alternative:* Continuation of existing environmental trends and activities under the No Action Alternative would result in **moderate** to **major adverse** impacts on commercial fisheries and for-hire recreational fishing. *Cumulative Impacts of the No Action Alternative:* The No Action Alternative combined with all planned activities (including other offshore wind activities) would result in **moderate** to **major adverse** impacts because some commercial fisheries would experience substantial long-term disruptions. Presence of structures would cause **minor** to **moderate adverse** impacts on for-hire recreational fishing and could include **moderate beneficial** impacts.	*Proposed Action:* The Proposed Action would have **moderate** to **major adverse** impacts depending on the fishery and fishing operation. Some fishing operations could experience long-term, major disruptions. However, it is estimated that most vessels would only have to adjust somewhat to account for disruptions due to impacts. *Cumulative Impacts of the Proposed Action:* Impacts of the Proposed Action when combined with the impacts from ongoing and planned activities including other offshore wind activities would be **major adverse**.	*Alternative C:* Routing the Brayton Point offshore export cable onshore to avoid the Sakonnet River could result in slight reductions in impacts on fishers that use the Sakonnet River but the difference in impact would be slight and the same overall **moderate** to **major adverse** impacts would result. *Cumulative Impacts of Alternative C:* Impacts of Alternative C when combined with impacts from ongoing and planned activities including other offshore wind activities would be the same as the Proposed Action.	*Alternative D:* By removing six WTGs, Alternative D would provide more area in the northern portion of the Lease Area for commercial fishing vessels to operate without potential impacts from structures, slightly reducing the potential for gear entanglement and allisions. The same **moderate** to **major adverse** impacts would result. *Cumulative Impacts of Alternative D:* Impacts of Alternative D when combined with impacts from ongoing and planned activities including other offshore wind activities would be the same as the Proposed Action.	*Alternative E:* Alternative E-1 would have similar impacts as the Proposed Action. The larger foundations under Alternatives E-2 and E-3 would increase the potential for gear entanglement and loss. Conversely, the larger foundations would increase beneficial artificial reef effects. The same **moderate** to **major adverse** impacts would result. *Cumulative Impacts of Alternative E:* Impacts of Alternative E when combined with impacts from ongoing and planned activities including other offshore wind activities would be the same as the Proposed Action.	*Alternative F:* Installation of fewer cables would require less hard cable protection, reducing the potential for gear entanglement and loss but any difference in impacts would be small. The same **moderate** to **major adverse** impacts would result. *Cumulative Impacts of Alternative F:* Impacts of Alternative F when combined with impacts from ongoing and planned activities including other offshore wind activities would be the same as the Proposed Action.
3.6.2 Cultural Resources	*No Action Alternative:* Continuation of existing environmental trends and activities under the No Action Alternative would result in **moderate adverse** impacts on cultural resources. *Cumulative Impacts of the No Action Alternative:* The No Action Alternative combined with all planned activities (including other offshore wind activities) would result in **major adverse** impacts on cultural resources due to disturbance, damage, disruption, and destruction of individual cultural resources.	*Proposed Action:* The Proposed Action would have **major adverse** impacts on cultural resources. BOEM anticipates that NHPA requirements to identify historic properties and resolve adverse effects would reduce the significance of potential impacts on some historic properties but mitigation of both physical and visual adverse effects on historic properties would still be needed under the Proposed Action. *Cumulative Impacts of the Proposed Action:* Impacts of the Proposed Action when combined with the impacts from ongoing and planned activities including other offshore wind activities would be **minor** to **major**.	*Alternative C:* Alternative C-1 or C-2 cable routes could introduce adverse impacts on a larger number of individual cultural resources as compared to the Proposed Action. However, Alternatives C-1 and C-2 routes are predominantly along public road ROWs and may not contribute additional impacts in these previously disturbed areas. The same **major adverse** impacts would result. *Cumulative Impacts of Alternative C:* Impacts of Alternative C when combined with impacts from ongoing and planned activities including other offshore wind activities would be **major adverse**.	*Alternative D:* Eliminating six WTGs is not anticipated to result in a reduction of impacts on marine cultural resources and would only slightly reduce the visibility of the Project on historic aboveground resources. The same **major adverse** impacts would result. *Cumulative Impacts of Alternative D:* Impacts of Alternative D when combined with impacts from ongoing and planned activities including other offshore wind activities would be **major adverse**.	*Alternative E:* Alternative E-3 would result in the greatest potential for impacts on marine cultural resources because of the larger foundation size, followed by Alternatives E-2 and E-1. Overall, the anticipated range of impact severity on individual marine cultural resources under Alternatives E-1, E-2, and E-3 would be the same as the Proposed Action and the overall impact would remain **major adverse**. *Cumulative Impacts of Alternative E:* Impacts of Alternative E when combined with impacts from ongoing and planned activities including other offshore wind activities would be **major adverse**.	*Alternative F:* Reducing the number of installed cables would reduce the overall area subject to seabed disturbance, thereby reducing adverse impacts on marine cultural resources including the Nantucket Sound TCP. However, most cultural resources are located in other areas unaffected by this alternative; therefore, the same **major adverse** impacts would result. *Cumulative Impacts of Alternative F:* Impacts of Alternative F when combined with impacts from ongoing and planned activities including other offshore wind activities would be **major adverse**.

Resource	Alternative A No Action	Alternative B Proposed Action	Alternative C Fisheries Habitat Impact Minimization	Alternative D Nantucket Shoals	Alternative E Foundation Structures	Alternative F Muskeget Channel Cable Modification
3.6.3 Demographics, Employment, and Economics	*No Action Alternative:* Continuation of existing environmental trends and activities under the No Action Alternative would result in **minor adverse** and **minor beneficial** impacts on demographics, employment, and economics. *Cumulative Impacts of the No Action Alternative:* The No Action Alternative combined with all planned activities (including other offshore wind activities) would result in **minor** impacts, primarily associated with impacts on commercial fishing and other marine businesses from offshore wind development. **Moderate beneficial** impacts would result from increased jobs, tax revenues, improved ports, and marine industry diversification.	*Proposed Action:* The Proposed Action would have **minor adverse** and **minor beneficial** impacts on demographics, employment, and economics. Adverse impacts include temporary and permanent disruptions to commercial fishing and recreational business operations. Beneficial impacts include job creation, workforce development, and income and tax revenue. *Cumulative Impacts of the Proposed Action:* Impacts of the Proposed Action when combined with the impacts from ongoing and planned activities including other offshore wind activities would be **minor adverse** and **moderate beneficial** impacts.	*Alternative C:* Installation of longer onshore cable routes under Alternative C would result in increased traffic delays, disruptions to business and residential access, and related construction impacts. Alternative C-2 would result in the greatest impact followed by Alternative C-1; however, the overall impact magnitude would be the same: **minor adverse** and **minor beneficial**. *Cumulative Impacts of Alternative C:* Impacts of Alternative C when combined with impacts from ongoing and planned activities including other offshore wind activities would be the same as the Proposed Action.	*Alternative D:* Alternative D would install six fewer WTGs, which would result in a shorter duration of noise impacts and less vessel traffic. However, the Project would generate less energy and would result in slightly lower beneficial impacts associated with delivering a reliable supply of energy. The overall impact levels would be the same as for the proposed action**: minor adverse** and **minor beneficial**. *Cumulative Impacts of Alternative D:* Impacts of Alternative D when combined with impacts from ongoing and planned activities including other offshore wind activities would be the same as the Proposed Action.	*Alternative E:* Alternative E, which would involve installing a range of foundation types, would not have measurable impacts on demographics, employment, and economics that are materially different from the impacts of the Proposed Action. The overall impact levels would be the same as for the Proposed Action**: minor adverse** and **minor beneficial**. *Cumulative Impacts of Alternative E:* Impacts of Alternative E when combined with impacts from ongoing and planned activities including other offshore wind activities would be the same as the Proposed Action.	*Alternative F:* Alternative F, which would involve reducing the number of Falmouth offshore export cables from five to three, would not have measurable impacts on demographics, employment, and economics that are materially different from the impacts of the Proposed Action. The overall impact levels would be the same as for the Proposed Action**: minor adverse** and **minor beneficial**. *Cumulative Impacts of Alternative F:* Impacts of Alternative F when combined with impacts from ongoing and planned activities including other offshore wind activities would be the same as the Proposed Action.
3.6.4 Environmental Justice	*No Action Alternative:* Continuation of existing environmental trends and activities under the No Action Alternative would result in **minor adverse** impacts on environmental justice. *Cumulative Impacts of the No Action Alternative:* The No Action Alternative combined with all planned activities (including other offshore wind activities) would result in **minor adverse** impacts due to gentrification and potential loss of income for low-income and minority workers; and **minor beneficial** impacts related to employment in the offshore wind industry and displaced fossil fuel emissions after offshore wind projects are operational.	*Proposed Action:* The Proposed Action would have **minor adverse** impacts attributable to air emissions, noise at ports, onshore construction, and impacts on marine businesses. The Proposed Action may have disproportionally high **major adverse** impacts on Tribal Nations due to potential impacts on ancient submerged landform features. The Proposed Action would also have **minor beneficial** impacts from displacement of fossil fuel energy generation and employment opportunities. *Cumulative Impacts of the Proposed Action:* Overall impacts associated with the Proposed Action when combined with the impacts from ongoing and planned activities including other offshore wind activities would be **moderate adverse**.	*Alternative C:* Increased length of the Brayton Point onshore export cable route would result in construction-related increases in air emissions, traffic, and noise. However, the location of the Alternative C onshore cables would not occur in areas with environmental justice populations. Impacts from Alternative C would be the same as the Proposed Action: **major adverse** and **minor beneficial**. *Cumulative Impacts of Alternative C:* Impacts of Alternative C when combined with impacts from ongoing and planned activities including other offshore wind activities would be the same as the Proposed Action.	*Alternative D:* Alternative D would install six fewer WTGs than the Proposed Action, which would slightly reduce the impacts of vessel activity in ports and offshore structures on fishing. The impact magnitude of Alternative D would remain **major adverse** and **minor beneficial**. *Cumulative Impacts of Alternative D:* Impacts of Alternative D when combined with impacts from ongoing and planned activities including other offshore wind activities would be the same as the Proposed Action.	*Alternative E:* Under Alternative E-1, use of all piled foundations would result in similar impacts as the Proposed Action. Under Alternatives E-2 and E-3, use of foundations that avoid pile driving would slightly reduce impacts on businesses in environmental justice communities that rely on fishing or tourism by reducing noise associated with foundation installation. Impact magnitude would remain **major adverse** and **minor beneficial**. *Cumulative Impacts of Alternative E:* Impacts of Alternative E when combined with impacts from ongoing and planned activities including other offshore wind activities would be the same as the Proposed Action.	*Alternative F:* Reducing the number of Falmouth offshore export cables from five to three would not meaningfully change the impacts on environmental justice from the Proposed Action. Impact magnitude would remain **major adverse** and **minor beneficial**. *Cumulative Impacts of Alternative F:* Impacts of Alternative F when combined with impacts from ongoing and planned activities including other offshore wind activities would be the same as the Proposed Action.

Resource	Alternative A No Action	Alternative B Proposed Action	Alternative C Fisheries Habitat Impact Minimization	Alternative D Nantucket Shoals	Alternative E Foundation Structures	Alternative F Muskeget Channel Cable Modification
3.6.5 Land Use and Coastal Infrastructure	*No Action Alternative:* Continuation of existing environmental trends and activities under the No Action Alternative would result in **minor adverse** and **minor beneficial** impacts on land use and coastal infrastructure. *Cumulative Impacts of the No Action Alternative:* The No Action Alternative combined with all planned activities (including other offshore wind activities) would result in **minor adverse** impacts from land disturbance and accidental releases during onshore construction, as well as from the views of offshore structures that could affect the use and value of onshore properties; **minor beneficial** impacts would result from productive use of ports and related infrastructure for offshore wind activity.	*Proposed Action:* The Proposed Action would have **minor adverse** impacts resulting from port utilization, accidental spills, and land disturbance and construction impacts, and **moderate adverse** impacts associated with the need for zoning relief for the Falmouth landfalls and substation sites. The Proposed Action would also have **minor beneficial** impacts by supporting designated uses and infrastructure improvements at ports. *Cumulative Impacts of the Proposed Action:* Overall, impacts from ongoing and planned activities including other offshore wind activities would result in **moderate adverse** impacts and **minor beneficial** impacts.	*Alternative C:* Alternative C would increase the length of the Brayton Point onshore cable route, resulting in increased impacts from land disturbance, traffic, and noise compared to the Proposed Action, with Alternative C-2 resulting in the most impacts. The overall impact magnitudes would be the same as the Proposed Action: **moderate adverse** and **minor beneficial** impacts. *Cumulative Impacts of Alternative C:* Impacts of Alternative C when combined with impacts from ongoing and planned activities including other offshore wind activities would be the same as the Proposed Action.	*Alternative D:* The impacts associated with the Proposed Action would not change under Alternative D because the alternative only differs in offshore components, and the offshore components would not substantively contribute to impacts on land use and coastal infrastructure; the same **moderate adverse** and **minor beneficial** impacts are anticipated. *Cumulative Impacts of Alternative D:* Impacts of Alternative D when combined with impacts from ongoing and planned activities including other offshore wind activities would be the same as the Proposed Action.	*Alternative E:* The impacts associated with the Proposed Action would not change under Alternative E because the alternative only differs in offshore components, and the offshore components would not substantively contribute to impacts on land use and coastal infrastructure; the same **moderate adverse** and **minor beneficial** impacts are anticipated. *Cumulative Impacts of Alternative E:* Impacts of Alternative E when combined with impacts from ongoing and planned activities including other offshore wind activities would be the same as the Proposed Action.	*Alternative F:* The impacts associated with the Proposed Action would not change under Alternative F because the alternative only differs in offshore components, and the offshore components would not substantively contribute to impacts on land use and coastal infrastructure; the same **moderate adverse** and **minor beneficial** impacts are anticipated. *Cumulative Impacts of Alternative F:* Impacts of Alternative F when combined with impacts from ongoing and planned activities including other offshore wind activities would be the same as the Proposed Action.
3.6.6 Navigation and Vessel Traffic	*No Action Alternative:* Continuation of existing environmental trends and activities under the No Action Alternative would result in **moderate adverse** impacts on navigation and vessel traffic. *Cumulative Impacts of the No Action Alternative:* The No Action Alternative combined with all planned activities (including other offshore wind activities) would result in **moderate adverse** impacts primarily due to the presence of offshore wind structures, which would increase the risk of collisions, allisions, and accidental releases.	*Proposed Action:* The Proposed Action would result in **moderate adverse** impacts associated with changes in navigation routes, delays in ports, and degraded communication and radar signals. Some commercial fishing, recreational, and other vessels would avoid the Wind Farm Area altogether. *Cumulative Impacts of the Proposed Action:* Overall, impacts from ongoing and planned activities including other offshore wind activities would result in **moderate adverse** impacts.	*Alternative C:* Routing the Brayton Point offshore export cable onshore would slightly reduce the impacts on navigation and vessel traffic from fewer miles of offshore cable installation in the Sakonnet River, which would reduce the potential for collisions with slow-moving cable-laying vessels. Alternative C-2 would cross the Fall River Harbor Federal Navigation Channel three times, contributing to an increased potential for short- and long-term impacts. However, overall impact levels under Alternative C-1 and C-2 would be the same as the Proposed Action: **moderate adverse**. *Cumulative Impacts of Alternative C:* Impacts of Alternative C when combined with impacts from ongoing and planned activities including other offshore wind	*Alternative D:* Installation of six fewer WTGs under Alternative D would incrementally decrease impacts on vessel traffic compared to the Proposed Action by providing additional space closer to Nantucket Shoals and coastal areas, which are more frequently used by fishing and recreational vessels but would not change the overall impact magnitude of **moderate adverse**. *Cumulative Impacts of Alternative D:* Impacts of Alternative D when combined with impacts from ongoing and planned activities including other offshore wind activities would be the same as the Proposed Action.	*Alternative E:* Alternative E, which would involve installing a range of foundation types, may slightly change the duration of foundation construction and the number of vessels, but any differences would be small and last only for the duration of construction. The overall impact levels would be the same as for the Proposed Action**: moderate adverse**. *Cumulative Impacts of Alternative E:* Impacts of Alternative E when combined with impacts from ongoing and planned activities including other offshore wind activities would be the same as the Proposed Action.	*Alternative F:* Reducing the number of Falmouth offshore export cables from five to three would result in a slight reduction in cable-laying vessel construction activity but overall impacts would be similar to those of the Proposed Action and the same **moderate adverse** impact level would result. *Cumulative Impacts of Alternative F:* Impacts of Alternative F when combined with impacts from ongoing and planned activities including other offshore wind activities would be the same as the Proposed Action.

Resource	Alternative A No Action	Alternative B Proposed Action	Alternative C Fisheries Habitat Impact Minimization	Alternative D Nantucket Shoals	Alternative E Foundation Structures	Alternative F Muskeget Channel Cable Modification
			activities would be the same as the Proposed Action.			
3.6.7 Other Uses (Marine Minerals, Military Use, Aviation, Scientific Research, Surveys, and Search and Rescue)	*No Action Alternative:* Continuation of existing environmental trends and activities under the No Action Alternative would result in **negligible** impacts for marine mineral extraction, military and national security uses, aviation and air traffic, cables and pipelines, and radar systems, **moderate** for SAR operations; and **major** for scientific research and surveys. *Cumulative Impacts of the No Action Alternative:* The No Action Alternative combined with all planned activities (including other offshore wind activities) would result in **negligible** impacts for marine mineral extraction; **minor** impacts for aviation and air traffic, and cables and pipelines; **moderate** for radar systems due to WTG interference; **minor** for military and national security uses, except for USCG SAR operations, which would have **moderate** adverse impacts; and **major** for scientific research and surveys.	*Proposed Action:* The Proposed Action would result in **negligible** impacts for marine mineral extraction and cables and pipelines; **minor** impacts for aviation and air traffic, radar systems, and most military and national security uses; **moderate** for SAR operations; and **major** impacts for scientific research and surveys. *Cumulative Impacts of the Proposed Action:* The Proposed Action when combined with the impacts from ongoing and planned activities including other offshore wind activities would be **negligible** for marine mineral extraction and cables and pipelines; **minor** for aviation and air traffic, radar systems, and most military and national security uses; **moderate** for SAR operations;, and **major** for NOAA's scientific research and surveys.	*Alternative C:* Alternative C rerouting of export cables onshore would reduce localized impacts on cables and pipelines; however, overall impacts would remain the same as described under the Proposed Action: **negligible** impacts for marine mineral extraction and cables and pipelines; **minor** impacts for aviation and air traffic, radar systems, and most military and national security uses; **moderate** for SAR operations; and **major** impacts for scientific research and surveys. *Cumulative Impacts of Alternative C:* Impacts of Alternative C when combined with impacts from ongoing and planned activities including other offshore wind activities would be the same as the Proposed Action.	*Alternative D:* Alternative D could decrease impacts on radar systems on Nantucket Island by removing six WTGs closest to shore. While this would reduce line-of-sight impacts of the three radar systems on Nantucket Island, localized, long-term impacts on the other radar systems in the geographic analysis area are still anticipated, and overall impacts would remain the same as described under the Proposed Action: **negligible** impacts for marine mineral extraction and cables and pipelines; **minor** impacts for aviation and air traffic, radar systems, and most military and national security uses ; **moderate** for SAR operations; and **major** impacts for scientific research and surveys. *Cumulative Impacts of Alternative D:* Impacts of Alternative D when combined with impacts from ongoing and planned activities including other offshore wind activities would be the same as the Proposed Action.	*Alternative E:* The suction bucket and GBS foundations proposed under Alternatives E-2 and E-3 would have a larger seabed footprint and would exclude more area from future submarine and cable pipeline placement as compared to the piled foundations proposed under Alternative E-1. However, because future cables and pipelines would have the option to route around the foundations, impacts on cables and pipelines would remain the same as described under the Proposed Action: **negligible** impacts for marine mineral extraction and cables and pipelines; **minor** impacts for aviation and air traffic, radar systems, most military and national security uses ; **moderate** for SAR operations; and **major** impacts for scientific research and surveys. *Cumulative Impacts of Alternative E:* Impacts of Alternative E when combined with impacts from ongoing and planned activities including other offshore wind activities would be the same as the Proposed Action.	*Alternative F:* Reducing the number of Falmouth offshore export cables to three would not meaningfully change the impacts on cables and pipelines because crossings would still be required at this, and other locations within the geographic analysis area. Impacts would remain the same as described under the Proposed Action: **negligible** impacts for marine mineral extraction and cables and pipelines; **minor** impacts for aviation and air traffic, radar systems, and most military and national security uses ; **moderate** for SAR operations; and **major** impacts for scientific research and surveys. *Cumulative Impacts of Alternative F:* Impacts of Alternative F when combined with impacts from ongoing and planned activities including other offshore wind activities would be the same as the Proposed Action.

Resource	Alternative A No Action	Alternative B Proposed Action	Alternative C Fisheries Habitat Impact Minimization	Alternative D Nantucket Shoals	Alternative E Foundation Structures	Alternative F Muskeget Channel Cable Modification
3.6.8 Recreation and Tourism	*No Action Alternative:* Continuation of existing environmental trends and activities under the No Action Alternative would result in **minor** impacts on recreation and tourism. *Cumulative Impacts of the No Action Alternative:* The No Action Alternative combined with all planned activities (including other offshore wind activities) would result in **moderate adverse** impacts from increased noise, vessel traffic, and offshore structures. **Minor beneficial** impacts would result from offshore structures that provide opportunities for sightseeing and fishing.	*Proposed Action:* The Proposed Action would result in **minor** impacts associated with noise, anchored vessels, hindrances on recreational vessel navigation, and visual impacts from the presence of offshore wind structures. **Minor beneficial** impacts would result from the reef effect and sightseeing attraction of offshore wind energy structures. *Cumulative Impacts of the Proposed Action:* Overall, impacts from ongoing and planned activities including other offshore wind activities would result in **moderate adverse** impacts and **minor beneficial** impacts.	*Alternative C:* Alternative C would increase the length of the Brayton Point onshore cable route, resulting in increased impacts from traffic, noise, and temporary emissions that degrade the recreational experience, with Alternative C-2 resulting in the most impacts. The overall impact magnitudes would be the same as the Proposed Action: **minor** and **minor beneficial** impacts. *Cumulative Impacts of Alternative C:* Impacts of Alternative C when combined with impacts from ongoing and planned activities including other offshore wind activities would be the same as the Proposed Action.	*Alternative D:* Installation of six fewer WTGs under Alternative D would result in a negligible reduction of impacts on visual resources. Gear entanglements and loss, as well as allisions, and recreational fishing may slightly decrease due to fewer structures but the overall impact magnitude is the same as the Proposed Action: **minor** and **minor beneficial** impacts. *Cumulative Impacts of Alternative D:* Impacts of Alternative D when combined with impacts from ongoing and planned activities including other offshore wind activities would be the same as the Proposed Action.	*Alternative E:* Alternative E, which would involve installing a range of foundation types, would not have measurable impacts on recreation and tourism that are materially different from the impacts of the Proposed Action. Impacts would be **minor** and **minor beneficial**. *Cumulative Impacts of Alternative E:* Impacts of Alternative E when combined with impacts from ongoing and planned activities including other offshore wind activities would be the same as the Proposed Action.	*Alternative F:* Alternative F, which would reduce the maximum number of Falmouth offshore export cables from five to three, would not have measurable impacts on recreation and tourism that are materially different from the impacts of the Proposed Action. Impacts would be **minor** and **minor beneficial**. *Cumulative Impacts of Alternative F:* Impacts of Alternative F when combined with impacts from ongoing and planned activities including other offshore wind activities would be the same as the Proposed Action.
3.6.9 Scenic and Visual Resources	*No Action Alternative:* Continuation of existing environmental trends and activities under the No Action Alternative would result in **major adverse** impacts on recreation and tourism. *Cumulative Impacts of the No Action Alternative:* The No Action Alternative combined with all planned activities (including other offshore wind activities) would result in **major adverse** impacts on seascape and landscape resources and **major** impacts on open ocean due to addition of new structures, nighttime lighting, onshore construction, and increased vessel traffic.	*Proposed Action:* Effects of offshore Project elements on high- and moderate-sensitivity seascape character units, open ocean character units, and landscape character units would be **major adverse**. Onshore facilities would result in **minor adverse** impacts on scenic and visual resources. *Cumulative Impacts of the Proposed Action:* Overall, impacts from ongoing and planned activities including other offshore wind activities would result in **major adverse** impacts.	*Alternative C:* Installation of longer onshore export cables and infrastructure would result in slightly greater localized, temporary visual impacts near construction sites than the Proposed Action. However, the overall impact on visual and scenic resources would be approximately the same as the Proposed Action: **major adverse**. *Cumulative Impacts of Alternative C:* Impacts of Alternative C when combined with impacts from ongoing and planned activities including other offshore wind activities would be **major adverse.**	*Alternative D:* Eliminating six WTGs may result in a slight reduction in visual impacts, but the number of structures removed would be small and it is unlikely these changes would be noticeable to the casual viewer. Therefore, impacts from Alternative D are anticipated to be approximately the same as the Proposed Action: **major adverse**. *Cumulative Impacts of Alternative D:* Impacts of Alternative D when combined with impacts from ongoing and planned activities including other offshore wind activities would be **major adverse**.	*Alternative E:* Installation of different foundation types under Alternatives E-1, E-2, and E-3 would not change the most prominent visible aspects of WTGs and OSPs and, therefore, would have no meaningful difference in impacts on seascape, open ocean, and landscape character units and viewer experience compared to the Proposed Action and would result in **major adverse** impacts. *Cumulative Impacts of Alternative E:* Impacts of Alternative E when combined with impacts from ongoing and planned activities including other offshore wind activities would be **major adverse**.	*Alternative F:* The reduction in the number of cables installed along the Falmouth offshore export cable route under Alternative F may reduce the number of vessel trips required to install the cables, but this slight reduction in vessel activity would have no meaningful difference in impacts compared to the Proposed Action and would result in **major adverse** impacts. *Cumulative Impacts of Alternative F:* Impacts of Alternative F when combined with impacts from ongoing and planned activities including other offshore wind activities would be **major adverse**.

3.3 ENVIRONMENTALLY PREFERABLE ALTERNATIVES

BOEM is required by CEQ regulations to identify in the ROD the *environmentally preferable alternative(s)* (40 CFR § 1505.2). Upon consideration and weighing of long-term environmental impacts against short-term impacts in evaluating what is the best protection of these resources, 43 CFR § 46.30), DOI's responsible official, who is approving this ROD, has determined that the environmentally preferable alternatives are the No Action Alternative (Alternative A) and Alternative D (Nantucket Shoals).

Adverse environmental impacts in the Project area would generally be less under the No Action Alternative because construction and installation, O&M, and decommissioning activities and disturbances related to the proposed Project would not occur and, hence, impacts on physical, biological, or cultural resources from the Proposed Action would be avoided. Nonetheless, the No Action Alternative would likely result in minor to moderate, long-term, adverse impacts on regional air quality because other energy generation facilities would be needed to meet future power demands. These facilities might be fueled with natural gas, oil, or coal, which would emit more pollutants than wind turbines and would have more adverse impacts on air quality and contribute greenhouse gasses that cause climate change. Adverse impacts on air quality also tend to disproportionately impact environmental justice communities, which often include low-income and minority populations. These air quality impacts might be compounded by other impacts because selection of the No Action Alternative could negatively impact future investment in U.S. offshore wind energy facilities, which in turn could result in the loss of beneficial cumulative impacts, such as increased employment, improvements in air quality, and reductions in greenhouse gas emissions. As noted in the final EIS, Section 3.6.3, *Demographics, Employment, and Economics*, public and private investors have committed substantial amounts of new funding to offshore wind development, including commitments to develop manufacturing facilities, and that advancement of the Project is critical to continue to attract investment in the United States offshore wind market.

Alternative D was developed through the scoping process to address potential impacts on protected species in the northeastern portion of the Lease Area. Scoping comments hypothesized that the presence of installed WTG foundations in the northeastern portion of the Lease Area may alter physical hydrodynamic processes along the western edge of Nantucket Shoals, an area that provides foraging habitat for many species. Modeling of the full build out of the entire southern New England lease areas indicates that minor, local changes to the physical hydrodynamic features may occur on the western side of Nantucket Shoals adjacent to the BOEM lease areas (Johnson et al. 2021). In addition, the National Academies of Sciences, Engineering, and Medicine (NASEM) recently evaluated the potential of offshore wind farms to alter the hydrodynamic processes that impact prey abundance and availability in the Nantucket Shoals region (NASEM 2024). The NASEM study included the following relevant conclusions: (1) "The paucity of observations and uncertainty of the modeled hydrodynamic effects of wind energy development at the turbine, wind farm, and regional scales make potential ecological impacts of turbines difficult to predict and/or detect." (2) "The hydrodynamic impacts from

offshore wind development in the Nantucket Shoals region on zooplankton will be difficult to isolate from the much larger magnitude of variability introduced by natural and other anthropogenic sources (including climate change) in this dynamic and evolving oceanographic and ecological system." While the impacts of installed foundations on species and their habitats are uncertain and their significance is unknown based on available data, the removal of turbines may lessen the impacts on wildlife (marine mammals, birds, fish) by providing more area of open ocean nearest to Nantucket Shoals for foraging habitat and would reduce impacts associated with noise, EMF, and vessel traffic in comparison to the Proposed Action. Removal of turbines would also provide more structure-free areas for commercial fishing.

Offshore wind has been identified as a key factor for Atlantic states to reach their greenhouse gas emission reduction goals. It is presently an irreplaceable component in state, federal, and international strategies to reduce and reverse global climate change over the coming decades. In comparison to the No Action Alternative, Alternative D would allow for the generation of electricity from sources that do not adversely affect the air quality in the region. Also, in contrast to the No Action Alternative, selection of Alternative D could encourage investment in U.S. offshore wind energy facilities, which could in turn result in beneficial cumulative impacts such as increased employment, improvements in air quality, and reductions in greenhouse gas emissions.

4 MITIGATION, MONITORING, AND REPORTING

Appendix G of the final EIS[15] identifies measures to avoid, minimize, and mitigate adverse environmental impacts that could result from the proposed activities and identifies the anticipated enforcing agency. BOEM is adopting all the measures identified in Tables G-2[16] and G-3 of Appendix G of the final EIS, except for the 13 Essential Fish Habitat (EFH) Conservation Recommendations (CRs) that are under USACE's jurisdiction (see final EIS Table G-2, CRs 33-45), the 5 EFH CRs that are under the EPA's jurisdiction (see final EIS Table G-2, 9-13 CRs), and those determined by BOEM to be infeasible (see final EIS Table G-2, CRs 9, 11, and 14). The measures that are identified in Tables G-2 and G-3 are outside of BOEM's or BSEE's authority to enforce.

The mitigation, monitoring, and reporting measures that BOEM intends to include as conditions of approval are identified in this ROD in Appendix A. Consultation under Section 106 of the National Historic Preservation Act (NHPA) was concluded after publication of the final EIS, and stipulations included in the executed Memorandum of Agreement (MOA) for Section 106 are

[15] Appendix G, Table G-1 separately identifies measures proposed by the Lessee as a part of its COP. The Lessee is required, as a condition of BOEM's approval, to conduct activities as proposed in its approved COP, which includes all the applicant-proposed mitigation measures identified in Appendix G, Table G-1.

[16] Appendix G, Table G-2 describes the draft reasonable and prudent measures (RPMs) provided by NMFS to BOEM, USACE, BSEE and EPA on October 24, 2024, for review as part of the ESA Section 7 consultation process for the SouthCoast Wind project because ESA Section 7 consultation was still ongoing at the time preparation of the FEIS was completed. As noted in the FEIS, the Lessee must adhere to the Biological Opinion, including the finalized RPMs and implementing terms and conditions, issued by NMFS for the SouthCoast Wind project.

included in Appendix A. Appendix A also clarifies the language of certain measures that were identified in the final EIS to ensure that they are enforceable, or to reflect updates to measures being considered by NMFS for the final ITR and associated LOA.

5 FINAL AGENCY DECISIONS

5.1 THE DEPARTMENT OF THE INTERIOR DECISION

After carefully considering the final EIS alternatives, including comments from the public on the draft EIS, DOI has decided to approve, with conditions, the COP for SouthCoast Wind by adopting the Preferred Alternative (Alternative D, *Nantucket Shoals*), which is also one of the environmentally preferable alternatives. By selecting the Preferred Alternative (hereinafter the "selected alternative"), DOI will allow for the construction, operation, maintenance, and eventual decommissioning of the offshore wind energy facility consisting of up to 141 WTGs and up to 5 OSPs in a total of up to 143 positions on the OCS offshore Massachusetts within Lease Area OCS-A 0521 within the range of design parameters outlined in the COP, subject to applicable mitigation measures. Under the selected alternative, six WTG positions (AZ-47, BA-47, BB-47, BC-47, BF-48, and BF-49) would be eliminated in the northeastern portion of the Lease Area to reduce potential impacts on foraging habitat and potential displacement of wildlife from this habitat adjacent to Nantucket Shoals.

Under Alternative B, the construction, operations and maintenance, and eventual decommissioning of the Project on the OCS offshore of Massachusetts would occur within the range of design parameters outlined in the SouthCoast Wind COP (SouthCoast Wind 2024), subject to applicable mitigation measures. The Project would have a capacity of up to 2,400 MW and would consist of up to 147 WTGs in the Lease Area and up to 5 OSPs at any of up to 149 positions and associated export cables. SouthCoast Wind would space WTGs in a 1-by-1-nmi offset grid pattern (east–west-by-north–south-gridded layout). The Project would include one preferred ECC, making landfall and interconnecting to the ISO-NE power grid at Brayton Point, in Somerset, Massachusetts. The ECC to Brayton Point would have an intermediate landfall on Aquidneck Island, Rhode Island. The Project could also include one variant ECC which, if used, would make landfall and interconnect to the ISO-NE grid in the town of Falmouth, Massachusetts. Alternative B would have had more permanent seafloor alteration compared to the selected alternative and would result in more total impacts on resources of concern than the selected alternative. Alternative B would allow for additional energy production compared to the other action alternatives. However, the action alternatives still allowed SouthCoast Wind to meet Project 1's planned 1,287 MW capacity, and sufficient energy production for Project 2. Therefore, BOEM has not selected the Proposed Action as the selected alternative.

Selection of Alternative C would have avoided placing the offshore export cable in the Sakonnet River to avoid impacts on fisheries habitats as identified by NMFS. Alternative C includes two possible onshore export cable routes. The Sakonnet River supports EFH for 16 fish species and has Habitat Areas of Particular Concern (HAPCs) for summer flounder and Atlantic cod. To

address this concern, BOEM developed onshore cable route options that would avoid placing the Offshore Export Cable and corresponding cable protection structures in the Sakonnet River. Offshore Project components within the Lease Area (WTGs, OSPs, inter-array cables) would be the same as the Proposed Action (Alternative B). The precise selection of onshore and nearshore routing for any action alternative is subject to review by state and local permitting authorities and is under the USACE authority and would be authorized pursuant to USACE's adoption of the final EIS and associated consultations, along with USACE's final identification of the Least Environmentally Damaging Practicable Alternative (LEPDA) in the ROD. The analysis of wetland impacts under Alternative C-1 and Alternative C-2 in the final EIS relies on the results of desktop studies using best available information and, therefore, reflects some uncertainty. However, based on BOEM's analysis, Alternative C-1 could result in slightly greater wetland impacts than the Proposed Action, Alternatives D, E, and F, while Alternative C-2 could result in slightly greater impacts on wetlands compared to the Proposed Action, Alternatives D, E, and F due to the larger area of land disturbance and the potential of an additional 1-acre of wetland impacts. The landfall site for Alternative C-1 is designated by the Rhode Island Coastal Resources Management Council (CRMC) as a Type 1 Water Use, Conservation Area, due to its proximity to the Sachuest Point National Wildlife Refuge Area and being a location with scenic natural habitat, and/or exposure to wave action (CRMC 2022). The Proposed Action's proposed intermediate landfall of the Brayton Point ECC in Portsmouth is designated as a Type 2 – Low Intensity Use. In addition, Alternative C-2 poses technical and feasibility challenges for installing the cables, which could make it difficult for SouthCoast Wind to meet its project goals. After the cables enter Mount Hope Bay, they would cross the Fall River Harbor Federal Navigation Channel in three locations. Because the cables cross a federal navigation channel, they would require Section 408 permission from the USACE pursuant to Section 14 of the Rivers and Harbors Act (33 U.S.C. 408).[17] as part of the selected alternative.

Selection of Alternative E would have resulted in narrowing of the project design envelope (PDE) to the use of piled foundations (Alternative E-1), suction bucket foundations (Alternative E-2), and/or gravity-based foundations (Alternative E-3). Selection of Alternatives E1 through E3 would narrow the PDE for the WTG foundations and could create financial feasibility risks for the Project because the current supply chain for WTG foundations and installation vessels is highly constrained. In particular, suction bucket and gravity foundations for WTG foundations are not anticipated to be commercially viable in the anticipated construction time frame due to lack of fabrication capability and capacity in the region. Therefore, BOEM has not selected Alternative F as part of the selected alternative.

Selection of Alternative F would have modified the Falmouth offshore export cable route to use ±525kV HVDC cables connected to an HVDC converter station, instead of HVAC cables connected to offshore substations, and would only use up to 3 offshore export cables, instead of up to 5 offshore export cables. Alternative F would require the installation of an additional HVDC converter OSP, resulting in a total of two HVDC converter OSPs (one for Project 1 to Brayton Point and one for Project 2 to Falmouth). It is important to note that while SouthCoast

[17] Selection or non-selection of this alternative falls within USACE jurisdiction.

has identified up to five OSPs in its PDE, SouthCoast has told BOEM that its current preference and the most likely scenario are two HVDC converter OSPs. Therefore, Alternative F would likely result in the same number of HVDC converter OSPs as the Proposed Action (if Falmouth is selected as the POI for Project 2). The addition of a second HVDC converter OSP would result in increased potential for entrainment/impingement impacts and thermal water discharge. The effects of a second HVDC converter OSP would be the same as the HVDC converter OSP for Project 1, which is subject to a National Pollutant Discharge Elimination System (NPDES) permit application that is described in the EIS. Therefore, BOEM has not selected Alternative F as part of the selected alternative.

Under Alternative A (the No Action Alternative), DOI would not approve the SouthCoast Wind Project. In addition, no other permits or authorizations for this proposed Project would be issued. Adverse environmental impacts across resources would generally be less under the No Action Alternative as no construction, operation, maintenance, or decommissioning activities would occur on the OCS. As a result, impacts on physical, biological, social, or cultural resources from the selected alternative would be avoided. However, the No Action Alternative would still be expected to result in minor to moderate, long-term, adverse impacts on regional air quality because other energy generation facilities would be needed to meet future power demands. These facilities might be fueled with natural gas, oil, or coal, which would emit more pollutants than wind turbines and would have more adverse impacts on air quality and contribute greenhouse gases that cause climate change. If the proposed Project is not developed, 117,236,160 metric tons of greenhouse gas emissions as carbon dioxide equivalent (CO_2e) emissions would not be avoided and up to 2.4 GW of offshore wind energy would not be generated. The No Action Alternative was not selected in this ROD because it would not allow for the development of DOI-managed resources and would not meet the purpose and need.

In summary, DOI considered the action alternatives that would result in fewer environmental impacts and use conflicts, while meeting the purpose and need for the action. The final EIS found that the selected alternative would result in fewer impacts than other action alternatives considered and is consistent with the purpose and need. Accordingly, DOI has selected the selected alternative in this ROD.

DOI coordinated with NMFS and USACE and weighed all concerns in making decisions regarding this Project and has determined that all practicable means within its authority have been adopted to avoid or minimize environmental and socioeconomic harm associated with the selected alternative and the approval of the COP. Appendix A of this ROD identifies the mitigation, monitoring, and reporting requirements that will be adopted as terms and conditions of COP approval. The mitigation and monitoring measures identified in Appendix A are representative of those included in Appendix G of the final EIS. Concurrent with the NEPA process, BOEM conducted a thorough National Historic Preservation Act Section 106 review of the Project with federally recognized Tribal Nations, the ACHP, and consulting parties and, through the Section 106 review, identified and assessed potential effects to historic properties, and identified measures to resolve adverse effects. Draft measures to resolve adverse effects were described and analyzed in the draft EIS. After the final EIS was made available to the

public, BOEM addressed consulting party comments on the MOA and distributed the MOA for signature by the consulting parties. The Section 106 review concluded with the execution and implementation of the MOA, which was signed by BOEM; the Massachusetts and Rhode Island State Historic Preservation Offices; ACHP; and the Lessee on December 18, 2024. The following concurring parties also signed the MOA: the Town of Swansea; Oak Grove Cemetery; USACE; and BSEE. The MOA includes measures that will resolve the selected alternative's adverse effects to historic properties including avoidance, minimization, and mitigation measures.

Moreover, BOEM consulted with federally recognized Tribal Nations regarding renewable energy leasing and development on the OCS. The following federally recognized Tribal Nations were invited to consult under Section 106 of the National Historic Preservation Act (NHPA): Delaware Tribe of Indians, Mashantucket (Western) Pequot Tribal Nation, Mashpee Wampanoag Tribe, Mohegan Tribe of Connecticut, The Delaware Nation, The Narragansett Indian Tribe, The Shinnecock Indian Nation, and Wampanoag Tribe of Gay Head (Aquinnah). Five Tribal Nations responded that they would like to consult on the Project: Mashantucket (Western) Pequot Tribal Nation, Mashpee Wampanoag Tribe, The Narragansett Indian Tribe, The Shinnecock Indian Nation, and Wampanoag Tribe of Gay Head (Aquinnah). BOEM also invited the same Tribal Nations to participate in preparation of the EIS as a cooperating Tribal government. The Delaware Nation declined the invitation to be a consulting party. The Delaware Tribe of Indians and Mohegan Tribe of Connecticut did not respond to BOEM's initiation of consultation; however, BOEM has included these Tribal Nations in all consulting party communications. BOEM held government-to-government and Tribal consultation meetings on November 19, 2021; May 1, 2022; September 1, 2022; January 17, 2024; February 7, 2024; October 25, 2024; and November 1, 2024.

As set forth in the final EIS, all alternatives, including the selected alternative, except where noted, are anticipated to have major adverse impacts to the following resource areas:

Marine Mammals, North Atlantic Right Whale (NARW): Under all alternatives, including the No Action Alternative, when considering ongoing and planned activities, major adverse impacts to NARWs could occur due to the risk of vessel strikes and fishing gear entanglement posed by those activities. The direct and indirect impacts of the Project alone are not expected to include entanglements or vessel strikes. Mitigation measures such as vessels maintaining a safe distance from marine mammals and reduced vessel speeds are designed to avoid vessel interactions with marine mammals. The direct and indirect impacts of all action alternatives to NARWs would be moderate due to implementation of several mitigation measures, e.g., clearance zones for pile driving, munitions and explosives of concern (MEC)/unexploded ordnance (UXO) detonations, and HRG surveys, and shutdown zones for pile driving and HRG surveys, use of sound attenuation measures during impact pile driving and MEC/UXO detonations, numerous vessel strike avoidance measures, and use of Protected Species Observers (PSO) and Passive Acoustic Monitoring (PAM).

Commercial Fisheries and For-Hire Recreational Fishing: It is estimated that the majority of vessels that fish in the Lease Area are not overly reliant on the Lease Area, with the majority of fishers deriving less than 5 percent of their revenue from the Lease Area. Therefore, BOEM expects that the impacts resulting from the Proposed Action would range from minor to major adverse, depending on the fishery and fishing operation. In addition, the impacts of the Proposed Action could include long-term, minor beneficial impacts for some for-hire recreational fishing operations due to the artificial reef effect (see final EIS Section 3.6.1). BOEM is mitigating potential impacts by adopting measures to reduce potential gear conflicts with cable protection measures and changes in seafloor obstructions (e.g., cable protection plan, boulder relocation plan). Lastly, BOEM has adopted a requirement for SouthCoast Wind to establish and implement a direct gear loss and fisheries income compensation fund for commercial and for-hire recreational fishermen impacted by the Project. BOEM anticipates including conditions of COP approval (see ROD Appendix A, Sections 5.3 and 6.2) to address this issue.

Cultural Resources: Mitigation was developed with Tribal Nations and consulting parties through the NHPA Section 106 consultation process to resolve adverse effects on historic properties pursuant to 36 CFR § 800.6. Avoidance, minimization, and mitigation measures are stipulated in the MOA. Mitigation that would reduce major impacts on onshore and offshore cultural resources include SouthCoast Wind's compliance with stipulations outlined in the MOA, such as the implementation of protective buffers to avoid marine archaeological resources per Stipulation I; completion of construction monitoring to avoid terrestrial archaeological resources per Stipulation I; implementation of visual minimization measures for offshore and onshore Project components per Stipulation II; implementation of measures in historic property treatment plans (HPTPs) for resolving adverse effects on ancient submerged landform features (ASLFs), terrestrial archaeological resources, and aboveground historic properties per Stipulation III; development and implementation of a monitoring plan for one marine archaeological resource per Stipulation IV; and implementation of actions that are consistent with the Post Review Discovery Plans for marine and terrestrial archaeology per Stipulation XII.

Environmental Justice: Major adverse effects are anticipated to occur, primarily due to damage to ASLFs resulting from offshore construction that would result in major disproportionate impacts on Native American Tribal Nations whose ancestors lived on submerged lands that are currently within state or federal waters. Mitigation was developed in consultation with Tribal Nations, and would include a requirement for SouthCoast Wind to continue and expand upon the Protected Species Observer training program for Tribal members. The proposed mitigation will provide a benefit to the public and Native American Tribal Nations through monitoring and promotion of the health of the ecosystem of Nantucket Sound through Tribal knowledge.

Other Uses, Scientific Research and Surveys: As set forth in the final EIS, the selected alternative is anticipated to have major adverse effects to NMFS Northeast Fisheries Science Center scientific surveys (hereinafter "NMFS surveys"). NMFS and BOEM have developed the *NOAA Fisheries and BOEM Federal Survey Mitigation Implementation Strategy - Northeast US*

Region (Hare et al. 2022)[18] to address the adverse impacts. BOEM and NMFS are of the view that the solution is a collaborative effort between both agencies and the offshore wind industry to establish project-specific survey programs that follow specific guidelines, thereby allowing the information to be combined regionally into a programmatic approach (see final EIS section 3.17). There are 14 NMFS scientific surveys that overlap with wind energy development in the northeast region. Ten of these surveys overlap with the Project. BOEM anticipates including a condition of COP approval (see ROD Appendix A, Section 6.3) to address this issue. Consistent with NMFS and BOEM Survey Mitigation strategy actions 1.3.1, 1.3.2, 2.1.1, and 2.1.2 in the *NOAA Fisheries and BOEM Federal Survey Mitigation Implementation Strategy - Northeast US Region*, the Lessee must submit to BOEM a survey mitigation agreement between NMFS and the Lessee. The survey mitigation agreement must describe how the Lessee will mitigate the Project's impacts on the ten NMFS surveys. The Lessee must conduct activities in accordance with such agreement. If the Lessee and NMFS fail to reach a survey mitigation agreement, then the Lessee must submit a survey mitigation plan to BOEM and NMFS.

Scenic and Visual Resources: Due to distance, extensive field of views, strong contrasts, large scale of change, and level of prominence, as well as heretofore undeveloped ocean views, major impacts are anticipated on the open ocean character unit and viewer boating and cruise ship experiences. The daytime presence of offshore WTGs and OSPs, as well as their nighttime lighting, would change perception of ocean scenes from natural and undeveloped to a developed wind energy environment characterized by WTGs and OSPs. In clear weather, the WTGs and OSPs would be an unavoidable presence in views from the coastline, with minor to moderate effects on seascape character and landscape character, and major effects on open ocean character. In coordination with BOEM, the Lessee must prepare and implement a scenic and visual resource monitoring plan as a condition of COP approval (see ROD Appendix A, Section 7.2.1) that monitors and compares the visual effects of the wind farm during construction and O&M (daytime and nighttime) to the findings in the COP Visual Impact Assessment and verifies the accuracy of the visual simulations (photo and video). The monitoring plan must include monitoring and documenting the meteorological influences on actual WTG visibility over a duration of time from selected onshore key observation points, as determined by BOEM and the Lessee. In addition, the Lessee must include monitoring of the operation of Aircraft Detection Lighting System (ADLS) in the monitoring plan. The Lessee must monitor the ADLS operations, documenting when (dates and time) the aviation warning lights are in the on position and the duration of each event. Details for monitoring and reporting procedures must be included in the plan.

Additional anticipated engineering and technical conditions of COP approval are included in Appendix A of this ROD.[19] SouthCoast Wind will be required to certify annually that it complies with the terms and conditions of its approved COP (30 CFR § 285.633(b)). SouthCoast Wind

[18] *See* Hare, J.A., Blythe, B.J., Ford, K.H., Godfrey-McKee, S., Hooker, B.R., Jensen, B.M., Lipsky, A., Nachman, C., Pfeiffer, L., Rasser, M. and Renshaw, K., 2022. NOAA Fisheries and BOEM Federal Survey Mitigation Implementation Strategy - Northeast US Region. NOAA Technical Memorandum 292. Woods Hole, MA. 33 pp.
[19] All mitigation measures and terms and conditions adopted by BOEM as part of this ROD will be included in the COP authorization letter to be issued to SouthCoast Wind.

must also comply with all other applicable requirements of 30 CFR Parts 285 and 585, including, but not limited to, the submission of a Facility Design Report and a Fabrication and Installation Report, before beginning construction activities.

Today's decision balances the orderly development of OCS renewable energy with the prevention of interference with other uses of the OCS and the protection of the human, marine, and coastal environments. A decision that balances these goals where they conflict and does not hold one as controlling over all others is consistent with the duties required under subsection 8(p)(4) of OCSLA, which requires the Secretary to ensure that approved activity is carried out in a manner that provides for Congress's 12 enumerated goals.

My approval of this decision constitutes the final decision of the Department of the Interior. The action taken herein is pursuant to an existing delegation of authority.

STEVEN FELDGUS

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Steven H. Feldgus
Principal Deputy Assistant Secretary
Land and Minerals Management

5.2 NATIONAL MARINE FISHERIES SERVICE DECISION

This section documents NMFS' planned determination to promulgate ITR and issue an incidental take authorization in the form of an LOA to SouthCoast Wind pursuant to its authorities under the MMPA, if specific findings are made. It also references NMFS' decision to adopt the BOEM final EIS to support NMFS' decision to promulgate the ITR and issue the associated LOA if specific findings are made. NMFS prepared and signed a separate memorandum independently evaluating the sufficiency and adequacy of the BOEM final EIS. That memorandum provides NMFS' rationale to adopt the final EIS to satisfy its independent NEPA obligations related to the potential ITR and LOA. In that memorandum, NMFS concluded: (i) the action analyzed in the final EIS covers NMFS' proposed decision to issue an LOA to SouthCoast Wind and meets all NEPA requirements under 40 CFR § 1506.3 (adopting an EIS); (ii) the analysis includes the appropriate scope and level of environmental impact evaluation for NMFS' proposed action and alternatives; and (iii) NMFS' comments and suggestions related to primary environmental effects of concern from the proposed action (i.e., effects to marine mammals), submitted in its role as a cooperating agency, have been satisfied.

On March 18, 2022, NMFS received an application from SouthCoast Wind pursuant to MMPA Section 101(a)(5)(A) for an authorization to take small numbers of marine mammals, by harassment, incidental to the construction of an offshore wind energy project on the OCS offshore Massachusetts in Lease Area OCS-A 0521, for a period of five years. NMFS reviews applications and, if specific findings are made, promulgates regulations and issues incidental take authorizations pursuant to the MMPA. Incidental take authorizations may be issued as either: (1) ITR and associated LOAs under Section 101(a)(5)(A) of the MMPA or (2) Incidental Harassment Authorizations under Section 101(a)(5)(D) of the MMPA. In addition, 40 CFR §§ 1500-1508 and NOAA policy and procedures require all proposals for major federal actions to be reviewed with respect to their effects on the human environment. Issuance of an incidental take authorization to SouthCoast Wind is a major federal action, triggering NMFS' independent NEPA compliance obligation. When serving as a cooperating agency, NMFS may satisfy its independent NEPA obligations by either preparing a separate NEPA analysis for its issuance of an incidental take authorization or, if appropriate, by adopting the NEPA analysis prepared by the lead agency. On October 17, 2022, after NMFS determined SouthCoast Wind's application was adequate and complete, it had a corresponding duty to determine whether and how to authorize take of marine mammals incidental to the activities described in the application in accordance with standards and determinations set forth in the MMPA and its implementing regulations. Thus, the purpose of NMFS' proposed action—which was based on SouthCoast Wind's request for authorization to take marine mammals incidental to specified activities associated with the Project (i.e., pile driving (impact and vibratory), unexploded ordnance or munitions and explosives of concern detonation, and site assessment surveys using high-resolution geophysical (HRG) equipment)—is to evaluate SouthCoast Wind's request under requirements of the MMPA (16 U.S.C. § 1371(a)(5)(A)) and its implementing regulations (50 CFR Part 216) administered by NMFS and to determine whether the findings necessary to promulgate the ITR and issue the LOA can be made, based on the best available information.

NMFS must render a decision regarding the request for authorization under its MMPA responsibilities (16 U.S.C. § 1371(a)(5)(A)) and its implementing regulations. In addition to its opportunity to comment on the draft EIS, the public was also involved in the MMPA decision-making process through its opportunity to comment on NMFS' Notice of Receipt of SouthCoast's incidental take request, which was published in the Federal Register (87 Fed. Reg. 62,793 [October 17, 2022]), and NMFS' proposed rulemaking that was published in the Federal Register (89 Fed. Reg. 53,708 [June 27, 2024]). NMFS' final action considers those comments, as well as the corresponding formal consultation process under Section 7 of the ESA for promulgation of the final ITR and issuance of the associated LOA.

5.2.1 NMFS Decision (40 CFR § 1505.2(a)(1))

Pending completion of all statutory processes, NMFS intends to promulgate an ITR and issue an LOA to SouthCoast Wind, if specific findings are made, which would authorize take of marine mammals incidental to specified construction activities associated with the proposed Project (i.e., pile driving (impact and vibratory), unexploded ordnance or munitions and explosives of concern detonation, and site assessment surveys using high-resolution geophysical (HRG) equipment) and wind turbine generator (WTG) and offshore substation platform (OSP) foundation presence for five years. NMFS' final decision to promulgate the ITR and issue the requested LOA will be documented in separate Decision Memoranda prepared in accordance with internal NMFS' policy and procedures. The LOA would authorize the incidental take of marine mammals while prescribing the amount and means of incidental take, as well as mitigation, monitoring, and reporting requirements, including those mandated by the BiOp that completes the formal Section 7 consultation process under the ESA. A final rule promulgating the regulations would describe NMFS' final determinations. Separately, NMFS would publish a notice in the Federal Register announcing an LOA has been issued, within 30 days of the action, in accordance with the MMPA.

5.2.2 Alternatives NMFS Considered (40 CFR § 1505.2(a)(2))

NMFS is required to consider a reasonable range of alternatives to a proposed action consistent with NEPA and 40 CFR §§ 1502.10(a)(5) and 1502.14. NMFS considered two alternatives, the No Action Alternative in which NMFS would deny SouthCoast Wind's request for an authorization and an action alternative in which it would issue the requested LOA to SouthCoast Wind with mitigation, monitoring, and reporting requirements.

Consistent with BOEM's No Action Alternative, NMFS, under its No Action Alternative, would not issue the requested authorization to SouthCoast Wind, in which case, NMFS assumes SouthCoast Wind would not proceed with the proposed project as described in the application since it would be likely to cause harassment of marine mammals that is prohibited under the MMPA without an authorization. Consistent with 40 CFR § 1505.2(a)(2) to identify an environmentally preferable alternative, NMFS considers the No Action Alternative to be the environmentally preferable alternative as the incidental take of marine mammals would be avoided since no construction activities resulting in harassment would occur.

The other alternative NMFS considered was its Proposed Action, the promulgation of regulations and issuance of the LOA to SouthCoast Wind, which would authorize take of marine mammals incidental to five years of specified construction activities as noted above, subject to specified mitigation, monitoring, and reporting measures. As part of that alternative, and through the public and agency review process, NMFS considered a range of mitigation measures to carry out its duty to identify other means of effecting the least practicable adverse impact on the species or stocks. These measures were initially identified in the proposed rule (89 Fed. Reg. 53,708 (June 27, 2024)) and may be modified in the final rule and LOA, if issued, in response to public comment, agency review, and ESA Section 7 consultation. The regulations and LOA, if issued, would also include monitoring and reporting requirements, as mandated under the MMPA. The Proposed Action alternative evaluated by NMFS (i.e., the promulgation of regulations and issuance of the LOA to SouthCoast Wind) will provide the incidental take authorization for the activities identified in the Preferred Alternative (Alternative D) evaluated by BOEM in the final EIS and selected in this ROD.

5.2.3 Primary Factors NMFS Considers Favoring Selection of the Proposed Action (40 CFR § 1505.2(a)(2))

As noted earlier, NMFS must promulgate regulations and issue an LOA to SouthCoast Wind in response to its request for an incidental take authorization, if specific findings are made. NMFS' Proposed Action to promulgate regulations and issue an LOA for specified activities included as part of BOEM's selected alternative effectively meets NMFS' stated purpose and need.

5.2.4 Mitigation, Monitoring and Reporting Considered by NMFS (40 CFR § 1505.2(a)(3))

NMFS has a statutory requirement to prescribe the permissible methods of take and other means of effecting the least practicable adverse impact on the species or stocks of marine mammals and their habitat, paying particular attention to rookeries, mating grounds, and other areas of similar significance. All incidental take authorizations must also include requirements pertaining to monitoring and reporting. Mitigation, monitoring, and reporting requirements related to marine mammals were preliminarily identified in the proposed ITR (89 Fed. Reg. 53,708 (June 27, 2024)). If NMFS promulgates regulations and issues the LOA to the applicant, the regulations and LOA will include the necessary mitigation to have the least practicable adverse impact on marine mammals, as well as monitoring and reporting requirements to be implemented by SouthCoast Wind. In summary, the mitigation, monitoring, and reporting measures generally include, but are not limited to, the following: vessel strike avoidance measures; seasonal moratorium on foundation pile driving; usage of PSOs and PAM operators; establishment of clearance and shutdown zones; soft-start and ramp-up procedures for impact pile driving and acoustic source use during high-resolution geophysical surveys, respectively; use of sound attenuation measures and PAM during foundation pile driving; requirements to conduct sound field verification (SFV) during foundation pile driving; fishery survey mitigation to avoid interactions and entanglements; and various situational and frequent (i.e., weekly, monthly, annual) reporting requirements. Appendix A of this ROD includes a listing of mitigation,

monitoring, and reporting measures that have been considered by BOEM in formulating its NEPA analysis. Many of these measures align with those included in the proposed ITR and LOA; however, if issued, the final LOA may contain modified or additional measures that are more protective than those listed in Appendix A.

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Samuel D. Rauch, III
Deputy Assistant Administrator for Regulatory Programs

5.3 U.S. Army Corps of Engineers Decision

In accordance with 40 CFR § 1505.2, this section constitutes the ROD of the USACE New England District to issue a Department of the Army (DA) permit pursuant to section 10 of the Rivers and Harbors Act of 1899 (RHA; 33 U.S.C. § 403) and section 404 of the Clean Water Act (CWA; 33 U.S.C. § 1344) for the construction and maintenance of the SouthCoast Wind Energy Project proposed by SouthCoast Wind (the applicant). This document is prepared in accordance with the CEQ regulations implementing NEPA (40 CFR § 1500-1508). This section also constitutes the USACE's CWA section 404(b)(1) Guidelines Evaluation (40 CFR § 230), and the Public Interest Review (33 CFR § 320.4) under the authority delegated to the District Engineer by 33 CFR § 325.8.

This ROD incorporates by reference the United States DOI, BOEM 2023 Draft Environmental Impact Statement (DEIS), and the 2024 final environmental impact statement (FEIS) for the SouthCoast Wind Energy Project. USACE has been a cooperating agency under 40 CFR § 1501.8, with BOEM as lead federal agency under 40 CFR § 1501.7, for purposes of complying with NEPA. Additionally, BOEM has been the lead agency for the purposes of complying with section 7 of the ESA, section 106 of the NHPA, and section 305 of the Magnuson-Stevens Fishery Conservation and Management Act (MSA).

USACE concurs with BOEM that this project constitutes a major federal action, significantly affecting the quality of the human environment, and, therefore, an EIS was required. As a cooperating agency in accordance with NEPA, USACE provided appropriate input and review comments pertinent to their jurisdiction during the EIS development process. USACE has independently reviewed and evaluated the information in the FEIS in accordance with 40 CFR § 1506.3, and 33 CFR § 325, Appendix B, and finds that the actions covered by the FEIS and those regulated by USACE under section 10 of the RHA and section 404 of the CWA are substantially the same. The FEIS and associated NEPA documents prepared by BOEM, with referenced materials, and comments received in response to them, are hereby adopted in full and in accordance with 40 CFR § 1506.3, for purposes of NEPA, the public interest review required by 33 CFR § 320.4, and the 404(b)(1) Guidelines analysis required by 40 CFR § 230.

This section documents the decision of the USACE to issue a DA permit pursuant to section 10 of the RHA and section 404 of the CWA to Jennifer Flood representing SouthCoast Wind. The DA permit will authorize the construction and maintenance of an offshore wind energy facility within BOEM's Renewable Energy Lease Area OCS-A 0521 in the Atlantic Ocean that will provide up to 2,400 MW of clean energy to the New England power grid (ISO-NE). Lease Area OCS-A 0521 (lease area) is approximately 127,388 acres and is located 26 nautical miles (nmi) south of Martha's Vineyard, MA and approximately 20 nmi south of Nantucket, MA.

The SouthCoast Wind Energy Project includes up to 149 positions within OCS-A 0521, in which up to 147 positions will be occupied by WTGs and up to five (5) positions will be occupied by

OSPs[20] connected by a network of inter-array cables (IACs). From one (1) or more (no more than five (5)) OSPs within the lease area, up to six (6) offshore export cables (up to four (4) power cables and up to two (2) communications cables) within a single, 1,640 – 2,300-foot wide, offshore export cable corridor (OECC) will travel a total of 124 miles, first heading west to Rhode Island state waters and north up the Sakonnet River. The cables will then make intermediate landfall on Aquidneck Island, then exit into Mount Hope Bay on the north side of the island. The cables within the OECC will run north through Mount Hope Bay to make landfall via the Lee River on the western side of Brayton Point in Somerset, Massachusetts.

Development of the SouthCoast Wind Energy Project will be completed in two phases, which SouthCoast refers to as Project 1 and Project 2. Project 1 will develop the northeastern portion of the lease area and will include up to 85 WTGs connected by 250 miles of IACs to one (1) OSP, and up to three (3) export cables (two (2) power cables and one (1) communications cable) within the OECC to Brayton Point.

Project 2 would develop the remainder of the overall project in the southern portion of the lease area and include up to 85 WTGs connected by 250 miles of IACs to one (1) OSP, and up to three (3) export cables (two (2) power cables and one (1) communications cable) within the OECC to Brayton Point.

As previously stated, the total combined number of WTG and OSP foundations across Project 1 and Project 2 will not exceed 149. For both phases, the WTGs and OSPs will require scour protection and the cables will require secondary cable protection in areas where burial cannot occur, where burial is not achieved to a sufficient depth, or where cables cross existing submarine cables. Scour and cable protection will consist of rock berms, bioactive concrete mattress placement, rock placement, and/or fronded mattresses.

At the site of the former Brayton Point Power Station, up to two high voltage direct current (HVDC) converter stations will be constructed to convert the project's generated power to High Voltage Alternating Current (HVAC). A new underground 354-kilovolt (kV) transmission line will be constructed to connect the converter station to the existing point of interconnection (POI), the National Grid substation at Brayton Point.

Work outside of waters of the United States, including wetlands, does not require authorization from the USACE, but is considered for this project's compliance under NEPA, the ESA, and the NHPA as part of a complete project. For this project, non-jurisdictional work includes construction activities at Brayton Point, including upland horizontal directional drilling (HDD) work for cable landfall, and cable installation through uplands on Aquidneck Island.

SouthCoast Wind is currently seeking USACE authorization for Project 1 only, as they have obtained CWA section 401 Water Quality Certifications (WQCs) for Project 1 only (see section

[20] SouthCoast Wind's original permit application proposed up to five (5) OSPs within the lease area, and this quantity of OSPs was evaluated under NEPA in BOEM's FEIS. SouthCoast Wind has since revised the number of OSPs for the overall proposed project to two (2) OSPs.

5.3.7.5 of this document). This ROD evaluates and makes a decision for the overall project (i.e., Project 1 and Project 2), however, only Project 1 can be authorized at this time because it has the required WQCs. A permit will not be issued for Project 2 until SouthCoast Wind receives WQCs for Project 2.

5.3.1 USACE Authorities and Jurisdictional Activities

5.3.1.1 USACE Authority and Jurisdiction under Section 404 of the CWA

Under section 404 of the CWA, USACE regulates the discharge of dredged or fill material into waters of the United States, including wetlands. The USACE's section 404 jurisdiction in tidal waters extends from the high tide line (HTL) to the seaward limits of the territorial seas. The limit of jurisdiction in the territorial seas is measured from the baseline in a seaward direction a distance of three (3) nmi (33 CFR § 328.4(a) and (b)). The baseline from which the three (3) nmi limit of the territorial seas is measures is generally the line on the shore reached by the ordinary low tides but may also lie across the mouth of bays or elsewhere when the coast is not in direct contact with the open sea. For this project, the USACE's section 404 jurisdiction in tidal waters coincides with the limits of Massachusetts and Rhode Island state waters.

The limit of section 404 jurisdiction in non-tidal waters (33 CFR § 328.4(c)) is as follows: 1) In the absence of adjacent wetlands, the jurisdiction extends to the ordinary high water (OHW) mark, or 2) When adjacent wetlands are present, jurisdiction extends beyond the OHW mark to the limit of the adjacent wetlands. When the water of the U.S. consists only of wetlands, the jurisdiction extends to the limit of the wetlands.

For the proposed project, up to 19.6 nmi (118,945.2 linear feet) of export cables will be located within tidal waters subject to the USACE's jurisdiction under section 404 of the CWA. Additionally, up to 44 linear feet would be located within wetlands and up to 80 feet would be located within a stream (Founders Brook) also subject to the USACE's jurisdiction under section 404 of the CWA. Within section 404 waters of the U.S., including wetlands, the applicant is proposing to install up to six (6) export cables, three (3) associated with Project 1, and three (3) associated with Project 2. There are no CWA section 404 jurisdictional activities are proposed for seabed preparation. In tidal waters, cables will be installed up to 13.1 feet below the substrate by jetting or mechanical (plowing or trenching) installation methods (see SouthCoast Wind's November 2024 Construction and Operations Plan (COP) section 3.3.5.4), and/or HDD at landfalls. In wetlands and flowing water (i.e., Founders Brook), cables will be installed by HDD or in excavated then backfilled trenches.

The following project activities and their associated impacts are subject to section 404 of the CWA:

1) Backfilling of up to 12 HDD exit pits; eight (8) for intermediate cable landfall on Aquidneck Island, and four (4) to make landfall at Brayton Point. Each HDD exit pit will disturb up to 0.3-acre for a total of up to 3.6 acres of impacts. At the two Aquidneck

Island landings (for the cables to come on and off the island), up to eight (8) HDD exit pits will be constructed at the time of Project 1 construction, with the intention of using four (4) for Project 1 and four (4) for Project 2. If only four (4) HDD exit pits are able to be constructed for Project 1 during the Project 1 construction period, the four (4) remaining HDD exit pits would be constructed for Project 2 at a later date, for a total of eight (8) HDD exit pits at Aquidneck Island for both projects.

At the Brayton Point landing, up to four (4) HDD exit pits will be constructed as a part of Project 1, with the intention of using two (2) for Project 1 and two (2) for Project 2. If only two HDD exit pits are able to be constructed for Project 1 during the Project 1 construction period, the two (2) remaining HDD exit pits would be constructed for Project 2 at a later date, for a total of four (4) HDD exit pits at Brayton Point for both projects. The total combined number of HDD exit pits for Project 1 and Project 2 at the landfall locations (Aquidneck Island and Brayton Point) will not exceed 12.

2) Placement of up to 30 acres of cable protection (15 acres for each Project 1 and Project 2). Cable scour protection will consist of rock berms, bioactive concrete mattress placement, rock placement, and/or fronded mattresses.

3) The backfill of excavated trenches within wetlands and Founders Brook on Aquidneck Island. Up to 44 linear feet of trench will be constructed to install the export cables through wetlands on Aquidneck Island and up to 80 linear feet of trench will be constructed to install cable across Founders Brook.

None of the proposed CWA section 404 discharges will result in the conversion of aquatic habitat to uplands, including the wetland and stream impacts on Aquidneck Island.

5.3.1.2 USACE Authority and Jurisdiction under Section 10 of the RHA

5.3.1.2.1 USACE Section 10 Jurisdiction in Navigable waters of the U.S.

Under section 10 of the RHA, USACE regulates construction of any structures and work that are located within or that affect "navigable waters of the U.S." In tidal waters, RHA section 10 jurisdictional waters overlap CWA section 404 jurisdictional waters, differing only at their shoreward limit. RHA section 10 jurisdictional waters' shoreward limit is the mean high water mark and the seaward limit coincides with the limit of the territorial seas.

For the proposed project, up to 19.6 nmi (118,945.2 linear feet) of export cables will be located within navigable waters subject to the USACE's jurisdiction under section 10 of the RHA. The following project activities and their associated impacts will be located within navigable waters and are subject to section 10 of the RHA:

1) Excavation and backfilling of up to 12 HDD exit pits (see number 1 in section 5.3.1.1).

2) Boulder relocation, cable lay and burial trials, pre-lay grapnel run, the installation of six (6) export cables and cable joints, and placement of secondary cable protection as needed. This work will occur within the overall OECC that will be no more than 2,300 feet wide. Each of the cables will have a 19.7-foot-wide disturbance zone associated with installation and are estimated to result in a disturbance area involving up to 88 acres of subtidal waters.

The applicant is planning to avoid any unexploded ordnances (UXO), but if avoidance is not possible, they would detonate the UXO. Detonation of UXO would be subject to section 10 of the RHA in navigable waters.

5.3.1.2.2 USACE Section 10 Jurisdiction on the Outer Continental Shelf

The USACE's authority to prevent obstructions to navigation in navigable waters of the United States was extended to artificial islands, installations, and other devices located on the seafloor, to the seaward limit of the outer continental shelf (OCS), by section 4(f) of the Outer Continental Shelf Lands Act of 1953, as amended (43 U.S.C. § 1333 and 33 CFR § 320.2). Structures that will be located on the seafloor of the OCS and therefore regulated under section 10 of the RHA and their estimated impacts include the following for both phases of the project (Project 1 and Project 2):

1) Construction of up to 149 foundations within lease area OSC-A 0521. Foundations will be for up to 147 WTGs (up to 85 WTG each for Project 1 and Project 2) and up to two (2) OSPs (up to one (1) OSP each for Project 1 and Project 2), but the total number of constructed foundations will not exceed 149.

2) Approximately 600 acres of subtidal seabed impacts associated with scour protection for WTG and OSP foundations. Conservative estimates for Project 1 and Project 2 seabed impacts associated with scour protection for WTG and OSP foundations are 231.64 acres and 427.14 acres, respectively. However, these acreages depend on how many foundations are placed for each project, and the total acreage of scour protection will not exceed 600 acres.

3) Up to 500 miles of IACs (up to 250 miles each for Project 1 and Project 2) with an associated 122 acres (up to 61 acres each for Project 1 and Project 2) of secondary cable protection.

4) Up to six (6) export cables attached to the seabed within the OECC with an associated 62.1 nmi (377,492.8 linear feet) with an associated 92 acres of cable protection on the OCS.

5.3.2 USACE Public Notice and Comments

USACE published a 45-day public notice for the overall project on February 17, 2023; the comment period ended on April 4, 2023. The public notice was published on the USACE New England District Regulatory Division website. The public notice was also sent electronically via email and/or hard copy mailed to all interested parties/stakeholders listed in the "New England Public Notice Worksheet," (see administrative record), including adjacent property owners.

In response to the public notice USACE received a total of 21 comments. Comments in their entireties have been made a part of the administrative record and are only summarized in this document. USACE forwarded all comments to the applicant for their review on September 7, 2023.

Received comments and USACE's responses are as follows:

Commenter 1: Barbara Tibbetts
Date Received: February 22, 2023
Method: Email
Comment: Ms. Tibbetts owns property on Nantucket Island and has lived on the island full time for three (3) years. Ms. Tibbetts gave further background about herself, and continued stating, "I realize we need renewable energy but at what cost?? The environmental cost of course is first as not enough is known about the effects." She then asked how they (the applicant) house the workers on Nantucket and stated that Nantucket is having a housing crisis.

USACE Response: USACE acknowledged Ms. Tibbets' comments in an email dated February 22, 2023. The environmental impact of the project has been documented and disclosed by BOEM's FEIS for the project. Where workers would be house for the construction of the proposed project is outside the USACE's purview. However, information regarding worker housing can be found in section 3.6.3.5 of BOEM's FEIS.

Commenter 2: Jeff Letteri
Date Received: February 22, 2023
Method: Email
Comment: Mr. Letteri requested a public hearing be held on the proposed project for the following reasons: 1) The proposed project "possess clear and present danger if constructed to commercial shipping, fishing and transportation, as well as pleasure craft operating in that area;" 2) The proposed project "has the potential to waste fuel oil in excess of its stated carbon footprint reduction, in commercial shipping, fishing and transportation, as well as pleasure boating, having to navigate to avoid said project area;" and 3) The proposed project "fails to meet its project purpose, in that it doesn't provide clean energy to Northeast United States…in that wind energy machine manufacture and maintenance have larger carbon footprint, who's [sic] carbon footprint earn out, exceeds the lifetime of this project."

USACE Response: USACE acknowledged Mr. Letteri's comments in an email dated February 22, 2023. Public hearings are to be held "…for the purpose of acquiring information or evidence" (33 CFR § 327.3(a)) and shall be granted "…unless the district engineer determines that the issues raised are insubstantial or there is otherwise no valid interest to be served by a hearing." (33 CFR § 327.4(b)) BOEM held three virtual public meetings for the proposed project on March 20, 23, and 27 of 2023. These public meetings gave the public opportunities to voice their views on the proposed project and recordings of these meetings are available on BOEM's project website. Additionally, USACE attended and presented at each of these meetings. Therefore, a public hearing was not granted as Mr. Letteri requested. A memorandum for record (MFR) titled "Subject: Determination of Need for a Public Hearing, SouthCoast Wind Energy Project, NAE-2020-00958," dated September 30, 2024, describes all reasons why a public hearing for the proposed project was not held and is a part of the project's administrative record.

Impacts to navigation are discussed within section 5.3.6.1 of this document and within sections 3.6.6.5 and 3.6.6.7 of BOEM's FEIS. Analysis of the project's impacts to air quality, including greenhouse gasses such as carbon, can be found in sections 3.4.1.5 and 3.4.1.7 of BOEM's FEIS.

Commenter 3: Leslie Killian
Date Received: February 22, 2023
Method: Email
Comment: Ms. Killian stated that she is opposed to windfarms off Nantucket. Ms. Killian described the historic preservation and nature of Nantucket, stating the view from Nantucket is "consistent with its history" and that Nantucket is a "prime tourist destination." She stated that the windfarms "will destroy the views from Nantucket and thereby negatively affect the tourist industry" and that the "windfarms would severely hamper the historic nature of Nantucket." Additionally, she stated that the energy generated by the windfarms would not benefit Nantucket citizens as the cables would not connect there. She also stated that she believes that windmills should be placed on land and "not interfere with the nature of the sea and their negative impact on fishing, whale and other species" Ms. Killian requested that the USACE deny the building of windfarms within sight of Nantucket.

USACE Response: USACE acknowledged Ms. Killian's comments in an email dated February 22, 2023. Analysis of the project's impacts to historic properties can be found in section 5.3.7.3 of this document, and in sections 3.6.2.5 and 3.6.2.7, and Appendix I of BOEM's FEIS. Additionally, resultant impacts to recreation and tourism, including on Nantucket, from viewshed impacts is discussed in sections 3.6.8.5 and 3.6.8.7, and Appendix I of BOEM's FEIS. A visual impacts assessment is included in Appendix H of BOEM's FEIS.

Commenter 4: Sandy MacDonald
Date Received: February 22, 2023
Method: Email
Comment: Ms. MacDonald wrote in the subject line of her email, "Are you willing to ensure the extinction of right whales?" Her email consisted of the following comment: "I live on Nantucket,

near the south shore. I care nothing about incursions on the view, and everything about the certain death sentence for this already endangered species."

USACE Response: USACE acknowledged Ms. MacDonald's comment in an email dated February 22, 2023, and offered Ms. MacDonald a National Oceanic and Atmospheric Association's (NOAA) weblink for information regarding offshore wind energy applications and whales. Discussions of impacts to endangered species, including whales, can be found in section 5.3.7.1 of this document, and in sections 3.5.6.5 and 3.5.6.7 of BOEM's FEIS.

Commenter 5: Susan Samols
Date Received: February 22, 2023
Method: Email
Comment: Ms. Samols stated that she opposes "the Vineyard wind farm." She continued her comments by stating that "with whale deaths linked to offshore wind energy the cost is too much." She acknowledged the need for alternative energy sources to help combat climate change but stated that wind energy "is too high a price for the environment."

USACE Response: The USACE acknowledged Ms. Samols' comments in an email dated February 23, 2023, and provided a NOAA weblink for information regarding offshore wind energy applications and whales. The proposed project is not affiliated with the Vineyard Wind 1 energy project. Discussions of impacts to endangered species, including whales, can be found in section 5.3.7.1 of this document, and in sections 3.5.6.5 and 3.5.6.7 of BOEM's FEIS.

Commenter 6: Joan Dennis
Date Received: February 23, 2023
Method: Email
Comment: Ms. Dennis requested that the USACE "consider the horrible damage being done to our oceans by these crazy wind power schemes." She stated that whale habitat and feeding areas are being destroyed and that "what you are pushing will push them over the brink to e xtinction [sic]."

USACE Response: USACE acknowledged Ms. Dennis' comments in an email dated February 23, 2023. Discussions of impacts to endangered species, including whales, can be found in section 5.3.7.1 of this document, and in sections 3.5.6.5 and 3.5.6.7 of BOEM's FEIS.

Commenter 7: Ms. Margaret Manning
Date Received: February 23, 2023
Method: Email
Comment: Ms. Manning stated her appreciation for the USACE's "engineering review" and that her main concern with the project is the impact of HDD along the coastline. She stated that she is concerned it will "exacerbate an already serious problem of coastal erosion in this area." She stated that homeowners along "Little pond [sic]" have been warned that digging up vegetation or trimming dead tree branches within 100 feet of the water can negatively impact coastal resiliency. Therefore, she posed the question "If that is the case, how can drilling a giant hole

directly into the already eroding coastline be done safely?" She then stated that she doesn't trust that the applicant has the expertise or commitment to perform HDD with "enough precision, precaution and preparation to protect the coastline."

USACE Response: USACE acknowledged Ms. Manning's comments in an email dated February 23, 2023. The USACE's review of the proposed project, and any project which applies for DA authorization, is not an "engineering review." Rather, the USACE's review involves an analysis to ensure any project subject to DA authorization complies with the regulations pertinent to the authorities delegated to them, typically section 10 of the RHA and/or section 404 of the CWA. Therefore, the USACE does not perform an engineering analysis of a proposed project. For any proposed project, the applicant is responsible for ensuring their proposed methods of construction are safe and effective. Installation of cables from sea to shore utilizing HDD is known to reduce impacts to the shoreline by minimizing sediment mobilization and seabed sediment alternations. Additionally, onshore HDD is typically completed from upland areas above the coastline. Impacts to shoreline erosion are discussed in section 5.3.6.1 of this document, and throughout BOEM's FEIS, HDD is discussed as an impact-reducing construction methodology.

Commenter 8: L.S. Nielancy Weiner
Date Received: February 27, 2023
Method: Email
Comment: Ms. Nielancy Weiner's comment consisted of the following sentence, "NNNOOO [sic] to south coast on our Nantucket doorstep."

USACE Response: USACE acknowledged Ms. Nielancy Weiner's comment in an email dated August 30, 2023. The USACE acknowledges Ms. Nielancy Weiner's opposition to the project.

Commenter 9: Michael Samols
Date Received: March 2, 2023
Method: Email
Comment: Mr. Samols stated that he strongly opposes the Vineyard windfarm. Mr. Samols continued his comments by stating that "with whale deaths linked to offshore wind energy the cost is too much." He acknowledged the need for alternative energy sources to help combat climate change but stated that wind energy "is too high a price for the environment."

USACE Response: The USACE acknowledged Mr. Samols' comments in an email dated August 30, 2023, and provided a NOAA weblink for information regarding offshore wind energy applications and whales. The project is not affiliated with the Vineyard Wind 1 energy project. Discussion of impacts to endangered species, including whales, can be found in section 5.3.7.1 of this document, and in sections 3.5.6.5 and 3.5.6.7 of BOEM's FEIS.

Commenter 10: Carl Borchert
Date Received: March 10, 2023
Method: Email

Comment: Mr. Borchert expressed his support of the proposed project, as well as his support for the landing locations. He also stated that after cable installation, disturbance to sea and riverbeds would cease.

USACE Response: USACE acknowledged Mr. Borchert's comments in an email dated August 30, 2023. The USACE acknowledges Mr. Borchert's support of the project.

Commenter 11: Jerry Luby
Date Received: March 29, 2024, and April 4, 2024
Method: Email
Comment: Mr. Luby is the president of Oak Grove Cemetery of Falmouth, MA. Mr. Luby had a list of ten (10) questions about the converter station which was proposed to be near the cemetery and stated he had been trying to meet with Kelsey Perry (of SouthCoast). He also stated that the cemetery is private, nonprofit, nondenominational, and listed on the National Register of Historic Places and the State of Massachusetts's Cultural Resources List. Mr. Luby followed up with formal comments on behalf of the Oak Grove Cemetery Board of Directors emailed in a letter dated April 4, 2023. In these comments, Mr. Luby expressed the board's objection to the proposed site of the converter station in Falmouth, as the land it would be on abuts the cemetery. The board believes that the converter station would be intrusive both visually and auditorily and would result in less income to the cemetery, which is planned for expansion in the northern and eastern portions of the property. Mr. Luby states "A decrease in funding for the Phase II project has already been documented because of the massive changes under consideration." Mr. Luby, on behalf of the board recommends that SouthCoast choose an alternative location for their proposed converter station.

USACE Response: Since the publishing of USACE's public notice for the proposed project, the applicant has revised the project plan to only land at Brayton Point. The Falmouth landing and subsequent converter station became a project "variant," and the applicant would only utilize this Falmouth variant if all power generated by the overall project could not be transmitted to Brayton Point. If the proposed project receives DA authorization, and the applicant determines they need to utilize the Falmouth variant, they would be required to request new DA authorization from USACE before they could construct the variant. At such a time, the USACE would evaluate the impacts of the variant. However, BOEM included the variant in their FEIS and information on the Falmouth variant's impacts to historic properties, including the Oak Grove Cemetery, can be found in sections 3.6.2.5 and 3.6.2.7, and Appendices I and H of BOEM's FEIS.

Commenter 12: Laura Forte and Ken Kharbanda
Date Received: March 31, 2023
Method: Email
Comment: Ms. Forte and Mr. Kharbanda submitted comments jointly in one email. They wrote that the proposed project "does not meet most people's criteria for true green energy." They further stated that the proposed project "has severe impacts to endangered species, historic places, tourism/the livelihood of people who rely on tourism and property values and the

environment." They stated that they believe that the project and other windfarms "may knowingly cause" the extinction of the North Atlantic right whale. They further questioned how many other endangered or threatened species would be impacted, and what the cumulative impacts would be for these species by all of the projects, "up and down the coast line." They asked, "what is the cumulative requested 'take' (kill) amount as a percent of each species' population that use the area?" Additionally, they expressed concern for impacts to Falmouth's historic nature and impacts to Oak Grove Cemetery. They also expressed concern for impacts to the local economy due to a loss of tourism and impacts to property values. Lastly, they requested that alternative areas be evaluated for the proposed project.

USACE Response: USACE acknowledged Ms. Forte and Mr. Kharbanda's comments in an email dated August 30, 2023. A discussion of impacts to threatened and endangered species, including whales, can be found in section 5.3.7.1 of this document, and in sections 3.5.6.5 and 3.5.6.7 of BOEM's FEIS. Additionally, a discussion of impacts to economics and tourism, can be found in section 5.3.6.1 of this document and sections 3.6.3.5, 3.6.3.7, 3.6.8.5, and 3.6.8.7 of BOEM's FEIS. Falmouth is no longer proposed as a landing area, but rather a variant landing area if all power generated by the project cannot be transmitted to Brayton Point. BOEM included the variant in their FEIS and information on the Falmouth variant's impacts to historic properties, including the Oak Grove Cemetery, can be found in sections 3.6.2.5 and 3.6.2.7, and Appendices I and H of BOEM's FEIS.

Commenter 13: Patty and Bill Burke
Date Received: April 2, 2023
Method: Email
Comment: The Burkes wrote that they accept "the invitation to request a public hearing." They wrote that they recognize the need for clean energy and that wind energy can contribute to that, and that they are supportive of a "wide range of innovations for clean energy, including carefully planned and executed offshore wind." They stated that "Urgency is not a good excuse for piecemeal planning for necessary but new and environmentally impactful technologies." They requested a "master vision and plan to coordinate new connections to and expansion of the grid as a major consideration for this project and for a national plan." They stated that human and wildlife protections must be addressed in all proposed renewable energy projects and that residential neighborhoods must be excluded from landings and/or transport sites. They stated that routing through residential neighborhoods could expose people "to known and possible negative short and long term health consequences."

USACE Response: Public hearings are to be held "for the purpose of acquiring information or evidence" (33 CFR § 327.3(a)) and shall be granted "unless the district engineer determines that the issues raised are insubstantial or there is otherwise no valid interest to be served by a hearing." (33 CFR § 327.4(b)) BOEM held three virtual public meetings for the proposed project on March 20, 23, and 27 of 2023. These public meetings gave the public opportunities to voice their views on the proposed project and recordings of these meetings are available on BOEM's project website. Additionally, USACE attended and presented at each of these meetings. Therefore, a public hearing was not granted as the Burkes requested. A MFR titled "Subject:

Determination of Need for a Public Hearing, SouthCoast Wind Energy Project, NAE-2020-00958," dated September 30, 2024, describes all reasons why a public hearing for the proposed project was not held and is a part of the project's administrative record.

A discussion of the project's impacts on human health can be found in sections 3.6.5.5 and 3.6.5.8 of BOEM's FEIS.

Commenter 14: Sherri Lowell
Date Received: April 2, 2023
Method: Email
Comment: Ms. Lowell wrote to ask whether data on efficiency and costs for repair and maintenance has been collected from the wind turbine located behind the Nantucket High School as this information could be useful in determining the benefits of the project. She asked whether similar ocean wind farms have been successful and what the impact is on the local fishing industry and sea life, asking if this has been studied and whether the effects are immeasurable. She considered that the cost to marine life and the local fishing industry may outweigh the benefits.

USACE Response: USACE acknowledged Ms. Lowell's comments in an email dated August 30, 2023. To USACE's knowledge, data has not been collected from the wind turbine behind the Nantucket High School and is not available for consideration of the proposed project. A discussion of the proposed project's impacts to economics, including to the local fishing industry, can be found in section 5.3.6.1 of this document, and in sections 3.6.1.5 and 3.6.1.7 of BOEM's FEIS. A discussion of the project's impacts to marine life can be found in sections 5.3.5.3 and 5.3.6.1 of this document, and throughout section 3.5 of BOEM's FEIS.

Commenter 15: Joyce Carson
Date Received: April 3, 2023
Method: Email
Comment: Ms. Carson wrote that she is opposed to the project, stating that wind farms hurt the environment. She stated that wind farms are very expensive to install and maintain and do not provide enough energy. Additionally, she stated that the materials are built in China and not the U.S. and are very difficult to recycle.

USACE Response: USACE acknowledged Ms. Carson's comments in an email dated August 30, 2023. USACE acknowledges Ms. Carson's opposition to the project.

Commenter 16: Kelly Welch
Date Received: April 10, 2023
Method: Email
Comment: Ms. Welch wrote that her home is very close to the POI on Gifford Street in Falmouth, MA. Ms. Welch stated that she supports the project "in concept," but believes that the onshore transmission station would be industrial, loud, and would impact the surrounding area. She suggested that the USACE should partner with the Commonwealth to find a location that is

more suitable, and suggested there are less populated locations and locations not near a National Historic Place.

USACE Response: USACE acknowledged Ms. Welch's comments in an email dated August 30, 2023. Since the publishing of USACE's public notice for the project, the applicant has revised the project plan to only land at Brayton Point. The Falmouth landing and subsequent converter station became a project "variant," and the applicant would only utilize this Falmouth variant if all power generated by the overall project could not be transmitted to Brayton Point. If the proposed project receives DA authorization, and the applicant determines they need to utilize the Falmouth variant, they would be required to request new DA authorization from USACE before they could construct the variant. At such a time, the USACE would evaluate the impacts of the variant. However, BOEM included the variant in their FEIS and information on the Falmouth variant's impacts to historic properties, including the Oak Grove Cemetery, which can be found in sections 3.6.2.5 and 3.6.2.7, and Appendices I and H of BOEM's FEIS.

Commenter 17: NOAA National Marine Fisheries Service (NMFS) Greater Atlantic Regional Fisheries Office (GARFO)
Date Received: April 18, 2023
Method: Letter transmitted via email
Comment: NOAA NMFS GARFO wrote a letter in response the USACE's public notice which included many comments regarding the project's impacts to spawning and early life habitats of commercially and recreationally important species, and to sensitive habitats such as hard complex bottom, sand waves, shellfish beds, and submerged aquatic vegetation (SAV). Additionally, NOAA NMFS GARFO wrote that the project described in the public notice is not the least environmentally damaging practicable alternative. They wrote that the two land-based alternatives developed by BOEM appear to represent the least environmentally damaging practicable alternative and should be considered in USACE's CWA section 404(b)(1) analysis. NOAA NMFS GARFO's comments continued with species and habitat specific discussions of potential impacts and recommended measures the applicant should be required to take (such as preconstruction habitat surveys and post-construction monitoring of habitats). NOAA NMFS GARFO also briefly gave an overview of the status of ESA consultation and stated that their most significant concern is the proposed project's impacts to the North Atlantic right whale (NARW). They concluded their comment letter by stating that if an Incidental Take Authorization (ITA) is issued by NMFS Office of Protected Resources under the Marine Mammal Protection Act (MMPA) it could contain measures relevant to conditions contained in a USACE permit, and they recommended that USACE review any proposed rule published for an ITA to determine if any measures would conflict with those being considered by USACE. They further stated that they expect that USACE will condition any permit issued for the project to comply with all applicable laws, including the MMPA.

USACE Response: Since the publishing of USACE's public notice for the project, the project has changed, and Essential Fish Habitat (EFH) consultation has taken place for the proposed project. Through EFH consultation NOAA NMFS GARFO provided an analysis of the project's impacts to the resources within their jurisdiction and provided conservation recommendations

(CRs). Additionally, a discussion of the project's impacts to fisheries, including EFH, can be found in section 3.5.5. of BOEM's FEIS. USACE's analysis of alternatives to the project can be found in section 5.3.3 of this document, and BOEM's analysis of alternatives can be found in Chapter Two (2) of their FEIS. ESA consultation has since been completed, with BOEM acting as lead federal agency. A discussion of ESA compliance can be found in section 5.3.7.1 of this document, and a discussion of impacts to marine mammals, including ESA listed species, can be found in sections 3.5.6.5 and 3.5.6.7 of BOEM's FEIS. USACE has no authority to require any permittee to comply with the MMPA, however USACE must ensure compliance with the ESA. USACE would require permittee compliance with the NMFS's issued biological opinion (BO), which includes a term and condition for SouthCoast to comply with the measures specified in the proposed MMPA ITA. Therefore, USACE would indirectly require compliance with the MMPA.

Commenter 18: Cultural Heritage Partners
Date Received: April 4, 2023, and April 18, 2023
Method: Letter transmitted via email
Comment: Cultural Heritage Partners submitted comments on behalf of the Town of Nantucket, Massachusetts. Their April 4, 2023, letter stated that the Town has significant concerns regarding consultation and inadequacies in BOEM's DEIS, the accompanying technical reports, and the proposed NHPA section 106 Memorandum of Agreement (MOA). Due to this, they stated they could not "provide substantive comments on the appropriateness or completeness of the review process under" NEPA or section 106 of the NHPA and that USACE should not make a permit decision until "that review is complete." They stated, "Should the Corps rely on the DEIS as drafted to issue its permit, it risks making a decision that is arbitrary, capricious, and contrary to law." They concluded their letter by stating that because the public review of the DEIS and accompanying documents were still ongoing USACE could not "reasonably determine whether the Project is in the public interest."

The April 18, 2023, letter from Cultural Heritage Partners was not addressed to USACE, but rather BOEM and their third-party contractor for the proposed project in response to BOEM's publication of the DEIS.

USACE Response: USACE, acting either as a cooperating or lead federal agency, cannot make a decision on any permit application until all acts which require federal action agency compliance are satisfied, including NEPA and the NHPA. This ROD is being executed at the conclusion of the NEPA review and with documented compliance with the NHPA, ESA, and the Magnuson-Stevens Act.

BOEM has provided a response to all comments they received on the DEIS in Appendix N of their FEIS.

Commenter 19: U.S. Environmental Protection Agency (EPA)
Date Received: March 30, 2023
Method: Letter transmitted via email

Comment: The letter from the EPA was not addressed to USACE, but rather to BOEM in response to BOEM's publication of the DEIS for the project. Although EPA's letter was not addressed to USACE, they included comments regarding compliance with section 404 of the CWA. EPA recommended that the FEIS "contain a more focused discussion of how the selected alternative is consistent with the CWA Section 404(b)(1) Guidelines," and that Appendix F of the FEIS contain detailed maps of the various routes analyzed. They also recommended that it be clarified which route over Aquidneck Island is being incorporated into the preferred alternative. Lastly, they recommended that backfill amounts which would occur in the Sakonnet River be described.

USACE Response: BOEM's responses to EPA's comment letter can be found in Appendix N of the FEIS. USACE's alternatives analysis can be found in section 5.3.3 of this document. No backfill is anticipated to occur within the Sakonnet River, as the methodologies for cable emplacement that may be utilized by the applicant do not result in a discharge of fill material.

Commenter 20: Massachusetts Division of Fisheries and Wildlife (MassDMF)
Date: March 23, 2023
Method: Letter transmitted via email
Comment: The letter from MassDMF was not addressed to USACE, but rather to the State of Massachusetts Executive Office of Energy and Environmental Affairs. MassDMF stated that the project would involve components within migratory habitats and foraging areas of the roseate tern, common tern, and least tern, and described these species' history and use of Massachusetts habitat. They recommended that the applicant develop and integrate conservation measures to minimize impacts to these species.

USACE Response: USACE acknowledges MassDMF's comments. A discussion of the project's impacts to wildlife can be found in section 5.3.5.3 of this document and sections 3.5.3.5 and 3.5.3.7 of BOEM's FEIS.

Commenter 21: NOAA National Ocean Service Office of Coast Survey
Date: March 30, 2023
Method: Letter transmitted via email
Comment: The NOAA National Ocean Service Office of Coast Survey requested that they be provided a copy of any issued permits, that the minimum blade clearance at Mean High Water (MHW) be explicitly stated in the as-built documents and stated in any USACE permit, and the following be added to an issued permit for the proposed project in order to update the "NOAA ENC – Electronic Navigational Charts."

1. "Notify NOAA's Nautical Data Branch by email at ocs.ndb@noaa.gov at least two weeks prior to commencement of installation of the offshore export cables.
2. Notify NOAA's Nautical Data Branch by email at ocs.ndb@noaa.gov at least two weeks prior to commencement of the installation in the BOEM Lease Area of each subproject, i.e., wind turbine generators (WTGs), offshore substation platforms, fixed substructures (monopile, piled jacket, suction-bucket jacket, and gravity-based structures), inter-array cables, offshore export cables, and scour protection.

Section G-14 of the *Navigation Risk Assessment* (NSRA), Document Revision B, Issue Date August 2021 states, 'Locations and details of offshore Project components such as the export cables will be provided to NOAA so they can be included on nautical charts.' In addition to my guidance in Item 2b above, I defer to the applicant to submit updates at a frequency that fulfill the requirements of the NSRA.

3. When construction of the offshore export cables and other offshore subprojects is complete, notify NOAA's Nautical Data branch by email at ocs.ndb@noaa.gov, and provide as-built drawings with explicit geographic control, horizontal datum (WGS 84 or NAD83), survey unit, survey date and any other relevant information. Digital data is preferred (e.g., CAD, GIS, PDF, Excel spreadsheets for route position lists of cables, etc.). If construction deviates from the permit(s), please provide a plan with the changes made or indicate what changed from the original plan."

USACE Response: USACE will copy the NOAA National Ocean Service Office of Coast Survey on issuance of any permit for the proposed project, require minimum blade clearance at MHW be explicitly stated on as-built documents and within the USACE permit, as well as include the conditions as requested.

5.3.3 Alternatives Considered by USACE Under the NEPA

5.3.3.1 Determination of USACE Scope of Analysis for NEPA

The scope of analysis for USACE's NEPA review is described in 33 CFR Part 325 Appendix B § 7.b. For the proposed project, USACE's NEPA scope of analysis includes the specific activities requiring a DA permit. The scope of analysis also includes other aspects of the overall project because USACE and BOEM have sufficient control and responsibility to warrant federal review. Accordingly, the USACE scope of analysis under NEPA includes up to 127,388 acres of Lease Area OCS-A 0521 that would be impacted by WTG, OSP, and cable installation, the 124-mile OECC, the onshore cable route over Aquidneck Island, and the area at Brayton Point for up to two new onshore converter stations. In addition, for the purposes of NEPA, reasonably foreseeable activities within the larger overall wind energy area were considered to account for potential cumulative effects.

5.3.3.2 Determination of Purpose and Need for USACE NEPA Review

For purposes of USACE's NEPA review, the purpose of the project is to provide a commercially viable offshore wind energy project within Lease Area OCS-A 0521 and provide up to 2,400 MW of clean, renewable energy to the northeast United States, including Massachusetts, Connecticut, and/or Rhode Island. For the purposes of USACE's NEPA review, the project need is to help these states, and potentially other New England states, comply with their offshore wind procurement laws, need for renewable energy, and decarbonization goals and targets.

5.3.3.3 USACE Identification of Alternatives under NEPA

USACE has determined that the following criteria apply to any proposed NEPA alternative:

1. Any proposed alternative must provide renewable energy via the use of offshore WTGs as BOEM designated the lease areas specifically for renewable wind energy.

2. Any alternative must tie in with the ISO-NE power grid and deliver a minimum of 2,400 MW of electrical energy from the overall project to meet expected contractual obligations.[21]

3. USACE did not consider any alternatives related to the Falmouth OECC (Alternative F), as SouthCoast is no longer proposing to utilize that OECC. Rather, the applicant is keeping the route as a variant. As stated previously, should the applicant find it needs to utilize the Falmouth route, a new DA permit application and review would be required.

One (1) no action alternative (Alternative A) and eight (8) action alternatives (Alternatives B, C-1, C-2, D, E-1, E-2, E-3, and F) were considered reasonable under NEPA and carried forward for in depth analysis in BOEM's FEIS. For a full description of each alternative, see Chapter 2 of the FEIS, specifically section 2.1. See Table 2-3 in BOEM's FEIS for a discussion of alternatives not considered reasonable and not carried forward for analysis.

Alternative A is the no action alternative. Under this alternative, USACE would not issue any permits under section 10 of the RHA and section 404 of the CWA.

Alternative B is the applicant's overall project, both Projects 1 and 2. The overall project would result in the installation of up to 147 WTGs and 5 OSPs with no more than 149 foundation positions constructed within Lease Area OCS-A 0521. Project 1, which is the only project being considered for authorization by USACE currently, would install up to 85 WTGs and one (1) OSP within Lease Area OCS-A 0521. Project 2, which is not being considered for authorization by USACE currently, would install up to 85 of WTGs and one (1) OSP. Again, no more than 149 foundation positions would be constructed within the lease area. Both projects would collocate their export cables in one Brayton Point OECC, make intermediate landfall and cross Aquidneck Island, and make final landfall at Brayton Point in Sommerset, Massachusetts. Alternative B is reasonable under NEPA as it meets the purpose and need for the proposed action while being technically and economically feasible (40 CFR § 1508.1(hh)).

Alternative C-1 is the fisheries habitat impact minimization alternative which would land the offshore export cables at the Second Beach parking lot in Middletown, Rhode Island on

[21] Massachusetts, Connecticut, and Rhode Island all issued solicitations for additional offshore wind generated electricity and signed a memorandum of understanding in October 2023 to allow developers to submit multi-state bids and states to collaborate on their procurement decisions. On September 6, 2024, SouthCoast Wind was selected by the Massachusetts Department of Energy Resources and Rhode Island Energy to provide 1,087 MW to the Commonwealth of Massachusetts and 200 MW to the State of Rhode Island. SouthCoast Wind has indicated their intent to bid on further solicitations from states in the New England region.

Aquidneck Island. Once on Aquidneck Island, there are two export cable route variations (western and eastern). Both variations would reach Route 138 and follow the same route to Boyd's Lane and rejoin the proposed route across Aquidneck Island in Portsmouth, RI. From here, the alternative is the same as the proposed project. This alternative would reduce the offshore export cable route by nine (9) miles and increase the onshore cable route by nine (9) miles. Development of Lease Area OCS-A 0521 would remain as proposed for the overall project.

Alternative C-2 is the fisheries habitat impact minimization alternative which would land the offshore export cables on the ocean facing side of Breakwater Point, in the parking lot across from the Sakonnet Harbor. The cables would follow Route 77 from Little Compton to Tiverton, turn east onto Route 177 to Fish Road, go north to Souza Road which turns into Schooner Drive. At the end of Schooner Drive is a cul-de-sac, which would serve as the onshore HDD installation cable entrance to Mount Hope Bay. Once in Mount Hope Bay, the cables would cross the Fall River Harbor Federal Navigation Project (FNP) three times before joining back with the proposed OECC route just south of the landing at Brayton Point. This alternative would reduce the OECC route by 12 miles and increase the onshore cable route by 13 miles.

See section 2.1.3 and Figure 2-6 of BOEM's FEIS for detailed descriptions of Alternatives C-1 and C-2 and visual depictions of the routes. BOEM carried these alternatives forward for analysis through their FEIS. These alternatives were also requested for inclusion in the analysis by NMFS and other agencies concerned with the proposed project's potential impacts to fisheries, EFH, and HAPCs. As stated in BOEM's FEIS, "The precise selection of onshore and nearshore routing for any action alternative is under the jurisdiction of the USACE and is pursuant to their adoption of this FEIS and the associated consultations, along with USACE's final identification of least environmentally damaging practicable alternative (LEDPA) and route selection for the joint ROD." The carrying forward of these alternatives for analysis implies the alternatives were found to be reasonable under NEPA by BOEM, however, USACE has determined that these alternatives are not economically feasible based on information provided by the applicant. Both alternatives are further analyzed pursuant to NEPA implementing regulations and the CWA Section 404(b)(1) Guidelines (the Guidelines) in sections 5.3.3.4 and 5.3.4.2, respectively, of this document, which includes information relevant to the determination of a "reasonable alternative" under NEPA per 40 CFR § 1508.1(hh).

Alternative D is the Nantucket Shoals alternative and BOEM has identified this alternative as their preferred alternative. Under this alternative up to six (6) WTGs (AZ-47, BA-47, BB-47, BC-47, BF-48, and BF-49) in the northeastern portion of the lease area would be eliminated to reduce potential impacts on NARW foraging habitat and potential displacement of wildlife from habitat within the lease area adjacent to Nantucket Shoals. Outside of the elimination of up to six (6) WTGs, the alternative would be the same as the proposed project. See section 2.1.4 of BOEM's FEIS for a detailed description of Alternative D, and Chapter 2 of BOEM's FEIS for their discussion of Alternative D as the preferred alternative. Alternative D is reasonable under NEPA as it meets the purpose and need for the proposed action while being technically and economically feasible (40 CFR § 1508.1(hh)).

Alternative E-1 is the piled foundation structures alternative and would involve the use of 149 monopile and/or piled jacket foundation structures to support all WTGs and OSPs within the lease area.

Alternative E-2 is the suction bucket foundation structures alternative and would involve the use of 149 suction bucket foundation structures to support all WTGs and OSPs within the lease area.

Alternative E-3 is the gravity-based foundation structures alternative and would involve the use of 149 gravity-based foundation structures to support all WTGs and OSPs within the lease area.

See section 2.1.5 and Table 2-2 of BOEM's FEIS for a detailed description of these alternatives and a comparison of resource effects by foundation type. Outside of foundation types, Alternatives E would be the same as the proposed project. Alternatives E-1, E-2, and E-3 are reasonable under NEPA as they meet the purpose and need for the proposed action while being technically and economically feasible (40 CFR § 1508.1(hh)).

5.3.3.4 USACE Specification of Environmentally Preferable Alternatives

USACE is required by CEQ regulations, 40 CFR § 1505.2(b), to specify the alternative or alternatives considered environmentally preferable. USACE may discuss preferences among alternatives based on relevant factors, including economic and technical considerations. USACE will identify all such factors that it balanced in making its decision and state how those considerations entered into its decision.

USACE has identified four (4) environmentally preferrable alternatives: (1) Alternative A, the no action alternative; (2) Alternative C-1, the fisheries habitat impact minimization alternative landing in Middletown, RI; (3) Alternative C-2, the fisheries habitat impact minimization alternative landing at Breakwater Point in Rhode Island; (4) Alternative D, the BOEM-identified preferred alternative. Alternatives E-1, E-2, and E-3 were not included in this section as they are all foundation design alternatives. The design of the foundations would be determined based on site-specific information and/or may be utilized as mitigation measures to lessen impacts to one or more resource.

Under Alternative A, the "No Action Alternative," USACE would not issue any permits under section 404 of the CWA or section 10 of the RHA for the proposed project. Therefore, no WTGs, OSPs, inter-array, and no interlink cables would be installed in the lease area. Additionally, no export cables would be installed within the Atlantic Ocean to carry electricity from the lease area to a point of interconnection with the ISO-NE power grid. There would be no impacts to any aquatic resources under this alternative. Offshore wind projects necessitate siting on the OCS and therefore cannot be sited outside of USACE jurisdiction. Also, in the absence of the proposed action, other offshore wind projects are reasonably foreseeable and would be implemented, which would cause similar impacts to the aquatic environment. Lastly, although this alternative would be technically and economically feasible, it would not meet the purpose and need for the

proposed action to provide clean, renewable offshore wind energy to the northeastern United States. For these reasons, USACE did not choose Alternative A.

Under Alternative C-1 (both the eastern and western routes), which is the fisheries habitat impact minimization alternative landing in Middletown, RI, the length of the export cable would be reduced by nine (9) miles in tidal waters, and cable protection placed on the seabed within the territorial seas would be reduced by 13 acres as compared to Alternative B, the proposed project (see Appendix F, Table F-2, Table A in BOEM's FEIS). The applicant provided to USACE a benthic desktop study and a geohazard memo which were both specifically completed for this alternative. Both documents describe a prominent hard substrate ridge that extends across the entire alternative's OECC as it approaches Sachuest Bay. Both documents demonstrate that this ridge would pose a physical barrier and would increase cable installation risks.

The applicant also provided a cost comparison of the construction of the proposed project (Alternative B) versus the costs to construct Alternatives C-1 (eastern and western routes) and C-2. This comparison applies to the route segments where the alternatives diverge from the proposed OECC route. Construction of this Alternative C-1 route segment would increase the construction costs associated with this segment by over 200%. In addition to added construction costs, SouthCoast Wind would need to acquire six (6) to eight (8) private property agreements to utilize the Alternative C-1 route, which would increase the cost associated with private property agreements by over 188%. Alternative C-1 would also have increased property tax and Host Community Agreement (HCA) costs. An HCA is a negotiated payment required by host communities to ensure that any proposed project in their town results in benefits that outweigh any project drawbacks. Since these are negotiated payments, SouthCoast Wind cannot provide an exact HCA cost for Middletown, RI, but has already negotiated such an HCA with Portsmouth, as both Alternative B (the proposed project) and Alternative C-1 would traverse Portsmouth. SouthCoast Wind utilized recent northeast regional HCAs for power projects to determine an expected HCA cost for Middletown, RI. Alternative C-1's estimated HCA cost would be around 417% more than the proposed project's HCA cost. Additionally, SouthCoast Wind's HCA with Portsmouth, RI included property taxes, which essentially results in no property taxes associated with the proposed project (Alternative B). The property taxes estimated by SouthCoast Wind for Alternative C-1 would be $1.06 million. Overall, Alternative C-1 would increase the cost for this segment of the project by 301%. SouthCoast Wind has obtained PPAs with both Massachusetts and Rhode Island, and the PPA bids were priced based upon the costs associated with the proposed project. The overall cost of the Alternative C-1 segment would prevent SouthCoast Wind from being able to provide power to these states within their awarded agreements. SouthCoast Wind has stated that the project would not be economically viable with Alternative C-1.

Under Alternative C-2, the fisheries habitat impact minimization alternative landing in Breakwater Point in Little Compton, RI, the length of the export cable would be reduced by 12 miles, and cable protection placed on the seabed within the territorial seas would be reduced by 17 acres as compared to Alternative B, the proposed project (see Appendix F, Table F-2, Table B in BOEM's FEIS). The approach to the landing site is constrained, which would present

challenges to the HDD installation (see section 2.1.3 of BOEM's FEIS). This alternative would also cross an FNP three (3) times. USACE requires geotechnical information regarding the substrates below an FNP in order to determine if minimal burial depths of cables could be achieved. As the applicant is not proposing this alternative, such geotechnical information has not been obtained. To perform geotechnical surveys within the FNP would also require obtaining USACE section 408 permission. The time required to obtain permission and perform the surveys would likely impede the applicant's ability to meet contractual obligations under their awarded PPAs.

As with Alternative C-1 above, this alternative would also increase the construction costs associated with this segment of the proposed project by 249%. This route would require up to ten (10) private property agreements, and potentially more due to a particularly constrained portion of the route, increasing private property agreement costs by an estimated 244%. HCA costs for Little Compton and Tiverton would be estimated to increase by 417%, and property taxes for this route are estimated at $1.43 million. Overall, Alternative C-2 would increase the cost for this segment of the project by 350%. As with Alternative C-1, SouthCoast Wind has stated that the project would not be economically viable with Alternative C-2.

Although Alternatives C-1 and C-2 would meet the purpose and need for the proposed action to provide clean, renewable offshore wind energy to the northeastern U.S., while minimizing impacts to the seabed, the ridge that crosses Alternative C-1's OECC presents technical challenges which could prevent cable installation. Alternative C-2 may not allow the applicant to meet contractual obligations due to the geotechnical surveys which would be required to potentially route the cable through the FNP. For both routes, the associated costs would render the project economically infeasible. Therefore, USACE did not choose either Alternative C-1 or C-2.

Alternative D[22] is the "Nantucket Shoals" alternative which would remove up to six (6) turbines in the northeastern portion of the lease area to address potential impacts on protected species. The removal of these WTGs (listed in section 5.3.3.3 of this document) would be expected to lessen the hydrodynamic impacts to the foraging habitat along the western edge of Nantucket Shoals. Although BOEM has identified Alternative D as the preferred alternative, section 2.1.4 of the FEIS states that there is a lack of conclusive evidence that the removal of these WTGs would measurably lessen the minor impacts on hydrodynamic features. However, given the high foraging value of the Nantucket Shoals, out of an abundance of caution, BOEM has chosen this alternative as preferred as it would reduce potential impacts and potential displacement of wildlife from the habitat adjacent to Nantucket Shoals. Alternative D is technically and economically feasible and would meet the purpose and need for the proposed action to provide clean, renewable offshore wind energy to the northeastern United States. Therefore, USACE has chosen Alternative D as the NEPA preferred alternative.

[22] Alternative D only differs from the overall proposed project (Alternative B) in the number of WTGs within the lease area. Therefore, the export cable route under Alternative D would be the same as Alternative B, the applicant's proposed project.

5.3.3.5 Mitigation, Monitoring, and Reporting (40 CFR § 1505.2(c))

USACE is required by CEQ regulations to state whether it has adopted all practicable means to avoid or minimize environmental harm from the alternative selected, and if not, why the agency did not. The agency will adopt and summarize, where applicable, a monitoring and enforcement program for any enforceable mitigation requirements or commitments.

USACE has adopted all practicable means to avoid or minimize environmental harm from the Preferred Alternative. These practicable means include:

- Appendix G of BOEM's FEIS identifies environmental protection measures committed to by the applicant to avoid, minimize, and mitigate adverse environmental impacts that could result from the proposed activities. USACE has adopted these measures as part of the proposed action, which will be subject to the USACE permit authorizations.

- USACE has adopted certain conservation recommendations (CRs) as a result of EFH consultation under the MSA.

- Under section 7 of the ESA, USACE has adopted the reasonable and prudent measures and terms and conditions found in the BOs issued by the U.S. Fish and Wildlife Service (USFWS) for terrestrial species in the action area and issued by the NMFS for marine species within the action area.

- USACE has adopted conservation recommendations received from NMFS in accordance with the Fish and Wildlife Coordination Act (FWCA).

- USACE has adopted all mitigation measures identified in the MOA resultant from the Section 106 consultation process under the NHPA.

5.3.4 Alternatives Evaluation under the Section 404(b)(1) Guidelines

Any discharge of dredged or fill material into waters of the United States authorized under section 404 of the CWA must comply with guidelines established by the Administrator of the EPA under section 404(b)(1) of the CWA in 40 CFR Part 230 (the Guidelines). For the proposed project, USACE has determined that the activities in waters of the United States regulated under section 404 of the CWA include the following: (1) Backfilling of up to 12 HDD exit pits; eight (8) for intermediate cable landfall on Aquidneck Island, and four (4) to make landfall at Brayton Point. Each HDD exit pit would disturb up to 0.3-acre for a total of up to 3.6 acres of impacts; (2) Placement of up to 30 acres of secondary cable scour protection. Cable scour protection would consist of rock berms, bioactive concrete mattress placement, rock placement, and/or fronded mattresses; and (3) The backfill of excavated trenches within wetlands and a waterway (Founders Brook) on Aquidneck Island. Up to 44 linear feet of trench would be constructed to

install the export cables through wetlands and up to 80 linear feet of trench would be constructed to install cables across Founders Brook.

"Except as provided under section 404(b)(2) of the CWA, no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences." (40 CFR § 230.10(a)). An alternative is practicable if it is available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes (40 CFR § 230.10(a)(2)).

For the SouthCoast Wind Energy Project, USACE has determined that the overall project purpose is the construction and any needed maintenance of a commercial-scale offshore wind energy project, including associated transmission lines, for renewable energy generation and distribution to the ISO-NE power grid.

According to the Guidelines, when the activity associated with a discharge, which is proposed for a special aquatic site (SAS) (as defined in 40 CFR Part 230 subpart E), does not require access or proximity to or siting within the SAS in question to fulfill its basic purpose (i.e., is not "water dependent"), practicable alternatives that do not involve SASs are presumed to be available, unless clearly demonstrated otherwise. In addition, where a discharge is proposed for an SAS, all practicable alternatives to the proposed discharge which do not involve a discharge into an SAS are presumed to have less adverse impact on the aquatic ecosystem, unless clearly demonstrated otherwise.

This Guidelines alternatives analysis is not identical to the NEPA alternatives analysis discussed in section 5.3.3.3 of this ROD. The Guidelines only look at alternatives to a discharge of dredged or fill material in waters of the United States regulated by USACE under section 404 of the CWA. As such, alternatives which involve only proposed project features located on the OCS and analyzed under NEPA are not subject to the Guidelines analysis. The Guidelines are only applicable to waters of the United States as defined under section 404 of the CWA, which extends only to the 3 nmi limit of the territorial seas. Therefore, the only alternatives which are considered in USACE's Guidelines alternatives analysis are (1) the No Action Alternative; (2) Alternative B[23]; (3) Alternative C-1 (Western); (4) Alternative C-1 (Eastern); and (5) Alternative C-2.

5.3.4.1 Site Selection/Screening Criteria

The proposed discharges of dredged and/or fill material are directly related to the OECC route as the route determines how much of the cable would require discharges of fill material for cable protection and the location of the HDD exit pits. Depending on the alternative, there could also

[23] Alternative B was proposed by the applicant to include up to 147 WTGs within the lease area. The export cable route proposed and evaluated under Alternative B is the same export cable route as proposed and evaluated under Alternative D, which USACE has determined is the environmentally preferable alternative under NEPA.

be non-tidal waters and/or wetland impacts associated with cable installation. USACE has determined that any alternative regarding the cable route and associated onshore work must meet the following criteria:

1) Within tidal waters, any alternative must have geological substrate characteristics that would allow for adequate burial of the cable (3.2 to 13.1 feet below substrate). However, it is anticipated that there would be a small percentage of the route that may not allow for adequate cable burial depth.

2) Any alternative must allow the transmission cables coming from the lease area to tie into the ISO-NE power grid and deliver 1,287 MW of power (see Footnote 1, section 5.3.3.3 of this document).

5.3.4.2 Description of Section 404 Alternatives and Their Impacts

This alternatives analysis considers five (5) export cable corridor alternatives and associated onshore work, as well as a "no action alternative." The alternatives analysis is below and is also supported by Appendix F of BOEM's FEIS.

This alternatives analysis assumes the following of the export cable corridor route alternatives and associated onshore work within Section 404 waters:

1) Up to six (6) export transmission cables would be installed in the OECC. Within section 404 tidal waters, the applicant is proposing to use simultaneous cable lay and burial technology to a target depth of six (6) feet below the substrate. USACE has determined that this cable installation method does not involve a discharge of dredged or fill material regulated under section 404 of the CWA (see 33 CFR § 323.2(d)(3)(i)).

2) Fill impacts regulated under section 404 of the CWA are associated with secondary cable protection. In areas where burial could not occur or where sufficient burial depth could not be achieved due to seafloor conditions and location specific factors warrant the use of cable protection, cable protection in the form of hard armoring would be installed. This armoring would consist of rock berms, bioactive concrete mattresses, rock bag placement, and/or fronded mattresses. Cable protection would also be required where the proposed cables cross existing submarine cables. As the applicant is planning to install cables in soft sediments and to avoid complex habitat to the maximum extent practicable, it is assumed that the resultant subtidal impacts from secondary cable protection would be similar in nature across all alternatives.

3) Fill impacts regulated under section 404 of the CWA are also associated with intermediate and final landfalls. Cables would make intermediate and final landfall via HDD installation. This would require the excavation and backfill of HDD exit pits in subtidal waters, resulting in up to 3.6 acres of subtidal impacts of all alternatives.

4) Intermediate landfall cable installation (across Aquidneck Island) would also involve fill impacts regulated under section 404 of the CWA as the cable would be installed through wetlands and open water via trenches or HDD. Trenches would involve the excavation of material, side casting, and eventual backfill.

No Action Alternative: Under this alternative, USACE would not issue any permits under section 404 of the CWA, and the applicant would not discharge any dredged or fill material into waters of the United States associated with the SouthCoast Wind Energy Project. Therefore, no secondary cable protection would be placed over the offshore export cables in waters of the United States, no HDD exit pits would be backfilled, and no side casting and backfilling within onshore waters of the United States would occur. Without secondary cable protection, portions of the cable would lie directly on the substrate or would be buried to an insufficient depth. This would subject the cables to damage by tidal forces and scour. Cables would also be subject to damage by fishing gear and boat anchors, as well as pose as a safety hazard to those mariners. Without the discharge of dredged material associated with the HDD work, the export cables would have to lie directly on the substrate in the nearshore environment and in the intertidal zone. The cables would be subject to damage by tidal forces, people, and animals, and could pose a safety hazard. The cables installed along the intermediate landfalls would also have to lie directly on substrates, rather than being buried. Lying directly on the substrates would pose similar hazards for damage and safety. It is infeasible to install the export cables without the addition of secondary cable protection, HDD work, and burial within trenches. Because the export cable work could not be performed without any discharge of dredged or fill material into waters of the United States, the No Action Alternative is not practicable under the Guidelines because it does not meet the overall project purpose.

Alternative B: Alternative B is the applicant's overall proposed route and would route the export cable from the lease area to territorial seas for landfall at Brayton Point in Sommerset, Massachusetts. From the boundary of the territorial seas, it would route north through the Sakonnet River, make intermediate landfall on Aquidneck Island at the northeast corner of Boyds Lane and Park Avenue. There are four alternatives for crossing Aquidneck Island, discussed below. Route 3 is the applicant's proposed route. Once across Aquidneck Island, the cables would then enter Mount Hope Bay and make landfall on the western side of Brayton Point at Lee River, as proposed by the applicant, or alternatively, the eastern side at Taunton River. Alternative B, regardless of the route across Aquidneck Island and regardless of the western or eastern approach would result in 30 acres of cable protection placed within the territorial seas.

The routes across Aquidneck Island would result in differing lengths of export cable within the territorial seas (Route 1: 121,065.7 linear feet (LF), Route 2A: 119,075.5 LF, Route 2B: 118,991.3 LF, and Route 3: 118,945.2 LF). All routes would result in the same acreage of temporary wetland impacts, 0.012-acre, associated with trenching. Each alternative route across Aquidneck Island would require a stream crossing. Route 1 would result in 0.04-acre of temporary stream impacts, while Routes 2a, 2b, and 3 would all result in 0.08-acre of temporary stream impacts. Stream impacts are associated with crossings of an existing culvert (cable would

be installed either over or under the existing culvert). Although Route 1 would result in less stream impacts, HDD installation would be extremely challenging at Route 1's exit off of Aquidneck Island, as the area would conflict with other utility alignments, a debris pile around a bridge piling, shell/crepidula substrate, and challenging seabed slopes. These challenges make the Route 1 infeasible and therefore not practicable. The remaining routes do not encounter such challenges and have equal impacts under section 404 of the CWA and are practicable. See Appendix F in BOEM's FEIS for a detailed description of each route alternative across Aquidneck Island.

The eastern and western approaches to Brayton Point would have equal impacts associated with HDD exit pit construction and backfilling. However, the eastern route would cross a private navigation channel and cross shallow water depths, both of which pose challenges to safe and effective HDD installation. Shallow water depths can present an obstacle to reaching target cable depths and supplemental cable protection would be required. Although both approaches are practicable, the eastern approach could result in greater impacts associated with cable protection.

SouthCoast Wind's proposed route is the Brayton Point OECC with Route 3 across Aquidneck Island with the western approach to Brayton Point. As the applicant's preferred and proposed route across Aquidneck Island and to Brayton Point have equal impacts (30 acres of cable protection, 0.012-acres of temporary wetland impacts, and 0.08-acres of temporary stream impacts) as all other routes that have not already been eliminated (Routes 2a, 2b, and the eastern approach) under section 404 of the CWA, as discussed above, is considered practicable.

Alternative C-1 (Western): Alternative C-1 (Western) is described in Appendix F of BOEM's FEIS. It is subject to the same potential routes across Aquidneck Island and the same potential approaches to Brayton Point as described above under Alternative B. Alternative C-1 (Western), regardless of (1) the route across Aquidneck Island, and (2) the western or eastern approach to Brayton Point would result in 17 acres of cable protection placed within the territorial seas.

The routes across Aquidneck Island would result in differing lengths of export cable within the territorial seas (Route 1: 72,860 LF, Route 2A: 70,876.6 LF, Route 2B: 72,399 LF, and Route 3: 70,746 LF). All Alternative C-1 (Western) potential routes would result in the same acreage of temporary wetland impacts, which range from 0.017-acre to 0.497-acre, associated with trenching and the cable landing. As no engineering design has been completed for this alternative, SouthCoast Wind conservatively estimated wetland impacts at the landfall site. If the cable was able to land via HDD at the existing Second Beach parking lot, wetland impacts would be avoided and only 0.017-acre of wetlands would be estimated to be impacted by the alternative. If landing within the Second Beach parking lot was not possible, additional wetland impacts would likely occur, resulting in up to 0.497-acre of impacts. The only potential Alternative C-1 (Western) route that would have differing temporary stream impacts would be associated with Route 1 over Aquidneck Island. Alternative C-1 (Western) with Route 1 over Aquidneck Island would result in 0.18-acre of temporary stream impacts while all remaining Alternative C-1 (Western) routes would result in 0.22-acre of temporary stream impacts.

Alternative C-1 (Eastern): Alternative C-1 (Eastern) is described in Appendix F of BOEM's FEIS. It is subject to the same potential routes across Aquidneck Island and the same potential approaches to Brayton Point. Alternative C-1 (Eastern), regardless of (1) the route across Aquidneck Island, and (2) the western or eastern approach to Brayton Point would result in 17 acres of cable protection placed within the territorial seas.

The routes across Aquidneck Island would result in differing lengths of export cable within the territorial seas (Route 1: 74,026 LF, Route 2A: 70,935 LF, Route 2B: 71,785 LF, and Route 3: 70,808 LF). All Alternative C-1 (Eastern) potential routes would result in the same acreage of temporary wetland impacts, which range from 0.012-acre to 0.492-acre, associated with trenching and the cable landing. Alternative C-1 has the same landing point regardless of its onshore route, so if the cable could land via HDD at the existing Second Beach parking lot, wetland impacts would be avoided and only 0.012-acre of wetlands would be estimated to be impacted by the alternative. If landing within the Second Beach parking lot was not possible, additionally wetland impacts would likely occur, resulting in up to 0.492-acre of impacts. The only potential Alternative C-1 (Eastern) route that would have differing temporary stream impacts would be associated with Route 1 over Aquidneck Island. Alternative C-1 (Eastern) with Route 1 over Aquidneck Island would result in 0.13-acre of temporary stream impacts while all remaining Alternative C-1 (Eastern) routes would result in 0.17-acre of temporary stream impacts.

Alternative C-2: Alternative C-2 is described in Appendix F of BOEM's FEIS. This alternative would make intermediate landfall at Sakonnet Point rather than crossing Aquidneck Island, and would enter Mount Hope Bay at Tiverton, Rhode Island. After entering Mount Hope Bay, the cable would travel northwest to cross the FNP, then turn northeast and eventually follow the same proposed cable route to Brayton Point. Regardless of the whether the approach to Brayton Point is the western or eastern approach, Alternative C-2 would result in 13 acres of cable protection placed within the territorial seas (although the eastern approach could require additional cable protection), 0.12-acre of temporary wetland impacts, and 0.41-acre of temporary stream impacts.

Although Alternatives C-1 (Western), C-1 (Eastern), and C-2 could technically be constructed (i.e., the technology exists for subtidal, intertidal, and onshore cable emplacement), for the same reasons these alternatives were not chosen under NEPA, as discussed in section 5.3.3.4 of this document, they are not considered practicable under the Guidelines. These alternatives would increase the cost of the project from where they deviate from the proposed Brayton Point OECC route by over 301% and 350%, respectively, and SouthCoast Wind has stated that these additional costs would make the project not economically viable. The approach to Alternative C-1 (both Western and Eastern) encounters a ridge that poses a potential barrier to cable installation. It is also unknown whether the appropriate cable depths could be reached for the crossings of the FNP in Alternative C-2, so USACE cannot determine whether the project is capable of placement through the FNP. The applicant has no existing authorizations for the use of private property or municipalities along either of these alternative routes, essentially rendering these alternatives unavailable to the applicant. The onshore routes for both Alternatives C-1 and

C-2 would require the development and negotiation of six (6) to ten (10) private property agreements and three (3) additional HCAs. These can take several years to negotiate and jeopardize the applicant's ability to meet contractual obligations under their awarded PPAs.

5.3.4.3 Determination of the Least Environmentally Damaging Practicable Alternative under the Section 404(b)(1) Guidelines

As described above, the No Action Alternative, Alternative C-1 (Western and Eastern), and Alternative C-2 are not practicable under the Guidelines. Further, even if Alternatives C-1 and C-2 were considered practicable, the impacts to SAS (i.e., wetlands) would either be equal to or greater than the proposed project's impacts to SAS. Per 40 CFR § 230.10(a)(3), for projects which do not require siting within an SAS, practicable alternatives that do not involve SAS are presumed to be available unless clearly demonstrated otherwise. The applicant has clearly demonstrated that Alternatives C-1 and C-2 are not available. Therefore, Alternative B, being the only practicable alternative, is the least environmentally damaging practicable alternative under the Guidelines. The environmental impacts of Alternative B were addressed in the NEPA process by BOEM in their FEIS, which USACE has adopted.

5.3.5 Evaluation of the Discharge of Dredged and Fill Material Under the Section 404(b)(1) Guidelines (40 CFR 230 subparts B through H)

The following sequence of evaluation is consistent with 40 CFR § 230.5. The impact assessment may differ from the impact assessment in BOEM's FEIS in that the NEPA analysis assesses impacts from the overall project as a whole, whereas this analysis deals with a subset of the overall project, specifically the impacts from the discharge of dredged and fill material into waters of the United States. As noted above, waters of the United States subject to the CWA only extend to the 3 nmi limit of the territorial seas. It has been determined that there are no practicable alternatives to the proposed discharges that would be less environmentally damaging (40 CFR § 230.1(a)). There is not a practicable alternative to the proposed discharges that would have less adverse impact on the aquatic ecosystem, and the proposed discharges do not have other significant environmental consequences. Therefore, this section evaluates the discharges proposed in Alternative B.

5.3.5.1 Proposed Disposal Site Determination (Subpart B, 40 CFR § 230.11(f))

Each disposal site will be specified through the application of these Guidelines. For offshore (marine) cable installation activities (i.e., the discharge of cable protection and the backfilling of HDD exit pits), the general disposal site is the Atlantic Ocean, including the Sakonnet River and Mount Hope Bay, within the proposed 2,300-foot-wide (maximum) Brayton Point OECC from the limits of the territorial seas shoreward to Brayton Point. For onshore cable installation activities (i.e., the discharge of excavated material and the subsequent backfilling of trenches), the general disposal sites are estuarine emergent wetlands on Aquidneck Island and Founders Brook.

During cable installation in marine waters, turbidity would be anticipated to increase to concentrations greater than 10 mg/L for up to six (6) hours and would not be anticipated to reach farther than 200 meters from the trench (FEIS section 3.4.2). Discharges of fill for cable protection and backfilling of HDD exit pits are anticipated to have a smaller associated turbidity plume. The turbidity plume resultant from the discharge of fill material can reasonably be considered the mixing zone. Discharged fill would be placed carefully, as it is intended to backfill an excavated area or to protect laid cable. Additionally, cable protection would specifically be stable fill material that would not be subject to currents (i.e., the fill material would not contribute to turbidity and would not extend the mixing zone). The mixing zone, as defined in 40 CFR § 230.3(m), would not be expected to be adversely impacted by these discharges of fill.

Cable installation within wetlands would be confined to the discharge area, as there wouldn't be open water to act as a mixing zone, as defined in 40 CFR § 230.3(m). In Founders Brook, the mixing zone would be the immediate area involved in the discharge and downstream of the discharge. Typical best management practices (BMPs) would be required and would minimize water quality impacts of the defined mixing zone.

5.3.5.2 Potential Impacts on Physical and Chemical Characteristics of the Aquatic Ecosystem (Subpart C, 40 CFR § 230.20-230.25)

Substrate: The discharge of fill material for cable protection within the territorial seas would be anticipated to have a minor, long-term effect on substrate. Where cable protection would be laid (up to 30 acres), existing substrates would be covered completely and would likely experience compaction from the weight of the cable protection material. Existing substrates would not be removed, but they would be effectively "replaced" by the cable protection materials for the life of the proposed project. Species which utilize these substrates could also be smothered by the discharge of cable protection. The applicant has committed to avoiding sensitive benthic habitats to the extent practicable, which would lessen this impact. Additionally, the cable protection would be expected to provide habitat for benthic organisms, so although some may be covered by its placement, there would not be a complete loss of habitat. HDD exit pits (up to 3.6 acres total) would be backfilled with either the same substrates which were excavated, or with suitable clean fill material. In either case, substrates would only be disturbed temporarily during HDD activities, resulting in a minor, short-term impact.

For wetlands and stream crossings of the onshore cable, up to 0.012-acre and 0.08-acre of substrates would be disturbed, respectively. Substrates would be excavated and replaced to backfill a cable trench. Substrates would not be replaced but would experience disturbance and potentially mixing of topsoil and subsoil. Trenching through wetlands could result in a change to the hydrology of the wetlands if they are not backfilled properly. This could lead to channelization (water ponding or flowing on the top of the backfilled material) or ponding on either side of the trenched area if the backfilled trench acts as a barrier. A special condition would be added to the permit to ensure hydrology is not adversely impacted. Substrates adjacent to the project footprint may experience compaction due to equipment. A special condition would

be added to the permit requiring that equipment work from construction mats to reduce pressure and the indirect impacts of compaction to adjacent wetland substrates. Trenching through streams could result in movement of substrates downstream. This would be minimized by typical BMPs, such as dewatering the work area and use of sediment controls and would be temporary, only occurring during construction.

Suspended particulates/turbidity: The discharge of fill material for cable protection within the territorial seas would be anticipated to have a minor, short-term effect on suspended particulates/turbidity. As discussed in section 5.3.5.1, cable installation would be anticipated to increase to concentrations greater than 10 mg/L for up to six (6) hours and would not be anticipated to reach farther than 200 meters from the trench. Since the placement of cable protection would not disturb existing sediments to the same degree as cable installation, resultant increases in suspended particulates/turbidity would likely be less than that estimated for cable installation and resuspended particulates would resettle in less time. Excavation and backfilling of the HDD exit pits would also result in temporary increases to suspended particulates/turbidity within the immediate area of the pits. Levels would be expected to return to typical levels within a few hours.

In wetlands, if there are associated areas of open water, and within flowing water suspended particulates/turbidity levels could increase in those localized areas. Due to the temporary nature of the work, increased levels would be expected to decrease to typical levels within a few hours after construction is completed. Additionally, sedimentation and erosion controls would lessen these impacts.

Water: The discharge of fill material for cable protection within the territorial seas would not be anticipated to have an impact on water, as all material would be required to be clean fill material. The HDD exit pits would be backfilled with the excavated material if found not to contain elevated levels of contaminants. If those sediments are found to have elevated levels of contaminants, the HDD exit pits would either be backfilled with suitable, clean material or allowed to backfill naturally.

Within wetlands and flowing water, only existing substrates would be utilized as fill. Therefore, for all areas of the proposed project there would be no anticipated changes to chemistry or physical characteristics of the receiving water which would reduce or eliminate the water's suitability for populations of aquatic organisms or for human usage. It should also be noted WQCs have been issued by the certifying authorities for the entirety of Project 1 and the HDD exit pits associated with Project 2.

Current patterns and water circulation: The discharge of fill material for cable protection within the territorial seas would not be anticipated to have an impact on current patterns or water circulation. Such discharge would be the minimal necessary to protect cables and would not be of an amount or height that would cause changes to the current patterns or water circulation within the water. It would be required by special condition for the HDD exit pits to be backfill to

original bottom contours, so no changes to current patterns or water circulation would be anticipated as a result of that discharge.

In wetlands, if there are associated open waters, and within flowing water, water circulation would also not be anticipated to be impacted or would be minimally impacted if the area is dewatered (by cofferdam or stream rerouting) during construction. Any impacts to water circulation would be temporary and minimal in such case.

Normal water fluctuations: The discharge of fill material for cable protection within the territorial seas would not be anticipated to have any impact on normal water fluctuations. All cable protection discharges would be subtidal and would have no impact on normal tidal fluctuations or how the tide interacts with the shore. The HDD exit pits would also be subtidal, and their subsequent backfilling would also have no impact on normal tidal fluctuations or how the tide interacts with the shore.

In wetlands, there may be temporary impacts to normal water fluctuations during construction, but such impacts would be restored after construction is completed. The applicant would be required to maintain wetland hydrology and any evidence of altered hydrology would require restoration. If cable installation across the stream requires dewatering (cofferdam or temporary rerouting), normal water fluctuations could be impacted by such activity. Again, this would be temporary, lasting only through construction.

Salinity gradients: The discharge of fill material for cable protection within the territorial seas would not be anticipated to have any impact on salinity gradients. Cable protection would not be placed in area or a manner in which it would restrict or divert flow of either a fresh or saltwater input. Material placed to backfill the HDD exit pits would also not restrict or divert flow of any fresh or saltwater inputs, even for the HDD exit pits near Brayton Point, which are near the Lee River.

Wetlands which would be temporarily impacted are estuarine marine wetlands, but the backfilling of the cable trench would not be anticipated to have any impact on any salinity gradients, as the impacts of construction would be restored. Installation of the cable through the stream would also not be anticipated to have any impact to salinity gradients as the installation would not restrict the freshwater flow.

5.3.5.3 Potential Impacts on the Biological Characteristics of the Aquatic Ecosystem (Subpart D, 40 CFR § 230.30-230.32)

Threatened and endangered species: The discharge of fill material for cable protection and HDD exit pits within the territorial seas and for cable installation through wetlands and flowing water onshore would have a minor impact to threatened and endangered species. Threatened and endangered terrestrial species that could occur within the vicinity of the proposed discharges of fill material include roseate tern (*Sterna dougallii dougallii*), northern long eared bat (*Myotis septentrionalis*), sandplain gerardia (*Agalinis acuta*), piping plover (*Charadrius melodus*) and

red knot (*Calidris canutus rufa*). BOEM, as lead federal agency, determined that the proposed project may affect, but is not likely to adversely affect, the roseate tern, northern long eared bat, sandplain gerardia, and the tricolored bat. The USFWS concurred with BOEM's determinations for these species in their September 1, 2023, BO. Piping plover and red knot would not be adversely affected by the discharge of subtidal fills proposed by the project, including the backfilling of the HDD exit pits. BOEM's biological assessment (BA) and USFWS's subsequent BO largely focus on the risk of these species striking WTGs, which is not subject to the Guidelines analysis as the WTGs are not within the territorial seas.

Threatened and endangered marine species that could occur within the vicinity of the proposed discharges of fill material include shortnose sturgeon (*Acipenser brevirostrum*), Atlantic sturgeon (*Acipenser oxyrinchus oxyrinchus*), fin whale (*Balaenoptera physalus*), NARW (*Eubalaena glacialis*), sei whale (*Balanoptera borealis*), sperm whale (*Physeter macrocephalus*), blue whale (*Balaenoptera musculus*), green sea turtle (*Chelonia mydas*), Kemp's ridley sea turtle (*Lepidochelys kempii*), leatherback sea turtle (*Dermochelys coriacea*), and loggerhead sea turtle (*Caretta caretta*). BOEM, as lead federal agency, evaluated impacts from the discharge of fill material within marine waters (i.e., the territorial seas) with other cable installation activities (route identification surveys, trenching, jet plowing, etc.) and determined that noise generated and habitat conversion from these activities as a whole may affect, but is not likely to adversely affect, ESA-listed marine mammals and fish. Further, they found the noise associated with these activities would have no effect to ESA-listed sea turtles, while habitat conversion from these activities may affect, but are not likely to adversely affect, ESA-listed sea turtles. These impacts were coordinated by BOEM in their request for formal consultation with the NMFS.

Fish, crustaceans, mollusks, and other aquatic organisms: The discharge of fill material within the territorial seas would be anticipated to have moderate impacts to fish, crustaceans, mollusks, and other aquatic organisms. The placement of cable protection on the seafloor could smother or crush sessile or slow-moving organisms or organisms in an early life stage (egg or larval). Other mobile organisms may be able to avoid the discharges. The project's existing CWA section 401 WQCs include timing restrictions which would help avoid and minimize impacts to these organisms. The project area within territorial seas is mostly within Rhode Island state waters. The Rhode Island Department of Environmental Management's (RIDEM) CWA section 401 WQC includes a work window of October 15 through January 31 for in-water cable installation work, restricting work from occurring during times of year in which sensitive life stages of winter flounder are present and diadromous fish are migrating. This timing window also minimizes impacts to sensitive life stages of shellfish. In Massachusetts state waters, the Massachusetts Department of Environmental Protection's (MassDEP) CWA section 401 WQC includes a time of year restriction of January 15 through May 31, which also protects these organisms. RIDEM's CWA section 401 WQC also requires the applicant to conduct shellfish surveys of the HDD exit pits within Rhode Island state waters and relocate any shellfish prior to exit pit construction. As WQCs are made a part of USACE authorizations, USACE would require adherence to these timing windows and restrictions, as well as to the shellfish survey/relocation requirements. MassDEP did not require the same or similar shellfish surveys of

the HDD exit pits, but in response to NMFS's EFH CRs, USACE has committed to requiring the applicant to perform the same surveys/relocations for shellfish at the HDD exit pits in Massachusetts state waters. The placement of cable protection on the seafloor could also change the composition of the aquatic organisms which previously utilized that area of the seafloor. This potential change in aquatic organism composition would be anticipated to be long-term, through the life of the project.

Impacts to fish, crustaceans, mollusks, and other aquatic organisms resultant from the discharge of fill material within the territorial seas would be anticipated to be temporary to long-term. It would be anticipated that the placement of solid fill material (rock or bioactive concrete mattresses) would have similar habitat function to that which is currently present. In cases where cable protection is laid over soft substrates, it would create new rocky or hard bottom habitat. Habitat would remain but would be changed and thus provide the opportunity for different aquatic species to utilize the area. See section 3.5.2 of BOEM's FEIS for a discussion of the project's anticipated impacts to benthic resources, and section 3.5.5 of BOEM's FIES for a discussion of the project's anticipated impacts finfish, invertebrates, and EFH.

The discharges of fill material into wetlands and flowing waters for cable installation would be anticipated to have minor short-term impacts to aquatic organisms, including fish. Construction through these waters would be temporary and BMPs would be implemented to minimize any impacts (such as increased turbidity, sedimentation, etc.) which could have adverse impacts to aquatic organisms. It would not be anticipated that discharges of fill in these waters would result in identifiable and measurable impacts to aquatic organisms.

Other wildlife: The discharge of fill material into the territorial seas would be anticipated to have a minor impact to other wildlife species that have not been considered above. Impacts to fish, crustacean, mollusks and other aquatic organisms could have secondary impacts to the species which forage on these species.

5.3.5.4 Potential Impacts on Special Aquatic Sites (Subpart E, 40 CFR § 230.40-230.45)

Sanctuaries and refuges, wetlands, mud flats, vegetated shallows, coral reefs, riffle and pool complexes: The project would not include any discharges of fill material within any sanctuaries, refuges, mud flats, vegetated shallows, coral reefs, and riffle and pool complexes. The project would include the discharge of fill material into 0.012-acre of estuarine marine wetlands as the export cable would make intermediate landfall and cross Aquidneck Island. Impacts would include the potential side cast and backfill of excavated material for trenched cable installation. All impacts to wetlands would be temporary and minor. Wetlands would be anticipated to restore within a growing season. Section 3.5.8.5 of BOEM's FEIS has found the project's impacts to wetlands to be moderate adverse but concludes that there would be no permanent or long-term impacts as a result of the project. BOEM's analysis also takes into account factors which are outside of USACE's jurisdiction, as well the Falmouth variant's impacts to wetlands. Additionally, BOEM's impact area for wetlands is larger than USACE's, as USACE only considers the direct footprint of impacts. Impacts which may occur outside of that direct

footprint are considered as secondary impacts (see section 5.3.5.8 of this document). USACE is not considering these additional factors, nor the Falmouth variant in this analysis, and evaluates wetland impacts commensurate with the level of impact significance and complexity (40 CFR § 230.6(b)).

5.3.5.5 Potential Impacts on Human Use Characteristics (Subpart F, 40 CFR § 230.50-230.54)

Municipal and private water supplies: The discharge of fill material into the territorial seas would have no anticipated impact on any municipal or private water supplies as none exist within the territorial seas. The discharge of fill material associated with wetland and stream crossings on Aquidneck Island would also be anticipated not to have an impact on municipal and private water supplies as USACE is unaware of any such supplies within the project area.

Recreational and commercial fisheries: The discharge of fill material into the territorial seas for cable protection would be anticipated to have minor impacts on recreational and commercial fisheries. Fish populations could be negatively impacted if the discharges were to smother or crush non-mobile life stages (eggs and larvae), but time of year restrictions would be required (as discussed in section 5.3.5.3 of this document) to avoid and minimize this risk. Cable protection could snag fishing gear, but the applicant has committed to utilizing cable protection in fishing areas that is "trawl-friendly," with tapered/sloped edges to reduce the risk of snags. Additionally, the applicant has committed to implementing a compensation program for lost income for commercial and recreational fishermen. As discussed in the FEIS, there may also be a benefit to recreational fishing as new structures, including fill material, could have a "reef affect" and attract fish. See section 3.6.1.5 of BOEM's FEIS for a detailed description of impacts of the proposed project to recreational (for-hire) and commercial fisheries.

The applicant's proposed activities in the lease area would occur on the OCS and are thus outside of USACE's CWA section 404 jurisdiction. As such, although those activities are regulated by USACE under section 10 of the RHA, they are not subject to the requirements of the Guidelines. This Guidelines analysis of potential impacts to recreational and commercial fisheries only considers potential impacts of the discharge of dredged or fill material regulated under section 404 of the CWA (i.e., the 30 acres of cable protection, 3.6 acres of backfilled HDD exit pits, and 0.012-acre and 0.08-acre of temporary wetland and stream impacts, respectively).

The discharge of fill material within wetlands and flowing water would not be anticipated to have an impact to recreational and commercial fisheries. The installation of cables through these areas would be temporary and resultant impacts would be minimal and not to a scale which would result in identifiable impacts to recreational and commercial fisheries.

Water-related recreation: The discharge of fill material within the territorial seas would be anticipated to have a negligible impact on water-related recreation. The existence of fill material on the seabed for cable protection and the backfilling of HDD exit pits would not interfere with any recreational activities taking place on the surface of the ocean. During placement, however,

recreational vessels may have to avoid work vessels which are performing the discharge. Additionally, where cable protection is placed on existing soft sediments, a reef effect could occur, having a minor, localized beneficial impact on recreational fishing.

The discharge of fill material within wetlands and flowing water would not be anticipated to have an impact to any water-related recreation due to the temporary and minor impacts cable installation through these areas would have.

Aesthetics: The discharge of fill material within the territorial seas would not be anticipated to have more than minimal impacts on aesthetics. During placement of cable protection and backfilling of HDD exit pits, turbidity would increase and potentially decrease the aesthetic value of the area, but this would be temporary and localized to the area near where the cable protection is placed. Additionally, cable protection laying vessels would be visible and may decrease the aesthetic value of the area. Again, this would be a temporary and minor impact.

Similar impacts would be likely to occur from the discharge of fill material into wetlands and flowing water. Aesthetic value would be temporarily decreased by the visibility of the construction equipment, and the trenched area through wetlands would be visible until the area completely restores (at least one growing season).

Parks, national and historical monuments, national seashores, wilderness areas, research sites, and similar preserves: The proposed discharges would have no effect to any parks, national and historical monuments, national seashores, wilderness areas, research sites, and/or similar preserves, as none of these areas/features occur within or adjacent to the areas to be filled.

5.3.5.6 Evaluation and Testing (Subpart G, 40 CFR § 230.60-230.61)

The discharges associated with the project are backfilling of the HDD exit pits, cable protection, and backfilling of trenches through wetlands and flowing water (Founders Brook). The RIDEM's CWA section 401 WQC requires the applicant to develop a sediment sampling and analysis plan for their review 180 days prior to the commencement of HDD exit pit excavation. This plan would further inform RIDEM and other agencies, including USACE, as to whether the area to receive backfill in Rhode Island state waters contains unacceptable levels of contaminants. In response to concern about contaminant levels within Mount Hope Bay expressed by NMFS during EFH consultation, USACE has agreed to include a special condition to the permit which requires, if necessary, the disposal of contaminated excavated materials outside of waters of the United States (i.e., uplands) and the use of suitable clean material to backfill the HDD exit pits or allowing the exit pits to backfill naturally. Sediment testing performed in Massachusetts state waters, in support of MassDEP's CWA section 401 WQC evaluation, found that all contaminants in low concentrations below RCS-1 criteria. As such, USACE will not require any additional testing. Fill material to be utilized for cable protection would only be permitted to be clean material and is proposed to be rock and/or bioactive concrete mattresses. Testing is not required for these materials. The trench within wetlands and Founders Brook would be backfilled with the excavated native material. This discharge would

not be likely to degrade the disposal site, even in the event it contains contaminants, as it would have originated from the disposal site. BMPs would be implemented to control the discharge and ensure that it does not impact areas not within the construction footprint. Testing is not required for these materials.

5.3.5.7 Actions to Minimize Adverse Impacts (Subpart H, 40 CFR § 230.70-230.77)

The applicant has committed to certain avoidance, minimization, and mitigation measures which are described in Table G-1, Appendix G of BOEM's FEIS. While this table describes all measures the applicant has committed to, some are specific to the discharge of fill material.

Actions concerning the location of the discharge: The applicant would site the export cables to avoid areas of sensitive seafloor and benthic habitat to the extent practicable, minimizing the amount of cable protection necessary in these areas. HDD exit pits (and therefore backfilling of HDD exit pits) would be sited to avoid any SAV and productive shellfish beds to the extent practicable. Discharges within onshore waters (wetlands and flowing water) have been avoided to the extent practicable.

Actions concerning the material to be discharged: Only clean fill material or excavated material would be authorized for discharge. Clean rock material or bioactive concrete mattresses would be utilized for cable protection, and the HDD exit pits would be backfilled with their excavated material or a clean, suitable material. Wetlands and Founders Brook would be backfilled with their excavated material, which would not be expected to impact the quality of the aquatic resource.

Actions controlling the material after discharge: For onshore waters, erosion and sediment controls measures would be implemented to avoid dewatering, discharge scour, and siltation to nearby receiving waters, including wetlands. Additionally, the USACE would require appropriate backfilling and restoration of the trench through onshore waters to ensure no erosion or sedimentation occurs after construction.

Actions affecting the method of dispersion: The applicant would utilize typical methods of discharge in all waters with applicable BMPs to minimize indirect impacts from occurring to adjacent waters.

Actions related to technology: Landfalls would be accomplished utilizing HDD to avoid the need to install the export cables via an excavated and backfilled trench.

Actions affecting plant and animal populations: Landfall sites and onshore facilities have been sited to avoid significant fish and wildlife habitats. The export cables would be microsited to avoid sensitive seafloor and benthic habitats, minimizing the need for cable protection in these areas.

Actions affecting human use: No actions affecting human use of aquatic resources to receive a proposed discharge have been identified.

Other actions: The export cables would be installed at a sufficient depth (up to 13.1 feet below the surface) to the maximum extent practicable to minimize the amount of cable protection necessary. Construction mats would be utilized within wetlands to minimize soil disturbance outside of the direct impact footprint. The applicant is required by conditions of their CWA section 401 WQCs to take certain actions to minimize impacts resultant from proposed discharges and/or provide additional information and plans for approval to the certifying authorities to ensure minimal impacts occur from proposed discharges. These include conditions regarding HDD backfilling methods, SAV avoidance, identifying areas and methods of cable protection, bathymetric survey of the laid cable, and export cable inspections.

5.3.5.8 Factual Determinations (Subpart B, 40 CFR § 230.11)

Physical substrate determination: Based on the evaluation in section 5.3.5.2 of this document, USACE has determined that the proposed discharge of fill material for cable installation within the territorial seas would have a minor, long-term impact on physical substrates. Further, the discharge of fill material for the backfilling of HDD exit pits and trenches through wetlands and Founders Brook would have a minor, short-term impact on physical substrates.

Water circulation, fluctuation, and salinity determination: Based on the evaluation in section 5.3.5.2 of this document, USACE has determined that the proposed discharges within the territorial seas would have no effect to water circulation, fluctuation, and salinity. In wetlands and Founders Brook minor, short-term impacts could occur but would only be anticipated to occur during construction activities.

Suspended particulate/turbidity determination: Based on the evaluation in section 5.3.5.2 of this document, USACE has determined that the proposed discharges within the territorial seas and onshore waters would have minor, short-term impacts to suspended particulates/turbidity.

Contaminant determination: Based on the evaluation in section 5.3.5.6 of this document, USACE has determined that the proposed fill material would not introduce, relocate, or increase contaminants within the subject aquatic resources.

Aquatic ecosystem and organism determination: Based on the evaluation in section 5.3.5.3 of this document, USACE has determined the discharge of fill material within the territorial seas and onshore waters would have minor, long-term impacts to the aquatic ecosystem and organisms.

Proposed disposal site determination: Based on the evaluation in section 5.3.5.1 of this document, USACE has determined the proposed discharge of fill material within the territorial seas and onshore waters would have minor, long-term impacts on the disposal sites.

Determination of cumulative effects on the aquatic ecosystem: See Chapter 3 of BOEM's FEIS, which discusses anticipated cumulative impacts of the proposed project for each affected resource.

The proposed project's potential cumulative impacts, combined with other recent, current, or reasonably foreseeable actions would include onshore aquatic resource and marine impacts from other offshore wind energy projects, as well as any other project which may propose a discharge of fill into waters of the Unite States, including wetlands, within the vicinity of the proposed project.

The USACE New England District has previously authorized three offshore wind energy projects, all of which included cable protection within the territorial seas. For these projects, Vineyard Wind 1, Revolution Wind, and New England Wind 1, a total of 71.4 acres of discharges of fill has been authorized. The proposed project would increase that acreage to 101.4 acres (for both Project 1 and Project 2). Each project has also included impacts from HDD exit pit backfilling with total impacts ranging from 0.46-acre to the proposed project's 3.6 acres. HDD exit pit backfilling impacts would be temporary in nature and the disturbed areas would be expected to restore in a relatively short amount of time. The HDD exit pit impacts would not be expected to occur for all projects at the same time. Depending on construction schedules, some backfilled HDD exit pits may be fully restored by the time the proposed project's HDD exit pits are being backfilled. This would lessen the cumulative impacts associated with these discharges. None of the previously authorized offshore wind energy projects have included impacts to onshore aquatic resources. The proposed project is the only project thus far which has proposed such impacts. Due to the minimal and temporary nature of onshore impacts to aquatic resources, no appreciable cumulative impacts are anticipated to occur from the proposed project.

In addition to the previously authorized offshore wind energy projects, USACE is aware of four other offshore wind energy projects which are or would be proposed within the USACE New England District's area of responsibility. These are the New England Wind 2 project, Vineyard Northeast project, Beacon Wind project, and Bay State/Star Board Wind project. The New England Wind 2 project was evaluated by USACE at the same time as the New England Wind 1 project, and that project proposes to discharge fill into 29.4 acres of the territorial seas and would have no onshore impacts to aquatic resources. At this time, USACE is unaware of how many additional acres of fill would be proposed by the remaining known projects. USACE is also unaware as to whether these projects would include onshore impacts to aquatic resources. Although USACE is unaware of the specific impacts that would be proposed by these projects, it would be anticipated that the impacts would be of a similar nature as the proposed project and of those projects which have already been authorized. In USACE's experience, offshore wind developers typically route their cables through soft sediments to the extent practicable, which limits the need for cable protection. When cable protection is necessary, they propose to utilize clean material. These actions lessen cumulative impacts. Although cumulative impacts from cable protection are long-term, as the cable protection would be in place for the life of a project, there is no loss of waters associated with cable protection fills, or any other subtidal fills associated with offshore wind energy projects.

These additional offshore wind energy projects, as well as any other project which may propose CWA section 404 jurisdictional activities within waters of the United States, including wetlands, would undergo the same evaluation under section 404 of the CWA. They would be subject to

similar avoidance and minimization measures, special conditions, and potentially require compensatory mitigation to offset unavoidable impacts to aquatic resources. As such, USACE anticipates no more than minimal, long-term cumulative impacts resultant of the proposed project's completion.

Determination of secondary effects to the aquatic ecosystem: Secondary impacts from the placement of fill material within the territorial seas for cable protection and the backfilling of HDD exit pits would include a localized, short-term increase in turbidity. Construction within wetlands and Founders Brook would also see localized, short-term increases in turbidity. See sections 5.3.5.1 and 5.3.5.2 of this document for further discussion of increases in turbidity. Additional secondary impacts within wetlands which could result from the project's construction could include disturbance (for example, rutting, soil mixing, compaction, etc.) of areas outside of the direct project footprint from equipment usage. Accidental releases of equipment fluids could also occur in wetlands and the territorial seas. Actions would be taken to minimize these types of secondary impacts (see section 5.3.5.7 of this document). Additionally, the placement of cable protection would change the composition of the seabed and could result in a change to the composition of the aquatic organisms which previously utilized the area in which cable protection is placed. See section 5.3.5.3 for further discussion regarding changes in aquatic organism composition.

5.3.5.9 Findings of Compliance or Non-compliance with the Restrictions on Discharges (40 CFR § 230.10(a-d) and 230.12)

Based on the information above, including the factual determinations, the proposed discharges of dredged and fill material have been evaluated to determine whether any restrictions on discharge would occur:

Is there a practicable alternative to the proposed discharge that would be less damaging to the environment (any alternative with less aquatic resource effects, or an alternative with more aquatic resource effects that avoids other significant adverse environmental consequences)?

No, as evaluated throughout section 5.3.4 of this document, there is no practicable alternative which would be less damaging to the environment.

Will the discharge cause or contribute to violations of any applicable water quality standards?

No, the proposed discharge would not cause or contribute to violations of any applicable water quality standards. The MassDEP and RIDEM issued CWA section 401 WQCs for Project 1 and the HDD exit pits of Project 2 (see section 5.3.7.5 of this document), indicating that the proposed project meets both states' water quality standards.

Will the discharge violate any toxic effluent standards (under section 307 of the CWA)?

No, the proposed discharge will not violate any toxic effluent standards under section 307 of the CWA.

Will the discharge jeopardize the continued existence of endangered or threatened species or their critical habitat?

No, the proposed discharge will not jeopardize the continued existence of endangered or threatened species, or any designated critical habitat. See section 5.3.7.1 of this document.

Will the discharge violate standards set by the Department of Commerce to protect marine sanctuaries designated under title III of the Marine Protection, Research, and Sanctuaries Act of 1972?

No, the proposed discharge will not violate the standards set by the Department of Commerce to protect marine sanctuaries designated under title IIII of the Marine Protection, Research, and Sanctuaries Act of 1972.

Will the discharge cause or contribute to significant degradation of waters of the United States?

No, the proposed discharge will not cause or contribute to significant degradation of waters of the United States.

Have all appropriate and practicable steps (Subpart H, 40 CFR § 230.70-230.77) been taken to minimize the potential adverse impacts of the discharge on the aquatic ecosystem?

Yes, all appropriate and practicable steps have been taken to minimize the potential adverse impacts of the discharge on the aquatic ecosystem. Seasonal restrictions would be in place to limit impacts to aquatic organisms, the export cables would be sited outside of important benthic habitats to the extent practicable, and all impacts to onshore wetlands and flowing water would be temporary. In addition, the USACE authorization would include special conditions to ensure minimal potential impacts.

Is compensatory mitigation required to offset environmental losses resulting from proposed unavoidable impacts to waters of the United States?

No, compensatory mitigation is not required for the proposed project. Although the proposed project results in long-term impacts from the discharge of cable protection fill material, there is no loss of waters. Additionally, the discharge of fill material for cable protection would not result in any impacts to or loss of SAS. Onshore wetland impacts would be minimal and temporary, as would stream impacts, and would not result in a specifically identifiable significant resource loss of importance to the human or aquatic environment.

5.3.6 USACE Public Interest Review (33 CFR § 320.4)

In accordance with 33 CFR Part 320, USACE's decision whether to issue a permit is based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity and its intended use on the public interest. Evaluation of the probable impacts which the proposed activity might have on the public interest required a careful weighing of all those factors which

were relevant to this project. The benefits which reasonably may be expected to accrue from this project have been balanced against its reasonably foreseeable detriments. The decision whether to authorize a proposal, and if so, the conditions under which it will be allowed to occur, was therefore determined using this general balancing process. The decision reflects the national concern for both protection and utilization of important resources. All factors which may be relevant to the proposal have been considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and, in general, the needs and welfare of the people. These public interest factors are addressed below.

Unless a distinction is made between projects, the public interest factor review below applies to both Project 1 and Project 2 of the identified FEIS preferred alternative (Alternative D) and the LEDPA (Alternative B route to Brayton Point) as identified in sections 5.3.3.4 and 5.3.4.3, respectively. The proposed project's cumulative impacts to specific resources are discussed in Chapter 3 of BOEM's FEIS at the end of each resource-specific discussion of impacts. It should be noted that BOEM's FEIS also includes the Falmouth variant in its analysis and conclusion of impact levels. USACE's ROD does not consider the Falmouth variant, and, therefore, impact levels determined by USACE may differ from the FEIS for specific factors.

5.3.6.1 USACE Review of Public Interest Factors (33 CFR § 320.4(a)(1))

Conservation: It is anticipated that the project would have no effect on conservation. Conservation is not defined in USACE regulations but can be broadly defined as the planned management of natural resources in order to prevent or minimize exploitation, destruction, or neglect of such resources. The project does not involve the conservation of any resources but has been designed to minimize impacts to natural resources. The project also does not propose any impacts to any conservation areas. Offshore wind energy projects previously authorized by USACE New England District have also not impacted any conservation areas, and it is anticipated that future proposed offshore wind energy projects would also avoid conservation areas to the extent practicable when routing their export cables both offshore and onshore. When considering past, present, and reasonably foreseeable future offshore wind energy projects, it is anticipated that these projects would have no effect on conservation cumulatively.

Economics: It is anticipated that the project would have both minor beneficial and minor adverse impacts to economics. Minor beneficial impacts are anticipated due to job creation, increases in state and local tax revenues, sourcing of local materials such as equipment, fuel, and some construction materials. Minor adverse impacts are also anticipated from construction activities, which disrupt fish stocks, and the presence of cable protection on the seafloor could impact commercial fishermen by lost catches and snagged gear. Marine recreational businesses could also be impacted adversely from construction activities. Since construction activities are temporary, subsequent impacts to economic impacts would also be anticipated to be temporary. Cable protection would be in place throughout the life of the project, though, and pose a long-

term impact. The applicant has committed to implementing a compensation program for lost income for commercial and recreational fishermen. When considering past, present, and reasonably foreseeable future offshore wind energy projects, it is anticipated that the project would have moderate beneficial cumulative impacts due to the investment in offshore wind energy, job creation and workforce development, income and tax revenue, and infrastructure improvements. See sections 3.6.3.5 and 3.6.3.7 of BOEM's FEIS for an in-depth discussion of the project's impacts to economics.

Aesthetics: It is anticipated that the project would have long-term major impacts to aesthetics. The presence of WTGs and OSPs within the lease area would affect the seascape character, open ocean character, and viewer experience. Nighttime lighting could result during construction of the project and could be visible during the nighttime, evening, and early morning hours from both on and offshore. Construction lighting impacts, however, would be limited to the duration of construction activities. Construction on land would result in typical impacts on aesthetics, with increases in noise during construction hours near the project area, and visual impacts of equipment within areas equipment is not typically seen. Impacts to aesthetics resultant from onshore construction activities are anticipated to be no more than minor. When considering past, present, and reasonably foreseeable future offshore wind energy projects, it is anticipated that the project would have major cumulative impacts to aesthetics due to the cumulative impact of each project's effects on open ocean character and viewer experience. Moderate cumulative impacts are anticipated for seascape character due to the changes in the view from onshore. To reduce individual and cumulative impacts, the applicant would paint WTGs light gray to reduce visibility against the horizon, and WTGs would be equipped with a hazard lighting system which responds to the detection of nearby aircraft, reducing visual lighting impacts. Offshore wind energy projects previously authorized by USACE New England District have also incorporated these measures, and it is anticipated that future offshore wind energy projects would also propose these measures. See sections 3.6.9.5, 3.6.9.7, and Appendix H of BOEM's FEIS for an in-depth analysis of the project's impacts to aesthetics and viewshed.

General Environmental Concerns: It is anticipated that the project would result in beneficial impacts to general environmental concerns. At full operation, the overall SouthCoast Wind Energy Project would produce up to 2,400 MW of renewable energy for the ISO-NE power grid. The addition of this energy would reduce emissions produced by current energy production methods and contribute to Massachusetts, Rhode Island, and potentially other New England states' goals for clean energy procurement. Once operational, the project would result in annual avoided emissions of 4,038,482 tons of carbon dioxide, which is equivalent to the emissions generated by around 800,000 passenger vehicles in a year. It would take approximately one (1) year of project operation to offset the project's produced construction emissions of carbon dioxide. After the offsetting of its own project construction emissions, the project would displace other sources of carbon dioxide from other types of energy production. Reductions of carbon dioxide and other greenhouse gasses can contribute to slowing climate change and sea level rise. When considering past, present, and reasonably foreseeable offshore wind energy projects, it is anticipated that the cumulative impacts to general environmental concerns would be moderately

beneficial. See sections 3.4.1.5 and 3.4.1.7 of BOEM's FEIS for an in-depth analysis of the project's impacts to air quality/emissions.

Wetlands: See section 5.3.5.4 for a discussion of the project's impacts to wetlands. Impacts to wetlands resultant from the project would be minor and temporary. When considering past, present, and reasonably foreseeable offshore wind energy projects, it is anticipated that the cumulative impacts to wetlands would be minor adverse. Offshore wind energy projects previously authorized by USACE New England District have not included any impacts to wetlands, but other reasonably foreseeable projects may. It is anticipated that any future projects, which may propose wetland impacts would result in similar type impacts (i.e., temporary impacts resultant from trenched cable installation). Additionally, cable installation through wetlands for these projects would not occur simultaneously; impacted wetlands resultant from one project may restore prior to another project's wetland impacts occurring. Cumulative impacts, therefore, would be anticipated to be minor adverse. It should be noted that in sections 3.5.8.5 and 3.5.8.7 of BOEM's FEIS, cumulative impacts to wetlands were determined to be moderate adverse. However, the FEIS takes into account other factors not within USACE's jurisdiction that could impact wetlands, includes wetland impacts which would occur under the Falmouth variant (which USACE is not evaluating), and BOEM considered the impact area outside of the direct footprint of the discharge of fill material (i.e., the impact area under BOEM's analysis is larger than the impact area under USACE's analysis).

Historic Properties: See section 5.3.7.3 of this document for a discussion of NHPA Section 106 compliance. It is anticipated that the project would have negligible to major impacts on historic properties and cultural resources. See section 3.6.2.5 and 3.6.2.7 of BOEM's FEIS for a detailed analysis of the project's individual and cumulative impacts on historic properties and cultural resources. When considering past, present, and reasonably foreseeable offshore wind energy projects, it is anticipated that cumulative impacts would be major adverse, as the construction of offshore wind energy projects could result in permanent, irreversible impacts on both terrestrial and marine archaeological resources and ancient submerged landforms if they cannot be avoided. The execution of an MOA under Section 106 of the NHPA for each project would help to mitigate or compensate for these impacts, but the impacts would remain. USACE has signed an MOA for this project as a concurring party.

Fish and Wildlife Values: See section 5.3.5.3 of this document for a discussion of impacts related to the discharge of fill material to fish and wildlife. It is anticipated that impacts to fish and wildlife would range from minor adverse to major adverse, dependent on the species. The FEIS analyzed impacts to wildlife, fish, and other marine species, including the following: bats (minor adverse), benthic invertebrates (moderate adverse), birds (minor adverse), finfish (moderate adverse), marine mammals (moderate adverse, except for NARW which is anticipated to experience major adverse impacts), and sea turtles (minor adverse). Impacts are summarized in Tables ES-2 and 2-4 of BOEM's FEIS. As such, it is anticipated that the project would have moderate adverse impacts on fish and wildlife values.

When considering past, present, and reasonably foreseeable offshore wind energy projects, impacts to fish and wildlife values are considered to range from minor adverse to moderate adverse, except in the case of the NARW, which are anticipated as major adverse. Consultations required by the ESA, MSA, and the MMPA and the implementation of mitigation measures would help to avoid and minimize impacts to fish and wildlife, but some impacts would be unavoidable. See Chapter 3, section 3.5 of BOEM's FEIS for detailed analysis of impacts to specific fish and wildlife species.

33 CFR § 320.4(c) discusses the FWCA and the need for USACE to consider input from USFWS, NMFS, and state fish and wildlife agencies with a view to the conservation of wildlife resources by prevention of their direct and indirect loss and damage due to the proposed project. USACE did not receive any FWCA comments from any state agencies, however, the certifying authorities considered input from such agencies in their reviews of the project under section 401 of the CWA for the issuance of their WQCs. These WQCs will be made a part of the USACE authorization. USFWS did not provide FCWA recommendations, but NMFS made three (3) that were included with their EFH CRs. One (1) recommendation will be implemented by USACE (reporting of relocated boulders, created berms, and cable protection), but two (2) will not be implemented. The recommendations that will not be implemented are either not within the USACE's purview or are already proposed by the applicant in their Fisheries Monitoring Plan, which is required by RIDEM's WQC.

USACE anticipates that the concerns of state fish and wildlife agencies, USFWS, and NMFS in relation to the FWCA will be fully considered and implemented to the degree practicable and appropriate on future offshore wind energy projects as well.

Flood Hazards: USACE anticipates the proposed project would have no impact on flood hazards. The project does not include any components that involve construction, removal, or modification of impoundment structures, nor involves construction of a feature that may become a flood hazard. Based on the geographical setting of offshore wind energy projects, export cables, and onshore components, USACE does not anticipate that future offshore wind energy projects will impact impoundment structures either. Therefore, when considering past, present, and reasonably foreseeable offshore wind energy projects, USACE does not anticipate that there will be any cumulative impact on flood hazards.

Floodplain Values: According to the Rhode Island Floodplain Viewer (https://risegis.ri.gov/portal/apps/Styler/index.html?appid=37dc9eac2c154547a4d7d1bc9f1934e7), the project would site cables near or through 1% Annual Chance Flood zones on Aquidneck Island. USACE anticipates minimal impacts to these floodplains due to the temporary and minimal nature of the work. The project is not anticipated to reduce the floodplains' capacities for storing flood waters and the project would not result in redirection of floodwater. When considering past, present, and reasonably foreseeable offshore wind energy projects, it is anticipated that cumulative impacts to floodplain values would be minor. None of the offshore wind energy projects previously authorized by New England District USACE have been sited within floodplains and have had no effect to such resources. It is anticipated that offshore wind

energy developers will site their projects to avoid and minimize impacts to floodplains to the maximum extent practicable.

Land Use: It is anticipated that there would be minor adverse impacts to land use resultant from onshore construction, including cable installation, and potential impacts such as accidental spills from construction equipment, increased noise, and disruptions of traffic. When considering past, present, and reasonably foreseeable offshore wind energy projects, it is anticipated that cumulative impacts would be also be minor as other offshore wind energy projects would likely result in similar levels of impact. See sections 3.6.5.5 and 3.6.5.8 of BOEM's FEIS for an in-depth analysis of impacts to land use and coastal infrastructure. It should be noted that BOEM's FEIS concluded that the project would result in moderate adverse impacts both individually and cumulatively. However, this determination was due to the need for broad-scale zoning relief in Falmouth when the project was analyzed for impacts caused by the presence of structures. All other impact producing factors analyzed by BOEM concluded that there would be negligible to minor impacts.

Navigation: It is anticipated that the project would have moderate adverse impacts to navigation. The presence of construction vessels would likely result in changes in other, non-project vessels' navigation routes, delays in ports, as well as degraded communication and radar signals. If non-project vessels choose to avoid the area due to the construction of the project, congestion in other areas not subject to construction could occur. The following measures would be implemented to minimize impacts to navigation:

- Foundations will be spaced in an east-west orientation with one (1) nmi spacing between rows. Layout orientation will align with neighboring lease holders to provide consistent navigable routes.
- Private Aids to Navigation (PATON) would be requested by the applicant from the U.S. Coast Guard (USCG).
- On-scene safety vessels and/or personnel will be present to advise mariners of construction activity.
- Local Notices to Mariners (LNMs) will be submitted to the USCG, Fleet Command, and the SouthCoast Wind project website prior to the commencement of offshore construction activities.

When considering past, present, and reasonably foreseeable offshore wind energy project, cumulative impacts would also be moderate adverse. Project construction for multiple offshore wind projects occurring simultaneously is likely and would contribute cumulatively to navigation impacts. Vessel operators would likely have to account for, and potentially navigate around, more than one project at any given time during construction periods. Offshore wind energy projects previously authorized by USACE have also included measures to minimize impacts to navigation, and it is anticipated that future projects would also proposed similar measures. See sections 3.6.6.5 and 3.6.6.7 of BOEM's FEIS for an in-depth analysis of impacts to navigation.

Shoreline Erosion and Accretion: It is anticipated that the project would have no impacts on shoreline erosion and accretion. The project would utilize HDD for all sea-to-shore transitions, and no structures or fills would be required along the shoreline for this method. Therefore, no component of the project would potentially result in the erosion or accretion of shoreline. When considering past, present, and reasonably foreseeable offshore wind energy projects, it is anticipated that there would be no cumulative impacts to shoreline erosion and accretion. Offshore wind energy projects previously authorized by New England District USACE have all utilized HDD for sea-to-shore transitions. It is anticipated that future offshore wind energy projects would also utilize this method.

Recreation: See section 5.3.5.5 of this document for a discussion of impacts to recreation related to the discharge of fill material. It is anticipated that the proposed project would have minor adverse impacts to recreation. Impacts to recreation would occur from visual impacts, navigational disruptions, disturbance to fish during cable lay, nighttime lighting, and construction noise. The project could impact recreational boaters, fishers, beachgoers, and other recreationists. Construction impacts on recreation would be temporary, however, ceasing once construction is completed. Minor beneficial impacts may be realized by the presence of structures creating a "reef effect" and attracting fish, which recreational fishers could utilize. When considering past, present, and reasonably foreseeable offshore wind energy projects cumulative impacts to recreation are anticipated to be moderate adverse because multiple projects would be under construction simultaneously. There may also be a cumulative minor benefit from the cumulative structures creating multiple areas of "reef effect" and attracting fish for recreational fishers. See sections 3.6.8.5 and 3.6.8.7 of BOEM's FEIS for an in-depth analysis of impacts to recreation.

Water Supply and Conservation: See sections 5.3.5.2 and 5.3.5.5 of this document for a discussion of impacts to conservation and water supply related to the discharge of fill material. It is anticipated that the proposed project would have no impacts to water supply and conservation because it would have no effect on water quantities available for water supplies. When considering past, present, and reasonably foreseeable offshore wind energy projects, it is anticipated that no cumulative impacts to water supply and conservation would occur. Offshore wind energy projects previously authorized by New England District USACE have not had any impacts to this resource, and it is anticipated that future offshore wind energy projects would also have no impact to this resource.

Water Quality: See section 5.3.5.2 of this document for a discussion of impacts to water quality related to the discharge of fill material. It is anticipated that the project would have minor adverse impacts on water quality. Construction activities in open water would result in localized increases in turbidity, which would return to normal levels after construction activities in a given area are completed. Onshore construction activities could result in erosion and sedimentation, which would be minimized with BMPs. Accidental releases could also occur. When considering past, present, and reasonably foreseeable offshore wind energy projects, cumulative impacts to water quality are anticipated to be minimal due to the localized and temporary nature of activities that impact water quality. In addition, in state waters, CWA section 401 WQCs are required for

all projects. These WQCs would further ensure that impacts to water quality, at least within the territorial seas, would be minimal. See sections 3.4.2.5 and 3.4.2.6 of BOEM's FEIS for an in-depth analysis of impacts to water quality.

Energy Needs: It is anticipated that the project would have beneficial impacts to energy needs. The overall project would provide up to 2,400 MW of renewable wind energy to the ISO-NE energy grid once operational. This would contribute to the clean energy goals of Massachusetts and Rhode Island, and potentially to other New England states. Massachusetts Bill H.5060 codified the goal of procuring 5,600 MW of offshore wind energy no later than June 30, 2027. Rhode Island Senate Bill 2583 requires market-competitive procurement of 600 to 1,000 MW of newly developed offshore wind energy. According to ISO-NE (https://www.iso-ne.com/about/key-stats/resource-mix), "All six New England states have renewable portfolio standards, which require electricity suppliers to provide customers with increasing percentages of renewable energy." Project 1 of the overall SouthCoast Wind Energy Project would provide power to Massachusetts and Rhode Island and help those states reach their goals. Project 2 does not yet have a PPA, so the power to be generated by Project 2 could potentially go to the other New England states with renewable energy goals. When considering past, present, and reasonably foreseeable offshore wind energy projects, it is anticipated that these projects would have major beneficial cumulative impacts to the energy needs of the New England region. Offshore wind energy projects previously authorized by New England District USACE would provide up to 4,104 MW to New England states. Future projects would only add to this number, allowing these states to get closer to their renewable energy goals.

Safety: It is anticipated that the project would have minor adverse impacts on safety, mostly related to navigational concerns. There would be additional vessels in the area for construction, increasing chances of allisions and collisions, and non-project vessels would be required to navigate around construction activities. Navigation mitigation measures would help to reduce safety risks. When considering past, present, and reasonably foreseeable offshore wind energy projects, cumulative impacts to safety are anticipated to be minor, as similar safety risks are anticipated to occur and similar mitigation measures would be implemented.

Food and Fiber Production: It is anticipated that the project would have minor adverse impacts to food and fiber production due to the anticipated impacts on commercial fishing (including shellfish). See section 5.3.5.5 of this document for a discussion of impacts to commercial fishing related to the discharge of fill material. Construction of the proposed project could impact commercial fishing through disruption of fish presence (due to behavioral response), changes in fish communities (due to changes in habitat), and risks of gear loss or damage. Sections 3.6.1.5 and 3.6.1.7 of BOEM's FEIS estimate minor to moderate impacts to commercial fishing individually by the project and major adverse cumulative impacts. However, commercial fishing is only one aspect of food and fiber production, and does not include aquaculture and farming, neither of which would be impacted by the project. Therefore, it is anticipated that impacts to food and fiber production would be overall less than the impacts to commercial fishing, specifically. When considering past, present, and reasonably foreseeable offshore wind energy

projects, it is anticipated that cumulative impacts to food and fiber production would be minor adverse.

Mineral Needs: It is anticipated that the project would have no effect on mineral needs, as the project is not located within any sand or mineral lease areas. As BOEM authorizes offshore mineral lease areas, the wind energy lease area designation determination took into account the presence or potential for offshore sand or mineral extraction. When considering past, present, and reasonably foreseeable offshore wind energy projects, it is anticipated that there would be no cumulative impacts on mineral needs.

Considerations of Property Ownership: It is anticipated that the project would have no impact on property ownership. The applicant has obtained a lease from BOEM to use the wind energy area for the life of the project. The applicant has also obtained authorizations from the appropriate state and local governments and private property owners to install the offshore export cables. When considering past, present, and reasonably foreseeable offshore wind energy projects, it is anticipated that there would be no cumulative impacts to property ownership, as all other projects would have to obtain similar authorizations.

Needs and Welfare of the People: It is anticipated that the project would be in the interest of the people, as the authorization of the project, with required mitigative measures, would result in increased energy reliability and environmental benefits in the form of a net reduction in greenhouse gas emissions. The project has received approval from multiple agencies within the state of Rhode Island and the Commonwealth of Massachusetts, indicating support for the project at the state level. Regarding public input on the federal permitting process, USACE received 21 comments on the project, which are addressed above. Of these comments, three (3) pertained specifically to the Falmouth variant which is no longer proposed. As lead federal agency, BOEM received numerous comments from the public, agencies, interested groups, and stakeholders. Comments were submitted by mail, online via www.regulations.gov, and through individual speakers at BOEM's three (3) public meetings. Comments included substantive comments regarding information in the draft EIS and were all addressed and considered in the determination of the preferred alternative in the FEIS. Comments are summarized and addressed by BOEM in Appendix N of the FEIS.

5.3.6.2 USACE Evaluation of the Relative Extent of the Public and Private Need for the Proposed Structure or Work (33 CFR § 320.4(a)(2)(i))

In terms of the public need for the proposed work, the SouthCoast Wind Energy Project (Project 1 and Project 2) would produce up to 2,400 MW of renewable energy for the ISO-NE power grid. The addition of this energy would reduce emissions produced by current energy production methods and contribute to Massachusetts and Rhode Island, and potentially other New England states', goals for clean energy procurement. In terms of the private need, in addition to providing a financial gain to the companies investing in the project, BOEM's FEIS indicates that the project would have a minor beneficial impact on employment and economics.

5.3.6.3 If There Are Unresolved Conflicts as to Resource Use, USACE Evaluation of the Practicability of Using Reasonable Alternative Locations and Methods to Accomplish the Objective of the Proposed Structure or Work (33 CFR § 320.4(a)(2)(ii))

To the extent that there may be unresolved resource use conflicts among offshore wind energy generation, vessel navigation, and commercial fishing, USACE has determined that there are no reasonable alternative locations or methods to accomplish the proposed work that would lessen potential resource conflicts. USACE has determined that the Preferred Alternative (Alternative D) with the proposed route to Brayton Point (Alternative B) is the only environmentally preferrable alternative that satisfies the project purpose and need and is technically and economically feasible.

5.3.6.4 USACE Evaluation of the Extent and Permanence of the Beneficial and/or Detrimental Effects Which the Proposed Structure or Work is Likely to Have on the Public and Private Uses to Which the Area is Suited (33 CFR § 320.4(a)(2)(iii))

The tidal waters within which the proposed work would be located are also suited for navigation by vessels, as well as recreational and commercial fishing. The project is anticipated to have moderate adverse impacts to navigation, major impacts to commercial fishing and for-hire recreational fishing, but potentially minor beneficial impacts to recreational fishing (due to reef effect). Some of the factors which contribute to these impacts would only persist through construction, but others may persist through the life of the project (33 years). Onshore project components would be located in wetland areas and cross Founders Brook. These areas may also be suited to onshore recreation, such as hiking/strolling. The project is anticipated to have minor adverse impacts to onshore recreational activities that would only persist during the construction through that area.

5.3.7 Compliance with Other Laws, Policies, and Executive Orders

5.3.7.1 Section 7(a)(2) of the Endangered Species Act

The USACE action area for Section 7 of the ESA includes all areas in the NEPA scope of analysis. The action area includes all areas to be affected directly or indirectly by the federal action and not merely the immediate area involved in the action. USACE designated BOEM as the lead federal agency for Section 7 consultation and BOEM completed consultation with both USFWS and NMFS.

USACE accepts the USFWS biological opinion dated September 1, 2023, including its Incidental Take Statement (ITS), which states that the proposed action is not likely to jeopardize the continued existence of listed terrestrial species or destroy or adversely modify critical habitat under USFWS jurisdiction. The requirement for the applicant to adhere to the terms and conditions of the ITS will be included as a binding condition of the USACE authorization. The

consultation has been found to be sufficient to ensure the activity requiring USACE authorization is in compliance with Section 7 of the ESA.

USACE accepts the NMFS biological opinion dated November 7, 2024, including its ITS, which states that the proposed action is not likely to jeopardize the continued existence of listed marine species or destroy or adversely modify critical habitat under NMFS jurisdiction. The terms and conditions of the ITS relevant to the USACE action will be included as binding conditions of the USACE authorization. The consultation has been found to be sufficient to ensure the activity requiring USACE authorization is in compliance with Section 7 of the ESA.

5.3.7.2 Magnuson-Stevens Fishery Conservation and Management Act, Essential Fish Habitat

USACE designated BOEM as lead federal agency for complying with the consultation requirements of section 305(b)(2) of the MSA regarding EFH. Accordingly, BOEM consulted with NMFS on USACE's behalf by submitting an EFH assessment on June 14, 2024, and July 5, 2024. BOEM and USACE came to the following agreement regarding the analysis of EFH CRs provided by NMFS.

1) USACE agreed to address any EFH CRs that only applied to work within the 3 nmi jurisdictional limit of the territorial seas, as this area is outside of BOEM's geographic authority.

2) As the lead federal agency, BOEM agreed to address any EFH CRs that applied to work on the OCS, where both BOEM and USACE have geographic authority.

3) BOEM agreed to address any EFH CRs that applied to both the OCS and work within the 3 nmi jurisdictional limit of the territorial seas, coordinating with USACE if needed.

NMFS provided BOEM with fifty-two (52) EFH CRs for the proposed project on September 23, 2024. USACE analyzed 13 of the EFH CRs that were applicable only within the 3 nmi jurisdictional limit of the territorial seas, which is solely within USACE's jurisdiction. For each of these EFH CRs, USACE determined whether to adopt, partially adopt, or decline to adopt the recommendation. For any EFH CRs that were not adopted, USACE provided detailed rationale. USACE provided this information to BOEM in a response letter dated November 15, 2024. The USACE letter was appended to BOEM's EFH CR response letter to NMFS that addressed all remaining EFH CRs. Consultation has been completed and USACE has determined that with the adoption of certain EFH CRs by USACE and BOEM, which will be added as special conditions of the permit, the proposed project is in compliance with the MSA.

5.3.7.3 Section 106 of the National Historic Preservation Act

The USACE permit area under section 106 of the NHPA for the SouthCoast Wind Energy Project (Project 1 and Project 2) includes those areas comprising waters of the United States,

including wetlands, navigable waters of the United States, and the OCS that will be directly affected by the proposed work or structures, as well as activities outside of these waters because all three tests identified in 33 CFR Part 325, Appendix C, part (1)(g)(1) have been met. USACE designated BOEM as the lead federal agency for complying with section 106 of the NHPA. The USACE permit area has been addressed within the "area of potential effect" (APE) defined by BOEM in the FEIS.

BOEM determined that the project would result in adverse effects to one (1) marine archaeological resource, two (2) ancient submerged landform features, two (2) terrestrial archaeological resources, two (2) traditional cultural properties, and two (2) aboveground historic properties. See Appendix I in BOEM's FEIS for additional information and analysis on impacts to historic properties. BOEM, in conjunction with consulting parties, developed an MOA to resolve the adverse effects on historic properties, and USACE signed the MOA as a concurring party.

USACE has determined that the consultation completed by BOEM is sufficient to confirm NHPA section 106 compliance for this permit authorization, and additional consultation is not required. As lead federal agency, BOEM has fulfilled USACE's responsibilities under section 106 of the NHPA.

5.3.7.4 Tribal Trust Responsibilities

As the lead federal agency for NEPA and NHPA section 106 consultation, BOEM also took the lead on government-to-government consultation with federally recognized Tribes. BOEM began government-to-government consultation with federally recognized Tribes via public scoping meetings on March 20, 22, and 27, 2023.

The following Tribal Nations were contacted by BOEM and invited to be a consulting party to the NHPA section 106 review of the SouthCoast Wind Energy Project: Delaware Tribe of Indians; Mashantucket (Western) Pequot Tribal Nation; Mashpee Wampanoag Tribe; Mohegan Tribe of Connecticut; The Delaware Nation; The Narragansett Indian Tribe, The Shinnecock Indian Nation; and Wampanoag Tribe of Gay Head (Aquinnah). The Mashantucket (Western) Pequot Tribal Nation, Mashpee Wampanoag Tribe, Wampanoag Tribe of Gay Head (Aquinnah), The Narragansett Indian Tribe, and The Shinnecock Indian Nation accepted BOEM's invitation to consult and are listed as either signatories or concurring parties on the NHPA section 106 MOA. The Tribes which accepted BOEM's invitation to be a consulting party to the NHPA section 106 review participated in NHPA section 106 meetings held throughout the project review.

BOEM held the following government-to-government consultation meetings as part of Tribal trust responsibilities:

- May 2, 2022, with the Wampanoag Tribe of Gay Head (Aquinnah)
- June 1, 2022, with the Wampanoag Tribe of Gay Head (Aquinnah)

- June 2, 2022, with the Mashpee Wampanoag Tribe
- September 1, 2022, with the Mashpee Wampanoag Tribe, the Wampanoag Tribe of Gay Head (Aquinnah), and the Mashantucket Pequot Tribal Nation
- January 17, 2024, with the Wampanoag Tribe of Gay Head (Aquinnah)
- October 25, 2024, with the Mashantucket Pequot Tribal Nation and the Wampanoag Tribe of Gay Head (Aquinnah)

USACE did not receive any requests for government-to-government consultation. USACE has determined that consultation with federally recognized Tribes completed by BOEM is sufficient and no additional consultation by USACE is necessary. A summary of BOEM's government-to-government consultation for this project can be found in Appendix A, Section A.2.2.3 of BOEM's FEIS.

5.3.7.5 Section 401 of the Clean Water Act – Water Quality Certification

An individual CWA section 401 WQC is required for each part of the proposed project from both the State of Rhode Island and the Commonwealth of Massachusetts as the certifying authorities. RIDEM issued a CWA section 401 WQC to the applicant on March 14, 2024, for Project 1 only. MassDEP issued a CWA section 401 WQC to the applicant on May 7, 2024, for Project 1 only. In accordance with the 2023 CWA section 401 WQC Improvement Rule, the WQCs were provided to the EPA as part of the 401(a)(2) process on March 15, 2024, and May 9, 2024, respectively. In both cases, 30 days passed without a response from EPA. The conditions of the CWA section 401 WQCs and any amendments will become conditions of the USACE authorization.

Although both WQCs are for Project 1, both certifying authorities also authorized the construction of all necessary HDD exit pits within their state waters for the overall project (i.e., the HDD exit pits for both Project 1 and Project 2). As such, USACE will not authorize Project 2 outside of the associated HDD exit pits until valid CWA section 401 WQCs are obtained from the certifying authorities and until the neighboring jurisdictions coordination process has been completed per 40 CFR §121, Subpart B.

5.3.7.6 Coastal Zone Management Act

An individual Massachusetts Coastal Zone Management (CZM) consistency determination is required for the project and was issued by the Massachusetts Office of CZM on October 21, 2024.

An individual Rhode Island CZM consistency determination is required for the project and was issued by the Rhode Island Coastal Resources Management Council on December 19, 2023.

5.3.7.7 Wild and Scenic Rivers Act

The SouthCoast Wind Energy Project is not located in a component of the National Wild and Scenic River System or in a river officially designated by Congress as a "study river" for possible inclusion in the National Wild and Scenic River System. USACE has determined that it has fulfilled its responsibilities under the Wild and Scenic Rivers Act.

5.3.7.8 Effects on USACE Civil Works Projects (33 U.S.C. § 408)

The project's OECC is near the Fall River Harbor FNP in Mount Hope Bay, however, the OECC does not cross the FNP, and no export cables are proposed to be laid within the FNP. Therefore, no RHA section 14 (33 U.S.C 408) permission is required for the project.

5.3.7.9 USACE Wetland Policy (33 CFR § 320.4(b))

Based on the Guidelines analysis and public interest review herein, the beneficial effects of the project outweigh the detrimental wetland impacts of the project.

5.3.7.10 Presidential Executive Orders

Executive Order (EO) 13175, Consultation and Coordination with Indian Tribal Governments: As lead federal agency for NEPA and NHPA section 106 consultation, BOEM was also the lead on government-to-government consultations with federally recognized Tribes. See section 5.3.7.4 of this document for a summary of consultations.

EO 11988, Floodplain Management: See section 5.3.6.1 of this document for a discussion of impacts to floodplains. USACE has determined that due to the temporary nature of the work within mapped floodplains and the anticipated restoration of impacts after construction is completed, no impacts to floodplains would occur.

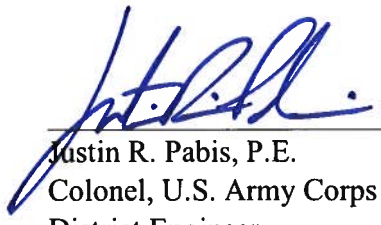
EO 12898, Federal Action to Address Environmental Justice in Minority Populations and Low-Income Populations, EO 14008, Tackling the Climate Crisis at Home and Abroad, and EO 14096, Revitalizing Our Nation's Commitment to Environmental Justice for All: As the lead federal agency for NEPA, BOEM was also the lead for assessing environmental justice impacts resultant of the project. The project overall is anticipated to have negligible to minor impacts on low-income and minority employees of marine industries and supporting businesses, such as commercial fishing, support industries, marine recreation, and tourism. It is also anticipated that there would be major environmental justice impacts related to tribally important traditional cultural properties. See sections 3.6.4.6 and 3.6.4.8 of BOEM's FEIS for an in-depth analysis of impacts to environmental justice.

EO 13112, Invasive Species, as amended by EO 13751, Safeguarding the Nation from the Impacts of Invasive Species: The project's Benthic Monitoring Plan includes monitoring for and documentation of changes in non-native species occurrences.

EO 13212, as amended by EO 13302, Actions to Expedite Energy-Related Projects: Actions were taken to the extent permitted by law and regulation to accelerate completion of the review of this energy related project while maintaining safety, public health, and environmental protections.

5.3.8 U.S. Army Corps of Engineers Approval

I find that the issuance of the USACE permit, as described by regulations published in 33 CFR Parts 320 through 332, with the scope of work described in this document and the FEIS for the SouthCoast Wind Energy Project, is based on a thorough analysis and evaluation of all issues set forth in this Joint ROD. Having completed the evaluation above, I have determined that the proposed discharge of dredged or fill material complies with the 404(b)(1) Guidelines. There are no less-environmentally damaging practicable alternatives available to SouthCoast Wind Energy LLC, to construct Project 1 and Project 2 of the SouthCoast Wind Energy Project than the Preferred Alternative of the FEIS and the LEDPA determined herein. The issuance of the permit is consistent with national policy, statutes, regulations, and administrative directives; and on balance, issuance of USACE permits to construct the SouthCoast Wind Energy Project, Project 1 and Project 2, is not contrary to the public interest. As explained above, all practicable means to avoid and/or minimize environmental harm from the selected permitted alternatives have been adopted and will be required by the terms and conditions of the USACE permit.



20Dec24

Justin R. Pabis, P.E.
Colonel, U.S. Army Corps of Engineers
District Engineer

Date

6 REFERENCES

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National Marine Fisheries Service (NMFS). 2024. Endangered Species Act Section 7 Consultation: Biological Opinion for Construction, Operation, Maintenance, and Decommissioning of the SouthCoast Wind Commercial Project (Lease OCS-A 0521). November 7, 2024.

SouthCoast Wind Energy, LLC (SouthCoast Wind). 2024. SouthCoast Wind *Construction and Operations Plan*. Prepared by AECOM; Tetra Tech, Inc.; and DNV Energy USA, Inc. Submitted to Bureau of Ocean Energy Management. July 2024. Available: https://www.boem.gov/renewable-energy/state-activities/southcoast-wind-formerly-mayflower-wind

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APPENDIX A: ANTICIPATED CONDITIONS OF CONSTRUCTION AND OPERATIONS PLAN APPROVAL

U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF OCEAN ENERGY MANAGEMENT

Anticipated Conditions of Construction and Operations Plan Approval
Lease Number OCS-A 0521
December 20, 2024

Subject to the conditions set forth in this document, the Bureau of Ocean Energy Management (BOEM) approves SouthCoast Wind Energy LLC (Lessee or SouthCoast) to conduct activities under the Construction and Operations Plan (COP)[1] for the SouthCoast Wind Project in Lease Area OCS-A 0521 (Lease). The Department of the Interior (DOI) reserves the right to amend these conditions or impose additional conditions authorized by law or regulation on any future approvals of COP revisions.

The Lessee must maintain a full copy of these terms and conditions on every Project-related vessel and is responsible for the implementation of, or the failure to implement, each of these terms and conditions by the Lessee's contractors, consultants, operators, or designees.

Contents:

[1] SouthCoast Wind. November 2024. Construction and Operations Plan, SouthCoast Wind, Volumes I-II.

1 GENERAL PROVISIONS

1.1 Adherence to the Approved Construction and Operations Plan, Statutes, Regulations, Permits, and Authorizations. The Lessee must conduct all activities as proposed in its approved COP for the Project, as stated in these terms and conditions, and as described in any final plans with which the BOEM and/or the Bureau of Safety and Environmental Enforcement (BSEE) have concurred. Additionally, the Lessee must comply with all applicable requirements in commercial Lease OCS-A 0521, statutes, regulations, consultations, and permits and authorizations issued by federal, state, and local agencies for the Project. BOEM and/or BSEE, as applicable, may issue a notice of noncompliance, pursuant to 30 C.F.R. § 585.106(b) and 30 C.F.R. § 285.400(b), if it is determined that the Lessee failed to comply with any provision of its approved COP, the Lease, the Outer Continental Shelf Lands Act (OCSLA), or OCSLA's implementing regulations. BOEM and/or BSEE may also take additional actions pursuant to 30 C.F.R. §§ 585.106 and 285.400, where appropriate.

1.1.1 As provided in the COP and modified by the selected Alternative in the Record of Decision (ROD), the Lessee may construct and install on the Outer Continental Shelf (OCS) a combination of up to 141 wind turbine generators (WTGs) and up to 5 offshore substation platforms (OSPs) in a total of up to 143 positions. The Lessee may construct and install inter-array and interlink cables linking the individual WTGs to the OSPs and up to 8 offshore export cables within export cable corridors (ECC) on the OCS.

1.2 Record of Decision. All mitigation measures selected in the ROD for this Project are incorporated herein by reference and are considered terms and conditions of this COP. To the extent there is any inconsistency between the mitigation measures in the ROD and these terms and conditions, these terms and conditions will prevail.

1.3 Effective Date. This COP approval and these associated terms and conditions become effective on the date BOEM notifies the Lessee that its COP has been approved and remain effective until the earlier of the end of the operations period or termination of the Lease.

1.4 Consistency with Other Agreements and Authorizations. In the event that these terms and conditions are, or become, inconsistent with the terms and conditions of the Project's Biological Opinion (BiOp) issued by the National Oceanic and Atmospheric Administration's (NOAA) National Marine Fisheries Service (NMFS) on November 7, 2024;[2] the BiOp issued by the U.S. Fish and Wildlife Service (USFWS) on September 1, 2023;[3] the Letter of Authorization (LOA) issued for the Project under the Marine Mammal Protection Act (MMPA); the Section 106 Memorandum of Agreement (MOA) executed on December 18, 2024, or amendments to any of these documents; the language in the NMFS

[2] *See* BiOp Letter from Michael Petony, Regional Administrator, US Dept of Commerce National Oceanic and Atmospheric Administration NMFS GARFO, to Karen Baker, Chief Office of Renewable Energy Programs, BOEM. National Marine Fisheries Service Endangered Species Act Section 7 Biological Opinion (November 7, 2024), https://www.boem.gov/renewable-energy/state-activities/nmfs-esa-consultations [hereinafter NMFS BiOp]. This is inclusive of the avoidance, minimization, and mitigation measures described in the proposed action and included in the BiOp's ITS.

[3] *See* BiOp Letter from Audrey Mayer, Supervisor, New England Field Office, Fish and Wildlife Serv., to Karen Baker, Chief, Office of Renewable Energy Programs, BOEM. (September 1, 2023), https://www.boem.gov/renewable-energy/state-activities/fws-esa-consultations [hereinafter USFWS BiOp]. This is inclusive of the avoidance, minimization, and mitigation measures described in the proposed action and included in the BiOp's ITS.

BiOp, USFWS BiOp, LOAs, Section 106 MOA, or amendments to any of these documents, will prevail. To the extent the Lessee identifies inconsistencies within or between the language in the NMFS BiOp, USFWS BiOp, LOA, Section 106 MOA, or amendments to any of these documents, it must direct questions regarding potential inconsistencies to BSEE and BOEM. BSEE, in consultation with BOEM, will determine how the Lessee must proceed. Activities authorized by COP approval will be subject to any terms and conditions and reasonable and prudent measures (RPMs) resulting from a BOEM-reinitiated consultation for the Project's NMFS BiOp or USFWS BiOp, and any stipulations resulting from amendments to the Section 106 MOA.

1.5 Variance Requests. The Lessee may submit a written request via email to the BOEM Office of Renewable Energy Programs Deputy Chief for Atlantic Operations and to BSEE through TIMS Web (https://timsweb.bsee.gov/), requesting a variance from the requirements of these conditions. The request must explain why compliance with a particular requirement is not technically and economically practicable or feasible and any alternative actions the Lessee proposes to take in lieu of the requirement. BSEE may require a Certified Verification Agent (CVA) to review and make a recommendation to BSEE and/or BOEM on the technical acceptability and compliance with the COP of the Lessee's variance request and any alternative actions the Lessee proposes to take. To the extent not otherwise prohibited by law and after consideration of all relevant facts and applicable legal requirements, as well as after consultation or coordination with other federal agencies as the Bureaus deem appropriate, BOEM or BSEE, in consultation with the other Bureau, may grant a request for variance if the appropriate Bureau determines that the variance: (1) would not result in a change in the Project impact levels described in the Final Environmental Impact Statement (Final EIS) and ROD for the Project, (2) would not alter obligations or commitments resulting from consultations performed by BOEM and BSEE under federal law in connection with this COP approval in a manner that would require BOEM to reinitiate or perform additional consultations (e.g., under the Endangered Species Act (ESA), Coastal Zone Management Act (CZMA), National Historic Preservation Act (NHPA), Magnuson-Stevens Fishery Conservation and Management Act (MSA)); and (3) would not alter BOEM's determination that the activities associated with the Project would be conducted in accordance with subsection 8(p)(4) of OCSLA. Variance requests that would require BOEM to reinitiate or to perform additional consultations are not appropriate for adjudication through the variance process and likely would require a COP revision pursuant to 30 C.F.R. § 585.634. After making a determination regarding a request for a variance, BOEM or BSEE will notify the Lessee in writing whether the appropriate Bureau(s) will allow the proposed variance from the identified requirements set forth in this COP approval. Approvals of variance requests will be made publicly available. This condition (Section 1.5) applies to the extent it is not inconsistent with more specific provisions for variances or departures in these terms and conditions.

1.6 48-Hour Notification Prior to Construction Activities. The Lessee must submit a 48-hour notification to BSEE through TIMS Web prior to the start of each of the following construction activities occurring on the OCS: seabed preparation activities such as boulder relocation and pre-lay grapnel runs, export cable installation, inter-array cable installation, WTG and OSP foundation installation, WTG tower and nacelle installation, OSP topside installation, and cable and scour protection installation.

1.7 Inspections. As provided for in Terms and Conditions Item 14 of the NMFS BiOp, the Lessee must consent to on-site observations and inspections by federal agency personnel, including NOAA personnel, during activities described in the NMFS BiOp, for the purposes of evaluating the effectiveness and implementation of measures designed to minimize or monitor incidental take.

1.8 Project Website. The Lessee must develop and maintain a Project website to provide a means for the public to communicate with the Lessee about the Project, including fisheries communication and outreach. The website must provide a method for the public to register comments or ask questions through either a direct link to a comment form or email, or by providing the contact information (phone and/or email address) of a Lessee representative who will, as practicable, respond to these communications.

1.8.1 The Lessee must post construction notices and other publicly relevant information to the Project website on a monthly basis. The Project website must allow users to subscribe (or unsubscribe) to an electronic mailing list for Project update notifications.

1.8.2 The Lessee must post the following information to the Project website within 5 business days of availability.

1.8.2.1 Locations where target burial depths were not achieved, the locations of cable protection measures, and the locations where cable burial conditions have deteriorated or changed significantly as identified in Section 2.15.

1.8.2.2 Project-specific information found in the most current Local Notices to Mariners (LNM).

1.8.2.3 The Fisheries Communication Plan (COP Appendix W).

1.8.3 Geographic information system (GIS) location data must be downloadable from the Project website and packaged in an ESRI-compatible format, preferably an ESRI shapefile. Files must use a NAD83 UTM Zone 19 or a geographic coordinate system in NAD83. A text file with table field descriptions that contain measurement units, where applicable, must be included.

1.9 Lease Segregation and Designation of Operators. Should the Lessee request to segregate the Lease and assign a portion of the Lease Area to a different lessee ("assignee") or designate multiple operators, BOEM reserves the right to issue separate COP approval letters, which may include conditions reflecting the appropriate party, either the assignor, assignee or operator, and conditions specific to the lease to which the particular COP approval letter pertains and its associated project components, as appropriate, and consistent with the alternative selected in the ROD and the mitigation measures adopted in the ROD. Further, should such assignment or designation of operator occur, the NHPA Section 106 MOA, entitled, Memorandum of Agreement Among the Bureau of Ocean Energy Management, Mashantucket (Western) Pequot Tribal Nation, Mashpee Wampanoag Tribe, Wampanoag Tribe of Gay Head (Aquinnah), the State Historic Preservation Officers of Massachusetts and Rhode Island, SouthCoast Wind Energy LLC, and the Advisory Council on Historic Preservation (ACHP) Regarding the SouthCoast Wind Project (Lease Number OCS-A 0521) and executed on December 18, 2024, will be

binding on the assignee or operator, even though such party was not an original signatory to the MOA.

1.10 Submissions. Unless otherwise stated, the Lessee must provide any submissions required under these conditions to the stated agencies through the following means:

1.10.1 BOEM[4] and/or BSEE:

1.10.1.1 For Sections 1 through 4 of this appendix, via email to the Office of Renewable Energy Programs Project Coordinator for submissions to BOEM;

1.10.1.2 For Sections 5, 6, 8, and 9 of this appendix, via email to renewable_reporting@boem.gov for submissions to BOEM and via TIMSWeb for submissions to BSEE; and

1.10.1.3 For Section 7 of this appendix and any other sensitive material submissions, via email to atlantic_section106@boem.gov for submissions to BOEM and via email to env-compliance-arc@bsee.gov to BSEE.

1.10.2 Unites States Army Corps of Engineers (USACE) New England District at cenae-r-offshorewind@usace.army.mil and Roberta.K.Budnik@usace.army.mil. The Lessee must confirm any additional points of contact with USACE prior to submission.

1.10.3 USFWS:

1.10.3.1 For Section 5 of this appendix, via email to New England Field Office at newengland@fws.gov.

1.10.3.2 For Section 8 of this appendix, via email to jaron_ming@fws.gov and AQ_BOEM@fws.gov.

1.10.3.3 The Lessee must confirm the correct point of contact with the USFWS prior to submitting.

1.10.4 United States Environmental Protection Agency (EPA) at mcgrath.morgan@epa.gov. The Lessee must confirm the correct point of contact with the EPA prior to submitting.

1.10.5 United States Coast Guard (USCG) First District. The Lessee must confirm the correct point of contact with the USCG prior to submitting.

1.10.6 NMFS:

1.10.6.1 NMFS Greater Atlantic Regional Fisheries Office Protected Resources Division (GARFO-PRD) at nmfs.gar.incidental-take@noaa.gov,

1.10.6.2 NMFS Office of Protected Resources (NMFS-OPR) at PR.ITP.MonitoringReports@noaa.gov,

1.10.6.3 NMFS GARFO Habitat and Ecosystem Services Division (GARFO-HESD) at NMFS.GAR.HESDoffshorewind@noaa.gov, and

[4] BOEM will notify the Lessee in writing if BOEM designates a different process for BOEM submissions.

1.10.6.4 NMFS Northeast Fisheries Science Center (NEFSC) at nefsc.survey.mitig@noaa.gov.

1.11 Calendar Days. Unless otherwise specified in the terms and conditions, the term "days" means "calendar days."

1.12 Temporary Placement of Equipment on the OCS Outside of the Lease Area. To the maximum extent possible, the Lessee must place all equipment, including jack-up legs, within the Lease Area (including the project easements). Subject to BSEE's concurrence and the following conditions, the Lessee may temporarily place equipment outside of the Lease Area, but in no case may the Lessee conduct activity on the OCS that is not described in the COP or place equipment on the OCS in an area for which the Lessee has not provided all required information in the COP under 30 C.F.R. § 585.626.

1.12.1 Notification of Activities Outside of the Lease Area. If the Lessee anticipates temporarily, (*i.e.,* a few days or hours) placing any equipment on the OCS outside the Lease Area, the Lessee must submit a notification to BSEE via TIMS Web 30 days prior to such activities. The Lessee must also clearly identify and include said activities in its Construction Status submissions under Section 2.23 or its Maintenance Schedule submissions under Section 2.24. The activities necessitating such placement of equipment will be reviewed by BSEE in coordination with BOEM to confirm that the equipment does not unreasonably interfere with other uses of the OCS. All such activities must be conducted in accordance with these terms and conditions of COP approval and all applicable requirements in the Lease, statutes, regulations, consultations, and permits and authorizations issued by federal, state, and local agencies for the Project. This requirement does not apply to anchors that have already been disclosed in an anchoring plan submitted, reviewed, and made final under Section 5.3.2.

1.12.2 Installation, Repair and Maintenance on the OCS Outside of the Lease Area on an Adjoining Lease. To the extent that equipment, including anchors, cannot be located within the Lease Area, and full enjoyment of the Lease requires the temporary placement of equipment in an adjoining lease, the Lessee must execute a long-term agreement with the adjoining leaseholder that describes the scope and timing of, and the manner in which the Lessee will perform, activities in the adjoining lease ("Installation, Repair and Maintenance Agreement"). If the Lessee and the adjoining leaseholder do not execute the Installation, Repair and Maintenance Agreement, then BOEM, in coordination with BSEE, may evaluate the scenario to determine if the proposed activities would result in unreasonable interference with the rights granted to the adjoining leaseholder and/or to ensure compliance with any other requirement in applicable law, and may impose any conditions deemed necessary.

1.13 Reporting Adjustments. If a term and condition requires periodic reporting of certain activities and no such activities transpire within a reporting period, the Lessee may submit a brief statement to the recipient specified in that term and condition in lieu of the submission of a full report.

2 TECHNICAL CONDITIONS

2.1 Munitions and Explosives of Concern/Unexploded Ordnance Investigation. The Lessee must investigate the areas of potential disturbance for the presence of Munitions and Explosives of Concern (MEC)/Unexploded Ordnance (UXO) and evaluate the risks consistent with the As Low as Reasonably Practical (ALARP) risk mitigation principle. The ALARP risk mitigation principle requires (1) a desktop study (DTS); (2) an investigation survey to determine the presence of objects and report findings; (3) an identification survey to determine the nature of the identified objects and report of findings; (4) MEC/UXO mitigation; and (5) a certification that MEC/UXO risks from installation and operation of the facility have been reduced to ALARP levels. The Lessee must implement the mitigation methods identified in the approved COP, the DTS, and the subsequent survey report(s) following the resolution of all comments provided by BOEM and/or BSEE. In the event an archaeological discovery is made during the MEC/UXO Investigation, the Lessee must notify BOEM within 24 hours of discovery (pursuant to 30 C.F.R. § 585.702 and Lease Stipulation 4.2.7 of Addendum "D"). As part of the Fabrication and Installation Report (FIR) and prior to commencing seabed preparation activities (such as but not limited to pre-lay grapnel run and boulder relocation) and installation activities, the Lessee must make available for review to the approved Certified Verification Agent (CVA), BOEM, and BSEE, the complete and final versions of information on implementation and installation activities associated with the ALARP mitigation process, including the: (1) DTS; (2) investigation surveys to determine the presence of objects; (3) identification surveys to determine the nature of the identified objects; and (4) MEC/UXO mitigation measure(s), and/or construction re-routing.

2.2 MEC/UXO Investigation Survey Plan. The Lessee must submit an Investigation Survey Plan to BOEM and BSEE for review and concurrence prior to seabed disturbing activities and the installation of facilities in the area of potential disturbance. The MEC/UXO Investigation Survey Plan must describe the surveys that will be performed to determine the nature of objects as potential MEC/UXO to reduce risks to ALARP levels. The plan must include information on the proposed survey vessel, equipment, methodologies, and planned survey schedule.

2.3 MEC/UXO Investigation Survey Report. The Lessee must submit an Investigation Survey Report to BOEM and BSEE for review and concurrence prior to seabed disturbing activities and the installation of facilities in the areas of potential disturbance. The report must include the following:

2.3.1 A detailed discussion of methodologies.

2.3.2 A summary and detailed description of findings for target discrimination.

2.3.3 A list of findings that identify conditions different from those anticipated and discussed in the DTS.

2.4 MEC/UXO Identification Survey Plan. The Lessee must submit an Identification Survey Plan to BOEM and BSEE for review and concurrence prior to seabed preparation activities and the installation of facilities in the areas of potential disturbance. The MEC/UXO Identification Survey Plan must describe the surveys that will be performed to determine the nature of objects identified as potential MEC/UXO to reduce risks to ALARP levels. The plan must include information on the proposed survey vessel, equipment, methodologies, and planned survey schedule. If the Identification Survey Plan is not

consistent with the recommendations included in the DTS and Investigation Survey Report, the Identification Survey Plan must discuss in detail the deviations and the associated rationale.

2.5 MEC/UXO Identification Survey Report. The Lessee must submit an Identification Survey Report to BOEM and BSEE for each Bureau's review and concurrence prior to seabed disturbing activities and the installation of facilities in the areas of potential disturbance. The report must include the following:

2.5.1 A detailed discussion of methodologies.

2.5.2 A comprehensive list and shapefile of locations of all confirmed MEC (latitude, longitude).

2.5.3 A summary and detailed description of the findings and information on all planned mitigations necessary for MEC/UXO risks to reach ALARP levels, such as: detailed information on MEC/UXO relocation activities, detonation, micrositing of facilities, changes to installation or operational activities, and cable re-routings.

2.5.4 A separate list of findings that identify conditions different from those anticipated and discussed in the DTS.

2.5.5 A statement attesting that the installation methods and MEC/UXO mitigation strategies discussed in the FIR, DTS, and/or Investigation Survey Report are consistent with the results of the Identification Survey Report, accepted engineering practices, and applicable best management practices. Alternatively, the Lessee may submit a detailed discussion of alternative installation methods and/or MEC/UXO mitigation strategies that the Lessee has determined to be appropriate given the results of the Identification Survey, accepted engineering practices, and applicable best management practices.

2.6 MEC/UXO Discovery Notification. In the event of a confirmed MEC/UXO, the Lessee must coordinate with the USCG to ensure that the MEC/UXO discovery is published in the next version of the LNM for the specified area and must provide BOEM and BSEE with a copy of the LNM once it is available. The Lessee must also provide the following information to BOEM (BOEM_MEC_Reporting@boem.gov), BSEE (via TIMSWeb, renops@bsee.gov, and env-compliance-arc@bsee.gov) and relevant agency representatives within 24 hours of any such discovery made during activities, such as seabed clearance, construction, and operations:

2.6.1 A narrative describing activities that resulted in the identification of confirmed MEC/UXO;

2.6.2 A description of the activity at the time of discovery (e.g., survey, seabed clearance, cable installation);

2.6.3 A description of the location (latitude, longitude);

2.6.4 The water depth (meters (m)) of the confirmed MEC/UXO;

2.6.5 A description of the MEC/UXO type, dimensions, and weight; and

2.6.6 The MEC/UXO vertical position (description of exposure or estimated depth of burial).

2.7 Munitions Response Plan for Confirmed MEC/UXO. In the event the Project plans to mitigate confirmed MEC/UXO, the Lessee must implement methods identified in the approved COP and as described in the MEC/UXO Investigation (as referenced in Section 2.1) for MEC/UXO mitigation activities. Under all circumstances of confirmed MEC/UXO, the Lessee must demonstrate to BSEE's and BOEM's satisfaction that avoidance of confirmed MEC/UXO through micrositing of planned infrastructure (e.g., WTGs, OSPs, inter-array cables, or export cables) is not feasible. For confirmed MEC/UXO on the OCS where avoidance through micrositing is not feasible, the Lessee must submit a Munitions Response Plan to BOEM and BSEE for review and concurrence. The Munitions Response Plan must include the following:

2.7.1 A description of the method of munitions response (in situ disposal, or relocation through "lift and shift") and an analysis describing the identification and determination of the method chosen for each confirmed MEC/UXO;

2.7.2 A hazard analysis of the response activities;

2.7.3 A description of the type and designation of work vessels, remotely operated vehicles, unmanned surface vehicles, or craft planned to be used in proximity to the MEC/UXO;

2.7.4 The contact information of the identified munitions response contractor;

2.7.5 The contractor qualifications and competencies to safely carry out the response work;

2.7.6 A proposed timeline of activities;

2.7.7 The position of confirmed MEC/UXO and, if applicable, planned relocation position;

2.7.8 A description of the potential impact of weather and sea state on munitions response operations;

2.7.9 A description of the potential for human exposure;

2.7.10 A medical emergency procedure;

2.7.11 A description of the protective measures to be implemented to reduce risk and/or monitor effects to protected species and habitats or other ocean users;

2.7.12 A plan for accidental detonation; and

2.7.13 A plan for removal of non-MEC/UXO discoveries and debris during MEC/UXO mitigation.

2.8 Munitions Response After Action Report. The Lessee must submit a Munitions Response After Action Report detailing the activity and outcome to BOEM and BSEE. The report must include the following information:

2.8.1 A narrative describing the activities the Lessee undertook, including the following:

2.8.1.1 A comprehensive list and shapefile of As Found location and, if applicable, As Left location (latitude, longitude);

2.8.1.2 The water depth (in meters) of munitions response activities;

2.8.1.3 The weather and sea state at the time of munitions response;

2.8.1.4 The detailed characteristics (e.g., type, size, classification) of MEC items subject to response efforts; and

2.8.1.5 The duration of the munitions response activities, including start and stop times.

2.8.2 A summary describing how the Lessee followed its Munitions Response Plan and any deviations from the plan;

2.8.3 A description of safety measures used, including but not limited to the presence of a USCG safety-zone, notices to mariners, other USCG safety actions in place prior to taking any munitions response actions, and how security call protocols were used;

2.8.4 The results of the munitions response;

2.8.5 A description of any threats and effects to health, safety, or the marine environment;

2.8.6 A description of any effects on protected species and marine mammals and measures implemented to reduce risk and monitor effects;

2.8.7 The details and results of any geophysical surveys conducted after the completion of the munitions response activities; and

2.8.8 If applicable, a description of anticipated future munitions response activities.

2.9 MEC/UXO ALARP Certification. The Lessee must provide to BOEM, BSEE, and the approved CVA, a certification confirming that MEC/UXO risks related to the installation and operation of the facility have been reduced to ALARP levels. The certification must be made by a qualified third party. ALARP Certification must be made available prior to performing any seabed preparation activities (including activities associated with the Pre-Lay Grapnel Run Plan (Section 2.27) and Boulder Identification and Relocation Plan (Section 5.3.5), and prior to commencing installation activities with the submission of the relevant FIR.

2.10 Safety Management System.

2.10.1 The Lessee must submit its SMS to BSEE for review within 30 days of COP approval, or in adherence to a schedule otherwise determined by BSEE. The Lessee may not commence any activities described in the COP until BSEE is satisfied that all comments and issues raised during review are resolved.

2.10.2 The Lessee must provide a schedule of relevant activities and provide evidence of SMS functionality no later than 30 days prior to the scheduled start of those activities. BSEE must be satisfied that, pursuant to 30 C.F.R. § 285.812, the SMS is functional before activities described in the approved COP may commence.

2.10.3 The Lessee must conduct periodic SMS audits, at minimum once every 3 years, and comply with the requirements in 30 C.F.R. § 285.812.

2.10.4 In addition to maintaining an acceptable SMS, the Lessee, designated operator, contractor, and subcontractor(s) constructing, operating, or decommissioning renewable energy facilities on the OCS must follow the policies and procedures of any other SMS(s) applicable to such activities and must take corrective action whenever there is a failure to follow the relevant SMS(s), or where the relevant SMS(s) failed to ensure safety.

2.11 Emergency Response Procedure. Prior to the construction of the Project, the Lessee must submit an Emergency Response Procedure to address non-routine events for review and concurrence by BSEE. The Lessee must submit any revisions to the procedure once every 3 years and upon BSEE's request, consistent with Section 2.10.3. The Emergency Response Procedure must address the following:

2.11.1 Standard Operating Procedures. The Lessee must describe the procedures and systems that will be used at Project facilities in the case of emergencies, accidents, or non-routine conditions, regardless of whether man-made or natural. The Lessee must include, as a part of the standard operating procedures for non-routine conditions, descriptions of high-consequence and low-probability events (i.e. mass marine debris, fires, vessel allisions) and methods to address those events, including methods for (1) initial action procedures (2) establishing and testing WTG rotor shutdown, braking, and locking; (3) lighting control; (4) notifying the USCG of mariners in distress or potential/actual search and rescue incidents; (5) notifying BSEE and the USCG of any events or incidents that may impact maritime safety or security; (6) notifying Tribes and federal, state, and local officials of an emergency response event that may impact the respective entity; and (7) providing the USCG with environmental data, imagery, communications, and other information pertinent to search and rescue or marine pollution response.

2.11.2 Communications. The Lessee must describe the capabilities of the control center, the onshore facility(s) where communications will be maintained, in order to communicate with the USCG.

2.11.3 Monitoring. The Lessee must ensure that the control center maintains the capability to monitor (e.g., using cameras already installed to support Lessee's operations) the Lessee's installation and operations in real-time, including at night and in periods of poor visibility.

2.12 Oil Spill Response Plan. Pursuant to 30 C.F.R. § 585.627(c), the Lessee must submit an Oil Spill Response Plan (OSRP) to the BSEE Oil Spill Preparedness Division (OSPD) at BSEEOSPD_ATL_OSRPs@bsee.gov for review and approval prior to the installation of any component that may handle or store oil on the OCS. The Lessee should not include confidential or proprietary information in the OSRP. The OSRP may be lease-specific, or it may be a regional OSRP covering multiple leases. Facilities and leases covered in a regional OSRP must have the same owner or operator (including affiliates) and must be located in the Atlantic OCS region. For a regional OSRP, subject to BSEE OSPD approval, the Lessee may group leases into sub-regions for the purposes of determining worst-case

discharge (WCD) scenarios, conducting stochastic trajectory analyses, and identifying response resources. The Lessee's OSRP must be consistent with the National Contingency Plan, Regional Contingency Plan, and the appropriate Area Contingency Plan(s), as defined in 30 C.F.R. § 254.6. To continue operating, the Lessee must operate consistently with the OSRP approved by BSEE. The Lessee's OSRP, including any regional OSRP, must contain the following information:

2.12.1 Bookmarks. Appropriately labeled bookmarks that are linked to their corresponding sections of the OSRP.

2.12.2 Table of Contents.

2.12.3 Record of Change. A table identifying the changes made to the current version of the OSRP and, as applicable, a record of changes made to previously submitted versions of the OSRP.

2.12.4 Facility and Oil Information. "Facility," as defined in 30 C.F.R. § 585.113, means an installation that is permanently or temporarily attached to the seabed of the OCS. An OSP and a WTG, as examples, each meet this definition of facility. "Oil," as defined in 33 U.S.C. § 1321(a), means oil of any kind or in any form, including, but not limited to, petroleum, fuel oil, sludge, oil refuse, and oil mixed with wastes other than dredged spoil. Dielectric fluid, as an example, meets this definition of oil. The OSRP must:

2.12.4.1 List the latitude and longitude, water depth, and distance to the nearest shoreline for each facility that may handle and/or store oil.

2.12.4.2 List the oil(s) by product/brand name and corresponding volume(s) on each type of facility covered under the Lessee's OSRP.

2.12.4.3 Include a map depicting the location of each facility that may handle and/or store oil within the boundaries of the covered lease area(s) and their proximity to the nearest shoreline. The map must also feature a compass rose, scale, and legend.

2.12.5 Safety Data Sheets. The OSRP must include a safety data sheet for every type of oil present on any OCS facility in quantities equal to or greater than 100 gallons.

2.12.6 Response Organization. The OSRP must identify a trained Qualified Individual (QI), and at least one alternate, with full authority to implement removal actions and ensure immediate notification of appropriate federal officials and response personnel. The Lessee must designate personnel to serve as trained members of an Incident Management Team (IMT) and identify them by name and Incident Command System (ICS) position in the OSRP.

2.12.6.1 "Qualified Individual" means an English-speaking representative of the Lessee who is located in the United States, available on a 24-hour basis, and given full authority to obligate funds, carry out removal actions, and communicate with the appropriate federal officials and the persons providing personnel and equipment in removal operations.

2.12.6.2 "Incident Management Team" (IMT) means the group of personnel identified within the Lessee's organizational structure who manage the

overall response to an incident in accordance with the Lessee's OSRP. The IMT consists of the Incident Commander (IC), Command and General Staff, and other personnel assigned to key ICS positions designated in the Lessee's OSRP. With respect to the IMT, the Lessee must identify at least one alternate in the OSRP as the IC, Planning Section Chief, Operations Section Chief, Logistics Section Chief, and Finance Section Chief. If a contract has been established with a third-party IMT, the Lessee must provide evidence of such a contract in the OSRP.

2.12.7 Notification Procedures. The OSRP must describe the procedures for spill notification. Notification procedures must include the 24-hour contact information for:

2.12.7.1 The QI and an alternate, including phone numbers and email addresses;

2.12.7.2 IMT members, including phone numbers and email addresses;

2.12.7.3 Tribes and federal, state, and local regulatory agencies that must be notified when a spill occurs, including, but not limited to, the National Response Center at 1-800-424-8802;

2.12.7.4 The Oil Spill Removal Organizations (OSRO) and Spill Response Operating Teams (SROT) that are available to respond; and

2.12.7.5 Other response organizations and subject matter experts that the Lessee will rely on, including nongovernmental wildlife response and rehabilitation services.

2.12.8 Spill Mitigation Procedures. The OSRP must describe the different discharge scenarios that could occur from the Lessee's facilities and the mitigation procedures the offshore facility operator and any listed/contracted OSROs would follow when responding to such discharges. The mitigation procedures must address responding to both smaller spills (with slow, low-volume leakage) and larger spills, to include the largest WCD scenario covered under the Lessee's OSRP. To achieve compliance with this section, the OSRP must include the following:

2.12.8.1 Procedures for the early detection of a spill (i.e., monitoring procedures for detecting dielectric fluid and other oil-based substances handled or stored on the facility when spilled to the ocean).

2.12.8.2 General procedures for ensuring that the source of a discharge is controlled as soon as possible after a spill occurs.

2.12.8.3 Procedures to conduct trajectory modeling and remove oil and oiled debris from the water surface and along shorelines.

2.12.8.4 Procedures to store, transfer, and dispose of recovered oil and oil-contaminated materials and to ensure that all disposal is in accordance with federal, state, and local requirements.

2.12.9 Resources at Risk. The OSRP must include a concise list of the sensitive resources that could be impacted by a spill. In lieu of listing sensitive resources, the Lessee may identify the areas that could be impacted by a spill from the Lessee's facility and provide hyperlinks to corresponding Environmentally Sensitive Index Maps and Geographic Response Strategies/Plans for those areas from the appropriate Area Contingency Plan(s).

2.12.10 OSRO(s) and SROT(s). The Oil Spill Removal Organization (OSRO) is an entity contracted by the Lessee to provide spill response equipment and/or manpower in the event of an oil spill. The Spill Response Operating Team (SROT) is the group of trained persons who deploy and operate oil spill response equipment in the event of a spill, threat of a spill, or an exercise. The OSRP must include a list (with contact information) of the OSRO(s) and SROT(s) who are under contract and/or membership agreement to respond to the WCD of oil from the Lessee's offshore facilities. Evidence of such contracts and/or membership agreements must be provided in the OSRP.

2.12.11 Oil Spill Response Equipment. The OSRP must include a list, or a hyperlink to a list, of the oil spill response equipment that is available to the Lessee through a contract and/or membership agreement with the OSRO(s). The OSRP must include a map that shows the oil spill response equipment storage depot(s) and planned/potential staging area(s) for the oil spill response equipment that would be deployed by the facility operators or the OSRO(s) listed in the plan in the event of a discharge.

2.12.11.1 The Lessee must ensure that the oil spill response equipment is maintained in proper operating condition.

2.12.11.2 The Lessee must ensure that all oil spill response equipment maintenance, modification, and repair records are kept for a minimum of 3 years.

2.12.11.3 The Lessee must provide oil spill response equipment maintenance, modification, and repair records to BSEE OSPD upon request.

2.12.11.4 The Lessee or the OSRO must provide BSEE OSPD with physical access to the oil spill equipment storage depots and perform functional testing of the equipment upon request.

2.12.11.5 BSEE OSPD may require maintenance, modifications, or repairs to oil spill response equipment or require the Lessee to remove response equipment from being listed in the OSRP if it does not operate as intended.

2.12.12 Training. The OSRP must include a description of the training necessary to ensure that the QI, IMT, OSRO(s), and SROT(s) are sufficiently trained to perform their respective duties. The Lessee must ensure that the IMT, OSRO(s), and SROT(s) receive annual position-specific training. The Lessee's OSRP must provide the most recent dates of applicable training(s) completed by the QI, IMT, OSRO(s), and SROT(s). The Lessee must maintain and retain training records for three years and must provide the training records to BSEE upon request.

2.12.13 Worst-Case Discharge Scenario. The OSRP must describe the WCD scenario for the facility containing the highest cumulative volume of oil(s). For a regional OSRP covering multiple sub-regions, a WCD scenario must be described for each sub-region.

2.12.13.1 If multiple candidate WCD facilities contain the same cumulative volume of oil(s), the WCD facility is the one closest to shore.

2.12.13.2 The WCD facility must be identified on the facility map consistent with the "Facility and Oil Information" Section 2.12.4.

2.12.13.3 The OSRP must identify the subset of oil spill response equipment from the inventory listed in the OSRP that will be used to contain and recover the WCD volume. The OSRP must include timeframes for response resources to deploy to the WCD facility. Timeframes must include times for equipment procurement, loadout, travel, and deployment.

2.12.14 Stochastic Trajectory Analysis. The OSRP must include a stochastic spill trajectory analysis for the WCD facility. For a regional OSRP containing multiple WCD scenarios, a stochastic trajectory analysis must be included for each WCD scenario. The stochastic trajectory analysis must:

2.12.14.1 Be based on the WCD volume.

2.12.14.2 Be conducted for the longest period that the discharged oil would reasonably be expected to persist on the water's surface, or 14 days, whichever is shorter.

2.12.14.3 Identify the probabilities for oiling on the water's surface and on shorelines and the minimum travel times for the transport of the oil over the duration of the model simulation. Oiling probabilities and minimum travel times must be calculated for exposure threshold concentrations reaching 10 g/m^2. The stochastic analysis must incorporate a minimum of 100 different trajectory simulations using random start dates selected over a multi-year period.

2.12.15 Response Plan Exercise. The OSRP must include a triennial exercise plan for review and concurrence by BSEE to ensure that the Lessee is able to respond quickly and effectively whenever oil is discharged from the Lessee's facilities. Compliance with the National Preparedness for Response Exercise Program guidelines will satisfy the exercise requirements of this section. If the Lessee chooses to follow an alternative exercise program, the OSRP must provide a description of that program. For a regional OSRP covering multiple sub-regions, the IMT exercise scenarios must be rotated between each sub-region within the triennial exercise period.

2.12.15.1 The triennial exercise plan must include annual scenario-based notification exercises, at least one functional IMT exercise, and annual scenario-based IMT tabletop exercises in the two years without a functional exercise. The Lessee must conduct an annual oil spill response equipment deployment exercise.

2.12.15.2 The Lessee must notify BSEE OSPD at least 30 days in advance of any exercise it intends to conduct for compliance with this condition.

2.12.15.3 BSEE will advise the Lessee about the options it has to satisfy these requirements and may require changes in the type, frequency, or location of the required exercises, exercise objectives, equipment to be deployed and operated, or deployment procedures or strategies.

2.12.15.4 BSEE may evaluate the results of the exercises and advise the Lessee of any needed changes in response equipment, procedures, tactics, or strategies.

2.12.15.5 BSEE may periodically initiate unannounced exercises to test the Lessee's spill preparedness and response capabilities.

2.12.15.6 The Lessee must maintain and retain exercise records for at least three years and must provide the exercise records to BSEE upon request.

2.12.16 OSRP Review and Update. The Lessee must review and update the OSRP at least once every 3 years and more frequently as needed, starting from the date the OSRP was initially approved. The Lessee must send a written notification to BSEE OSPD upon completion of this review and submit any updates for concurrence. BSEE OSPD may require the Lessee to make changes to the OSRP at any time if it is determined to be outdated or to contain significant inadequacies as discovered through a review of the Lessee's OSRP, information obtained during exercises or actual spill responses, or other relevant information obtained by BSEE OSPD.

2.12.17 OSRP Maintenance. The Lessee must submit a revised OSRP to BSEE OSPD within 15 days if any of the following conditions occur:

2.12.17.1 The Lessee experiences a change that would significantly reduce their oil spill response capabilities.

2.12.17.2 The calculated WCD volume has significantly increased.

2.12.17.3 The Lessee removes a contracted IMT, OSRO, or SROT from the Lessee's plan.

2.12.17.4 There has been a significant change to the applicable area contingency plan(s).

2.13 Cable Routings. The Lessee must submit the final Cable Burial Risk Assessment (CBRA) package and engineered cable routings for all cable routes on the OCS to BSEE for review and concurrence with the relevant Facility Design Report (FDR). The final CBRA package must include a summary of final information on (1) natural and man-made hazards; (2) sediment mobility, including high and low seabed levels, from both mobile and stable seabed, expected over the Project lifetime; (3) feasibility and effort level information required to meet burial targets; (4) profile drawings of the cable routings illustrating cable burial target depths; and (5) minimum burial depths from stable seabed to address threats to the cable including, but not limited to, anchoring risk, military activity, third party cable crossings, and fishing gear interaction. Detailed supporting data and analysis may be incorporated by reference or attachments, including relevant geospatial data.

2.13.1 Falmouth Export Cable Route. The Lessee must consolidate all cables within the Brayton Point export cable route corridor for Project 2. The Lessee may not conduct any activity within the Falmouth export cable route corridor unless installation of the export cables within the Brayton Point export cable route corridor is technically infeasible. The Lessee must submit a technical feasibility analysis to BOEM for review and concurrence if the Lessee is unable to consolidate all cables with the Brayton Point export cable route corridor. The Lessee may not conduct any activity (including any seabed disturbing activity) within the Falmouth export cable route corridor before receiving concurrence from BOEM on the technical feasibility analysis and before BOEM has completed all required consultations (including the Essential Fish Habitat Consultation) for the Falmouth export cable route corridor.

2.13.2 Falmouth Export Cable Route Geotechnical Sampling. If any portion of the Falmouth Export Cable Route is developed, the Lessee must collect, interpret, and analyze cone penetrometer tests (CPT) along the length of the Falmouth Export Cable Route at 1km intervals. This CPT data must be incorporated into the relevant FDR submittal, including, but not limited to, an assessment of ground conditions, cable burial methods and cable burial tool suitability.

2.14 Cable Burial. The Lessee must install the export and inter-array cables using jetting, trenching, or plowing. BOEM has determined the proper burial depth to be a minimum of 3.3 feet (1.0 m) below the stable seabed for federal sections of the export and inter-array cables. The Lessee must comply with cable burial conditions described in the COP by demonstrating proper burial depth of the installed submarine cables along at least 90 percent of the Falmouth export cable route length on the OCS, at least 85 percent of the Brayton Point export cable route length and at least 90 percent of the inter-array cable length, excluding approaches to foundations. The Lessee must demonstrate proper burial depth by providing cable monitoring reports (Section 2.17) and final, as-built information (Section 2.24).

2.15 Cable Protection Measures. In areas where the final cable burial depth is less than 1.0 m below seabed, excluding within the vicinity of WTG/OSP foundations where cables are enclosed within a cable protection system, the Lessee must install secondary protection such as concrete mattresses, rock bags, or rock placement and must adhere to the design and avoidance measures on scour and cable protection in Sections 5.3.9.1 and 5.3.9.2.

2.15.1 The use of cable protection measures must not exceed 10 percent of the Falmouth export cable route length, 15 percent of the Brayton Point export cable route length and 10 percent of the inter-array cable length, excluding cable crossings and approaches to foundations. The Lessee must employ cable protection measures when proper burial depth, as defined in Section 2.14, is not achieved. The Lessee must include design information and drawings as part of the relevant FDR and must include installation information as a part of the relevant FIR. The Lessee must also provide BSEE with detailed drawings/information of the actual burial depths and locations where protective measures were used in accordance with the time frames in Section 2.24. The Lessee must post on the project website (Section 1.8, Project Website) a notice of the locations where target burial depths

were not achieved and where cable protection measures were used, including an accessible graphic/geo-referenced repository.

2.15.2 If the Lessee requests a variance under Section 1.5 to any cable protection measure, the Lessee must use a CVA for verification of the proposed alternative. A scope of work for CVA verification of the proposed alternative must be included with the variance request.

2.16 Crossing Agreements. The Lessee must provide final cable crossing agreements for each active, in-service submarine cable or other types of in-use infrastructure, such as pipelines, to BOEM at least 60 business days before seabed preparation activities that occur within 500 m of such infrastructure, including boulder clearance. The Lessee must also provide information on cable crossing agreements that have not been finalized, including draft agreements and communication logs between owners or operators. The Lessee must make the agreements and crossing designs available to the CVA for review, unless otherwise determined by BOEM.

2.16.1 If the Lessee concludes that it will be unable to reach a cable crossing agreement, the Lessee must inform BOEM as soon as possible, and no later than 60 business days before any seabed preparation activities that occur within 500 m of the in-use infrastructure, including boulder clearance. A cable crossing agreement will not be required if BOEM has determined—at its sole discretion and based on its review of the record of relevant communications from the Lessee to owners or operators of active, in-service submarine cables or other types of in-use infrastructure—that the Lessee made reasonable efforts to enter an agreement and was unable to do so. Information to support a claim of reasonable efforts may include call logs, emails, letters, or other methods of communication.

2.17 Post-Installation Cable Monitoring. The Lessee must conduct an inspection of each inter-array and export cable to determine cable location, burial depths, and site conditions, and to assess the state of the cables. Inspections must occur within 6 months following installation of the export and inter-array cables, within 1 year following completion of the initial post-installation inspection, and every 3 years thereafter. Additional inspections must be conducted within 180 days of a storm event (as defined in the Post-Storm Event Monitoring Plan, described in Section 2.21). The Lessee must provide BSEE and BOEM with a cable monitoring report within 90 days following each inspection. Inspections of the cable location and burial must include high-resolution geophysical (HRG) methods, involving, for example, multibeam bathymetric survey equipment; and must identify seabed features, natural and man-made hazards, and site conditions along all federal sections of the cable routing, to be included in the cable monitoring report. The cable monitoring report must also include summary records from monitoring systems used to assess the state of the cables, such as distributed temperature sensing or other condition assessment techniques. Additionally, the Lessee must notify BSEE within 30 days if monitoring systems detect changes that exceed thresholds of the cable design associated with the chosen monitoring technique.

2.17.1 If BSEE determines that the condition of the cable or conditions along the cable corridor warrant adjusting the frequency of inspections (e.g., due to changes in cable burial or seabed conditions that may impact cable stability or other users of

the seabed), then BSEE may require the Lessee to submit a revised inspection schedule for review and concurrence.

2.17.2 If BSEE determines that conditions along the cable corridor or the state of the cable have deteriorated or changed significantly and remedial actions are warranted, BSEE will notify the Lessee that the Lessee must submit to BSEE the following within 90 days of being notified: a seabed stability analysis and/or cable integrity analysis, a remedial action plan, and a schedule for completing remedial actions. All remedial actions must be consistent with the approved COP. BSEE will review the plan and schedule and provide any comments within 60 days of receiving the plan. The Lessee must resolve all comments to BSEE's satisfaction.

2.17.3 If the Lessee determines that conditions along the cable corridor or the state of the cable have deteriorated or changed significantly and remedial actions are warranted, the Lessee must submit the following to BSEE within 90 days of making the determination: the data used to make the determination, a seabed stability analysis and/or cable integrity analysis, a plan for remedial actions, and a schedule for the proposed work. All remedial actions must be consistent with those described in the approved COP. BSEE will review the plan and schedule and provide comments within 60 days, if applicable. The Lessee must resolve all comments to BSEE's satisfaction.

2.18 Technical WTG and OSP Foundation Requirements.

2.18.1 WTG and OSP Foundation Depths. The Lessee must include, with the relevant FDR, geotechnical investigations at all approved foundation locations along with associated geotechnical design parameters and recommendations pursuant to and consistent with 30 C.F.R. § 285.701(a)(10). The geotechnical investigations at each OSP must include, at a minimum, one deep boring located within the footprint of each OSP.

2.18.2 Limitation of WTG Foundation Type. Suction bucket jacket foundations were shown to be not technically feasible and therefore are prohibited as a foundation base for WTGs. For a suction bucket jacket foundation to be employed, the Lessee must submit a new suction bucket jacket foundation technical feasibility assessment report to BOEM for review and concurrence. Upon review and concurrence of the report, BOEM will notify the Lessee of what additional information BOEM requires in order to determine if a COP revision is necessary in accordance with 30 C.F.R 585.634(a).

2.19 Structural Integrity Monitoring. In accordance with 30 C.F.R. § 285.824(a) (Annual Self-Inspection Plan), the Lessee must submit the inspection plan covering the design life of the facility to BSEE for concurrence with the FDR.

2.19.1 Underwater Inspection. The Lessee must conduct a baseline underwater inspection to establish the as-installed platform condition. The baseline underwater inspection must be conducted prior to implementation of a risk-based inspection plan for the platform. The minimum scope of work must include the following, unless the information is available from the installation records: a) a visual survey of the platform for structural damage, from the mudline to

waterline, including coating integrity through the splash zone; b) a visual survey to verify the presence and condition of the anodes; c) a visual survey to confirm the presence and condition of installed appurtenances; d) measurement of the as-installed mean water surface elevation, with appropriate correction for tide and sea state conditions; e) record the as-installed platform orientation; and f) measurement of the as-installed platform elevation from the mean lower low water datum.

2.19.2 Above-water Inspection. The Lessee must conduct annual above-water inspections to ensure that structural integrity is maintained. The Lessee must inspect the condition of cathodic protection system(s), deteriorating coating systems, excessive corrosion, indications of obvious overloading, and bent, missing, or damaged members of the structure in the splash zone and above the water line. The Lessee must provide a summary of the findings in the Annual Self-Inspection Report pursuant to 30 C.F.R. § 285.824(c). See Section 2.21 for post-storm structural integrity monitoring.

2.20 Foundation Scour Protection Monitoring. The Lessee must inspect scour protection performance. The Lessee must submit an Inspection Plan to BSEE for review and concurrence with the relevant FDR.

2.20.1 The Lessee must include in the Inspection Plan how it will document and monitor the occurrence of lionfish to understand the occurrence of invasive lionfish (*Pterois volitans* and P. miles).

2.20.2 The Lessee must carry out an initial foundation scour inspection within 6 months of completing the installation of each foundation location; thereafter at intervals not greater than 5 years; and within 180 days after a storm event (as defined in the Post-Storm Event Monitoring Plan, described in Section 2.21).

2.20.3 The Lessee must provide BOEM and BSEE with a foundation scour monitoring report within 90 days of completing each foundation scour inspection. If multiple foundation locations are inspected within a single survey effort, the foundation scour monitoring reports for those locations may be combined into a single foundation scour monitoring report provided within 90 days of completing the last foundation scour inspection. The schedule of reporting must be included in the Inspection Plan for BSEE review and concurrence.

2.20.4 The Lessee must submit a plan for additional monitoring and/or mitigation to BSEE for review and concurrence if scour protection losses develop within 10 percent of the maximum loss allowance, edge scour develops within 10 percent of the maximum allowance, or spud depressions from installation affect scour protection stability.

2.21 Post-Storm Event Monitoring Plan. The Lessee must provide a plan for post-storm event monitoring of the facility infrastructure, foundation scour protection, and cables to BSEE prior to or with the relevant FDR. The Lessee must address BSEE's comment(s) to BSEE's satisfaction and receive concurrence prior to commencing installation activities. The Lessee may submit separate plans for the cables (including cable protection), the WTGs, and the OSPs. The plan must describe how the Lessee will measure and monitor environmental

conditions and duration of storm events; specify the environmental condition thresholds (and their associated technical justification) above which post-storm event monitoring or mitigation is necessary; describe potential monitoring, mitigation, and damage identification methods; and state when the Lessee must notify BSEE of post-storm event-related activities. At a minimum, post-storm event inspections must be conducted for each OSP, and 10 percent of the WTGs, including associated scour protection, following each storm where any condition(s) exceeds the one-half the design return period. For example, a WTG platform designed for 50-year environmental conditions must be inspected following a storm event with 25-year environmental conditions. Cables must be inspected in accordance with condition 2.17. Post-storm criteria are subject to change based on lessons learned during operations. To change the post-storm event inspection triggering criteria, the Lessee must submit a revised plan for BSEE review and concurrence. BSEE reserves the right to require post-storm mitigations and additional inspections to address conditions that could result in safety risks and/or impacts to the environment.

2.22 High-Frequency Radar Interference Analysis and Mitigation. The Lessee's Project has the potential to interfere with oceanographic high-frequency (HF) radar systems in the U.S. Integrated Ocean Observing System (IOOS®), which is managed by the IOOS Office within NOAA pursuant to the Integrated Coastal and Ocean Observation System Act of 2009 (Pub. L. No. 111-11), as amended by the Coordinated Ocean Observation and Research Act of 2020 (Pub. L. No. 116-271, Title I), codified at 33 U.S.C. §§ 3601–3610 (referred to herein as "IOOS HF-radar"). IOOS HF-radar measures the sea state, including ocean surface current velocity and waves in near real-time. These data have many vital uses, including tracking and predicting the movement of spills of hazardous materials or other pollutants, monitoring water quality, and predicting sea state for safe marine navigation. The USCG also integrates IOOS HF-radar data into its Search and Rescue systems. The Lessee's Project is within the measurement range of seven oceanographic HF radar systems listed in Table 2-1 below:

Table 2.22-1: Identified IOOS HF Radar Systems

Radar Name	Radar Operator
Amagansett, New York (AMAG)	Rutgers University
Block Island, RI Long-range SeaSonde (BLCK)	Rutgers University
Martha's Vineyard, MA (MVCO)	Rutgers University
Long Point Wildlife Refuge, MA (LPWR)	Woods Hole Oceanographic Institute (WHOI)
Nantucket, MA SeaSonde (NANT)	Rutgers University
Nantucket, MA LERA (NWTP)	WHOI
Nauset, MA (NAUS)	University of Massachusetts Dartmouth

2.22.1 Mitigation Requirement. Due to the potential interference with IOOS HF-radar and the risk to public health, safety, and the environment, the Lessee must mitigate unacceptable interference with IOOS HF-radar from the Project. The Lessee must mitigate interference before commissioning the first WTG or before blades start spinning, whichever is earlier, and interference mitigation must continue throughout operations and decommissioning until the point of decommissioning where all rotor blades are removed. Interference is considered unacceptable if, as determined by BOEM in consultation with NOAA's IOOS Office, IOOS HF-radar performance falls or may fall outside any of the specific

radar systems' operational parameters or fails or may fail to meet IOOS's mission objectives.

2.22.2 Mitigation Review. The Lessee must submit documentation to BOEM demonstrating how it will mitigate unacceptable interference with IOOS HF-radar systems in accordance with Section 2.22.1. The Lessee must submit this documentation to BOEM at least 120 days prior to commissioning the first WTG or the start of blades spinning, whichever is earlier. If, after consultation with the NOAA IOOS Office, BOEM deems the mitigation acceptable, the Lessee must conduct activities in accordance with the proposed mitigations. If, after consultation with NOAA IOOS Office, BOEM deems the mitigation unacceptable, the Lessee must resolve all comments on the documentation to BOEM's satisfaction.

2.22.3 Mitigation Agreement. The Lessee is encouraged to enter into an agreement with the NOAA IOOS Office to implement mitigation measures, and any such Mitigation Agreement may satisfy the requirement to mitigate unacceptable interference with IOOS HF-radar. The point of contact for the development of a Mitigation Agreement with the NOAA IOOS Office is the Surface Currents Program Manager, whose contact information is available at https://ioos.noaa.gov/about/meet-the-ioos-program-office/ and upon request from BOEM. If the parties reach a mitigation agreement, the Lessee must submit the agreement to BOEM. A Lessee may satisfy its obligations under Section 2.22.2 by providing BOEM with an executed Mitigation Agreement between the Lessee and NOAA IOOS. If there is any discrepancy between Section 2.22.2 and the terms of a Mitigation Agreement, the terms of the Mitigation Agreement will prevail.

2.22.4 Mitigation Data Requirements. Mitigation required under Section 2.22.2 must address the following:

2.22.4.1 Before commissioning the first WTG or before blades start spinning, whichever is earlier, and continuing throughout the life of the Project until the point of decommissioning when all rotor blades are removed, the Lessee must make publicly available via NOAA IOOS near real-time, accurate numerical telemetry of surface current velocity, wave height, wave period, wave direction, and other oceanographic data measured at Project locations selected by the Lessee in coordination with the NOAA IOOS Office.

2.22.4.2 If requested by the NOAA IOOS Office, the Lessee must share with IOOS accurate numerical time-series data of blade rotation rates, nacelle bearing angles, and other information about the operational state of each WTG in the Lease Area to aid interference mitigation.

2.22.5 Additional Notification and Mitigation.

2.22.5.1 If at any time the NOAA IOOS Office or an HF-radar operator informs the Lessee that the Project will unacceptably interfere with an HF-radar system, the Lessee must notify BOEM of the determination and

propose new or modified mitigation pursuant to Section 2.22.5.2 as soon as possible and no later than 30 days from the date on which the determination was communicated.

2.22.5.2 If a mitigation measure other than that identified in Section 2.22.2 is proposed, then the Lessee must submit information on the proposed mitigation measure to BOEM for its review and concurrence. If, after consultation with the NOAA IOOS Office, BOEM deems the mitigation acceptable, the Lessee must conduct activities in accordance with the proposed mitigations. The Lessee must resolve all comments on the documentation to BOEM's satisfaction, prior to implementation of the mitigation.

2.23 Critical Safety Systems and Equipment. The Lessee must provide to BSEE a qualified third-party verification of (1) the identification, (2) proper installation, and (3) commissioning of all critical safety systems and equipment designed to prevent or ameliorate fires, spillages, or other major accidents that could result in harm to health, safety, or the environment (hereinafter "critical safety systems"). The documentation provided to BSEE must demonstrate that the qualified third party verified that the critical safety systems were identified using appropriate methodologies as defined by the operator's risk management standards, were installed and commissioned in conformity with the Original Equipment Manufacturer's (OEM's) standards and the Project's functional requirements, and are functioning properly, as required by the surveillance reporting requirements in Section 2.23.5.

2.23.1 Qualified Third Party. A qualified third party must be a technical classification society, a licensed professional engineering firm, or a registered professional engineer capable of providing the necessary certifications, verifications, and reports. The qualified third party must not have been involved in the design of the Project.

2.23.2 Critical Safety Systems. Critical safety systems include but are not limited to equipment, devices, engineering controls, or system components that are designed to prevent, detect, or mitigate impacts from fires, spillages, or other major accidents that could result in harm to health, safety or the environment including systems that facilitate the escape and survival of personnel.

2.23.3 Identification of Critical Safety Systems Risk Assessment(s). The Lessee must conduct a risk assessment(s) to identify hazards and the critical safety systems used within its facilities, including WTG(s), tower(s), and each OSP, to prevent or mitigate identified risks. The Lessee must submit a description of each risk for which a Critical Safety System acts as a control to BSEE and the qualified third party for review in a single document, no later than submission of the FDR. The submission must include a description of the specific hazard along with the determined likelihood and consequence. The Lessee must arrange with the qualified third party and provide information to the qualified third party necessary for it to make a recommendation to BSEE on the acceptability of the identified risks and any associated conclusions regarding identified hazards and implemented or changed critical safety systems and equipment. The Lessee must

resolve BSEE's comments to BSEE's satisfaction before BSEE completes its review of the associated FDR under 30 C.F.R. § 285.700.

2.23.4 Installation and Commissioning Surveillance Requirements. The Lessee must ensure the proper installation and commissioning of the critical safety systems. The Lessee must arrange for a qualified third party to evaluate whether the installation and commissioning of the critical safety systems are in conformance with the OEM requirements and the Project's functional requirements. BSEE and the Lessee may agree to perform additional tests during commissioning surveillance activities. The third-party must (1) examine the commissioning records of the critical safety systems and equipment for every WTG and OSP and (2) witness the commissioning of the critical safety systems and equipment of 5 percent of the WTGs, including at least one WTG in the first array string, and each OSP. The Lessee must arrange for a qualified third party, at a minimum, to verify the following:

2.23.4.1 The installation procedures and/or commissioning instructions supplied by the manufacturer and identified in the Project's functional requirements are adequate.

2.23.4.2 During commissioning, that the Lessee is following the instructions supplied by the manufacturer and that are identified in the Project's functional requirements.

2.23.4.3 The systems and equipment function as designed.

2.23.4.4 The completion of the final commissioning records.

2.23.5 Surveillance Reporting. The Lessee must submit to BSEE surveillance records, including for the examination of commissioning records and witnessing, (for example, the final results and acceptance of the commissioning test by the qualified third party) or a Conformity Statement and supporting documentation (prepared consistent with *International Electrotechnical Commission System for Certification to Standards Relating to Equipment for Use in Renewable Energy Applications* [IECRE OD-502, 2018)]) for the critical safety systems identified in Section 2.23.2. The Lessee must submit surveillance records for each OSP within one month of verification by the qualified third party. After the commissioning of the critical safety systems has been completed for the first WTG, the Lessee must, on a monthly basis, submit the surveillance records or Conformity Statement and supporting summary documentation for all WTGs that have been verified by a qualified third party within the previous month. If BSEE has not responded to the surveillance records or Conformity Statement and supporting documentation submitted by the qualified third party within 5 business days, the Lessee may presume concurrence and continue operating. If the surveillance records or Conformity Statement and supporting documentation are not submitted within a month of qualified third-party verification of the commissioning of the safety systems or if BSEE objects to the submission, BSEE may require the facility to which the surveillance records or Conformity Statement pertains to cease operations.

2.24 Engineering Drawings. The Lessee must compile, retain, and submit to BSEE the drawings and documents specified in Table 2.24-1.

Table 2.24-1: Engineering Drawings

Drawing Type	Time Frame to Submit "Issued for Construction" (IFC) Drawings	Deadline to Submit Final, As-Built Drawings
Complete set of structural drawing(s), including major structural components.[5]	With FDR submittal. Drawings must be reviewed and stamped by a registered professional engineer.	Submit no later than March 31st of each calendar year, for all structures installed the prior year and submitted annually until completion of installation.
Front, side, and plan view drawings[6]	With FDR submittal. Drawings must be reviewed and stamped by a registered professional engineer. Include a table with and show the relationships between: (1) vertical datum planes including Highest Astronomical Tide (HAT), Mean Lower Low Water (MLLW), Mean Sea Level, and others as applicable, (2) 1,000-year wave crest elevation, and (3) elevation to the underside of the deck.	N/A
Location plat for all Project facilities[7]	With FDR submittal. Drawings must be reviewed and stamped by a registered professional land surveyor.	Submit no later than March 31st of each calendar year, for all facilities installed the prior year and updated annually until completion of installation. Drawings must be reviewed and stamped by a registered professional land surveyor.
Complete set of cable drawing(s)	With FDR submittal. Drawings must be reviewed and stamped by a registered professional engineer.	Submit preliminary as-built reports quarterly for all facilities installed in the previous quarter. Submit final as-built reports within 6 months following installation of the export and inter-array cables.
Proposed Anchoring Plat as required by Section 5.3.3 and 7.1.2	120 days before anchoring activities. If there are fewer than 120 days between anchoring activities and this COP approval, no later than 60 days prior to commencing anchoring activities.	N/A
As-placed Anchor Plats for all anchoring activities	N/A	Submit 90 days after completion of an activity or construction of a major facility component.
Piping and instrumentation diagram(s)	With FDR submittal. Drawings must be reviewed and stamped by a registered professional engineer.	Submit quarterly for all facilities installed in the previous quarter.

[5] As required by 30 C.F.R § 285.701(a)(4). This is applicable to the WTGs and OSPs.

[6] As required by 30 C.F.R § 285.701(a)(3). This is applicable to the WTGs and OSPs.

[7] As required by 30 C.F.R § 285(a)(2). This is applicable for all installed assets on the OCS including scour protection, cables, WTGs, and OSPs.

Table 2.24-1: Engineering Drawings

Drawing Type	Time Frame to Submit "Issued for Construction" (IFC) Drawings	Deadline to Submit Final, As-Built Drawings
Safety diagram(s)[8]	With FDR submittal. Drawings must be reviewed and stamped by a registered professional engineer. Drawings must show location of all lifesaving equipment and egress routes.	Submit quarterly for all facilities installed in the previous quarter.
Electrical drawings, i.e., Electrical one-line drawing(s) and Protective Relay Coordination Study/Diagram	With FDR submittal. Drawings must be reviewed and stamped by a registered professional engineer.	Submit quarterly for all facilities installed in the previous quarter.
Cause and Effect Chart	With FDR submittal.	N/A
Schematics of fire and gas-detection system(s)	With FDR submittal. Drawings must be reviewed and stamped by a registered professional engineer.	Submit quarterly for all facilities installed in the previous quarter.
Area classification diagrams	With FDR submittal.	Submit quarterly for all facilities installed in the previous quarter.

2.24.1 Engineering drawings, as outlined in Table 2.24-1, and the associated engineering report(s) must include the lease number "OCS-A 0521" on all drawings and reports and, where applicable, the Area Name, Block Number, and Structure Designation on all drawings and reports. Also, these drawings and reports must be reviewed and stamped by a licensed professional engineer or a professional land surveyor. Pursuant to 30 C.F.R § 285.705(a), any changes to the approved design must be evaluated by BSEE to determine if the Lessee is required to use a CVA for any project modifications under 30 C.F.R § 285.703(c). This applies beginning from the submission date of FDR and FIR through construction, commissioning, and operations and includes structural, mechanical, electrical, and safety systems. For modified systems, only the modifications are required to be stamped by a licensed professional engineer(s) or a professional land surveyor. The professional engineer or land surveyor must be licensed in a State or Territory of the United States and have sufficient expertise and experience to perform the duties. The Lessee must ensure that the engineer of record submits a stamped report showing that the as-built design documents have been reviewed, any changes that result in material changes from the IFC drawings have been analyzed and are acceptable, and accurately represent the as-installed facility. The Lessee must also ensure that the engineer of record documents any differences between the IFC drawings and the as-built drawings in the stamped report and submits the report with the as-built drawings.

[8] Safety diagrams should depict the location of critical safety systems and equipment designed to prevent or ameliorate major accidents that could result in harm to health, safety, or the environment. This should include, but not be limited to, escape routes, station bill, fire/gas detectors, firefighting equipment, etc.

2.24.2 As-Placed Anchor Plats. The Lessee must provide as-placed anchor plats to BOEM and BSEE within 90 days of completion of an activity (including during operations and decommissioning) or construction of a major facility component (e.g., buoys, export cables, WTGs or OSPs, inter-array cables, etc.) or decommissioning to demonstrate that seafloor-disturbing activities complied with avoidance requirements for seafloor features and hazards, archaeological resources, and/or anomalies. As-placed anchor plats must show the "as-placed" location of all anchors and any associated anchor chains and/or wire ropes and relevant locations of interest or avoidance on the seafloor for all seabed disturbing activities. The plats must be at a scale of 1 inch = 1,000 feet (300 meters) with Differential Global Positioning System (DGPS) accuracy. The Lessee must submit the plats to BSEE.

2.25 Construction Status. Weekly during months in which installation activities are ongoing, the Lessee must provide BSEE, BOEM, and the USCG with a construction status update and any changes to the schedule or process described in the plan required by Section 3.2.1 (Installation Schedule). The Lessee must also include a list of all vessels being used and a comprehensive list and shapefile of As-Built locations of all installed infrastructure (WTG, OSP, cables) with the construction status update.

2.25.1 For WTG, and OSP facilities, the As-Built locations must include the following:

2.25.1.1 Area and block;

2.25.1.2 USCG approved, unique alpha-numeric identification;

2.25.1.3 Latitude and longitude (expressed in decimal degrees relative to the western hemisphere (negative longitude) and Easting and Northing);

2.25.1.4 Water depth (in feet and meters, referenced to MLLW); and

2.25.1.5 Installation date for each major structural component, as applicable (i.e., foundation, transition piece, tower, RNA, blades, topsides (OSP)).

2.25.2 For cables, the As-Built locations must include the following:

2.25.2.1 Unique cable segment identifier (ideally, expressive of the facilities or joints at cable terminations);

2.25.2.2 String number; and

2.25.2.3 Latitude and longitude at 0.001 KP intervals (expressed in decimal degrees relative to the western hemisphere (negative longitude) and Easting and Northing).

2.26 Maintenance Schedule. On a quarterly basis, the Lessee must provide BSEE with its maintenance schedule for any planned WTG, or OSP maintenance.

2.27 Pre-lay Grapnel Run Plan. The Lessee must submit a Pre-lay Grapnel Run Plan for BSEE review and concurrence. The Lessee must submit the plan at least 120 days prior to pre-lay grapnel run activities. BSEE will review the plan and provide comments, if applicable, within 60 business days of submittal. The Lessee must resolve BSEE's comments to BSEE's satisfaction. If BSEE does not provide comments on the plan within 60 business

days of its submittal, then the Lessee may presume BSEE's concurrence with the plan. The plan must be consistent with and meet the conditions of the SMS in Section 2.10.

2.27.1 The plan must include the following:

2.27.1.1 Figures of the location of pre-lay grapnel run activities.

2.27.1.2 A description of pre-lay grapnel run methods, including expected grapnel penetration depth, vessel specifications, metocean limits on operation, etc.

2.27.1.3 A description of removal and disposal methods of debris collected by grapnel run and applicable environmental regulations for disposal.

2.27.1.4 A description of safety distances or zones to limit pre-lay grapnel activities near third-party assets. Descriptions should be consistent with Cable Crossing Agreements (Section 2.16).

2.27.1.5 A description of the environmental footprint of disturbance activities and the measures taken to avoid further adverse impacts to archaeological resources, seafloor hazards, complex habitat, and fishing operations.

2.27.1.6 A description of MEC/UXO ALARP certified areas, which must be consistent with MEC/UXO ALARP Certification (Section 2.6).

2.27.1.7 A summary of any consultation and outreach with resource agencies and the fishing industry in the development of the plan (e.g., notifications to mariners).

2.27.2 The Lessee must submit a letter to BSEE outlining any deviations from the Pre-lay Grapnel Run Plan within 90 days following the completion of pre-lay grapnel run activities.

2.27.3 The Lessee must provide a copy of the final Pre-lay Grapnel Run Plan to NMFS GARFO-HESD.

3 NAVIGATIONAL AND AVIATION SAFETY CONDITIONS

3.1 Design Conditions.

3.1.1 PATON/Markings on PATONs. The Lessee must mark each WTG and OSP with PATONS (Private Aids to Navigation). No sooner than 60 and no less than 30 days before foundation installation, the Lessee must file an application (form CG-2554 or CG-4143, as appropriate), with the Commander of the First Coast Guard District to establish PATONs, as provided in 33 C.F.R. part 66. United States Coast Guard (USCG) acceptance of the application must be obtained before the Lessee begins installation of the facilities. The lighting, marking, and signaling plan must be submitted with the PATON application.

3.1.2 Lighting, Marking, and Signaling Plan. The Lessee must provide a lighting, marking, and signaling plan at least 120 days before foundation installation, for a 60-business day review by BOEM, BSEE and USCG. Concurrence must be obtained from BOEM and BSEE prior to foundation installation. The plan must

conform to applicable Federal law and regulations. A copy of the final lighting, marking, and signaling plan must be sent to USFWS within 14 days of concurrence. The Lessee must use lighting technology that minimizes upward illumination to the extent practicable.

3.1.2.1 Structure Markings. The Lessee must:

3.1.2.1.1 Clearly and visibly mark each individual WTG and OSP with "OCS-A 0521" and the unique, alpha-numeric identification consistent with the attached Rhode Island and Massachusetts Structure Labeling Plot (Attachment 2), as identified in the lighting, marking, and signaling plan (Section 3.1.2). OCS-A 0521 must be inscribed directly above or below the alpha numeric identification characters on each WTG and OSP. The Lessee must additionally display "OCS-A 0521" and the alpha-numeric identification character as identified in the lighting, marking, and signaling plan on each WTG nacelle and on the OSP's heli-host and/or heli-pad area visible from above.

3.1.2.1.2 Provide signage that is visible to mariners in a 360-degree arc around the structures to inform vessels of the vertical blade-tip clearance (also referred to as Air Gap), as determined at HAT.

3.1.2.1.3 Aviation. For each WTG, install red obstruction lighting that is consistent with the Federal Aviation Administration (FAA) Advisory Circular [AC] 70/7460-lM, (Nov. 2020).

3.1.2.1.4 Environmental-Aircraft Detection Lighting System. The Lessee must use an FAA-approved vendor for the Aircraft Detection Lighting System (ADLS), which will activate the FAA hazard lighting only when an aircraft is in the vicinity of the wind facility, to reduce visual impacts at night. The ADLS for each WTG must be fully operational once that WTG is commissioned. The Lessee must confirm the use of, and submit to BSEE, information about the FAA-approved vendor for ADLSs on WTGs and the OSPs as part of at the time the relevant FIR is submitted.

3.1.3 Blade/Nacelle Control. The Lessee must equip all WTG rotors (blade assemblies) with control mechanisms constantly operable from the Lessee's control center.

3.1.3.1 Control mechanisms must enable the Lessee to immediately initiate the shutdown of any WTG upon emergency order from the Department of Defense (DoD) or USCG. The Lessee must initiate braking and shutdown of each requested WTG immediately after the shutdown order. The Lessee may resume operations only upon

notification from the entity (DoD or USCG) that initiated the shutdown.

3.1.3.2 The Lessee's Emergency Response Procedure as outlined in section 2.11.1 for WTG rotor shutdown and locking must be used to test the shutdown capability (functioning) of at least one WTG within the lease area at least annually. The Lessee must submit the results of testing to BSEE with the Project's annual inspection results.

3.1.3.3 The Lessee must work with USCG to establish the proper blade configuration during WTG shutdown for USCG air assets conducting search and rescue operations.

3.1.3.4 The Lessee must notify USCG and BSEE in advance of trainings and exercises to test and refine notification and shutdown procedures, allow USCG and BSEE to participate in these trainings and exercises, and provide search and rescue training opportunities for USCG Command Centers, vessels, and aircraft.

3.1.4 Structure Micrositing. The Lessee must not adjust approved structure locations in a way that narrows any linear rows and columns oriented both northwest-southeast and northeast-southwest to less than 0.6 nautical miles, nor to a layout that eliminates two distinct lines of orientation in a grid pattern. The Lessee must submit the final as-built structure locations as part of the as-built documentation outlined in Section 2.24.

3.2 Installation Conditions.

3.2.1 Installation Schedule. Not less than 60 days prior to commencing offshore construction activities, the Lessee must provide USCG with a plan that describes the schedule and process for seabed preparation, export, and inter-array cable installation, and installing the WTGs and OSPs, including all planned mitigations to be implemented to minimize any adverse impacts to navigation while installation is ongoing. Appropriate LNM submissions must accompany the plan and its revisions.

3.2.2 Cable Burial. The Lessee must submit a detailed cable burial plan, containing the proposed locations and burial depths, to USCG no later than the relevant FIR submittal. In accordance with Section 2.24, the Lessee must submit to BOEM and USCG a copy of the final as-built cable burial report containing a positioning list that depicts the precise location and burial depths of the entire cable system (export and array routes).

3.2.3 Nautical Charts/Navigation Aids. The Lessee must submit as-built cable burial reports (containing precise cable locations and burial depths, precise locations of cable protection measures with vertical/horizontal dimensions), OSP, and WTG locations to USCG and NOAA, consistent with Section 2.24, to facilitate government-produced and commercially available nautical charts and aid USCG cross-reference structures and navigation aids.

3.3 Reporting Conditions.

3.3.1 Complaints. On a monthly basis, the Lessee must provide BSEE with (1) a description of any complaints received (written or oral) by boaters, fishermen, commercial vessel operators, or other mariners regarding impacts to navigation safety allegedly caused by construction or operations vessels, crew transfer vessels, barges, or other equipment; and (2) a description of remedial action(s) taken in response to complaints received, if any. BSEE reserves the right to require additional remedial action consistent with 30 C.F.R. Part 285.

3.3.2 Correspondence. On a monthly basis, the Lessee must provide BSEE, BOEM, and USCG with copies of any correspondence received from other federal, state, or local agencies regarding navigation safety issues.

3.4 Meeting Attendance. As requested by BSEE, BOEM and USCG, the Lessee must attend meetings (i.e., Harbor Safety Committee, Area Committee) to provide briefings on the status of construction and operations, and on any problems or issues encountered with respect to navigation safety.

4 NATIONAL SECURITY CONDITIONS

4.1 Hold and Save Harmless – United States Government. Whether compensation for such damage or injury might otherwise be due under a theory of strict or absolute liability or any other theory, the Lessee assumes all risks of damage or injury to any person or property that occurs in, on, or above the OCS in connection with any activities being performed by the Lessee in, on, or above the OCS, if the injury or damage to any person or property occurs by reason of the activities of any agency of the United States Government, its contractors or subcontractors, or any of its officers, agents or employees, being conducted as a part of, or in connection with, the programs or activities of the individual military command headquarters (hereinafter "the appropriate command headquarters") listed below:

United States Fleet Forces (USFF) N46
1562 Mitscher Ave, Suite 250
Norfolk, VA 23551
(757) 836-6206

The Lessee assumes this risk, whether or not such injury or damage is caused in whole or in part by any act or omission, regardless of negligence or fault, of the United States, its contractors or subcontractors, or any of its officers, agents, or employees. The Lessee further agrees to indemnify and save harmless the United States against all claims for loss, damage, or injury in connection with the programs or activities of the appropriate command headquarters, whether the same is caused in whole or in part by the negligence or fault of the United States, its contractors, or subcontractors, or any of its officers, agents, or employees and whether such claims might be sustained under a theory of strict or absolute liability or otherwise.

4.2 Communication Protocol for Construction and Operations. The Lessee must establish a point-of-contact through the DoD Clearinghouse (osd.dod-siting-clearinghouse@mail.mil) to coordinate with the US Fleet Forces Command and Naval Air Warfare Center Aviation Division for the following conditions:

4.2.1 The Lessee must communicate and coordinate the planned construction and operations schedule with appropriate military department commands to deconflict planned construction and operations activities to the extent practicable.

4.2.2 The Lessee and military department commands will mutually determine an appropriate meeting frequency to facilitate communication.

4.2.3 This protocol will serve as a forum to communicate the project schedule and identify potential military mission compatibility concerns or conflicts experienced due to construction activities. The Lessee must seek resolution to conflicts as it is determined to be practicable.

4.3 North American Aerospace Defense Command (NORAD) Operations. The Lessee must enter into a mitigation agreement with the DoD/NORAD for purposes of implementing this Section 4.3. If there is any discrepancy between Section 4.3 and the terms of the mitigation agreement, the terms of the mitigation agreement will prevail. Within 15 days of entering into the mitigation agreement, the Lessee must provide BOEM and BSEE with a copy of the executed mitigation agreement. The DoD point-of-contact for the development of the agreement is osd.dod-siting-clearinghouse@mail.mil. The NORAD point-of-contact for the development of the agreement is John Rowe: John.Rowe.14@us.af.mil. If the NORAD point-of-contact is no longer active, the Lessee must identify a point-of-contact through the DoD Clearinghouse at osd.dod-siting-clearinghouse@mail.mil. Within 45 days of completing the requirements in Section 4.3, the Lessee must provide BOEM with evidence of compliance with those requirements.

4.3.1 Radar Adverse Impact Management (RAM) Scheduling. To mitigate impacts on the NORAD of the Falmouth, Massachusetts Airport Surveillance Radar model 8 (ASR-8), the Lessee must complete the following:

4.3.1.1 NORAD Notification. At least 30, but no more than 60, days prior to the completion of commissioning of the last WTG (i.e., that date by which every WTG in the Project is installed with potential for blade rotation), the Lessee must notify NORAD for RAM scheduling. The Lessee must again notify NORAD when the commissioning of the last WTG is complete.

4.3.1.2 Funding for RAM Execution. At least 30, but no more than 60, days prior to the completion of commissioning of the last WTG (i.e., that date by which every WTG in the Project is installed with potential for blade rotation), the Lessee must contribute funds in the amount of $80,000 to NORAD toward the execution of the RAM. If the time gap between the commissioning of the first and last WTG is anticipated to be 3 years or greater, the Lessee must contribute additional funds in the amount of $80,000 per affected radar to NORAD toward the execution of the RAM when 50 percent of the WTGs are commissioned, and an additional $80,000 per affected radar to NORAD toward the execution of additional RAM when the last WTG is commissioned if commissioning of the last WTG occurs later than 3 years from commissioning of the first WTG. This allows NORAD to manage radar adverse impacts over an extended period of construction.

4.4 Department of the Navy Operations. To mitigate potential impacts on the Department of the Navy's (DON) operations, the Lessee must coordinate with the DON for purposes of implementing Section 4.4. Within 45 days of completing the requirements in Sections 4.4.1 through 4.4.3, the Lessee must provide BOEM with evidence of compliance with those requirements. The DON point-of-contact for coordination is Matthew Senska: matthew.c.senska.civ@us.navy.mil; 571-970-8400. If the DON point-of-contact is no longer active, the Lessee must identify a point-of-contact through the DoD Clearinghouse at osd.dod-siting-clearinghouse@mail.mil.

4.4.1 Distributed Optical Fiber Sensing (DOFS) Technology and Acoustic Monitoring Devices. At least 240 days prior to deployment, the Lessee must provide all information necessary for evaluation of the potential submarine power cables, data cables, and acoustic monitoring devices to be used in the Project to osd.dod-siting-clearinghouse@mail.mil for a 180-day review. If the DON requests additional information, the Lessee must provide it within 15 days of the request. The following information must be provided:

- Sensor deployment dates and duration;
- Siting routes and locations of acoustic monitoring devices;
- Shore station location;
- DOFS and acoustic monitoring capabilities;
- Make and model of integrated (or planned integration/deployment of) and standalone scientific sensors;
- Manufacturers and vendors;
- Plans for data storage;
- Transmission and usage; and
- Associated physical and cybersecurity protocols.

4.4.1.1 The Lessee must provide the DON with notice of the intent to change this information at least 30 days prior to any change.

4.4.1.2 If the DON determines through the evaluation in Section 4.4.1 that the use of DOFS or other acoustic monitoring devices presents risk to national security or military operations, the Lessee must work with the DON to implement mitigation measures to address the risk (Section 4.4.3). The Lessee must implement such measures within 30 days of notification from the DON, or according to a schedule agreed to by the Lessee and the DON.

4.4.1.3 As-Builts. The Lessee must provide the DON with as-built schematics and diagrams showing the exact makes and models of all DOFS equipment and acoustic monitoring devices used at commissioning. The Lessee must provide notification to the DON of any changes to the as-built schematics within 10 business days of any change. The

Lessee must provide to the DON the updated as-built schematics and diagrams thereafter according to a schedule agreed to by the Lessee and the DON.

4.4.2 National Security Review.

4.4.2.1 Initial Screening. Within 45 days following approval of the COP, the Lessee must provide the DON with the names of each entity and person having beneficial ownership or control of 5 percent or more of the Lessee and the project operator, all material vendors and manufacturers who will regularly visit the project, who supply or manufacture equipment used on the project, control equipment used on the project, or have access to associated data systems. In addition, the Lessee must provide such information for each director and the top five executives of the Lessee and the project operator. The Lessee must also provide the following information for each identified person: full legal name, date of birth, country of citizenship, and permanent address.

4.4.2.2 Supplementary Screenings. The Lessee and DON must establish a process to review additional entities not previously reviewed during the initial screening based on when the information will be available during the project planning process. This process will include Lessee's provision to DON of information regarding any foreign entities and persons allowed to access the wind turbine structures and associated data systems.

4.4.2.3 The DON will screen the names of the entities and persons identified. Once the Lessee submits the names of the entities and persons for screening, the DON will identify to the Lessee, no later than 60 days after the receipt of the name of any entity and person posing a security concern.

4.4.2.4 The Lessee must provide written notice to the DON at least 45 days in advance of the intended use of any material vendor not previously screened pursuant to this section. The Lessee must allow the DON 45 days following such notice to conduct a security review and assess any security concern. Notwithstanding the foregoing, the Lessee need not wait 45 days if an unexpected situation arises for which employing services or vendors immediately is prudent for the safe operation of the Project.

4.4.2.5 In any case in which the DON identifies any entity and any person screened in accordance with this section as posing national security risk, the Lessee agrees to enter into negotiations with the DON to mitigate the risk to national security that arises as a result of the proximity of any entity and person posing a national security concern to military activities. Except in unexpected situations as previously described, the threat to national security must be resolved to the satisfaction of the DON prior to allowing access to the site or its

associated data systems by representatives of any entity and person posing a national security concern or the use of wind turbines or other permanent on-site equipment or associated data systems manufactured by any entity and person posing a national security concern. In any case in which an entity and person is identified as posing a national security concern following an unexpected situation, the threat to national security must be resolved to the satisfaction of DON at the earliest opportunity.

4.4.3 Mitigation Measures. Following the analyses conducted pursuant to Sections 4.4.1 and 4.4.2, the DON and Lessee will coordinate to implement mitigation required to address national security risk. If the DON so determines, the Lessee must enter into an additional mitigation agreement to document the measures resulting from the coordination. Mitigation measures may include, but are not limited to, the following:

4.4.3.1 Lessee appointment of a DON-approved Security Officer, subject to citizenry and other requirements, to monitor compliance with mitigation measures.

4.4.3.2 Restrictions on DOFS, multi-phenomenological sensing, or acoustic monitoring equipment operating modes, parameters, locations, and/or capabilities; these may include programmed modes to avoid distributed sensing on specified portions of a cable when required by DON.

4.4.3.3 Equipment and component restrictions and requirements, to include prohibitions on usage, installation, or connection of equipment or components manufactured in specified foreign countries; no equipment may be used on the Project if it is banned by any agency of the United States.

4.4.3.4 Physical and cybersecurity protections at, and Government inspections of, locations where the Lessee's DOFS and/or acoustic monitoring equipment and components are installed and monitored.

4.4.3.5 Temporary or permanent shutdown or data diversion of cable distributed sensing, multi-phenomenological sensing, or acoustic monitoring devices in sensitive locations, as determined and required by DON.

4.4.3.6 Reporting requirements for the Lessee and subcontractor reporting requirements concerning business and ownership relationships with foreign entities and use of non-citizens for installation and maintenance work.

5 PROTECTED SPECIES AND HABITAT CONDITIONS

5.1 General Environmental Conditions.

5.1.1 Aircraft Detection Lighting System. *See* Section 3.1.2.1.4.

5.1.2 Marine Debris[9] Awareness and Elimination. The Lessee must submit required documents related to marine debris awareness training, reporting, and recovery (e.g., annual training compliance, incident reporting, 24-hour notices, recovery plans, recovery notifications, annual survey and reporting, and decommissioning and site clearance) described in Sections 5.1.2.1 through 5.1.2.8 to BSEE via TIMSWeb.

5.1.2.1 Marine Debris Awareness Training and Certification. The Lessee must ensure that all vessel operators, employees, and contractors engaged in offshore activities pursuant to the approved COP complete marine debris awareness training and are certified prior to engaging in offshore activities and annually thereafter. The training and certification process must include training through viewing of either a marine debris video or training slide pack posted on the BSEE website (https://www.bsee.gov/debris).

5.1.2.1.1 Training Compliance Report. Before engaging in offshore activities pursuant to the approved COP and by January 31 of each year thereafter, the Lessee must submit to BSEE a report that describes its marine debris awareness training process and certifies that all personnel have completed the required training for the previous year. The Lessee must make this certification available for inspection by BSEE upon request.

5.1.2.2 Marking. Any materials, equipment, tools, containers, and other items that are used in OCS activities and that are of such a shape or configuration that make them likely to snag or damage fishing devices or be lost or discarded overboard, must be clearly marked with the vessel or facility identification number and must be properly secured to prevent loss overboard. All markings must clearly identify the owner and must be able to resist the effects of the environmental conditions to which they may be exposed.

5.1.2.3 Recovery. If the marine debris was lost within the boundaries of an archaeological resource/avoidance area, or a sensitive ecological/benthic resource area, the Lessee must contact BSEE for concurrence before conducting any recovery efforts. The Lessee must take steps to prevent similar releases of marine debris and must submit a description of these preventative actions to BSEE within 30 days from the date on which the release of marine debris occurred.

5.1.2.4 Notification and Recovery. The Lessee must notify BSEE within 24 hours of any releases of marine debris and indicate whether the released marine debris was immediately recovered. If the marine debris was not recovered, the Lessee must provide its rationale for not recovering the marine debris (e.g., marine debris is located within the

[9] Throughout this document, "marine debris" is defined as any object or fragment of wood, metal, glass, rubber, plastic, cloth, paper, or any other man-made item or material that is lost or discarded in the marine environment.

boundaries of a sensitive area, recovery was not possible because conditions were unsafe, or recovery was not practicable and warranted because the released marine debris is not likely to cause undue harm or damage to natural resources or interfere with OCS uses).

5.1.2.5 After reviewing the notification BSEE may order the Lessee to recover the marine debris within a specified timeframe, or at the time of decommissioning, if the debris was not immediately recovered.

5.1.2.6 Recovery Plan. If BSEE orders the Lessee to recover the marine debris, the Lessee must then submit a Recovery Plan to BSEE within 10 calendar days. BSEE may order the Lessee to submit additional or updated Recovery Plans if there is an ongoing loss of marine debris event. Unless BSEE objects within 2 business days after initiating review, the Lessee may proceed with the activities described in the Recovery Plan. BSEE must be notified that recovery activities are complete within 30 days from the time the marine debris notification was submitted, unless BSEE grants the Lessee an extension.

5.1.2.7 Annual Reporting. The Lessee must include, for each release, the following in an annual report submitted to BSEE via TIMSWeb by January 31st of each year: The report should be in chronological order and must include the following:

5.1.2.7.1 Project identification and contact information for the Lessee and for any operators or contractors involved;

5.1.2.7.2 The date and time of the release;

5.1.2.7.3 The lease number, OCS area and block, and coordinates of the object's location (latitude and longitude in decimal degrees);

5.1.2.7.4 A detailed description of the released object(s), including dimensions (approximate length, width, height, and weight), composition (e.g., plastic, aluminum, steel, wood, or paper), and buoyancy (floats or sinks);

5.1.2.7.5 Pictures, data imagery, data streams, and/or a schematic or illustration of the object, if available;

5.1.2.7.6 An indication of whether the item(s) could be detected as a magnetic anomaly of greater than 50 nanoteslas, a seafloor target of greater than 0.5 m (1.6 ft), or a sub-bottom anomaly of greater than 0.5 m (1.6 ft) when operating a magnetometer or gradiometer, side scan sonar, or sub-bottom profiler;

5.1.2.7.7 An explanation of how the object was lost; and

5.1.2.7.8 A description of immediate recovery efforts and results, including photos.

5.1.2.8 Annual Surveying and Reporting, Periodic Underwater Surveys, Reporting of Monofilament and Other Fishing Gear Around WTG Foundations. The Lessee must conduct a survey around the foundations of at least 10 WTG for lost fishing gear annually for the first three years following COP approval and every 5 years thereafter. The Lessee may conduct surveys by remotely operated vehicles, divers, or other means to determine the quantity and locations of marine debris. The Lessee must report the results of the surveys to BOEM and BSEE in an annual report, submitted by January 31, for the preceding calendar year. The Lessee must submit annual reports in both Microsoft Word and Adobe PDF format. The Lessee must provide photographic and videographic materials (TIFF or Motion JPEG 2000) in TIMSWeb with the submittal of the annual report. The Lessee may submit photographic and videographic files to marinedebris@bsee.gov if the files cannot be uploaded in TIMSWeb. The Lessee may only modify survey design and effort (i.e., the number of WTGs and frequency of reporting) upon review and concurrence by BOEM and BSEE.

5.1.2.8.1 Annual reports must include a summary of the survey reports including survey date(s); contact information of the operator; location and pile identification number; photographic and/or video documentation of the survey and debris encountered; any animals sighted; and the disposition of any located debris (i.e., removed or left in place).

5.2 Avian and Bat Protection Conditions.

5.2.1 The Lessee must submit all required documents related to avian and bat protection conditions in Sections 5.2.2 through 5.2.7 to BOEM, BSEE, and USFWS. The Lessee must confirm the relevant point-of-contact before submitting the required documents and must also confirm that the agencies have received the documents.

5.2.2 Bird-Deterrent Devices and Plan. The Lessee must submit a Bird Perching Deterrent Plan (BPDP) to BOEM and BSEE, with the FDR, describing the type and location of the bird perching deterrent devices and the safety considerations used to determine the appropriate location(s) for each WTG and offshore substation platform (OSP) to minimize the attraction of roseate terns and other marine birds. BOEM, BSEE, and USFWS will review the BPDP and provide any comments on the plan to the Lessee within 60 business days of its submittal. The Lessee must resolve all comments on the BPDP to BOEM's satisfaction before the Lessee may begin installation of WTGs or OSPs. The BPDP must include a discussion of the best available science, including the documented efficacy, of the proposed devices, the type(s) and locations of bird perching deterrent devices, include a maintenance plan for the life of the Project, allow for modifications and updates as new information and technology become available, track the efficacy of the deterrents, and include a timeline for installation. The structural as-built

drawings, per Section 2.24, must show the location and type of bird-deterrent devices.

5.2.3 Navigation Lighting Upward Illumination Minimization. Nothing in this condition supersedes or is intended to conflict with lighting, marking, and signaling requirements of FAA, USCG, or BOEM. The Lessee must use lighting technology that minimizes impacts on avian species to the extent practicable including lighting designed to minimize upward illumination. The Lessee must provide USFWS with a copy of the final Lighting, Marking, and Signaling plan, and the Lessee's approved application to USCG to establish PATONs (Sections 3.1.1 through 3.1.2).

5.2.4 Avian and Bat Monitoring Program. The Lessee must develop and implement an Avian and Bat Post-Construction Monitoring Plan (ABPCMP) in coordination with USFWS and other relevant regulatory agencies. The objectives of the monitoring plan will include: (1) to advance understanding of how the target species use the offshore airspace and do (or do not) interact with the wind farm; (2) to improve the collision estimates from SCRAM (or its successor) for the three listed bird species; and (3) to inform any efforts aimed at minimizing collisions or other project effects on target species. The plan will be based on the SouthCoast Wind Draft Post-Construction Avian and Bat Monitoring Framework (December 6, 2023 Version). The plan will also include an initial monitoring phase involving deployment of Motus radio tags on listed birds in conjunction with installation and operation of Motus receiving stations on WTGs in the Lease Area following offshore Motus recommendations. The initial phase may also include deployment of satellite-based tracking technologies (e.g., GPS or Argos tags). The plan will include acoustic bat and bird detectors and the use of radar. BOEM and BSEE will use annual monitoring reports to determine the need for adjustments to monitoring approaches and to consider new monitoring technologies, and/or additional periods of monitoring. Prior to or concurrent with offshore construction activities, including seabed preparation activities, the Lessee must submit an ABPCMP for BOEM, BSEE, and USFWS review. BOEM, BSEE, and USFWS will review the ABPCMP and provide any comments on the plan to the Lessee within 60 business days of its submittal. The Lessee must resolve all comments on the ABPCMP to BOEM's and BSEE's satisfaction before implementing the plan and before commissioning the first WTG.

5.2.4.1 Monitoring. The Lessee must conduct monitoring as outlined in ABPCMP. The ABPCMP will allow for changing methods over time (see Conservation Measure 5.d, USFWS BiOp) in order to regularly update and refine collision estimates for listed birds. The plan must include an initial monitoring phase involving deployment of Motus radio tags on listed birds in conjunction with installation and operation of Motus receiving stations on turbines in the Lease Area following offshore Motus recommendations. The initial phase may also include deployment of satellite-based tracking technologies (e.g., GPS or Argos tags).

5.2.4.2 Annual Monitoring Reports. During the first 12 months after final WTG is commissioned for the Project, the Lessee must submit quarterly progress reports to BOEM, BSEE and the USFWS by the 15th day of the first month following the end of each quarter (see addresses in Section 1.10). The quarterly report must include a summary of all work performed, an explanation of overall progress, and any technical problems encountered. The Lessee will transition to submitting annual reports after each full year of post-construction monitoring within 12 months of completion of the survey season (see addresses in Section 1.10). The report must include all data, analyses, and summaries regarding ESA-listed and non-ESA-listed birds and bats. In addition, the Lessee must report observations of injured or dead piping plovers, rufa red knots, and roseate terns; any listed species perching on Project infrastructure (including offshore substations); implementation and effectiveness of avoidance and minimization measures; and any other relevant activity and information related to the proposed action and potential impacts to listed species.

5.2.4.3 Monitoring Plan Revisions. Within 30 business days of submitting the annual monitoring report, the Lessee must meet with BOEM, BSEE, and USFWS to discuss the monitoring results, the potential need for revisions to the ABPCMP, including technical refinements or additional monitoring, and the potential need for any additional efforts to reduce impacts. If the reported monitoring results deviate substantially from the impact analysis included in the Final EIS,[10] the Lessee must transmit to BOEM, BSEE, and USFWS recommendations for new mitigation measures and/or monitoring methods. In consultation with USFWS, BOEM and BSEE may adjust the frequency, duration, and methods for various monitoring efforts in future revisions of the ABPCMP based on current technology (including its cost), and the evolving weight of evidence regarding the likely levels of collision mortality for each listed bird species (See Conservation Measure 5. Monitoring and Data Collection, USFWS BiOp).

5.2.4.4 Operational Reporting. Upon commissioning of the first WTG, the Lessee must submit to BOEM and BSEE an annual report, due by January 31, summarizing monthly operational data from the preceding year, calculated from 10-minute supervisory control and data acquisition data, for all WTGs together in tabular format, including the proportion of time the WTGs were spinning each month, the average rotor speed (monthly revolutions per minute) of spinning WTGs plus 1 standard deviation, and the average pitch angle of blades (degrees relative to rotor plane) plus 1 standard deviation. Any data considered by the Lessee to be privileged or confidential must be clearly marked

[10] https://www.boem.gov/renewable-energy/southcoast-wind-final-environmental-impact-statement

as confidential business information and will be handled by BOEM and BSEE in a manner consistent with 30 C.F.R. § 585.114. To the extent the data generated for the project is not convenient to the format specifications described in this section, BOEM, USFWS, and the lessee may agree to alternative parameters, consistent with the practice of adjacent projects and SCRAM modeling requirements.

5.2.5 Raw Data. The Lessee must store the raw data from all avian and bat surveys and monitoring activities using accepted archiving practices including data collected during COP preparation. Such data must be accessible to BOEM, BSEE, and USFWS upon request for the duration of the Lease. The Lessee must work with BOEM to ensure that the data are publicly available. All avian tracking data (i.e., from radio and satellite transmitters) must be stored, managed, and made available to BOEM and USFWS following the protocols and procedures outlined in the USFWS document entitled, *Guidance for Coordination of Data from Avian Tracking Studies* effective at time of COP approval. All bat data must be stored in NAB at (https://www.nabatmonitoring.org/).

5.2.6 Annual Bird/Bat Mortality Reporting. The Lessee must provide an annual report to BOEM, BSEE, and the USFWS documenting any dead (or injured) birds or bats found on vessels and structures during construction, operations, and decommissioning. The report must contain the following information: the name of the species, date found, location, a picture to confirm species identity (if possible), and any other relevant information. Carcasses with federal or research bands must be reported to the United States Geological Survey Bird Band Laboratory, available at https://www.pwrc.usgs.gov/BBL/bblretrv/. The Lessee must also submit to BOEM, BSEE, and USFWS an annual report covering each calendar year, due by January 31, documenting the implementation of any collision-prevention measures during the preceding year. Additionally, annual reporting of injured or dead listed species will be recorded in the Injury & Mortality Reporting (IMR) system (https://ecos.fws.gov/imr/welcome).

5.2.6.1 Immediate Reporting. Any occurrence of a dead or injured ESA-listed bird or bat in or within 1 mile of the lease area must be reported to BOEM, BSEE, and USFWS as soon as practicable (taking into account crew and vessel safety), no later than 72 hours after the sighting and, if practicable, the dead specimen will be carefully collected and preserved in the best possible state. BOEM will coordinate with USFWS on procedures and required permits for processing and handling specimens.

5.2.7 Compensatory Mitigation for Piping Plover and Red Knot. At least 180 days prior to the start of commissioning of the first WTG, the Lessee must distribute a Compensatory Mitigation Plan for Piping Plover and Red Knot to BOEM, BSEE, and USFWS for review and comment. BOEM, BSEE, and USFWS will review the Compensatory Mitigation Plan and provide any comments on the plan to the Lessee within 60 days of its submittal. The Lessee must resolve all comments on this Compensatory Mitigation Plan to BOEM's and BSEE's satisfaction before implementing the Plan and before commissioning of the first WTG. The

Compensatory Mitigation Plan would provide compensatory mitigation actions to fully offset take of Piping Plover and Red Knot by the fifth year of WTG operation. The Lessee will review the effectiveness of the plan with BOEM, BSEE and USFWS at regular (5 year) intervals thereafter or as new information becomes available, during which alternative and adaptive strategies might be considered. The Compensatory Mitigation Plan must include: (1) a quantification of the level of offsets to fully offset the impact of the incidental take expressed in the ITS, based on scientifically recognized techniques and methodologies for each of the impacted species; Piping Plover and Red Knot; (2) detailed description of the mitigation actions for each species; (3) the specific location for each mitigation action; (4) a timeline for completion of the mitigation measures; (5) details of the mitigation mechanisms (e.g., conservation bank, in-lieu fee, applicant-proposed mitigation); (6) best available science linking the compensatory mitigation action(s) to the projected level of collision mortality; and (7) monitoring and reporting to ensure the effectiveness of the mitigation actions in offsetting take.

5.3 Pre-Seabed Disturbance Conditions.

5.3.1 The Lessee must submit all required documents related to pre-seabed disturbance conditions in Sections 5.3.2 through 5.3.9 (e.g., sand bedform removal plan, anchoring plans, as-placed anchor plats, boulder identification and relocation, micrositing plan, and scour and cable protection) to BOEM, BSEE, and NMFS GARFO-HESD.

5.3.2 Sand Bedform Removal Plan. The Lessee must prepare and implement a Sand Bedform Removal Plan that describes how sand bedforms that could affect the Project will be mitigated. The Lessee must submit this plan to BSEE and BOEM for review and concurrence. The Lessee must submit a Sand Bedform Removal Plan(s) to BOEM and BSEE for the agencies' 60 business day review, 120 days prior to sand bedform removal activities within the scope of the plan. The Lessee must resolve all comments on the Sand Bedform Removal Plan to BOEM's and BSEE's satisfaction prior to implementation of the plan. If BOEM or BSEE do not provide comments on the plan within 60 business days of its submittal, then the Lessee may presume concurrence with the plan. The Lessee must provide a copy of the final Sand Bedform Removal Plan to NMFS GARFO-HESD.

5.3.2.1 The plan must include the following:

5.3.2.1.1 A description of sand bedform removal methods, including expected penetration depth, vessel specifications, equipment specifications, and metocean limits on operation;

5.3.2.1.2 Figures of the location of sand bedform removal activities, including Lessee proposed safety zones associated with third-party assets;

5.3.2.1.3 A description of how dredged material will be handled and disposed of;

5.3.2.1.4 A description of safety distances or zones to limit sand bedform removal activities near third-party assets;

5.3.2.1.5 A description of the environmental footprint of disturbance activities and measures taken to avoid further adverse impacts to archaeological resources, seafloor hazards, complex habitat, and fishing operations;

5.3.2.1.6 A description of how information regarding complex benthic habitats is shared with vessel operators

5.3.2.1.7 A summary of consultation and outreach with resource agencies and the fishing industry in development of the plan to include LNM.

5.3.2.1.8 A description of how sand bedform removal will be limited to the extent required to achieve adequate cable burial depth and will not exceed more than 5% of the Falmouth export cable route.

5.3.2.2 Sand Bedform Removal Report. The Lessee must provide to BSEE and BOEM, and make available to the approved CVA, a Sand Bedform Removal Report. The report must be submitted within 60 days of completion of the Sand Bedform Removal activities and prior to or with the relevant FIR. The report must include a summary of the activities performed and outline any deviations from the Sand Bedform Removal Plan. The Lessee must also provide to BOEM, BSEE, and NMFS GARFO-HESD a comprehensive list and shapefile of sand bedform removal activities and sediment relocation (latitude, longitude).

5.3.3 Anchoring Plans/Plats. The Lessee must prepare and implement an Anchoring Plan(s) for all areas where anchoring or buoy placement occurs and jack-up barges are used during construction and operations/maintenance within 1,640 ft (500 m) of habitats, resources, and submerged infrastructure that are sensitive, including sensitive benthic habitats;[11] boulders greater than or equal to 0.5 m; ancient submerged landform features (ASLFs); known and potential shipwrecks; potentially significant debris fields; potential hazards; third-party infrastructure, and any related facility installation (such as cable, WTG, and OSP installation). Avoidance buffers must be consistent with the following: exclusion zones for potential and confirmed unexploded ordnances consistent with risks identified in the MEC/UXO Desktop Study (Section 2.1) and relative to risks of planned activities; avoidance of cultural resources and shipwrecks and ASLFs will be consistent with Section 7.1.2 and 7.1.3.

[11] Sensitive benthic habitats include complex habitat, benthic features, and bathymetric features, Complex habitat is defined as coarse unconsolidated mineral substrates (i.e., substrates containing 5 percent or greater gravels), rock substrates (e.g., bedrock), and shell substrates (e.g., mussel reef) consistent with Coastal and Marine Ecological Classification Standards definitions, as well as vegetated habitats (e.g., SAV). Benthic features are defined as sand waves, megaripples, and ripples. Bathymetric features are defined as topographic features of the seafloor such as lumps, scarps, ledges, and banks.

5.3.3.1 The Lessee must provide to all construction and support vessels the locations where anchoring or buoy placement must be avoided or minimized to the extent technically and/or economically practicable or feasible, including sensitive benthic habitats, boulders greater than or equal to 0.5 m, ASLFs, known and potential shipwrecks, potentially significant debris fields, potential hazards, and any related facility installation activities (such as cable, WTG, and OSP installation). If avoidance and minimization is determined to be infeasible, the plans must describe in detail the rationale for such infeasibility. Dynamic positioning systems should be used in these areas instead of anchoring, as practicable. If anchoring is necessary at these locations, then for cable installation all vessels deploying anchors must extend the anchor lines to the extent practicable to minimize the number of times the anchors must be raised and lowered to reduce the amount of habitat disturbance, unless the anchor chain sweep area includes sensitive benthic habitat that may be impacted by the chain sweep. On all vessels deploying anchors, the Lessee must use mid-line anchor buoys to reduce the amount of anchor chain or line that touches the seabed, unless the Lessee demonstrates, to BOEM's and BSEE's satisfaction, that (1) the use of mid-line anchor buoys to reduce the amount of anchor chain or line that touches the seabed is not technically practical or feasible; or (2) a different alternative is as safe and provides the same or greater environmental protection.

5.3.3.2 If placement of jack-up barge spud cans is necessary in sensitive benthic habitats, locations for the spud cans must be selected to avoid or minimize impacts according to the following list, including complex habitat sub-types (using NMFS complexity categories), prioritized from highest to lowest priority, to avoid during micrositing: complex habitats with high density large boulders, complex habitats with medium density large boulders, complex habitats with low density large boulders, complex with scattered large boulders; complex habitats with no large boulders,[12] as technically practicable or feasible. Benthic habitat data (i.e., backscatter, side scan, bathymetry, and boulder layers) should be used to inform the anchoring plan. In the event of any misalignment in avoidance buffers described above with any other permits or authorizations, please refer to Section 1.4.

5.3.3.3 The Lessee must provide the proposed Anchoring Plan to BOEM and BSEE, for the agencies' 60-day review, at least 120 days before anchoring activities or at least 120 days before construction begins for export and inter-array cables, whichever is earlier. The Lessee must resolve all comments on the Anchoring Plan to BOEM's and BSEE's satisfaction before conducting any OCS seabed-disturbing activities that require anchoring. If there are fewer than 120 days between

[12] Benthic features are defined as sand waves, megaripples, and ripples; Bathymetric features are defined as topographic features of the seafloor such as lumps, scarps, ledges, and banks.

anchoring activities and this COP approval, the Lessee must submit the Plan as soon as practicable and no later than 60 days prior to commencing activities. The Lessee must provide the final version of each Anchoring Plan to BOEM, BSEE, NMFS GARFO-HESD, and the USACE. Additionally, the Lessee must provide in the Anchoring Plan a description of how information regarding sensitive benthic habitats is shared with ECC and WTG construction vessel operators.

5.3.4 Micrositing Plan(s). The Lessee must prepare and implement a Micrositing Plan(s) that describes how inter-array cables, export cable routes, WTGs, and OSPs will be microsited to avoid or minimize impacts (as technically and/or economically practicable or feasible) to archaeological resources (Sections 7.1.2 and 7.1.3), sensitive benthic habitats, boulders greater than or equal to 0.5 meters in diameter, and potential and confirmed MEC/UXO. The plan(s) must describe MEC/UXO ALARP Certified areas, which should be consistent with MEC/UXO ALARP Certification (Section 2.9). To the extent practicable, cables should cross sensitive benthic habitat areas perpendicularly at the narrowest points; cables unable to avoid benthic features such as sand waves should be sited along natural benthic contours within troughs/lows, to maximize cable burial while minimizing disturbance to local submarine topography. The Lessee must submit detailed supporting data and analysis as part of the FDR or FIR, including relevant geophysical and geospatial data. The submission of the data may be incorporated by reference or submitted as an attachment to the FDR or FIR. The Micrositing Plan(s) must be consistent with, Cable Routings (Section 2.13) and the Boulder Identification and Relocation Plan(s) (Section 5.3.5).

5.3.4.1 BOEM requires that the Lessee include in the plan a description of how it plans to minimize impacts to sensitive benthic habitat along the Brayton Point ECC (between KP 55-58) from cable laying activities along the northeastern edge of the cable corridor associated with Brown's Ledge as technically and economically feasible.

5.3.4.2 BOEM requires the following WTG micrositing actions be reflected in the Micrositing Plan as technically and economically practicable:

5.3.4.2.1 BK39 should be shifted the maximum allowable distance west;

5.3.4.2.2 BL38 should be shifted the maximum allowable distance west;

5.3.4.2.3 BL39 should be sifted the maximum allowable distance west;

5.3.4.2.4 BL42 should be shifted the maximum allowable distance east;

5.3.4.2.5 BL43 should be sited outside of the benthic ridge feature to the southwest;

5.3.4.2.6 BM40 should be shifted the maximum allowable distance east;

5.3.4.2.7 BM41 should be shifted the maximum allowable distance east.

5.3.4.3 Micrositing may only occur within areas surveyed and within navigational tolerances from the USCG for Navigational Safety Conditions of the COP.

5.3.4.4 The Micrositing Plan(s) must include a figure for each microsited cable segment, including benthic habitat delineations showing sensitive benthic habitat and locations of boulders greater than or equal to 0.5 m. The plan(s) must include a figure encompassing the lease area, depicting large boulder locations, benthic habitat delineations, and the proposed microsited locations for cables, WTGs, and OSPs. Backscatter, bathymetry, and boulder layers should be used to inform the Micrositing Plan.

5.3.4.5 For cables, OSPs, and/or WTGs that cannot be microsited to avoid impacts to sensitive benthic habitat or boulders greater than or equal to 0.5 m, the micrositing plan must identify technically and/or economically practicable or feasible impact minimization measures and use the following prioritized list, including complex habitat sub-types, to avoid during micrositing: complex habitats with high density large boulders, complex habitats with medium density large boulders, complex habitats with low density large boulders, complex with scattered large boulders; complex habitats with no large boulders.

5.3.4.6 The Lessee must submit the Micrositing Plan(s) to BOEM and BSEE for a 60-day review, 120 days prior to site preparation activities for cables, WTGs, and OSP(s) within the scope of the plan. The Lessee must resolve all comments on the Micrositing Plan(s) to BOEM's and BSEE's satisfaction prior to implementation of each plan(s). If there are fewer than 120 days between site preparation activities and this COP approval, the Lessee must submit the plan as soon as practicable and no later than 60 days prior to commencing activities. The Lessee must provide the final version of each Micrositing Plan to BOEM, BSEE, NMFS, and USACE. Additionally, the plan must describe how information regarding sensitive benthic habitats is shared with vessel operators.

5.3.4.7 Post-Installation Micrositing Report. The Lessee must provide a post-installation Micrositing Report to BOEM and BSEE for coordination with NMFS GARFO-HESD. The report must include a summary of the micrositing activities for WTGs, inter-array cables, and the export cables and demonstrate (i.e., figures of as-built locations overlaid on multibeam echosounder backscatter survey data) how impacts to complex habitats and benthic features were avoided and/or minimized within the lease area and ECC. The report must also identify and depict (i.e., figures) areas in which WTGs or cables could not be microsited to avoid complex habitats with a description of the complex

habitat sub-types impacted (see prioritized list of complex habitat sub-types listed under the Micrositing Plan Section 5.3.4) and include documentation of technical feasibility issues encountered. The Lessee must submit the report within 60 days of completion of all WTG and cable installations. The Lessee must also provide BOEM, BSEE, and NMFS GARFO-HESD a shapefile of as-built WTGs, inter-array cables, and the export cables, as well as best-available multibeam echosounder backscatter survey data (i.e., as a raster file for use in ArcGIS).

5.3.5 Boulder Identification and Relocation Plan. The Lessee must submit a Boulder Identification and Relocation Plan(s) to BOEM and BSEE for the agencies' 60-day review, 120 days prior to boulder relocation activities within the scope of the plan. The final version of the Boulder Identification and Relocation Plan must be provided to NMFS GARFO-HESD. The plan(s) should be inclusive of any boulder studies undertaken by the Lessee. The Lessee must resolve all comments on the Boulder Identification and Relocation Plan(s) to BOEM's and BSEE's satisfaction prior to implementation of the plan(s). If BOEM or BSEE do not provide comments on the plan(s) within 60 days of its submittal, then the Lessee may presume concurrence with the plan(s). Concurrence with the plan(s) will be determined by BSEE. The plan(s) must detail how the Lessee will avoid or minimize impacts to sensitive benthic habitats and fishing operations. The plan(s) must provide for relocation of boulders as closely as practicable to the original location, in areas of soft bottom that are immediately adjacent to existing similar habitat from which the boulder originated. The plan(s) must include multibeam backscatter data and boulder (greater than or equal to 0.5 m in diameter) data layers to inform the siting of boulders and areas for relocation. The plan(s) must include sufficient scope to mitigate boulders for facility installation and operational risks. The plan(s) must be consistent with and meet the conditions of the SMS in Section 2.10. The plan(s) must include the following for boulders that are proposed to be relocated:

5.3.5.1 A summary and detailed description of surface and subsurface boulders greater than 0.5 m in diameter and locations along the cable routes and WTG areas where such boulders have been found;

5.3.5.2 A detailed summary of methodologies used in boulder identification, including geological and geophysical survey results;

5.3.5.3 Figures of the location of boulder relocation activities specified by activity type (e.g., pick or plow, removal, or placement);

5.3.5.4 A description of boulder removal and/or relocation methods for each type of boulder relocation activity, and technical feasibility constraints, including, but not limited to, the capacity of the crane used in grab systems, vessel specifications, and metocean limits on operations;

5.3.5.5 A description of the areal extent of the environmental footprint of disturbance activities by habitat type and specific measures taken to avoid further adverse impacts to archaeological resources, sensitive

habitat and fishing activity, and a description of how information regarding these resources is shared with vessel operators;

5.3.5.6 A comprehensive list and shapefile of locations of boulders that would be relocated (latitude, longitude), boulder dimensions (meters), buffer radius (meters), areas of active (within last 5 years) bottom trawl fishing (latitude, longitude), areas where boulders greater than 2 meters in diameter are anticipated to occur (latitude, longitude), and identification of approximate areas to which boulders would be relocated (latitude, longitude);

5.3.5.7 A description of the specific strategies and measures taken to minimize the impacts to sensitive habitats and quantity of seafloor obstructions from relocated boulders in areas of active fishing, as technically and/or economically feasible;

5.3.5.8 The measures taken to minimize the quantity of seafloor obstructions from relocated boulders in areas of active bottom trawl fishing;

5.3.5.9 A description of safety distances or zones to limit boulder relocation near third-party assets;

5.3.5.10 A summary of any consultation and outreach with resource agencies and the fishing industry in the development of the plan (e.g., notifications to mariners);

5.3.5.11 A description of MEC/UXO ALARP certified areas, which must be consistent with MEC/UXO ALARP Certification (Section 2.9); and

5.3.5.12 A statement of consistency with the Micrositing Plan (Section 5.3.4).

5.3.6 The Lessee must provide USCG, NOAA, and the local harbormaster with a comprehensive list and shapefile of positions and areas to which boulders greater than 2 m in diameter would be relocated (latitude, longitude) at least 60 days prior to boulder relocation activities.

5.3.7 Boulder Relocation. The Lessee must implement methods identified in the approved COP and described in the Boulder Identification and Relocation Plan(s) for boulder relocation activities. The Lessee must consider the spatial extent of boulder relocation in the micrositing of WTGs and OSP foundations and inter-array and export cables for this Project and must relocate boulders as closely as practicable to the original location, in areas of soft bottom immediately adjacent to existing similar habitat. The relocation of boulders must be consistent with the Project easement.

5.3.8 Boulder Relocation Decision Protocol. The Plan(s) must include a prioritized relocation decision protocol for export cable, inter-array cable, OSP and WTG positions as follows: 1) relocation is conducted in a manner that ensures safety of the vessel and crew, 2) boulders are not relocated within the exclusion zone of potential or confirmed MEC/UXO, 3) boulders are not relocated within Archaeological Exclusion Zones, 4) boulders are not relocated within any other exclusion or protected zone including but not limited to SAV, shellfish beds

(including mussels), or areas that would impede existing scientific monitoring and research activities in State water, 5) boulders are not relocated in complex benthic hard bottom habitat, 6) boulders are not stacked on top of each other, 7) relocated boulders are grouped together or grouped next to nearby boulders but within similar bottom habitats and/or at the perimeter of the hard/soft bottom habitat interface, 8) relocated boulders are placed as close to the original location as possible, within previously surveyed areas, but outside the clearance radius. If the Lessee believes one or more relocation decision conditions described in this Section is infeasible, the Lessee must submit a technical feasibility analysis with the Boulder Relocation Report for review and concurrence by BOEM and BSEE. A variance request under Section 1.5 is not required if the Lessee submits a technical feasibility analysis pursuant to this Section.

5.3.9 Boulder Relocation Report. The Lessee must provide a Boulder Relocation Report to BSEE, BOEM, and NMFS GARFO-HESD and make the Boulder Relocation Report available to the approved CVA. The report must include a post-relocation summary of the boulder relocation activities and information to certify boulder risks related to the installation and operation of the facility have been properly mitigated. The report must also identify boulders that could not be relocated with documentation of technical feasibility concerns, including information on how, if at all, the final boulder placement differs from the Boulder Relocation Plan and why such changes were necessary. The Lessee must submit the report within 60 days of completion of the boulder relocation activities. The Lessee must also provide BOEM, BSEE, and NMFS GARFO-HESD a comprehensive list and shapefile of boulder locations to which boulders were relocated (latitude, longitude), boulder dimensions (m), any safety distances or zones to limit boulder relocation near third-party assets (m), and areas of active (within last 5 years) bottom trawl fishing (i.e., as a raster file for use in ArcGIS).

5.3.10 Scour and Cable Protection Plan. The Lessee must prepare and implement a Scour and Cable Protection Plan(s) that includes descriptions and specifications for all scour and cable protection materials. The plan(s) must include a depiction of the location and extent of cable protection, the habitat types (from acoustic surveys and transect data) for the areas of cable protection measures, and detailed information on the proposed scour or cable protection materials for each area and habitat type. The Scour and Cable Protection Plan(s) must demonstrate consistency with the Micrositing Plan(s), as appropriate.

5.3.10.1 If technically feasible, the Scour and Cable Protection Plan should not include the use of engineered stone or concrete mattresses in sensitive habitat. The Lessee must ensure that all materials used for scour and cable protection measures consist of natural or engineered stone that does not inhibit epibenthic growth and provides three-dimensional complexity in height and in interstitial spaces. If concrete mattresses are necessary, bioactive concrete (i.e., with bio-enhancing admixtures) must be used as practicable as the primary scour protection (e.g., concrete mattresses) or veneer to support biotic growth. If the Scour and Cable Protection Plan includes the use of engineered stone or

concrete mattresses in sensitive habitat, the Plan must include a technical feasibility analysis demonstrating why the use of those materials is necessary.

5.3.10.2 The Scour and Cable Protection Plan must include the use of cable protection measures that have tapered or sloped edges to reduce hangs for mobile fishing gear. The Plan may not include the permanent use of plastics/recycled polyesters/net material (i.e., rock-filled mesh bags, fronded mattresses) for scour and cable protection. The Plan may include the temporary use for 12 months or less of plastics/recycled polyesters/net material (i.e., rock-filled mesh bags, fronded mattresses) for scour and cable protection.

5.3.10.3 The Lessee must submit the Scour and Cable Protection Plan(s) to BOEM and BSEE for a 60-day review, at least 120 days prior to placement of scour and cable protection within the area covered by the scope of the Plan(s). BOEM and BSEE must concur with the Scour and Cable Protection Plan(s) prior to BSEE issuing a no-objection to an FDR covering the scour and/or cable protection materials.

5.3.10.4 The Lessee must resolve all comments on each Plan to BOEM's and BSEE's satisfaction before placement of the scour and cable protection materials. The Lessee must provide the final version of the Scour and Cable Protection Plan(s) to BSEE, NMFS, and USACE.

5.3.10.5 If the Lessee believes that it is technically infeasible to comply with Section 5.3.10.1 or Section 5.3.10.2, the Lessee must submit a technical feasibility analysis for review and concurrence by BOEM and BSEE. A variance request under Section 1.5 is not required if the Lessee submits a technical feasibility analysis pursuant to this Section. The technical feasibility analysis may be submitted as part of the Scour and Cable Protection Plan.

5.4 Benthic Habitat and Fisheries Monitoring Conditions.

5.4.1 Berm Survey and Report. Where plows, jets, grapnel runs, or other similar methods are used, post-construction geophysical surveys required as part of the Post-Installation Cable Monitoring must be capable of detecting bathymetry changes of 0.5 meters or less and must be completed to determine the height and width of any created berms. The Lessee must capture bathymetry changes greater than 3 feet during the first and second post-installation surveys along the cable routes (as described in Section 2.17). If there are bathymetric changes in berm height greater than 1 meter above grade after the second survey, the Lessee must develop and implement a Berm Remediation Plan to restore created berms to match adjacent natural bathymetric contours (isobaths), as technically and/or economically practical or feasible. The Lessee must submit the Berm Remediation Plan to BOEM and BSEE for a 60-day review within 90 days of completion of the post-construction survey where the change was detected. The Lessee must resolve all comments on the Berm Remediation Plan to BOEM's and BSEE's satisfaction prior to initiating restoration activities. The Lessee must

provide the final version of the Berm Remediation Plan to BOEM, BSEE, NMFS, and USACE.

5.4.2 Benthic and Fisheries Monitoring Plans. The Lessee must conduct benthic and fisheries monitoring to assess benthic habitat and fisheries in the Project area pre-, during, and post-construction.

5.4.2.1 The Lessee must conduct fisheries monitoring consistent with the South Coast Wind Fisheries Monitoring Plan – UMass Dartmouth (SMAST) dated July 2023.

5.4.2.2 As part of the fisheries monitoring plan, the Lessee must inspect deceased cod that are caught in the ventless trap and trawl surveys for spawning condition, assuming it is safe and practicable to do so.

5.4.2.3 The Lessee must update the Benthic Monitoring Plan- Lease Area and Brayton Point ECC dated April 2024 to specifically describe methods to monitor recovery of sensitive benthic habitat impacted by cable laying activities between KP 55-58 and between KP 76-84. The revised plan must be submitted to BOEM and NMFS HESD 60 days prior to implementation of the revised plan.

5.4.2.4 The Lessee must submit the most current Benthic and Fisheries Habitat Monitoring Plan to BOEM, BSEE, and NMFS within 120 days of COP approval for a 60-day review. The Monitoring Plans must address Agency comments received on the Plans.

5.4.2.5 The Lessee must submit any revisions to the plans to BOEM, to BSEE with status updates of submittals in the Annual Certification, and to NMFS GARFO-HESD. The Lessee should also submit the Benthic and Fisheries monitoring plan reports and resulting data to NMFS GARFO-HESD.

5.4.3 Sacrificial Anodes. The Lessee may not use Zinc sacrificial anodes on external components of WTG and OSP foundations. If the Lessee believes that it is technically infeasible to comply with this Section, the Lessee must submit a technical feasibility analysis for review and concurrence by BOEM and BSEE. A variance request under Section 1.5 is not required if the Lessee submits a technical feasibility analysis pursuant to this Section.

5.5 Non-Avian Protected Species Monitoring Plan Conditions.[13]

5.5.1 The Lessee must submit all required documents related to protected species in accordance with the November 7, 2024, NMFS BiOp Term and Conditions 1 & 5. In addition to the requirements in the BiOp, the Lessee must submit all documents to BOEM, BSEE, and USACE.

[13] The requirements in this section set forth BOEM's conditions pursuant the reasonable and prudent measures and the implementing terms and conditions in the Incidental Take Statement of the November 7, 2024, NMFS Biological Opinion. BOEM intends to implement its conditions of approval, including those in this section, consistently with the Terms and Conditions in the Biological Opinion. *See* Condition 1.4.

5.5.2 The Lessee must obtain BOEM's and BSEE's concurrence with the Plan(s) prior to the start of any activity described in the plans. To change an approved non-avian protected species monitoring plan, the Lessee must submit a revised plan for BOEM and BSEE review. BOEM's and BSEE's concurrence with the revised plan is required prior to commencement of activities under the revised plan. The Lessee must follow final plans.

5.6 Endangered and Threatened Species Conditions for Fishery Monitoring. The Lessee must follow requirements in accordance with the November 7, 2024, NMFS BiOp Appendix A, as applicable, as well as submit all required reporting documents related to endangered and threatened species conditions for fishery monitoring surveys in Section 5.4.2 to BOEM, BSEE, and NMFS GARFO-PRD.

5.6.1 The Lessee must ensure that any lost survey gear is reported and recovered according to the Marine Debris Awareness and Elimination conditions in Section 5.1.2 and the November 7, 2024, NMFS BiOp Appendix A. All lost gear must also be reported to NMFS GARFO-PRD and BSEE within 24 hours of the documented time when gear is discovered to be missing or lost. This report must include information on any markings on the gear and any efforts undertaken or planned to recover the gear.

5.6.2 The captain and/or a member of the scientific crew must conduct marine mammal monitoring prior to, during, and after haul-back of gear used for fisheries monitoring surveys. If a marine mammal is determined by survey staff to be at risk of interaction with the deployed gear, all gear must be immediately removed.

5.6.3 The Lessee must ensure all vessels deploying fixed gear have adequate disentanglement equipment (i.e., knife and boathook) onboard. Any disentanglement must occur consistent with the Northeast Atlantic Coast Sea Turtle Disentanglement Network Guidelines and the procedures described in "Careful Release Protocols for Sea Turtle Release with Minimal Injury" (2019).

5.7 Protected Species Training and Coordination. Before beginning any in-water activities involving vessel use (transit), cable installation, pile-driving, and HRG surveys, and when new personnel join the work, the Lessee must conduct briefings for construction supervisors and crews, PSO and PAM teams, vessel operators, and all staff to explain responsibilities, communication procedures, and protected species mitigation, monitoring, and reporting requirements.

5.8 Vessel Strike Avoidance Conditions.

5.8.1 The Lessee must follow vessel strike avoidance measures as described in the November 7, 2024, NMFS BiOp, inclusive of Appendices. The Lessee must also submit any required documents related to vessel strike avoidance consistent with the November 7, 2024, NMFS BiOp Term and Condition 1 and Appendix A to BOEM and BSEE.

5.8.2 Visual Observer Requirements. The Lessee must ensure that vessel operators and crew members maintain a vigilant watch for marine mammals and sea turtles, communicate detections, and reduce vessel speed, alter the vessel's course, or stop the vessel as necessary to avoid striking marine mammals or sea turtles,

consistent with identified requirements pursuant to the November 7, 2024, NMFS BiOp inclusive of Appendices.

5.9 Passive Acoustic Monitoring (PAM) of Foundation Installation and Transit Corridor.

5.9.1 Consistent with the requirements described in the MMPA LOA per the November 7, 2024, NMFS BiOp Term and Condition 1, the Lessee must conduct PAM to supplement visual monitoring of marine mammals before, during, and after all monopile and jacket foundation installations.

5.9.2 Consistent with the requirements outlined in the MMPA LOA and Appendix A of the November 7, 2024, NMFS BiOp, if a vessel is traveling at any speed greater than 10 knots (18.5 km/hr) (i.e., no speed restrictions are enacted) in the transit corridor (defined as from a port to the Lease Area or return), in addition to the required dedicated visual observer, SouthCoast Wind must monitor the transit corridor in real-time with PAM prior to and during transits. If a North Atlantic right whale is detected via visual observation or PAM within or approaching the transit corridor, all vessels in the transit corridor must travel at 10 knots (18.5 km/hr) or less for 24 hours following the detection. Each subsequent detection will trigger a 24-hour reset. A slowdown in the transit corridor expires when there has been no further North Atlantic right whale visual or acoustic detection in the transit corridor in the past 24 hours.

5.10 Clearance and Shutdown Zones. The Lessee must follow the MMPA LOA per the November 7, 2024, NMFS BiOp ITS, Tables 11.1.a and 11.1.b (see Tables 5.10-1 and 5.10-2 below), requiring that any pile-driving will not proceed unless the visual PSOs can effectively monitor the full extent of the minimum visibility zones and identified clearance zones for marine mammals and sea turtles. The Lessee must establish and monitor the following clearance and shutdown zones for the specified activity unless otherwise approved by BOEM and BSEE (in consultation with NMFS).

5.10-1 Clearance, Shutdown, and Minimum Visibility Zones, in meters (m), during Sequential and Concurrent Installation of 9/16-m Monopiles and 4.5-m Pin Piles

Installation Order	**Sequential**					**Concurrent**	
Pile Type	**9/16-m Monopile**	**4.5-m Pin Pile**	**9/16-m Monopile**		**4.5-m Pin Pile**	**WTG Mono + 4 OSP Pin Piles**	**4 WTG Pin + 4 OSP Pin Piles**
Method	**Impact Only**		**Impact**	**Vibratory**	**Impact**	**Vibratory**	**Impact Only**
Minimum Visibility zone: Within NARW EMA: 4,800 m (pin piles); 7,400 m (monopiles). Outside NARW EMA: equivalent to blue/fin/sei whale impact pile driving clearance zone							
NARW Visual Clearance/ Shutdown zone	Sighting at Any Distance from PSOs on Pile-Driving or Dedicated PSO Vessels triggers a delay or shutdown (minimum visibility zone plus any additional distances observable by the visual PSOs on any PSO platform).						

NARW PAM Clearance/ Shutdown Zone	10,000 m (pin), 15,000 m (monopile)							
Blue, Fin, Sei Whale Clearance/ Shutdown Zone Summer (Winter)	4,000 m (4,100 m)	2,300 m (2,700 m)	4,200 m	400 m	2,300	NAS	4,000 m	3,000 m
Sperm Whales Visual Clearance/ Shutdown Zone	NAS							
Sea Turtles Visual Clearance/ Shutdown Zone	200 m							

Note: The clearance and shutdown zones for marine mammals reflect the proposed conditions of the MMPA ITA and the zones for sea turtles reflect the zone sizes identified in BOEM's BA. Further modification may be included in the final MMPA ITA.

Table 5.10-2 Clearance Zones during UXO/MEC Detonations

UXO/MEC Weight Charge	NARW, Blue, Fin, and Sei Whales		Sperm Whales		Sea Turtles
	ECC	WFA	ECC	WFA	All Sites
PAM Clearance Zone*	15,000 m				N/A
E4 (2.3 kg) Clearance Zone	800 m	400 m	100 m	50 m	500 m
E6 (9.1 kg) Clearance Zone	1,500 m	900 m	200 m	50 m	
E8 (45.5 kg) Clearance Zone	2,900 m	1,900 m	300 m	100 m	
E10 (227 kg) Clearance Zone	4,200 m	3,500 m	500 m	300 m	
E12 (454 kg) Clearance Zone	4,900 m	4,500 m	600 m	400 m	

Note: These clearance and shutdown zones for marine mammals reflect the proposed conditions of the MMPA ITA and the zones for sea turtles reflect the zone sizes identified in BOEM's BA. Further modification may be included in the final MMPA ITA.

5.10.1 Long-term PAM. The Lessee must conduct long-term monitoring of ambient noise and baleen whale, and commercially important fish vocalizations in the Lease Area before, during, and following construction. The Lessee must conduct continuous[14] recording at least 1 year before the start of pile installation, through

[14] Continuous recording in this measure recognizes that PAM devices can be damaged or lost from weather and other ocean uses, mechanical failures, and general maintenance. The Lessee must make every effort to maintain the PAM system as near continuous as possible. If temporal gaps in recording are expected, the lessee must ensure that additional recorders can be deployed to fill gaps.

pile installation, initial operation, and for at least 3 but no more than 10 full calendar years of operations[15] to monitor for potential impacts. If the Lessee has pre-existing acoustic monitoring on its lease area, it is at BOEM's discretion as to whether the existing effort can (partially or completely) fulfill the long-term PAM requirement outlined here. The Lessee must meet with BOEM and BSEE at least 60 days prior to conclusion of the third full calendar year of operation monitoring (and at least 60 days prior to the conclusion of each subsequent year until monitoring is concluded) to discuss: 1) monitoring conducted to-date, 2) the need for continued monitoring, which need will be determined by BOEM, and 3) if monitoring is continued, whether adjustments to the monitoring are warranted. The monitoring instrument(s) must be configured to ensure that the specific locations (with confidence intervals) of vocalizing NARW anywhere within the lease area can be identified, assuming a 10 km detection range for their calls. The Lessee may satisfy this condition through either of the options set forth more fully below but must notify BOEM of its choice at least 120 days before pile driving is scheduled to begin. PAM deployment and data submission requirements of this Section must be consistent with Section 4. In the case where there is a conflict, the Lessee must follow the language in Section 4.

5.10.1.1 Option 1 - Lessee Conducts Long-term PAM. If the Lessee chooses to comply with Section 5.10.1 using this option, the Lessee must conduct PAM, including data processing and archiving following the Regional Wildlife Science Collaborative (RWSC) best practices16 to ensure data comparability and transparency. PAM instrumentation must be deployed to allow for identification of any NARW that vocalize anywhere within the lease area, as well as Atlantic cod.

The sampling rate (minimum 10 kHz) of the recorders must prioritize baleen whale detections but must also have a minimum capability to record noise from vessels, pile-driving, and WTG operation in the lease area. The system must be configured for continuous recording over the entire year. If temporal gaps in recording are expected, the Lessee must ensure that additional recorders can be deployed to fill gaps. The Lessee must use trawl-resistant moorings to ensure that instruments are not lost and must replace any lost instruments as soon as possible. The Lessee must also notify BOEM if this occurs.

The Lessee must follow the best practices outlined in the RWSC best practices document,[17] unless otherwise required through conditions of COP approval. The best practices include engaging with the RWSC, calibrating the instruments, running QA/QC on the raw data, following the templates for reporting species vocalizations, and preparing the data for archiving at National Centers for Ecological Information

[15] For the purposes of this condition, operation initiates with the commissioning of the first WTG.

[16] https://rwsc.org/wp-content/uploads/2022/12/RWSC-PAM-Data-Management-Storage-Best-Practices.pdf.

[17] https://rwsc.org/wp-content/uploads/2022/12/RWSC-PAM-Data-Management-Storage-Best-Practices.pdf.

(NCEI). Although section III of the RWSC best practices document specifies steps for Section 106 compliance, the Lessee must instead follow the conditions outlined in Section 7.1.1 and the Section 106 Memorandum of Agreement.

The Lessee must document the occurrence of mysticete vocalizations (as well as odontocete clicks, as available based on sample rate) using automatic or manual detection methods. In addition, data must be processed with either manual or automatic detection software to detect vocalizations of spawning cod. The Lessee must submit a log of these detections as well as the detection methodology to BOEM, BSEE, and NMFS (at nmfs.pacmdata@noaa.gov) within 120 days following each recorder retrieval. The Lessee must send all raw data to the NCEI Passive Acoustic Data archive on an annual basis and the Lessee must follow NCEI guidance for packaging the data. Please note that if the DON requires screening of the data, the Lessee will have an additional 90 days for data processing.

5.10.1.1.1 Long-term Passive Acoustic Monitoring Plan. The Lessee must prepare and implement a Long-term PAM Plan under this option. No later than 120 days prior to instrument deployment and before any construction begins, the Lessee must submit to BOEM and BSEE the Long-term PAM Plan that describes all proposed equipment (including number and configuration of instruments), deployment locations, mooring design, detection review methodology, and other procedures and protocols related to the required use of PAM. If there are fewer than 120 days between the commencement of any construction activity and this COP approval, the Lessee must submit the plan as soon as practicable and no later than 60 days prior to commencing activities. As the Lessee prepares the Long-term PAM Plan, it must coordinate with the RWSC.

BOEM and BSEE will review the Long-term PAM Plan and provide comments, if any, on the plan within 45 days of its submittal. The Lessee may be required to submit a modified Long-term PAM Plan based on feedback from BOEM and BSEE. The Lessee must address all outstanding comments to BOEM's and BSEE's satisfaction and will need to receive written concurrence from BOEM. If BOEM does not provide comments on the Long-term PAM Plan within 45 days of its submittal, the Lessee may conclusively presume BOEM's concurrence with the Long-term PAM Plan.

5.10.1.2 Option 2 – Financial and Other Contributions to BOEM's Environmental Studies Program.[18] As an alternative to conducting long-term PAM in the Lease Area, the Lessee may make a financial contribution to BOEM's Environmental Studies Partnership for an Offshore Wind Energy Regional Observation Network (POWERON) initiative on an annual basis and cooperate with the POWERON team to allow the team's access to the Lease Area for deployment, regular servicing, and retrieval of instruments. In the event the Lessee selects this Option, BOEM and the Lessee will enter into a separate agreement. The Lessee's financial contribution must provide for all activities necessary to conduct PAM within and adjacent to the Lease Area, such as vessel and staff time for regular servicing of instruments, QA/QC on data, data processing to obtain vocalizations of sound-producing species and ambient noise metrics, as well as long-term archiving of data at NCEI. At the Lessee's request, BOEM will provide an estimate of the necessary amount of the financial contribution. BOEM will also invite the Lessee to contribute to discussions about the scientific approach of the POWERON initiative via the RWSC. The Lessee may request temporary withholding of the public release (i.e., the placement into the NCEI public data archive) of raw acoustic data collected within the Lease Area for up to 180 days after collection of that data. During this temporary hold, BOEM may elect to provide the Lessee with a copy of the raw PAM data collected under this option after the DON has cleared the data for national security concerns.

5.11 WTG and OSP Foundation Installation Conditions. The Lessee must follow measures in the November 7, 2024, NMFS BiOp, including Appendices, and submit all required documents related to WTG and OSP foundation installation conditions in Sections 5.11.1 through 5.11.3 below to BOEM, BSEE, and NMFS GARFO-PRD.

5.11.1 Seasonal and Daily Restrictions. The Lessee must follow the November 7, 2024, NMFS BiOp ITS, inclusive of Appendices.

5.11.2 Use of PSOs and PAM Operators for Pile-Driving. The Lessee must follow the November 7, 2024, NMFS BiOp ITS, inclusive of Appendices.

5.11.3 Noise Attenuation System. The Lessee must follow the November 7, 2024, NMFS BiOp ITS Term and Condition 4, inclusive of Appendices.

5.12 Site Assessment and Site Characterization Activities. The Lessee must comply with all applicable measures identified in the November 7, 2024, NMFS BiOp, inclusive of Appendices. The Lessee must submit applicable survey plans to BSEE for review and concurrence that PDCs/BMPs are followed appropriately at least 90 days prior to the planned start of geophysical and geotechnical surveys. The Lessee must submit survey reports to BSEE.

[18] The Lessee may elect Option 2 initially or during any subsequent calendar year of monitoring, subject to agreement with BOEM and BSEE.

5.13 Reporting for Protected Species. The Lessee must implement the reporting requirements necessary in the November 7, 2024, NMFS BiOp, including Terms and Conditions 2, 3, 4, 5, 6, 7, 8 and all Appendices, and as specified in the following conditions. The Lessee must report to BOEM and BSEE within 24 hours of any potential take of an ESA-listed species.

5.13.1 Detected or Impacted Protected Species Reporting. The Lessee must follow reporting requirements in the November 7, 2024, NMFS BiOp Term and Condition 7 and Appendices.

5.13.2 Detected or Impacted Dead Non-ESA-Listed Fish. The Lessee must report any occurrence of at least 10 dead non-ESA-listed fish within established shutdown or monitoring zones to BOEM and BSEE as soon as practicable (taking into account crew and vessel safety), but no later than 24 hours after the sighting. BOEM or BSEE will notify NMFS GARFO-HESD. In the email the Lessee must confirm the relevant point of contact for questions regarding the report and confirm with BOEM and BSEE that the report was received. The email must also include modifications the Lessee will make to reduce the risk of additional fish kills in the project area.

5.13.3 Weekly Pile-Driving Reports. The Lessee must compile and submit weekly reports during construction that document pile driving and HRG survey activities, including associated PSO, SFV, and noise abatement activities. These weekly reports must include the information required by the November 7, 2024, NMFS BiOp Terms and Conditions 2e, 4, 5c, and 7e, and the Lessee must submit the reports to NMFS-OPR, NFMS GARFO-PRD, BOEM, and BSEE. The Lessee may submit the reports directly from the PSO providers and the reports may consist of raw data. The Lessee must submit weekly reports no later than Wednesday for the previous week (Sunday – Saturday). Weekly reports must include:

5.13.3.1 Summaries of pile driving activities and piles installed, including pile ID, type of pile, pile diameter, start and finish time of each pile driving event, hammer log (number of strikes, max hammer energy, duration of piling) per pile, any changes to noise attenuation systems and/or hammer schedule, details on the deployment of PSOs and PAM Operators, including the start and stop time of associated observation periods by the PSOs and PAM Operators, and a record of all observations/detections of marine mammals and sea turtles as detailed in Section 5.13.3.3 below;

5.13.3.2 A summary of SFV, including the results of abbreviated SFV monitoring conducted. and NAS implemented during pile driving;

5.13.3.3 All protected species detections. This includes: species identification, number of animals, time at initial detection, time at final detection, distance to pile/vessel at initial detection, closest point of approach to pile/vessel, and animal direction of travel relative to pile/vessel; description of animal behavior, features used to identify species, and for moving vessels: speed (knots), distance and bearing to animal at initial detection, closest point of approach and bearing to animal,

distance and bearing to animal at final detection, and animal direction of travel relative to vessel. Sightings/detections during pile driving activities (clearance, active pile driving, post-pile driving) and all other (transit, opportunistic, etc.) sightings/detection must be reported and identified as such; and

5.13.3.4 Vessel strike avoidance measures taken.

5.13.4 Monthly Pile-Driving Reports. Starting the first month that in-water activities occur on the OCS, the Lessee must compile and submit monthly reports that include a summary of all Project activities carried out in the previous month, including dates and locations of any fisheries surveys, vessel transits (number of transits, name and type of vessel, ports used, and route inclusive of foreign and domestic ports), piles installed (number and ID), HRG surveys conducted, and all observations of ESA-listed whales, sea turtles, and sturgeon inclusive of any mitigation measures taken as a result of those observations. Sightings/detections must include species ID, time, date, initial detection distance, vessel/platform name, vessel activity, vessel speed, bearing to animal, Project activity, and if any, mitigation measures taken. These reports must include the information identified in the November 7, 2024, NMFS BiOp Terms and Condition 7g, and the Lessee must submit the reports to BOEM, BSEE, and NMFS-OPR, and NMFS-GARFO-PRD no later than the 15th of the month for the previous month.

5.13.5 Reporting Instructions for Monthly PSO Pile-Driving Monitoring Reports. PSOs must collect data consistent with standard reporting forms, software tools, or electronic data forms authorized by BOEM for the particular activity. PSOs must fill out report forms for each vessel with PSOs aboard. Unfilled cells must be left empty and must not contain "NA." The Lessee must submit the reports in Microsoft Word and Excel formats (not as a PDF). Enter all dates as YYYY-MM-DD. Enter all times in 24 Hour Coordinated Universal Time (UTC) as HH:MM.

5.13.5.1 The PSO must create a new entry on the Effort form each time a pile segment changes, or weather conditions change, and at least once an hour as a minimum. The PSO must review and revise all forms for completeness and resolve incomplete data fields before submittal. The file name must follow this format: Lease#_ ProjectName_PSOData_YearMonthDay toYearMonthDay.xls. Data fields must be reported in Excel format. Data categories must include Project, Operations, Monitoring Effort, and Detection, as further specified below. The Lessee must generate all PSO data through software applications or otherwise recorded electronically by PSOs and the Lessee must provide the data to BOEM and BSEE in electronic format (CSV files or similar format) to be checked for quality assurance and quality control. Applications developed to record PSO data are encouraged if the data fields listed below can be recorded and exported into Excel. Alternatively, BOEM has developed an Excel spreadsheet with all the necessary data fields, that is available upon request.

Required data fields include:

Project Information:

- Project name
- Lease number
- State coastal zones
- PSO contractors
- Vessel names
- Reporting dates (YYYY-MM-DD)
- Visual monitoring equipment used (e.g., bionics, magnification, infrared cameras)
- Distance finding method used
- PSO names (Last, First) and training
- Observation height above sea surface

Operations Information:

- Date (YYYY-MM-DD)
- Hammer type used (make and model)
- Greatest hammer power used for each pile
- Pile identifier and pile number for the day (e.g., pile 2 of 3 for the day)
- Pile diameters
- Pile length
- Total number of strikes used to install each pile
- Total hammer energy used to install each pile
- Pile locations (latitude and longitude)
- Number of vessel transits
- Types of vessels used
- Vessel routes used

Monitoring Effort Information:

- Date (YYYY-MM-DD)
- Noise source (ON=Hammer On; OFF=Hammer Off)
- PSO name(s) (Last, First)
- If visual, how many PSOs on watch at one time?
- Time pre-clearance visual monitoring began in UTC (HH:MM)
- Time pre-clearance monitoring ended in UTC (HH:MM)
- Time pre-clearance PAM monitoring began in UTC (HH:MM)
- Time PAM monitoring ended in UTC (HH:MM)
- Duration of pre-clearance PAM and visual monitoring
- Time power-up or ramp-up began
- Time equipment full power was reached
- Duration of power-up or ramp-up
- Time pile driving began (hammer on)

- Time pile driving activity ended (hammer off)
- Duration of activity
- Duration of visual detection
- Wind speed (knots), from direction
- Swell height (m)
- Water depth (m)
- Visibility (kilometers)
- Glare severity
- Latitude (decimal degrees), longitude (decimal degrees)
- Compass heading of vessel (degrees)
- Beaufort scale
- Precipitation
- Cloud coverage (%)
- Did a shutdown/power-down occur?
- Time shutdown was called for (UTC)
- Time equipment was shut down (UTC)
- Habitat or prey observations
- Marine debris sighted

Detection Information:

- Date (YYYY-MM-DD)
- Sighting ID (V01, V02, or sequential sighting number for that day; multiple sightings of the same animal or group must use the same ID)
- Date and time at first detection in UTC (YY-MM- DDT HH:MM)
- Time at last detection in UTC (YY-MM-DDT HH:MM)
- PSO name(s) (Last, First)
- Effort (ON=Hammer On; OFF=Hammer Off)
- If visual, how many PSOs on watch at one time?
- Start time of observations
- End time of observations
- Duration of visual observation
- Wind speed (knots), from direction
- Swell height (m)
- Water depth (m)
- Visibility (kilometers)
- Glare severity
- Latitude (decimal degrees), longitude (decimal degrees)
- Compass heading of vessel (degrees)
- Beaufort scale
- Precipitation
- Cloud coverage (%)
- Sightings including common name, scientific name, or family

- Percent certainty of identification
- Number of adults
- Number of juveniles
- Total number of animals
- Bearing to animals when first detected (ship heading + clock face)
- Bearing to animals at closest approach (ship heading+ clock face)
- Bearing to animal at final detection (ship heading+ clock face)
- Range from vessel and pile (reticle distance in meters)
- Description (include features such as overall size; shape of head; color and pattern; size, shape, and position of dorsal fin; height, direction, and shape of blow, etc.)
- Detection narrative (note behavior, especially changes in relation to activity and distance from service vessel)
- Direction of animal travel in first approach relative to vessel and pile
- Behaviors observed: indicate behaviors and behavioral changes observed in sequential order (use behavioral codes)
- If any bow-riding behavior observed, record total duration during detection (UTC HH:MM)
- Initial heading of animals (degrees)
- Final heading of animals (degrees)
- Shutdown zone size during detection (m)
- Was the animal inside the shutdown zone?
- Closest distance to vessel and pile (reticle distance in m)
- Time at closest approach to vessel and pile (UTC HH:MM)
- Time animal entered shutdown zone (UTC HH:MM)
- Time animal left shutdown zone (UTC HH:MM)
- If observed or detected during ramp-up or power-up: first distance (reticle distance in m), closest distance (reticle distance in m), last distance (reticle distance in m), behavior at final detection
- Did a shutdown/power-down occur?
- Time shutdown was called for (UTC HH:MM)
- Time equipment was shut down (UTC HH:MM)
- Detections with PAM

5.13.6 Annual Reports. Beginning one calendar year after the commissioning of the first WTG, the Lessee must compile and submit annual reports that include a summary of all Project activities carried out in the previous year, including vessel transits (number, type of vessel, ports used, and route), repair and maintenance activities, survey activity, and all observations of ESA-listed species. The Lessee must submit the annual reports to BOEM, BSEE, NMFS-OPR, and NMFS GARFO-PRD. The Lessee must submit these reports by April 1 of each year for the

previous calendar year (i.e., the 2026 report is due by April 1, 2027). BOEM and BSEE (in consultation with NMFS) may approve changes to the frequency and timing of reports.

5.14 Other Protected Species Conditions. On November 7, 2024, NMFS issued a BiOp, including an ITS for the Project. The ITS includes RPMs and Terms and Conditions that NMFS determined were necessary and appropriate to minimize and monitor the amount or extent of incidental take of species listed as endangered or threatened under the ESA and under NMFS jurisdiction. The Lessee must execute the proposed action in compliance with all avoidance, minimization, and monitoring measures described in the NMFS BiOp, as well as the RPMs and implementing Terms and Conditions included in the NMFS BiOp's ITS. Those RPMs and Terms and Conditions are incorporated by reference in this document. This includes all measures specified in the NMFS BiOp and measures from the MMPA LOA that were incorporated into the NMFS BiOp. The Lessee must comply with all conditions in Appendix A of these Conditions of COP Approval consistent with Sections 1.1 and 1.4.

6 CONDITIONS RELATED TO COMMERCIAL FISHERIES AND FOR-HIRE RECREATIONAL FISHING

6.1 Fisheries Compensation and Mitigation Funds. No later than 120 days prior to commencement of offshore construction activities, unless a different schedule is agreed to as a component of a separate agreement between the Lessee and BOEM and BSEE for funds not subject to a State agreement, the Lessee must establish and implement a direct compensation program to provide monetary compensation to commercial and for-hire fishermen and shoreside support services impacted by the Project and funded in accordance with Section 6.1.1 and Section 6.1.2 below. Calculation steps are shown in Section 6.1.3 below.

6.1.1 Direct Compensation Program. The Lessee must ensure that the Direct Compensation Fund (hereinafter sometimes referred to as "Fund") includes an amount sufficient to be used to pay claims brought by eligible claimants and must be based, at a minimum, on the annual average commercial fisheries landings values as derived from Table 3.6.1-17 (page 3.6.1-24) and Table 3.6.1-26 (page 3.6.1-41) of the SouthCoast Wind Final EIS. The Fund amount must be determined by the formula set out below.

6.1.1.1 In the Fund, for the Other States as noted in Section 6.1.1.3.3, the Lessee must reserve the amount of, at a minimum, 100 percent of annual revenue exposure allocated to the Project during the post-COP approval pre-construction and construction period and (pending BSEE's approval of the Lessee's decommissioning application) projected decommissioning period. The Lessee must reserve 100 percent of annual revenue exposure for the first year after the completion of construction, 80 percent of revenue exposure 2 years after the completion of construction, 70 percent of revenue exposure 3 years after the completion of construction, 60 percent after 4 years, and 50 percent for the 5th year after the completion of construction. DOI will evaluate the need for additional mitigation. The Lessee may

propose to BOEM and BSEE that the Lessee would like to fully fund the amounts in the first year of the program in which case the total amount may be modified to reflect present value and may incorporate a discount rate that allows reserve amounts in investment vehicles to anticipate growth in funds over the period for which funds are required to be available. However, if the actual funds are less than the required reserve amounts for a given period, the Lessee will be required to fund the difference. BOEM may require the Lessee's growth projections in order to approve this alternative.

6.1.1.2 The compensation calculations described above must be normalized using the latest annual gross domestic product (GDP) Implicit Price Deflator (U.S. Bureau of Economic Analysis,[19] "Table 1.1.9. Implicit Price Deflators for Gross Domestic Product") to the year construction begins, through the construction period, and thereafter for the 5-years post-construction. The reserve amounts for mitigation during decommissioning must also be normalized.

6.1.1.3 The Lessee must establish the following Funds for compensation of income losses by commercial or for-hire fishermen:

6.1.1.3.1 Rhode Island – The Lessee must contribute $250,000 to the State of Rhode Island as direct financial mitigation for Rhode Island commercial and for-hire fishing sectors and an additional $30,000 to support Rhode Island commercial fishermen, for-hire charter fishermen, and recreational fishermen. This funding has two components: (1) Funding to compensate for economic losses directly attributable to development of the Brayton Point ECC, and (2) Funding to support commercial and for-hire charter fishing operations more generally. The funds will be paid into the Rhode Island Future Viability Trust.

6.1.1.3.2 Massachusetts - The Lessee must establish a $4,217,000 Compensatory Mitigation Fund and contribute $1,500,000 to the Massachusetts Fisheries Innovation Fund. The Compensatory Mitigation Fund will compensate Massachusetts commercial and for-hire charter fishers and shoreside businesses impacted by the Development in lease area OCS-A 0521 and its export cable areas in federal and state waters for direct economic losses arising from the construction, operation, decommissioning of each Phase of the Development, and unforeseen, extraordinary events that lead to later business interruption.

6.1.1.3.3 Other States – The Lessee must establish a Fund and allocate compensation/mitigation funds to the Project in

[19] BEA Table 1.1.9. Implicit Price Deflators for Gross Domestic Product

accordance with Section 6.1.3 below as identified in Table 3.6.1-17 (page 3.6.1-24) and Table 3.6.1-26 (page 3.6.1-41) of the SouthCoast Wind Final EIS.

6.1.2 Shoreside Support Services. At least 90 days prior to establishment of the Direct Compensation Program described in Section 6.1.1, the Lessee must submit to BOEM a Shoreside Support Services report for a 60-day review and approval. If a State agreement for compensatory mitigation includes support for shoreside services, such as through a community fund, the amount allocated to shoreside services in the State agreement(s) may be removed from the calculation in Section 6.1.3 if such amount is greater than BOEM's required amounts. The report must include a description of the structure of the Direct Compensation Fund and an analysis of the impacts of the Project to shoreside support services within communities near the ports listed below as identified in Table 3.6.1-16 SouthCoast Wind Final EIS:

- Point Judith, RI
- New Bedford, MA
- Montauk, NY
- Newport, RI
- Chatham, MA
- Fairhaven, MA
- Beaufort, NC
- Newport News, VA
- Little Compton, RI
- Westport, MA

6.1.3 Compensation Calculations. The Lessee must use Tables 6.1.3-1 and 6.1.3-2 to calculate the total Fund amount required by Section 6.1.1.1. The required Fund amount must be normalized to current real prices from a base year as described in Section 6.1.1.2. The Lessee may use the most recent complete year's GDP Implicit Price Deflator to estimate Direct Compensation Fund requirements after COP approval if the current year is unavailable (n_i). The Lessee may also update the GDP Implicit Price Deflator, noted in Tables 6.1.3-1 and 6.1.3-2, should the BEA conduct Annual or Comprehensive Updates to the National, Industry, and State and Local Economic Accounts.

As described in Section 6.1.1.1, the Lessee must ensure that the reserve amount allows for, at a minimum, 100 percent of annual revenue exposure allocated to the Project during the projected post-COP approval pre-construction and construction years and, pending BSEE approval of the decommissioning plan, decommissioning years. The Lessee must use the GDP Implicit Price Deflator to adjust the annual average commercial fisheries revenue as derived from Table 3.6.1-17 (page 3.6.1-24) and Table 3.6.1-26 (page 3.6.1-41) of the SouthCoast Wind Final EIS, less the exposed revenue from the existing State of Massachusetts agreement as described in Section 6.1.1.3.2. After two years

following the expiration of a Project Period, unclaimed funds for that expired Project Period may be rolled forward or recouped.

Table 6.1.3-1. Calculation Subcomponents for Construction and Decommissioning

Project Period	Base Annual Average Fishing Revenue Exposed to the Wind Farm Area[1,2]	Shoreside Support Services Multiplier[3]	Exposure Ratio	Adjusted Base Annual Average Fishing Revenue Exposed to the Wind Farm Area	Reserve Requirements
Construction	$\left(\$343{,}533 \times \frac{n_i}{118.026}\right) + \left(\$1{,}400 \times \frac{n_i}{118.026}\right)$	M	1	$\left(\$343{,}533 \times \frac{n_i}{118.026}\right) + \left(\$1{,}400 \times \frac{n_i}{118.026}\right)$	$\left(\$343{,}533 \times \frac{n_i}{118.026}\right)(1 + \mathrm{M}) + \left(\$1{,}400 \times \frac{n_i}{118.026}\right)$
Decommissioning[4]	$\left(\$343{,}533 \times \frac{n_i}{118.026}\right) + \left(\$1{,}400 \times \frac{n_i}{118.026}\right)$	M	1	$\left(\$343{,}533 \times \frac{n_i}{118.026}\right) + \left(\$1{,}400 \times \frac{n_i}{118.026}\right)$	$\left(\$343{,}533 \times \frac{n_i}{118.026}\right)(1 + \mathrm{M}) + \left(\$1{,}400 \times \frac{n_i}{118.026}\right)$

Notes:

[1] Inflation-adjusted revenues are derived from Table 3.6.1-17 (page 3.6.1-24), not including Massachusetts, and Table 3.6.1-26 (page 3.6.1-41) of the SouthCoast Wind Final EIS. Derived figures may not be identical to the Final EIS due to rounding. The inflation-adjusted base equation is:

$$\left(\frac{Total\ Commercial\ Fishing\ Revenues}{15} + Annual\ Average\ Recreational\ Fishing\ Revenues\right) \times \frac{\boldsymbol{n_i}}{118.026}.$$

[2] Across Project Periods, it is anticipated that the value for n_i will change. It is also anticipated that the GDP Implicit Price Deflator denominator will change based on BEA Annual or Comprehensive updates.

[3] The Lessee's calculations of the Impacts to Shoreside Businesses Multiplier may use BOEM's draft *Guidelines for Mitigating Impacts to Commercial and Recreational Fisheries on the Outer Continental Shelf Pursuant to 30 C.F.R. Part 585* or future versions, but BOEM must, in all events, review the calculations.

[4] Decommissioning funds may be required pending BSEE's approval of Lessee's decommissioning application.

Table 6.1.3-2. Calculation Subcomponents by Operating Year

	Base Annual Average Fishing Revenue Exposed to the Wind Farm Area[1,2]	Exposure Ratio	Adjusted Base Annual Average Fishing Revenue Exposed to the Wind Farm Area	Shoreside Support Services Multiplier[3]	Reserve Requirements
Operating Year 1	$\left(\$343{,}533 \times \frac{n_i}{118.026}\right) + \left(\$1{,}400 \times \frac{n_i}{118.026}\right)$	1	$\left(\$343{,}533 \times \frac{n_i}{118.026}\right) + \left(\$1{,}400 \times \frac{n_i}{118.026}\right)$	M	$\left(\$343{,}533 \times \frac{n_i}{118.026}\right)(1+\mathrm{M}) + \left(\$1{,}400 \times \frac{n_i}{118.026}\right)$
Operating Year 2	$\left(\$343{,}533 \times \frac{n_i}{118.026}\right) + \left(\$1{,}400 \times \frac{n_i}{118.026}\right)$	0.8	$\left(\$\,274{,}827 \times \frac{n_i}{118.026}\right) + \left(\$1{,}120 \times \frac{n_i}{118.026}\right)$	M	$\left(\$\,274{,}827 \times \frac{n_i}{118.026}\right)(1+\mathrm{M}) + \left(\$1{,}120 \times \frac{n_i}{118.026}\right)$
Operating Year 3	$\left(\$343{,}533 \times \frac{n_i}{118.026}\right) + \left(\$1{,}400 \times \frac{n_i}{118.026}\right)$	0.7	$\left(\$\,240{,}473 \times \frac{n_i}{118.026}\right) + \left(\$980 \times \frac{n_i}{118.026}\right)$	M	$\left(\$\,240{,}473 \times \frac{n_i}{118.026}\right)(1+\mathrm{M}) + \left(\$980 \times \frac{n_i}{118.026}\right)$
Operating Year 4	$\left(\$343{,}533 \times \frac{n_i}{118.026}\right) + \left(\$1{,}400 \times \frac{n_i}{118.026}\right)$	0.6	$\left(\$\,206{,}120 \times \frac{n_i}{118.026}\right) + \left(\$840 \times \frac{n_i}{118.026}\right)$	M	$\left(\$\,206{,}120 \times \frac{n_i}{118.026}\right)(1+\mathrm{M}) + \left(\$840 \times \frac{n_i}{118.026}\right)$
Operating Year 5	$\left(\$343{,}533 \times \frac{n_i}{118.026}\right) + \left(\$1{,}400 \times \frac{n_i}{118.026}\right)$	0.5	$\left(\$\,171{,}767 \times \frac{n_i}{118.026}\right) + \left(\$700 \times \frac{n_i}{118.026}\right)$	M	$\left(\$\,171{,}767 \times \frac{n_i}{118.026}\right)(1+\mathrm{M}) + \left(\$700 \times \frac{n_i}{118.026}\right)$

Notes:

[1] Inflation-adjusted revenues are derived from Table 3.6.1-17 (page 3.6.1-24), not including Massachusetts, and Table 3.6.1-26 (page 3.6.1-41) of the SouthCoast Wind Final EIS. Derived figures may not be identical to the Final EIS due to rounding. The inflation-adjusted base equation is:

$$\left(\frac{Total\ Commercial\ Fishing\ Revenues}{15} + Annual\ Average\ Recreational\ Fishing\ Revenues\right) \times \frac{\boldsymbol{n_i}}{118.026}.$$

[2] Across Project Periods, it is anticipated that the value for n_i will change. It is also anticipated that the GDP Implicit Price Deflator denominator will change based on BEA Annual or Comprehensive updates.

[3] The Lessee's calculations of the Impacts to Shoreside Businesses Multiplier may use BOEM's draft *Guidelines for Mitigating Impacts to Commercial and Recreational Fisheries on the Outer Continental Shelf Pursuant to 30 C.F.R. Part 585* or future versions, but BOEM must, in all events, review the calculations.

6.1.4 Reporting. By January 31 of each year, after the fund is established, the Lessee must submit to BOEM and BSEE an annual report demonstrating implementation of the Direct Compensation Program. The report must include, as applicable, the following: the Fund charter, including the governance structure, audit and public reporting procedures; documentation regarding the funding account, including the dollar amount, establishment date, financial institution, and owner of the account; and the standards used for paying compensatory mitigation for impacts to commercial and for-hire fishers and related shoreside businesses resulting from all phases of the Project development on the Lease Area (post-COP approval pre-construction, construction, operation, and decommissioning); and the number of claims processed, approved, and denied. The Lessee must publicly report an annual audit. Where there is a compensation agreement between a State and the Lessee, the Lessee must submit to BOEM and BSEE verification that any agreed-upon compensatory fisheries mitigation fund is established and funded.

6.1.5 Notification. The Lessee must notify BOEM and BSEE of any compensation and mitigation fund agreements into which a State and the Lessee have entered. The Lessee must request that the Administrator(s) of the direct compensation program(s) listed above, and any others established for other States, notify BOEM when the direct compensation program(s) has been established and is processing claims. Notification can be accomplished by the Administrator(s) transmitting to BOEM an annual financial statement of the direct compensation program(s). The Lessee must request that the Administrator(s) submit the required notification by January 31 of each year, beginning on the second anniversary of the Project's Commercial Operations Date as defined by Addendum "B" of the Lease or as otherwise negotiated with BOEM. The Lessee must request that the notification be signed by the Administrator(s).

6.2 Fisheries Gear Loss Compensation. The Lessee must maintain throughout the life of the Project, a fisheries gear loss claims procedure to implement the financial compensation policy proposed by the Lessee in Appendix W (Page 3 Section 1.3) of the COP, Fisheries Communication Plan. The fisheries gear loss claims procedure must be available to all fishermen impacted by Project activities or infrastructure, regardless of homeport.

6.3 Federal Survey Mitigation Program. There are 14 NMFS scientific surveys that overlap with wind energy development in the northeast region. Ten of these surveys overlap with the Project. Consistent with NMFS and BOEM survey mitigation strategy actions 1.3.1, 1.3.2, 2.1.1, and 2.1.2 in the *NOAA Fisheries and BOEM Federal Survey Mitigation Implementation Strategy - Northeast US Region,*[20] within one year plus 120 days of COP approval, the Lessee must submit to BOEM a survey mitigation agreement between NMFS and the Lessee. The survey mitigation agreement must describe how the Lessee will mitigate the Project impacts on the 10 NMFS surveys. The Lessee must conduct activities in accordance with such agreement.

[20] Hare, J.A., Blythe, B.J., Ford, K.H., Godfrey-McKee, S., Hooker, B.R., Jensen, B.M., Lipsky, A., Nachman, C., Pfeiffer, L., Rasser, M. and Renshaw, K., 2022. NOAA Fisheries and BOEM Federal Survey Mitigation Implementation Strategy - Northeast US Region. NOAA Technical Memorandum 292. Woods Hole, MA. 33 pp.

If the Lessee and NMFS fail to reach a survey mitigation agreement, then the Lessee must submit a survey mitigation plan to BOEM and NMFS that is consistent with the mitigation activities, actions, and procedures described in Sections 6.3.1 and 6.3.2 below, within one year plus 180 days of COP approval. BOEM will review the survey mitigation plan in consultation with NMFS Northeast Fisheries Science Center (NEFSC). The Lessee must resolve comments to BOEM's satisfaction and must conduct activities in accordance with the plan.

6.3.1 As soon as reasonably practicable, but no later than 30 days after the issuance of the Project's COP approval, the Lessee must initiate coordination with NMFS NEFSC to develop the survey mitigation agreement described above. Mitigation activities specified under the agreement must be designed to mitigate the Project impacts on the following NMFS NEFSC surveys: (a) Spring Bottom Trawl survey; (b) Autumn Multi-species Bottom Trawl survey; (c) Ecosystem Monitoring survey; (d) Aerial marine mammal and sea turtle survey; (e) Shipboard marine mammal and sea turtle survey; (f) Atlantic Sea scallop survey; (g) Ocean quahog survey; (h) Seal survey; (i) NARW survey; and (j) Sea Turtle Ecology survey. At a minimum, the survey mitigation agreement must describe actions to address impacts on the affected surveys due to the preclusion of sampling platforms and impacts on statistical designs. NMFS has determined that the Project area is a discrete stratum for surveys that use a random stratified design. This agreement may also consider other anticipated Project impacts on NMFS surveys, such as changes in habitat and increased operational costs due to loss of sampling efficiencies.

6.3.2 The survey mitigation agreement must identify activities that will result in the generation of data equivalent to data generated by NMFS' affected surveys for the duration of the Project. The survey mitigation agreement must describe the implementation procedures by which the Lessee will work with NEFSC to generate, share, and manage the data required by NEFSC for each of the surveys impacted by the Project, as mutually agreed upon between the Lessee and NMFS/NEFSC. The survey mitigation agreement must also describe the Lessee's participation in the NMFS NEFSC Northeast Survey Mitigation Program to support activities that address regional-level impacts for the surveys listed above.

7 VISUAL AND CULTURAL RESOURCES CONDITIONS

7.1 Section 106 MOA Conditions.

7.1.1 Reporting. The Lessee must submit all required monitoring, reporting (annual, immediate, or post-discovery), and survey documentation related to cultural resources to BOEM and BSEE.

7.1.2 Avoidance of Known and Potential Shipwrecks and Debris Fields. The Lessee must avoid known and potential shipwrecks and potentially significant debris fields as described below and in the Project Section 106 MOA, Stipulation I. The Lessee must identify avoidance requirements on proposed anchoring plats, as-placed plats, and drawings associated with seabed disturbances (e.g., relevant FDR/FIR documents for export cables, inter-array cables, WTGs, etc.). If the

Lessee determines that avoidance is not possible, the Lessee must notify BOEM and BSEE prior to disturbing the seabed in the excluded area. In such instances, BOEM will notify the Lessee of any additional requirements, which may include additional consultation with consulting parties under Section 106 of the NHPA and additional measures to resolve adverse effects. If any vessel conducting work on behalf of the Lessee or any other activity associated with planning, construction, operation, or decommissioning disturbs the seabed within the avoidance areas noted below, the Lessee must submit an incident report to BOEM and BSEE within 24 hours.

7.1.2.1 Avoidance of Marine Archaeological Resources. The Lessee must comply with protective buffers determined by BOEM such that 31 identified marine archaeological resources (i.e., Potential NOAA 7840 [known shipwreck *Kershaw*]; Potential AWOIS 9821 [known shipwreck *Sagamore*]; Marine Archaeological Resources 20-02, 20-03, 20-04, 20-05, 20-07 [known shipwreck NOAA 9820], 20-08, 20-09, 20-10, 20-11, 20-12, 20-13, 20-14, 21-02, 21-03, 21-04, 21-05, 21-06, BP-03, BP-04, BP-05, BP-09, BP-11, BP-12, BP-13, BP-14, BP-18, BP-19, BP-20, and BP-21 [Swn Ha-20])) are provided buffers as follows:

7.1.2.1.1 For resources with visual footprints measuring greater than or equal to 5 meters (16.4 feet), the Lessee will maintain a distance of no less than 50 meters (164 feet) from each resource's extant features. These resources include: Potential NOAA 7840 (known shipwreck Kershaw); Potential AWOIS 9821 (Known shipwreck *Sagamore*); 20-07; 20-09; 20-10; 20-12; 21-06; BP-03; BP-04; BP-05; BP-09; BP-12; BP-14; BP-18; BP-19; BP-20; and BP-21 (Swn Ha-20).

7.1.2.1.2 For resources with visual footprints measuring less than 5 meters (16.4 feet), the Lessee will maintain a distance of no less than 50 meters (164 feet) from each resource's centroid, resulting in a total avoidance area of 7,853.98 square meters (84,539.54 square feet) per resource. These resources include: 20-2; 20-03; 20-04; 20-05; 20-08; 20-11; 20-13, 20-14; 21-02; 21-03; 21-04; 21-05; BP-11; and BP-13.

7.1.3 Avoidance of ASLFs. The Lessee must avoid seven (7) ASLFs (i.e., FM-P-21-04A; FM-P-21-04B; FM-P-21-05, FM-P-21-07, BP-P-21-01A, BP-P-21-01B and BP-P-21-03) by complying with protective buffers recommended by the QMA based on the defined spatial extent of each ASLF, which has been determined based on the maximum observed presence within the seismic data, as described in the Project Section 106 MOA, Stipulation I.

7.1.4 Demonstration of avoidance of marine archaeological resources and ASLFs. The Lessee must provide as-placed and as-laid maps with both the horizontal and

vertical extent of all seafloor impacts. These seafloor impacts may include anchoring activities (location of all anchors, anchor chains, cables, and wire ropes on the seafloor, including sweep but excluding the vertical extent of anchor penetration of the seafloor), cable installation (including trenching depths and seafloor footprint of the installation vessel), and WTG installation (anchoring and spudding/jack-up vessel placement). The as-built or as-laid position plats must be submitted at a scale of 1-in. = 1,000-ft., with Differential Global Positioning System (DGPS) accuracy demonstrating that these seafloor disturbing activities complied with the avoidance criteria applied to the archaeological sites or historic properties established in the Section 106 MOA. The Lessee must submit these documents and maps to BOEM no later than 90 days after completion of the seafloor disturbing/construction activities.

7.1.5 Implementation of Minimization Measures in the Terrestrial Area of Potential Effects. The Lessee must conduct archaeological monitoring during onshore construction in areas described in the Section 106 MOA Attachment 3: Falmouth Terrestrial Archaeological Monitoring Plan and Attachment 4: Aquidneck Island Terrestrial Archaeological Monitoring Plan. If archaeological resources or human remains are identified during construction, operations, or decommissioning of the Project, the onsite construction supervisor must stop work immediately and follow the protocols outlined in Attachment 14: Unanticipated Discoveries Plan for Terrestrial Archaeological Resources. The Lessee must execute all aspects of the Section 106 MOA (Stipulation I.A.2, Attachment 3, Falmouth Terrestrial Archaeological Monitoring Plan, and Attachment 4, Aquidneck Island Terrestrial Archaeological Monitoring Plan).

7.1.6 Implementation of Minimization Measures in the Visual Area of Potential Effects. The Lessee must use uniform WTG design, paint color, height, and rotor diameter to reduce visual contrast and decrease visual clutter. The Lessee must confirm these conditions as part of the final FIR.

7.1.7 Implementation of Mitigation Measures to Resolve Physical Adverse Effects to Historic Properties in the Marine APE. The Lessee must fund and implement mitigation and monitoring measures consistent with the Section 106 MOA, Stipulation III.C, Stipulation IV, and MOA Attachment 6, Historic Properties Treatment Plan for Ancient Submerged Landforms and Submerged Cultural Resources to resolve adverse effects to two Ancient Submerged Landform Features and one marine archaeological site in the marine APE.

7.1.8 Implementation of Mitigation Measures to Resolve Physical Adverse Effects to Historic Properties in the Terrestrial APE. The Lessee must fund and implement mitigation measures consistent with the Section 106 MOA, Stipulation III.D and MOA Attachment 7, Historic Properties Treatment Plan for Terrestrial Archaeological Sites in Rhode Island to resolve adverse effects to two terrestrial archaeological sites in the terrestrial APE.

7.1.9 Implementation of Mitigation Measures to Resolve Visual Adverse Effects to Historic Properties. The Lessee must execute all aspects of Stipulation III.E of the Section 106 MOA; Attachment 8: Historic Properties Treatment Plan for

Chappaquiddick Island Traditional Cultural Place, Attachment 9: Historic Properties Treatment Plan for Nantucket Historic District, Attachment 10: Historic Properties Treatment Plan for Nantucket Sound Traditional Cultural Place, and Attachment 11: Historic Properties Treatment Plan for Oak Grove Cemetery. The Lessee must fund and implement mitigation measures consistent with the Section 106 MOA, Stipulation III.E to resolve visual adverse effects to four historic properties. The four adversely affected historic properties in the visual APE are:

7.1.9.1 Chappaquiddick Island Traditional Cultural Place

7.1.9.2 Nantucket Historic District

7.1.9.3 Nantucket Sound Traditional Cultural Place

7.1.9.4 Oak Grove Cemetery

7.1.10 Annual Monitoring and Reporting on the Section 106 MOA. By January 31 of each year, the Lessee must submit for BOEM's review a summary report detailing work undertaken pursuant to the Section 106 MOA during the preceding year. The Lessee must address any BOEM comments and after BOEM's review and agreement, the Lessee must share the summary report with all participating consulting parties identified in Attachment 1 of the Section 106 MOA. The report must include a description of how the stipulations relating to avoidance, minimization, and mitigation measures (Section 106 MOA Stipulations I, II, and III) were implemented; any scheduling changes proposed; any project modifications; any changes to the attachments of the MOA; any amendments to the MOA; any problems encountered; and any disputes and objections received in BOEM's efforts to carry out the terms of the Section 106 MOA. The Lessee may satisfy this reporting requirement by providing the relevant portions of the Annual Certification of Compliance required under 30 C.F.R. § 285.633.

7.1.11 Phased Identification. The Lessee must conduct phased identification of historic properties, assess effects, and resolve adverse effects within limited areas of the terrestrial APE. The phased identification and evaluation of historic properties will occur after publication of the Final EIS and ROD, consistent with the Section 106 MOA, Stipulation V and Attachment 12, Terrestrial Archaeology Phased Identification Plan. The Lessee must implement phased identification to ensure potential historic properties are identified, effects assessed, and adverse effects are resolved prior to initiation of onshore construction at the locations subject to phased identification as specified in the Section 106 MOA Attachment 12, Terrestrial Archaeology Phased Identification Plan.

7.1.12 Implementation of Post-Review Discovery Plans. If properties are discovered that may be historically significant or unanticipated effects on historic properties are found, the Lessee must implement the Post-Review Discovery Plans found in Section 106 MOA Stipulation XII, Attachment 13: Unanticipated Discoveries Plan for Marine Archaeological Resources, and Attachment 14: Unanticipated Discoveries Plan for Terrestrial Archaeological Resources. The Lessee must implement the following actions:

7.1.12.1 Immediately halt all ground- or seabed-disturbing activities within the area of discovery or unanticipated effect on a known historic property in accordance with all safety procedures and emergency shut-down protocols while considering whether stabilization and further protections are warranted to keep the discovered resource or known historic property from further degradation and impact.

7.1.12.2 As soon as practicable and no later than 72 hours after the discovery or unanticipated effect, notify BOEM and BSEE simultaneously with a written report, describing the discovery in detail, including a narrative description of the manner of discovery (e.g., date, time, heading, weather, information from logs); a narrative description of the potential resource, including measurements; images that may have been captured of the potential resource; portions of raw and processed datasets relevant to the discovery area; recommendations on the need and urgency of stabilization and additional protections; and any other information considered by the Lessee to be relevant to BOEM's or BSEE's understanding of the potential resource. BOEM and/or BSEE may request additional information and/or request revisions to the report.

7.1.12.2.1 In the event that the post-review discovery includes human remains or potential funerary objects or features, the Lessee will notify federally recognized Tribal Nations at the same time as BOEM and BSEE.

7.1.12.3 Keep the location of the discovery or known historic property confidential and take no action that may adversely affect the discovery or known historic property until BOEM, with the assistance of the Lessee, has made an evaluation or assessment and instructs the Lessee on how to proceed.

7.1.12.4 Conduct any additional investigations and submit documentation as directed by BOEM to determine if the discovery is eligible for listing in the National Register of Historic Places (NRHP) (30 C.F.R. § 585.702(b)) or if unanticipated adverse effects have occurred to a historic property. The Lessee must satisfy this requirement if (1) the discovery has been impacted by the Lessee's Project activities; (2) impacts on the discovery from Project activities cannot be avoided; or (3) additional information is needed on the extent of unanticipated effects on the historic property.

7.1.12.5 If investigations indicate that the discovery is potentially eligible for listing in the NRHP or if the historic property has been adversely affected due to the unanticipated effect, BOEM, with the assistance of the Lessee, will consult with the other relevant signatories, Tribal Nations, and consulting parties to the Section 106 MOA who have a demonstrated interest in the affected historic property on the further avoidance, minimization, or mitigation of adverse effects.

7.1.12.6 If BOEM or BSEE incurs costs in addressing the discovery or unanticipated effect on a historic property, under Section 110(g) of the NHPA, BOEM or BSEE may charge the Lessee reasonable costs for carrying out preservation responsibilities under OCSLA (30 C.F.R. § 585.702(c)-(d)).

7.1.13 Emergency Situations and Section 106 Consultation. In the event of an emergency or disaster that is declared by the President or the Governors of Massachusetts or Rhode Island, which represents an imminent threat to public health or safety or creates a hazardous condition due to impacts from the Project's infrastructure damaged during the emergency and affecting historic properties in the APEs, the Lessee must notify BOEM and BSEE. BOEM and/or BSEE, with the assistance of the Lessee, will notify the consulting federally recognized Tribal Nations, SHPOs, and the Advisory Council on Historic Preservation (ACHP) of the condition that has initiated the situation and the measures taken to respond to the emergency or hazardous condition consistent with the Section 106 MOA. BOEM and/or BSEE will make this notification as soon as reasonably possible, but no later than 48 hours from when the Bureau(s) becomes aware of the emergency or disaster. If the consulting federally recognized Tribal Nations, SHPOs, or the ACHP would like to provide technical assistance to BOEM and/or BSEE, they will submit comments within 7 days from notification if the nature of the emergency or hazardous condition allows for such coordination.

7.1.14 No Impact without Approval. The Lessee may not knowingly impact a potential archaeological resource without BOEM's and BSEE's prior concurrence. If a possible impact to a potential archaeological resource occurs, the Lessee must immediately halt operations; report the incident within 24 hours to BOEM and BSEE; and provide a written report within 72 hours to BOEM and BSEE.

7.2 Visual and Scenic Resource Conditions.

7.2.1 Scenic and Visual Impact Monitoring Plan. In coordination with BOEM, the Lessee must prepare and implement a scenic and visual resource monitoring plan that monitors and compares the visual effects of the wind farm during construction and operations and maintenance (daytime and nighttime) to the findings in the COP Visual Impact Assessment and verifies the accuracy of the visual simulations (photo and video). The monitoring plan must include monitoring and documenting the meteorological influences on actual WTG visibility over an agreed duration of time from selected onshore key observation points, as determined by BOEM and the Lessee. In addition, the Lessee must include monitoring of the operation of ADLS (see Section 3.1.2.1.4) in the monitoring plan. The Lessee must monitor the frequency that the ADLS is operative, documenting when (dates and time) the aviation warning lights are in the on position and the duration of each event. The Lessee must include details for monitoring and reporting procedures in the plan.

7.2.2 Onshore Visual Mitigation. The Lessee must implement and incorporate the mitigation design measures listed in the COP for reducing visual impacts by the onshore Project components, which include:

7.2.2.1 Conform to landscape codes and edge treatments (i.e. visual buffers) to improve site aesthetics and screen new development from view. In areas where vegetation removal needs to occur to support construction, new landscaping should be provided and maintained.

7.2.2.2 Design buildings to blend in and consider local aesthetic; minimize the number of separate elements. The buildings and substation electrical components (e.g., transformers, overhead power line towers, etc.) will be color treated in a single, non-reflective color/surface coating with a non-reflective matte to semi-gloss finish to reduce visual contrast, such as BLM Environmental Color Chart CC001 Yuma Green, or Shadow Gray, unless consultation with the Town of Falmouth results in the selection of an alternative color.

7.2.2.3 Locate several substation components inside the building(s) to minimize outdoor features and reduce the quantity of lightning masts.

7.2.2.4 Revised proposed building design to better fit village context. For example, use pitched roofs and painted wood siding to better match local Cape Cod vernacular design. The buildings associated with onshore substation development will match local Cape Cod design standards. The design of the substation buildings will relate to the local design context and guidelines.

7.2.2.5 Construct the Project facility lightning protection masts at the minimum height and diameter required for safety and function.

7.3 Other Conditions.

7.3.1 PAM Placement Review. The Lessee may place PAM systems only in locations where an analysis of the results of geophysical surveys has been completed. This analysis must include a determination by a QMA as to whether any potential archaeological resources are present in the area. This activity may have already been performed as part of the Lessee's submission of archaeological resources reports in support of its approved COP. Except as allowed by BOEM under Stipulation 4.2.6 of Addendum "C" of the Lease and Section 7.1.2 above, the PAM placement activities must avoid potential archaeological resources by a minimum of 50 meters from the outer edge of magnetic anomalies or acoustic contacts for each of the resources, and the avoidance distance must be calculated from the maximum discernible extent of the archaeological resource. The Lessee must submit as-placed PAM system plats to BSEE within 90 days of placement.

7.3.1.1 If PAM placement activities impact potential historic properties, the Lessee must take the actions described in Post-Review Discoveries (Section 7.1.12).

7.3.1.2 If PAM placement activities impact potential historic properties identified in the archaeological surveys without BOEM's prior authorization, the Lessee and the QMA must provide to BOEM and BSEE a statement documenting the extent of these impacts. This statement must be made to BOEM and BSEE consistent with

Stipulation 4.3.7 of Addendum C of the Lease and Section 7.1.14, above. BOEM may require the Lessee to implement additional mitigation measures as appropriate based on a review of the results and supporting information.

8 AIR QUALITY CONDITIONS

8.1 Reporting. The Lessee must submit all monitoring, reporting, and survey requirements related to air quality that are included in the OCS air permit to BOEM, BSEE, and USFWS, in addition to being submitted to the appropriate EPA regional contact(s). The Lessee must confirm the relevant point of contact prior to reporting and confirmation of reporting receipt.

8.2 Lye Brook Wilderness Area Air Quality Related Values (AQRV) Mitigation Framework. The Lessee must develop a framework for the mitigation of AQRV impacts at Lye Brook Wilderness Area, to be executed by the Lessee if air quality modeling shows that AQRV are being impacted at the Class I area. The Lessee must submit the framework (if required) to BOEM and to the Federal Land Manager or National Park Service representative for the impacted Class I area within 180 days of COP approval, or on a schedule agreed to by the Lessee, BOEM, and the applicable Federal Land Manager or National Park Service representative for the impacted Class I area. The framework must include:

8.2.1 A description of existing conditions and monitoring objectives;

8.2.2 A description of preventative and any voluntary offsetting mitigation measures;

8.2.3 Identification of the avoidance or offset value for each measure;

8.2.4 The mechanism for the transfer of any funding from the Lessee to USFWS; and

8.2.5 Reporting to demonstrate completion of implementation.

8.3 OCS Air Permit Incorporation by Reference. Pursuant to Clean Air Act Section 328, the Lessee must obtain an OCS air permit for OCS sources. When required, the Lessee must demonstrate that the air quality impacts from emissions attendant to both the construction and operation and maintenance phases will not interfere with attainment and maintenance of any applicable federal or state ambient air quality standard and Prevention of Significant Deterioration of Air Quality Increments. The Lessee must comply with the anticipated OCS air permit issued by the EPA or the delegated state/local permitting authority. The terms and conditions for Air Quality incorporate by reference the entirety of the expected EPA OCS Permit, and the air quality mitigation measures found in Appendix G, Table G-3, under AQ-01 through AQ-08 of the Final EIS. The EPA is the enforcement authority for ensuring compliance with the air quality conditions listed in the OCS Air Permit.

9 FEDERALLY RECOGNIZED TRIBAL NATIONS CONDITIONS

9.1 Environmental Data Sharing with Federally Recognized Tribal Nations. No later than 90 days after COP approval, the Lessee must make a request to both the BSEE Tribal Liaison Officer and the Eastern Seaboard Tribal Liaison at the same email address, tribalengagement@bsee.gov, to coordinate with federally recognized Tribal Nations with geographic, cultural, or ancestral ties to the project area (hereinafter "interested Tribal Nation"), including, but not limited to: Delaware Tribe of Indians, Mashantucket (Western)

Pequot Tribal Nation, Mashpee Wampanoag Tribe, Mohegan Tribe of Connecticut, The Narragansett Indian Tribe, The Shinnecock Indian Nation, and Wampanoag Tribe of Gay Head (Aquinnah). The purpose of this coordination is to (1) solicit Tribal Nation interest in participating as an environmental liaison during construction and/or maintenance activities, so the environmental liaison can safely monitor, and participate in postmortem examinations of mortality events, as a result of these activities; and (2) provide open access to the following: reports generated as a result of the Fisheries Research and Monitoring Plan; reports of NARW sightings; injured or dead protected species reporting (sea turtles, NARW, sturgeon); NARW PAM monitoring; PSO reports (e.g., pile-driving reports); pile-driving schedules and schedule changes; and any interim and final SFV reports, and their associated data. If an interested Tribal Nation expresses interest in participating as an environmental liaison, the Lessee must provide the interested Tribal Nation information regarding training(s), certification(s), and safety measures, required for participation. Environmental liaisons must be invited to monitor/participate from a safe platform, such as a vessel. The Lessee must provide to the interested Tribal Nation, in a manner suitable to the Tribal Nation, access to all ESA reports, Post Review Discovery Plans, and other documents listed in this paragraph no later than 30 days after the information becomes available. The Lessee may redact or withhold a document(s) listed in this paragraph when it includes information that the Lessee would not generally make publicly available and the disclosure of which the Lessee considers to be contrary to the Lessee's commercial interests. The Lessee must submit a justification for the request to redact/withhold in writing to the BSEE Tribal Liaison Officer and the Eastern Seaboard Tribal Liaison at tribalengagement@bsee.gov. Only upon approval from BSEE of such request may the document be redacted/withheld.

ATTACHMENT 1: LIST OF ACRONYMS

ACHP	Advisory Council on Historic Preservation
ADLS	Aircraft Detection Lighting System
ALARP	As Low as Reasonably Practical
APE	Area of Potential Effects
ASLF	Ancient Submerged Landform Feature
ASR	Airport Surveillance Radar
BHMP	Benthic Habitat Monitoring Plan
BiOp	Biological Opinion
BOEM	Bureau of Ocean Energy Management
BSEE	Bureau of Safety and Environmental Enforcement
CBRA	Cable Burial Risk Assessment
C.F.R.	Code of Federal Regulations
CHIRPs	compressed high-intensity radiated pulses
COP	Construction and Operations Plan
CVA	Certified Verification Agents
CZMA	Coastal Zone Management Act
dB	decibels
DGPS	Differential Global Positioning System
DoD	Department of Defense
DOI	Department of the Interior
DOFS	Distributed Optical Fiber Sensing
DON	Department of the Navy
DPS	distinct population segment
DTS	Desktop Study
EIS	Environmental Impact Statement
EPA	United States Environmental Protection Agency
ESA	Endangered Species Act
FAA	Federal Aviation Administration
FDR	Facility Design Report
FIR	Fabrication and Installation Report
GARFO	Greater Atlantic Regional Fisheries Office
GDP	Gross Domestic Product
GIS	Geographic Information System
GPS	Global Positioning System
HESD	Habitat and Ecosystem Services Division
HF	high frequency
HRG	high resolution geophysical
IC	Incident Commander
ICS	Incident Command System

IFC	issued for construction
IMT	Incident Management Team
IOOS	U.S. Integrated Ocean Observing System
IR	infrared
ITA	Incidental Take Authorization(s)
ITS	Incidental Take Statement
km	kilometer(s)
KP	kilometer post
kts	knots
Lease	commercial lease OCS-A 0483
LNM	Local Notice to Mariners
LOA	Letter of Agreement
m	meter(s)
m^2	meters squared
MEC	Munitions and Explosive of Concern
MMPA	Marine Mammal Protection Act
MOA	Memorandum of Agreement
Motus	Motus Wildlife Tracking System
MSA	Magnuson-Stevens Fishery Conservation and Management Act
NAD83	North America Datum of 1983
NARW	North Atlantic right whale
NAS	Naval Air Station or Noise Attenuation System
NAWCAD	Naval Air Warfare Center Aviation Division
NCEI	National Centers for Environmental Information
NEFSC	Northeast Fisheries Science Center
NHPA	National Historical Preservation Act
nmi	nautical miles
NMFS	National Marine Fisheries Service
NMS	noise mitigation systems
NOAA	National Oceanic and Atmospheric Administration
NORAD	North American Aerospace Defense Command
NRHP	National Register of Historic Places
OCS	Outer Continental Shelf
OCSLA	Outer Continental Shelf Lands Act
OEM	Original Equipment Manufacturer
OPR	Office of Protected Resources
OSPD	Oil Spill Preparedness Division
OSRO	Oil Spill Removal Organization
OSRP	Oil Spill Response Plan
OSP	offshore substation platform

PAM	Passive Acoustic Monitoring or Passive Acoustic Monitor(s)
PATON	Private Aids to Navigation
PIT	passive integrated transponder
POWERON	Partnership for an Offshore Wind Energy Regional Observation Network
Project	SouthCoast Wind Project
PSO	Protected Species Observer
PTS	permanent threshold shift
QA/QC	quality assurance/quality control
QI	Qualified Individual
QMA	Qualified Marine Archaeologist
RAM	Radar Adverse-Impact Management
ROD	Record of Decision
RVMP	Reduced Visibility Monitoring Plan
RWSC	Regional Wildlife Science Collaborative
SEL	sound exposure level(s)
SF_6	Sulfur Hexafluoride
SFV	Sound Field Verification
SMS	Safety Management System
SROT	Spill Response Operating Team
USACE	United States Army Corps of Engineers
USCG	United States Coast Guard
USFFC	United States Fleet Forces Command
USFWS	United States Fish and Wildlife Service
UAS	unmanned aircraft systems
UTC	Coordinated Universal Time
UTM	Universal Transverse Mercator
UXO	unexploded ordnance
VHF	Very High Frequency
WCD	worst-case discharge
WTG	wind turbine generator

ATTACHMENT 2 RHODE ISLAND AND MASSACHUSETTS STRUCTURE LABELING PLOT

AY 28	AY 29	AY 30	AY 31	AY 32	AY 33	AY 34	AY 35	AY 36	AY 37	AY 38	AY 39	AY 40	AY 41	AY 42	AY 43	AY 44	AY 45	AY 46	AY 47	AY 48	AY 49	AY 50
AZ																						
BA 28	BA 29	BA 30	BA 31	BA 32	BA 33	BA 34	BA 35	BA 36	BA 37	BA 38	BA 39	BA 40	BA 41	BA 42	BA 43	BA 44	BA 45	BA 46	BA 47	BA 48	BA 49	BA 50
BB 28	BB 29	BB 30	BB 31	BB 32	BB 33	BB 34	BB 35	BB 36	BB 37	BB 38	BB 39	BB 40	BB 41	BB 42	BB 43	BB 44	BB 45	BB 46	BB 47	BB 48	BB 49	BB 50
BC 28	BC 29	BC 30	BC 31	BC 32	BC 33	BC 34	BC 35	BC 36	BC 37	BC 38	BC 39	BC 40	BC 41	BC 42	BC 43	BC 44	BC 45	BC 46	BC 47	BC 48	BC 49	BC 50
BD 28	BD 29	BD 30	BD 31	BD 32	BD 33	BD 34	BD 35	BD 36	BD 37	BD 38	BD 39	BD 40	BD 41	BD 42	BD 43	BD 44	BD 45	BD 46	BD 47	BD 48	BD 49	BD 50
BE 28	BE 29	BE 30	BE 31	BE 32	BE 33	BE 34	BE 35	BE 36	BE 37	BE 38	BE 39	BE 40	BE 41	BE 42	BE 43	BE 44	BE 45	BE 46	BE 47	BE 48	BE 49	BE 50
BF 28	BF 29	BF 30	BF 31	BF 32	BF 33	BF 34	BF 35	BF 36	BF 37	BF 38	BF 39	BF 40	BF 41	BF 42	BF 43	BF 44	BF 45	BF 46	BF 47	BF 48	BF 49	BF 50
BG 28	BG 29	BG 30	BG 31	BG 32	BG 33	BG 34	BG 35	BG 36	BG 37	BG 38	BG 39	BG 40	BG 41	BG 42	BG 43	BG 44	BG 45	BG 46	BG 47	BG 48	BG 49	BG 50
BH 28	BH 29	BH 30	BH 31	BH 32	BH 33	BH 34	BH 35	BH 36	BH 37	BH 38	BH 39	BH 40	BH 41	BH 42	BH 43	BH 44	BH 45	BH 46	BH 47	BH 48	BH 49	BH 50
BJ 28	BJ 29	BJ 30	BJ 31	BJ 32	BJ 33	BJ 34	BJ 35	BJ 36	BJ 37	BJ 38	BJ 39	BJ 40	BJ 41	BJ 42	BJ 43	BJ 44	BJ 45	BJ 46	BJ 47	BJ 48	BJ 49	BJ 50
BK 28	BK 29	BK 30	BK 31	BK 32	BK 33	BK 34	BK 35	BK 36	BK 37	BK 38	BK 39	BK 40	BK 41	BK 42	BK 43	BK 44	BK 45	BK 46	BK 47	BK 48	BK 49	BK 50
BL 28	BL 29	BL 30	BL 31	BL 32	BL 33	BL 34	BL 35	BL 36	BL 37	BL 38	BL 39	BL 40	BL 41	BL 42	BL 43	BL 44	BL 45	BL 46	BL 47	BL 48	BL 49	BL 50
BM 28	BM 29	BM 30	BM 31	BM 32	BM 33	BM 34	BM 35	BM 36	BM 37	BM 38	BM 39	BM 40	BM 41	BM 42	BM 43	BM 44	BM 45	BM 46	BM 47	BM 48	BM 49	BM 50
BN 28	BN 29	BN 30	BN 31	BN 32	BN 33	BN 34	BN 35	BN 36	BN 37	BN 38	BN 39	BN 40	BN 41	BN 42	BN 43	BN 44	BN 45	BN 46	BN 47	BN 48	BN 49	BN 50
BP 28	BP 29	BP 30	BP 31	BP 32	BP 33	BP 34	BP 35	BP 36	BP 37	BP 38	BP 39	BP 40	BP 41	BP 42	BP 43	BP 44	BP 45	BP 46	BP 47	BP 48	BP 49	BP 50
BQ 28	BQ 29	BQ 30	BQ 31	BQ 32	BQ 33	BQ 34	BQ 35	BQ 36	BQ 37	BQ 38	BQ 39	BQ 40	BQ 41	BQ 42	BQ 43	BQ 44	BQ 45	BQ 46	BQ 47	BQ 48	BQ 49	BQ 50
BR 28	BR 29	BR 30	BR 31	BR 32	BR 33	BR 34	BR 35	BR 36	BR 37	BR 38	BR 39	BR 40	BR 41	BR 42	BR 43	BR 44	BR 45	BR 46	BR 47	BR 48	BR 49	BR 50
BS 28	BS 29	BS 30	BS 31	BS 32	BS 33	BS 34	BS 35	BS 36	BS 37	BS 38	BS 39	BS 40	BS 41	BS 42	BS 43	BS 44	BS 45	BS 46	BS 47	BS 48	BS 49	BS 50
BT 28	BT 29	BT 30	BT 31	BT 32	BT 33	BT 34	BT 35	BT 36	BT 37	BT 38	BT 39	BT 40	BT 41	BT 42	BT 43	BT 44	BT 45	BT 46	BT 47	BT 48	BT 49	BT 50
BU 28	BU 29	BU 30	BU 31	BU 32	BU 33	BU 34	BU 35	BU 36	BU 37	BU 38	BU 39	BU 40	BU 41	BU 42	BU 43	BU 44	BU 45	BU 46	BU 47	BU 48	BU 49	BU 50
BV 28	BV 29	BV 30	BV 31	BV 32	BV 33	BV 34	BV 35	BV 36	BV 37	BV 38	BV 39	BV 40	BV 41	BV 42	BV 43	BV 44	BV 45	BV 46	BV 47	BV 48	BV 49	BV 50

ATTACHMENT 2: RHODE ISLAND AND MASSACHUSETTS STRUCTURE LABELING PLOT (COORDINATES)

Lease Number	Owner	Longitude	Latitude	Row	Column
OCS-A 0521	SouthCoast Wind Energy LLC	-70.28318784	40.92229752	AZ	46
OCS-A 0521	SouthCoast Wind Energy LLC	-70.26119804	40.92254015	AZ	47
OCS-A 0521	SouthCoast Wind Energy LLC	-70.30484933	40.90537152	BA	45
OCS-A 0521	SouthCoast Wind Energy LLC	-70.28286533	40.9056182	BA	46
OCS-A 0521	SouthCoast Wind Energy LLC	-70.26088105	40.90586069	BA	47
OCS-A 0521	SouthCoast Wind Energy LLC	-70.32649979	40.88844158	BB	44
OCS-A 0521	SouthCoast Wind Energy LLC	-70.30452158	40.8886923	BB	45
OCS-A 0521	SouthCoast Wind Energy LLC	-70.28254309	40.88893884	BB	46
OCS-A 0521	SouthCoast Wind Energy LLC	-70.26056433	40.88918118	BB	47
OCS-A 0521	SouthCoast Wind Energy LLC	-70.34813921	40.87150769	BC	43
OCS-A 0521	SouthCoast Wind Energy LLC	-70.32616679	40.87176245	BC	44
OCS-A 0521	SouthCoast Wind Energy LLC	-70.30419409	40.87201303	BC	45
OCS-A 0521	SouthCoast Wind Energy LLC	-70.28222112	40.87225942	BC	46
OCS-A 0521	SouthCoast Wind Energy LLC	-70.26024788	40.87250162	BC	47
OCS-A 0521	SouthCoast Wind Energy LLC	-70.36976761	40.85456987	BD	42
OCS-A 0521	SouthCoast Wind Energy LLC	-70.34780099	40.85482866	BD	43
OCS-A 0521	SouthCoast Wind Energy LLC	-70.32583408	40.85508327	BD	44
OCS-A 0521	SouthCoast Wind Energy LLC	-70.30386689	40.8553337	BD	45
OCS-A 0521	SouthCoast Wind Energy LLC	-70.28189942	40.85557995	BD	46
OCS-A 0521	SouthCoast Wind Energy LLC	-70.25993169	40.85582201	BD	47
OCS-A 0521	SouthCoast Wind Energy LLC	-70.391385	40.83762812	BE	41
OCS-A 0521	SouthCoast Wind Energy LLC	-70.36942417	40.83789094	BE	42
OCS-A 0521	SouthCoast Wind Energy LLC	-70.34746304	40.83814958	BE	43
OCS-A 0521	SouthCoast Wind Energy LLC	-70.32550164	40.83840404	BE	44
OCS-A 0521	SouthCoast Wind Energy LLC	-70.30353995	40.83865433	BE	45
OCS-A 0521	SouthCoast Wind Energy LLC	-70.28157799	40.83890043	BE	46
OCS-A 0521	SouthCoast Wind Energy LLC	-70.25961576	40.83914235	BE	47
OCS-A 0521	SouthCoast Wind Energy LLC	-70.41299139	40.82068245	BF	40
OCS-A 0521	SouthCoast Wind Energy LLC	-70.39103635	40.82094929	BF	41
OCS-A 0521	SouthCoast Wind Energy LLC	-70.36908101	40.82121196	BF	42
OCS-A 0521	SouthCoast Wind Energy LLC	-70.34712539	40.82147045	BF	43
OCS-A 0521	SouthCoast Wind Energy LLC	-70.32516948	40.82172477	BF	44
OCS-A 0521	SouthCoast Wind Energy LLC	-70.30321329	40.8219749	BF	45
OCS-A 0521	SouthCoast Wind Energy LLC	-70.28125683	40.82222086	BF	46
OCS-A 0521	SouthCoast Wind Energy LLC	-70.2593001	40.82246264	BF	47
OCS-A 0521	SouthCoast Wind Energy LLC	-70.23734311	40.82270025	BF	48
OCS-A 0521	SouthCoast Wind Energy LLC	-70.21538586	40.82293368	BF	49
OCS-A 0521	SouthCoast Wind Energy LLC	-70.43458679	40.80373287	BG	39
OCS-A 0521	SouthCoast Wind Energy LLC	-70.41263753	40.80400373	BG	40
OCS-A 0521	SouthCoast Wind Energy LLC	-70.39068798	40.80427042	BG	41
OCS-A 0521	SouthCoast Wind Energy LLC	-70.36873814	40.80453293	BG	42
OCS-A 0521	SouthCoast Wind Energy LLC	-70.34678801	40.80479127	BG	43
OCS-A 0521	SouthCoast Wind Energy LLC	-70.3248376	40.80504544	BG	44
OCS-A 0521	SouthCoast Wind Energy LLC	-70.30288691	40.80529543	BG	45
OCS-A 0521	SouthCoast Wind Energy LLC	-70.28093594	40.80554124	BG	46

Lease Number	Owner	Longitude	Latitude	Row	Column
OCS-A 0521	SouthCoast Wind Energy LLC	-70.25898471	40.80578288	BG	47
OCS-A 0521	SouthCoast Wind Energy LLC	-70.43422774	40.78705426	BH	39
OCS-A 0521	SouthCoast Wind Energy LLC	-70.41228397	40.78732496	BH	40
OCS-A 0521	SouthCoast Wind Energy LLC	-70.39033991	40.78759149	BH	41
OCS-A 0521	SouthCoast Wind Energy LLC	-70.36839556	40.78785385	BH	42
OCS-A 0521	SouthCoast Wind Energy LLC	-70.34645092	40.78811204	BH	43
OCS-A 0521	SouthCoast Wind Energy LLC	-70.32450599	40.78836606	BH	44
OCS-A 0521	SouthCoast Wind Energy LLC	-70.30256079	40.7886159	BH	45
OCS-A 0521	SouthCoast Wind Energy LLC	-70.28061532	40.78886157	BH	46
OCS-A 0521	SouthCoast Wind Energy LLC	-70.25866958	40.78910307	BH	47
OCS-A 0521	SouthCoast Wind Energy LLC	-70.4561712	40.78677938	BH	38
OCS-A 0521	SouthCoast Wind Energy LLC	-70.43386899	40.77037559	BJ	39
OCS-A 0521	SouthCoast Wind Energy LLC	-70.41193071	40.77064614	BJ	40
OCS-A 0521	SouthCoast Wind Energy LLC	-70.38999213	40.77091251	BJ	41
OCS-A 0521	SouthCoast Wind Energy LLC	-70.36805326	40.77117472	BJ	42
OCS-A 0521	SouthCoast Wind Energy LLC	-70.34611411	40.77143276	BJ	43
OCS-A 0521	SouthCoast Wind Energy LLC	-70.32417467	40.77168662	BJ	44
OCS-A 0521	SouthCoast Wind Energy LLC	-70.30223495	40.77193632	BJ	45
OCS-A 0521	SouthCoast Wind Energy LLC	-70.28029497	40.77218185	BJ	46
OCS-A 0521	SouthCoast Wind Energy LLC	-70.45580697	40.77010088	BJ	38
OCS-A 0521	SouthCoast Wind Energy LLC	-70.47774465	40.769822	BJ	37
OCS-A 0521	SouthCoast Wind Energy LLC	-70.43351054	40.75369688	BK	39
OCS-A 0521	SouthCoast Wind Energy LLC	-70.41157774	40.75396726	BK	40
OCS-A 0521	SouthCoast Wind Energy LLC	-70.38964464	40.75423348	BK	41
OCS-A 0521	SouthCoast Wind Energy LLC	-70.36771125	40.75449554	BK	42
OCS-A 0521	SouthCoast Wind Energy LLC	-70.34577758	40.75475342	BK	43
OCS-A 0521	SouthCoast Wind Energy LLC	-70.32384362	40.75500714	BK	44
OCS-A 0521	SouthCoast Wind Energy LLC	-70.30190939	40.7552567	BK	45
OCS-A 0521	SouthCoast Wind Energy LLC	-70.45544304	40.75342232	BK	38
OCS-A 0521	SouthCoast Wind Energy LLC	-70.47737524	40.7531436	BK	37
OCS-A 0521	SouthCoast Wind Energy LLC	-70.49930712	40.75286072	BK	36
OCS-A 0521	SouthCoast Wind Energy LLC	-70.43315239	40.73701811	BL	39
OCS-A 0521	SouthCoast Wind Energy LLC	-70.41122506	40.73728834	BL	40
OCS-A 0521	SouthCoast Wind Energy LLC	-70.38929744	40.7375544	BL	41
OCS-A 0521	SouthCoast Wind Energy LLC	-70.36736953	40.7378163	BL	42
OCS-A 0521	SouthCoast Wind Energy LLC	-70.34544133	40.73807404	BL	43
OCS-A 0521	SouthCoast Wind Energy LLC	-70.32351285	40.73832761	BL	44
OCS-A 0521	SouthCoast Wind Energy LLC	-70.45507941	40.73674372	BL	38
OCS-A 0521	SouthCoast Wind Energy LLC	-70.47700614	40.73646516	BL	37
OCS-A 0521	SouthCoast Wind Energy LLC	-70.49893255	40.73618244	BL	36
OCS-A 0521	SouthCoast Wind Energy LLC	-70.52085865	40.73589556	BL	35
OCS-A 0521	SouthCoast Wind Energy LLC	-70.43279454	40.72033929	BM	39
OCS-A 0521	SouthCoast Wind Energy LLC	-70.41087268	40.72060937	BM	40
OCS-A 0521	SouthCoast Wind Energy LLC	-70.38895053	40.72087527	BM	41
OCS-A 0521	SouthCoast Wind Energy LLC	-70.36702809	40.72113702	BM	42
OCS-A 0521	SouthCoast Wind Energy LLC	-70.34510536	40.72139461	BM	43
OCS-A 0521	SouthCoast Wind Energy LLC	-70.45471609	40.72006506	BM	38

Lease Number	Owner	Longitude	Latitude	Row	Column
OCS-A 0521	SouthCoast Wind Energy LLC	-70.47663735	40.71978667	BM	37
OCS-A 0521	SouthCoast Wind Energy LLC	-70.49855829	40.71950411	BM	36
OCS-A 0521	SouthCoast Wind Energy LLC	-70.52047892	40.7192174	BM	35
OCS-A 0521	SouthCoast Wind Energy LLC	-70.54239923	40.71892652	BM	34
OCS-A 0521	SouthCoast Wind Energy LLC	-70.43243699	40.70366043	BN	39
OCS-A 0521	SouthCoast Wind Energy LLC	-70.4105206	40.70393034	BN	40
OCS-A 0521	SouthCoast Wind Energy LLC	-70.38860391	40.70419609	BN	41
OCS-A 0521	SouthCoast Wind Energy LLC	-70.36668694	40.70445769	BN	42
OCS-A 0521	SouthCoast Wind Energy LLC	-70.45435308	40.70338635	BN	38
OCS-A 0521	SouthCoast Wind Energy LLC	-70.47626886	40.70310812	BN	37
OCS-A 0521	SouthCoast Wind Energy LLC	-70.49818434	40.70282573	BN	36
OCS-A 0521	SouthCoast Wind Energy LLC	-70.52009951	40.70253919	BN	35
OCS-A 0521	SouthCoast Wind Energy LLC	-70.54201436	40.70224848	BN	34
OCS-A 0521	SouthCoast Wind Energy LLC	-70.56392888	40.70195361	BN	33
OCS-A 0521	SouthCoast Wind Energy LLC	-70.43207974	40.68698151	BP	39
OCS-A 0521	SouthCoast Wind Energy LLC	-70.41016881	40.68725126	BP	40
OCS-A 0521	SouthCoast Wind Energy LLC	-70.38825759	40.68751686	BP	41
OCS-A 0521	SouthCoast Wind Energy LLC	-70.45399037	40.6867076	BP	38
OCS-A 0521	SouthCoast Wind Energy LLC	-70.47590069	40.68642953	BP	37
OCS-A 0521	SouthCoast Wind Energy LLC	-70.49781071	40.6861473	BP	36
OCS-A 0521	SouthCoast Wind Energy LLC	-70.51972041	40.68586092	BP	35
OCS-A 0521	SouthCoast Wind Energy LLC	-70.5416298	40.68557039	BP	34
OCS-A 0521	SouthCoast Wind Energy LLC	-70.56353887	40.68527569	BP	33
OCS-A 0521	SouthCoast Wind Energy LLC	-70.58544761	40.68497685	BP	32
OCS-A 0521	SouthCoast Wind Energy LLC	-70.43172278	40.67030254	BQ	39
OCS-A 0521	SouthCoast Wind Energy LLC	-70.40981731	40.67057214	BQ	40
OCS-A 0521	SouthCoast Wind Energy LLC	-70.45362796	40.67002879	BQ	38
OCS-A 0521	SouthCoast Wind Energy LLC	-70.47553283	40.66975088	BQ	37
OCS-A 0521	SouthCoast Wind Energy LLC	-70.49743739	40.66946882	BQ	36
OCS-A 0521	SouthCoast Wind Energy LLC	-70.51934164	40.66918261	BQ	35
OCS-A 0521	SouthCoast Wind Energy LLC	-70.54124557	40.66889224	BQ	34
OCS-A 0521	SouthCoast Wind Energy LLC	-70.56314918	40.66859772	BQ	33
OCS-A 0521	SouthCoast Wind Energy LLC	-70.58505246	40.66829905	BQ	32
OCS-A 0521	SouthCoast Wind Energy LLC	-70.60695542	40.66799622	BQ	31
OCS-A 0521	SouthCoast Wind Energy LLC	-70.43136613	40.65362352	BR	39
OCS-A 0521	SouthCoast Wind Energy LLC	-70.45326585	40.65334993	BR	38
OCS-A 0521	SouthCoast Wind Energy LLC	-70.47516527	40.65307218	BR	37
OCS-A 0521	SouthCoast Wind Energy LLC	-70.49706438	40.65279029	BR	36
OCS-A 0521	SouthCoast Wind Energy LLC	-70.51896318	40.65250424	BR	35
OCS-A 0521	SouthCoast Wind Energy LLC	-70.54086166	40.65221405	BR	34
OCS-A 0521	SouthCoast Wind Energy LLC	-70.56275982	40.6519197	BR	33
OCS-A 0521	SouthCoast Wind Energy LLC	-70.58465765	40.6516212	BR	32
OCS-A 0521	SouthCoast Wind Energy LLC	-70.60655516	40.65131855	BR	31
OCS-A 0521	SouthCoast Wind Energy LLC	-70.62845233	40.65101175	BR	30
OCS-A 0521	SouthCoast Wind Energy LLC	-70.45290405	40.63667101	BS	38
OCS-A 0521	SouthCoast Wind Energy LLC	-70.47479802	40.63639343	BS	37
OCS-A 0521	SouthCoast Wind Energy LLC	-70.49669168	40.6361117	BS	36

Lease Number	Owner	Longitude	Latitude	Row	Column
OCS-A 0521	SouthCoast Wind Energy LLC	-70.51858503	40.63582583	BS	35
OCS-A 0521	SouthCoast Wind Energy LLC	-70.54047807	40.6355358	BS	34
OCS-A 0521	SouthCoast Wind Energy LLC	-70.56237078	40.63524162	BS	33
OCS-A 0521	SouthCoast Wind Energy LLC	-70.58426317	40.6349433	BS	32
OCS-A 0521	SouthCoast Wind Energy LLC	-70.60615523	40.63464083	BS	31
OCS-A 0521	SouthCoast Wind Energy LLC	-70.62804695	40.63433421	BS	30
OCS-A 0521	SouthCoast Wind Energy LLC	-70.4963193	40.61943307	BT	36
OCS-A 0521	SouthCoast Wind Energy LLC	-70.51820721	40.61914736	BT	35
OCS-A 0521	SouthCoast Wind Energy LLC	-70.49594722	40.60275438	BU	36
OCS-A 0521	SouthCoast Wind Energy LLC	-70.51782969	40.60246884	BU	35

APPENDIX B: OCSLA COMPLIANCE REVIEW OF THE CONSTRUCTION AND OPERATIONS PLAN FOR THE SOUTHCOAST WIND PROJECT

United States Department of the Interior

BUREAU OF OCEAN ENERGY MANAGEMENT
WASHINGTON, DC 20240-0001

Information Memorandum

To: Elizabeth Klein
Director, Bureau of Ocean Energy Management

From: David Diamond
DAVID DIAMOND Digitally signed by DAVID DIAMOND Date: 2024.12.19 14:57:36 -05'00'
Deputy Associate Director for Operations, Atlantic Outer Continental Shelf
Office of Renewable Energy Programs

Subject: Compliance Review of the Construction and Operations Plan for the SouthCoast Wind Project for Commercial Lease OCS-A 0521

1 SUMMARY

Subsection 8(p)(4) of the Outer Continental Shelf Lands Act (OCSLA), 43 U.S.C. §§ 1337(p)(4), requires the Secretary of the Interior (Secretary) to approve activities in a manner that provides for 12 enumerated factors under subsection 8(p) of OCSLA. This memorandum documents the Bureau of Ocean Energy Management's (BOEM) compliance review of the construction and operations plan (COP)[1] for the SouthCoast Wind Project (hereinafter "Project")[2] on Commercial Lease OCS-A 0521, and BOEM's consideration of the 12 factors enumerated in subsection 8(p)(4) of OCSLA (hereinafter "8(p)(4) factors").[3]

[1] SouthCoast Wind (OCS-A 0521) Construction and Operations Plan (November 1, 2024), https://www.boem.gov/renewable-energy/state-activities/southcoast-wind-formerly-mayflower-wind

[2] This memorandum considers the Project as modified by the preferred alternative in the final EIS, Alternative D. Bureau of Ocean Energy Mgmt., BOEM 2024-0055, SouthCoast Wind Project Final Environmental Impact Statement, (2024) [hereinafter final EIS]. The term "Project" refers to both Project 1 and Project 2, which together make up the SouthCoast Wind Project and that we refer to as "the Project" in this memorandum.

[3] See M-Opinion 37067, entitled, "Secretary's Duties under Subsection 8(p)(4) of the Outer Continental Shelf Lands Act When Authorizing Activities on the Outer Continental Shelf," which provides that 8(p)(4) of OCSLA "does not require the Secretary to ensure that the goals are achieved to a particular degree, and she retains wide discretion to determine the appropriate balance between two or more goals that conflict or are otherwise in tension." Solicitors' M-Opinions are legal interpretations that are binding on DOI as a whole. Department of the Interior, Departmental Manual, 209 DM 3.1, 3.2A(11) (2020). The recent decision in *Seafreeze Shoreside v. United States DOI,* Nos. 23-1853, 23-2051, 2024 U.S. App. LEXIS 30741, at *43-48 (1st Cir. Dec. 5, 2024) is consistent with conclusions in this M-Opinion.

BOEM has determined that the Project will comply with the Department's regulations[4] and that the proposed activities will be carried out in a manner that provides for safety, protection of the environment, prevention of waste, and the other factors listed in subsection 8(p)(4) of OCSLA.

2 BACKGROUND AND PROJECT OVERVIEW

Subsection 8(p)(7) of OCSLA, 43 U.S.C. § 1337(p)(7), directs the Department of the Interior (DOI), through BOEM, to provide for coordination and consultation with the Governor of any state or the executive of any local government that may be affected by a lease, easement, or right-of-way authorizing renewable energy activities on the Outer Continental Shelf (OCS). Efforts to consider whether to lease areas offshore Massachusetts and Rhode Island and assess the feasibility of allowing wind energy activities therein began in 2009. BOEM formed the Massachusetts Renewable Energy Task Force in 2009 to help fulfill its 8(p)(7) obligation in its consideration of potential leasing activities on the OCS offshore Massachusetts. The Task Force allowed for coordination among affected federal agencies and tribal, state, and local governments throughout the leasing process. The first Massachusetts Renewable Energy Task Force meeting was held on November 19, 2009; subsequent meetings were held on January 27, September 8, and December 10, 2010; May 2, June 3, June 7, and October 17, 2011; August 8, 2012; May 15, 2013; January 16, 2014; April 29, 2015; May 16, 2017; and April 24, 2018. The meetings held on December 10, 2010, May 2, 2011, June 3, 2011, August 8, 2012, May 16, 2017, and April 24, 2018, were joint meetings with the Rhode Island Renewable Energy Task Force. Fourteen meetings were held in total with the last meeting occurring on April 24, 2018.

2.1 Planning, Analysis, and Leasing

On December 29, 2010, BOEM issued a Request for Interest (RFI) in the *Federal Register* to assess whether there were parties interested in developing commercial wind facilities off the coast of Massachusetts beginning approximately 12 nautical miles (nm) south of Martha's Vineyard and Nantucket and extending approximately 31 nm seaward, south to the 60 meter depth contour, then east approximately 65 nm, then north approximately 31 nm.[5] The area is approximately 2,224 square nm and contains 321 whole OCS lease blocks as well as 163 partial blocks. This area was delineated in consultation with the Massachusetts Renewable Energy Task Force. Based on the responses received to the RFI, BOEM determined there was competitive interest in the location identified and continued with the competitive leasing process.

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[4] Unless otherwise noted, all part 585 citations in this memorandum are to the current regulations following the July 15, 2024, effective date of the Renewable Energy Modernization Rule. *See* 89 Fed. Reg. 42,602 (May 15, 2024).
[5] *See* Commercial Wind Leasing for Wind Power on the Outer Continental Shelf (OCS) Offshore Massachusetts—Request for Interest, 75 Fed. Reg. 82,055 (Dec. 29, 2010), https://www.federalregister.gov/documents/2010/12/29/2010-32853/commercial-leasing-for-wind-power-on-the-outer-continental-shelf-ocs-offshore-massachusetts-request

On February 6, 2012, BOEM published a Call for Information and Nominations (Call) to seek additional nominations from entities interested in commercial wind energy leases within the Call Area offshore Massachusetts.[6] BOEM sought public input on the potential for wind development in the Call Area, including comments on site conditions, resources, and existing uses of the area that would be relevant to BOEM's wind energy development authorization process.[7]

BOEM also published a Notice of Intent (NOI) to prepare an environmental assessment (EA) on February 6, 2012.[8] The EA's purpose was to assess reasonably foreseeable impacts resulting from the site characterization activities (including geophysical, geotechnical, archaeological, and biological surveys) and site assessment activities (e.g., the installation of a meteorological tower and/or buoys) within the proposed area. Through the NOI, BOEM sought public input on the environmental and socioeconomic issues to be considered, as well as alternatives and mitigation measures.

On May 30, 2012, BOEM designated a wind energy area (WEA), consisting of 132 OCS blocks and 19 sub-blocks, approximately 12 nm south of Martha's Vineyard and 13 nm southwest of Nantucket.[9] BOEM received several comments as a result of the WEA designation, and decided to exclude certain areas identified as important habitats that could be adversely affected if ultimately developed with the installation of wind turbine generators. Specifically, BOEM excluded an area of high sea duck concentration, as well as an area of high value fisheries to reduce conflict with commercial and recreational fishing activities.

On November 2, 2012, BOEM published a Notice of Availability of an EA in accordance with the National Environmental Policy Act (NEPA) for potential commercial wind lease issuance and site assessment activities on the OCS offshore Massachusetts for public review and comment.[10]

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[6] *See* Commercial Leasing for Wind Power on the Outer Continental Shelf Offshore Massachusetts—Call for Information and Nominations, 77 Fed. Reg. 5820 (Feb. 6, 2012), https://www.federalregister.gov/documents/2012/02/06/2012-2645/commercial-leasing-for-wind-power-on-the-outer-continental-shelf-offshore-massachusetts-call-for

[7] *See* Commercial Leasing for Wind Power on Outer Continental Shelf: Offshore Massachusetts; Call for Information and Nominations (February 6, 2012), https://www.regulations.gov/document/BOEM-2011-0097-0001

[8] *See* Commercial Wind Leasing and Site Assessment Activities on the Atlantic Outer Continental Shelf Offshore Massachusetts, 77 Fed. Reg. 5830 (Feb. 6, 2012), https://www.federalregister.gov/documents/2012/02/06/2012-2649/commercial-wind-leasing-and-site-assessment-activities-on-the-atlantic-outer-continental-shelf

[9] Announcement of Area Identification, Commercial Wind Energy Leasing on the Outer Continental Shelf Offshore Massachusetts (May 30, 2012), https://www.boem.gov/sites/default/files/uploadedFiles/BOEM/Renewable_Energy_Program/State_Activities/MA_AreaID_Announcement_052412_Final.pdf

[10] *See* Environmental Assessment for Potential Commercial Wind Lease Issuance and Site Assessment Activities on the Atlantic Outer Continental Shelf (OCS) Offshore Massachusetts, 77 Fed. Reg. 66,185 (November 2, 2012), https://www.federalregister.gov/documents/2012/11/02/2012-26905/environmental-assessment-for-potential-commercial-wind-lease-issuance-and-site-assessment-activities

On June 18, 2014, BOEM published a proposed sale notice (PSN) for an area located offshore Massachusetts[11] and a Notice of Availability of a Revised Environmental Assessment and Finding of No Significant Impact for commercial wind lease issuance and site assessment activities on the Atlantic OCS offshore Massachusetts.[12]

On November 26, 2014, BOEM announced the publication of the final sale notice (FSN) for a lease sale offshore Massachusetts and the availability of a revised EA for site assessment and site characterization activities in the area.[13] The WEA was auctioned as four leases (OCS-A 0500, OCS-A 0501, OCS-A 0502, OCS-A 0503).

On January 29, 2015, BOEM held a competitive lease sale pursuant to 30 C.F.R. § 585.220-585.223 for certain lease areas within the Massachusetts WEA. The auction lasted two rounds. RES America Developments, Inc., was identified as the winner of Lease Area OCS-A 0500 (187,523 acres) and Offshore MW LLC was identified as the winner of Lease Area OCS-A 0501 (166,886 acres). Lease Areas OCS-A 0502 and OCS-A 0503 went unsold during the lease sale.

On December 12, 2016, BOEM received an unsolicited lease request from Statoil Wind US, LLC for previously unleased areas OCS-A 0502 and OCS-A 0503 in the wind energy area offshore Massachusetts, and on January 4, 2017, BOEM received an unsolicited lease request from PNE Wind USA, Inc., for the same two unleased areas. Due to the fact that both parties nominated the same areas, BOEM determined that competitive interest existed and proceeded with the competitive leasing process.

On April 11, 2018, BOEM published a PSN for portions of the Massachusetts WEA that that were unsold on January 29, 2015 (Lease Areas OCS-A 0502 and OCS-A 0503).[14] On October 19, 2018, BOEM announced the publication of the FSN for a lease sale offshore

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[11] *See* Atlantic Wind Lease Sale 4 (ATLW4) Commercial Leasing for Wind Power on the Outer Continental Shelf Offshore Massachusetts—Proposed Sale Notice, 79 Fed. Reg. 34,771 (June 18, 2014), https://www.federalregister.gov/documents/2014/06/18/2014-14116/atlantic-wind-lease-sale-4-atlw4-commercial-leasing-for-wind-power-on-the-outer-continental-shelf

[12] *See* Notice of the Availability of a Revised Environmental Assessment (EA) and a Finding of No Significant Impact (FONSI), 79 Fed. Reg. 34,781 (June 18, 2014), https://www.federalregister.gov/documents/2014/06/18/2014-14004/commercial-wind-lease-issuance-and-site-assessment-activities-on-the-atlantic-outer-continental

[13] *See* Atlantic Wind Lease Sale 4 (ATLW4) Commercial Leasing for Wind Power on the Outer Continental Shelf Offshore Massachusetts—Final Sale Notice, 79 Fed. Reg. 70,545 (Nov. 26, 2014), https://www.federalregister.gov/documents/2014/11/26/2014-27965/atlantic-wind-lease-sale-4-atlw4-commercial-leasing-for-wind-power-on-the-outer-continental-shelf

[14] *See* Atlantic Wind Lease Sale 4 (ATLW4A) Commercial Leasing for Wind Power on the Outer Continental Shelf Offshore Massachusetts—Proposed Sale Notice, 83 Fed. Reg. 15,618 (April 11, 2018), https://www.federalregister.gov/documents/2018/04/11/2018-07379/atlantic-wind-lease-sale-4a-atlw-4a-commercial-leasing-for-wind-power-on-the-outer-continental-shelf

Massachusetts.[15] This portion of the WEA was auctioned as three leases (OCS-A 0520, OCS-A 0521, OCS-A 0522). Lease OCS-A 0521 covered approximately 127,388 acres (ac) (51,552 hectares (ha)) and is located approximately 30 statute miles (mi) (26 nm, 48 kilometers (km)) south of Martha's Vineyard, Massachusetts and 23 mi (20 nm, 37 km) southwest of Nantucket, Massachusetts.

2.2 Lease Sale

On December 13-14, 2018, BOEM held a competitive lease sale pursuant to 30 C.F.R. §§ 585.220-585.223, for certain lease areas within the Massachusetts WEA. The auction lasted 32 rounds. Mayflower Wind Energy LLC won Lease Area OCS-A 0521 with a bid of $135,000,000.[16] This lease sale resulted in BOEM's issuance of Commercial Lease OCS-A 0521 to Mayflower Wind Energy LLC that became effective on April 1, 2019, and contains 127,388 acres. On March 17, 2023, Mayflower Wind Energy, LLC changed its name to SouthCoast Wind Energy LLC (SouthCoast Wind).[17]

Lease OCS-A 0521 does not, by itself, authorize any activity, such as construction, by SouthCoast Wind within the leased area. Under Lease OCS-A 0521 and 30 C.F.R. § 585.600, SouthCoast Wind must submit and receive approval of a COP before any construction activities may take place on the OCS.[18] Submittal and processing of the COP is governed by the provisions set forth in 30 C.F.R. §§ 585.620-585.628.

2.3 Site Assessment

On July 29, 2019, SouthCoast Wind submitted a site assessment plan (SAP) for Lease OCS-A 0521. SouthCoast Wind subsequently revised the plan based on BOEM comments in August, September, October, and December 2019, and January 2020. BOEM determined that the SAP was complete on December 12, 2019, and approved the SAP on May 26, 2020. The plan details the methods and procedures SouthCoast Wind will use to collect and analyze data and information on the meteorological and oceanographic conditions of the Lease Area. The SAP

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[15] *See* Atlantic Wind Lease Sale 4 (ATLW4A) Commercial Leasing for Wind Power on the Outer Continental Shelf Offshore Massachusetts—Final Sale Notice, 83 Fed. Reg. 53,089 (October 19, 2018), https://www.federalregister.gov/documents/2018/10/19/2018-22878/atlantic-wind-lease-sale-4a-atlw-4a-for-commercial-leasing-for-wind-power-on-the-outer-continental

[16] *See* Bureau of Ocean Energy Mgmt., Bids Received for Lease Sale ATLW-4A Offshore Massachusetts, https://www.boem.gov/sites/default/files/renewable-energy-program/State-Activities/MA/Bids-Received-Lease-Sale-ATLW-4-A.pdf

[17] *See* Bureau of Ocean Energy Mgmt., Change of Name Recognized (March 17, 2023), https://www.data.bsee.gov/PDFDocs/Scan/RENLEASES/0/793.pdf

[18] *See* 30 C.F.R. § 585.600(a)(2).

approval allowed for the deployment of one SEAWATCH Wind LiDAR meteorological ocean buoy.[19]

2.4 Construction and Operations

Submittal and processing of the COP is governed by the provisions set forth in 30 C.F.R. §§ 585.620-585.628. SouthCoast Wind submitted a COP to BOEM on February 15, 2021, with subsequent revisions, including the revision submitted on July 31, 2024, that was used to develop the final environmental impact statement (EIS).[20] SouthCoast Wind submitted a final revised COP on November 1, 2024, that included various minor administrative updates, and aligned the COP with BOEM consultations completed since the July 31, 2024, revision. The COP proposes the construction and installation, operations, and maintenance (O&M), and eventual decommissioning of two electrically distinct offshore wind energy facilities (Project 1 and Project 2, which together make up the SouthCoast Wind Project and that we refer to as "the Project" in this memorandum) limited to an area within Lease OCS-A 0521, as shown in Figure 1 below. The Project includes one preferred offshore export cable corridor (ECC) making landfall at Brayton Point, Massachusetts with an intermediate landfall on Aquidneck Island, Rhode Island. If technical, logistical, grid interconnection, or other unforeseen challenges arise during the design and engineering phase that prevent Project 2 from making interconnection at Brayton Point, Project 2 would use a variant ECC, which, if used, would make landfall and interconnect to the ISO-NE grid in the town of Falmouth, Massachusetts.

The offshore components of the Project consist of up to 147 wind turbine generators (WTGs) and supporting tower structures and up to five offshore substation platforms (OSPs), using up to 149 foundations at any of up to 149 locations. In addition, there will be up to 497.1 miles (800 km) of inter-array cable, all of which will be located on the OCS within the Lease Area. The WTGs and OSPs will be placed in a grid-like array (with WTGs oriented east-west and north-south), with a 1 by 1-nm grid pattern between WTGs.

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[19] *See* Bureau of Ocean Energy Mgmt., Site Assessment Plan Mayflower Wind Lease OCS – A 0521, https://www.boem.gov/sites/default/files/documents/renewable-energy/PublicRelease_Mayflower_SiteAssessmentPlan_20200114_508%20Compliant.pdf

[20] *See* SouthCoast Wind (OCS-A 0521) Construction and Operations Plan (November 1, 2024), https://www.boem.gov/renewable-energy/state-activities/southcoast-wind-formerly-mayflower-wind

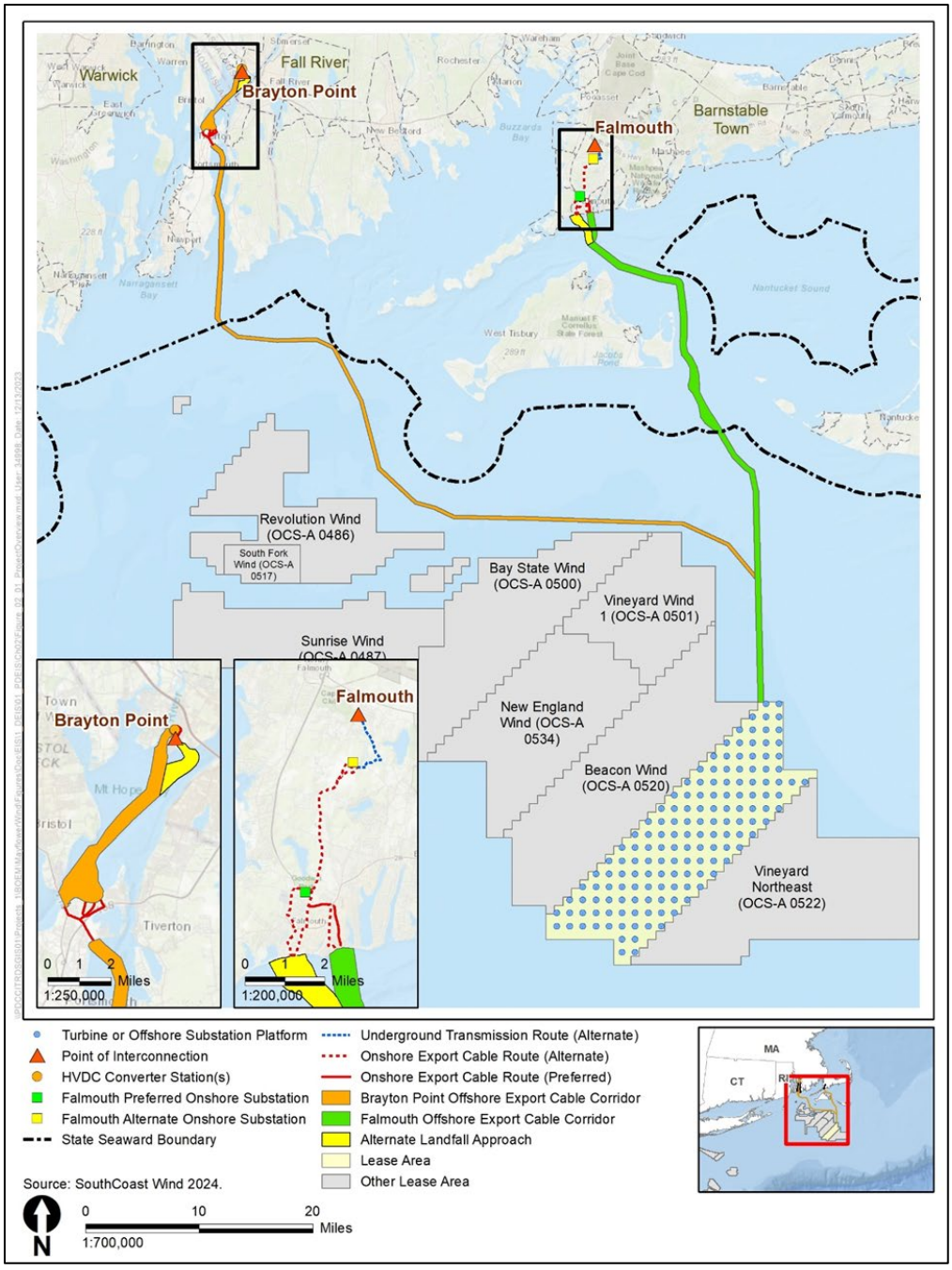

Figure 1: Project Overview – Lease Area and Submarine Export Cable Routes

BOEM conducted its analysis under NEPA and prepared the final EIS, which assesses the reasonably foreseeable impacts on physical, biological, socioeconomic, and cultural resources that could result from the construction and installation (construction), operations and maintenance (operations), and conceptual decommissioning (decommissioning) of the Project. BOEM considered a reasonable range of alternatives during the EIS development process,

including comments on the draft EIS from Tribal Nations, the public, cooperating agencies, key stakeholder groups (such as commercial fishermen), and the applicant.

SouthCoast Wind proposed the Project using a Project Design Envelope (PDE) framework, under which multiple aspects of the Project are potentially variable but would remain within the limits defined in the PDE. The Preferred Alternative (Alternative D – Nantucket Shoals), which falls within the PDE, will reduce by six the number of WTG in the northeastern portion of the leased area, to reduce potential impacts on foraging habitat and potential displacement of wildlife from this habitat adjacent to Nantucket Shoals.[21] Under Alternative D, six WTGs (AZ-47, BA-47, BB-47, BC-47, BF-48, and BF-49) would be removed.

Specifically, the Preferred Alternative (Alternative D) will entail the construction, operation, maintenance, and eventual decommissioning of up to 141 WTGs and up to five OSPs to be installed in a total of up to 143 positions over two Project Phases. The Project will include one preferred ECC making landfall and interconnecting to the ISO New England Inc. power grid at Brayton Point, in Somerset, Massachusetts. The ECC to Brayton Point will have an intermediate landfall on Aquidneck Island, Rhode Island. The Project will also include one variant ECC which, if used, would make landfall and interconnect to the ISO-NE grid in the town of Falmouth, Massachusetts.

As proposed in the COP, the Project would generate up to 2,400 MW of electricity within Lease OCS-A 0521 to meet existing and potential future offtake demands for New England States. Project 1 would generate approximately 1,287 MW[22] and consist of up to 85 WTGs. BOEM does not have authority under OCSLA to approve proposed facilities that would be located within the states of Massachusetts or Rhode Island, and BOEM would coordinate with cooperating agencies regarding this aspect of the Preferred Alternative.

2.5 Project Easements

The BOEM-administered regulations at 30 C.F.R. § 585.200(b) state that a lease issued under Part 585 "confers on the lessee the right to one or more project easements without further competition for the purpose of installing gathering, transmission, and distribution cables; pipelines; and appurtenances on the OCS as necessary for the full enjoyment of the lease." In accordance with 30 C.F.R. § 585.622(b), SouthCoast Wind requested a project easement as part of its COP. As proposed in the COP, the Project will include up to 1,651 nm (1,900 km) of submarine export cables, consisting of up to two routes to Massachusetts. The Project 1 export cable will interconnect in Brayton Point, MA, and the Project 2 export cable will interconnect in

[21] *See* Bureau of Ocean Energy Mgmt., SouthCoast Wind BOEM 2024-0055, https://www.boem.gov/renewable-energy/southcoast-wind-final-environmental-impact-statement
[22] *See* SouthCoast Wind (OCS-A 0521) Construction and Operations Plan (November 1, 2024), https://www.boem.gov/renewable-energy/state-activities/southcoast-wind-formerly-mayflower-wind

either Brayton Point, MA or Falmouth, MA. As proposed in the COP, the export cable route for Project 1 to Brayton Point contains two High Voltage Direct Current (HVDC) export cables and one communications cable, and ranges from a maximum width of 2,300 ft (700 m) to a minimum width of 1,640 ft (500 m). Two potential project easements are proposed for Project 2: an identical route to Brayton Point, MA as described for Project 1 with the same number of cables (3 total), or an export cable route to Falmouth, MA containing up to four power cables (HVAC or HVDC) and one communications cable, ranging from a maximum width of 3,280 ft (1,000 m) to a minimum width of 2,625 ft (800 m).

Southcoast Wind's project easement will include both Project 1 and Project 2 with up to six submarine offshore export cables (including up to four power cables and up to two communication cables) and a spatial area outside of the Lease Area on the OCS ranging from approximately 1571 ft (479 m) to 1649 ft (503 m) in width along an approximate 112 km (69 mi) towards shore. SouthCoast Wind may request a project easement later for Project 2's Falmouth variant, if SouthCoast Wind determines that it will be required to construct Project 2.

3 SECTION 585.628 REVIEW

The BOEM-administered regulations at 30 C.F.R § 585.628 require BOEM to review the COP and all information provided therein pursuant to 30 C.F.R. §§ 585.626 and 585.627 to determine whether the COP contains all the information necessary to be considered complete and sufficient for BOEM to conduct technical and environmental reviews.[23] Once BOEM determines that the COP is complete and sufficient, BOEM and the Bureau of Safety and Environmental Enforcement (BSEE) conduct a technical review, and BOEM conducts an environmental review. As described below, BOEM's Office of Renewable Energy Programs (OREP) has completed the sufficiency, technical, and environmental reviews of the SouthCoast Wind COP.

3.1 Completeness and Sufficiency Review

The BOEM-administered regulations at 30 C.F.R. § 585.620 provide the general requirements for what the lessee must describe in a COP. The regulations at 30 C.F.R. § 585.627 require the lessee to submit information and certifications necessary for BOEM to comply with NEPA and other relevant laws.

In a letter submitted on February 15, 2021, SouthCoast Wind requested a regulatory departure from 30 C.F.R. § 585.626(a)(4)(ii),[24] which requires that detailed in situ geotechnical data at each proposed foundation location be provided at the time of COP submittal. Instead of submitting the in situ geotechnical data with the COP, SouthCoast Wind proposed to provide the data no later than with its submittal of the Facility Design Report and the Fabrication and

[23] See 30 C.F.R. §§ 585.620 through 585.628.
[24] Citation of the regulation in effect at the time of the request (February 21, 2021).

Installation Report (FDR/FIR), when the Project design and associated Project design envelope would be more mature. OREP's Engineering and Technical Review Branch (ETRB) evaluated the departure request and concluded that the geotechnical information submitted at that point was sufficient to allow for review of the COP. Therefore, on October 4, 2021, BOEM approved the departure request, allowing SouthCoast Wind to submit geotechnical investigations at final foundation locations with or prior to the FDR along with results of geotechnical analyses and foundation design parameters.

On February 15, 2021, SouthCoast Wind submitted a COP to BOEM for review and approval. On May 27, 2021, OREP's Projects and Coordination Branch (PCB), in coordination with ETRB and Environment Branch for Renewable Energy (EBRE), verified that the COP included an adequate level of information, as required in 30 C.F.R. §§ 585.626 and 585.627, for BOEM to begin reviewing the sufficiency of that information. PCB coordinated BOEM's sufficiency review of the SouthCoast Wind COP. Throughout the review process, BOEM evaluated the information provided in response to its requests for additional information, as well as the updated COPs SouthCoast Wind submitted, and determined that the information provided was sufficient.

BOEM has determined that the COP includes all the information required in 30 C.F.R. §§ 585.626 and 585.627. Prior to the implementation of the Modernization Rule on July 15, 2024, BOEM had approved a regulatory departure for the information described in 30 C.F.R. § 585.626(a)(4)(ii) under the previous regulations. This departure is no longer necessary under the updated regulations and SouthCoast Wind will submit the information when it submits its FIR and FDR in accordance with requirements in 30 C.F.R. part 285. This information includes the results of in situ testing, boring, and sampling at each foundation location.

3.2 Technical Review

ETRB conducted a technical review of SouthCoast Wind's proposed facilities, project design, project activities, shallow hazards, geological conditions, physical and oceanographic conditions, cables, and fabrication and installation details in the COP, and coordinated with the following agencies:

- BSEE, for safety (Safety Management System (SMS) and Oil Spill Response Plan);
- National Oceanic and Atmospheric Administration (NOAA), for aviation and radar interference;
- Federal Aviation Administration (FAA), for aviation and radar interference; and
- United States Coast Guard (USCG), for vessel navigation and marine radar.

Furthermore, ETRB and BSEE reviewed the statement of work and qualifications submitted in the COP for the Certified Verification Agent (CVA) nomination. On November 3, 2020, BOEM approved the nomination of DNV GL Renewables Certification USA, LLC (now DNV) to be the

CVA for the Project. DNV will review SouthCoast Wind's FDR and FIR and must certify that the project facilities are designed, fabricated, and installed in conformance with accepted engineering practices.

As a result of these reviews, ETRB has determined both the technical information and supporting data provided with the COP meet the requirements of 30 C.F.R. § 585.626 and are sufficient to allow the safe installation of the Project as proposed in the COP. ETRB has also concluded that the COP demonstrates that SouthCoast Wind has planned and is prepared to conduct the proposed activities in a manner that uses properly trained personnel and the best available and safest technology pursuant to 30 C.F.R. § 585.621. ETRB provided a memorandum (ETRB Review Memo; Appendix B.1 to the record of decision (ROD)), which recommends approval of the COP subject to ETRB's proposed conditions (Anticipated Conditions of COP Approval; Appendix A to the ROD).

3.3 Environmental Review

OREP's EBRE conducted an environmental review of the COP. On November 1, 2021, BOEM published the NOI to prepare an EIS for SouthCoast Wind's COP,[25] which started BOEM's formal scoping process pursuant to NEPA. BOEM published the Notice of Availability (NOA) of the draft EIS for the Project on February 17, 2023.[26]BSEE, NMFS, USACE, USCG, and U.S. Environmental Protection Agency (EPA) were cooperating agencies during the development and review of the document. Cooperating state agencies included the Massachusetts Office of Coastal Zone Management, the Rhode Island Coastal Resources Management Council, and the State of New York Department of State. The U.S. Fish and Wildlife Service (USFWS), National Park Service, U.S. Department of Navy, U.S. Department of Defense, and the Advisory Council on Historic Preservation (ACHP) supported the environmental review as participating agencies.

Moreover, BOEM consulted with federally recognized Tribal Nations regarding renewable energy leasing and development on the OCS. The following federally recognized Tribal Nations were invited to consult under Section 106 of the National Historic Preservation Act (NHPA): Delaware Tribe of Indians, Mashantucket (Western) Pequot Tribal Nation, Mashpee Wampanoag Tribe, Mohegan Tribe of Connecticut, The Delaware Nation, The Narragansett Indian Tribe, The Shinnecock Indian Nation, and Wampanoag Tribe of Gay Head (Aquinnah). Five Tribal Nations responded that they would like to consult on the Project: Mashantucket (Western) Pequot Tribal

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[25] *See* Notice of Intent To Prepare an Environmental Impact Statement for the Proposed Mayflower Wind Project on the Northeast Atlantic Outer Continental Shelf, 86 Fed. Reg. 60,270 (November 1, 2021), https://www.federalregister.gov/documents/2021/11/01/2021-23806/notice-of-intent-to-prepare-an-environmental-impact-statement-for-the-proposed-mayflower-wind

[26] *See* Notice of Availability of a Draft Environmental Impact Statement for SouthCoast Wind Energy, LLC's (Formerly Mayflower Wind Energy, LLC) Proposed Wind Energy Facility Offshore Massachusetts, 88 Fed. Reg 10377 (February 17, 2023), https://www.federalregister.gov/documents/2023/02/17/2023-03271/notice-of-availability-of-a-draft-environmental-impact-statement-for-southcoast-wind-energy-llcs

Nation, Mashpee Wampanoag Tribe, The Narragansett Indian Tribe, The Shinnecock Indian Nation, and Wampanoag Tribe of Gay Head (Aquinnah). BOEM also invited the same Tribal Nations to participate in preparation of the EIS as a cooperating Tribal government. The Delaware Nation declined the invitation to be a consulting party. The Delaware Tribe of Indians and Mohegan Tribe of Connecticut did not respond to BOEM's initiation of consultation; nevertheless, BOEM included these Tribal Nations in all consulting party communications. BOEM held government-to-government meetings and Tribal consultation meetings with federally recognized Tribal Nations on November 19, 2021; May 2, 2022; June 1, 2022; September 1, 2022; January 17, 2024; February 7, 2024; October 25, 2024; and November 1, 2024.

On November 15, 2024, BOEM published the NOA of the final EIS in the *Federal Register*.[27] BOEM identified Alternative D as the Preferred Alternatives and, in Appendix N of the final EIS, BOEM's responses to comments on the draft EIS. The final EIS concluded that the Proposed Action and Preferred Alternative D would have negligible to moderate adverse impacts on most resources and only the potential for major adverse impacts on (i) marine mammals (NARW), (ii) commercial fisheries and for-hire recreational fisheries, (iii) cultural resources, (iv) environmental justice, (v) scientific research and surveys, and (vi) scenic and visual resources. The final EIS also found that the Project could have, to some extent, beneficial impacts on the following resources: (i) air quality, (ii) benthic resources, (iii) birds, (iv) finfish, invertebrates, and EFH, (v) marine mammals (odontocetes and pinnipeds), (vi) sea turtles, (vii) commercial fisheries and for-hire recreational fisheries, (viii) demographics, employment, and economics, (ix), environmental justice, (x) land use and coastal infrastructure, and (xi) recreation and tourism.

The final EIS also found that the following resources could be subject to major impacts if future planned actions, including the Project, materialize and no further actions are taken to mitigate their impacts: (i) marine mammals (NARW), (ii) commercial fisheries and for-hire recreational fisheries, (iii) cultural resources, (iv) scientific research and surveys, and (v) scenic and visual resources. The final EIS also found that future planned actions could have beneficial impacts on the following resources: (i) air quality, (ii) benthic resources, (iii) birds, (iv) marine mammals (odontocetes and pinnipeds), (v), (vi) commercial fisheries and for-hire recreational fisheries, (vii) demographics, employment, and economics, (viii) land use and coastal infrastructure, and (ix) recreation and tourism. Cumulative impacts on all resources range from negligible to major. The 30-day waiting period for the final EIS closed on December 16, 2024.

[27] *See* Notice of Availability of a final EIS for SouthCoast Wind, 89 Fed. Reg. 90,316 (November 15, 2024), https://www.federalregister.gov/documents/2024/11/15/2024-26657/notice-of-availability-of-a-final-environmental-impact-statement-for-southcoast-wind-energy-llcs

BOEM conducted an Endangered Species Act (ESA) Section 7 consultation with NMFS Greater Atlantic Regional Fisheries Office and the U.S. Fish and Wildlife Service on the proposed COP for the SouthCoast Wind offshore wind energy facility and offshore export cables. On November 7, 2024, NMFS issued a Biological Opinion (BiOp) for the Project.[28] The BiOp concluded that the Project is not likely to jeopardize the continued existence of blue, fin, sei, sperm, or North Atlantic right whales or the Northwest Atlantic DPS of loggerhead sea turtles, North Atlantic DPS of green sea turtles, Kemp's ridley or leatherback sea turtles, shortnose sturgeon, or any of the five DPSs of Atlantic sturgeon; or critical habitat designated for the North Atlantic right whale or the Northwest Atlantic DPS of loggerhead sea turtles. NMFS concurred with BOEM's determination that the proposed action is not likely to adversely affect hawksbill sea turtles, giant manta rays, oceanic whitetip sharks, or critical habitat designated for the New York Bight or Gulf of Maine DPSs of Atlantic sturgeon; and have no effect on the Gulf of Maine DPS of Atlantic salmon, and concluded the consultation informally for these species and critical habitat designations. To be exempt from the prohibitions of Section 9 of the ESA, BOEM, BSEE, USACE, and NMFS' Office of Protected Resources must comply with the Reasonable and Prudent Measures and implementing Terms and Conditions issued as part of the BiOp.

On September 1, 2023, USFWS transmitted its BiOp and concluded consultation for the SouthCoast Wind offshore wind energy project (Project code: 2022-0026203)[29]. The USFWS concurred with BOEM's determination that the proposed action is not likely to adversely affect roseate tern, northern long eared bat, tricolored bat, and sandplain gerardia. The BiOP concluded the Project is not likely to jeopardize the continued existence of the federally listed piping plover or *rufa* red knot.

BOEM also completed an Essential Fish Habitat (EFH) consultation under the Magnuson-Stevens Fishery Conservation and Management Act (MSA)[30] and received conservation recommendations from NMFS on September 23, 2024, pursuant to Section 305(b)(4)(A) of the MSA. According to Section 304(b)(4)(B) of the MSA, BOEM is required to provide NMFS a detailed response to each EFH conservation recommendation within 30 days of receipt. BOEM provided interim responses to NMFS on October 29, 2024, and issued a detailed response letter to NMFS on November 18, 2024. The detailed response to the conservation recommendations provided draft conditions of COP approval that adopt or partially adopt NMFS's conservation recommendations, which BOEM has included in Appendix A of the ROD.

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[28] *See* Biological Opinion Letter from Michael Pentony, Regional Administrator, Greater Atlantic Regional Fisheries Office, U.S. Dept of Commerce, National Oceanic and Atmospheric Administration, NMFS, to Karen Baker, Chief Office of Renewable Energy Programs, BOEM. National Marine Fisheries Service, Endangered Species Act, Section 7, Biological Opinion (November 7, 2023).

[29] *See* Letter from Audrey Mayer, Supervisor, New England Field Office, Fish and Wildlife Serv., to Karen Baker, OREP, BOEM (September 01, 2023), https://www.boem.gov/sites/default/files/documents/renewable-energy/state-activities/SouthCoastWind%20USFWS%20BO%20alm%20signed_1.pdf

[30] https://www.fisheries.noaa.gov/resource/document/magnuson-stevens-fishery-conservation-and-management-act

BOEM included a draft Finding of Adverse Effect and draft agreement to resolve effects with the draft EIS, and BOEM included updated versions of those documents in the final EIS. On December 18, 2024, the final Memorandum of Agreement resolving adverse effects on historic properties was executed.

BOEM also conducted an NHPA[31] Section 106 review of the Project, identified historic properties that could be adversely affected by COP approval, and consulted on measures to resolve those adverse effects. BOEM consulted under Section 106 of the NHPA from September to November 2021. BOEM elected to use the NEPA substitution procedures allowed under 36 C.F.R. § 800.8(c). BOEM identified one marine archaeological resource, two ancient, submerged landform features, and two terrestrial archaeological resources that would be adversely affected by the Project. BOEM also identified four historic properties that would be visually adversely affected by the Project. Two traditional cultural places (Chappaquiddick Island and Nantucket Sound) and one National Historic Landmark (NHL) (Nantucket Historic District) would be visually adversely affected by offshore Project components. One historic property (Oak Grove Cemetery, Falmouth, Massachusetts) would be visually adversely affected by onshore Project components. BOEM followed the requirements for compliance with NHPA Section 110(f) (36 C.F.R. § 800.10) and consulted with NPS, Massachusetts State Historic Preservation Officer (SHPO), and ACHP to assess and undertake planning and actions as may be necessary to minimize harm to the NHL. BOEM addressed this process and finding in Appendix I, Finding of Adverse Effect for the SouthCoast Wind Construction and Operations Plan, of the final EIS. Consultation under Section 106 of the NHPA concluded with the execution of the Memorandum of Agreement (MOA), which was signed by SouthCoast Wind, BOEM, the Massachusetts and Rhode Island SHPOs, and ACHP, and fully executed on December 18, 2024.

SouthCoast Wind submitted requests for Federal Consistency Certification to the Commonwealth of Massachusetts and the State of Rhode Island under the Coastal Zone Management Act (CZMA).[32] Acting under Section 307 of the Federal CZMA (Pub. L. No. 92-583), as amended, the coastal management programs for the Commonwealth of Massachusetts and the State of Rhode Island concurred with SouthCoast Wind's consistency certification, finding the Project is consistent to the maximum extent practicable with the enforceable policies of each state's coastal management program. SouthCoast Wind provided BOEM with the CZMA concurrence letters issued by the Commonwealth of Massachusetts on October 21, 2024, and the State of Rhode Island on December 19, 2023.

[31] https://www.nps.gov/subjects/archeology/national-historic-preservation-act.htm
[32] *See* 16 U.S.C. §§ 1451 *et seq*.

4 COMPLIANCE REVIEW[33]

The BOEM-administered regulations at 30 C.F.R. part 585 set forth responsibilities for both BOEM and SouthCoast Wind that implement those imposed by the OCSLA subsection 8(p)(4) factors.[34] The regulations at 30 C.F.R. § 585.102 require BOEM to ensure that any activities authorized under part 585 are carried out in a manner that provides for 12 enumerated goals. Similarly, 30 C.F.R. § 585.621 requires the COP to demonstrate that SouthCoast Wind has planned and is prepared to conduct the proposed activities in a manner that conforms to its responsibilities listed in 30 C.F.R. § 585.105(a), as well as 7 other goals listed therein. BOEM and SouthCoast Wind share some of the responsibilities (e.g., ensuring that activities are carried out in a safe manner), while others are the responsibility of either BOEM (e.g., ensuring a fair return to the United States) or SouthCoast Wind (e.g., using properly trained personnel). The discussion in the following sections, 4.1 to 4.12, explain how BOEM has ensured the selected alternative provides for the section 8(p)(4) factors and the regulations at 30 C.F.R. part 585. Because many of these goals are related to the same topic or overlap one another, some are analyzed together.

4.1 Conforms to All Applicable Laws, Regulations, and Lease Provisions of SouthCoast Wind's Commercial Lease[35]

Consultations and reviews for the Project under NEPA, ESA, CZMA, MSA, and NHPA are complete. Further, BOEM's approval of the COP includes a condition prohibiting SouthCoast Wind from commencing construction activities before obtaining all applicable permits and authorizations, including permits and permissions requested by SouthCoast Wind under Section 10 of the Rivers and Harbors Act of 1899 (RHA), Section 404 of the Clean Water Act (CWA), and Section 14 of the RHA from USACE; Incidental Take Regulations and an associated Letter of Authorization under the Marine Mammal Protection Act from NMFS; and CWA Section 401 Permit and Water Quality Certifications from Massachusetts Department of Environmental Protection (MassDEP) and Rhode Island Department of Environmental Management . Section 1.5 of the COP (Regulatory Framework) lists all expected federal, Massachusetts and Rhode Island State, regional (county), and local-level reviews and permits for the Project.[36]

4.2 Safety, Best Available and Safest Technology, Best Management Practices, and Properly Trained Personnel[37]

The SouthCoast Wind Project COP proposed the following major offshore components:

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[33] *See* 43 U.S.C. § 1337(p)(4) (OCSLA Subsection 8(p)(4)); 30 C.F.R. §§ 585.102, 585.621.
[34] *See* 30 C.F.R. §§ 585.102(b), 585.621(b).
[35] *See* 30 C.F.R. §§ 585.102(b), 585.621(b).
[36] *See* SouthCoast Wind (OCS-A 0521) Construction and Operations Plan (November 1, 2024), https://www.boem.gov/renewable-energy/state-activities/southcoast-wind-formerly-mayflower-wind
[37] *See* 43 U.S.C. § 1337(p)(4)(A); 30 C.F.R. §§ 585.102(a)(1), 585.621(c), 585.621(f)-(h).

- Up to 147 WTGs and up to five (5) OSPs at a total of 149 positions allocated between two electrically distinct projects (Project 1 and Project 2);[38]
    - Up to 85 WTGs for Project 1 and Project 2 individually
- Each WTG or OSP would be supported by a monopile, piled jacket, and/or suction bucket jacket foundation (maximum of 85 suction-bucket jacket foundation locations are proposed for Project 2 only);
- Inter-array cables with an operating voltage of 60-72.5 kilovolts (kV);
- Up to six (6) submarine high voltage direct current (HVDC) export cables operating at 320 kV and buried to a target depth of 3.2-13.1 feet (1-4 meters), or, in the event Project 2 interconnects at Falmouth instead of Brayton Point, Project 2 would utilize up to (5) HVAC export cables operating at 200-345 kV or up to (5) high HVDC export cables operating at 525 kV buried to a target depth of 3.2-13.1 feet (1-4 meters).

As documented in ETRB's memo (Appendix B.1 to the ROD), BOEM expects SouthCoast Wind to use the most current technology available for commercial production that meets or exceeds current industry standards. In some cases, this could include technologies currently in prototyping and/or working toward type certification by a recognized certification body but not yet commercially available. ETRB has determined that the information on the proposed major components provided in the COP is sufficient to determine that the Project proposes to use the best available and safest technology pursuant to 30 C.F.R. § 585.621(f), which will meet or exceed the current international industry standards. The approved CVA will confirm as much by certifying that the facility is designed, fabricated, and installed in accordance with the COP and approved industry standards. BOEM and BSEE will also confirm that the design is in accordance with the COP through review of the FDR and FIR.

The engineering design of the WTGs and their ability to sufficiently withstand weather events—which include hurricane-level events—are independently evaluated by a CVA when reviewing the FDR and FIR according to international standards. One of these standards calls for the structure to be able to withstand a 50-year return interval event. An additional standard also includes withstanding 3-second gusts of a 500-year return interval event. WTGs are designed to withstand the oceanographic and meteorological conditions expected in the Lease Area, including hurricane force winds.

OREP consulted with BSEE and the USCG on safety requirements during the COP review process. BSEE's and USCG's recommendations and relevant requirements have been incorporated into the proposed conditions of approval for the COP to ensure that this Project is carried out in a safe manner.[39] Additionally, oversight of the review of future submissions (e.g.,

[38] Project 1 refers to the development in the northern portion of the Lease Area and associated interconnection, and Project 2 refers to the development in the southern portion of the Lease Area and associated interconnection.
[39] *See* infra. Anticipated Terms and Conditions of COP Approval, Appendix A to the ROD.

FDR and FIR activities) will allow BSEE to evaluate whether the "facilities are designed, fabricated, and installed in conformance with accepted engineering practices."[40]

The COP also provides a detailed description of the Project's proposed SMS,[41] as required by 30 C.F.R. § 585.627(d). The proposed SMS, which will be finalized following any COP approval, includes a description of the processes and procedures listed in 30 C.F.R. § 285.810(a)-(f), and SouthCoast Wind's proposed implementation thereof. Furthermore, the finalized SMS must describe the methods that are used and maintained to control the identified risks. BSEE determined that proposal is consistent with acceptable industry practices and standards.

For these reasons, ETRB concluded that the technical information and supporting data provided with the COP is sufficient to allow the safe installation of the proposed project on the OCS, uses best available and safest technology, best management practices, and uses properly trained personnel, pursuant to 30 C.F.R. § 585.621(c), (f), (g), and (h).

4.3 Protection of the Environment and Prevention of Undue Harm or Damage to Natural Resources; Life (including human and wildlife); Property; the Marine, Coastal, or Human Environment; or Sites, Structures, or Objects of Historical or Archaeological Significance[42]

Minimizing environmental impacts through the assessment of environmental resources is integral to BOEM's planning and leasing phase of offshore wind development. The final EIS (BOEM, 2023) determined that the majority of the potential adverse impacts to the environment and natural resources are negligible to moderate. The final EIS concluded that the Preferred Alternative would potentially result in major impacts only to NARW, commercial fisheries and for-hire recreational fisheries, cultural resources, environmental justice, scientific research and surveys, and scenic and visual resources.[43] The final EIS identified a range of adverse impacts to environmental, socioeconomic, and cultural resources, which are summarized in the ROD. In addition, as the final EIS concluded, the Preferred Alternative could have beneficial impacts on the following resources: (i) air quality, (ii) benthic resources, (iii) birds, (iv) finfish, invertebrates, and EFH, (v) marine mammals (odontocetes and pinnipeds), (vi) sea turtles, (vii) commercial fisheries and for-hire recreational fisheries, (viii) demographics, employment, and economics, (ix), environmental justice, (x) land use and coastal infrastructure, and (xi) recreation and tourism. The numerous consultations performed under various federal statutes, and the analysis in the final EIS, indicate that approval of the Preferred Alternative would not result in undue harm to environmental resources. For all adverse impacts, mitigation measures were

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[40] *See* 30 C.F.R. § 285.705(a)(1).
[41] *See* Appendix Z of SouthCoast Wind (OCS-A 0521) Construction and Operations Plan (November 1, 2024), https://www.boem.gov/renewable-energy/state-activities/southcoast-wind-formerly-mayflower-wind
[42] *See* 43 U.S.C. § 1337(p)(4)(B); 30 C.F.R. §§ 585.102(a)(2), 585.621(e).
[43] *See* Bureau of Ocean Energy Mgmt., SouthCoast Wind BOEM 2024-0055, https://www.boem.gov/renewable-energy/southcoast-wind-final-environmental-impact-statement

identified and will be incorporated in the terms and conditions of COP approval. This includes mitigation measures identified during consultations.

BOEM analyzed in the final EIS the potential environmental effects of the proposed activities described in the COP. Appendix G of the final EIS specifically references measures to be taken or mitigation measures recommended to protect the environment. BOEM has also engaged in consultations under the ESA, the MSA, and the NHPA. As a result of the ESA consultation, NMFS issued the BiOp for the Project on November 7, 2024, and USFWS issued its BiOp on September 1, 2023. BiOp conclusions are discussed above in Section 3.3. To minimize impacts, both the FWS and NMFS BiOps include Reasonable and Prudent Measures and implementing Terms and Conditions that are incorporated by reference into conditions of approval. BOEM also consulted with NMFS in accordance with Section 305(b)(2) of the MSA. BOEM analyzed potential adverse impacts of the Project on EFH in an EFH Assessment deemed complete by NMFS on April 13, 2023.[44] NMFS issued a letter on September 23, 2024, in which the agency provided 52 conservation recommendations to avoid and minimize impacts to EFH for activities within the OCS and state waters. Several of the recommendations pertained specifically to activities authorized by USACE and EPA and are responded to by those agencies. BOEM provided a detailed response to conservation recommendation under its jurisdictional authority to NMFS via a November 18, 2024, letter regarding how each of the conservation recommendations would be applied to the Project. BOEM fully or partially adopted 25 of the 34 conservation recommendations under BOEM's jurisdiction.

BOEM also conducted NHPA Section 106 consultation with the 44 consulting parties made up of federal agencies (including the ACHP), 7 federally recognized Tribes, State agencies (including the Massachusetts and Rhode Island Historic Preservation Offices), local governments, the Lessee, and nongovernmental organizations and/or groups or private property owners, with a demonstrated interest in the affected historic properties. BOEM held 5 consultation meetings.[45] Through that consultation, BOEM identified historic properties that may be adversely affected by activities resulting from COP approval, as well as measures to resolve those adverse effects. BOEM also identified one NHL (Nantucket Historic District) that may be visually adversely affected by activities resulting from COP approval and followed the requirements for compliance with NHPA Section 110(f). On December 18, 2024, an MOA was executed stipulating how the adverse effects of the Project on historic properties will be resolved. As discussed in section 3.3, BOEM also conducted government to government consultation meetings with Tribal Nations in which potential impacts to environmental and cultural resources were discussed.

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[44] *See* https://www.boem.gov/sites/default/files/documents/renewable-energy/state-activities/SouthCoast%20Wind_NMFS_EFH_July2024.pdf

[45] The list of those parties invited to participate and accepting participation are listed in Attachment 1 of the Section 106 MOA.

The COP proposed impact avoidance, minimization, and mitigation measures, which BOEM included as elements of the Project in its environmental analysis and consultations. Measures proposed by SouthCoast Wind can be found in Volume 2, Section 16 of the COP and include measures to avoid, minimize, and mitigate impacts to resources such as air quality, birds, and bats, among others.[46] As described in the ROD, BOEM will require SouthCoast Wind to implement the measures proposed in its COP and comply with all measures and commitments resulting from consultations.

BOEM's Preferred Alternative also includes mitigation and monitoring measures to avoid or reduce impacts on existing ocean uses and on environmental and socioeconomic resources associated with construction, operation, and maintenance activities across the various resources analyzed in the final EIS. Appendix G of the final EIS contains a comprehensive list of mitigation and monitoring measures, which are analyzed in the respective Chapter 3 resource section of the final EIS.

4.4 Prevention of Waste and Conservation of Natural Resources[47]

Natural resources are defined in 30 C.F.R. § 585.113 to "include, without limiting the generality thereof, renewable energy, oil, gas, and all other minerals (as defined in Section 2(q) of the OCSLA), and marine animal and marine plant life." In the COP analysis, BOEM focused on the prevention of waste and the conservation of natural resources only in the context of *wind energy resources, oil and gas, and marine minerals*. BOEM considered how the Project would prevent waste by considering the location, installation, and operation of wind energy facilities proposed in the COP. Discussion of the conservation of *marine animal and plant life* can be found in Volume II, Section 6 of the SouthCoast Wind COP and the final EIS, Chapter 3, Affected Environment and Environmental Consequences, both of which consider how BOEM addresses the Project's impacts on the marine environment. For similar reasons, BOEM has determined that the Project conserves natural marine animal and plant life consistent with 43 U.S.C. § 1337(p)(4)(B), 30 C.F.R. §§ 585.102(a)(2), and 585.621(d). See Section 4.3, above.

BOEM's issuance of Lease OCS-A 0521 was the result of a comprehensive planning process, as discussed in Section 1.1 and Appendix A of the final EIS. The multiple stages of the planning process evaluated natural resources in the region and removed from consideration areas that would be incompatible with renewable energy activities covered by Lease OCS-A 0521. The analysis conducted in Section 3.6.7 of the final EIS concluded that the Project would result in negligible impacts on non-energy marine minerals (primarily sand and gravel) because the Project would avoid mineral leases, sand and gravel leases and borrow areas, and ocean disposal areas. There are no existing oil and gas leases in the Atlantic at this time and there are no oil and

[46] COP Volume 2, Section 16, Table 16-1 (SouthCoast Wind 2024), https://www.boem.gov/renewable-energy/state-activities/southcoast-wind-formerly-mayflower-wind
[47] *See* 43 U.S.C. §§ 1337(p)(4)(C) -(D); 30 C.F.R. §§ 585.102(a)(3)-(4), 585.105(a).

gas lease sales in the Atlantic included in the next National OCS oil and gas leasing program, which was approved on December 14, 2023.[48] There is no evidence that the project will waste oil, gas, or other mineral resources.

The proposed COP reflects current industry practices (e.g., equipment, design, and orientation) for the Project Area. The mitigation measures to be adopted with the Preferred Alternative's selection strike a rational balance between deconflicting OCS uses and maximizing wind energy harvesting in the proposed Project Area.

4.5 Coordination with Relevant Federal Agencies[49]

Throughout BOEM's regulatory process, BOEM engaged with relevant federal agencies to obtain expert advice, comply with regulatory requirements, and ensure proper coordination. Documentation of this coordination with federal agencies through BOEM's Intergovernmental Renewable Energy Task Force meetings, and public meetings from the early pre-lease planning stages to the Area Identification process (which resulted in the WEAs before modification at the Proposed Sale Notice stage) can be found in Section 1.5.2 of the Massachusetts EA,[50] Section 1.5.2 of the Revised Massachusetts EA,[51] and on BOEM's website.[52] Throughout the environmental and technical review of the COP, BOEM met with various federal agencies, including BSEE, DoD, EPA, USACE, USFWS, NOAA-NMFS, NPS, and USCG. Through the NOI to prepare the EIS, BOEM invited federal agencies with jurisdiction and/or special expertise to become Cooperating or Participating Agencies. BOEM provided Cooperating Agencies with the preliminary draft EIS on October 21, 2022, for review and comment. BOEM considered and addressed agency comments received, and provided a revised preliminary draft EIS with a request that Cooperating and Participating agencies confirm that their comments were adequately addressed. On February 17, 2023, BOEM published the draft EIS. The Cooperating Agencies also supported preparation of the final EIS. BOEM provided Cooperating Agencies with the preliminary final EIS on July 29, 2024, for review and comment. Before publishing the final EIS, BOEM considered and addressed comments received, and provided a revised preliminary final

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[48] See Bureau of Ocean Energy Mgmt., National OCS Oil and Gas Leasing Program, https://www.boem.gov/oil-gas-energy/national-program/national-ocs-oil-and-gas-leasing-program.

[49] Throughout the COP review and approval process, DOI engaged in meaningful consultation with federally recognized Tribes. For more detail see final EIS Appendix A, Section A.2.2.3 and Appendix N. See also 43 U.S.C. § 1337(p)(4)(E); 30 C.F.R. § 585.102(a)(5).

[50] BOEM, OCS EIS/EA BOEM 2012-087, Commercial Wind Lease Issuance and Site Assessment Activities on the Atlantic Outer Continental Shelf Offshore Massachusetts (2012), https://www.boem.gov/sites/default/files/uploadedFiles/BOEM/BOEM_Newsroom/Library/Publications/2012/BOEM-2012-087.pdf

[51] BOEM, OCS EIS/EA BOEM 2014-603, Commercial Wind Lease Issuance and Site Assessment Activities on the Atlantic Outer Continental Shelf Offshore Massachusetts, Revised Environmental Assessment (2014), https://www.boem.gov/sites/default/files/renewable-energy-program/State-Activities/MA/Revised-MA-EA-2014.pdf

[52] https://www.boem.gov/renewable-energy/state-activities/massachusetts-activities

EIS with a request that Cooperating Agencies confirm that their comments were adequately addressed. During the EIS process, BOEM met with all the Cooperating and Participating agencies five times (August 6, 2021, January 5, 2022, March 8, 2022, October 28, 2022, and July 24, 2024), met with agencies individually on multiple occasions, and hosted two sets of three public meetings (scoping and draft EIS). USACE and NOAA have both indicated their intention to adopt the final EIS and sign a joint ROD with BOEM.

4.6 Protection of National Security Interests of the United States[53]

At each stage of the regulatory process involving Lease OCS-A 0521, BOEM has consulted with DoD for the purpose of assessing national security considerations in its decision-making processes. On February 6, 2012, BOEM published a Call in the *Federal Register* (under Docket ID: BOEM-2011-0097) to help BOEM determine whether competitive interest exists in the identified Call Area offshore Massachusetts. The Call also requested information from the public on issues relevant to BOEM's review of nominations for potential leasing in the area. The Call Area was identified through consultation with BOEM's Massachusetts and Rhode Island Renewable Energy Task Forces, which included federal, state, and Tribal government partners, including DoD, USCG, and the States of Massachusetts and Rhode Island. Furthermore, BOEM consulted with DoD on the EA (described in section 4.5 above), which examined the potential environmental effects of issuing commercial wind energy leases and the site characterization activities and site assessment activities that are expected to take place in the Massachusetts WEA following lease issuance. Section 4.2.3.7 of the EA discusses military activities within the WEA.

Following BOEM's consultation with DoD on the proposed action to issue leases in the entire WEA, DoD concluded that site-specific stipulations, developed in consultation with DoD, could mitigate the impact of site characterization surveys and the installation, operation, and decommissioning of meteorological towers and buoys on DoD testing, training, and operations in the WEA. When addressed through coordination with the DoD, impacts would be negligible and avoidable.

While reviewing the COP, BOEM coordinated with DoD to develop measures necessary to safeguard against potential liabilities and impacts on DoD activities. BOEM requested that the Military Aviation and Installation Assurance Siting Clearinghouse (DoD Clearinghouse) coordinate within the DoD a review of the COP. As a result of this review, DoD identified potential impacts on the North American Aerospace Defense Command (NORAD) and the Department of the Navy (DON).

DoD provided the following measures to mitigate potential impacts to NORAD:

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[53] *See* 43 U.S.C. § 1337(p)(4)(F); 30 C.F.R. §§ 585.102(a)(6), 585.621(d).

- The Project owner will notify NORAD 30 to 60 days prior to Project completion and again when the Project is complete and operational for Radar Adverse Impact Management (RAM) scheduling.
- The Project owner will contribute funds ($80,000 per impacted radar) toward the execution of the RAM.
- Curtailment for National Security or Defense Purposes as described in the leasing agreement.

Additionally, DON requested the following conditions:

- To mitigate potential impacts on the DON's operations, the Lessee must coordinate with the DON on any proposal to utilize distributed fiber-optic sensing technology as part of the Project or associated transmission cables;

To protect the security interests of the United States, BOEM has included the measures identified in communications with DoD as conditions of approval in Appendix A of the ROD.

Section 3c of Lease OCS-A 0521 also includes a provision allowing for BOEM to suspend operations in accordance with the national security and defense provisions of section 12 of OCSLA.[54]

4.7 Protection of the Rights of Other Authorized Users of the OCS[55]

BOEM must ensure that activities described in the COP provide for protection of the rights of other authorized users of the OCS. "Authorized users of the OCS" means other users authorized by BOEM to conduct OCS activities pursuant to any OCS lease, easement, or grant, including those authorized for renewable energy, oil and gas, and marine minerals.[56] BOEM's regulatory authority allows the agency to protect the rights of other authorized users by virtue of its right to determine the location of leases, easements, and grants issued and, thereafter, to approve, disapprove, or require modification of plans to conduct activities on such leases, easements, and grants. Approval of the Preferred Alternative, including the project easement, will not result in adverse impacts to rights granted by BOEM pursuant to any other OCS lease or grant, including leases or grants for renewable energy, oil and gas, or marine minerals. The activities that would be authorized by the COP do not restrict equitable access and sharing of the seabed in a manner that significantly interferes with those parties' authorized uses.

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[54] Commercial Wind Lease OCS-A 0521, https://www.boem.gov/MA-LEASE-OCS-A-0521-package/
[55] *See* 43 U.S.C. § 1337(p)(4)(G); 30 C.F.R. § 585.102(a)(7).
[56] BOEM's Marine Minerals Program manages Outer Continental Shelf mineral leasing (primarily sand and gravel) for coastal restoration, and commercial leasing of gold, manganese, and other hard minerals.

Specifically, there are no nearby oil and gas leases or grants or deposits of sand, gravel, and shell resources subject to 43 U.S.C. § 1337(k)(2) (OCSLA) that would be affected by the activities proposed in the COP.

Though there are eight adjacent and nearby wind energy leases comprising the Massachusetts and the Rhode Island/Massachusetts WEAs, the five New England offshore wind lessees holding these leases (including SouthCoast Wind) entered into a developers' agreement to establish a regional 1 x 1-nm wind turbine layout across their respective leases to allow for safe navigation without the need for additional designated transit lanes, and provide uniform spacing among structures for search and rescue operations.[57] This layout is consistent with Alternative D and would arrange the WTGs in an east-west/north-south orientation and require a minimum spacing of 1 nm between the WTGs.

The Proposed Action described in the COP includes two turbine locations located on the border of the lease that would result in portions of the rotor swept area with blade overhang outside of the Lease Area. In addition, the proximity of the turbines to the boundary of the Lease Area could necessitate temporary placement of equipment outside the Lease Area for construction or maintenance of the turbines. The lessees of the adjoining leases (OCS-A 0520 and OCS-0522) also plan to locate WTGs in proximity to the SouthCoast Wind WTGs that overhang its Lease Area. Still, BOEM recognizes that the overhang of SouthCoast Wind's WTGs on another lessee's lease could impact the full enjoyment of the neighboring lease, by possibly creating the need to temporarily locate repair and maintenance equipment in such other lease due to safety considerations. Therefore, to mitigate that potential issue, BOEM has included a condition of COP approval that requires a Repair and Maintenance Agreement between SouthCoast Wind and the neighboring lessees (OCS-A 0520 and OCS-A 0522) prior to the date activities that would be located on the adjoining lease are scheduled to commence. Inclusion of this condition of COP approval also prevents unreasonable interference with the use of the OCS by the adjoining lessee. Moreover, BOEM has included a condition of approval that requires SouthCoast Wind to specifically notify BSEE and BOEM of the temporary placement of any equipment outside of its Lease Area and provides that BSEE will review such activity in coordination with BOEM. That condition also provides that any placement of equipment outside the Lease Area must be within the area that was analyzed in BOEM's review of the COP (Term and Condition 1.12 of Appendix A of the ROD).

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[57] Equinor Wind US, Eversource Energy, Mayflower Wind, Orsted North America, and Vineyard Wind LLC. (2019). *Letter to Mr. Michael Emerson, RE: Proposal for a uniform 1 x 1 NM wind turbine layout for New England Offshore Wind. 1 November 2019.* https://static1.squarespace.com/static/5a2eae32be42d64ed467f9d1/t/5dd3d3e476d4226b2a83db25/1574163438896/Proposed+1x1+layout+from+RI-MA+Leaseholders+1+Nov+19+%281%29.pdf

4.8 A Fair Return to the United States[58]

BOEM has determined that the high bid resulting from the lease auction and terms of the lease provide a fair return to the United States. As described in Section 2.2 above, BOEM auctioned areas within the Massachusetts WEA on December 13-14, 2018, offering the area as three separate leases: OCS-A 0520, OCS-A 0521, and OCS-A 0522. Mayflower Wind Energy, LLC (renamed SouthCoast Wind Energy, LLC),[59] was the winner of Lease OCS-A 0521, with the auction lasting 32 rounds, and a resulting total bid price of $135,000,000. At the time of the lease sale, BOEM determined that the minimum bid for these Lease Areas constituted a fair return to the United States, in addition to allowing for non-monetary factors to be considered. As published in the final sale notice for this lease sale,[60] the minimum bid for Lease Area OCS-A 0521 was $2 per acre, or $254,776. SouthCoast Wind's winning monetary bid exceeded these minimum bid amounts at $1059.75 per acre and, therefore, exceeded the minimum amount necessary for a fair return to the United States.

Lease payments are enumerated in Lease OCS-A 0521, Addendum "B" and describe annual rent payment requirements that are calculated per acre or fraction thereof. Rental payments compensate the public for lease development rights and serve as an incentive to timely develop the lease during the period before operations. The annual rent for Lease OCS-A 0521 is $382,164. Once a project begins commercial generation of electricity, a lessee must pay an operating fee, which is calculated in accordance with the formula in Addendum "B" and BOEM-administered regulations.[61] The operating fee compensates the public for offshore wind development on OCS submerged lands and the associated electricity generated and sold. Upon COP approval, and annually thereafter, SouthCoast Wind would be required to submit its first project easement rent payment, calculated based on the acreage of the easement and the formula provided at 30 C.F.R. § 585.500(c)(5) and Addendum "D" of Lease OCS-A 0521.[62]

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[58] *See* 43 U.S.C. § 1337(p)(4)(H); 30 C.F.R. § 585.102(a)(8).
[59] *See* Bureau of Ocean Energy Mgmt., Change of Name Recognized (March 17, 2023), https://www.data.bsee.gov/PDFDocs/Scan/RENLEASES/0/793.pdf
[60] *See* Atlantic Wind Lease Sale 4 (ATLW4A) Commercial Leasing for Wind Power on the Outer Continental Shelf Offshore Massachusetts—Final Sale Notice, 83 Fed. Reg. 53,089 (October 19, 2018), https://www.federalregister.gov/documents/2018/10/19/2018-22878/atlantic-wind-lease-sale-4a-atlw-4a-for-commercial-leasing-for-wind-power-on-the-outer-continental
[61] *See* 30 C.F.R. § 585.506.
[62] Addendum D of Commercial Lease OCS-A 0521 was amended on October 24, 2024, to reflect new easement rent payment amounts under the modernization rule finalized July 15, 2024.

4.9 Prevention of Interference with Reasonable Uses of the OCS, the Exclusive Economic Zone, the High Seas, and the Territorial Seas; Does Not Unreasonably Interfere with Other Uses of the OCS, Including National Security and Defense[63]

Under OCSLA and its implementing regulations, the Secretary must ensure that any authorized activities are carried out in a manner that provides for the prevention of interference with reasonable uses (as determined by the Secretary) of the Exclusive Economic Zone, the high seas, and the territorial seas.[64]

Throughout the planning and leasing process for Lease OCS-A 0521, as well as the NEPA process for the COP review, BOEM considered numerous other OCS uses in order to minimize or eliminate interference. To develop the Massachusetts WEA, BOEM worked closely with the Massachusetts and Rhode Island Renewable Energy Task Forces, federal agencies, federally recognized Tribes, the public, and other stakeholders between 2009 and October 2011.

When identifying areas suitable for leasing, BOEM removed certain areas from consideration to strike a rational balance between identifying an area suitable for wind energy development and preventing interference with other reasonable uses of the OCS.

During the NEPA process for the COP, BOEM assessed alternatives and mitigation measures that could further avoid, minimize, or mitigate impacts to other OCS uses, including sea-lanes and navigation, aviation, fishing activities, and NOAA scientific research and surveys. The discussion below summarizes how BOEM considered these other OCS uses in the Lease Area and the actions taken to ensure that the proposed activities, if approved, would be carried out in a manner that provides for the prevention of unreasonable interference with those uses.

- **Navigation and Vessel Traffic**[65]

  The major ports in the vicinity of the Project area include the ports of Providence and Davisville in Rhode Island, and the ports of Fall River and New Bedford in Massachusetts. These ports serve the commercial fishing industry, passenger cruise lines, cargo and other maritime activities. Of these, the largest deep-draft port by volume is Providence Port. The primary vessel traffic and commercial shipping lanes to these ports are outside the Lease Area. On average, the Proposed Action would generate approximately one to three vessel trips per day between the Lease Area and ports during regular operations. The presence of these vessels could cause delays for non-Proposed Action vessels and could cause some

[63] *See* 43 U.S.C. § 1337(p)(4)(I); 30 C.F.R. §§ 585.102(a)(9), 585.621(d). Approval of a COP does not restrict the legal rights of others to conduct reasonable uses of the Exclusive Economic Zone, the high seas, and the territorial sea (e.g., innocent passage, fishing).
[64] *See* 43 U.S.C. § 1337(p)(4)(I); 30 C.F.R. § 585.102(a)(9), § 585.621(d).
[65] *See* Bureau of Ocean Energy Mgmt., SouthCoast Wind BOEM 2024-0055, https://www.boem.gov/renewable-energy/southcoast-wind-final-environmental-impact-statement

fishing or recreational vessel operators to change routes or use an alternative port. The 149 positions will conform to a 1.0 nm x 1.0 nm (1.9 km x 1.9 km) grid layout with an east-west and north south orientation across the entire Massachusetts Rhode Island Wind Energy Area (MA/RI WEA), as agreed upon by Southcoast Wind and the other MA/RI WEA leaseholders. This uniform grid pattern and spacing is consistent with recommendations in the MARIPARS final report and minimizes the risks of vessel accidents and space use conflicts in the Project area. USCG's final MARIPARS evaluated vessel traffic through the lease areas and concluded that: "(1) lanes for vessel transit should be oriented in a northwest to southeast direction, 0.6 nm to 0.8 nm wide. This width will allow vessels the ability to maneuver in accordance with the International Regulations for Preventing Collisions at Sea while transiting through the Rhode Island/Massachusetts WEA; (2) lanes for commercial fishing vessels actively engaged in fishing should be oriented in an east to west direction, 1 nm wide; and (3) lanes for USCG search and rescue operations should be oriented in a north to south and east to west direction, 1 nm wide. This will ensure two lines of orientation (positions arranged in rows in two directions, see Figure 1) for USCG helicopters to conduct search and rescue operations." [66]

There are several routing measures that assist with routing vessel traffic to help avoid navigation hazards in the vicinity of the Lease Area. Two Traffic Separation Systems influence deep-draft vessel routes in the geographic analysis area: the Nantucket/Ambrose Shipping Safety Fairway (also referred as Nantucket Ambrose Fairway) and the Narragansett Bay Traffic Separation System in Rhode Island Sound. The Project Area does not lie in international or coastwise shipping routes; however, the westbound lane of the Nantucket Ambrose Fairway, which has an average of between 10 and 20 deep draft transits per day, is located about 2.2 nm (4.1 km) to the south. [67] Most commercial vessels, such as cargo vessels, carriers, and tankers, make use of the two Traffic Separation Systems on approach to and departure from ports. The majority of deep-draft vessel transits occur in the traffic lanes along the southern edge of the geographic analysis area within the Nantucket Ambrose Fairway.

The closest anchorage is Anchorage G, located 13 nm (24 km) from the Project Area; therefore, no measurable effects on navigation safety are anticipated related to anchorages. No significant anchorage activity is indicated by the AIS data in the vicinity of the Project Area. The closest federal ATON is approximately 21 nm (39 km) from the Project Area.[68]

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[66] *See* U.S. Coast Guard, USCG 2019-0131, The Areas Offshore of Massachusetts and Rhode Island Port Access Route Study (2020), https://www.navcen.uscg.gov/pdf/PARS/FINAL_REPORT_PARS_May_14_2020.pdf

[67] *See* SouthCoast Wind (OCS-A 0521) Construction and Operations Plan (November 1, 2024) Appendix X. Navigation Safety Risk Assessment, Section 2.2

[68] *See* SouthCoast Wind (OCS-A 0521) Construction and Operations Plan (November 1, 2024), Appendix X: Navigation Safety Risk Assessment

As described in the final EIS, Southcoast Wind has committed to developing a mariner communication plan to inform the USCG, harbor masters, commercial and recreational fisheries, among others, of construction and maintenance activities and vessel movement. If the COP is approved, BOEM will require Southcoast Wind to (1) obtain USCG approval for private aids to navigation to be installed and (2) coordinate with the USCG District 1 so that, to the extent possible, the FDR is consistent with the recommendations provided in the marking and lighting guidelines published by the USCG District 166 and BOEM67 and chapter 4, section G of Aids to Navigation Manual (COMDTINST Manual (CIM 16500.7A)).

- **Commercial Fisheries and For-Hire Recreational Fishing**[69]

  Federally permitted fishing occurs in the Lease Area. NMFS has issued permits for approximately 4,300 vessels that are currently engaged in various commercial and for-hire recreational fisheries in the Northeast Region (Maine to Virginia). Of these federally permitted vessels, an average of 331 commercial vessels per year over 15 years have reported fishing in the Lease Area.[70] Of these 331 vessels, NMFS data from 2008 to 2022 show that most permits source less than 0.38 percent of their annual revenue from the Lease Area.[71] Although a few outlier vessels derived a higher proportion of their annual revenue from the Lease Area in comparison to other vessels fishing in the Lease Area, the revenue for most of these outliers was below 5 percent of their annual revenue. The final EIS found that the Project would result in moderate to major adverse impacts to commercial fisheries and minor to moderate adverse impacts on for-hire recreational fishing, depending on the fishery or fishing operation. Minor beneficial impacts for some for-hire recreational fishing operations could also occur. The final EIS states that future planned actions, including future offshore wind approvals, could result in moderate to major adverse impacts to commercial fisheries and for-hire recreational fishing, depending on the fishery or fishing operation.

  Approval of the Project would not limit the right to navigate or fish within the Project Area. That said, some Project activities and components (e.g., foundations, cable protection measures) are expected to impact some types of fishing within the Project Area.[72] For example, temporary safety zones may be established in coordination with the USCG around active construction. During this time, all fishing and transit would need to avoid the safety zone. During the operational period, fishing and transit would be permitted; however, some larger vessel size classes and/or vessels towing fishing gear may choose to avoid the Project Area due to operational concerns. It is anticipated that vessel operators that choose to avoid

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[69] *See* Chapter 3.6.1 in the final EIS, Bureau of Ocean Energy Mgmt., SouthCoast Wind BOEM 2024-0055, https://www.boem.gov/renewable-energy/southcoast-wind-final-environmental-impact-statement
[70] *Id.*
[71] *Id.*
[72] *Id.*

the area will fish or transit in other locations. Static gear fishing including hook and line, lobster and crab traps, and gillnets are not anticipated to have the same operational constraints as mobile gear fishing, although fishing methodology (e.g., direction of setting the gear and/or length of set gear) may need to be adjusted for fishing within the Project Area.

While BOEM expects that, with time, many fishermen will adapt to the spacing and be able to fish successfully in the Project Area,[73] the Lessee has identified ways to reduce the level of interference that the Project would have with commercial fisheries.[74] For instance, most WTGs would be placed in a uniform grid within the Lease Area, with minimum spacing of 1-by-1 nm between WTGs in in both north-south and east-west orientations. As proposed in the COP, the design orients the WTGs with the rest of the Massachusetts/Rhode Island wind energy lease areas, to create straight-route orientations to maximize safe navigation amongst all lease areas.

BOEM is including as conditions of COP approval two fisheries mitigation programs that consist of a gear claim procedure under which requests for reimbursement related to lost and/or damaged gear would be processed and a Direct Compensation Program for reimbursement of lost revenues. The Direct Compensation Program must include losses to shoreside business and requires SouthCoast Wind to conduct a shoreside seafood business analysis that would be used to further supplement funds available for settling claims of lost revenue as a result of the Project. The Direct Compensation Fund includes a reserve amount to be used to pay claims brought by both commercial and for-hire recreational fishermen according to BOEM's *Draft Guidelines for Mitigating Impacts to Commercial and Recreational Fisheries on the Outer Continental Shelf Pursuant to 30 C.F.R. Part 585* (BOEM's Mitigation Guidance)[75] and must be based on the annual average commercial fisheries landings values and for-hire recreational fishing revenue stated in the final EIS (Tables 3.6.1-17 and 3.6.1-26). The reserve amount must be determined by the formula specified in the conditions of approval. The reserve amount will be augmented to pay claims in amounts determined through an analysis of impacts of the Project to shoreside support services. Including all the measures described above would mitigate impacts that the Project is expected to have on commercial fisheries and for-hire recreational fisherman and will prevent unreasonable interference with said fishing interests.

- **Scenic and Visual**

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[73] *Id.*
[74] *Id.*
[75] See https://www.boem.gov/sites/default/files/documents/renewable-energy/DRAFT%20Fisheries%20Mitigation%20Guidance%2006232022_0.pdf#:~:text=As%20reflected%20in%20the%20Guidelines,prior%20to%20engaging%20in%20any June 23, 2022

After SouthCoast Wind submitted its COP, BOEM conducted a thorough analysis of the impacts of the Proposed Action on visual and scenic resources. The geographic analysis area (GAA) for the SouthCoast Wind Project was established from a computer-generated terrain elevation viewshed model and encompasses a 42.8-mile radius Zone of Theoretical Visibility (ZTV) around the Project Area. A quantified inventory of the physical elements and features and the aesthetic, perceptual, and experiential aspects of the visual and scenic resources was conducted. A second viewshed model was generated that added surface cover to the digital elevation viewshed to and analyze impacts to the ocean, seascape, and landscape character areas within the ZTV on Martha's Vineyard and Nantucket Island, MA, and surrounding ocean area.

Twenty-four key observation points (KOP) on Martha's Vineyard, MA and 33 KOPs on Nantucket Island, MA were selected from the affected areas defined in the computer-generated terrain elevation plus surface cover viewshed model. Photo simulations were produced for 7 of the 24 KOPs on Martha's Vineyard, and 13 of the 33 KOPs with 1 video simulation on Nantucket Island showing the views from the KOPs and depicting the potential changes to the existing visual setting by the Project's proposed components. The distance from the KOPs to the closest wind turbine ranges from 23 miles to 38 miles. The level of impact ranges from moderate at KOPs that are located 23 to 26.5 miles from the nearest WTG, and minor at KOPs that are located at 29.4 to 41.2 miles from the nearest WTG when viewing at the ground level. The analysis included two hypothetical offshore KOPs to represent impacts to people viewing the project from (1) water vessels engaged in recreational fishing, pleasure, and tour boating areas and from (2) commercial and cruise ship shipping lanes. Impacts from these two hypothetical offshore KOPs range from major to negligible depending on the viewing distance between the viewer and the project.

Aviation warning lighting affixed to the wind turbines would be potentially visible to the fullest extent of the GAA from beaches, coastlines, and inland locations with views of the ocean with impacts to scenic and visual resources. Nighttime impacts would be reduced by implementing an aircraft detection lighting system (ADLS) on WTGs and offshore substations. The aviation warning lights would remain off until low flying aircraft enter the obstruction zone and are detected by surveillance radar, at which time the warning lights would activate. A report by Capitol Airspace Group estimated that with an ADLS system in place, the aircraft warning lights would activate for a total of 4 minutes and 46 seconds over a one-year period. Considering the local sunrise and sunset times, an ADLS-controlled obstruction lighting system could result in over a 99% reduction in system activated duration as compared to a traditional always-on obstruction lighting system.

A 3.5-mile Visual Onshore Study Area was used to review potential visibility from 7 onshore KOPs, 3 KOPs for the Brayton Point substation location and 4 KOPs for the Falmouth substation location for assessing visual impacts by the onshore substations, and onshore

export and interconnection cables. The onshore components would be sited in developed industrial and previously disturbed areas where it is feasible to introduce less visual contrast relative to the surroundings. The facilities located at Brayton Point were found to be unseen from the 3 KOPs resulting in a negligible level of impact. Impacts by the facilities located at the Falmouth site range from moderate at 1 KOP to major at the other 3 KOPs when considering the location of the sites relative to scenic resources and public viewpoints, context of the sites and surrounding land uses, visual contrast and prominence between the onshore substations, and the surrounding landscape. Some impacts will be mitigated through color treating facilities to fit into the natural color tones of the setting and by using vegetative screening at the onshore substation sites to screen views from nearby residents.

Populations affected by the offshore and onshore actions include tourists visiting and residents living in coastal communities, including low income and minority neighborhoods; recreational users of the seascape, including those using ocean beaches and tidal areas; recreational users of the open ocean, including those involved in yachting, fishing, boating, and passage on ships; recreational users of the landscape, including those using landward beaches, golf courses, cycle routes, and footpaths; tourists, workers, visitors, or local people using transport routes; people working in the countryside, commerce, or dwellings; and people working in the marine environment, such as those on fishing vessels and crews of ships.

In coordination with BOEM, SouthCoast Wind must prepare and implement a scenic and visual resource monitoring plan that monitors and compares the visual effects of the wind farm during construction and O&M (daytime and nighttime) to the findings in the COP Visual Impact Assessment and verifies the accuracy of the visual simulations (photo and video). The monitoring plan shall include monitoring and documenting the meteorological influences on actual WTG visibility over a duration of time from selected onshore key observation points, as determined by BOEM and SouthCoast Wind. In addition, SouthCoast Wind must include monitoring of the ADLS operation in the monitoring plan. The Lessee shall monitor the frequency that the ADLS is operative, documenting when (dates and time) the aviation warning lights are in the on position and the duration of each event. Details for monitoring and reporting procedures must be included in the plan (see ROD Appendix A 7.2.1)

- **NOAA Scientific Research and Surveys**[76]

  As described in Section 3.6.7.1 of the final EIS, the Lease Area overlaps current fisheries management, protected species, and ecosystem monitoring surveys conducted by or in

[76] *See* Bureau of Ocean Energy Mgmt., SouthCoast Wind BOEM 2024-0055, https://www.boem.gov/renewable-energy/state-activities/southcoast-wind-formerly-mayflower-wind

coordination with NOAA's Northeast Fisheries Science Center. NOAA Fisheries and BOEM have developed the *NOAA Fisheries and BOEM Federal Survey Mitigation Implementation Strategy - Northeast US Region* (Hare et al. 2022)[77] to address these adverse impacts.

Due to the overlap of the proposed activity with NMFS scientific surveys, BOEM is including as a condition of COP approval Term and Condition 6.3 of Appendix A of the ROD to address this issue. Consistent with NMFS and BOEM Survey Mitigation strategy actions 1.3.1, 1.3.2, 2.1.1, and 2.1.2 in the *NOAA Fisheries and BOEM Federal Survey Mitigation Implementation Strategy - Northeast US Region*, SouthCoast Wind must submit to BOEM a survey mitigation agreement between NMFS and SouthCoast Wind. The survey mitigation agreement must describe how SouthCoast Wind will mitigate the Project's impacts on the affected NMFS scientific surveys. SouthCoast Wind must conduct activities in accordance with such agreement. If SouthCoast Wind and NMFS fail to execute a survey mitigation agreement, then SouthCoast Wind must submit a survey mitigation plan to BOEM.

- **National Security and Defense**

  As explained in Section 4.6, BOEM has consulted extensively with the DoD. BOEM will include any mitigation measures identified during the consultations as conditions of the COP approval.

4.10 Consideration of (i) the Location of, and any Schedule Relating to, a Lease or Grant under this Part for an Area of the OCS, and (ii) any Other Use of the Sea or Seabed, Including Use for a Fishery, a Sealane, a Potential Site of a Deepwater Port, Navigation[78]

For a discussion on how BOEM selected the Lease Area, see Section 2.1. For a discussion on how BOEM considered potential conflicts with fisheries, sea-lanes, deepwater ports, navigation, and aviation, see Section 4.9.

[77] *See* Hare, J.A., Blythe, B.J., Ford, K.H., Godfrey-McKee, S., Hooker, B.R., Jensen, B.M., Lipsky, A., Nachman, C., Pfeiffer, L., Rasser, M. and Renshaw, K., 2022. NOAA Fisheries and BOEM Federal Survey Mitigation Implementation Strategy - Northeast US Region. NOAA Technical Memorandum 292. Woods Hole, MA. 33 pp.
[78] *See* 43 U.S.C. § 1337(p)(4)(J); 30 C.F.R. § 585.102(a)(10).

4.11 Public Notice and Comment on any Proposal Submitted for a Lease or Easement[79]

For a detailed discussion on public notice and comment opportunities associated with the issuance of Lease OCS-A 0521, please see Chapter 1 and Appendix A of the final EIS,[80] Section 5.1 of the Massachusetts EA,[81] and Section 5.1 of the revised Massachusetts EA.[82]

Before preparing the draft EIS, BOEM held three virtual public scoping meetings (on November 10, November 15, and November 18, 2021) to solicit feedback and to identify issues and potential alternatives for consideration. The topics most referenced in the scoping comments included mitigation and monitoring, marine mammals, cumulative impacts, and commercial fisheries and for-hire recreational fishing.[83] BOEM made the Scoping Summary Report available to the public on BOEM's website, and all public scoping submissions received can be viewed online at http://www.regulations.gov under Docket Number BOEM- 2021-0062.

On February 1, 2023, BOEM published an NOA for the draft EIS in the *Federal Register* consistent with the regulations implementing NEPA to assess the potential impacts of the Proposed Action and alternatives.[84] BOEM made the draft EIS available to the public on BOEM's website. The NOA commenced the public review and comment period of the draft EIS. BOEM held three virtual public hearings (November 10, 15, and 18, 2021) to solicit feedback and identify issues for consideration in preparing the final EIS. Throughout the public review and comment period, federal agencies; Tribal, state, and local governments; and the general public had the opportunity to provide comments on the draft EIS. The topics most referenced during the draft EIS comment period included air quality, climate change, commercial fisheries and for-hire recreational fishing, demographics, employment and economics, marine mammals, and scenic and visual resources. All draft EIS comment submissions received can be viewed online at http://www.regulations.gov under Docket Number BOEM- 2023-0011.

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[79] *See* 43 U.S.C. § 1337(p)(4)(K); 30 C.F.R. § 585.102(a)(11).
[80] *See* Bureau of Ocean Energy Mgmt., SouthCoast Wind BOEM 2024-0055, https://www.boem.gov/renewable-energy/southcoast-wind-final-environmental-impact-statement
[81] BOEM, OCS EIS/EA BOEM 2012-087, Commercial Wind Lease Issuance and Site Assessment Activities on the Atlantic Outer Continental Shelf Offshore Massachusetts (2012), https://www.boem.gov/sites/default/files/uploadedFiles/BOEM/BOEM_Newsroom/Library/Publications/2012/BOEM-2012-087.pdf
[82] BOEM, OCS EIS/EA BOEM 2014-603, Commercial Wind Lease Issuance and Site Assessment Activities on the Atlantic Outer Continental Shelf Offshore Massachusetts, Revised Environmental Assessment (2014), https://www.boem.gov/sites/default/files/renewable-energy-program/State-Activities/MA/Revised-MA-EA-2014.pdf
[83] https://www.boem.gov/sites/default/files/documents/renewable-energy/state-activities/Mayflower_ScopingReport_508.pdf
[84] https://www.federalregister.gov/documents/2023/02/17/2023-03271/notice-of-availability-of-a-draft-environmental-impact-statement-for-southcoast-wind-energy-llcs

On November 15, 2024, BOEM published an NOA for the final EIS in the *Federal Register*.[85] BOEM also made the final EIS available in electronic form at https://www.boem.gov/renewable-energy/state-activities/southcoast-wind-formerly-mayflower-wind. BOEM's 30-day waiting period for the final EIS closed on December 16, 2024. BOEM's responses to comments on the draft EIS are included in Appendix N of the final EIS.

4.12 Oversight, Inspection, Research, Monitoring, and Enforcement Relating to a Lease, Easement, or Right-of-Way[86]

Secretarial Order 3299, which established BOEM and BSEE, assigned safety and environmental oversight for the OCS renewable energy program to BOEM until such time as the Assistant Secretary, Land and Minerals Management (ASLM), determined that an increase in activity justified the transfer of those functions to BSEE. In December 2020, the Principal Deputy Assistant Secretary, Land and Minerals Management, acting with the authority of the ASLM, directed the transfer of safety and environmental oversight for the OCS renewable energy program from BOEM to BSEE due to increased wind energy development.[87] On September 14, 2022, DOI delegated relevant authorities to BSEE and BOEM in Departmental Manual Part 219, Chapter 1, and Part 218, Chapter 1, respectively.

On January 31, 2023, DOI published a final rule in the *Federal Register*[88] that moved portions of the existing OCS renewable energy regulations to BSEE, consistent with the Secretary's order and the Departmental Manual. Following approval of the COP, BSEE will exercise the authority to perform oversight, inspection, research, monitoring, and enforcement relating to Lease OCS-A 0521, as authorized under the lease, OCSLA, and its implementing regulations. BOEM still retains its authority for enforcing compliance, including safety and environmental compliance, with all applicable laws, regulations, leases, grants, and approved plans through notices of noncompliance, cessation orders, civil penalties, and other appropriate means.

Under this authority, BSEE and BOEM will ensure that offshore renewable energy development in Lease OCS-A 0521 is conducted safely and maintains regulatory compliance. BSEE has reviewed the proposed COP and recommended technical conditions for the design, construction, operation, maintenance, and monitoring of the Project, and for periodic review and reporting. BOEM included these technical conditions in Appendix A of the ROD as anticipated conditions of COP approval.

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[85] *See* Bureau of Ocean Energy Mgmt., SouthCoast Wind BOEM 2024-0055, https://www.boem.gov/renewable-energy/state-activities/southcoast-wind-formerly-mayflower-wind
[86] See 43 U.S.C. § 1337(p)(4)(L); 30 C.F.R. § 585.102(a)(12).
[87] "Memorandum from Principal Deputy Assistant Secretary - Land and Minerals Management on the Department of the Interior's Offshore Renewable Energy Program Roles and Responsibilities," December 22, 2020.
[88] *See* Reorganization of Title 30-Renewable Energy and Alternate Uses of Existing Facilities on the Outer Continental Shelf, 88 Fed. Reg. 6376 (Jan. 31, 2023).

5 STATUS OF THE LEASE

SouthCoast Wind is currently in compliance with all of the terms of Lease OCS-A 0521. SouthCoast Wind maintains the lease in full force and effect by virtue of annual rent payments, all of which have been timely paid.

6 FINANCIAL ASSURANCE

As required by 30 C.F.R. § 585.626(a)(17), Section 1.8 of the COP[89] contains SouthCoast Wind's statement attesting that the activities and facilities proposed in the COP are or will be covered by an appropriate bond or security as required by 30 C.F.R. § 585.516 and §§ 585.525 through 585.529. SouthCoast Wind has provided and currently maintains Surety Bond No. SUR0053613 in the amount of $100,000 and Surety Bond No. SUR0056591 in the amount of $492,164 to meet the initial lease-specific and SAP supplemental financial assurance requirements on Lease OCS-A 0521 to guarantee compliance with all terms and obligations of the lease. Before BOEM will allow SouthCoast Wind to install facilities approved in its COP, SouthCoast Wind must provide a supplemental bond or other authorized financial assurance in an amount determined by BOEM based on anticipated decommissioning costs of the proposed facilities.[90] SouthCoast Wind must also provide supplemental financial assurance to cover the additional annual rental amount for the project easement where transmission lines to shore will be located. In addition, BOEM may increase the amount of supplemental financial assurance at any time if BOEM determines it is necessary to guarantee compliance with the terms and conditions of the lease.[91]

7 CONCLUSION

Minimizing environmental impacts and interference with other uses of the OCS is integral to OCS wind energy planning, leasing, and development. Over many years, the United States Government, on behalf of the American people has, through the DOI, BOEM, and other agencies, devoted significant time and resources to identifying, analyzing, and developing strategies to mitigate potential environmental impacts and interference with other OCS uses. In 2009, OREP established and began meeting with the Massachusetts Intergovernmental Renewable Energy Task Force, and with other stakeholders and ocean users, to introduce BOEM and offshore wind. Subsequently, BOEM initiated its planning and analysis process to determine competitive interest in the area and eventually identified a WEA and prepared an EA. The EA and the associated finding of no significant impact concluded that reasonably foreseeable environmental effects associated with lease issuance, including those resulting from site

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[89] *See* SouthCoast Wind (OCS-A 0521) Construction and Operations Plan (November 1, 2024), https://www.boem.gov/renewable-energy/state-activities/southcoast-wind-formerly-mayflower-wind
[90] *See* 30 C.F.R § 585.516(a)(3)
[91] *See* 30 C.F.R. § 585.517

characterization surveys in the WEA and site assessment activities, i.e., the deployment of meteorological towers and/or buoys, would not significantly impact the environment.

In December of 2018, BOEM held a lease sale that led to the issuance of Lease OCS-A 0521 to Mayflower Wind Energy LLC, now SouthCoast Wind Energy LLC. SouthCoast submitted its COP in February of 2021, and BOEM conducted a project-specific NEPA analysis and other environmental consultations required by the ESA, MSA, and NHPA. Throughout its environmental and technical review of the COP, BOEM also coordinated with several federal agencies, including BSEE, DoD, DON, USEPA, USACE, USFWS, NOAA, EPA, NPS, and USCG. All of those reviews, consultations, and coordination efforts enabled BOEM to assess whether approval of the Preferred Alternative conforms with the OCSLA Subsection 8(p)(4) factors and BOEM's implementing regulations.

As reflected in the ROD for the Project, the Preferred Alternative, i.e., Alternative D (Nantucket Shoals) balances the goal to prevent interference with OCS uses with BOEM's duty to further the U.S. policy to make OCS energy resources available for expeditious and orderly development, subject to environmental safeguards, including the consideration of natural resources and existing ocean uses. The final EIS demonstrates that approving the Project as modified by the Preferred Alternative will have negligible to moderate adverse impacts on most resources and only the potential for major adverse impacts on (i) marine mammals (NARW), (ii) commercial fisheries and for-hire recreational fisheries, (iii) cultural resources, (iv) environmental justice, (v) scientific research and surveys, and (vi) scenic and visual resources. However, the Preferred Alternative could also have beneficial impacts on the following resources: ((i) air quality, (ii) benthic resources, (iii) birds, (iv) finfish, invertebrates, and EFH, (v) marine mammals (odontocetes and pinnipeds), (vi) sea turtles, (vii) commercial fisheries and for-hire recreational fisheries, (viii) demographics, employment, and economics, (ix), environmental justice, (x) land use and coastal infrastructure, and (xi) recreation and tourism.

The numerous consultations performed under various federal statutes, and the analysis in the final EIS, indicate that approval of the Preferred Alternative would not result in undue harm to environmental resources or in unreasonable interference with other OCS uses.[92]

Moreover, approval of the Preferred Alternative would further goals stated in Executive Order 14008, *Tackling the Climate Crisis at Home and Abroad*, by increasing renewable energy production on the OCS, "with the goal of doubling offshore wind by 2030 while ensuring robust protection for our lands, waters, and biodiversity and creating good jobs."[93]

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[92] *See* Bureau of Ocean Energy Mgmt., SouthCoast Wind BOEM 2024-0055, https://www.boem.gov/renewable-energy/southcoast-wind-final-environmental-impact-statement

[93] https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/

In conclusion, OREP has evaluated all the information that SouthCoast Wind provided in its COP and has assessed it in relation to the enumerated factors in OCSLA Subsection 8(p)(4) and the Department's implementing regulations at 30 C.F.R. part 585. Approval of the COP—as modified by the Preferred Alternative and the proposed Terms and Conditions included with the ROD—would be in accordance with the regulations at 30 C.F.R. part 585 and would ensure that all Project activities on the OCS are carried out in a manner that provides for the factors in OCSLA Subsection 8(p)(4).

APPENDIX B.1: ETRB REVIEW MEMORANDUM

United States Department of the Interior

BUREAU OF OCEAN ENERGY MANAGEMENT
WASHINGTON, DC 20240-0001

Memorandum

To: David MacDuffee
Chief, Projects and Coordination Branch

From: Jennifer Draher
Acting Chief, Engineering and Technical Review Branch

JENNIFER DRAHER
Digitally signed by JENNIFER DRAHER
Date: 2024.12.03 15:40:05 -05'00'

Subject: Review of the SouthCoast Wind Project Construction and Operations Plan (COP) for Commercial Lease OCS-A 0521

SouthCoast Wind Energy LLC (SouthCoast Wind) submitted a COP to the Bureau of Ocean Energy Management (BOEM) on February 15, 2021, for the SouthCoast Wind Project (Project) on commercial wind lease OCS-A 0521. The COP for the Project proposes the installation of the following major offshore components within 2 electrically distinct projects.[1]

- Up to 147 Wind Turbine Generators (WTG) and up to 5 Offshore Service Platforms (OSP) at a total of 149 positions allocated between Project 1 and Project 2);
    - Up to 85 WTGs for Project 1 and Project 2 individually
- Each WTG or Offshore Service Platforms (OSP) would be supported by a monopile, piled jacket, and/or suction bucket jacket foundation (a maximum of 85 suction-bucket jacket foundation locations are proposed for Project 2 only);
- Inter-array cables with an operating voltage of 60-72.5 kilovolts (kV);
- Up to (6) submarine high voltage direct current (HVDC) export cables operating at 320 kV and buried to a target depth of 3.3-13.1 feet (1-4 meters), or, in the event Project 2 interconnects at Falmouth instead of Brayton Point, Project 2 would utilize up to (5) HVAC export cables operating at 200-345 kV or up to (5) high HVDC export cables operating at 525 kV buried to a target depth of 3.3-13.1 feet (1-4 meters).

The Engineering and Technical Review Branch (ETRB) subject matter experts (SME) reviewed the proposed facilities, project design, project activities, and fabrication and installation details in the COP and coordinated with the following agencies:

- Bureau of Safety and Environmental Enforcement (BSEE) for safety (Safety Management System [SMS]), the Oil Spill Response Plan (OSRP), and the Certified Verification Agent (CVA) Nomination;
- Federal Aviation Administration (FAA) for aviation and radar interference;

[1] Project 1 refers to the development in the northern portion of the Lease Area and associated interconnection, and Project 2 refers to the development in the southern portion of the Lease Area and associated interconnection.

- National Oceanic and Atmospheric Administration (NOAA), for radar interference; and
- The United States Coast Guard (USCG), for vessel navigation, marine radar interference and Search and Rescue (SAR).

In review of the COP, ETRB SMEs used their knowledge and experience gained from past project reviews, research funded by BOEM, BSEE, and others, past projects built and operating in Europe, projects currently being built in the United States, and individual expertise to assess the information provided in the COP. ETRB determined that the technical information and supporting data submitted by SouthCoast Wind meets the requirements of 30 CFR §585.626 and 30 CFR §585.627[2] including the recent revisions to 30 CFR 585.626 and 585.627 that became effective on July 15, 2024[3]. The information requirements of the new regulations are substantially similar to the requirements of the previous regulations, which, as relevant here, were revised for clarification and to provide flexibility in the timing—not substance—of submittal of certain data. ETRB has verified that the information SouthCoast Wind submitted in its COP and updated COPs submitted during ETRB's review process, meets the information requirements under the new and previous regulations. This review is documented in BOEM's COP Review Matrix located on the Office of Renewable Energy Program's share drive at AEAU: S:\State of Massachusetts\SouthCoast Wind\OCS-A 0521\COP.

ETRB expects SouthCoast Wind to use the most current technology available for commercial production that meets or exceeds current industry standards. In some cases, this includes technologies currently in prototyping and/or working toward type certification by a recognized industry standards organization but may not yet be commercially available. ETRB has determined that the technologies proposed within the Project Design Envelope (PDE) of the COP are the same as those currently being commercial utilized or prototyped around the world and constitute the most current and advanced technologies available. ETRB has also determined that the information provided in the COP is sufficient to determine that the project proposes to use the best available and safest technology which will meet or exceed the current international industry standards.

The COP also provides a description of its proposed SMS[4], as required by 30 C.F.R. § 585.627(d). The SMS addresses health and safety risks and the policies, standards, procedures, and training to address those risks. Monitoring (including remote), shutdown capabilities, and emergency response procedures are also included. The proposed SMS, which will be finalized following any COP approval, includes a description of the processes and procedures listed in 30 C.F.R. § 285.810(a)-(f), and SouthCoast Wind's proposed implementation thereof. BOEM determined that SouthCoast Wind's proposals are consistent with acceptable industry practices and standards (i.e., best management practices). Specifically, the SMS provides that all contractors will be fully qualified to perform the roles for which they are contracted, including any prescribed safety standards and awareness training.

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[2] Where ETRB review is appropriate inclusive of 30 CFR 585.627(a)(1) and portions of 585.627(a)(8), vessel traffic.
[3] The Department of Interior published the Renewable Energy Modernization Rule on May 15, 2024, which became effective on July 15, 2024. This final rule not only finalized amendments to the Department's existing renewable regulations administered by BOEM, but also regulatory amendments previously proposed by BOEM that are now administered by BSEE. *See* 89 FR42602
[4] See SouthCoast Wind Construction and Operations Plan, Appendix Z.

OREP has consulted with BSEE and the USCG on safety requirements and best practices during the COP review process. Their recommendations and relevant requirements have been incorporated into the anticipated conditions of approval for the COP to ensure that the Project is carried out in a safe manner. Additionally, oversight of the review of future submissions (e.g., Facility Design Report [FDR] and Fabrication and Installation Report [FIR]) will allow BSEE to ensure that the "facilities are designed, fabricated, and installed in conformance with accepted engineering practices."[5]

Furthermore, ETRB and BSEE reviewed the statement of work and qualifications submitted in the COP for the CVA nomination. SouthCoast Wind nominated of DNV GL Renewables Certification USA, LLC (DNV) to be the CVA for the Project. On November 3, 2020, BOEM approved the CVA nomination. DNV will review SouthCoast Wind's FDR and FIR and must certify that the project facilities are designed, fabricated, and installed in conformance with accepted engineering practices.

As a result of these reviews and consultations, ETRB has determined the technical information and supporting data provided with the COP is sufficient to allow the safe installation of the Project on the Outer Continental Shelf (OCS), does not unreasonably interfere with other uses of the OCS, uses best available and safest technology, best management practices, and properly trained personnel, pursuant to 30 CFR §585.621(b), (c), (e), (f), and (g).

ETRB recommends approval of the COP, along with the inclusion of the following terms and conditions (T&C), provided as Appendix A – Anticipated Terms and Conditions of COP Approval to the Record of Decision (ROD), developed in consultation with BSEE, FAA, NOAA, and USCG. The T&C are derived from the review of the information requirements in BOEM's regulations and the relevant mitigation measures identified in Appendix G: Mitigation and Monitoring of the Final Environmental Impact Statement (FEIS). The table below provides a cross-reference.

#	Terms and Conditions	Regulation	Information Requirement
2.1	Munitions and Explosives of Concern/Unexploded Ordnance Investigation	§585.627(a)(1)	Hazard information – manmade hazards
2.2	MEC/UXO Investigation Survey Plan	§585.627(a)(1)	Hazard information – manmade hazards
2.3	MEC/UXO Investigation Survey Report	§585.627(a)(1)	Hazard information – manmade hazards
2.4	MEC/UXO Identification Survey Plan	§585.627(a)(1)	Hazard information – manmade hazards
2.5	MEC/UXO Identification Survey Report	§585.627(a)(1)	Hazard information – manmade hazards
2.6	MEC/UXO Discovery Notification	§585.627(a)(1)	Hazard information – manmade hazards

[5] See 30 C.F.R. § 285.705(a)(1).

#	Terms and Conditions	Regulation	Information Requirement
2.7	Munitions Response Plan for Confirmed MEC/UXO	§585.627(a)(1)	Hazard information – manmade hazards
2.8	Munitions Response After Action Report	§585.627(a)(1)	Hazard information – manmade hazards
2.9	MEC/UXO ALARP Certification	§585.627(a)(1)	Hazard information – manmade hazards
2.10	Safety Management System	§585.627(d)	Safety Management System
2.11	Emergency Response Procedure	§585.626(a)(10)(ii)	Operating procedures – accidents or emergencies
2.12	Oil Spill Response Plan	§585.627(c)	Oil Spill Response Plan
2.13	Cable Routings	§585.626(a)(5)	Cables
2.14	Cable Burial	§585.626(a)(5)	Cables
2.15	Cable Protection Measures	§585.626(a)(5)	Cables
2.16	Crossing Agreements	§585.626(a)(6) §585.626(a)(15)	Cables
2.17	Post-Installation Cable Monitoring	§585.626(a)(6) §585.626(a)(10)	Cables
2.18	Technical WTG and OSP Foundation Requirements	§585.626(b)(1)	Geotechnical investigations
2.19	Structural Integrity Monitoring	§285.824 §585.626(a)(10)	Operating procedures, self-inspections
2.20	Foundation Scour Protection Monitoring	§585.626(b)(1) §585.626(a)(10)	Overall site characterization, operating procedures
2.21	Post-Storm Event Monitoring Plan	§585.627(a)(1) §585.626(b)(4) §585.626(a)(10)	Hazard information – meteorology, oceanography
2.22	High Frequency Radar Interference Analysis and Mitigation	§585.626(a)(21)	Other information as required by BOEM
2.23	Critical Safety Systems and Equipment	§585.626(a)(18)	CVA nomination and reports
2.24	Engineering Drawings	§585.626(a)(18)	CVA nomination and reports
2.25	Construction Status	§585.626(a)(19)	Construction Schedule
2.26	Maintenance Schedule	§585.626(a)(10)	Operating procedures
2.27	Pre-lay Grapnel Run Plan	§585.626(a)(13)	Cables; Environmental Impacts
3	Navigational and Aviation Safety Conditions	§585.626(a)(21)	Other information as required by BOEM
5.3.4	Micrositing Plan(s)	§585.626(a)(13)	Environmental Impacts

#	Terms and Conditions	Regulation	Information Requirement
5.3.5	Boulder Identification and Relocation Plan	§585.627(a)(1) §585.626(a)(13) §585.626(b)(1)	Hazard Information-Shallow Geological Hazards; Environmental Impacts
5.3.6	Boulder Relocation	§585.627(a)(1) §585.626(a)(13) §585.626(b)(1)	Hazard Information-Shallow Geological Hazards; Environmental Impacts
5.3.7	Boulder Relocation Decision Protocol	§585.627(a)(1) §585.626(a)(13) §585.626(b)(1)	Hazard Information-Shallow Geological Hazards; Environmental Impacts
5.3.8	Boulder Relocation Report	§585.627(a)(1) §585.626(a)(13) §585.626(b)(1)	Hazard Information-Shallow Geological Hazards; Environmental Impacts
5.3.9	Scour and Cable Protection Plan	§585.626(a)(5) §585.626(a)(13)	Cables; Environmental Impacts