

SCW RI CRMC Category B Assent Application

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Kyle Cassidy

September 30, 2024

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September 30, 2024

Mr. Jeff Willis Executive Director Rhode Island Coastal Resources Management Council Oliver Stedman Government Center 4808 Tower Hill Road, Suite 3 Wakefield, RI 02879-1900

RE: SouthCoast Wind – Category B Assent and Freshwater Wetlands Permit Application to Rhode Island Coastal Resources Management Council (CRMC)

Dear Mr. Willis,

SouthCoast Wind Energy LLC (formerly known as Mayflower Wind Energy LLC) (SouthCoast Wind) is pleased to submit this updated application to the Rhode Island Coastal Resources Management Council (CRMC) for a Category B Assent and Freshwater Wetlands permit. SouthCoast Wind is developing an offshore wind energy generation facility in federal waters in the designated Bureau of Ocean Energy Management (BOEM) Renewable Energy Lease Area OCS-A 0521 (Lease Area) located approximately 51 nautical miles (nm) (94 kilometers [km]) southeast of the Rhode Island coast. The Lease Area is not within Rhode Island jurisdictional areas, and specifically, it is not within the Geographic Location Descriptions defined in the Rhode Island Ocean Special Management Plan.

SouthCoast Wind is developing an export cable project in Rhode Island waters to connect the Lease Area to a grid interconnection point at Brayton Point in Somerset, Massachusetts. The cable will cross through Rhode Island state jurisdictional areas as follows: Rhode Island Sound to the Sakonnet River, onshore underground crossing at Aquidneck Island in Portsmouth, Rhode Island, then into Mount Hope Bay to the Massachusetts state line.

SouthCoast Wind greatly appreciates the input and guidance we have received from the CRMC staff during biweekly and additional focused meetings since the initial Category B Assent and Freshwater Wetlands permit application was filed in February 2023. We look forward to supporting the CRMC staff's continued review of these updated application materials. At the request of the CRMC staff, SouthCoast Wind is hereby submitting a clean and redline version of the updated application, including updated attachments to support the application. The redline updates reflect the significant Project progress made since the initial submission in February 2023 and are summarized below in Table 1. This updated application reflects SouthCoast Wind's major milestone achievements with federal, state, and local agencies on consultations, federal and state permit filings and approvals, advancement of community engagements, and site control. As discussed, SouthCoast Wind believes that the updates provided in this iteration of our application will satisfy CRMC's requirements for a "complete" application determination.

Table 1. Summary of Updates to the SouthCoast Wind Category B Assent Application – September 2024

Application Section or Attachment	Significant Application Updates
Section 1 – Introduction	Change of ownership



Application Section or Attachment	Significant Application Updates
	 RI CRMC Federal Consistency Determination on December 19, 2024 RI Department of Environmental Management (RI DEM) issuance of 401 Water Quality Certificate and Marine Dredging permit on March 14, 2024 Power Purchase Agreement Award Status DEIS was issued on February 13, 2023 NPDES Application deemed complete on April 7, 2023 USFWS issued a Biological Opinion for the Project on September 1, 2023 Proposed rule under the MMPA published in the Federal Register on June 27, 2024 IHA for 2024-2025 G&G Surveys submitted July 2024 Massachusetts FEIR Certificate of EEA Secretary issued on September 15, 2023; SFEIR Certificate of EEA Secretary issued on December 15, 2023 Massachusetts 401 Water Quality Certificate issued on May 7, 2024 Somerset Final order of conditions issued on September 9, 2024 Swansea Final order of conditions issued on August 27, 2024
Section 2 – Siting and Project Design	 Additional detail provided on seabed preparation activities and communications with local stakeholders Additional information on electro-magnetic fields included
Section 3 – Affected Environment, Potential Impacts, and Proposed Avoidance, Minimization, and Mitigation	 Updated description of coastal features to include site specific data USFW concluded its ESA Consultation on September 1, 2023 and issued a Biological Opinion SouthCoast development of a Historic Properties Treatment Plan to avoid and mitigate impacts to cultural resources Independent review on the benthic and geological habitat Updated values from Hydrodynamic and Sediment Transport Model results Outline of several mutually agreed upon commitments in the RI 401 Water Quality and Dredging permit. Additional detail provided on shellfish surveys Additional information on electro-magnetic fields included Developed a comprehensive benthic monitoring plan



Application Section or Attachment	Significant Application Updates
	 NMFS completed its EFH Consultation on September 23, 2024 Updated description of aquaculture locations near the project
Section 4 – CRMP Regulatory Standards	 RI CRMC Federal Consistency Determination on December 19, 2024 RI Department of Environmental Management (RI DEM) issuance of 401 Water Quality Certificate and Marine Dredging permit on March 14, 2024 SouthCoast development of a Historic Properties Treatment Plan to avoid and mitigate impacts to cultural resources SouthCoast Wind and the Town of Portsmouth entered into a Host Community Agreement on January 19, 2024 SouthCoast Wind acquired site control in the form of Option Agreements with landowners across Aquidneck Island
Section 5 – Ocan Special Area Management Plan Regulatory Compliance	 RI CRMC Federal Consistency Determination on December 19, 2024 Update to the most recent information sessions SouthCoast development of a Historic Properties Treatment Plan to avoid and mitigate impacts to cultural resources Update to Table 5-1 of outreach entities Updated positive economic impact estimates Independent review on the benthic and geological habitat
Section 6 – RICRMC Review Criteria: Wetlands Impacts, Avoidance, Minimization and Mitigation	 Power Purchase Agreement Award Status RI Department of Environmental Management (RI DEM) issuance of 401 Water Quality Certificate and Marine Dredging permit on March 14, 2024
Attachment A – Project Figures	Updated HDD staging area at Montaup Country Club
Attachment B – Route Alternatives Assessment	No updates
Attachment C – Offshore Export Cable Engineering Drawings	No updates
Attachment D – Onshore Engineering Drawings	Updated HDD staging area at Montaup Country Club
Attachment E – Cable Burial Risk Assessment (Confidential)	No updates



Application Section or Attachment	Significant Application Updates
Attachment F – Emergency Response Plan	No updates
Attachment G – Inadvertent Release of Drilling Muds Contingency Plan	No updates
Attachment H – Photo Array	No updates
Attachment I – Wetland Field Review Technical Memorandum	No updates
Attachment J – USFWS IPAC Consultation	No updates
Attachment K – Magnetic Field Monitoring Report	No updates
Attachment L – Hydrodynamic and Sediment Dispersion Modelling Report	 Model results updated in May 2024 to more accurately reflect HDD excavation pit size and incorporate new sediment data
Attachment M – Benthic Habitat Mapping Report	No updates
Attachment N – Navigation Saftey Rick Assessment	No updates
Attachment O – Sediment Sample Grain Size Analytical Results	No updates
Attachment P – Fisheries Monitoring Plan	 Updated in October 2023 to incorporate comments from RIDEM and MADMF
Attachment Q – Coastan Hazzard Assessment and Worksheet	No updates
Attachment R – Abutters List and Mapping	No updates
Attachment S – Building Official Form	No updates
Attachment T – COP Contents	Updated to reflect most recent COP update in July 2024
Attachment U – UXO Risk Assessment (Confidential)	No updates
*Attachment V – Benthic Monitoring Plan	 New plan develop to monitor the benthic habitat before and after construction
*Attachment W – Benthic-Geological Reviews of SouthCoast ECC	 Reviews completed in November 2023 for the RI CRMC Federal Consistency Determination review
*Attachment X – Historic Properties Treatment Plan (Confidential)	New plan developed for Section 106 consultation



Application Section or Attachment	Significant Application Updates
*Attachment Y – Aquidneck Island Notice of Options	• All property notices filed with the Town of Portsmouth on April 4, 2024

Note: * Represents new attachments not included in original filings

SouthCoast Wind appreciates CRMC's consideration of this updated submittal.

Sincerely,

Jeuose

Jenifer Flood Permitting Director SouthCoast Wind Energy LLC



SouthCoast Wind 1 Project

Joint Application for a Category B Assent and a Freshwater Wetlands Permit

September 2024

Submitted to: Rhode Island Coastal Resources Management Council

Location: Rhode Island State Waters and Onshore Project Components in Portsmouth, Rhode Island

Project Proponent: SouthCoast Wind Energy LLC

Preparer: POWER Engineers, Inc.



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ATTACHMENT E - CABLE BURIAL RISK ASSESSMENT (CONFIDENTIAL)

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ATTACHMENT K - MAGNETIC FIELD MODELING REPORT

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ATTACHMENT M - BENTHIC HABITAT MAPPING REPORT

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ATTACHMENT O - SEDIMENT SAMPLE GRAIN SIZE ANALYTICAL RESULTS

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ABBREVIATION	DEFINITION		
ас	acre		
AIS	Automated Identification System		
ACI	American Concrete Institute		
ANSI	American National Standards Institute		
APC	Areas of Particular Concern		
ASCE	American Society of Civil Engineers		
BGEPA	Bald and Golden Eagle Protection Act		
BMP	Best Management Practices		
BOEM	Bureau of Ocean Energy Management		
CBRA	Cable Burial Risk Assessment		
CFCRI	Commercial Fisheries Center of Rhode Island		
C.F.R.	Code of Federal Regulations		
CGP	Construction General Permit		
CMECS	Coastal and Marine Ecological Classification System		
СОР	Construction and Operations Plan		
CRMP	Coastal Resources Management Plan		
CVA	Certified Verification Agent		
CWA	Clean Water Act		
CZMA	Coastal Zone Management Act		
DC	Direct current		
DEIR	Draft Environmental Impact Report		
DP	Dynamically Positioned		
DPU	Department of Public Utilities		
ECC	Export Cable Corridor		
EEA	Executive Office of Energy and Environmental Affairs		
EF	Electric Field		
EFH	Essential Fish Habitat		
EFSB	Energy Facilities Siting Board		
EIR	Environmental Impact Report		
EIS	Environmental Impact Statement		
EJ	Environmental Justice		
ENF	Environmental Notification Form		
EMF	Electric and magnetic field(s)		
ERP	Emergency Response Plan		
ESA	Endangered Species Act		
FAA	Federal Aviation Administration		
FAB	Fisherman's Advisory Board		
FEIR	Final Environmental Impact Report		
FEMA	Federal Environmental Management Agency		
FLO	Fisheries Liaison Officer		
FMP	Fishery Management Plan		

ABBREVIATION	DEFINITION		
ft	feet		
G&G	Geophysical & Geotechnical		
GHG	Greenhouse Gas		
GLD	Geographic Location Description		
GPS	Global Positioning System		
ha	Hectare		
НАВ	Habitat Advisory Board		
НАРС	Habitat Areas of Particular Concern		
HDD	Horizontal Directional Drilling		
HVDC	High-volage direct current		
Hz	Hertz		
IEEE	Institute of Electrical and Electronic Engineers		
IHA	Incidental Harassment Authorization		
In	Inch		
IPaC	Information for Planning and Consultation		
ISO-NE	Independent System Operator - New England		
km	kilometer		
kV	kilovolt		
Lease Area	BOEM Renewable Energy Lease Area OCS-A 0521		
LNM	Legal Notice to Mariners		
LOA	Letter of Authorization		
m	meter		
MA	Massachusetts		
MA BUAR	Massachusetts Board of Underwater Archaeological Resources		
MA CZM	Massachusetts Office of Coastal Zone Management		
MA DMF	Massachusetts Division of Marine Fisheries		
MA DPH	Massachusetts Department of Public Health		
MA DPU	Massachusetts Department of Public Utilities		
MA ESFB	Energy Facilities Siting Board		
MARA	Marine Archaeological Resources Assessment		
MA/RI WEA	Massachusetts/Rhode Island Wind Energy Area		
MassDEP	Massachusetts Department of Environmental Protection		
MassDOT	Massachusetts Department of Transportation		
MassWildlife	Massachusetts Division of Fisheries and Wildlife		
MBTA	Migratory Bird Treaty Act		
MEPA	Massachusetts Environmental Policy Act		
MF	Magnetic field		
mG	milligauss		
МНС	Massachusetts Historical Commission		
MHW	Mean High-Water		
mi	Mile		

ABBREVIATION	DEFINITION		
MLA	Massachusetts Lobstermen's Association		
mm	Millimeters		
MMPA	Marine Mammal Protection Act		
MSIR	Marine Site Investigation Report		
MW	Megawatt		
NAAQS	National Ambient Air Quality Standards		
NAD	North American Datum		
NBPA	New Bedford Port Authority		
NEPA	National Environmental Policy Act		
NESC	National Electric Safety Code		
NHESP	Natural Heritage and Endangered Species Program		
NHPA	National Historic Preservation Act		
nm	nautical mile		
NMFS	National Marine Fisheries Service		
NOAA	National Oceanographic and Atmospheric Administration		
NOI	Notice of Intent		
NPDES	National Pollutant Discharge Elimination System		
NEPA	National Environmental Policy Act		
NESC	National Electric Safety Code		
NRHP	National Register of Historic Places		
NSRA	Navigation Safety Risk Assessment		
NWI	National Wetlands Inventory		
0&M	Operations & Maintenance		
Ocean Winds	Ocean Winds North America LLC		
OCS	Outer Continental Shelf		
OREI	offshore renewable energy installations		
OSHA	Occupational Safety and Health Administration		
OSP	Offshore Substation Platform		
OSRP	Oil Spill Response Plan		
PAL	Public Archaeology Laboratory		
PNF	Project Notification Form		
POI	Point of Interconnection		
POWER	POWER Engineers Consulting, PC		
PPA	Power Purchase Agreement		
REIC4	Rhode Island Executive Climate Change Coordinating Council		
RI	Rhode Island		
RICR	Rhode Island Code of Regulations		
RI CRMC	Rhode Island Coastal Resources Management Council		
RIDEM	Rhode Island Department of Environmental Management		
RI DFW	RIDEM Division of Fish and Wildlife		
RI DMF	Rhode Island Division of Marine Fisheries		

ABBREVIATION	DEFINITION		
RIDOT	Rhode Island Department of Transportation		
RI EFSB	Rhode Island Energy Facilities Siting Board		
R.I.G.L.	Rhode Island General Laws		
RIGIS	Rhode Island Geographic Information System		
RIHPHC	Rhode Island Historical Preservation and Heritage Commission		
RIPDES	Rhode Island Pollution Discharge Elimination System		
RI PUC	Rhode Island Public Utilities Commission		
ROSA	Responsible Offshore Science Alliance		
ROV	Remote Operated Vehicle		
ROW	Right-of-Way		
RWSC	Regional Wildlife Science Collaborative		
RWU	Roger Williams University		
SAMP	Special Area Management Plan		
SAP	Site Assessment Plan		
SAV	Submerged aquatic vegetation		
SESC	Soil Erosion and Sediment Control		
SGCN	Species of Greatest Conservation Need		
Shell New Energies	Shell New Energies US LLC		
SHPO	State Historic Preservation Office		
SMS	Safety Management System		
SouthCoast Wind	SouthCoast Wind Energy LLC		
SWPPP	Stormwater Pollution Prevention Plan		
TARA	Terrestrial Archaeological Resources Assessment		
ТНРО	Tribal Historic Preservation Office(r)		
ТЈВ	transition joint bay		
TMDL	Total Maximum Daily Load		
ТОҮ	Time of Year		
TSS	Total Suspended Solids		
UDP	Unanticipated Discovery Plan		
μg/L	micrograms per liter		
USACE	United States Army Corps of Engineers		
U.S.C.	United States Code		
USCG	United States Coast Guard		
USDOT	United States Department of Transportation		
USEPA	United States Environmental Protection Agency		
USFWS	United States Fish and Wildlife Service		
USGS	United States Geological Survey		
UXO	Unexploded Ordnance		
VMS	Vessel Monitoring System		
VTR	Vessel Trip Report		
WTG	Wind Turbine Generator		

ABBREVIATION	DEFINITION	
WQC	Water Quality Certification	
WQR	RIDEM Water Quality Regulations (250-RICR-150-05-1)	
XLPE	Cross-linked polyethylene	
YOY	young-of-the-year	

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State of Rhode Island and Providence Plantations Coastal Resources Management Council Oliver H. Stedman Government Center 4808 Tower Hill Road, Suite 3 Wakefield, RI 02879-1900

(401) 783-3370 Fax (401) 783-2069

APPLICATION FOR STATE ASSENT

To perform work regulated by the provisions of Chapter 279 of the Public Laws of 1971 Amended.

					File No. (CRMC USE ONLY)
Project Location	RI State Waters and Portsmouth, RI				
	No.	Street	City/Town		
					Plat: 8, 13, 19, 25
Owner's Name	SouthCoast Wind Energy, LLC.		Lot(s): 25-50, 25-1, 19-89, 8-1, 13-6		
	101 Endoral	Street 10th Elec	r Boston MA	02110	Owner's Contact:
Mailing Address			I BOSION, MA	02110	Number: 978-501-6469
	Address	C	City/Town, State	Zip Code	Email Address: erin.healy@southcoastwind.com
					Email address:
Contractor RI Re	eg. #	Address			Tel. No.
POWER Designer James Du	Engineers, Inc. c/o urand	2 Ha Address MA	mpshire Street Fo	xborough,	Tel. No. 774-643-1829
Name of Waterway Rhode Island Sound, Sakonnet River, Mount Hone Bay			Estimated Project Cost (EPC): Provided under separate cover		
				lopo Bay	Application Fee: Provided under separate cover
Provide Below a Description of Work As Proposed (<i>required</i>).					
SouthCoast Wind proposes to develop and build an electric interconnection Project (SouthCoast Wind 1) from an offshore wind generation facility under development in federal waters. A portion of the Project's export cables traverse Rhode Island state waters (RI Sound, Sakonnet River and Mt. Hope Bay) making intermediate landfall on Aquidneck Island in Portsmouth, RI, crossing underground across Portsmouth and exiting into Mount Hope Bay, ultimately making landfall at Brayton Point in Somerset. Massachusetts, All project					

components are detailed within the included Project narrative and supporting application and documentation.

Have you or any previous owner filed an application for and/or received an assent for any activity on this property? (If so please provide the file and/or assent numbers): No

Is this site within a designated historic district?

Is this application being submitted in response to a coastal violation? **OYES**

If YES, you must indicate NOV or C&D Number:

OYES

 \bigcirc NO \bigcirc NO

Name/mailing addresses of adjacent property owners whose property adjoins the project site. Accurate mailing addresses will

insure proper notification. _____Applicant must initial to certify accuracy of adjacent property owners and accuracy of mailing addresses. See attachments for abutter's list

STORMTOOLS (<u>Http://www.beachsamp.org/resources/stormtools/</u>) is a planning tool to help applicants evaluate the impacts of sea level rise and storm surge on their projects. The Council encourages applicants to use STORMTOOLS to <u>help them</u> <u>understand the risk that may be present at their site and make appropriate adjustments to the project design.</u>

NOTE: The applicant acknowledges by evidence of their signature that they have reviewed the Rhode Island Coastal Resources Management Program, and have, where possible, adhered to the policies and standards of the program. Where variances or special exceptions are requested by the applicant, the applicant will be prepared to meet and present testimony on the criteria and burdens of proof for each of these relief provisions. The applicant also acknowledges by evidence of their signature that to the best of their knowledge the information contained in the application is true and valid. If the information provided to the CRMC for this review is inaccurate or did not reveal all necessary information or data, then the permit granted under this application may be found to be null and void. Applicant requires that as a condition to the granting of this assent, members of the CRMC or its staff shall have access to the applicant's property to make on-site inspections to insure compliance with the assent. This application is made under oath and subject to the penalties of perjury. 08/04

Francis Slingsby, CEO, SouthCoast Wind Energy LLC

1	C Doodolgilea by:			
	Francis	Slinas		

Owner Name (PRINT)

Owner's Signature (SIGN) PLEASE REVIEW REVERSE SIDE OF APPLICATION FORM

STATEMENT OF DISCLOSURE AND APPLICANT AGREEMENT AS TO FEES

The fees which must be submitted to the Coastal Resources Management Council are based upon representations made to the Coastal Resources Management Council by the applicant. If after submission of this fee the Coastal Resources Management Council determines that an error has been made either in the applicant's submission or in determining the fee to be paid, the applicant understands that additional fees may be assessed by the Coastal Resources Management Council. These fees must be paid prior to the issuance of any assent by the Coastal Resources Management Council.

The applicant understands the above conditions and agrees to comply with them.

Docusigned by: Francis Slingsby 4758423DE94E469... Owner Signature

2/13/2023

Date

Francis Slingsby, SouthCoast Wind Energy, LLC, 101 Federal Street, 19th Floor, Boston, MA Print Name and Mailing Address

/ajt 03-2020

NOTICE TO APPLICANTS

The Coastal Resources Management Council regulations require that the following <u>must</u> accompany every application otherwise these applicants will be deemed incomplete and <u>returned</u>.

ALL OF THE FOLLOWING REQUIRED APPLICATION DOCUMENTS <u>MUST BE ORGANIZED INTO THREE</u> (3) ASSEMBLED PACKETS WHEN SUBMITTED TO BE CONSIDERED A COMPLETE APPLICATION

PLEASE NOTE When submitting large scale plans, Three (3) physical copies as well as one (1) <u>digital copy</u> (sent via email to cstaff1@crmc.ri.gov) are both <u>REQUIRED</u>. This is for submitting <u>new</u> applications as well as any <u>revisions</u> or <u>modifications</u> made.

 Three paper copies of completed application form including plans are required. If the project requires a type "B" or involves work in the waterway, plans must be 8 1/2" x 11". If the project is type "P" or Prohibited, a Special Exception form will be required, staff will provide you with the necessary forms. Electronic Copy of Application required – please email to: CStaff1@crmc.ri.gov

For Formal Applications (Category B): Site Plans must also be submitted in PDF format and if possible, application materials as well in PDF format.

- 2. Application fee <u>Please have a currently dated check</u>. Checks older than 2 weeks will not be accepted. (see attached CRMC Fee Schedule for Application fee amount).
- 3. **Proof of Ownership**. The CRMC requires a letter from the local tax assessor stating ownership of the property. If ownership of property entails an HOA, Neighborhood Association, Corporation, LLC, Fire District, etc please provide documentation permitting applicant to act as representative/signatory.
- 4. A completed and signed **CRMC Building Official letter** stating that a building permit will be issued upon receipt of a CRMC permit, with the exception of recreational boating facilities.
- 5. Supply **photos of coastal feature construction site**.

In addition, where these additional items are applicable, they are also required:

- a) Affirmation that the proposed structure will be serviced by municipal sewers. (For large projects, local community approval and construction details of the tie-in are required).
- b) An approved Onsite Wastewater Treatment System (OWTS) permit from DEM/OWTS, 291 Promenade Street, Providence, RI, 02908; phone (401) 222-2306.
- c) An approved "Change of Use" permit from DEM/OWTS is required in un-sewered areas when an increase in the number of bedrooms, an increase in "flow units", or a change from season to year-round use is proposed.

Your application receives a thorough review by our staff biologists and engineers during which they may require additional information to complete their review. If this becomes necessary you will receive a separate information request form.

You are urged during this process to be as complete as you can in fulfilling all informational requirements. In addition, you are also urged to adhere as closely as you can to all the Coastal Resources Program requirements. Failure to do so could cause delays in processing your application.

We thank you for your cooperation in this matter and look forward to working with you in protecting our coastal environment.

<u>CRMC FEE SCHEDULE</u> (CURRENT DATED CHECK OR MONEY ORDER ONLY)

Project Description	Description/Comments	Fee	
Residential Boating Facility	New Facility	\$1,500.00	
New Structural Shoreline	First 100 linear feet	\$1,500.00	
Protection Facility	Each additional linear foot	\$15.00/ft	
Residential Development Project	First 6 units/lots	\$3,500.00	
(condominiums, subdivisions,	Each additional unit/lot	\$400.00	
paper subdivisions, etc.)	Infrastructure (roads, drainage, etc.)	(.005 * EPC)	
Review of units/lots within a	Submitted in accordance with all	1/2 of the All Others fee	
Council approved Subdivision	Council conditions/stipulations		
Buffer Zone Alterations and	For areas less than or equal to 1 acre	\$100.00	
Management Plans	For areas between 1 and 5 acres	\$250.00	
	For areas greater than 5 acres	\$500.00	
Onsite Wastewater Treatment Systems (OWTS) with new construction	New Construction	All Others Fee	
OWTS Repair or Alteration Only	Repair Alterations	Single Family Home \$80.00	
		All Other \$105.00	
All Others Fee (includes Section 320	Based on Estimated Project Cost:		
reviews)	EPC is less than or equal to \$1,000	\$50.00	
, ,	EPC Between \$1,000.01 - \$2,500	\$100.00	
	\$2,500.01 - \$5,000	\$150.00	
	\$5,000.01 - \$10,000	\$200.00	
	\$10,000.01 - \$25,000	\$250.00	
	\$25,000.01 - \$50,000	\$500.00	
	\$50,000.01 - \$100,000	\$750.00	
	\$100,000.01 - \$150,000	\$1,000.00	
	\$150,000.01 - \$200,000	\$1,250.00	
	\$200,000.01 - \$250,000	\$1,500.00	
	\$250,000.01 - \$300,000	\$1,750.00	
	\$300,000.01 - \$350,000	\$2,000.00	
	\$350,000.01 - \$400,000	\$2,250.00	
	\$400,000.01 - \$450,000	\$2,500.00	
	\$450,000.01 - \$500,000	\$2,750.00	
	\$500,000.01 - \$20,000,000	(\$2,750.00 + .005 * EPC	
		beyond \$500,000.00)	
	EPC greater than \$20,000,000	(\$100,250.00 + .0025 * EPC	
		beyond \$20,000,000)	

EPC = *Estimated Project Cost. The EPC shall include all costs associated with site preparation (e.g., earthwork, landscaping, etc.) sewage treatment (e.g., cost of OWTS, sewer tie-ins, etc.) and construct costs (e.g., materials, labor, and installation of all items necessary to obtain a certification of occupancy).*

Preliminary Determinations	Fee
Individual residential homeowner/potential homeowner	\$150.00
All other projects (e.g., subdivisions, commercial, industrial, etc.)	\$1,000.00
Jurisdictional determinations	\$100.00
Jurisdictional Determination for Individual Lot Development of Residential Properties Adjacent to New Sewer Lines that no longer require an ISDS for Development	\$25.00
Coastal Feature verification	\$300.00
Other Fees	Fee
Single Family Residence Assent Renewal/Extension	\$75.00
All Other Assent Renewal/Extension	\$250.00
Modification-Single Family Residence w/no public hearing	\$100.00
Modification of under 50% of a recreational boating facility	\$250.00
All other Modification Requests	All Other fee or \$250.00 whichever is greater
Lightering Permits	\$250.00
Beach Vehicle Permits: Rhode Island registration Out-of-State registration	\$100.00 \$200.00
Declaratory Rulings	\$1,000.00
Petitions for regulation changes	\$1,000.00
Contested cases with sub-committee hearings	Applicant pays all costs of hearing process
Temporary Dock Application	\$100.00
Dock Registration	\$20.00
Transatlantic Cable Fee (effective August 16, 2012) One time fee per inactive cable	\$40,000 per year \$2,500.00

Administrative Fees for Activities which have occurred without a valid CRMC Approval

1. Administrative Reviews

All such activities will be assessed an application fee based on above plus:

- a) Illegally constructed structures and unauthorized activities located in tidal waters and/or on adjacent coastal or shoreline features (See 650-RICR-20-00-1.2 and § 1.2.2) shall be assessed **\$500.00** administrative fee;
- b) Illegal activities excluding those classified as maintenance activities under the RICRMP shall be assessed a **\$250.00** administrative fee; and,
- c) Unauthorized maintenance activities shall be assessed a **\$100.00** administrative fee.
- 2. Applications before the Council
 - a) In accordance with Council regulations, all activities or alterations which have already occurred, or have been constructed or partially constructed without a Council Assent shall be subject to the fee schedule contained in Management Procedures: 650-10-00-1 § 1.4.7. In addition, the Council shall assess an appropriate administrative fee based on a recommendation by the Executive Director. The recommended administrative fee shall take into account the impact on coastal resources, additional demand on Council resources, and hardship on an applicant (see 650-RICR-20-00-1 § 1.1.12).

<u>Hardships</u>

Where an applicant can demonstrate that the fee schedule described herein presents an undue hardship, the Council may adjust the application fee, administrative fee, and/or contested case fees.

* NOTE: All fees are Summative. In addition, all fees are filing fees and non-refundable.

**NOTE: Applicants should consult Section 1.4 of the CRMC's Management Procedures -- 650-10-00-1 -- for a more detailed description of the CRMC's fee schedule.



State of Rhode Island Coastal Resources Management Council Oliver H. Stedman Government Center 4808 Tower Hill Road, Suite 3 Wakefield, RI 02879-1900

COASTAL RESOURCES MANAGEMENT COUNCIL ASSENT CHECK LIST

X Photo(s) of project site and adjacent area (minimum size 3 x 5, maximum size "8 x 10")

<u>x</u> Application Fee in the form of CHECK or MONEY ORDER <u>ONLY</u> (See CRMC Fee Schedule)

$\underline{\mathbf{X}}~(l)$ Four Copies of completed application form

- _ For location no., provide street address, utility pole number(s) of the property
- Obtain the name of the waterway from a USGS topography map (reduction of such maps are found ln the RICRMP). If in doubt, leave this blank.
- For extensions of riparian boundary lines, this refers to the owner's riparian area which one may, pending state and federal permits, construct piers, dock, etc. if these lines have been established by the City/Town courts, legal agreement, etc., so indicate. If these lines have not been established, indicate "no". If unsure, leave blank.
- _ Be complete and concise in the description of the work proposed. The written description must describe completely all work reflected in the submitted plans. This concise written description is essential in order to put the project out to public notice.
- (2) **Proof of property ownership**. The CRMC requires a letter from the local tax assessor stating ownership of the property. Note that the current owner must file the application, although a potential purchaser may file if a valid sales agreement is also submitted. (See SouthCoast Wind cover letter)

(3) Sewage Disposal permit

(a) Affirmation that the proposed structure(s) will be serviced by municipal sewers.

(For large projects, local community approval and construction details of the tie-in are required).

- (b) An approved individual Sewage Disposal System (ISDS) permit from DEM/ISDS. Also the approved stamped plans, 235 Promenade Street, Providence, Rhode Island 02908. Phone 401-222-2306.
- (c) An approved "Change of Use" permit from DEM/ISDS is required in unsewered areas when an increase in the number of bedrooms, an increase in "flow units", or a change from seasonal to year-round use is proposed.
- _____ (d) For subdivisions, a subdivision review opinion from DEM/ISDS is required.

\underline{x} (4) Local approval.

- (a) A copy of the local building permit or CRMC Building Official Form from the local building official stating that a building permit will be issued upon receipt of a CRMC permit (form attached).
 (b) For subdivisions, the approval of the local planning board must be submitted.
- (b) For subdivisions, the approval of the local planning board must be submitted.
- \underline{X} (5) Location map: Indicate adjacent street(s), nearest utility pole(s), north arrow, scale, and waterway. This map must be able to be used for direction to the site, as well as for locating site on an aerial photograph. (If possible, include this map in a corner of the 8 ¹/₂" x 11" site plan (see below). Use of both a section of the local plat map and a section of USGS topography chart of street guide is suggested.

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<u>x</u> (6) **RICRMC Coastal Hazard Application WORKSHEET**

The list of projects below must complete the RICRMC Coastal Hazard Application WORKSHEET to be filed in addition to and with your standard CRMC application (http://www.crmc.ri.gov/applicationforms.html).

Any of the following **new projects**, including tear downs and rebuilds, located on a coastal feature or within the 200-foot contiguous area:

- _____construction of new residential buildings as defined in § 1.1.2;
- _____construction of new commercial and industrial structures as defined in § 1.1.2
- _____construction of new beach pavilions as defined in § 1.1.2;
- _____construction of any new private or public roadway, regardless of length;
- <u>x</u> construction of any new infrastructure project subject to §§ 1.3.1(F), (H), and (M); and
- _____construction of any new subdivisions with six (6) or more lots, any portion of which is within 200 feet of a shoreline feature.

Any of the following **modifications to existing projects**, including tear downs and rebuilds, located on a coastal feature or within the 200-foot contiguous area:

- ____any expansion of existing commercial structures over tidal waters;
- any expansion greater than 600 square feet to existing residential, commercial, industrial or beach pavilion structures;
- _____second story additions greater than 600 square feet to any existing residential, commercial, industrial or beach pavilion structures; and
- any modification to existing residential, commercial, industrial or beach pavilion structures when such structures are located within the CRMC minimum setback specified by § 1.1.9.

<u>See Section 1.1.6 (I)</u> of the Rhode Island Coastal Resources Management Program for specific regulatory requirements for the coastal hazard analysis application requirements:

http://www.crmc.ri.gov/regulations/RICRMP.pdf.

\underline{X} (7) Site plans.

- ^x (a) Four (4) copies of all site plans are required. Plans must be to scale. The scale must be no smaller than 1" = 50'. Larger scale plans such as 1" = 20', 1" = 30' or 1" = 40' are preferred. All site plans must have a title block which includes the project title (with name, street and town), sheet number, designer and final revision date on each and all sheets. Plan sheet subtitles such as "sediment and erosion control plan", "grading and utility plan", etc.; must also include the overall project title for the plan set such as "Proposed Residential Development Plan for John Smith, Seaside Avenue, Narragansett, RI". Plans which include multiple sheets with different revision dates must have a cover sheet which list the plans included in the plan set with a final cover sheet revision date for the plan set in total. Where plan revisions occur during the CRMC review for projects with multiple plan sheets, a final plan set may be requested with a final cover sheet revision date prior to assent issuance.
- <u>x</u> (b) If the project requires a Category "B" application as identified in the coastal program, requires a variance or special exception or involves work in the waterway or on the immediate shoreline, plans reduced to 8 l/2" x 11" must also be provided. Use of more than one sheet to delineate the project is acceptable. Note: When Plans are larger than 8 l/2" x 11" a graphic scale must be provided.
- x (c) Complete property boundary lines must be shown on at least one plan view.
- $\overline{\mathbf{X}}$ (d) Include a north arrow (indicate whether magnetic or true north is used).
- \underline{x} (e) Show abutting street(s), with nearest utility pole number(s). Also, show distance and direction to nearest intersection.
- <u>x</u> (f) Show location of all coastal (shoreline) features and feature boundaries (ref. section 1.2.2 of RICRMP): ***reasonable attempt by applicant must be made***
 - ____ top of seawall

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- ____ top of bedrock ledge, cliff, bluff, or coastal bank
- _____ top of dune, beach scarp
- \underline{X} inland edge of beach
- \underline{x} inland edge of coastal/contiguous wetlands
- ^X_(g) Locations of pertinent existing underground feature such as:
 - ____ ISDS: cesspools, septic tanks, leach fields
 - _____ sanitary sewer lines
 - ^x drainage pipes/culverts
 - _____ water lines/wells
 - _ underground utilities, tanks, etc.
- (h) Location of pertinent existing surface features, such as:
 - ____ walls, seawalls, groins, jetties
 - ____ piers, docks, boat ramps
 - ____ buildings
 - fences
 - $\underline{\mathbf{x}}$ driveways, parking areas
 - \underline{x} streams, drainage swales
 - $\underline{\mathbf{x}}$ edge of vegetated areas.
- \underline{X} (i) Mean High Water (MHW) line
- \underline{x} (j) Mean Low Water (MLW) line
- <u>x</u> (k) Existing and proposed elevation contours. The reference datum must be indicated *Preferable datum planes*
 - ____ MSL Mean Sea Level Used for most upland projects.
 - ____ MHW Mean high Water
 - <u>x</u> MLW Mean Low water Used for dredging and pier/dock applications
 - ____ Note: If no grade changes are proposed, specifically indicated this on a plan
 - ____ Note: If an assumed datum is used, its conversion to MSL datum must be provided
- X (1) Indicate all areas which will be altered (temporarily or permanently), by the construction activities, as well as areas to be subsequently altered for landscaping, etc. Include areas altered by clearing, grading, stockpiling, cutting of vegetation, etc.
- X (m) Indicate all temporary and permanent erosion/sediment controls (staked hay bales, log & hay dams, loam & seeded areas, mulch, riprap and plantings).
- $\underline{\mathbf{x}}$ (n) Indicate all proposed work:
 - ____ buildings
 - ____ piers, docks, ramps, etc.
 - _____ driveways and parking areas (show type of surface i.e., asphalt, crushed stone, etc.)
 - __ ISDS
 - ____ stormwater management practices
 - ____ other____
- (o) Provide calculations for stormwater management volumes, if applicable
- (p) Provide calculations for structural lot coverage, if applicable
- X (8) Cross sections for wall and fill projects must indicate both the existing and proposed cross section. The scale should not be exaggerated unless absolutely necessary as a true graphical representation of slope, etc. is desired.

- X (9) Details and specifications. Refer to the RICRMP for the standards required for the type of project being proposed. It is advised that these be included, either in written form or by dimensions on the submitted plans. Other information which is necessary includes the amount of materials to be used, volume of excavation/dredging proposed, methods of construction, times of construction, start and completion, etc. Page 4 Assent Check List
- ^X (10) Written requirements of RICRMP: (For Category "B" Applications)
 - (a) Address items in section 1.3.1(A) in writing.
 - ____ (b) Review appropriate sections of RICRMP
 - ____ (c) Request any and all variances and special exceptions required
- \underline{X} (11) Provide separately in writing, or in the written description, information regarding:
 - (a) the areas expected to be impacted during construction, access routes, etc
 - (b) pertinent time of construction information, such as anticipated duration of construction, expected start of construction etc.
 - (c) construction methods, expected type of equipment to be used etc.
 - (d) information on any and all utilities to be installed (electric lines, fuel oil storage tanks, etc.)
 - ____ (e) Information regarding any and all intentions for provisions for pedestrian access to the shore.

 $\underline{n}/a(12)$ Refer to checklist addenda for specific types of projects:

- (a) Dwelling additions
- (b) New and substantially improved dwellings & ISDS
- ____ (c) Dwellings/buildings in velocity flood zones.
- ____ (d) Residential piers and docks.
- (e) Drainage projects
- ____ (f) Dredging projects
- (g) other: see CRMC staff for assistance.
- X (13) Please provide address and/or phone numbers of contact person(s) who will be able to answer any questions regarding this application
- \underline{x} (14) Please provide address and/or phone numbers of contact person(s) who should be contacted by CRMC should questions regarding monitoring and permit compliance arise during construction.
- ^X(15) Please provide the names and contact information (address, phone, and email) of owners of abutting properties. (See attached abutters list and mapping)
- (16) Note: All proposals are forwarded to the Rhode Island Historical Preservation and Heritage Commission for review and comment in accordance with Section 1.2.3 of the RICRMP. In some cases, the applicant may be required to submit the results of an archaeological assessment survey in order to document the presence or absence of significant archaeological sites. If the proposed development would damage a significant historical or archaeological resource, the Council may require modification of, or prohibit the proposed action. For additional information, you may contact the Rhode Island Historical Preservation and Heritage Commission directly. Environmental Review Coordinator, 150 Benefit Street, Providence, Rhode Island 02903. Telephone: (401) 222-2968.



State of Rhode Island Coastal Resources Management Council Oliver H. Stedman Government Center 4808 Tower Hill Road, Suite 3 Wakefield, RI 02879-1900

FRESHWATER WETLANDS IN THE VICINITY OF THE COAST APPLICATION PACKAGE

THIS APPLICATION PACKAGE IS PROVIDED TO AID YOU IN COMPLETING YOUR FRESHWATER WETLAND IN THE VICINITY OF THE COAST APPLICATION. PLEASE READ THIS ENTIRE PACKAGE PRIOR TO COMPLETING THE APPLICATION.

This application package contains general information necessary to complete any application submitted to CRMC Freshwater Wetlands in the Vicinity of the Coast program. The applicant should refer to the Rules and Regulations for the Protection and Management of Freshwater Wetlands in the Vicinity of the Coast (650-RICR-20-00-9, effective July 1, 2022) and the CRMC's Management Procedures (650-RICR-10-00-1) for specific requirements and criteria as well as for a detailed explanation of the CRMC's practices and procedures for individual application types.

Please note that the application form and all supporting documentation must be **mailed** <u>**DIRECTLY TO**</u> the Coastal Resources Management Council, 4808 Tower Hill Road, Suite 3, Wakefield RI 02879.

All applications require a fee. Please refer to the general fee requirements and fee schedule herein. All fees must be paid by check or money order made payable to the "Coastal Resources Management Council" or "CRMC."



State of Rhode Island Coastal Resources Management Council Oliver H. Stedman Government Center 4808 Tower Hill Road, Suite 3 Wakefield, RI 02879-1900

APPLICATION FOR A FRESHWATER WETLANDS DETERMINATION OR PERMIT

PART A - APPLICATION TYPE:		File No. (CRMC USE ONLY)		
□ Request to Determine the Presence of Jurisdiction	onal Area [650-RICR-20-00-9.9.2]			
Request to Verify Wetland Edges [650-RICR-20	<u>)-00-9.9.3]</u>			
New Freshwater Wetlands Permit [650-RICR-20-	00-9.11]			
□ with Variance				
Application for Significant Alteration [650-RICR	-20-00-9.12]			
Permit Modification [650-RICR-20-00-9.14.3] -	Existing Permit #:	Application Fee:		
PART B - APPLICANT INFORMATION AND CER application or must be the government agency or entity with power of	CATIFICATION (Note: The applicant must be the owner of condemnation over such property or easement):	of the property or easement which is the subject of this		
Name of Applicant: SouthCoast Wind Energy LLC	<u>.</u>			
Name and Title of Representative (if Applicant is an Orga	anization): Jennifer Flood, Permitting	Director, SouthCoast Wind		
Applicant's Mailing Address: 101 Federal Street, S	Suite 1900			
Str	eet Number and Name or P.O. Box			
Boston	MA	02110		
City/Town	State	Zip Code		
Applicant's Email Address: iennifer.flood@southco	astwind.com Applicant's Phone N	Jumber: 978-501-6469		
STATEMENT OF DISCLOSURE AND APPLICAN	ΓAGREEMENT AS TO FEES·			
The fees which must be submitted to the Coastal Resources M	Anagement Council are based upon re presentation	s made to the Coastal Resources Management		
Council by the applicant. If after submission of this fee the Coa	stal Resources Management Council determines that	an error has been made either in the applicant's		
submission or in determining the fee to be paid, the applicant	understands that additional fees may be assessed by	the Coastal Resources Management Council.		
These fees must be paid prior to the issuance of any assent by	the Coastal Resources Management Council. The a	pplicant understands the above conditions and Phode Jeland Coastel Resources Management		
Program and have where possible adhered to the policies and	standards of the program. Where variances or species	al exceptions are requested by the applicant, the		
applicant will be prepared to meet and present testimony on the	e criteria and burdens of proof for each of these relie	f provisions. The applicant also acknowledges		
by evidence of their signature that to the best of their knowled	ge the information contained in the application is tru	he and valid. If the information provided to the		
CRMC for this review is inaccurate or did not reveal all necess	sary information or data, then the permit granted und	ler this application may be found to be null and		
void. Applicant requires that as a condition to the granting of to on-site inspections to insure compliance with the assent. This	application is made under oath and subject to the pe	have access to the applicant's property to make		
on site inspections to insure compliance with the assent. This	apprication is made under outri and subject to the pe	nuices of porjury.		
Junger that				
	02/24/202	23		
Applicant's Signature	Date (mm	/dd/yyyy)		
If more than one property owner is applying, please use	the Supplemental Document: Additional App	licant Information and Certification		
Primary City/Town:	Street Abutting Site, with Address (if applicable):			
Portsmouth, RI	RI state waters, RI Sound, Sakonnet	River, Mount Hope Bay		
Nearest Intersecting Street:				
0 Boyds Lane, 0 Park Avenue, 500 Anthony Road				
	Distance (in feet) and Direction to Property from n	earest street intersection:		
N/A				
Tax Assessor's Plat(s) and Lot Number(s):	Closest Utility Pole Number:			
8, 13, 19, 25 and 25-50, 25-1, 19-89, 8-1,13-6				
Has a Freshwater Wetlands application been previously submitted for this property?				
mas a meshwater wettands application been previously sub-		If yes, Previous Permit Application #		
Have there been provious anforcement actions for this prope	$\nabla \mathbf{V}_{22}$			
mave there been previous enforcement actions for this prope		If yes, Previous Enforcement Action File #		

PART D - PROJECT INFORMATION (Note: The Interactive GIS Map can provide helpful information for answering some of the below questions)	
Within which river buffer zone region is the site located? Urban Region Region 1 Region 2	
Will the project alter Freshwater Wetlands?	No Ves If ves so ft See below ¹
Will the project alter Watercourse?	$\overrightarrow{\mathbf{N}} \qquad \overrightarrow{\mathbf{N}} \qquad \overrightarrow{\mathbf{V}} \qquad \overrightarrow{\mathbf{V}} \qquad \overrightarrow{\mathbf{V}} \qquad \overrightarrow{\mathbf{N}} \qquad \overrightarrow{\mathbf{V}} \qquad \mathbf{$
Is the project located within a Drinking Water Supply Reservoir Watershed (DWSRW)?	No Yes If yes, sq. ft.
Is the project located within a Natural Heritage Area?	\checkmark No \square Yes See below ²
Have rare wetland types or rare species been documented? Does the project propose any of the following: New or increased impervious cover for property other than a single-family home? Disturbance of more than 10,000 sq. ft. of existing impervious cover? Fill in any amount of floodplain or alter storm flowage to a river, stream, or wetland on any lot? <i>If yes to any, please contact RIDEM Office of Water Resources for additional guidance.</i>	No Yes No Yes No Yes No Yes Yes Yes Yes Yes
Does this project require a variance from the Freshwater Wetlands Standards?	V No Ves
Has a variance from local zoning setbacks been sought?	V No Ves
Is municipal master plan approval required for this property? If yes, attach a copy of municipal master plan approval to this application form.	V No Yes
¹ 0 sq. ft. in biological wetlands, Preferred Route: 76,183 sq. ft. in contiguous areas, Alternative Route: 67,092 sq. ft. in contiguous areas	
² No Natural Heritage Areas are located within the onshore Project area based on the RIGIS Natural Heritage Area layer (2021).	
 The wetland flag numbers on site correspond to those depicted on the plans The proposed Limit of Disturbance(LOD) and other proposed activities and features have been staked and labeled on site (see § 9.8.6). I have inspected the subject property and its surroundings and do hereby attest that to the best of my knowledge, all site work performed above has been accurately completed and certified at the time of application submission and prior to CRMC inspection, in accordance with the <u>Rules and Regulations Governing the Protection and Management of Freshwater Wetlands in the Vicinity of the Coast (650-RICR-20-00-9).</u> 	
PART F - PROFESSIONAL CERTIFICATION	
I hereby certify that I have been authorized by the applicant to prepare documentation to be submitted in support of this Application; that such documentation is in accordance with the Rules and Regulations Governing the Protection and Management of Freshwater Wetlands in the Vicinity of the Coast (650-RICR-20-00-9); and that such documentation is true, accurate, and complete to the best of my knowledge. Note: The Project Manager / Primary Professional should enter their information first. Name and Title: James Durand, Environmental Project Manager, POWER Engineers, Inc. d/b/a: Email Addresse; jamie.durand@powereng.com Signature: Mark Durand By precking this box, I attest that I have reviewed and certify the Site Work Affidavit in Part E. Tlast inspected the property on: 02/17/2023	
Name and Title: d/b/a:	
Email Address: Phone No	umber:
Signature: Date:	
By checking this box, I attest that I have reviewed and certify the Site Work Affidavit in Part E. 1 last inspected the property on:	
Name and Title: d/b/a:	
Email Address: Phone Num	ber:
Signature: Date:	
By checking this box, I attest that I have reviewed and certify the Site Work Affidavit in Part E. I last inspected the property on:	
Application Instructions - Required Enclosures

Note: Incomplete Applications will delay processing

All Applicants must ensure that:

- All applicable sections of the application form are completed.
- All necessary signatures are provided on the application form (see Rule 9.8.3 for Signatories to Applications)
- The appropriate fee has been submitted with all supporting documents, studies, reports or additional information where required and applicable.
- A complete copy of <u>all</u> application materials has been sent electronically to <u>cstaff1@crmc.ri.gov</u>

Required Enclosures for Individual Application Types:

Request to Determine Presence of Jurisdictional Area (Rule 9.9.2)

- Quadruplicate (4) site plans of the subject property which clearly indicate the property location and property boundaries.
- Proof of property ownership (Letter from local tax assessor)

Request to Verify Freshwater Wetland Edges (Rule 9.9.3)

- Quadruplicate (4) site plans which identify the wetlands and their edge which the applicant wants CRMC to verify on the property.
- Proof of property ownership (Letter from local tax assessor)

Application for a Freshwater Wetland Permit (Rule 9.11)

- Quadruplicate (4) site plans which include the overall project proposed or contemplated.
- Proof of property ownership (Letter from local tax assessor)
- Documentation in compliance with standards set forth in § 9.7.1.
- Quadruplicate (4) copies of any and all documents, studies, reports and information in support of any project seeking a permit as an insignificant alteration (if applicable)
- Building Official form

Application for a Significant Alteration (Rule 9.12)

- Quadruplicate (4) site plans which include the overall project proposed or contemplated. *Note: Following initial CRMC review for completeness, the applicant will be contacted to provide additional full and reduced sized copies of the site plans for notice purposes. The number will vary based upon the number of municipalities, abutters, and interested parties involved.*
- Proof of ownership in the form of a current certified copy of the deed of the property, or Proof of property ownership (Letter from local tax assessor).
- A current list of the property owners whose property lies immediately adjacent to the project site. This list must contain the current mailing address of each property owner and must be accompanied by a radius map drawn to scale of not less than one inch to one hundred feet (1":100') showing the properties, lot numbers, and corresponding owners adjacent to the property site.
- Quadruplicate (4) copies of all documentation in compliance with the minimization standards as set forth in § 9.7.1.
- Building Official form

Application for Permit Renewal (Rule 9.14.2)

No additional enclosures required

Application for Permit Modification (Rule 9.14.3)

- Quadruplicate (4) site plans which clearly depict the proposed modification.
- Proof of property ownership (Letter from local tax assessor)
- Written narrative and any additional data which describes and details the proposed minor changes and/or modification proposed, and the reasons for the modification.

Application for Permit Transfer (Rule 9.14.4)

• Certified copy of the deed of transfer, or proof of property ownership (letter from local tax assessor)

SITE PLAN REQUIREMENTS

Site plans for applications must meet the criteria specified in § 9.8.4. These requirements are as follows:

- A. Site plans must be submitted with the following application types:
 - 1. Request to verify freshwater wetland edges (§ 9.9.3);
 - 2. Application for a freshwater wetlands general permit (§ 9.10);
 - 3. Application for a freshwater wetlands permit (§ 9.11);
 - 4. Application for a significant alteration (§ 9.12); and
 - 5. Application for permit modification (§ 9.14.3).
- B. Site plans may be required for other application types as specified in §§ 9.9 through 9.14.
- C. The correct number of site plans required by the application package must be provided at the time of submission. If additional plans are required, the applicant will be informed and must submit them.
- D. All site plans must be drawn to scale. The scale of all plans must be no smaller than one (1) inch = one hundred (100) feet (1" = 100'); however, a larger scale is preferred (e.g., one (1) inch = forty (40) feet (1" = 40'). Where additional detail is required to complete its evaluation, the CRMC may require larger scaled details.
- E. All site plans must be at least eight and one half inches by eleven inches (8 ¹/₂" x 11") in size but no larger than twenty-four inches by thirty-six inches (24" x 36").
- F. All site plans must contain a title block, the original date of the plan, and the latest revision date of the plan if applicable. The title block must include the name of the person or party involved, the proposed project title, if any, the principal street or road abutting the site, the tax assessor's plat and lot number(s), the city or town, the name of the preparer, and the scale of the plan.
- G. All site plans containing more than one (1) sheet must be numbered consecutively (specifically: "page 1 of [total number of sheets]," and so forth).
- H. All site plans must contain a legend which explains all markings or symbols.
- I. All site plans must have all markings permanently fixed. Site plans that are pieced together with tape or contain markings of pen, pencil, crayon, markers or other items that can be changed or altered at a later date are not acceptable. Blueline or blackline prints or photocopies of originals are acceptable.
- J. All site plans must, at a minimum, depict the following:
 - 1. Street(s) abutting the site with fixed reference points, (e.g., utility poles and numbers, house and number, and any other similar structures);
 - 2. Distance and direction to nearest street intersection;
 - 3. Magnetic north arrow;
 - 4. Entire property boundary outline and dimensions, which may be shown on a separate plan sheet;
 - 5. Inset map showing location of site in the community;
 - 6. Any other fixed referenced points or developed land including, but not limited to, stone walls, buildings, fences, edges of fields/woods, trails, access roads, bare gravel or paved areas, impervious surfaces, lawns and landscaped areas; and
 - 7. Scale of plans.
- K. All site plans indicating physical features, distances, contour elevations, property lines, freshwater wetland edges, or other information provided as baseline data must clearly note whether such information was obtained by on-site survey, by aerial photogrammetry sources, or by reproduction from other maps or plans. Site plan information obtained from aerial photogrammetry sources or by reproduction from other plans or maps must provide an estimate of the maximum possible horizontal or vertical error between the information provided and the actual on-site conditions. Site plans developed from on-site surveys must clearly note what class or standard the survey meets.

- L. All site plans submitted with a request to verify freshwater wetland edges, an application for a freshwater wetlands general permit, an application for a freshwater wetlands permit or an application for a significant alteration must accurately depict the edge of all freshwater wetlands, applicable buffer zones, and the limits of other applicable jurisdictional area in accordance with § 9.8.5.
- M. All site plans submitted for review or approval of a proposed project shall include and depict the following, where applicable:
 - 1. Where changes to grades are proposed, both current and proposed contour line elevations at maximum intervals of two feet (2') and where no changes to grades are proposed, include a notation which so indicates;
 - 2. Profiles and cross sections drawn to scale;
 - 3. A labeled 'limit of disturbance' that encloses all proposed temporary and permanent vegetative clearing and surface or subsurface disturbance associated with the proposed project;
 - 4. All temporary and permanent erosion and sediment controls;
 - 5. All temporary and permanent stormwater, flood protection and water quality management controls, and all best management practices;
 - 6. All proposed measures to conduct, contain or otherwise control the movements of surface water, groundwater, or stormwater flows; and the ultimate destination of such flows;
 - 7. Any and all construction activities either above or below the earth's surface proposed to occur within a jurisdictional area including the height of buildings;
 - 8. Any additional specific requirements contained in the application package checklist for proposed projects; and
 - 9. Any area within a buffer zone that is to be created and maintained as buffer in accordance with §9.7.1(B)(4).
- N. Each site plan sheet prepared by a registered professional must bear the stamp of that professional, along with the date and his or her signature. Site plans submitted for an application for a significant alteration must bear the stamp and signature of a registered professional engineer.

Site Work to be Performed by the Applicant (see: § 9.8.6)

The following work must be completed prior to application submission for certain application types where site inspections are required. In many cases, CRMC will not be able to complete its site investigation or evaluation without certain information visible onsite. This could either delay CRMC's completion of application processing or possibly result in inaccurate assessments. Therefore, in order to facilitate site inspection and investigation, the applicant must perform the following site work where applicable. <u>NOTE</u>: For subdivisions or large projects, site alterations proposed well away from wetland areas need not be marked. However, activity in and adjacent to wetland should be clearly identified. The following list represents important items for onsite identification:

- Property boundaries must be identified with labeled markers such as flags or stakes. This is very important when there are no other or very few fixed reference points available to discern the location and extent of the property in question.
- Boundary of outermost proposed limits of filling, clearing, soil disturbance, excavation or grading must be flagged or staked on site. All flags/stakes must be clearly labeled.
- Ponds, detention/retention basins must be outlined by flagging or staking and clearly marked. Outline of proposed stormwater best management practices required.
- Subdivision lots must be clearly numbered or otherwise marked on-site.
- Corner locations of proposed septic systems must be staked and labeled if the site is an individual lot for review. If a subdivision, only those systems on lots which contain freshwater wetlands need be staked and labeled.
- Centerlines of roadways, pipelines, or utility lines.
- Drainage swale centerlines or proposed relocated river and stream channels must be staked or flagged and labeled.
- All wetland edges that have been flagged or otherwise marked for verification must be clearly labeled.
- Periodic reference points of proposed construction reflected on site plans must be placed on the site for referral in those areas lacking fixed reference points such as in dense vegetation.

Application Fees

General Fee Requirements (Rule 9.8.8)

- A. The applicant must pay all required fees to the CRMC in full at the time the applicant submits any application or request for hearing.
- B. The fees for proposed projects and activities are set forth in the fee schedule under § 9.8.9.
- C. Unless specified in the fee schedule, fees submitted to the CRMC are not refundable once the technical review of the application has commenced; however, for the original applicant only, the CRMC will apply fifty percent (50%) of the fee submitted for an application for a freshwater wetlands permit to the cost of a new application for the project, if:
 - 1. A determination of a significant alteration is issued and the original applicant subsequently files an application for a significant alteration for the proposed project within six (6) months of the date the significant alteration determination was issued by the CRMC; or
 - 2. A determination of a significant alteration is issued with recommendations to prevent such an alteration, and the original applicant files a second (2nd) application for a freshwater wetlands permit that incorporates the recommendations, within six (6) months of the date of issue by the CRMC of the original determination.
- D. All fees must be paid by check or money order made payable to "CRMC."
- E. No application fees pursuant to these Rules are required for projects where the CRMC or a municipality is the applicant, or for an application for emergency alterations under § 9.14.1 of this Part.

Fee Schedule (Rule 9.8.9)

A. Table 2: Freshwater wetland application fees:

Application type	Lot size	Fee
	0 – 5 acres	\$150.00
1. Determine the presence of jurisdictional area:	>5 – 20 acres	\$250.00
	>20 acres	\$500.00
	0 – 5 acres	\$300.00
2. Verify freshwater wetland edges:	>5 – 20 acres	\$600.00
	>20 acres	\$1,000.00
3. Regulatory applicability		\$150.00
4. Freshwater wetlands general permit		\$150.00
5. Freshwater wetlands permit and significant alteration		See project types below
6. Permit transfer		\$100.00
7. Permit modification		\$150.00
8. Permit renewal		\$200.00

B. Table 3: Applications fees for various project types

Project type	Lot size / Number of lots	Application for freshwater wetlands permit fee	Application for significant alteration fee
1. Projects associated with existing single-family	lot	\$200.00	\$400.00
2. Construction of new single-family lot		\$450.00	\$900.00
3. Projects associated with existing non-single family, not miscellaneous below	0-5 acres	\$300.00	\$600.00
	>5 – 20 acres	\$1,000.00	\$2,000.00
	>20 acres	\$2,000.00	\$4,000.00

4. Construction of new non-single family, not	0-5 acres	\$500.00	\$1,000.00
miscellaneous below	>5 – 20 acres	\$1,500.00	\$3,000.00
	>20 acres	\$3,000.00	\$6,000.00
5. New subdivisions	1-9 lots	\$250.00 per lot	\$500.00 per lot
	10 or more lots	\$2,500.00 plus \$200.00	\$5,000.00 plus
		per lot	\$400.00 per lot
6. The maximum total fee for any subdivision is:		\$10,500.00	\$15,000.00

C. Table 4. Application fees for miscellaneous project types

Miscellaneous project type		App. for	App. for significant
		wetlands	alteration fee
4 T 1' ' 1 1 1 1 0 .		permit fee	#200.00
1. Individual docks, floats	· · ·	\$100.00	\$300.00
2. Wildlife habitat project or water quality impl	covement project		
3. Dry hydrants		-	
4. Freshwater wetland restoration project		-	
5. Aquatic plant control project			
6. Land redevelopment/reuse project limited to	conversion of sand and gravel	\$300.00	\$750.00
banks, mill sites, abandoned commercial/in	dustrial property to public		
recreation facilities		-	
7. Rehabilitation of existing parks or recreation	al areas	_	
8. Multiple docks, floats or individual boat laur	nches	_	
9. Pedestrian trails, paths, foot bridges			
10. Irrigation projects, sub-drains		_	
11. Relocation/channelization of an area subject	t to storm flowage		
12. Dam repair, alteration or removal projects			
13. Wells other than for single family house lots		\$600.00	\$2,000.00
14. New pond construction			
15. Dredging existing ponds			
16. New or replacement drainage structures/fac	ilities, e.g., culverts		
17. New access drive and roadways			
18. Construction of all new dams		\$1,000.00	\$2,000.00
19. New parks or recreational areas		\$1,000.00	\$2,500.00
20. Land clearing and/or grading operations			
21. Industrial processing/cooling, alternative en	ergy project		
22. Bike paths			
23. River or stream relocation/channelization		-	
24. Surface mining, e.g. gravel quarry		\$5,000.00	\$10,000.00
25. New golf course			
26. Road, bridge, railway, airport facility	a. Reconstruction	\$2,000.00	\$4,000.00
	b. New construction	\$5,000.00	\$10,000.00
27. Utility installation, and transmission lines	a. Reconstruction	\$2,000.00	\$4,000.00
	b. New construction	\$5,000.00	\$10,000.00
28. Other new projects not listed above		\$1,200.00	\$4,000.00

ATTENTION: to all applicants filing an "Application for a Significant Alteration"

In accordance with Rule 9.12, an application for a significant alteration will be required if a significant alteration is proposed. Such an application is subject to the application procedures and requirements as set forth in R.I. Gen. Laws § 2-1-22 and within 650-RICR-20-00-9. A significant alteration results from a project that: (1) because of its area, scope or duration, appears to represent more than a minimal change in or modification to the natural characteristics, functions or values of any freshwater wetland, buffer, floodplain, area subject to flooding or area subject to storm flowage; (2) may be detrimental to the

basic natural capabilities or values associated with such freshwater wetland, buffer, floodplain, area subject to flooding or area subject to storm flowage; or (3) appears to be random, unnecessary or undesirable.

Prior to filing an application for a significant alteration, an applicant may file an application for a freshwater wetlands permit to determine whether or not a project appears to represent a significant alteration to freshwater wetlands, buffer, floodplain, area subject to flooding or area subject to storm flowage.

Note: Applicants filing an "Application for a Significant Alteration" must include all application submittal requirements specified in Rule 9.12.2.

The CRMC will check the application to determine if the above items have been included or addressed. IF they have not been addressed at all, the application will be considered deficient and will be determined incomplete. NOTE: CRMC, prior to public notice, is checking only for <u>content</u>. The actual evaluation as to whether CRMC agrees or disagrees with the information provided takes place after the public notice.



EXECUTIVE SUMMARY

SouthCoast Wind Energy LLC (formerly known as Mayflower Wind Energy LLC) (SouthCoast Wind) is a limited liability company organized under the laws of the state of Delaware on June 7, 2018 upon filing its Certificate of Formation. SouthCoast Wind is a project fully owned by OW North America LLC (Ocean Winds). Ocean Winds is a 50-50 joint venture between EDPR and ENGIE. The combined experience of Ocean Winds and its parent companies (EDPR and ENGIE) bring a depth of real-world experience in designing, permitting, financing, constructing, and operating offshore wind projects. SouthCoast Wind is registered to do business in Rhode Island.

SouthCoast Wind is developing an offshore wind energy generation facility in federal waters in the designated Bureau of Ocean Energy Management Renewable Energy Lease Area OCS-A 0521 (Lease Area) located approximately 51 nautical miles (94 kilometers) southeast of the Rhode Island coast. The Lease Area is not within Rhode Island jurisdictional areas; specifically, it is not within the Geographic Location Descriptions defined in the Rhode Island Ocean Special Management Plan.

Up to 147 wind turbine generators are planned within the Lease Area with the potential to generate an estimated 2,400 megawatts (MW) of clean renewable energy. SouthCoast Wind is developing two interconnection projects to connect export cables from the Lease Area to the regional power grid. The SouthCoast Wind 1 Project will connect at Brayton Point in Somerset, Massachusetts. Brayton Point is the preferred point of interconnection (POI) for both interconnection projects. The Project will also include one variant export cable corridor which, if utilized, would make landfall and interconnect to the Independent System Operator - New England grid in the town of Falmouth, Massachusetts (see Figure 1-1 in Attachment A). The Brayton Point POI was selected for SouthCoast Wind 1 due to its robust capacity for energy injection into the existing electrical grid and the opportunity to redevelop a previously disturbed brownfield site formerly occupied by a coal burning power generation plant, which makes it situated in a prime location for an interconnection to the grid. This connector system is necessary to deliver the renewable clean energy generated by SouthCoast Wind's offshore energy generation facility to the New England region via the Independent System Operator - New England Inc.'s administered regional transmission system.

The SouthCoast Wind 1 Project in Rhode Island jurisdictional areas includes export cables with approximately 1,200 MW of capacity running through Rhode Island - specifically through Rhode Island Sound, the Sakonnet River, onshore underground crossing at Aquidneck Island in Portsmouth, Rhode Island then into Mount Hope Bay. At the onshore underground crossing of Aquidneck Island, the Project includes additional conduits (not additional cables) to accommodate 1,200 MW of additional transmission capacity if needed in the future. In the filing with the Rhode Island Energy Facility Siting Board, this option is referred to as the "Noticed Variation."

SouthCoast Wind is submitting this updated application to the Rhode Island Coastal Resources Management Council (RI CRMC) for the following permits to cover portions of the SouthCoast Wind 1 Project located within the boundaries of Rhode Island, including Rhode Island state waters (the Project):

- Category B Assent application (650-RICR-20-00-1) Coastal Resources Management Program, as amended, aka "The Red Book."
- New Freshwater Wetlands Permit pursuant to the Rules and Regulations Governing the Protection and Management of Freshwater Wetlands in the Vicinity of the Coast (650-RICR-20-00-9) and (650-RICR-20-00-9.11).

The Project also requires a Coastal Zone Management Act (CZMA) concurrence from RI CRMC for portions of the Project within the Ocean Special Area Management Plan area. SouthCoast Wind filed the Rhode Island CZMA

Consistency Certification with the RI CRMC on March 17, 2022. A public hearing was held and the Federal Consistency Determination for the Project was made at the RI CRMC Semi-Monthly Meeting on December 12, 2023. At that meeting the Council voted unanimously to approve concurrence with the mutually agreed upon conditions and the fisheries compensatory mitigation package between SouthCoast Wind and the RI CRMC. The Federal Consistency Concurrence Letter was sent to the Bureau of Ocean Energy Management from RI CRMC on December 19, 2023, informing the agency that RI CRMC issued concurrence with mutually agreed upon conditions for the Project.

The information presented in this Assent application demonstrates compliance with applicable regulations referenced above. Details on Project design and activities are provided, along with the avoidance, minimization and mitigation measures that have been integrated into the Project design and engineering, and will be implemented during the operational and decommissioning phases. SouthCoast Wind has met with RI CRMC and Rhode Island Department of Environmental Management staff on a regular basis to gain input on Project design and the content of this Assent application.

SouthCoast Wind evaluated multiple alternatives for both the offshore and onshore components of the Project based on selection criteria including potential impacts to the natural environment, impacts to local communities, system operability and reliability, engineering feasibility, construction feasibility, commercial feasibility, conflicts with existing onshore and offshore utility infrastructure, length of route, onshore traffic congestion, and offshore navigational risks. A detailed description of the route alternatives assessment is included in this Assent application.

The SouthCoast Wind 1 Project will help meet Rhode Island's important public policy requirements regarding clean energy, climate change, energy security, grid reliability, and economic advancement for the benefit of the region. Offshore wind will become a crucial resource not only because of its non-carbon emitting attributes, but because of its ability to provide power during extreme cold winter periods when other renewable resources are not available and traditional fossil-fuel generation resources become constrained. The Project will support the state's efforts to stimulate regional growth and economic activity while meeting the renewable energy goals in New England. SouthCoast Wind will pay to the state of Rhode Island for the submerged lands lease for the offshore subsea cables in Rhode Island state waters. In addition, SouthCoast Wind executed a Host Community Agreement with the Town of Portsmouth in January 2024.

SouthCoast Wind is developing the Project to meet the regional need for renewable clean energy from offshore wind generation. That need is driven by the strong public policies and legislative directives of the various New England states, as described in Section 1.2 of this application, especially Rhode Island and its neighboring coastal states, Massachusetts, and Connecticut. Rhode Island's and regional states' policies and legislative requirements require substantial reductions of greenhouse gas emissions and substantial increase of renewable clean energy into the regional electricity supply mix, delivered safely and reliably to the region from offshore wind. As a result of the Tri-State Offshore Wind Solicitation, SouthCoast Wind was selected to deliver 200 MW to the state of Rhode Island and 1,087 MW to the Commonwealth of Massachusetts. This 1,287 MW amount represents the total capacity for the SouthCoast Wind 1 Project. This award was announced on September 6, 2024 and SouthCoast will now work to negotiate and execute contracts with the Electric Distribution Companies for approval by the states' public utilities commissions.

1. INTRODUCTION

SouthCoast Wind Energy LLC (SouthCoast Wind) is a limited liability company organized under the laws of the State of Delaware on June 7, 2018 upon filing its Certificate of Formation. SouthCoast Wind is a project fully owned by Ocean Winds North America LLC (Ocean Winds). Ocean Winds is a 50-50 joint venture between EDPR and ENGIE. The combined experience of Ocean Winds and its parent companies (EDPR and ENGIE) bring a depth of real-world experience in designing, permitting, financing, constructing, and operating wind projects. SouthCoast Wind is registered to do business in Rhode Island.

SouthCoast Wind is developing an offshore wind renewable energy generation facility in federal waters in the designated Bureau of Ocean Energy Management (BOEM) Renewable Energy Lease Area OCS-A 0521 (Lease Area) located approximately 51 nautical miles (nm) (94 kilometers [km]) southeast of the Rhode Island coast. The Lease Area is not within Rhode Island jurisdictional areas, and specifically, it is not within the Geographic Location Descriptions (GLDs) defined in the Rhode Island Ocean Special Management Plan.

Up to 147 wind turbine generators (WTGs) are planned within the Lease Area with the potential to generate 2,400 megawatts (MW) of clean renewable energy. SouthCoast Wind is developing two interconnection projects to connect export cables from the Lease Area to the regional power grid. The SouthCoast Wind 1 Project will connect at Brayton Point in Somerset, Massachusetts. Brayon Point is the preferred point of interconnection (POI) for both projects to be developed within the Lease Area. The federal permits for SouthCoast Wind, which cover both projects under the full Lease Area build-out, will also include one variant export cable corridor which, if utilized, would make landfall and interconnect to the Independent System Operator - New England (ISO-NE) grid in the town of Falmouth, Massachusetts (see Figure 1-1 in Attachment A).

The SouthCoast Wind 1 Project includes export cables with approximately 1,200 MW of capacity running through Rhode Island - specifically through Rhode Island Sound, the Sakonnet River, onshore underground crossing at Aquidneck Island in Portsmouth, Rhode Island (see Figure 1-2, Attachment A), then into Mount Hope Bay. The *SouthCoast Wind 1 Project Concept Schematic* shown below in illustrates the offshore and onshore components of the Project in a cross-sectional view. At the onshore underground crossing of Aquidneck Island, the Project includes additional conduits (not additional cables) to accommodate 1,200 MW of additional transmission capacity if needed in the future. In the filing with the Rhode Island Energy Facility Siting Board (RI EFSB), this option is referred to as the "noticed variation."

SouthCoast Wind is submitting this application to the Rhode Island Coastal Resources Management Council (RI CRMC) for the following permits to cover portions of the SouthCoast Wind 1 Project located within the boundaries of Rhode Island, including Rhode Island state waters (the Project):

- Category B Assent application (650-RICR-20-00-1) Coastal Resources Management Program, as amended, *aka* "The Red Book."
- New Freshwater Wetlands Permit pursuant under the Rules and Regulations Governing the Protection and Management of Freshwater Wetlands in the Vicinity of the Coast (650-RICR-20-00-9) and (650-RICR-20-00-9.11).

The Project also requires a consistency concurrence from RI CRMC with SouthCoast Wind's Federal Consistency Certification pursuant to Section 307 of the Coastal Zone Management Act, Coastal Zone Management Act regulations and § 11.10 of Rhode Island Ocean Special Area Management Plan.

SouthCoast Wind filed the Rhode Island Coastal Zone Management Act (CZMA) Consistency Certification with the RI CRMC on March 18, 2022. The RI CRMC federal consistency review hearing and vote for the Project took place on December 12, 2023. CRMC issued a concurrence with mutually agreed upon conditions. A formal letter was filed with the BOEM on December 19, 2023, notifying the agency of this determination.

SouthCoast Wind filed a Water Quality Certification (WQC) pursuant to the Rhode Island State Water Quality Regulations (250-RICR-150-05-1) of the federal Clean Water Act and Dredge Permit pursuant to the Marine Infrastructure Maintenance Act of 1996 and the Marine Waterways and Boating Facilities Act of 2001, Chapter 46-6.1 of the Rhode Island General Laws (R.I.G.L.); and § 2.4.13 in the Rules and Regulations for Dredging and the Management of Dredged Materials (250 RICR-150-05-2) with Rhode Island Department of Environmental Management (RIDEM) on March 16, 2023. SouthCoast Wind worked closely with RIDEM to address agency and public comments on the application. RIDEM issued the final Dredging Permit and Water Quality Certification with mutually agreed upon conditions on March 14, 2024.

The Project will provide clean, renewable electrical power to the New England electrical grid and help make Rhode Island and the Southeast New England coastal region an important hub of the growing Atlantic Coast wind energy industry. The Project will substantially contribute to meeting the regional need for reduced greenhouse gas (GHG) emissions and increase supply of renewable clean energy from offshore wind generation, thereby carrying out important public policy requirements of the state of Rhode Island, the Commonwealth of Massachusetts, and the New England region.

Overview of SouthCoast Project Components Offshore to Onshore



Note: For the SouthCoast Wind 1 Project, the terms offshore converter station or offshore converter platform (OCP) are often used instead of offshore substation platform (OSP) to indicate that the power is converted from alternating current to direct current for transmission to shore.

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1.1 REGULATORY REQUIREMENTS

Figure 1-2 in Attachment A depicts the overall location of the Project and shows the limits of RI CRMC jurisdiction applicable to this Application. As shown, Project components onshore and within Rhode Island state waters seaward to the three-mile limit and are subject to the Rhode Island Coastal Resources Management Plan (CRMP).¹ Pursuant to R.I.G.L. 42-1-1(c)-(d), Rhode Island territorial waters extend seaward three miles from shoreline and that the waters of Narragansett Bay are bound by a base line or closing line from the southernmost point at Point Judith to the southernmost point on the southernmost island in the West Island group, south of Sakonnet point. The portion of the export cable corridor (ECC) in Rhode Island Sound is subject to the Ocean Special Area Management Plan (SAMP).² The policies, standards, and definitions contained in the CRMP for Type 4 waters in the Ocean SAMP boundary are superseded by policies and regulations found in §11.10, entitled Regulatory Standards, of the Ocean SAMP per §11.2(A) beginning at the mouth of Narragansett Bay and extending to the 3.0 nm-limit of state waters. The offshore facilities located seaward of the 3.0-nm state territorial sea within the Rhode Island GLDs were reviewed through the Federal Consistency Review process.

The offshore export cables extending between the mean high-water (MHW) mark seaward to the limit of the Rhode Island territorial waters, is under the purview of the R.I.G.L. 46-23-1 *et seq*. authorizing RI CRMC to review and issue a Submerged Lands Lease. The regulations set forth in the Ocean SAMP allow RI CRMC to issue a Submerged Lands License for Renewable Energy Development. SouthCoast Wind is seeking a License Agreement and Assent for the export cables from RI CRMC.

The offshore export cables will make landfall in the Town of Portsmouth approaching from the south via the Sakonnet River and from the north via Mount Hope Bay. Portions of the onshore export cables will be located within the 200-foot (ft) contiguous area to shoreline features and coastal wetlands regulated under the CRMP (650-RICR-20-00-1), *aka* "The Red Book."

The Project includes the following proposed activities in state waters extending seaward to the three-nautical mile limit or on coastal shoreline features and their 200-ft contiguous area and subject to the jurisdiction of RI CRMC pursuant to R.I.G.L. § 46-23-6:

- Installation, operation, and maintenance of two submarine power export cables and associated communications cabling, each approximately 20.4 miles (mi) (32.8 km) long.
- Possible placement of fill in state waters over the proposed subsea export cables to protect segments of the submarine export cables and existing utilities.
- Installation of the subsea export cables at the Project's proposed landfall construction areas utilizing horizontal directional drilling (HDD) with work including temporary dredging/excavation at up to eight offshore HDD locations.
- Installation, operation, and maintenance of two underground onshore high-voltage direct current (HVDC) export power cables and associated communications cabling within contiguous areas around freshwater wetlands and shoreline features in Portsmouth, Rhode Island.

RIDEM and RI CRMC regulate waterbodies within Rhode Island jurisdiction through the RIDEM Surface Water Quality Standards and the CRMP, respectively. The RIDEM Surface Water Quality Standards and Section 401 Water Quality Certification Regulations categorize water quality standards for each waterbody. The waters of

¹ 650-Rhode Island Code of Regulations (RICR)-20-00-1

² 650-RICR-20-05

the state of Rhode Island are assigned a Use Classification which is defined by the most sensitive uses that it is intended to protect (see Section 3.3.1.2 of this Application for additional information).³

Most of the Project within Rhode Island Sound, the Sakonnet River, and Mount Hope Bay is classified as Water Quality Standard Class SA, which are waters designated for shellfish harvesting for direct human consumption, primary and secondary contact recreational activities, and fish and wildlife habitat (see Figure 1-3, Attachment A).⁴ There are two small areas of waters mapped as SB and SB1 within the ECC in Rhode Island waters in Mount Hope Bay, bordering Massachusetts jurisdictional waters. SB waters are designated for primary and secondary contact recreational activities, shellfish harvesting for controlled relay and depuration, and fish and wildlife habitat. SB1 waters are similar to SB waters, but primary contact recreational activities may be impacted due to pathogens. Class SA, SB and SB1 waters have good aesthetic value.

RI CRMC assigns water use categories for marine and coastal waters in accordance with the CRMP as amended (aka, "The Redbook") Section 1.2.1 Tidal and Coastal Pond Waters A.⁵ The ECC crosses the following (see Figure 1-4, Attachment A):

- Open waters in Rhode Island Sound that support a variety of commercial and recreational activities while maintaining good value as a fish and wildlife habitat and open waters in Mount Hope Bay that could support water dependent commercial, industrial, and/or high intensity recreational activities are classified as Type 4 Multipurpose Waters.
- The Sakonnet River is classified as Type 2 Waters characterized by high scenic value that support low intensity recreational and residential uses. These waters include seasonal mooring areas where good water quality and fish and wildlife habitat are maintained.
- A short segment of the SouthCoast Wind 1 ECC in lower Mount Hope Bay overlaps with Type 6 waters (see Figure 1-5, Attachment A). However, SouthCoast Wind has committed to routing the cable to avoid the Type 6 water area. To establish the boundaries of Type 6 waters, the CRMC established a buffer to federal navigation channels that measures three times the channel depth. Type 6 waters are categorized for (i) industrial waterfronts, and (ii) commercial navigation channels. SouthCoast Wind has committed to routing the offshore export cables outside of Type 6 waters including the Mount Hope Bay main shipping channel, the Tiverton channel, and outside of the buffers to these federal navigation channels.

Compliance of the Project with the policies and standards of the CRMP is addressed in Section 4 of this Application and compliance with the policies and standards of the Ocean SAMP is addressed in Section 5 of this Application.

1.1.1 Category B Regulatory Requirements

Table 1-1 lists the application submittal requirements for a Category B Assent Application. These requirements are addressed in Section 4 of this Application.

³ 250-RICR-150-05-1

⁴ 250-RICR-150-05-1

⁵ 650-RICR-20-00-1

TABLE 1-1. LIST OF CATEGORY B APPLICATION REQUIREMENTS AND APPLICABLE SECTIONS

Category B Application Requirements	Applicable Section
a. Demonstrate the need for the proposed activity or alteration;	Section 1.2 Purpose and Need
b. Demonstrate that all applicable local zoning ordinances, building codes, flood hazard standards, and all safety codes, fire codes, and environmental requirements have or will be met; local approvals are required for activities as specifically prescribed for nontidal portions of a project in §§ 1.3.1(B), (C), (F), (H), (I), (K), (M), (O) and (Q) of this Part; for projects on state land, the state building official, for the purposes of this section, is the building official;	Section 1.3 Other Project Approvals and Permits Section 4 CRMP
c. Describe the boundaries of the coastal waters and land area that is anticipated to be affected;	Figures 1-1, 1-2 and 1-3 (Attachment A) Section 3 Affected Environment, Potential Impacts, and Mitigation
<i>d.</i> Demonstrate that the alteration or activity will not result in significant impacts on erosion and/or deposition processes along the shore and in tidal waters;	Section 2.7 Environmental Compliance, Protective Measures, and Monitoring Section 3.1 Coastal Features and Wetlands Appendix A Soil Erosion and Sediment Control (SESC) Plans
e. Demonstrate that the alteration or activity will not result in significant impacts on the abundance and diversity of plant and animal life;	Section 3 Affected Environment, Potential Impacts, and Mitigation
<i>f.</i> Demonstrate that the alteration will not unreasonably interfere with, impair, or significantly impact existing public access to, or use of, tidal waters and/or the shore;	Section 2.4 Landfall Construction Areas Section 3.5 Commercial and Recreational Fishing Section 3.8 Recreational Boating and Tourism Section 3.2 Navigation and Commercial Shipping
g. Demonstrate that the alteration will not result in significant impacts to water circulation, flushing, turbidity, and sedimentation;	Sections 3.1 and 3.2 Water Quality
h. Demonstrate that there will be no significant deterioration in the quality of the water in the immediate vicinity as defined by DEM;	Section 3.2 Water Quality
<i>i.</i> Demonstrate that the alteration or activity will not result in significant impacts to areas of historic and archaeological significance;	Sections 4.5 and 4.6.9 Terrestrial Archaeological Resources Section 3.7 Marine Archaeological Resources Attachment X Historic Properties Treatment Plan
j. Demonstrate that the alteration or activity will not result in significant conflicts with water dependent uses and activities such as recreational boating, fishing, swimming, navigation, and commerce, and;	Section 1.2 Purpose and Need
k. Demonstrate that measures have been taken to minimize any adverse scenic impact (see § 1.3.5 of this Part).	Section 1.3 Other Project Approvals and Permits Sections 4.4 and 4.6.10 CRMP

1.1.2 Freshwater Wetlands in the Vicinity of the Coast Regulatory Requirements

No components of the Project are located within biological freshwater wetlands or biological coastal features as defined by Rhode Island regulations. However, portions of the Aquidneck Island intermediate underground cable crossing route fall within contiguous areas around freshwater wetlands and river/stream pursuant to the CRMC Rules and Regulations Governing the Protection and Management of Freshwater Wetlands in the Vicinity of the Coast.⁶ The onshore Project components lie on or cross the jurisdictional boundary between RI CRMC and RIDEM review of wetlands. RI CRMC will be the sole freshwater wetland review agency in accordance with 650-RICR-20-00-9.5.4. Any Project impacts to freshwater wetlands within RIDEM jurisdiction or their contiguous areas will be presented in this Application.

1.1.3 Ocean Special Area Management Plan Regulatory Requirements

RI CRMC is authorized under the CZMA to develop and implement SAMPs to address specific regional issues. Development of the Ocean SAMP was driven by proposed offshore wind development and management of ocean resources.⁷ This Assent Application is applicable to the portion of the Ocean SAMP area within Rhode Island state waters (from the mouth of Narragansett Bay to the 3.0 nm state water boundary). The Project also requires a federal consistency concurrence from RI CRMC pursuant to Section 307 of the CZMA, CZMA regulations, and § 11.10 of Rhode Island Ocean SAMP; this applies to the portions of the Project within the Ocean SAMP GLD areas in federal waters. SouthCoast Wind filed the Rhode Island Coastal Zone Management Act Consistency Certification with the RI CRMC in March 2022; the consistency determination and letter was filed with BOEM for Project on December 19, 2023.

Subchapter 5 Part 11 of the CRMP outlines the policies and regulations of the Ocean SAMP, which are addressed in Section 5 of this Application.

1.2 PURPOSE AND NEED

The purpose of the Project is to deliver 1,287 MW of renewable clean energy to the New England regional electric grid. As a result of the Tri-State Offshore Wind Solicitation, SouthCoast Wind was selected to deliver 1,087 MW to the Commonwealth of Massachusetts and 200 MW to the state of Rhode Island. This amount represents the total capacity for the SouthCoast Wind 1 Project. This award was announced on September 6, 2024 and SouthCoast will now work to negotiate and execute contracts with the Electric Distribution Companies for approval by the states' public utilities commissions. The SouthCoast Wind 1 Project is necessary to meet the needs of the state and region for substantial reductions in GHG emissions and substantial increase to the renewable clean energy supply, delivered safely and reliably to the region from offshore wind. By enabling delivery of the offshore wind energy, the Project will provide the region with substantial benefits, including environmental and economic benefits and strengthening of energy system reliability and energy security. The time-critical requirements established by public policies and legislative directives of the New England states, including Rhode Island, express a clear need for additional renewable clean energy generation from offshore wind in the region for its environmental, economic, reliability, and security benefits.

The key public policy requirements in Rhode Island that drive the need for the Project are highlighted below.

⁶ 650-RICR-20-00-9.

⁷ Payne, Ken. 2010. The Planning and Policy Context for the Rhode Island Ocean Special Area Management Plan. June 23, 2010. http://www.crmc.ri.gov/samp_ocean/finalapproved/TechRep01-Payne_Policy.pdf.

1.2.1 Rhode Island Climate Change Legislation and Policies

<u>Energy 2035</u>: Energy 2035 identified offshore wind as Rhode Island's "most significant renewable energy resource."⁸ Significantly, Energy 2035 established the goals to "increase sector fuel diversity, produce net economic benefits, and reduce greenhouse gas emissions by 45 percent by the year 2035."⁹ To achieve these goals, Energy 2035 recommended numerous policy actions, including the promotion of local and regional renewable energy.¹⁰ To achieve this goal, Energy 2035 specifically prescribed procuring additional renewable energy "through support for state and federal offshore wind projects."¹¹

<u>Rhode Island 2030 Vision Plan</u>: While only 19% of the State's electricity consumption currently comes from renewable resources, Rhode Island has a roadmap to source 100% of its electricity from renewable resources by 2030. In October 2021, Governor Dan McKee released a working draft of a vision plan for the next decade in Rhode Island, *Rhode Island 2030: Charting a Course for the Future of the Ocean State* (Rhode Island 2030).¹² Rhode Island 2030 focuses on harnessing the State's "Blue Economy" as well as the "Green Economy." An industry that perfectly fits in both of these categories is the offshore wind industry. As an Infrastructure and Transportation Objective, Rhode Island 2030 states, "Infrastructure that supports the Blue Economy and life sciences, including ports that support offshore wind activity and site readiness work that enables future industrial and commercial development."¹³ The plan notes that the State will continue to invest in needed infrastructure for offshore wind in pursuit of the State's renewable energy goals. In 2022, the Administration issued an updated document creating a framework and guiding document to help usher the state through the strategy as 2030 approaches.¹⁴

Executive Order No. 20-01, Advancing a 100% Renewable Energy Future for Rhode Island by 2030: In January 2020, then Governor Gina Raimondo issued an Executive Order committing Rhode Island to be powered by 100% renewable electricity by 2030.¹⁵ This Executive Order committed Rhode Island "to mitigating economy-wide greenhouse gas emissions and their effect on climate change, while spurring new and innovative opportunities for investment and job growth throughout the state's clean energy economy."¹⁶ The Executive Order further found that "a clean and affordable future electric grid will require a diverse combination of responsibly- developed resources to power our economy while maintaining reliability, including, but not limited to, offshore wind, solar, on-shore wind, and storage."¹⁷

<u>Resilient Rhode Island Act and Rhode Island Greenhouse Gas Emissions Reduction Plan</u>: In 2014, the General Assembly passed the *Resilient Rhode Island Act*. That act created the Rhode Island Executive Climate Change Coordinating Council (RIEC4), which is charged with working to achieve GHG reduction targets: 10% by 2020, 45% by 2035, and 80% by 2050.¹⁸ In 2016, RIEC4 released the Rhode Island Greenhouse Gas Emissions Reduction Plan, which identified strategies and actions to meet the GHG reduction targets.¹⁹ The 2016 Plan

¹⁴ https://www.ri2030.com/_files/public/RI2030-Version2022-final-optimize

¹⁵ Rhode Island Executive Order No. 20-01, Advancing a 100% Renewable Energy Future for Rhode Island by 2030 (Jan. 17, 2020). <u>https://governor.ri.gov/executive-orders/executive-order-20-01</u>.
¹⁶ Id.

¹⁷ Id.

18 R.I.G.L. § 42-6.2 et seq.

⁸ Energy 2035 at 15.

⁹ *Id.* at 34.

¹⁰ *Id.* at 62-63.

¹¹ *Id.* at 63.

¹² Rhode Island 2030: Charting a Course for the Future of the Ocean State, Working Document (2021).

https://www.ri2030.com/ files/public/RI%202030 final.pdf.

¹³ *Id.* at 50.

¹⁹ RIEC4, Rhode Island Greenhouse Gas Emissions Reduction Plan (December 2016). <u>http://climatechange.ri.gov/documents/ec4-ghg-emissions-reduction-plan-final-draft-2016-12-29-clean.pdf</u>.

specifically emphasized the importance of renewable and clean energy, specifically offshore wind, to aid Rhode Island in meeting its GHG reduction goals.²⁰

<u>2021 Act on Climate</u>: In 2021, the General Assembly amended the *Resilient Rhode Island Act* through the passage of the *2021 Act on Climate* with the intent of increasing Rhode Island's efficiency and effectiveness in responding to climate change. The *2021 Act on Climate* sets mandatory and enforceable targets for reducing greenhouse-gas emissions and transitioning to a low carbon economy.²¹ The *2021 Act on Climate* requires that the RIEC4 update the Greenhouse Gas Emissions Reduction Plan to develop a plan to reduce climate emissions to net zero by 2050. This plan is required to be delivered to the General Assembly by December 31, 2025.

<u>Affordable Clean Energy Security Act of 2022</u>: On July 6, 2022, Governor Dan McKee signed into law the *Relating to Public Utilities and Carriers – Affordable Clean Energy Security Act* that seeks to expand Rhode Island's offshore energy resources. On October 14, 2022, Rhode Island issued a request for proposals for up to 1,000 MW of offshore wind, marking the latest advance by East Coast states toward developing the offshore wind sector. In issuing the legislation, Governor McKee stated: "Adding offshore wind clean energy capacity is essential to meeting our new 100 percent renewable energy by 2033 goal and our Act on Climate emissions reduction target."²²

<u>Renewable Energy Standard</u>. In June 2022, the General Assembly passed amendments to the state Renewable Energy Standard to achieve the goal that 100 percent of Rhode Island's electricity demand is from renewable energy by 2033. R.I.G.L. § 39-26-4.

1.2.2 Regional Energy Supply and Transmission System Reliability

States in the New England region have conducted procurements of offshore wind energy through competitive solicitations, including the most recent Multi-State Offshore Wind Solicitation, where a first of its kind agreement between Rhode Island, Massachusetts, and Connecticut created a path for the coordinated selection of offshore wind project across the three states.²³ SouthCoast Wind participated in this solicitation and has been selected to negotiate contracts for two Power Purchase Agreements (PPAs) for a total of 1,287 MW, including 1,087 MW with Massachusetts and 200 MW with Rhode Island. This combined 1,287 MW amount represents the total capacity for the SouthCoast Wind 1 Project. SouthCoast Wind plans to develop the full capacity of the Lease Area (an estimated 2,400 MW) and obtain power purchase commitments for the full output of its offshore wind renewable energy generation facility. To the extent that Rhode Island and the New England region offer future competitive solicitation for offshore wind procurement, SouthCoast Wind intends to participate.

The Project is necessary to connect the SouthCoast Wind offshore wind renewable energy generation facility to the ISO-NE grid. The offshore wind generation will help meet the need for GHG emissions reductions and increase in clean energy supply, including from offshore wind, in the region, as expressed in the state policies and legislative directives listed above.

SouthCoast Wind's offshore energy generation facility is approximately 51 nm (94 km) southeast of the coast of Rhode Island and requires new transmission infrastructure to connect to the onshore electric grid. Both the

²⁰ *Id.* at 18, 27, 30, 36.

²¹ R.I.G.L. § 42-6.2 et seq.

 ²² State of Rhode Island Office of Energy Resources. 2022. Governor McKee Signs Legislation Requiring Offshore Wind Procurement for 600 to 1,000 Megawatts. July 6, 2022. https://energy.ri.gov/press-releases/governor-mckee-signs-legislation-requiring-offshore-wind-procurement-600-1000.
 ²³ See Mass Press Release. (October 4, 2023)

https://www.mass.gov/news/massachusetts-rhode-island-and-connecticut-sign-first-time-agreement-for-multi-state-offshore-windprocurement.

offshore and the onshore Project components are integral to the Project being able to deliver its energy to the New England grid and to facilitate a safe and reliable interconnection.²⁴

Therefore, the existing transmission system is inadequate to interconnect SouthCoast Wind's offshore wind renewable energy generation facility and the proposed new transmission is needed to interconnect it to the regional electrical grid safely and reliably.

In developing this new transmission in the Project, SouthCoast Wind has engaged in an extensive analysis of offshore and onshore routing alternatives to avoid, minimize and/or mitigate impacts in the Town of Portsmouth, Rhode Island and surrounding communities including those on the Sakonnet River and Mount Hope Bay. See Attachment B Route Alternatives Assessment. SouthCoast Wind's proposed POI at Brayton Point will provide the offshore wind renewable energy generation facility with a strong interconnection to the regional transmission system for the reliable delivery of renewable clean energy.

1.3 OTHER PROJECT APPROVALS AND PERMITS

In addition to a Category B Assent and Freshwater Wetlands Permit, the Project requires permits and approvals from other state and federal regulatory agencies. As previously discussed, SouthCoast Wind has also applied for and obtained several environmental permits and approvals at the state level through RIDEM.

1.3.1 Rhode Island Department of Environmental Management

SouthCoast Wind applied for authorization from RIDEM under the Water Quality Regulations,²⁵ the Rules and Regulations for Dredging and the Management of Dredged Materials,²⁶ the Rhode Island Pollutant Discharge Elimination System (RIPDES) Regulations²⁷ General Permit for Stormwater Discharge Associated with Construction Activity. The RIDEM is also responsible for administering and enforcing the Fresh Water Wetlands Act including the issuance of Insignificant and/or Significant wetlands permits (250-RICR-150-15-1) unless the freshwater wetlands is located in the vicinity of the coast, which falls under the exclusive jurisdiction of RI CRMC pursuant to R.I.G.L. §46-23-6. The onshore Project components lie on or cross the jurisdictional boundary between RI CRMC and RIDEM review of wetlands. RI CRMC will be the sole freshwater wetland review agency in accordance with 650-RICR-20-00-9.5.4. Any Project impacts to freshwater wetlands within RIDEM jurisdiction or their contiguous areas will be presented in this application.

Water Quality Certification. SouthCoast Wind applied for a Water Quality Certification pursuant to the Rhode Island State Water Quality Regulations (250-RICR-150-05-1.15(A)(3)) and Section 401 of the federal Clean Water Act (CWA) on March 17, 2023. After RIDEM deemed the application complete, a public comment period commenced on January 31, 2024, with a public hearing on February 22, 2024. The final WQC was issued by RIDEM on March 14, 2024. The Rhode Island Division of Marine Fisheries (RI DMF) was also consulted as part of RIDEM's Section 401 application review process.

Dredge Permit. SouthCoast Wind prepared a submittal to RIDEM in compliance with Section 401 of the CWA, which regulate discharges into waters of the United States, including dredging of the seafloor within Rhode Island state waters pursuant to the Marine Infrastructure Maintenance Act of 1996 and the Marine Waterways and Boating Facilities Act of 2001, Chapter 46-6.1 of the Rhode Island General Laws; and § 2.4.13 in the Rules and Regulations for Dredging and the Management of Dredged Materials ("Dredging Regulations") (250 RICR-

²⁴ See In re: the Issuance of an Advisory Opinion to the Energy Facility Siting Board Regarding Revolution Wind, LLC's Application to Construct and Alter Major Energy Facilities, RI EFSB Docket No. 5151 (August 26, 2021) <u>http://www.ripuc.ri.gov/efsb/2021_SB-01/PUC%20Advisory%20Opinion%20-</u> %20Revolution%20Wind%20(8-26-2021).pdf.

²⁵ 250- RICR-150-05-1.1 et seq.

²⁶ 250-RICR-150-05-2.1 et seq.

²⁷ 250-RICR-150-10-1.1 et seq.

150-05-2). The final marine dredging permit was issued to SouthCoast Wind in conjunction with the WQC on March 14, 2024.

Construction General Permit. The RIDEM Office of Water Resources implements the RIPDES program. The purpose of this program is to restore, preserve, and enhance the quality of the surface waters and to protect the waters from discharges of pollutants so that the waters will remain available for all beneficial uses and thus protect the public health, welfare, and the environment. A General Permit for Stormwater Discharge Associated with Construction Activity (Construction General Permit or CGP) will be required to authorize discharges pursuant to R.I.G.L. § 46-12 as amended and regulations for the RIPDES Program (250-RICR-150-10-1).

RIDEM Natural Heritage Area Review. Pursuant to the Rhode Island Endangered Species Act, SouthCoast Wind has consulted with the Rhode Island Natural Heritage Program. SouthCoast Wind reviewed the RIDEM Natural Heritage Area overlays available on the RIDEM Environmental Resource Mapping website and determined that there are three natural heritage areas that overlap the Project Study Area, indicating potential state-listed species. SouthCoast Wind contacted RIDEM on April 8, 2022, to inquire about the species listing for these areas. RIDEM responded on April 11, 2022, with a list of species of concern identified near the Project Area. SouthCoast Wind followed up with RIDEM on February 10, 2023, for an updated list of species of concern near the Project Area. Please refer to Section 3.6.1.3 for more information on state-listed species.

1.3.2 Summary of Other Permits, Reviews, and Approvals

Table 1-2 provides a summary of the other required approvals and permits along with dates of approval or estimated dates of approvals for those permits that have not been issued.

TABLE 1-2. SUMMARY OF THE PROJECT'S FEDERAL AND STATE PERMITS, REVIEWS, AND APPROVALS

Agency/Regulatory Authority	Permit/Approval	Status
Federal		
	Site Assessment Plan (SAP)	Approved by BOEM May 26, 2020.
	Certified Verification Agent (CVA) Nomination	Approved by BOEM November 4, 2020.
BOEM ²⁸	Departure request for the early fabrication of SouthCoast Wind's Offshore Substation Platform(s) (OSP) and inter-array cables.	Approved by BOEM December 1, 2020.
	Construction and Operations Plan (COP)	COP filed February 15, 2021. BOEM published a Notice of Intent to Prepare an Environmental Impact Statement for the review of the COP on November 1, 2021.

²⁸ In its review of the COP, BOEM must comply with its obligations under the NEPA, the National Historic Preservation Act, the Magnuson-Stevens Fishery Conservation and Management Act, the Migratory Bird Treaty Act, the Clean Air Act, and the ESA. Thus, BOEM coordinates and consults with numerous other federal agencies including the National Marine Fisheries Service, United States Fish and Wildlife Service, the Environmental Protection Agency, and the United States Coast Guard during the review process. BOEM also coordinates with the states under the Coastal Zone Management Act to ensure that the project is consistent with the state's coastal zone management program.

Agency/Regulatory Authority	Permit/Approval	Status
	National Environmental Policy Act (NEPA) Review	Initiated by BOEM on November 1, 2021. Draft Environmental Impact Statement issued by BOEM February 13, 2023. Final Environmental Impact Statement anticipated November 15, 2024.
	Facilities Design Report and Fabrication & Installation Report	Filing planned for after COP approval.
U.S. Department of Defense Clearing House	Informal Project Notification Form	Submitted May 11, 2020.
U.S. Army Corps of Engineers (USACE)	Individual Clean Water Act (CWA) Section 404 Permit. Rivers and Harbors Act of 1899 Section 10 Permit.	Submitted December 2, 2022. Application deemed complete by USACE on February 2, 2023.
U.S. Coast Guard (USCG)	Private Aids to Navigation Authorization	To be filed 3-6 months prior to offshore construction.
	Local Notice to Mariners	To be filed prior to offshore construction.
U.S. Environmental Protection	National Pollutant Discharge Elimination System General Permit for Construction Activities	Submitted October 31, 2022; Application deemed complete by USEPA on September 29, 2023.
Agency (USEPA)	Outer Continental Shelf Permit Clean Air Act	Submitted November 23, 2022; Application deemed complete by USEPA on April 7, 2023
U.S. Fish and Wildlife Service (USFWS)	Endangered Species Act Section 7 consultation Bald and Golden Eagle Protection Act (BGEPA) and Migratory Bird Treaty Act (MBTA) compliance.	Submitted March 9, 2023; Application deemed complete by USFWS on March 30, 2023; Consultation concluded on September 1, 2023. Basic site evaluation and characterization studies completed and detailed studies ongoing.
National Oceanic and Atmospheric Administration (NOAA) U.S. National Marine Fisheries Service (NMFS)	Marine Mammal Protection Act (MMPA) Incidental Harassment Authorization (IHA) or Letter of Authorization (LOA)	Pre-construction: Concurrence for 2019 Geophysical and Geotechnical (G&G) surveys was issued by NMFS on July 26, 2019. IHA for 2020 G&G surveys issued on July 23, 2020. IHA for 2021 G&G surveys issued on July 1, 2021. IHA for 2023 G&G surveys issued on May 12, 2023. LOA Application for offshore construction and operations filed March 18, 2022 and deemed complete by NMFS September 19, 2022.Proposed Rule published in Federal Register June 27, 2024. IHA for 2024-2025 G&G surveys submitted on July 1, 2024.
Federal Aviation Administration (FAA)	Determination of No Hazard to Air Navigation	It is not currently anticipated that a Determination of No Hazard will be required for offshore structures in the

Agency/Regulatory Authority	Permit/Approval	Status
		Lease Area due to their location outside of 12 nm (22 km); nor will this be required for the onshore substation or converter station due to the maximum height of these structures. SouthCoast Wind continues to engage with the FAA with regards to whether any review and/or authorization is required for offshore equipment deployed to support horizontal directional drilling installation of the export cables.
State/Rhode Island		
	CZM Consistency Determination under the Federal Coastal Zone Management Act (16 United States Code [U.S.C.] §§ 1451-1464) and in accordance with the Rhode Island Coastal Resources Management Program and Special Area Management Plans.	Filed Q3 2021, revised on March 16, 2022, and November 2, 2023. Federal Consistency Determination issued on December 12, 2023; CRMC Determination Letter filed with BOEM on December 19, 2023.
	Category B Assent and Submerged Lands License pursuant to R.I.G.L. § 46-23 and 650-RICR-20-00-1 and 650-RICR-20-00-2.	Filed on February 24, 2023. Updated filing submitted on March 6, 2023. Updated Appendices submitted on July 2, 2024.
Rhode Island Coastal Resources Management Council (RI CRMC)	Freshwater Wetlands Permit pursuant to the Rules and Regulations Governing the Protection and Management of Freshwater Wetlands in the Vicinity of the Coast (650-RICR-20-00-2.1 et seq.) (R.I.G.L. § 46-23-6).	Filed on February 24, 2023. Updated filing submitted on March 6, 2023. Updated Appendices submitted on July 2, 2024.
	LOA/Survey Permit, if needed, in accordance with the R.I.G.L. § 46-23 and 650-RICR-20-00-1.	Approved July 7, 2021 for Summer 2021 benthic surveys; Approved February 4, 2022 for Spring 2022 benthic surveys. Updated for onshore geotechnical investigations on December 8, 2023; Extension granted through the end of 2024 on March 26, 2024.
Rhode Island Energy Facility Siting Board (RI EFSB) and Rhode Island Public Utilities Commission (RI PUC)	Certificate of necessity/public utility.	Application for a License to Construct Major Energy Facilities filed May 31, 2022, and docketed as of June 24, 2022 (Docket Number SB-2022-02). A revised application was submitted on September 11, 2024.
Rhode Island Historical Preservation and Heritage Commission (RIHPHC)	Permission to conduct archaeological field investigations (pursuant to the Antiquities Act of	Marine Survey approved on July 2, 2021. Phase 1 Permit (No. 21-32) issued on December 17, 2021; Terrestrial

Agency/Regulatory Authority	Permit/Approval	Status
	R.I.G.L. 42-45 and the Rhode Island Procedures for Registration and Protection of Historic Properties).	Archaeological Resources Assessment (Phase 1A/1B Report) filed March 14, 2022.
		Marine Archaeological Resources Assessment (MARA) submitted March 16, 2022.
	Section 106 Consultation	Initiated November 1, 2021
	Consultation with the Rhode Island Natural Heritage Program and Division of Fish and Wildlife	Information provided by RIDEM on June 24, 2021. Updated information provided by RIDEM on April 11, 2022. RI Natural Heritage Program confirmed state-listed species data on February 10, 2023.
Rhode Island Department of Environmental Management (RIDEM)	Water Quality Certification pursuant to Section 401 of the Clean Water Act, 33 U.S.C. § 1251 et seq. and R.I.G.L. § 46-12-3 and Dredging Permit pursuant to the Marine Infrastructure Maintenance Act of 1996 and RI Rules and Regulations for Dredging and the Management of Dredged Materials (R.I.G.L. §§ 46- 6.1 et seq.) and Rhode Island Water Quality Regulations (R.I.G.L. §§ 46.12 et seq.); (Dredging permit is issued jointly by RIDEM and RI CRMC under RIDEM dredging regulations).	Filed March 17, 2023. Amended application filed on October 16, 2023, and deemed complete on November 15, 2023. Public comment period commenced January 31, 2024; public hearing held February 22, 2024. RIDEM issued 401 Water Quality Certification and Marine Dredge Permit March 14, 2024.
	Rhode Island Pollution Discharge Elimination System (RIPDES) General Permit for Stormwater Discharge Associated with Construction Activity pursuant to R.I.G.L. § 42-12 as amended. Authorization under the RIPDES General Permit for Stormwater Discharge Associated with Construction Activity (Construction General Permit or CGP).	Filing –planned closer to construction start date by SouthCoast Wind.
RIDEM Division of Fish and Wildlife (RI DFW)	Letter of Authorization and/or Scientific Collector's Permit (for surveys and pre-lay grapnel run), if needed.	TBD based on consultations with RI DFW.
	Consultation with the Rhode Island Natural Heritage Program and Division of Fish and Wildlife	Information provided by RIDEM on June 24, 2021. Updated information provided by RIDEM on April 11, 2022.

Agency/Regulatory Authority	Permit/Approval	Status
		RI Natural Heritage Program confirmed state listed species data again on February 10, 2023.
Rhode Jeland Department of	Utility Permit/Physical Alteration	Filing planned closer to construction start date, if applicable.
Transportation (RIDOT)	Permit pursuant to R.I.G.L. Chapter 24-8.	RIDOT issued a draft Letter of Intent to grant easement across railway on July 9, 2024.
Local (for portions of the SouthCoast	Wind Project within local Rhode Island	jurisdiction)
Portsmouth Department of Public Works	Street Opening Permit	Filing planned closer to construction start date based on consultation with Town and Portsmouth and Director of Public Works.
Portsmouth Zoning and Planning Boards	Special Use Permit/Variances and Consistency with Comprehensive Community Plan	Pre-empted by the RI EFSB and in consultation with the Town of Portsmouth Planning Director.
Portsmouth Town Council	Noise Variance	Filing planned closer to construction start date based on consultation with Town and Town Council.
State/Massachusetts		
Massachusetts Executive Office of Energy and Environmental Affairs (EEA)	Massachusetts Environmental Policy Act (MEPA) Environmental Notification Form (ENF) and Environmental Impact Report (EIR) Certificate of Secretary of EEA.	Advanced notice of MEPA ENF Filing was sent to all relevant Community-Based Organizations and tribes on June 22, 2022. ENF filed on August 12, 2022. ENF Certificate of EEA Secretary issued on October 11, 2022. Filing of SouthCoast Wind 1 DEIR on February 1, 2023; Draft EIR Certificate of EEA Secretary issued on May 10, 2023. Filing of SouthCoast Wind 1 Final EIR on July 21, 2023; Final EIR Certificate of EEA Secretary issued on September 15, 2023. Filing of SouthCoast Wind 1 Supplemental Final EIR on October 31, 2023; Supplemental Final EIR Certificate of EEA Secretary issued on December 15, 2023.
Massachusetts Energy Facilities Siting Board (MA EFSB)	Approval to construct the proposed Project, pursuant to G.L. c. 164, § 69J (Siting Petition).	Filed May 27, 2022. Public Comment Hearing held on October 11, 2022. Six days of evidentiary hearings concluded on August 7, 2023; Initial Brief filed on

Agency/Regulatory Authority	Permit/Approval	Status
	Certificate of Environmental and Public Need (Section 72 Approval Consolidated with MA EFSB).	November 22, 2023; Reply Brief filed on December 6, 2023. Tentative Decision issued on September 20, 2024.
Massachusetts Department of Public Utilities (MA DPU)	Approval to construct and use proposed Project pursuant to G.L. c. 164, § 72 (Section 72 Petition) consolidated with MA EFSB proceeding. Individual and comprehensive exemptions from the zoning bylaws of Somerset for the proposed Project pursuant to G.L. c. 40A § 3 (Zoning Petition) consolidated with MA EFSB proceeding.	Filed concurrently with the MA EFSB Petition and Analysis on May 27, 2022. Petitions consolidated with MA EFSB proceeding on July 5, 2022.
Massachusetts Department of Environmental Protection (MassDEP)	Chapter 91 Waterways License/Permit for dredge, fill, or structures in waterways or tidelands. Section 401 Water Quality	Filed on December 20, 2023. Public comment period commenced April 17, 2024, ended May 24, 2024. Draft Chapter 91 License issued by MassDEP September 10, 2024. Filed on December 20, 2023. MassDEP
	Certification.	issued 401 Water Quality Certification on May 7, 2024; appeals period ended on May 28, 2024.
Massachusetts Office of Coastal Zone Management (MA CZM)	MA CZM Consistency Determination	Filed with COP on February 15, 2021 (Appendix D1). Revised version filed January 13, 2022. Executed multiple stays with CZM. CZM's Federal Consistency Determination anticipated by September 30, 2024.
Massachusetts Department of Transportation (MassDOT)	State Highway Access Permit(s) (if needed)	Filing planned prior to construction, if needed.
Massachusetts Board of Underwater Archaeological Resources (MA BUAR)	Special Use Permit (SUP)	SouthCoast Wind 1 Provisional SUP issued on June 25, 2021. Filed MA BUAR SUP application for SouthCoast Wind 1 on August 26, 2021. SUP approved on September 30, 2021. SUP renewal approved on September 29, 2022, and September 28, 2023. Next SUP renewal anticipated on September 26, 2024.
Massachusetts Historical Commission (MHC)	Project Notification Form/Field Investigation Permits (980 CMR § 70.00)	Project Notification Form (PNF) submitted July 26, 2021.Terrestrial Archaeological Resources Assessment (Brayton Point Phase 1A Report) filed on March 14, 2022.

Agency/Regulatory Authority	Permit/Approval	Status
	Section 106 Consultation	Initiated November 1, 2021.
Massachusetts Fisheries and Wildlife (MassWildlife) - Natural Heritage and Endangered Species Program (NHESP)	MA Endangered Species Act Checklist Conservation and Management Permit (if needed) or No-Take Determination.	Submitted Information Request for state- listed rare species on June 17, 2021. NHESP issued a letter identifying species in the Brayton Point Project Area on April 28,2022 (NHESP Tracking No. 19-38917); determined that the site is not mapped as Priority or Estimated Habitat.
Massachusetts Division of Marine Fisheries (MA DMF)	Letter of Authorization and/or Scientific Permit (for surveys and pre-lay grapnel run).	To be determined based on consultations with MA DMF.
Local (for portions of the SouthCoast V	Wind 1 Project within local Massachuset	ts jurisdiction)
Somerset Planning & Zoning Board	Local Planning/Zoning Approval(s) (if needed)	Filed zoning exemption petition requesting individual and comprehensive zoning exemptions from Somerset zoning bylaws pursuant to G.L. c. 40A § 3 on May 27, 2022. Zoning exemption was consolidated with the MA EFSB proceeding. Six (6) days of evidentiary hearings concluded on August 7, 2023; Initial Brief filed on November 22, 2023; Reply Brief filed on December 6, 2023. Tentative Decision issued on September 20, 2024.
Somerset Conservation Commission	Notice(s) of Intent and Order(s) of Conditions (Massachusetts Wetlands Protection Act and municipal wetland non-zoning bylaws), as applicable.	Notice of Intent (NOI) filed on March 15, 2024. Multiple hearings for wetlands were held and were closed on August 29, 2024. Final order of conditions was issued on September 9, 2024.
Somerset Department of Public Works, Board of Selectmen, and/or Town Council	Street Operating Permits/Grants of Location.	Filing of application(s) planned closer to construction (if applicable).
Swansea Conservation Commission	Notice(s) of Intent and Order(s) of Conditions (Massachusetts Wetlands Protection Act and municipal wetland non-zoning bylaws).	Notice of Intent filed on March 8, 2024. Multiple hearings were held and closed on August 26, 2024. Final order of conditions was issued on August 27, 2024.

2. SITING AND PROJECT DESCRIPTION

This section includes a description of the Project and an overview of the siting process used by SouthCoast Wind. Referenced Project figures are included in Attachment A, Offshore Export Cable Engineering Drawings are included in Attachment C and Onshore Engineering Drawings are provided in Attachment D.

SouthCoast Wind is developing an offshore wind energy generation facility capable of generating an estimated 2,400 MW of renewable clean energy. Export cables connecting the energy generation facility with the regional transmission system at Brayton Point in Somerset, Massachusetts, will run through Rhode Island state waters (specifically Rhode Island Sound, the Sakonnet River and Mount Hope Bay) and overland at Portsmouth, Rhode Island. For purposes of this application, the Project is defined as the transmission components located within Rhode Island-jurisdictional areas listed below and shown on the Project overview maps (Figures 1-2 and 1-3 in Attachment A). The Project includes the following components proposed in Rhode Island state waters:

- Two HVDC submarine power cables and associated communications cabling located within the ECC. The cables will be installed in a bundled configuration where practicable (see cable bundle cross-sectional view in Attachment A). Approximate cable route lengths within Rhode Island state waters are as follows:
 - 5.3 mi (8.6 km) in Rhode Island Sound
 - 11.0 mi (17.7 km) in the Sakonnet River
 - 4.0 mi (6.4 km) in Mount Hope Bay (portion in Rhode Island state waters)
- Eight HDD offshore pits in total; four HDD pits at each of two landfalls on either side of Aquidneck Island at Portsmouth, Rhode Island, in the Sakonnet River and in Mount Hope Bay. These eight pits will require dredging/excavation to facilitate HDD of the cable landfalls. Each offshore HDD pit will be located approximately 1,000 ft (300 meters [m]) from the Portsmouth shoreline.

The Project also includes the following onshore components in Portsmouth, Rhode Island:

- Two landfall construction areas on Aquidneck Island in Portsmouth, Rhode Island for HDD construction activities (subject to obtaining the necessary easements):
 - One landfall construction area on the northeast (Sakonnet River) side of Portsmouth will occupy the corner of Boyds Lane and Park Avenue.
 - One landfall construction area on the northwest (Mount Hope Bay) side of Portsmouth, either:
 - Within the Montaup Country Club parking lot (preferred)
 - Within land owned by Roger Williams University on the northern side of Anthony Road (RWU North parcel alternate)
- Two new underground onshore HVDC export power cables and associated communications cabling colocated within a single underground duct bank and manhole system through the proposed onshore export cable route in the Town of Portsmouth.

2.1 PROJECT SITING

The Project was sited based on a thorough assessment of alternative points of interconnection (POIs) to the electric grid and cable routing to connect to the selected POI. A detailed analysis of alternative routes considered for interconnection to the selected POI at Brayton Point is included in Attachment B and an overview is provided below.

Transmission and interconnection facilities are necessary to deliver electricity from the SouthCoast Wind Offshore Generation Facility to the regional electric grid. SouthCoast Wind considered and evaluated alternative potential POIs to the grid, offshore ECCs, landfall site alternatives, onshore export cable routes, and transmission technologies. Some of these alternatives were eliminated based on technical or commercial feasibility assessments, or the inability of the alternative to address the identified interconnection need. Other alternatives that were found to be feasible and capable of addressing the identified need were further examined on the basis of constructability, operability, environmental impacts, estimated costs and reliability assessments.

Delivery of an estimated 2,400 MW of clean power may necessitate multiple POIs for several reasons, most notably that individual connections to the regional transmission system are limited by ISO-NE to 1,200 MW maximum for reliability reasons. SouthCoast Wind considered multiple coastal interconnection points with suitable electrical characteristics, accessibility, and potential nearby land for the required substation/converter station facilities. Two POIs were selected: one at Brayton Point in Somerset, Massachusetts, the preferred, and one variant location in Falmouth, Massachusetts.

Brayton Point was selected as the POI to connect approximately 1,200 MW of clean renewable energy to the New England electric grid for the SouthCoast Wind 1 Project.. Brayton Point is a robust interconnection point that can accommodate 1,287 MW for the SouthCoast Wind 1 Project. Brayton Point is a previously disturbed brownfield site and the site of a former coal burning power generation plant which makes it situated in a prime location for an interconnection to the grid.

Fourteen onshore and offshore export cable route combinations to connect to the Brayton Point POI were considered by SouthCoast Wind. The list captures a representative array of overland and in-water routes to the Brayton Point POI. Please refer to Attachment B for the SouthCoast Wind 1 Project Route Alternatives Assessment.

SouthCoast Wind evaluated the following cable landing and onshore route alternatives that would avoid cable installation in Narragansett Bay and the Sakonnet River:

- Three routes landing in Middletown, Rhode Island.
- Two routes landing in Little Compton, Rhode Island.
- One route landing in Westport, Massachusetts.

Key evaluation factors for the onshore routes included:

- Environmental resources and conservation areas.
- Archaeological resources and cultural resource areas.
- Conflicts with residential uses.
- Potential socioeconomic effects due to use and space conflicts in heavily developed commercial and tourism areas, including Environmental Justice (EJ) populations.

- Avoidance of existing infrastructure and potential for effects on local communities.
- Space limitation for construction adjacent to small, 2-lane roads.
- Duration of construction activities and increased impacts with longer duration construction periods.

Most of the routes were down-selected by the alternatives analysis screening process. The selected alternative is the route in the Sakonnet River with an approximately 2.0-mi (3.2-km) intermediate onshore underground crossing in Portsmouth. The HVDC export cables will make intermediate landfall on Aquidneck Island in Portsmouth, Rhode Island to avoid a narrow and highly constrained area of the Sakonnet River at the old Stone Bridge and Sakonnet River Bridge (an area referred to as "The Hummocks"). This reach of the Sakonnet River poses a significant risk and challenge to (i) maneuvering survey vessels and cable-lay vessels, (ii) achieving target burial depth of the cables, and (iii) minimizing impacts to the marine environment.

2.2 CONSTRUCTION SCHEDULE IN RHODE ISLAND

The construction schedule is being developed based on seasonal constraints including minimization of activities during months of peak recreational onshore and offshore uses, commercial and recreational fishing, and life cycles of sensitive species. To discuss seasonal constraints on in-water work schedules, SouthCoast Wind has met with staff from the RI DMF, Massachusetts Division of Marine Fisheries (MA DMF), the RI CRMC, the United States Army Corps of Engineers (USACE), the United States Environmental Protection Agency (USEPA), and National Oceanographic and Atmospheric Administration's NMFS; discussions are continuing to finalize a schedule. Tables 2-1 and 2-2 provide an overview of expected durations for both onshore and offshore construction activities.

Activity	Expected Duration
HDD – Exit Pit Excavation / Prep at Each Landfall	Less than 1 week (per landfall)
HDD – Drilling Operation at Aquidneck – Boyds Lane Landfall	2-4 months
HDD – Drilling Operation at Aquidneck – Montaup Country Club Landfall/RWU North parcel Alternate	2-4 months

TABLE 2-1. PLANNED HDD CONSTRUCTION SCHEDULE IN PORTSMOUTH, RHODE ISLAND

TABLE 2-2. PLANNED CONSTRUCTION SCHEDULE IN RHODE ISLAND STATE WATERS

Activity	Expected Duration (In-Water)
Boulder Re-Location	Less than 1 week (1-4 days)
Crossing Preparation (Mattress/Rock Installation)	Less than 1 week (2-3 days)
Pre-Lay Grapnel Run (PLGR)	Less than 1 week (3-4 days)
Cable Lay & Burial: Rhode Island Sound & Sakonnet	3-6 weeks
Cable Lay & Burial: Mount Hope Bay	1-2 weeks
Cable Pull-In Each Landfall	Less than 1 week (per landfall)
Post-Lay Protection (Mattress/Rock Installation)	Less than 1-week (4-6 days)

2.3 OFFSHORE EXPORT CABLE DESIGN AND CONSTRUCTION

2.3.1 Engineering Design and Micro-Routing

SouthCoast Wind collected geophysical, geotechnical and benthic/habitat field survey data within the entire ECC, which is 1,640 ft (500 m) to 2,300 ft (700 m) wide. Based on this survey data, sensitive environmental and cultural resources and geohazards were mapped to guide cable routing within the ECC with the objectives (to the extent practicable) of meeting the cable burial target depth, minimizing the impacts to sensitive habitat and avoiding surficial geologic and anthropogenic features as informed by data collected in the Geophysical & Geotechnical (G&G) surveys.

A Cable Burial Risk Assessment (CBRA; "Confidential" – provided under separate cover, Attachment E) was completed to evaluate risk that cables could be damaged or compromised by vessel anchoring or scour, based on specific uses and physical characteristics at any one location along the cable route. The output of the CBRA is used to identify specific target burial depths, which will vary along the cable route based on assessment of the local soil conditions and risk to the buried cables from external risk factors. In general, the anticipated cable burial depth range is 3.2 to 13.1 ft (1.0 to 4.0 m) with a target cable burial depth of approximately 6.0 ft (1.8 m).

Two power cables and associated communication cabling will be installed in a bundled configuration where practicable, resulting in an estimated 20-ft (6-m) wide area of disturbance. The width of the surveyed ECC is designed to allow for micro-routing to avoid sensitive resources and obstacles, and to provide for maneuverability during construction and maintenance. The ECC provides sufficient area at landfall locations, at pipeline/cable crossings, or for anchoring. Cable design parameters are provided in Table 2-3. Charts depicting ECC mapping and preliminary cable micro-routing are included in Attachment C, Offshore Export Cable Engineering Drawings.

Cable Characteristics	Design Parameters
Number of Cables	Two offshore export power cables plus associated
	communications cabling "
Cable Diameter (per cable)	6.9 in (175.0 mm)
Nominal Cable Voltage	±320 kilovolt (kV)
Length of Cable Corridor (RI State Waters)	20.4 mi (32.8 km)
Cable Corridor Width	1,640 ft to 2,300 ft (500 m to 700 m)
Typical Width of Seabed Disturbance During Construction	6.0 m (19.7 ft)
Number of Cable / Pipeline Crossings Anticipated	3 pipeline crossings
Anticipated Cable Burial Depth (below level seabed)	3.2 to 13.1 ft (1.0 to 4.0 m)
Approximate Cable Load Current	2,000 A

TABLE 2-3. OFFSHORE EXPORT CABLE DESIGN PARAMETERS

Notes:

^a The cables will be installed in a bundled configuration, consisting of two power cables plus associated communications cabling installed together, where practicable, to minimize seabed impacts from installation. Maximum cable bundle width is twice the maximum cable diameter.

Each HVDC offshore export power cable will be a single-core (one power core) armored submarine cable, as depicted in the cross-section schematic of a typical subsea cable (as depicted in Attachment A). The power core will be either aluminum or copper stranded conductor, with cross-linked polyethylene insulation, a lead sheath, and a polyethylene over sheath. The cable will be covered with galvanized, stainless-steel wire armor, and an outer serving of polypropylene yarns soaked in bitumen. The layers of protective armoring and sheathing are to

protect the cable from external damage and keep it watertight. Fiber optic wires may be embedded within the armor layer of the cable. The HVDC cables will be installed in a bundled configuration where practicable, with each cable bundle consisting of two offshore export power cables and associated communications cabling.

2.3.2 Offshore Export Cable Construction Sequence

The general sequence of construction activities for the offshore export cables are listed and explained in Table 2-4. Additional details for construction activities are provided in subsections following the table.

Construction Activity	Construction Summary
Pre-lay Cable Surveys and Route Engineering	Extensive geophysical, geotechnical, and benthic surveys have been completed to characterize seabed conditions within the export cable corridor. Based on the survey data, route engineering was completed including Cable Burial Risk Assessments, burial tool suitability assessments, and preliminary micro-routing of cables within the ECC. Micro-routing is the primary strategy for avoiding geohazards, obstructions, and sensitive habitat. Micro-routing may also help to support achievement of target cable burial depth and to minimize the need for secondary cable protection.
	Prior to installation, additional surveys will be performed to check for debris and obstructions that may affect cable installation and confirm the details of seabed preparation that may be required. These pre-installation surveys will be performed closer to the date of the cable installation and will inform the final cable micro-routing within the ECC.
Seabed Preparation	Pre-installation seabed preparation will be completed as needed, and may include debris and boulder clearance, relocation of moorings and removal of any other obstructions. Boulder clearance trials may be performed prior to wide-scale seabed preparation activities to evaluate efficacy of boulder clearing techniques. The boulder clearance trials will take place in a selected location (location TBD) that will allow the vendor to facilitate trials in an equivalent area. The preferred method for boulder clearance is a boulder grab to locally remove and re-locate individual boulders, though the use of a boulder plow for denser boulder fields is also under consideration (if needed).
	A pre-lay grapnel run will be conducted to clear the cable route of buried hazards along the installation route to remove obstacles that could impact cable installation, such as abandoned mooring lines, wires, or derelict fishing gear. SouthCoast Wind will work with fishermen actively working in the area to notify them of pre-lay grapnel activities as a way to minimize gear entanglement. SouthCoast Wind will develop a gear-clearance plan, in consultation with the RI DMF, which will include advance notification to fishermen allowing them the opportunity to relocate or remove their gear. Cleared ghost gear and/or fishing lines will be disposed of responsibly during the pre-lay grapnel run, if brought aboard the vessel. SouthCoast Wind and its contractor will clear the ECC to make it safe for cable-lay operations and for overall safety to marine navigation, however, a salvage operation is not intended nor considered safe for the marine contractor. Otherwise ghost gear will be moved outside of the cable corridor. SouthCoast Wind will however

TABLE 2-4. TYPICAL OFFSHORE EXPORT CABLE CONSTRUCTION SEQUENCE

Construction Activity	Construction Summary
	consider providing details of identified gear to programs designed to remove the ghost gear. SouthCoast Wind will coordinate with the RI DMF in addition to SouthCoast Wind's other outreach efforts (i.e., direct outreach, outreach via Fisheries Representatives) to notify commercial and recreational fishermen prior to initiation of the pre-lay grapnel run. In addition, SouthCoast Wind expects to have Project Execution Plans before installation activities begin, then final reports (including as-builts) after the completion of the work.
Pipeline Crossing Preparation	Prior to installation of the cables, protective material (rock and/or mattresses) will be installed over the three existing pipelines to be crossed in the Sakonnet River, in accordance with industry-standard practice and requirements and as agreed with the owners of the existing pipelines. The purpose will be to achieve suitable vertical separation between the existing pipelines and the planned cables, and to ensure protection of the existing pipelines both during construction and long-term.
Cable Installation and Burial	Based on the seabed conditions in the Sakonnet River and Mount Hope Bay, it is expected that a simultaneous lay and burial method (using a jet-plow or jet- sled type burial tool) will be utilized, though multiple options will be maintained for flexibility to achieve suitable cable burial in the encountered seabed conditions. Alternatively, cable may be laid on the seabed and trenched post-lay or a trench may be pre-cut prior to cable installation.
	Cable lay and burial trials may be performed within the ECC prior to main cable installation activities to test equipment for suitability for the site-specific seabed conditions and ensure successful cable burial.
Offshore Joint Construction	It is anticipated that one or more offshore cable joints ("field joints") will be required, likely in the Sakonnet River, and possibly in Mount Hope Bay, due to the overall export cable route length. The specific joint quantities and locations are still to be determined and will depend on the final cable sizing and cable lay vessel/barge details.
Post-Installation Surveys	Post-installation surveys will be performed to determine the cable burial depth and other as-left conditions. The survey may be completed from a vessel and/or remotely operated vehicle.
Secondary Cable Protection	After the cable has been installed, secondary cable protection in the form of rock berms, rock bags, and/or mattresses will be installed as determined necessary in areas where sufficient cable burial in the seabed cannot be achieved. Additionally, secondary cable protection will be installed over the cables at crossing locations, where burial is not possible due to the presence of the third-party asset to be crossed.

2.3.3 Pipeline Crossings

The ECC crosses three pipelines at two locations in the Sakonnet River, as explained in Table 2-5 and shown in Figure 2-1 in Attachment A. SouthCoast Wind will coordinate with the owners of the pipelines listed below, and any other unanticipated cable or pipeline crossings not identified, to agree on detailed cable crossing design, installation, protection measures and maintenance requirements. Crossing designs will be determined by the

crossing's water depth, seabed conditions and the third-party crossing agreement requirements. Minimum separation distances will be determined so that both assets (subsea cable and submarine pipelines) can be safely operated with risk of damage to either asset mitigated to the extent practicable.

TABLE 2-5. PROPOSED CABLE/PIPELINE CROSSINGS

Cable Description	Number of Cables / Pipelines to be Crossed	Location
Potential Crossing Area 1	1 existing pipeline ^a	Sakonnet River (charted Pipeline Area)
Potential Crossing Area 2	2 existing pipelines ^b	Sakonnet River (charted Pipeline Area)

^a Gas pipeline owned by Enbridge as part of the Algonquin Gas Transmission system.

^b Water pipelines (20-inch and 24-inch) owned by the City of Newport Department of Utilities.

2.3.4 Pre-Installation Seabed Preparation

The seabed will be prepared prior to cable installation by the following steps:

- 1. Boulder removal to remove boulders that cannot be avoided by micro-routing.
- 2. Grapnel run to clear seabed debris.
- 3. Pre-lay survey including multi-beam and/or visual inspection using either vessel-mounted or remote operated vehicle (ROV)-mounted cameras.

Details on seabed preparation are provided in Table 2-4. A boulder relocation plan will be developed upon selection of a cable installation contractor, who will also clear debris and boulders from the export cable route, as necessary. If it is determined that a boulder cannot be avoided with micro-routing, a zone (or zones) will be identified for where cleared boulders/debris can be deposited. The boulder relocation areas will be determined by evaluating the benthic survey data, in order to relocate boulders to other boulder fields, if feasible, and to avoid introducing new obstacles on the seafloor that may be encountered by fishermen.

Additional survey data will likely be collected closer to installation to identify any anomalies or changes from prior surveys (such as fishing gear, debris, unexploded ordnance, or boulders) for the vessels and installation team to ensure safe vessel operations and successful cable burial. These surveys assist in building a framework for the seafloor and subsurface along the export cable route and highlight areas requiring pre-lay route preparation.

SouthCoast Wind is committed to clear communication with the fishing industry, fisheries representatives, management agencies, and with individual fishermen, on boulder relocation activities including notification of precise locations of moved boulders to proactively avoid potential issues with gear hangs. In addition to direct contact with fishermen through SouthCoast Wind's Fisheries Manager, maps and precise coordinates of relocated boulders will be broadcast through Local Notices to Mariners and shared with the RI DMF.

2.3.5 Offshore Cable Installation Methods

Export cables will be transported and installed from a carousel-equipped cable-lay vessel, cable-lay barge, dedicated cable transportation vessel, or a combination of these options. The number of campaigns will depend on vessel size, type, and capacity, and the cable type, length, and number of cable joints required. It is anticipated that one or more cable joints will be required, likely in the Sakonnet River, and possibly in Mount Hope Bay, due to the overall export cable route length. Data from surveys conducted along the ECC will be

provided to the contractor who will propose the final installation methodology based on the anticipated soil conditions and potential hazards. The CBRA has been provided with the application filed by SouthCoast Wind (Attachment E).

Depending on the survey findings and seabed conditions encountered, one or more of several preparation and installation methods may be utilized. These methods are listed in Table 2-6 and described below. These cable laying techniques can involve cable pre-installation followed by burial and/or simultaneous cable installation and burial (representative construction schematics are provided in Attachment A). The list is exhaustive, to ensure that the appropriate flexibility is maintained to consider alternative burial techniques to achieve burial in the seabed. One or more burial techniques among those listed and Table 2-6 will be considered to attempt cable burial, until cable burial in the seabed is deemed to not be possible or practicable. Only then, secondary cable protection material (as described below) will be considered and employed to ensure that sections of the cable that have not been sufficiently buried are suitably protected.

Based on current understanding of the seabed conditions in the ECC, the burial of the bundled offshore export cable in Rhode Island State Waters will primarily use a type of jet-plow or jet-sled technology. This involves the use of a skid-mounted burial tool that is towed by the cable-lay barge or Dynamically Positioned (DP) vessel. As the cable is laid on the seabed from the vessel, a narrow trench of the seabed surrounding the cable will be fluidized, lowering the cable to the target burial depth. By using this method of cable burial, the export cables are simultaneously laid and buried beneath the seafloor, which minimizes post-lay exposure of cables the seabed. Additionally, this method reduces sediment displacement (compared to mechanical trenching / plowing) and employs natural backfill as cover for the buried cable.

Equipment	Typical Use
Jetting sled / plow	Typically used in shallower water, in areas of prepared/benign seabed surfaces (i.e., areas without large sand waves or slopes).
Jetting ROV	Typically used in deeper water and can be used for unconsolidated soft beds.
Pre-cut plow	Any depth and can be used for hard bottoms (plows can be used for a wide range of soils from unconsolidated sands to stiff clays).
Mechanical plowing	Any depth and can be used for hard bottoms (plows can be used for a wide range of soils from unconsolidated sands to stiff clays).
Mechanical cutting ROV system	Any depth, used for hard, consolidated substrate.
Vertical injector	Vessel mounted burial solution for shallow water use that allows deep burial and does not require seabed/sand wave sea leveling.

TABLE 2-6. TYPICAL OFFSHORE EXPORT CABLE INSTALLATION AND BURIAL EQUIPMENT

<u>Jetting Sled / Plow</u> A jetting sled / plow is towed from a vessel and can be launched either during post-lay trench mode or fitted with the cable to simultaneously create a trench through soft seabed material and lay the cable. The trench is created by water jetting through unconsolidated, softer seabed material. As such, jetting is optimal in unconsolidated soils and sands with low shear strengths. The trenching systems offers sufficient maneuverability for any curves that the proposed offshore export cables may be laid in.

<u>Jetting ROV</u> This jet trencher is an ROV based system that can be launched from cable installation vessels or from a dedicated support vessel. This self-propelled jetting method is typically used in non-consolidated soils, in deeper water depths.

Pre-Cut Plow This method is deployed when surface and sub-surface boulders are present. A basic mechanical plow will pre-cut a V-shaped trench ahead of cable installation. This allows for the boulders and soils to be lifted to the edges of the trench for backfill purposes later. Once the cable is laid into the trench, the plow is reconfigured into backfill mode where the boulders and soils that were previously relocated are then redeposited.

<u>Mechanical Plowing</u> A mechanical plow is towed from the back of a vessel and simultaneously cuts a narrow trench in the seafloor, while also simultaneously laying and burying cable. Plowing capability can increase from firm unconsolidated soils/sands to more consolidated soils and clays with medium shear strengths.

<u>Mechanical Cutting ROV System</u> A mechanical cutting ROV cable burial system is a self-propelled system most suitable for soil with increased strength. This system can be utilized at any water depth. The mechanical cutting ROV system utilizes a cutting wheel or chain to break up and excavate any material. Used only in hard, consolidated soils, a rotating chain or cutting wheel with dedicated teeth will excavate the soil from beneath the cable and various systems will be required to displace this soil away for the trench allowing the cable to be lowered to depth.

<u>Vertical Injector</u> A vertical injector is a deep burial jetting tool used for cable installation and burial. The vertical injector uses water propelled from jet nozzles to fluidize the seabed material to allow for lowering of the cable. In some instances, this technology may be referred to as controlled flow excavation. This tool is towed along the back of a vessel and acts as a trowel creating a space for the cable to be installed and subsequently buried. This burial solution does not generally require seabed leveling in areas of sand waves or similar mobile sediment features. Hanging from the cable installation vessel or barge, this trenching system is one of the few options that does not require a level seabed and is therefore capable of trenching in areas of large sand waves.

2.3.6 Confirmation of Installed Cable Depth

Post-installation surveys will be performed to remotely confirm the cable position and burial depth, assess the reconstitution of the trench, and other as-left conditions. The survey may be completed from a vessel and/or remotely operated vehicle.

Depending on the details of the cable burial tool, it may also be possible to directly determine the cable burial depth as it is being laid, via the mechanical interface between the cable and the tool allowing determination of how deep the cable has been lowered beneath the seabed as it is simultaneously laid and buried. In addition to remote verification of cable burial depth post-installation, this can provide an accurate record of as-laid cable burial depth.

2.3.7 Cable Joints

It is anticipated that one or more offshore cable joints ("field joints") will be required, likely in the Sakonnet River, and possibly in Mount Hope Bay, due to the overall export cable route length. The specific joint quantities and locations are still to be determined and will depend on the final cable sizing and cable lay vessel/barge details.

To construct an offshore cable joint, two cable ends (one or both of which will be pre-installed on the seabed) will be recovered to the deck of the cable lay vessel/barge. The ends of the cable will be prepared for jointing on the deck of the vessel/barge, then will be jointed to each other following a pre-established qualified procedure in a controlled environment. Once the joint is complete, the completed cable joint and adjoining cable will be laid on the seabed, either in an "in-line" configuration or an "omega" configuration. The completed cable joint will then be post-buried and/or protected using secondary cable protection, to ensure that the cable joint is adequately protected to the same standard as the remainder of the cable. SouthCoast Wind will provide information on where jointing activities will occur prior to the work commencing.
2.3.8 Anchoring

Vessels will use DP during cable installation where water depths allow. Since water depths greater than 49.2 ft (15.0 m) are required for DP, this is not viable in Mt. Hope Bay or the Sakonnet River, and use will be limited to Rhode Island Sound. Nearshore areas and areas with shallow water less than 49.2 ft (15.0 m) may necessitate a moored vessel solution using anchors; see Figure 2-2 (Attachment A) for potential anchoring areas along the ECC. The maximum anchor radius from the cable installation barge will be approximately 2,625 to 3,281 ft (800 to 1,000 m) based on the anchor line length. This maximum radius will be forward and aft of the barge and will not extend outside of the width of the ECC.

2.3.9 Secondary Cable Protection

A primary objective is to avoid the use of secondary cable protection by achieving a suitable target cable burial depth in the seabed along the entire cable route, by micro-routing (to the extent practicable) the cables within the ECC and by assessing and selecting suitable installation/burial tooling for the seabed conditions. Secondary cable protection material will be required at the three cable crossings in the Sakonnet River and for areas where cable burial cannot be achieved. For cable protection, methods will be determined based on the location, length, and extent of the non-burial, and when all remedial burial solutions have been ruled out (remedial burial techniques may include jet trenching or controlled flow excavation that fluidizes the surrounding sand to allow the cable to further settle into the trench). Methods employing secondary cable protection material may include the creation of a rock berm, concrete mattress placement, rock placement, and fronded mattresses. Half shells may be used as well, and they are typically used to protect cable ends at pull-in areas and where trenching is not possible.

As a conservative estimate for planning purposes, SouthCoast Wind estimates up to 15% of the ECC within Rhode Island state waters will require secondary cable protection. Secondary cable protection is expected to be required primarily at the identified cable/pipeline crossing locations in the Sakonnet River, and in Rhode Island Sound where areas of harder seabed have been identified. Generally, the seabed conditions in the remainder of the ECC in the Sakonnet River and Mount Hope Bay are comprised of softer sediments which are expected to be suitable for cable burial and not require substantial secondary cable protection.

Any required crossings of other third-party pipelines by the offshore export cables will utilize mutually agreeable crossing designs consistent with typical industry practices, in accordance with International Cable Protection Committee recommendations, which typically employ use of concrete mattresses (though other crossing methods may be assessed for use). Minimum separation distances will be determined so that both the Project cables and the third-party pipelines can be safely operated with risk of damage to either asset mitigated to the extent practicable. An example of a concrete cable protection mattress and an example of cable protection rock bags are provided in "Submarine Typical Details" found in Attachment C – Offshore Export Cable Engineering Drawings.

2.3.10 Bundling and Cable Separation

The offshore export cables will be installed in a bundled configuration where practicable. The cables will be transported separately (on the same installation vessel) and assembled into a bundle during the process of cable laying. Because the HVDC offshore export cables will be installed in a single bundle where possible, there will typically be no horizontal separation between cables within a bundle as installed along the route. Although not anticipated except at cable landings, the cables may be unbundled and installed separately for part of the cable route, which does not affect the cable functionality but may result in different installation considerations. If the cables are installed separately, the target horizontal separation between each proposed Project cable will be approximately 164 ft (50 m). Final cable spacing will depend on bathymetry and other detailed seabed

characteristics and may be wider or narrower. Risk factors that will be considered and mitigated when considering cable spacing will include:

- Installation impacts (risk to adjacent cables)
- Operation and Maintenance (O&M) (including cable repair if needed)
- Thermal impacts to adjacent cables

2.4 SEA TO SHORE TRANSITION

The Project includes installation of four conduits via HDD at each end of the intermediate onshore crossing of Portsmouth (four from the Sakonnet River and four from Mount Hope Bay). Two of the conduits are to accommodate two power cables and communications cabling for delivery of approximately 1,200 MW. The remaining two conduits will be installed to accommodate potential future installation of an additional 1,200 MW.

HDD is a "trenchless" process for installing underground cables or pipes which enables the cables to remain buried below the coastal features, including coastal beaches and intertidal zone to limit environmental impacts during installation. Each HDD boring extends from an onshore construction area to an offshore construction area.

The routing and HDD locations are depicted on Figure 1-2 (Attachment A), in the Offshore Export Cable Engineering Drawings (Attachment C) and in the Onshore HDD and Soil Erosion and Sediment Control (SESC) Engineering Drawings (Attachment D). The onshore HDD locations being considered are the following:

- One landfall construction area on the northeast (Sakonnet River) side of Portsmouth will occupy the corner of Boyds Lane and Park Avenue.
- One landfall construction area on the northwest (Mount Hope Bay) side of Portsmouth, either:
 - Within the Montaup Country Club parking lot (preferred).
 - Within land owned by Roger Williams University (RWU) on the northern side of Anthony Road (RWU North parcel, alternate).

Construction of the sea-to-shore transition will involve the following:

- 1. Excavation of four onshore HDD pits at each landing (northeast and northwest sides of Portsmouth).
- 2. Excavation of four offshore HDD pits at each landing (northeast and northwest sides of Portsmouth).
 - A gravity cell or other temporary structure may be used if required to support HDD construction.
- 3. HDD of the borehole between each of the onshore and offshore HDD pits and reaming of the bore hole to the necessary diameter.
- 4. Insertion of conduit, made of high-density polyethylene or similar material, into each bore hole.
- 5. Construction and installation of onshore, underground concrete transition joint bays (TJBs).

Splicing of offshore export cable (single-core submarine cable) to onshore export cable (single-core underground cable) will occur within the TJBs

- 6. Installation of the offshore export cables (two power cables and associated communications cable) through the conduits, below the coastal features, coastal beaches and intertidal zone (note that extra conduits are for future use and will remain empty at this time).
- 7. Site restoration of disturbed onshore and offshore areas, including backfill of the dredged areas.

The vessel and equipment that will be used to support the HDD installation are depicted in Attachment C, Offshore Export Cable Engineering Drawings and Attachment D, Onshore HDD and SESC Engineering Drawings.

2.4.1 Onshore HDD Pit

Indicative dimensions of the onshore construction areas and equipment that will be used to support the HDD installation are depicted in Attachment D –Onshore Engineering Drawings – Soil Erosion and Sediment Control Plan, Onshore Engineering and HDD. Construction operations at each onshore landfall construction area will require approximately 0.6 to 1.0 acre (ac), depending on the configuration of available land and the final trajectories of the borings. The drilling operation requires fresh water for the mixing of the drilling slurry, however, there will be no withdrawals of water from wetlands and waterways for this Project.

Soil and other materials generated during installation of the HDD will be removed and re-used or properly disposed of at a suitable facility. Excavated soils will be removed and hauled to an appropriate on-site or off-site disposal/re-use location or to a temporary construction laydown area for on-site re-use. Soils will be handled in compliance with applicable laws and regulations.

The construction contractor(s) working at the Project site will be required to submit emergency response plans detailing their methods for containment of oil and hazardous materials including spill response, containment, control, clean-up and reporting to applicable agencies, as appropriate. Example spill prevention and control measures are outlined in Attachment F – Emergency Response Plan.

2.4.2 Offshore HDD Pit

Indicative dimensions of the onshore construction areas and equipment that will be used to support the HDD installation are depicted in Attachment D – Onshore Engineering Drawings – Soil Erosion and Sediment Control Plan, Onshore Engineering and HDD. Additional information is also provided in Attachment C – Offshore Export Cable Engineering Drawings. The volume of sediment to be excavated/dredged at each of the eight offshore HDD pits is 1,867 cubic yards (1,427 cubic meters). Potential volumes of offshore excavated material in Rhode Island state waters could be up to 14,932 cubic yards (11,416 cubic meters) based on all eight HDD pits offshore.

SouthCoast Wind plans to side-cast sediments immediately adjacent to the offshore pits to allow a readily available means of backfilling the trench and subsea cables. The excavated material can also serve to temporarily contain the HDD construction area, including serving as a potential containment area for the recirculated drilling muds.

Multiple excavation methods are under consideration for the HDD offshore exit pits. These include use of trailing suction hopper dredge, water injection dredge, clamshell and/or controlled flow excavation. One of or a combination of these methods may be used by the Project. SouthCoast Wind has verified seabed conditions of primarily soft sediments in Mount Hope Bay and the Sakonnet River (expected to be suitable for cable burial) SouthCoast Wind will select and use Best Management Practices (BMPs) including the use of a SESC plan to minimize sediment mobilization during offshore construction and HDD operations.

2.4.3 Horizontal Directional Drilling

The proposed HDD trajectories are anticipated to be approximately 0.3 - 0.6 mi (0.4 - 1.0 km) in length with a cable burial depth of up to approximately 40 ft (12.2 m) below the seabed. HDD bores will be separated by a distance of approximately 10 ft to 33 ft (3.0 m to 10 m). It is anticipated the HVDC cables will be unbundled at landfall. Each HVDC power cable is planned to require a separate HDD borehole and conduit. The dedicated communications cable may be installed within the same bore as a power cable, likely within a separate conduit.

HDD can be undertaken from either the onshore entry point, from the offshore exit point, or (likeliest) from a combination of the two. The HDD unit and associated equipment (temporary electric generators, water and slurry tanks, mud circulating system and support vehicles) will be staged onshore in Portsmouth. Appropriate construction BMPs will be implemented to protect adjacent coastal and freshwater wetlands, as shown on the SESC plans in Attachment D. Construction operations at each onshore landfall construction area will require approximately 0.6 - 1.0 ac, depending on the configuration of available land and the final trajectories of the borings.

Additional laydown space will be needed behind the onshore HDD pit to fuse segments of conduit together into a continuous assembly. This laydown area is expected to be between one-half to the full length of the HDD trajectory. It is important to pre-fuse the conduit in preparation so that a continuous assembly of pipe can be pulled in the bore hole without the need for stopping during drill pull-back operations. Once the pull-back commences, it is a 24-hour operation until completed at that bore, to reduce the risk of the bore hole collapsing. The pull-back laydown area will likely follow the trajectory of the onshore underground export cable route, with conduit fusing occurring in the shoulder of public right-of-way (ROW). The ends of each conduit will be capped/sealed prior to the completion of the installation, in order to protect the conduits from ingress of sediment and debris between the conduit installation and the cable installation and pulling, which may take place several months after HDD construction.

The drill head will be advanced between the onshore and offshore HDD pits. The HDD borehole will be reamed to the necessary diameter. The diameter of the bore hole will be approximately 30 in (76 cm) to accept conduit with an outside diameter of approximately 16 in (41 cm). The HDD operations will be supported by offshore vessels (jack-up barge and/or anchored barge), and support crew transport vessel and tugboat.

2.4.4 Cable Pulling

Once the HDD conduits and onshore underground infrastructure have been constructed, cables can be installed. Cable installation and pulling may take place several months after HDD construction. A cable barge/vessel will be positioned offshore equipped with reels of cable. The seaward end of the HDD conduit will be located by the cable installation spread and excavated if needed. The caps/seals protecting the end of the HDD conduit will be removed. The offshore export cable will be lowered from the vessel to the seafloor, and a winch located onshore will be used to pull the cable from sea to shore through the conduit. Each of the two power cables comprising the cable bundle is planned to be pulled into a separate HDD conduit.

2.5 ONSHORE EXPORT CABLE DESIGN AND CONSTRUCTION

2.5.1 Onshore Export Cable Engineering Design

The intermediate landfall on Aquidneck Island in Portsmouth, Rhode Island will include an approximately 2.0-mi (3.2-km) underground onshore export cable route to accommodate conduit for four power cables, plus associated communications cabling. As previously noted, two of these conduits will remain empty for potential use in the future. From the onshore HDD construction area at the intersection of Boyds Lane and Park Avenue, the underground onshore export cables will be routed to one of the two locations under consideration for HDD to Mount Hope Bay, either within the Montaup Country Club parking lot (preferred) or within land owned by Roger Williams University on the northern side of Anthony Road (RWU North parcel, alternate).

Table 2-7 presents the onshore export cable parameters for the Project. The onshore export cables will be spliced with the offshore export cables within TJBs.

TABLE 2-7. ONSHORE EXPORT CABLE DESIGN PARAMETERS

Cable Characteristics	Design Parameters
Number of Cables	Two onshore export power cables plus associated communications cabling
Approximate Length of	2 mi (3.2 km)
Onshore Export Cable Route	
Approximate Cable Diameter	5.9 in (150 mm)
Nominal Cable Voltage	+/-320 kV
Approximate Cable Load Current	2,000 A
Target Burial Depth (below ground surface)	3.0 to 6.0 ft (0.9 to 1.8 m)
Maximum Disturbance Depth ¹	25 ft (7.6 m)
Typical Disturbance Corridor ²	25 ft (7.6 m)
Disturbance Area at Splice Locations ³	1,000 sg ft (93 sg m)

¹ The target excavation depth for duct bank construction will be approximately 7.0 ft (2.1 m) deep. The target excavation depth for splice vaults is approximately 13.0 ft (4.0 m) deep.

 2 Within the disturbance corridor, trench excavation is anticipated to be approximately 5.0 to 6.0 ft (1.5 to 1.8 m) wide with the use of trench boxes.

³ The approximate spacing of splice vaults will be every 0.2 to 0.4 mi (0.3 to 0.6 km) based on the geometry of the route and the physical properties of the cables.

2.5.2 Onshore Export Cable Construction Sequence

The general sequence of construction activities for the onshore export cable are listed in Table 2-8. Civil construction is estimated to occur within a four to eight-month time frame and electrical installation is estimated to occur within a two- to three-month time frame.

Construction Activity	Construction Summary
Civil Construction/Site Work	
Site Preparation	Site preparation will include surveying and staking the onshore export cable corridor alignments, implementation of the specified traffic control measures required to perform the work, and soil erosion control methods to prevent runoff into the existing infrastructure. This stage of construction will also include identification of any existing underground utilities along the proposed alignment.
Clearing and Grading	The construction area for the cable route will be cleared of vegetation, and temporary environmental erosion controls such as swales and erosion control socks will be installed in accordance with BMPs. These controls will be maintained until the site is restored and stabilized. Portions of the construction area may also require grading.
Vault and Duct Bank Installation	The conduits will be encased in an approved concrete duct bank design installed via open trench for the majority of the Project. Once excavated, the open trench will be supported by a shoring system, if necessary. The conduits will be arranged per the design drawings and held in place using conduit spacers to allow concrete placement in accordance with the final design. This operation will be repeated until all conduit and concrete has been installed to the specified jointing locations (e.g., manholes, TJBs). At

TABLE 2-8. GENERAL ONSHORE EXPORT CABLE CONSTRUCTION SEQUENCE

Construction Activity	Construction Summary
	the completion of the installation, all conduits will be proofed and mandreleda to verify continuity of the raceway for cable installation.
Restoration Activities	Once the duct bank has been installed, restoration will be completed. For roadway installations, this will include the installation of the road subbase and base layers followed by the surface layer (i.e., concrete or asphalt). For installations outside of roadways, restoration typically involves backfilling to the original grade elevation and hydroseeding to prevent soil erosion.
Electrical Installation	
Cable Installation	Upon completion of the proofing and mandrel of the conduits, cable pulling operations can begin. The cable will be pulled through the duct bank to the vault and/or terminal structure and is cut leaving a sufficient amount of slack to perform the jointing operations. Once pulling is completed, the cables will be tested for jacket integrity to ensure no damage incurred during pulling. The cables will then be sealed to prevent moisture ingress until splicing/jointing operations can be performed.
Cable Splicing/Jointing	Cable jointing refers to the splicing and/or terminating of the cables. Splicing and terminating is performed once all the cables for the specific section have been successfully pulled into the jointing bay/vault or termination structure. Once splicing and terminating is complete, the cables and accessories will be secured to the associated racking systems with the use of cable clamps. This mitigates lateral movements experienced by the cable during operation.

Notes:

^a Mandrels are used to test the integrity of the conduit runs and remove small amounts of debris from within the conduit.

Off-site construction laydown areas are anticipated to be required to temporarily stage equipment and materials during the construction phase of the Project. SouthCoast Wind and its contractors will select site(s) that avoid and/or minimize additional impacts on coastal features, coastal wetlands and freshwater wetlands. SouthCoast Wind has initially identified one site that is located south of the northbound lane of State Route 24 (see Attachment A - Project Figures and Attachment D – Onshore Engineering Drawings). This site was previously occupied by a concrete batching plant; and the site is accessed off the northbound lane of Boyds Lane. This site has been selected because of its proximity to the Project route, it is a previously developed site which minimizes impacts on the environment and based on RIGIS data the site is located outside of the 200 ft contiguous area to coastal wetlands.

2.5.3 Onshore Export Cable Installation

The onshore export cables will be installed primarily within existing public road ROW. A pre-engineering survey will be performed to identify underground utility obstructions or potential crossings including other high-voltage cables or pipelines. Preliminary analyses have determined potential water line crossings by the onshore export cable route in Portsmouth.

SouthCoast Wind anticipates installing onshore cables in an underground concrete-encased duct bank, as shown in the Onshore HDD and SESC Engineering Drawings provided in Attachment D. Alternatively, the underground

conduits may be installed by directly burying them along or within public road ROW without the concrete encasement, where suitable.

Installation of the onshore underground conduit system will use open-cut trenching methods where practicable. An excavator or backhoe will excavate a trench along the proposed duct bank alignment. Trench boxes or other typical safety measures will be used to shore up the excavation while conduits are laid, and concrete is poured and cured. In areas without subsurface obstructions such as existing utilities, it may be feasible to install stretches of pre-cast concrete duct bank instead of a cast-in-place system.

Duct bank construction is expected to progress at a rate of 50 to 100 ft (15.2 to 30.5 m) per day, with the rate of progress depending on a variety of factors including the density of existing underground utilities. Trench excavation is anticipated to be approximately 5.0 to 6.0 ft (1.5 to 1.8 m) wide with the use of trench boxes. The target excavation depth for duct bank construction will be approximately 7.0 ft (2.1 m) deep but could be deeper depending on survey results and potential utility crossings. Splice vaults or direct buried splice pits will be placed at the required locations along the route, per the final design. At each location requiring the splicing of onshore power cables, two splice vaults and two communications handholes would be installed. The approximate spacing of splice vaults will be every 0.2 to 0.4 mi (0.3 to 0.6 km) based on the geometry of the route and the physical properties of the cables. Like TJBs, splice vaults provide a clean, dry environment for the jointing of segments of onshore export cable. The fiber optic communications cables will be joined inside the communications handhole installed adjacent to the splice vaults with its own access cover. After completion of trenches, duct banks, and vaults or pits, cable installation and pulling operations will be performed.

The equipment used will be typical for any high-voltage open-cut trench installation and may include equipment such as excavators, front-end loaders, dump trucks, concrete trucks, skid steers, flat bed trailers, shoring systems, padding machines, compaction equipment and trench boxes. Typical equipment used for cable installation includes a winch, cable reel cart, box trucks, splicing and terminating tools, and other miscellaneous tools. Cable pulling technicians will maintain cable pulling speed and monitor the tension of the pull.

2.5.4 Operation and Maintenance

The offshore export cables will be buried and are not expected to require regular maintenance, except for manufacturer-recommended cable testing. Periodic visual inspections and preventative maintenance of the offshore export cables will be planned based on survey data and manufacturer recommendations based on the as-built drawings. Planned outages are not expected for the periodic inspections. Burial inspection visuals will occur periodically to be determined after final design and route are selected.

The landfall facilities will be buried and are not expected to require regular maintenance. The onshore TJBs and splice vaults can be accessed for planned inspections or maintenance, and for unplanned maintenance on an asneeded basis. Periodic visual inspections of the joints may be planned based on contractor and manufacturer recommendations.

2.6 DECOMMISSIONING

Offshore export cables may be retired in place or removed, as per the Rhode Island CRMP Regulations (650-RICR-20-00-01) and the Ocean SAMP (650-RICR-20-05), and 30 Code of Federal Regulations (C.F.R.) 585.909. Cable protection measures, such as concrete mattresses or rocks, could be removed before any cable recovery activities. Dredging vessels may be used to unearth the cables before the cable may be reeled onto barges or other transport vessels. At landfall, if the cables are removed, the ducts will remain in place.

The decommissioning of the TJBs and underground duct banks will be coordinated closely with the host town of Portsmouth, Rhode Island to ensure that decommissioning activities meet the town's energy infrastructure

needs and have the fewest impacts to the public and the environment. Subject to those future discussions, it is envisioned that the TJBs, underground duct banks, and likely the buried cables will be retired in place for possible future reuse or for full retirement. SouthCoast Wind is required to submit a decommissioning plan to BOEM for review and acceptance.

2.7 Environmental Compliance, Protective Measures, and Monitoring

Prior to the commencement of construction, operation and maintenance, and decommissioning activities, a facility-specific environmental compliance manual will be prepared for the Project outlining specific construction and operating obligations. This manual, in conjunction with an Emergency Spill Prevention, Response and Prevention Plan, will serve as Project-specific environmental guidance documents for the construction and operation of the Project. The following subsections describe BMPs, applicant-proposed environmental protection measures, and monitoring that SouthCoast Wind will implementing when appropriate.

2.7.1 Best Management Practices

BMPs are structural or non-structural measures, practices, techniques, or devices employed to avoid or minimize impact to sensitive resources. This section describes BMPs that SouthCoast Wind will employ during construction and include:

- Construction work hours
- Time of year restrictions
- Emergency Spill Response
- Environmental compliance and monitoring
- Site restoration

2.7.2 Project Construction Work Hours

Consistent with the Town of Portsmouth, Rhode Island noise ordinance, typical construction work hours for the Project will be within the hours of 7:00 a.m. and 9:00 p.m. each day.¹ SouthCoast Wind will comply with these standard hours except as described below. Some construction activities, such as HDD activity, cable pull-through operations, concrete pours, and cable splicing, once started, generally continue uninterrupted, meaning night-time work will occur for certain aspects of the construction.

2.7.3 Time of Year Restrictions

SouthCoast Wind has conducted stakeholder outreach including conversations and meetings with the Town of Portsmouth, Rhode Island, local businesses, residents, the commercial and recreational fishing industries and communities, and other stakeholders through public meetings as well as open houses held in Portsmouth, Rhode Island. Based on input received, times of year for construction activities, primarily from late fall through early spring, were identified to minimize impacts to local stakeholders. SouthCoast Wind will work to the considerations of these entities, as well as those of the Rhode Island Department of Transportation (RIDOT) and our landfall site stakeholders.

SouthCoast Wind has also held meetings with regulatory agencies, including RIDEM, RI DMF, RI CRMC, USACE, USEPA and NMFS to receive input on time of year in-water work constraints regarding sensitive marine species.

¹ Portsmouth General Legislation Chapter 257 Section 13.

SouthCoast Wind will continue to coordinate with these agencies and local stakeholders to further define construction schedules and potential time of year restrictions for construction activities.

2.7.4 Emergency Spill Response

SouthCoast Wind has prepared Emergency Response Plan requirements (Attachment F) to avoid and/or minimize the risk of impacting the water column and benthic habitats from any accidental releases of oil and/or hazardous materials. Project contractors will be required to prepare emergency response plans applicable to each specific scope of work. The requirements for each of these plans are outlined in Attachment F – Emergency Response Plan requirements and will be included in the emergency response plans wherever relevant to the scope of work. The emergency response plans will be implemented along with the Project Oil Spill Response Plan (OSRP) (COP, Appendix E2). The OSRP includes provisions for responding to oil and fuel spills. Marine contractors conducting Project work within Rhode Island waters will be responsible for finalizing a task-specific OSRP consistent with SouthCoast Wind's OSRP and all applicable regulations.

2.7.5 HDD Inadvertent Release Response

SouthCoast Wind is utilizing HDD technology for sea-to-shore cable transitions to avoid impacts to sensitive coastal resources. An HDD Inadvertent Release of Drilling Muds Contingency Plan is included as Attachment G to describe best management practices to avoid an inadvertent release during HDD operations.

2.7.6 Environmental Compliance and Monitoring

SouthCoast Wind will implement environmental compliance plans for all construction activities to oversee implementation and reporting of best management practices and mitigation measures. Site personnel will be trained in required procedures for waste management and environmental protection. Wastes generated during construction and O&M activities, including septage, solid wastes or hazardous materials (chemicals, solvents, oils, greases, etc.) from equipment operation or maintenance will be temporarily stored and properly disposed of on land or otherwise disposed of in accordance with all applicable regulations.

2.7.7 Site Restoration

In addition to the reconstitution of the cable trench that is expected from the use of the jet-plow, the backfilling of the side-cast dredge material into the offshore HDD trench, the offshore cable trenches are anticipated to be fully reconstituted by the natural tidal and current cycles to reestablish pre-disturbance seafloor grades. If additional fill is necessary to backfill the temporary HDD pits, clean fill of similar geologic composition, grain size, and biological characteristics will be acquired.

Onshore construction areas will be restored to pre-construction conditions per plans and approaches developed with the local community and RIDOT, as required.

2.7.8 Proposed Avoidance, Minimization, and Mitigation Measures

The Project was sited, planned, and designed so that the proposed Project avoids and minimizes potential impacts on physical, biological, and cultural resources to the extent practicable. Avoidance, minimization, and mitigation measures designed for each phase of construction will effectively minimize Project impacts on the natural environment. Potential impacts to resources from the Project are expected to be limited temporally and/or spatially. Resource characterizations and impact assessments are presented in Section 3 and are guided by input from appropriate federal and state agencies, municipal input, and numerous stakeholders (public and private) in the region.

To the extent there are potential impacts from the Project that cannot be avoided, SouthCoast Wind will seek to avoid or minimize such impacts. Potential impacts to resources from the offshore export cables and landfalls are expected to be limited in scope temporally and/or spatially. Post-construction monitoring plans will be developed, as needed, in coordination with the relevant agencies prior to construction.

Table 2-9 below summarizes the various avoidance, minimization, and mitigation measures that SouthCoast Wind intends to implement, as appropriate to avoid, minimize or mitigate environmental impacts.

Resource	Project Phase	Avoidance, Minimization, and Mitigation Measures		
		Natural Environment		
Geology and Surficial Geology	Construction	 SouthCoast Wind will use BMPs to minimize sediment mobilization during offshore export cable installation. SouthCoast Wind, when feasible, will use technologies that minimize sediment mobilization and seabed sediment alteration for cable burial operations. SouthCoast Wind, where practical and safe, will utilize dynamic positioning vessels. SouthCoast Wind will utilize HDD for sea-to-shore transition. The offshore export cables will be installed in a bundled configuration where practicable, to reduce installation impact area and post-installation occupied area. The primary cable burial objective will be to achieve a suitable target burial depth of the offshore export cables in the seabed along the entire ECC (where possible), by micro-routing the cables within the ECC and by assessing and selecting suitable installation/burial tooling for the seabed conditions. Use of secondary cable protection (rock and/or mattresses) will be limited to the output practicable. 		
Geologic Hazards	Design and Construction	 SouthCoast Wind performed geophysical and geotechnical surveys as part of the planning phase of the Project to identify geologic hazards and anomalies. SouthCoast Wind is proactively routing the cables to avoid hazards, to the extent practicable. SouthCoast Wind will establish buffers, as necessary, to avoid anomalies during construction. 		
Marine Sediments and Soils	Construction	 SouthCoast Wind will select and use BMPs including the use of a SESC plan to minimize sediment mobilization during offshore construction and HDD operations. SouthCoast Wind, when feasible, will use technologies that minimize sediment mobilization and seabed sediment alteration for cable burial operations. Project vessels will follow USCG requirements at 33 C.F.R. 151 and 46 C.F.R. 162 regarding bilge and ballast water. All Project vessels are to comply with regulatory requirements related to the prevention and control of discharges and accidental spills including USEPA requirements under the USEPA 2013 Vessel General Permit and state and local government requirements. SouthCoast Wind will comply with the regulatory requirements related to the prevention and control of discharges and accidental spills including USEPA requirements under the USEPA 2013 Vessel General Permit and state and local government requirements. 		

TABLE 2-9. AVOIDANCE, MINIMIZATION AND MITIGATION MEASURES – NATURAL AND SOCIAL ENVIRONMENTS

Resource	Project Phase	Avoidance, Minimization, and Mitigation Measures		
		 documented in the proposed Project's Emergency Spill Prevention, Response and Prevention Plan. SouthCoast Wind will have an HDD Contingency Plan in place to mitigate, control, and avoid unplanned discharges related to HDD activities. SouthCoast Wind will implement an SESC plan during trenching and excavation activities, in accordance with the Rhode Island Soil Erosion and Sediment Control Handbook, and in accordance with approved plans and permit requirements. The erosion control devices will function to mitigate construction-related soil erosion and sedimentation and will also serve as a physical boundary to separate construction activities from resource areas. Prior to construction, SouthCoast Wind will conduct a sediment sampling and analysis survey in the vicinity of areas of potential impact to ensure water quality standards are met. 		
Surface Waters	Construction	 SouthCoast Wind will select and use BMPs including the use of an SESC plan to minimize sediment mobilization during offshore construction and HDD operations. SouthCoast Wind, when feasible, will use technologies that minimize sediment mobilization and seabed sediment alteration for cable burial operations. Project vessels will follow USCG requirements at 33 C.F.R. 151 and 46 C.F.R. 162 regarding bilge and ballast water. Sanitation will be provided on service vessels utilized by personnel for construction and transport. The transport vessels will hold sewage within holding tanks and dispose of all raw or treated sewage in accordance with all applicable discharge rules and regulations. All Project vessels are to comply with regulatory requirements related to the prevention and control of discharges and accidental spills including USEPA requirements under the USEPA 2013 Vessel General Permit and state and local government requirements. SouthCoast Wind will comply with the regulatory requirements related to the prevention and control of discharges and accidental spills as documented in the proposed Project's OSRP. SouthCoast Wind will have an HDD Contingency Plan in place to mitigate, control, and avoid upplaned discharges related to the HDD activities. 		
Finfish	Construction	 SouthCoast Wind will design the sea-to-shore transition to reduce the dredging footprint and effects to benthic organisms (e.g., offshore cofferdam and/or gravity cell). SouthCoast Wind will incorporate use of HDD at landing(s) to minimize spatial and temporal effects to benthic organisms and avoid disturbance to finfish and invertebrate Essential Fish Habitat (EFH) to the extent practicable. 		
Shellfish	Construction	 SouthCoast Wind will use HDD at landfall locations, to avoid disturbance to nearshore productive shellfish beds to the extent practicable. SouthCoast Wind will select lower impact construction methods, where possible. SouthCoast Wind has designed the ECC, and will micro-route cables within the ECC, to avoid complex habitats, where possible. The ECC was designed to minimize length of cable (and associated seabed impacts) needed. SouthCoast Wind will bury cables, where 		

Resource	Project Phase	Avoidance, Minimization, and Mitigation Measures
		 possible, to allow for benthic recolonization after construction is complete. Use of secondary cable protection (rock and/or mattresses) will be limited to the extent practicable. The offshore export cables will be installed in a bundled configuration where practicable, to reduce installation impact area and post-
		installation occupied area.
Marine Mammals and Sea Turtles	Construction	 Protected species observers will be employed, as required by National Marine Fisheries Service (NMFS), to monitor for whales, other marine mammals, and sea turtles. SouthCoast Wind will employ shut-down procedure when protected species are detected in their respective clearance zones in the Project area. SouthCoast Wind will implement measures as identified in the Project Marine Mammal and Sea Turtle Monitoring and Mitigation Plan, as needed. All vessel operators will be required to reduce vessel speed to 10 knots or less when large assemblages of marine mammals are observed near
		an underway vessel or if vessel are in an area with an active vessel speed
Rare, Threatened and Endangered Species	Construction	 SouthCoast Wind will continue to consult with the Rhode Island Natural Heritage Program, RIDEM, USFWS, and NMFS. SouthCoast Wind will site Project components to avoid locating onshore facilities and landfall sites in or near sensitive fish and wildlife habitats to the greatest extent practicable. SouthCoast Wind will train construction staff on biodiversity
		management and environmental compliance requirements.
Aquaculture	Construction	 SouthCoast Wind will work with municipal shellfish constables to coordinate shellfish seeding with planned activities prior to construction activities. SouthCoast Wind is currently working with commercial and recreational fishermen as well as Fisheries representatives to determine construction timing and locations with fishing vessels to anticipate and avoid/minimize/mitigate gear interactions that may occur during construction. SouthCoast Wind's ECC has been designed in a location and orientation
		 such that it does not directly overlap with active aquaculture leases. SouthCoast Wind has conducted modeling to understand potential sedimentation impacts.
Commercial and Recreational Fishing	Construction	 SouthCoast Wind is currently working with commercial and recreational fishermen as well as Fisheries Representatives to determine construction timing and locations with fishing vessels to anticipate and avoid/minimize/mitigate gear interactions that may occur during construction. Temporary safety zones associated with construction activities implemented in consultation with USCG will limit direct access to areas with active construction activities for the safety of mariners and Project employees, but these areas will be limited spatially and temporally.
		(LNMs) of the presence and location of partially installed structures.

Resource	Project Phase	Avoidance, Minimization, and Mitigation Measures		
		 The SouthCoast Wind Fisheries Liaison Officer will proactively contact fishermen known to fish in areas that will see construction activities in advance of the start of construction by utilizing Fisheries representatives and connections with relevant state agencies to alert the fishermen of planned construction activities and schedules. SouthCoast Wind will proactively contact and compensate fishermen if their gear is entangled during construction. SouthCoast Wind will consider the use of fixed mooring buoys at various strategic locations in the Project area to avoid the need for anchoring. SouthCoast Wind will continue to ensure that all Project-related vessels follow appropriate navigational routes and other USCG requirements, communicate via USCG LNMs, issue regular mariner updates and/or direct offshore radio communications to help mitigate risks to the commercial and recreational fishing industries, as well as other mariners. SouthCoast Wind will strive to achieve target burial depth, minimize secondary protection, select secondary protection methods that minimize interference with fishing activities, and make the location of secondary protection and relocated boulders available via methods most useful to the commercial fishing industry. 		
Electric and Magnetic Fields (EMF) (offshore export cables)	Post- Construction	 User of the commercial many metry of the second of the export cables will be completely shielded by cable materials. Magnetic Field (MF) modeling for the offshore export cables showed that direct current (DC) MF levels will be increased only for small areas along the seafloor around certain localized cable locations where conservative (and atypical) installation conditions are present, contributing to highly localized deviations from the earth's DC geomagnetic field. The weight of the currently available scientific evidence does not provide support for concluding there would be population-level harm to marine species from EMFs associated with HVDC submarine transmission. A BOEM sponsored study in 2019 concluded, based on its review of the state of the knowledge regarding potential EMF-related impacts on marine life, "The operation of offshore wind energy projects is not expected to negatively affect commercial and recreational fishes within the southern New England area. Negligible effects, if any, on bottom-dwelling species are anticipated. No negative effects on pelagic [i.e., in upper layers of the open sea] species are expected due to their distance from the power cables buried in the seafloor." Although the steady Magnetic Fields (MFs) emitted by DC submarine cables do not create induced EFs like those created by the time-varying MFs from 60-Hz AC submarine cables, motion-induced EFs are created by the movement of seawater or marine species through the steady MFs emitted by DC submarine cables. These motion-induced EFs have the same properties as the motion-induced EFs that are created by the movement of seawater or marine species through the earth's steady geomagnetic field. For the typical buried HVDC offshore cable installation case, the motion-induced EFs associated with movement through the earth's steady geomagnetic field. The strength of these motion induced EFs also similarly drops off with distance from the cables like the DC MFs associated with the cur		

3. AFFECTED ENVIRONMENT, POTENTIAL IMPACTS, AND PROPOSED AVOIDANCE, MINIMIZATION, AND MITIGATION

3.1 ONSHORE ENVIRONMENTAL SETTING, PROJECT IMPACTS, AND PROPOSED AVOIDANCE MITIGATION MEASURES

This section provides an overview of the environmental setting, potential Project impacts, and proposed avoidance, minimization, and mitigation measures within the onshore Project Area. For the purposes of this discussion, the onshore Project Area consists of approximately 2.0 mi (3.2 km) of onshore export cables within an underground duct bank and manhole system, an approximate 25 ft (7.6 m) wide construction zone along the duct bank, construction zones around manhole/vault structures of approximately 1,000 sq ft (93 sq m),¹ and two onshore construction areas for the HDD construction areas, each approximately 1.0 ac (0.4 hectare [ha]). Two HDD construction areas are proposed at the southern and northern sides of Aquidneck Island. The southern HDD construction area is located at the parking lot of the Montaup Country Club, with an alternate site under consideration at land owned by Roger Williams University on the northern side of Anthony Road (*aka* RWU north parcel HDD construction area). See Figure 1-2 in Attachment A, Attachment D Onshore Engineering Drawings – Soil Erosion and Sediment Control Measures, Onshore Engineering and HDD and Attachment H Photo Array for more information about the planned cable route and construction areas.

3.1.1 Coastal Features and Coastal Wetlands

The following sections describe both CRMC jurisdictional coastal features and coastal wetlands. Coastal Features and Coastal Wetlands were mapped based on state mapping data (RIDEM 1993) and field verification by POWER Engineers Consulting, PC (POWER) as described in Attachment I Wetland Field Review Technical Memorandum and summarized on Figure 3-1 (Panels 1-9). Coastal Features and Coastal Wetlands were field delineated on December 21, 2021, January 6, 2022, and February 7, 2023,² within publicly accessible areas of the proposed underground export cable routes and where access was granted on private property. Outside of these areas accessed during field verification, the RIDEM 1993 wetland coverage data is displayed on Figure 3-1 (Panels 1-9).

The following contiguous areas around the mapped Coastal Features and Wetlands were also mapped:

- 200-ft Contiguous Area of a Coastal Feature
- 200-ft Contiguous Area of a Coastal Wetland

3.1.1.1 Coastal Features

Coastal Features (Coastal Beach, Coastal Dune and Manmade Shoreline) were mapped at Island Park Beach in the vicinity of the onshore HDD construction area. Island Park Beach is located south of the

¹ The approximate spacing of splice vaults will be every 0.2 to 0.4 mi (0.3 to 0.6 km) based on the geometry of the route and the physical properties of the cables.

² RIGIS. 1993.

intersection of Boyds Lane and Park Avenue and includes coastal beach and dune backed by manmade shoreline features. The CRMP defines Coastal Beach as expanses of unconsolidated, usually unvegetated sediment commonly subject to wave action, but may also include a vegetative beach berm. Beaches extend from mean low water landward to an upland rise, usually the dune, headland bluff, or coastal protection structures, pilings, or foundation. The CRMP defines Dunes as an elevated accumulation of sand formed by ocean wind action.

The upper limit of the coastal dune at Island Park Beach abuts an approximately 36-inch-high concrete seawall which runs parallel to Park Avenue. The CRMP defines Manmade Shoreline as those shorelines that are characterized by concentrations of shoreline protection structures and other alterations, to the extent that natural shoreline features are no longer dominant. At Island Park Beach, the limit of the CRMC 200-ft contiguous area is measured from the top of this seawall as it is the most landward coastal feature in this area.

Coastal features that occur along the Montaup Country Club HDD Trajectory Bayshore, where it transitions into Mount Hope Bay, also revealed Coastal Beach. This location of Coastal Beach is not reflected in Attachment I Wetland Field Review Technical Memorandum due to the need for access permission to be granted to the site. Field delineations at this location have since been completed. The coastal beach is comprised of sand and rounded cobble. Atlantic slipper snail shells (*Crepidula fornicata*) were present and common. The coastal beach gently transitions into a flat upland that extends inland for approximately 125 ft between the coastal beach and Montaup Country Club golf course. This upland area is dominated by scattered eastern red cedar (*Juniperus virginiana*) trees, honeysuckle (*Lonicera* sp.), bayberry (*Myrica pennsylvanica*), common reed (*Phragmites australis*), and grasses (*Poaceae spp.*). No coastal dune habitat, elevated landform, or manmade shoreline was observed at this location.

3.1.1.2 Coastal Wetlands

Coastal wetlands are defined in the CRMP "as salt marshes and freshwater or brackish wetlands contiguous to salt marshes or physiological features. Areas of open water within coastal wetlands are considered a part of the wetland. In addition, coastal wetlands also include freshwater and/or brackish wetlands that are directly associated with non-tidal coastal ponds and freshwater or brackish wetlands that occur on a barrier beach or are separated from tidal waters by a barrier beach" (RI CRMC 2020)³.

SouthCoast Wind identified and mapped three coastal wetlands in the vicinity of the onshore export cable route. Each of these coastal wetlands have an associated 200-ft contiguous area to coastal wetlands and coastal features.

Wetland W8 is a Coastal Wetland located north of Anthony Road and east of the Aquidneck Land Trust Town Pond parking area (see Figure 3-1). This wetland complex consists of estuarine emergent and palustrine emergent marshes dominated by common reed that cover >1.0 ac and a palustrine scrubshrub swamp dominated by coastal sweet pepperbush (*Clethra alnifolia*), dogwood (*Cornus* sp.), and highbush blueberry. Wetland W8 has a 200-ft contiguous area. The wetland includes an embayment fed by the tidal portion of Founders Brook. The tidally influenced portion of the wetland appears to have zones of intertidal unconsolidated shore, and intertidal persistent emergent marsh dominated by

³ RI CRMC. 2020. RI CRMP aka The Red Book

smooth cordgrass and common reed. Soils underlying the wetland are mapped as Sa and Mk, which are both hydric soils.

Wetland W10 is a Coastal Wetland located on the east side of Boyds Lane north of Park Avenue (see Figure 3-1). This estuarine system consists of an intertidal persistent emergent marsh dominated by common reed and salt hay grass (*Spartina patens*), intertidal unconsolidated shore, and subtidal unconsolidated bottom tidal pools and channels. Wetland W10 has a 200-ft contiguous area. Most of the wetland boundary lies on private property adjacent to Boyds Lane. Soils underlying the wetland are mapped as Mk, a hydric soil.

Wetland W11 is a Coastal Wetland located on the west side of Boyds Lane north of Park Avenue (see Figure 3-1). This estuarine emergent wetland is a remnant salt marsh, as evidenced by presence of salt hay grass. Full tidal exchange is restricted due to an elevated 18-inch diameter culvert under Boyds Lane. Limited tidal exchange may occur during exceptional high tides or during storm surges. Despite the tidal restriction, this wetland is considered an estuarine emergent marsh dominated by common reed and salt hay grass and an unconsolidated bottom open water pond. Review of historic aerial photography indicates the pond is permanently flooded. Wetland W11 has a 200-ft contiguous area. Most of the wetland boundary is located on private property adjacent to Boyds Lane. Soils underlying the wetland are mapped as Mk, a hydric soil.

3.1.1.3 Coastal Wetlands Functions and Values

The landscape setting of the onshore export cable route and HDD construction areas is defined by transportation corridors (state and local roadways) located within the coastal community of the Town of Portsmouth interspersed with areas of upland development and bordered by coastal and freshwater wetlands. The coastal wetlands on the south end of Project route are associated with the Sakonnet River, to the east by Island Park Cove, and to the north by Mount Hope Bay. The wetland system located within the SouthCoast Wind 1 Project corridor were identified and delineated by POWER, including ground-truthing RIDEM and CRMC regulated wetlands mapped by Rhode Island Geographic Information System (RIGIS) (please refer to POWER's Wetland Field Review Technical Memorandum Attachment I).

The United States Fish and Wildlife Service (USFWS), National Wetlands Inventory (NWI) established a dichotomous key and wetland functional assessment entitled *Wetland Functions Associated with Landscape Position, Landform* and Water Path Flow.⁴ Wetlands are categorized primarily based on their position in the landscape, landform type (geologic and surficial geologic setting), and the hydrologic regime. This USFWS wetland functional assessment was applied to the wetlands present along the Project onshore corridor.

Coastal Wetlands 8, 10 and 11, are estuarine wetland systems that are high salinity environments influenced twice daily by the tidal cycles of the Sakonnet River and Mount Hope Bay. These estuarine wetlands (landscape position) are characterized by salt marsh communities, including high marsh and low marsh plant communities that are fringe wetlands (landform) bordering tidal creeks, salt pannes and coastal embayments (i.e., Island Park Cove). Estuarine wetlands serve the following major functions⁵:

⁴ USFWS, R.W. Tiner. 2013. Dichotomous Keys and Mapping Codes for Wetland Landscape Position, Landform, Water Flow Path, and Waterbody Type Descriptors : Version 2.0.

⁵ USFWS. 2013.

- 1. Buffer inland development from the water level rises with the tides.
- 2. Buffer terrestrial areas from changes in sea level rise and storm surge.
- 3. Serve as barriers to saltwater encroachment.
- 4. Allow for sediment deposition.
- 5. Provide open habitat to estuarine organisms for feeding and recruitment.
- 6. Offer subaqueous soils and water quality for shellfish communities.

Table 3-1 below provides the functions and values of the coastal wetlands in the Project Area. This evaluation follows the USACE descriptive approach⁶:

Wetland	Biological	Hydrologic	Water Quality	Societal Values
Coastal Wetland 8	V	٧	v	V
Coastal Wetland 10	V	٧	٧	٧
Coastal Wetland 11	v	٧	٧	٧

TABLE 3-1. COASTAL WETLANDS FUNCTIONS AND VALUES

3.1.2 Freshwater Wetlands in the Vicinity of the Coast

Non-tidal Freshwater Wetlands in the Vicinity of the Coast are present in the onshore Project Area. The freshwater wetlands are predominantly associated with Founders Brook located to the northwest of the Project onshore export cable route. These wetlands are subject to the *Rules and Regulations Governing the Protection and Management of Freshwater Wetlands in the Vicinity of the Coast* (650-RICR-20-00-9) (Freshwater Wetlands Rules). CRMC will be the lead-review agency for activities within freshwater wetlands jurisdictional areas. These Freshwater Wetland Rules are incorporated into the CRMP by reference, however, the criteria for describing and evaluating wetlands, documenting avoidance, minimization, and mitigation and responding to specific review criteria differ from the CRMP. Brief descriptions of the resources are presented here. Further details are presented in Attachment I.

Freshwater Wetlands in the Vicinity of the Coast were mapped based on state mapping data (RIDEM 1993), the National Hydrography Dataset (United States Geological Survey [USGS] 2011), and field verification by POWER as described in Attachment I and summarized on Figure 3-1 (Panels 1-9). The following contiguous areas around the mapped Freshwater Wetlands were also mapped:

- 100-foot Contiguous Area of a Freshwater Wetland
- 200-foot Contiguous Area of a River/Stream

Wetland W1 is a Freshwater Wetland in the Vicinity of the Coast located at the toe of embankment slope within a depression between Route 24 southbound, the Route 24 southbound Exit 2 ramp, and the eastern side of Boyds Lane (see Figure 3-1). This wetland consists of a palustrine emergent marsh dominated by common reed and is <1.0 ac in size. Wetland W1 has a 100-ft contiguous area. The wetland appears to be anthropogenic in nature and may be a component of the highway stormwater treatment system. No defined outlet or inlets other than highway stormwater outfalls were observed.

⁶ USACE. 1999. The Highway Methodology Workbook Supplement, Wetland Functions and Values - a Descriptive Approach. New England District, USACE, NAEEP-360-1-30a. Concord, MA.

The wetland extends beyond the review area to the northeast. Soils underlying the wetland are mapped as Walpole sandy loam (Wa), a hydric soil.

Wetland W2 is a Freshwater Wetland in the Vicinity of the Coast located between Old Boyds Lane and the southwestern side of Boyds Lane north of Route 24 (see Figure 3-1). This wetland is a palustrine emergent marsh dominated by common reed and appears to be >1.0 ac in size. Soils underlying the wetland are mapped as Wa and UD.

Wetland W3 is a Freshwater Wetland in the Vicinity of the Coast located south of the railroad tracks under the Mount Hope Bridge north of the terminus of Boyds Lane (see Figure 3-1). This wetland is a palustrine emergent marsh dominated by common reed and is <1.0 ac in size. Soils underlying the wetland are mapped as Pittstown silt loam (PmB), a non-hydric soil.

Wetland W4 is a Freshwater Wetland in the Vicinity of the Coast that occupies a small depression north of the railroad tracks under the Mount Hope Bridge (see Figure 3-1). This wetland is a palustrine emergent marsh dominated by common reed and extends beyond the review area to the west. The wetland is <1.0 ac in size. Soils underlying the wetland are mapped as PmB, a non-hydric soil.

Wetland W5 is a Freshwater Wetland in the Vicinity of the Coast located north of the intersection of Boyds Lane and Anthony Road (see Figure 3-1). This wetland system contains Founders Brook and is classified as a riverine perennial unconsolidated bottom channel of unknown depth bordered by a palustrine emergent marsh dominated by common reed. The wetland appears to be >1.0 ac in size and separated from an adjacent coastal wetland by a linear upland berm. Soils underlying the wetland are mapped as Matanuck mucky peat (Mk), a hydric soil, and Water (W) (Founders Brook).

Wetland W6 is a Freshwater Wetland in the Vicinity of the Coast bounded by the Route 24 southbound Exit 2 ramp, Boyds Lane, and Anthony Road (see Figure 3-1). This wetland system includes a palustrine emergent marsh dominated by common reed >1.0 ac in size and a shallow palustrine unconsolidated bottom pond (Town Pond). Founders Brook drains the system to the north via an approximately 5.0-ft-diameter concrete culvert under Anthony Road. Soils underlying the wetland are mapped as Sandyhook mucky fine sand (Sa), a hydric soil.

Wetland W7 is a Freshwater Wetland in the Vicinity of the Coast that occupies a small depression northeast of the eastern limit of Wetland W5 and north of Anthony Road (see Figure 3-1). This wetland is a small (<1.0 ac) seasonally saturated palustrine forested wetland that appears to be confined to a low area between Anthony Road, an upland berm parallel with Founders Brook on the west, and an elevated trail to the north. Dominant vegetation includes red maple (*Acer rubrum*) and eastern cottonwood (*Populus deltoides*) trees with an understory of multiflora rose (*Rosa multiflora*) and highbush blueberry (*Vaccinium corymbosum*). Soils underlying the wetland within the review area are mapped as UD.

Wetland W9 is a Freshwater Wetland in the Vicinity of the Coast located on an undeveloped lot on the north side of Boyds Lane between Anthony Road and Maple Drive (see Figure 3-1). This wetland is a palustrine emergent marsh dominated by common reed and extends beyond the review area to the northeast. Soils underlying the wetland are mapped as PmB, a non-hydric soil.

Wetland W12 is a Freshwater Wetland in the Vicinity of the Coast located on the north side of Anthony Road on the Montaup Country Club property (see Figure 3-1). This small wetland system (<1.0 ac) consists of a small pond with a palustrine emergent marsh fringe and appears to be anthropogenic in

nature (i.e., golf course water feature). Soils underlying this wetland are mapped as Quonset gravelly sandy loam, a non-hydric soil.

3.1.2.1 Freshwater Wetlands in the Vicinity of the Coast Functions and Values

Freshwater Wetlands 1, 2, 3, 4, 5, 6, 7, 9, and 12 are palustrine fringe wetland systems that are located in a low gradient setting along the coast, and in many instances, border coastal wetlands (i.e., salt marsh). The main freshwater tributary located within the Project onshore corridor is Founders Brook.

Founders Brook is a low-gradient lotic wetland (landscape position) that receives water contribution from fringe wetlands (landform) consisting of forested wetland, scrub-shrub wetland and emergent wetland. Founders Brook flows northeast through the Anne Hutchinson & Many Dyer Memorial Park-Founders Brook Park, is culverted under Boyds Lane where the brook enters an emergent wetland comprised predominantly by tall reed (*Phragmites*) where is flows north through a culvert under Anthony Road and expands in width on the northwest side of the existing electric transmission right-ofway (ROW). The transmission ROW also appears to serve as a separation zone between Founders Brook and an estuarine wetland system that is flushed through a narrow breachway into Mount Hope Bay. The hydrologic regime of Founders Brook serves the following functions:

- 1. Continuous flow with cool seasonal flooding.
- 2. Capturing and distributing high suspended sediments.
- 3. Flood storage and disbursement of floodwaters.
- 4. Conserve groundwater discharge.
- 5. Provide fisheries and wildlife habitat and biodiversity.
- 6. Biogeochemical activity and nutrient retention.

The wetlands associated with Founders Brook, including the freshwater wetland system located within the roadway cloverleaf of State Route 24, Boyds Lane (State Route 138) and Anthony Road, offer the following wetland functions to varying degrees:

- 1. Hydrologic function dynamic and long-term water storage, energy dissipation, subsurface water storage and moderation of groundwater flow/discharge.
- 2. Biochemical function nutrient cycling, removal of imported elements, retention of particulates, and organic carbon export.
- 3. Floral habitat maintain characteristic plant communities, maintain characteristic detrital biomass.
- 4. Faunal habitat maintain spatial structure of habitat, maintain interspersion and connectivity of habitats, maintain distribution/abundance of invertebrate and vertebrate species.

Table 3-2 presents the freshwater wetlands functions and values for the 12 aforementioned freshwater wetlands in the Project Area. This evaluation uses the USACE descriptive approach.⁷

⁷ USACE. 1999. The Highway Methodology Workbook Supplement, Wetland Functions and Values - A Descriptive Approach. New England District, USACE, NAEEP-360-1-30a. Concord, MA.

Wetland	Biological	Hydrologic	Water Quality	Societal Values
Wetland 1		٧	٧	
Wetland 2	V	٧	٧	V
Wetland 3		٧	٧	
Wetland 4		v	v	
Wetland 5	V	v	v	V
Wetland 6	V	٧	v	
Wetland 7	V	٧	٧	V
Wetland 9	V	٧	V	
Wetland 12			٧	

TABLE 3-2. FRESHWATER WETLANDS FUNCTIONS AND VALUES

3.1.2.2 Potential Project Impacts

The Project footprint does not lie within mapped coastal features or coastal wetlands. The underground portion of the onshore export cables are generally located within existing roadways or previously developed non-wetland areas to avoid direct impacts to wetlands. SouthCoast Wind has routed the cables within roadways to avoid wetland impacts. HDD will be used for the landfalls onto Portsmouth, which enables the cables to remain buried below the beach and intertidal zone, avoiding impacts to shoreline coastal wetlands.

Some areas of the Project footprint lie within the CRMC 200-ft contiguous areas as measured from the landward edge of coastal features and coastal wetlands in the Project Area. These areas are identified in Table 3-3 below.

Construction Location	Project Footprint within Contiguous Area in ac (ha)	Comments	
		HDD Construction Area	
Sakonnet River (Boyds Lane/Park Avenue)	1.04 (0.42)	This includes 200-ft contiguous area measured from the manmade shoreline feature and Coastal Wetlands 10 and 11.	
Montaup Country Club	0	The construction area is located outside of contiguous areas of wetlands.	
RWU North Parcel	1.01 (0.41)	This includes 200-ft contiguous area measured from Coastal Wetland 8.	
Underground Export Cable Route			
Preferred Route (to Montaup Country Club HDD Construction Area)	3.96 (1.60)	 Along Boyds Lane, this includes 200-ft contiguous area measured from Coastal Wetlands W10 and W11, the stream that flows beneath Boyds Lane via a culvert, and stream S2 (Founders Brook) and 100-ft contiguous area measured from Freshwater Wetlands in the Vicinity of the Coast W1, W2, W5, and W6. Along Anthony Road, this includes 200-ft contiguous area measured from a Coastal Wetland mapped by RIGIS and stream S2 and 100-ft contiguous area measured from Freshwater Wetlands in the Vicinity of the Coast W5, W6, W7, W8, and W12. 	

TABLE 3-3. PROJECT FOOTPRINT WITHIN CONTIGUOUS AREAS

Construction Location	Project Footprint within Contiguous Area in ac (ha)	Comments
Alternate Route (to RWU North Parcel HDD Construction Area)	3.31 (1.34)	 Along Boyds Lane, this includes the same contiguous areas identified for the preferred route above. Along Anthony Road, this includes 200-ft contiguous area measured from stream S2 and 100-ft contiguous area measured from Freshwater Wetlands in the Vicinity of the Coast W5, W6, W7, and W8.

3.1.2.3 Proposed Avoidance, Minimization, and Mitigation Measures

Environmental protective measures proposed by SouthCoast Wind are summarized in Section 2.7. Below is a list of measures applicable to coastal and freshwater wetlands:

- Onshore Project components were sited within previously disturbed and developed areas to the extent practicable; the Project footprint does not lie within Coastal Features or Wetlands, although it does overlap with the adjacent jurisdictional Contiguous Areas.
- HDD will be used to avoid impacts to shoreline Coastal Features and Wetlands.
- SouthCoast Wind will implement the Soil Erosion and Sediment Control Plan in Attachment D; the Emergency Response Plan (Attachment F); and the requirements of the RIPDES Construction General Permit.
- SouthCoast Wind will implement the HDD Inadvertent Release of Drilling Muds Contingency Plan (Attachment G) to minimize the potential risks associated with an inadvertent release of drilling fluids.
- SouthCoast Wind will require the construction contractor to have spill control and containment kits on site to allow for immediate response and cleanup in the event of an accidental release of fuel, oils, or other hazardous materials.
- Accidental spill or release of oils or other hazardous materials will be managed through Emergency Spill Response Plans prepared by construction contractors in compliance with the Emergency Response Plan requirements (Attachment F).
- At all times, dewatering will be performed in compliance with the Rhode Island Soil Erosion and Sediment Control Handbook and the applicable RIDEM and RI CRMC regulations pertaining to dewatering. Stormwater management and dewatering practices are outlined in Attachment D – Soil Erosion and Sediment Control Measures, Onshore Engineering and HDD.

3.1.3 Surface Waters and Groundwater

3.1.3.1 Affected Environment

Surface waters in Portsmouth, Rhode Island were field delineated on December 21, 2021, and January 6, 2022, within publicly accessible areas of the proposed underground export cable routes. Two nontidal perennial watercourses were identified during the field review. These resources had clearly defined bed and banks and exhibited indicators of year-round flow. Stream S1 is located near Mount Hope Bridge and is not described here as the Mount Hope Bridge route option has been deselected by SouthCoast Wind. Stream S2 is described below and shown on Figure 3-1. Additional information can be found in Attachment I - Wetland Field Review Technical Memorandum.

Coastal Features and Coastal Wetlands are described in Section 3.1.1 above, and Freshwater Wetlands in the Vicinity of the Coast are described in Section 3.1.2. Please see Section 3.2.2 for discussion of nearshore and offshore surface waters including Mount Hope Bay, the Sakonnet River, and Rhode Island Sound.

Stream S2 is Founder's Brook, a perennial watercourse that flows north and discharges into Mount Hope Bay (see Figure 3-1). Based on field indicators and available mapping, Founders Brook is a nontidal resource. Within the review area, Founders Brook drains Wetlands W5 and W6 and passes under Anthony Road via an approximately 5.0-ft-wide round concrete culvert. On the north side of Anthony Road, the brook is semi-ponded with a mucky sand substrate and is approximately 14 ft wide, >2.0 ft deep, and contained within Wetland W5. On the south side of Anthony Road, the brook has a mucky sand substrate, is approximately 6.0 ft wide, <1.0-ft deep and has low banks within Wetland W6. Stream S2 has a 200-ft contiguous area. Review of National Hydrography Dataset and topographic maps show Founders Brook continuing upstream under Boyds Lane and along the northwestern side of Route 24.

The onshore Project Area is not within a community wellhead protection area, groundwater recharge area, or sole source aquifer.⁸ There are no mapped drinking water protection areas along the export cable route in Rhode Island.

Groundwater beneath the onshore Project Area in Portsmouth, Rhode Island is classified as GA –suitable for drinking water use without treatment, but it is not considered a priority area for groundwater resources.

3.1.3.2 Potential Project Impacts

SouthCoast Wind has included Soil Erosion and Sediment Control Measures in the Onshore Engineering Drawings (Attachment D) which outline construction-related BMPs to reduce and/or prevent the discharge of stormwater pollutants into wetland resources or groundwater of Rhode Island. During excavation activities for the Project, groundwater and/or stormwater may be encountered by the contractor. The contractor may, if needed, discharge groundwater or stormwater into a secondary dewater containment area onsite using acceptable filtration measures, including the use of a dewatering basin properly lined with geotextile fabric for filtration, proper filter bags, oil absorbent filter socks (if necessary, should an oil sheen be observed), and erosion controls.

SouthCoast Wind will utilize HDD technology for sea-to-shore cable transitions to avoid impacts to sensitive coastal resources. HDD operations have the potential to inadvertently release drilling fluids from a deep boring into the surface environment if fluids travel through overlying soils or bedrock fractures to the ground surface or surface waters, typically under high pressure conditions. The HDD contractor will implement the BMPs outlined in a plan to minimize the potential for adverse environmental impacts during the HDD activities. An HDD Inadvertent Release of Drilling Muds Contingency Plan is included as Attachment G to describe these BMPs to avoid an inadvertent release during HDD operations.

There are no anticipated impacts to surface waters or groundwater during construction, operations and maintenance, or decommissioning of the onshore Project components.

⁸ RIDEM. 2021. *RI_Drinking_Water_Supplies GIS Feature Layer*. October 12, 2021. <u>https://ridemgis.maps.arcgis.com/home/item.html?id=d695d418523c46e7a280bd35e29776c9</u>. Accessed April 15, 2022.

3.1.3.3 Proposed Avoidance, Minimization, and Mitigation Measures

Environmental protective measures proposed by SouthCoast Wind are summarized in Section 2.7. Below is a list of measures applicable to groundwater:

- SouthCoast Wind will implement the HDD Inadvertent Release of Drilling Muds Contingency Plan (Attachment G) to minimize the potential risks associated with an inadvertent release of drilling fluids.
- SouthCoast Wind will require the construction contractor to have spill control and containment kits on site to allow for immediate response and cleanup in the event of an accidental release of fuel, oils, or other hazardous materials.
- Accidental spill or release of oils or other hazardous materials will be managed through Emergency Spill Response Plans prepared by construction contractors in compliance with the Emergency Response Plan requirements (Attachment F).
- At all times, dewatering will be performed in compliance with the Rhode Island Soil Erosion and Sediment Control Handbook and the applicable RIDEM and RI CRMC regulations pertaining to dewatering. Stormwater management and dewatering practices are outlined in Attachment D – Soil Erosion and Sediment Control Measures, Onshore Engineering and HDD.

3.1.4 Wildlife and Rare, Threatened, and Endangered Species

3.1.4.1 Affected Environment

Wildlife Habitat

The wildlife species present within the onshore Project area vary according to the habitat resources present. The majority of the Onshore Project Area is located within previously disturbed and developed areas, specifically existing roadway ROWs and parking lots, avoiding sensitive wildlife habitats to the greatest extent practicable. The landfall construction area located at the corner of Boyds Lane and Park Avenue and the landfall construction area located within land owned by Roger Williams University on the northern side of Anthony Road (alternate) [*aka* RWU north parcel HDD construction area] are not within roadway ROWs or parking lots and the habitats at these landfall construction areas are described below. The landfall construction area within the Montaup Country Club parking lot (preferred) is located within a paved parking lot and is outside of contiguous areas to coastal wetlands, rivers and streams, and freshwater wetlands, thus the habitat is not described below.

Landfall Construction Area (Corner of Boyds Lane and Park Avenue)

The temporary landfall construction area proposed at the northeast intersection of Boyds Lane and Park Avenue will be primarily located within the grass shoulder and previously disturbed roadway ROW. The landfall construction area will support the HDD construction and operations from the Sakonnet River. The landfall construction area is located within the 200-ft contiguous area of a coastal wetland (salt marsh – *Spartina alterniflora, Spartina patens*) located to the north (see Attachment A, Figure 3-1) that is associated with "The Cove" in Portsmouth. The land beyond the roadway consists of upland forb and scrub-shrub habitat (multiflora rose and staghorn sumac) with some scattered tree cover containing approximately 12-16 black locust and white oak trees. The construction area will extend into existing vegetated areas where removal of vegetation and earth disturbance will be required to prepare a safe and level construction area for the HDD equipment.

Landfall Construction Area (Montaup Country Club)

The temporary landfall construction area proposed at the Montuap Country Club located at 500 Anthony Road will be located within an existing, paved parking lot. The landfall construction area will support the HDD construction and operations from Mount Hope Bay. The landfall construction area is located outside of any 200-ft contiguous area of a coastal wetland. The adjacent land use includes the club house, maintenance garages, and manicured / landscaped course facilities.

Landfall Construction Area (RWU Property, Alternate)

An alternate landfall construction area (referred as the RWU north parcel HDD construction area) has been identified on the northeast side of Anthony Road, across the street from the Roger Williams University residence hall facility (see Attachment A, Figure 3-1). Portions of the construction area are located within the 200-ft contiguous area of a coastal feature (salt marsh - *Spartina patens, Distichlis spicata, Juncus gerardii*)) and within the 100-ft contiguous area of a freshwater wetland (fringe emergent marsh - *Phragmites spp.*). The property appears to have been the construction area used during the restoration of the "Bertha K. Russel Preserve" to restore salt marsh habitat. This land is also occupied by an existing gravel access route that provides access to the electric transmission ROW. This land offers a level and somewhat isolated parcel where HDD equipment can be staged and advanced to reach Mount Hope Bay. The land consists of upland scrub-shrub habitat (multiflora rose and staghorn sumac) with some forested area containing approximately 10-14 black cherry and black locust trees. The construction area will extend into existing vegetated areas where removal of vegetation and earth disturbance will be required to prepare a safe and level construction area for the HDD equipment.

Rare, Threatened, and Endangered Species

To assess whether any federal or state listed rare, threatened, or endangered species or species of greatest concern were present within the Onshore Project Area, SouthCoast Wind evaluated information from the USFWS Information for Planning and Consultation (IPaC) tool, the Rhode Island Natural Heritage Program, and the RIDEM Division of Fish and Wildlife.

USFWS IPaC Consultation

SouthCoast Wind generated an official species list from the USFWS using the IPaC tool on March 30, 2022 regarding the Project's Study Area including the ECC, landfall locations, and onshore underground export cables (see Attachment J - USFWS IPaC Consultation). An official species list is an official letter from the local USFWS office containing information to assist in evaluating the potential impacts of a project. It includes a list of species and critical habitat that should be considered under *Section 7* of the Endangered Species Act (ESA), as well as a project tracking number and other pertinent information from the local field office.

The official species list generated by IPaC on March 30, 2022 (Attachment J), indicated that the federally designated and threatened northern long-eared bat (*Myotis septentrionalis*) and federally endangered roseate tern (*Sterna dougallii dougallii*) have the potential to occur within the Study Area. The USFWS has recently delayed the effective date of the final rule to reclassify the northern long-eared bat from a threatened species to an endangered species under the ESA. The agency is extending the effective date by 60 days, from January 30, 2023 to March 31, 2023. See additional information on the potential for northern long-eared bat and roseate terns in the RIDEM Division of Fish and Wildlife section below.

USFWS concluded its ESA Consultation with a Biological Opinion, which was provided to BOEM on September 1, 2023. The Biological Opinion considered the potential adverse effects of operating the Project, including the Clean Energy Resource in federal waters, on the federally threatened Atlantic Coast piping plover (*Charadrius melodus*) and red knot (*Calidris canutus rufa*). The Biological Opinion also assessed BOEM's determination that the proposed action "may affect, but is not likely to adversely affect," the federally endangered roseate tern, northern long-eared bat, and sandplain gerardia (*Agalinis acuta*). USFWS concurred with BOEM's determination that the Project may affect, but is not likely to adversely affect roseate tern, northern long-eared bat, and sandplain gerardia. Additionally, USFWS's Biological Opinion concluded that the Project is not likely to jeopardize the continued existence of the piping plover or rufa red knot.

The IPaC list also indicated that there are no Critical Habitats within the Study Area.

RIDEM Division of Fish and Wildlife

The northern long-eared bat is listed as a species of greatest conservation need in the 2015 Rhode Island Wildlife Action Plan.⁹ Northern long-eared bats utilize maternity roost sites during the summer and hibernacula sites during the winter. On April 8, 2022, SouthCoast Wind contacted Jennifer Brooks, Bat Biologist at RIDEM Division of Fish and Wildlife, for information on northern long-eared bat maternity roosts and hibernacula in the vicinity of the Project. According to her response, dated April 12, 2022, there are no known northern long-eared bat maternity roosts or hibernacula in or near (within five miles) the Project Area. SouthCoast Wind communicated again with the Division of Fish and Wildlife on February 10, 2023, to request any available information on the northern long-eared bat; SouthCoast Wind will forward the Division's response, when received, to the RI CRMC. Conversion of foraging and roosting habitats is also expected to be minimal for the Project as the onshore Project components are planned to be installed primarily within roadways and roadway shoulders to mitigate impacts to rare species and tree clearing will be avoided. SouthCoast Wind updated its consultation (April 2022) with the RIDEM Division of Fish and Wildlife (RIDFW), and according to the RIDFW, at this time, there are no known northern long-eared bat maternity roosts or hibernaculum in or near five miles of the SouthCoast Wind preferred onshore export cable route.

The roseate tern is a medium-sized gull-like tern that is approximately 15 inches (38 centimeters) long and prefers shoreline habitat.¹⁰ The roseate tern is a specialist feeder, eating fish almost exclusively, and feeding by plunge diving. Habitat for the roseate tern includes nesting habitat along sandy shores and barrier islands and under hollows or dense vegetation. Roseate tern is identified in the 2015 Rhode Island Wildlife Action Plan as a species of greatest conservation need.¹¹ No more than five pairs of roseate terns have nested in Rhode Island since the 1950s. The last breeding record is of two individuals in 1984, although immature and summer roseate terns continue to be observed in Rhode Island, indicating that the species may still nest in small numbers. Roseate terns are seasonally common in Rhode Island as a migrant, typically during post-breeding dispersal, and have been consistently recorded construction at a few coastal sites including Trustom Pond, Charlestown Breachway, Great Salt Pond on Block Island, and at Napatree Point.¹²

⁹ RIDEM. 2015. *Rhode Island Wildlife Action Plan*. http://www.dem.ri.gov/programs/fish-wildlife/wildlifehuntered/swap15.php. Accessed April 15, 2022.

¹⁰ USFWS. 2022. Environmental Conservation Online System: Roseate tern (Sterna dougalli dougalli). <u>https://ecos.fws.gov/ecp/species/B070</u>. Accessed April 15, 2022.

¹¹ RIDEM. 2015. *Rhode Island Wildlife Action Plan*. <u>http://www.dem.ri.gov/programs/fish-wildlife/wildlifehuntered/swap15.php</u>. Accessed April 15, 2022.

¹² RIDEM. 2015. *Rhode Island Wildlife Action Plan*. <u>http://www.dem.ri.gov/programs/fish-wildlife/wildlifehuntered/swap15.php</u>. Accessed April 15, 2022.

RIDEM Natural Heritage Area Review

Pursuant to the Rhode Island Endangered Species Act, SouthCoast Wind has consulted with the Rhode Island Natural Heritage Program. SouthCoast Wind reviewed the RIDEM Natural Heritage Area overlays available on the RIDEM Environmental Resource Mapping website and determined that there are three natural heritage areas that overlap the Project Study Area, indicating potential state-listed species.¹³ SouthCoast Wind contacted RIDEM on April 8, 2022, to inquire about the species listing for these areas. RIDEM responded on April 11, 2022, with the following list of species of concern that have been identified near the Project Area (see Table 3-4). This list of species are birds, with the exception of salt marsh tiger beetle, all of which could fly over the offshore export cable corridor or onshore export cable routes and the wading birds could intermittently occur at the shallow landing areas. One macroinvertebrate, the salt marsh tiger beetle's habitat preference is salt marsh communities.

Scientific Name	Common Name	RI* Status
Ardea alba	Great egret	SC
Ardea herodias	Great Blue Heron	SC
Bubulcus ibis	Cattle egret	SC
Egretta caerulea	Little blue heron	SC
Egretta thula	Snowy egret	SC
Ellipsoptera marginate	Salt marsh tiger beetle	ST
Falco peregrinus	Peregrine falcon	SE
Haematopus palliates	American oystercatcher	SC
Nycticorax nycticorax	Black-crowned night heron	SC
Plegadis falcinellus	Glossy ibis	SC
Sterna antillarum	Least tern	ST

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Notes:

*Rhode Island Status Codes (under RIDEM): SE= State Endangered; ST= Sate Threatened, SC= Special Concern Source: RIDEM. 2022. Natural Heritage Screening. Natural Heritage Consultation Email. April 11, 2022.

3.1.4.2 Potential Project Impacts

The HDD construction areas and cable construction will be primarily within previously disturbed lands, namely public roadway ROWs and parking areas, which do not provide any significant habitat. The landfall construction area at the corner of Boyds Lane and Park Avenue and the landfall construction area under consideration within land owned by Roger Williams University (*aka* RWU north parcel HDD construction area) would require some tree clearing to prepare a safe and level construction area. SouthCoast Wind and its contractors will implement soil erosion and sediment control measures and construction BMPs to avoid, minimize and mitigate potential effects to coastal and freshwater wetlands (see Attachment D – Soil Erosion and Sediment Measures, Onshore Engineering and HDD). Temporary security fencing and/or noise barriers may also be installed, if required. The disturbed areas will be

¹³ RhodeMap, RIGIS, and RIDEM. "Layer: Natural Heritage Area (ID: 7)." https://risegis.ri.gov/hosting/rest/services/RIDEM/Conservation_Opportunity_Areas/MapServer/7. Accessed April 23, 2022.

stabilized, restored, and reseeded. Should additional restoration of plantings be required, SouthCoast Wind will develop a supplemental restoration approach.

There will be no significant impacts on wildlife and plant species diversity associated with the construction of the landfall construction areas or along the onshore export cable route.

SouthCoast Wind also completed a Bat Risk Assessment for the proposed Project to identify and mitigate potential risks to bats.¹⁴ The Bat Risk Assessment relies on desktop resources, including scientific research, nearby offshore acoustic survey results, and behavioral studies regarding bats' reactions to various conditions and stimuli that may be similar to those presented by various stages of the Project. The Bat Risk Assessment determined that potential Project impacts (e.g., discharges and releases, trash and debris) would not affect bats.

Roseate tern may also occur in the ocean facing coastline of the Project Area. The onshore Project activities are not likely to affect the roseate tern due to the minimal anticipated shoreline disturbance from the HDD installation of the export cable landfall.

Construction activities and land disturbances can disrupt wildlife behavior and may displace wildlife during the construction phase of the Project. The onshore export cable route is bordered by habitats that contain and assemblage of coastal, aquatic, and terrestrial wildlife species, such as nearshore estuarine habitat, salt marsh communities, freshwater wetlands, upland scrub-shrub habitat and forested fringes. Wildlife currently utilizing the habitat edges may be affected by the construction of the Project. Larger, more mobile species will leave the construction area. Individuals of some bird species will also be temporarily displaced. Depending on the time of year of these operations, this displacement could impact breeding and nesting activities. Smaller and less mobile animals may be affected during the more intense construction activities such as the trenching, excavation and drilling.

Since the onshore export cable route is located along existing public road ROW, including highways in some instances, the species affected are expected to be limited in number. Effects will be localized to the immediate area of construction however these impacts are anticipated to be a temporary impact as it is anticipated that existing wildlife utilization patterns and behaviors will resume and impacts to population sizes are expected to be minimal.

3.1.4.3 Proposed Avoidance, Minimization, and Mitigation Measures

Environmental protective measures proposed by SouthCoast Wind are summarized in Section 2.7. Below is a list of measures applicable to wildlife and to rare, threatened, and endangered species:

- The majority of the onshore Project components were sited within previously disturbed and developed areas, specifically existing roadway ROWs and parking lots, avoiding sensitive wildlife habitats to the greatest extent practicable.
- SouthCoast Wind will train construction staff on rare species awareness and environmental protection procedures and requirements.
- Construction lighting will be limited to the minimum necessary to ensure safety and comply with applicable regulations during the construction phase of the Project. No operational lighting is proposed for the Project in the portion of the Project covered herein.

¹⁴ Bat Risk Assessment, Mayflower Wind Energy, LLC, October 2021.

- The onshore export cables will be buried; therefore, avoiding risks to avian and bat species as is typically associated with overhead lines.
- SouthCoast Wind will continue to consult with the Rhode Island Natural Heritage Program, RIDEM, and USFWS.
- SouthCoast Wind will site the Project components to avoid locating onshore facilities and landfall sites in or near significant fish or wildlife habitats to the greatest extent practicable.

3.1.5 Terrestrial Archaeological Resources

SouthCoast Wind contracted with the Public Archaeological Laboratory (PAL) to conduct a Terrestrial Archaeological Resources Assessment (TARA) for the Project in Portsmouth, including Phase I site identification archaeological testing. A copy of this report has been provided to the Rhode Island Historical Preservation & Heritage Commission (RIHPHC) [COP, Appendix R].

Phase I subsurface archaeological testing performed by PAL identified two archaeological sites within the Project Area on Aquidneck Island. PAL recommends that these sites are potentially eligible for listing in the National Register under Criteria A and D. Based upon the archaeological field investigations performed by PAL, PAL recommends archaeological monitoring of cable duct trench excavation near the sites to document any archaeological materials that may be identified during construction. PAL further recommended archaeological monitoring of Montaup County Club HDD construction area and in the vicinity of the RWU North parcel HDD construction area to document any pre- or post-Contact archaeological features or deposits that may be encountered during boring for the HDDs. SouthCoast Wind also developed and will implement a Historic Properties Treatment Plan (Attachment X) to minimize and mitigate adverse effects to archaeological sites within the onshore Project Area in Portsmouth, Rhode Island. This Historic Properties Treatment Plan has been shared with RIHPHC and the Narragansett Indian Tribe for review and comment as part of the Section 106 consultation.

3.1.6 Visual Resources

Effects to visual resources can be perceived by both residents (year-round and seasonal) and tourists. SouthCoast Wind retained the services of Tetra Tech, Inc. to perform a Visual Impact Assessment of the entire Project (COP, Appendix T). The portions of the Visual Impact Assessment applicable to the Project activities in Rhode Island are described below.

The Project will introduce no permanent above-ground structures into the Town of Portsmouth, Rhode Island. There will be only temporary visual effects during the construction phase of the Project, such as construction-related equipment and vehicles. Construction activities will include surveying; excavation, stockpiling topsoil; grading, HDD at the landfalls, buried conduit and cables; temporary fencing; and restoration, repaving and site stabilization. It is anticipated that visual contrast will be introduced during Project construction primarily for motorists, cyclists and pedestrians traveling on sections of Park Avenue and Boyds Lane and Anthony Road - where the presence of construction equipment, materials, and crews will be briefly visible to passing travelers. Marine operations will involve the use of anchored barges, tugboats, crew transfer vessels, and other support vessels that will be present in the Sakonnet River, Mount Hope Bay and Rhode Island Sound during the cable laying and horizontal directional drilling operations. However, these visual effects will be short term because construction equipment and crews will be removed once construction is complete.

Nighttime lighting of the construction areas including onshore and offshore will be limited to only that required for safety, security, and to abide by navigational requirements, such as at vehicle entry points at the horizontal directional drilling construction areas, and on the nearshore and offshore vessels. No permanent lighting is proposed nor required in the Town of Portsmouth or in Rhode Island state waters.

There will be no long-term visual impacts from the Project, which will be underground. There are no permanent above-ground structures proposed within the Town of Portsmouth nor are there any permanent features proposed that would be visible in Rhode Island state waters. Visual and aesthetic impacts from installation of the underground duct bank will not substantially alter the overall visual setting of the existing landscape setting.

3.1.7 Electric and Magnetic Fields Onshore

SouthCoast Wind understands that EMF produced by the transmission of electricity can be a concern to communities where transmission infrastructure is sited. SouthCoast Wind has studied predicted EMF from the Project and continues to engage stakeholders on this topic through direct outreach and the publication of EMF materials on a dedicated web page for the local community.¹⁵

EMFs are created anywhere there is a flow of electricity, and their strength diminishes within a short distance from the source. A Magnetic Field Analysis study was conducted to model the magnetic fields produced by typical onshore and offshore cable configurations for the Project and contextualize them to the latest research and guidelines for public health and the marine environment (see Attachment K). The modeling analysis focuses on magnetic fields because the electric fields arising from the voltage on the export cables will be shielded by cable materials.

For the three representative HVDC onshore duct bank configurations that were modeled, peak maximum DC magnetic field levels ranging from 181 to 433 milligauss (mG) were obtained at 1.0 m above the ground surface, which is far below health-based exposure guidelines for DC magnetic fields. For each duct bank configuration, the magnetic field levels drop off very rapidly with increasing lateral distance from the cables, for example, ranging from 3.5 to 30.5 mG at 25 ft (7.6 m) from the duct bank centerlines.

The state of Rhode Island has not adopted standards for EMFs from HVDC transmission lines or other sources that can be compared to the model-predicted DC magnetic fields. Scientists have not reported any confirmable chronic health risks for the weak steady EMFs associated with HVDC power transmission; this is consistent with the fact that humans have lived for tens of thousands of years in the presence of the earth's DC geomagnetic field, which is not known to adversely interact with biological processes or directly affect human health.

3.1.8 Electric and Magnetic Fields Offshore

Three configurations of offshore HVDC cables were modeled, including the typical installation case where the two DC conductors are bundled together as well as two atypical, worst-case installation scenarios (Attachment K).¹⁶ Only for the two atypical installation cases will magnetic field levels above

¹⁵ https://southcoastwind.com/southcoast/

¹⁶ One worst-case installation case assumes the bundled conductors are laid directly on the seafloor surface and covered by a concrete mattress, such as at a cable crossing location. The other is an unbundled installation case where the two DC conductors are separately buried approximately 164 ft (50 m) apart at a target depth of 2.0 m to be used as needed to ensure safe installation and repair of the separate cables, as well as to minimize risk of damage to both cables from threats such as anchor strike.

the offshore export cables appreciably differ from the earth's steady (DC) geomagnetic field, and only within short distances from the cables.

Case		Magnetic Field ^a (milligauss ^b)			
		Max	10 feet	25 feet	50 feet
1	HVDC offshore, bundled, 6.6-ft burial depth. ^c	123	38.7	8.4	2.2
2	HVDC offshore, bundled, on seafloor under a 1.0-ft concrete mattress. ^d	3,785	55.7	9.0	2.2
3	HVDC offshore, non-bundled, 164-ft cable separation, 6.6-ft burial depth. ^c	1,909	1,120	579	360

TABLE 3-5. SUBMARINE MAGNETIC FIELD STUDY RESULTS¹⁷

^a Magnetic field results at maximum and at varying distances from the centerline (or from cable in separated offshore case).

^b Milligauss is a unit of magnetic flux density; however, the generic term "magnetic field" is used throughout this document.

^c Results are reported at the sea floor.

^d Results are reported at the surface of the concrete mattress.

No regulatory thresholds or guidelines for allowable EMF levels in marine environments have been established for either HVDC or HVAC transmission. Overall, although knowledge gaps remain and there is a need for continued research, the weight of the currently available evidence does not provide support for concluding there would be population-level harms to marine species from EMF associated with HVDC submarine transmission. This conclusion regarding a lack of evidence of population-level harm to marine species from HVDC-related EMFs is supported by findings from recent governmental reports and expert state of the science reviews. Additional information on EMF in the marine environment is provided in Sections 3.3.1.4, 3.3.1.5 and 3.4.2.2 below.

3.2 NEARSHORE AND OFFSHORE ENVIRONMENTAL SETTING, POTENTIAL IMPACTS, AND PROPOSED AVOIDANCE, MINIMIZATION, AND MITIGATION MEASURES

This section describes the offshore affected environment, potential impacts associated with construction, operations and maintenance, and decommissioning of the Project within Rhode Island waters, and proposed avoidance, minimization, and mitigation measures to address these potential impacts. Generally, decommissioning impacts are commensurate with construction phase impacts and are therefore discussed together.

The Project was sited, planned, and designed to avoid and minimize impacts and potential Project impacts are expected to be limited temporally and spatially. SouthCoast Wind plans to bundle the two export cables and associated communications cabling, where possible, to limit the footprint of the Project on the seabed. SouthCoast Wind has established and collected field data from an export cable corridor of nominal width between 1,640 ft (500 m) to 2,300 ft (700 m) to allow micrositing of the export cable to avoid sensitive resources were practicable. Cable landfalls at Portsmouth, RI will be accomplished using HDD technology to avoid impacts to sensitive coastal resources. Where potential impacts cannot be avoided, SouthCoast Wind proposes minimization and mitigation measures presented in Section 2, Table 2-9 and Section 2.7.

¹⁷ POWER Engineers Consulting, PC. 2022.

SouthCoast Wind has collected detailed geophysical, geotechnical and benthic habitat data from the entire ECC. Information and assessments based on this data to support this impacts evaluation is included in the following attachments to this application and in the SouthCoast Wind Construction and Operations Plan which can be accessed at <u>SouthCoast Wind COP on BOEM Website</u> <u>https://www.boem.gov/renewable-energy/state-activities/southcoast-wind-formerly-mayflower-wind.</u>

Summaries are provided below based on technical studies and reports prepared for the Project, including:

- Marine Archaeological Resources Assessment¹⁸
- Geohazard Report for the Brayton Point Export Cable Corridor ¹⁹
- Hydrodynamic and Sediment Transport Modeling Report for the Brayton Point Export Cable Burial Assessment²⁰ (Attachment L)
- Benthic Habitat Mapping to Support State Permitting Applications Brayton Point ECC for Rhode Island State Waters²¹ (Attachment M)
- Commercial and Recreational Fisheries and Fishing Activity Report²²
- Navigation Safety Risk Assessment23 (Attachment N)
- Benthic-Geologic Review of the SouthCoast Wind ECC (Attachment W)

3.2.1 Geology and Physiography

This section includes an overview of geologic conditions with the Project Study Area based primarily on data generated from G&G and benthic surveys completed by Fugro in 2021 and 2022,²⁴ and information in available literature.

Bathymetry in the Study Area is depicted in Figure 3-2. Depths in Mount Hope Bay and the Sakonnet River are generally less than 33 ft (10 m), with a deepening natural channel in Lower Mount Hope Bay. In Rhode Island Sound, water depths vary between approximately 66 ft (20 m) and 131 ft (40 m).

During the Quaternary period, glacial and post-glacial processes shaped the geology of Southern New England and the Study Area. Illinoian and Late Wisconsin glaciations are inferred from terminal moraines to have advanced as far south as Martha's Vineyard and Nantucket Islands.²⁵ As the Laurentide glaciers began to melt, glacial outwash formed a thick sequence of sandy deposits southward across Rhode Island Sound, the Sakonnet River, and into Mount Hope Bay. Pro-glacial lakes formed in front of the glaciers and behind the end moraines and deposited thick sequences of glacio-lacustrine deposits. Post

¹⁸ Mayflower Wind Energy LLC and Fugro USA Marine, Inc. 2022. *Marine Archaeological Resources Assessment (Mayflower Wind Construction and Operations Plan Appendix Q (Confidential) - Docket No. BOEM-2021-0062)*. August 2022.

¹⁹ Mayflower Wind Energy LLC and Fugro USA Marine, Inc. 2022. *Geohazard Report for the Brayton Point Export Cable Corridor (Mayflower Wind Construction and Operations Plan Appendix E.2 (Confidential) - Docket No. BOEM-2021-0062)*. February 25, 2022.

²⁰ Hydrodynamic and Sediment Transport Modeling for the Brayton Point Export Cable Burial Assessment, Mayflower Wind Energy LLC | USA, May 13, 2024 - Final Report, Daniel L. Mendelsohn, Innovative Environmental Science and J. Craig Swanson, Swanson Environmental

²¹ INSPIRE Environmental. 2022. Benthic Habitat Mapping to Support State Permitting Applications – Brayton Point ECC for RI State Waters. September 22, 2022.

²² Mayflower Wind Energy LLC and Tetra Tech. 2021. *Commercial and Recreational Fisheries and Fishing Activity Technical Report (Mayflower Wind Construction and Operations Plan Appendix V - Docket No. BOEM-2021-0062)*. August 30, 2021.

²³ Mayflower Wind Energy LLC and DNV Energy USA Inc. 2021. Navigation Safety Risk Assessment (Mayflower Wind Construction and Operations Plan Appendix X - Docket No. BOEM-2021-0062). August 27, 2021.

²⁴ Mayflower Wind COP, Appendix M.2 *Benthic and Shellfish Resources Characterization Report Addendum #*2 and Appendix M.3 ²⁵ Foster et al., 2014

glacial sediment deposition evolved as the sea level rose and transgressed across the continental shelf and inundated the area. As the sea transgressed across the study area, the depositional environment transitioned to a shallow marine environment similar to the shelf's current depositional setting. In general, sandy sediments were deposited in higher energy environments and fine grained deposits in low energy, deeper water areas.

3.2.1.1 Surficial Geology and Sediments

The description of surficial geology and sediments is primarily based on data from geophysical surveys and sediment grab samples collected by SouthCoast Wind's survey contractor, Fugro. Data analysis and mapping was conducted by Fugro (COP, Appendix E MSIR, COP, Appendix E.2 Geohazard Report for Brayton Point ECC). Glacial Moraine areas indicated in the Ocean SAMP (RI CRMC 2010) were also considered.

The Environmental Benthic Habitat Mapping Report (Attachment M) integrates Fugro's analysis of survey data with benthic survey data to describe and map seabed sediments (substrate) and benthic habitat. Glacial Moraine comprised 2.7% (411 acres) of the ECC in federal waters and comprised 3.1% (185 acres) of the ECC in Rhode Island state waters, predominantly located in Rhode Island Sound (Attachment M Benthic Habitat Mapping Assessment, Tables 3-2 and 3-4).

Glacial moraine areas identified in the Ocean SAMP intersect the ECC in two areas within Federal Waters; at Southwest Shoal and where the ECC turned due west outside of RI State Waters (Attachment M, Figure 4-5). Glacial moraines defined in the Ocean SAMP were based on several sources interpreted by Boothroyd (2009)²⁶. Most of the data near the Southwest Shoal interpreted in the Ocean SAMP were collected by the USGS in 1980 over very widely spaced seismic lines and near the Rhode Island State Waters boundary in 1975 (McMullen et al. 2009)^{27 28}. Because of the paucity of seismic data in the region of the Brayton Point ECC, the areas identified in the Ocean SAMP are general and do not reflect high-resolution distribution of moraine deposits and subsequent erosion and deposition of surficial sediments that affect benthic habitats.

The Ocean SAMP does not identify any moraines in Rhode Island state waters that overlap with the Brayton Point ECC (Attachment M, Figure 4-5); however, Glacial Moraine habitats were mapped in the Brayton Point ECC in Rhode Island Sound using data collected by SouthCoast Wind (Attachment M, Figure 4-5). Most of the moraine area identified in the Ocean SAMP at Southwest Shoal was also mapped as Glacial Moraine using data collected by SouthCoast Wind (Figure 3-3). In contrast, only a discrete area of the Ocean SAMP-identified moraine near the Rhode Island State Waters boundary was mapped as Glacial Moraine using data collected by SouthCoast Wind (see Attachment M and Figure 4-5).

Attachment M, Benthic Habitat Mapping Report, integrates the geophysical, grain size and benthic biological data collected to provide detailed mapping and discussion of surface deposits in the Project

²⁶ Boothroyd. J.C. 2009. A Short Geological History of Block Island and Rhode Island Sounds. Ocean Special Area Management Plan.

²⁷ McMullen, K. Y., L. J. Poppe, T. A. Haupt, and J. M. Crocker, 2009. Sidescan-sonar imagery and surficial geologic interpretations of the sea floor in western Rhode Island Sound. U.S. Geological Survey Open-File Report 2008-

^{1181.} Report and data available online at: http://woodshole.er.usgs.gov/pubs/of2008-1181/index.html ²⁸ McMullen, K. Y., L. J. Poppe, and N. K. Soderberg, 2009. Digital seismic-reflection data from western Rhode Island Sound, 1980. U.S. Geological Survey Open-File Report 2009-1002. Report and data available online at: http://pubs.usgs.gov/of/2009/1002/index.html

Area. In general, sediments in Mount Hope Bay and the Sakonnet River were primarily fine grained (mud to muddy sand) typical of depositional estuarine environments. *Crepidula*, a colonizing limpit, was found overlying these muds in some areas in the upper Sakonnet River and in the lower Mount Hope Bay. Very small areas of Mud to Muddy Sand – with Boulder Field(s) typical of glacial moraine and Bedrock were mapped in the lower portion of Mount Hope Bay near Aquidneck Island (Figure 3-3). There is also evidence of anthropogenic debris such as rock and backfill over pipelines.

Sediments became coarser at the mouth of the Sakonnet River and in Rhode Island Sound where deposits included gravels, sand and mud with boulders. The distribution of these deposits is related to the offshore extension of the Buzzards Bay moraine, a terminal moraine that is perhaps an extension of the Point Judith moraine near the mouth of the Sakonnet River (as mapped by Baldwin et al. 2016; COP, Appendix E, MSIR)²⁹.

Clusters of individual surficial boulders with poorly sorted gravels, sands and muddy sands (Glacial Moraine, Mixed-Size Gravel in Muddy Sand to Sand – with Boulder Field(s)) and proximal areas were mapped in RI Sound from the RI State Waters Line to the mouth of the Sakonnet River, and in the lower portion of Mount Hope Bay near Aquidneck Island (Figure 3-3).

The feasibility of the Project to successfully avoid geological features such as glacial moraine was confirmed through an independent assessment of the Project survey data by subject matter experts, Dr. Bryan Oakley and Dr. John King (Attachment W). This review generally concurred with the SouthCoast Wind Cable Burial Risk Assessment (Attachment E), that careful cable routing would be able to avoid areas of particular concern, specifically where glacial moraine is present.

3.2.1.2 Sediment Grain Size Analysis

Sediment grab samples were collected for grain size analysis during the 2021 and 2022 benthic surveys from eight locations in Mount Hope Bay, 14 locations in the Sakonnet River, and seven locations in Rhode Island Sound for a total of 29 sample locations. Grain size data is presented in Attachment O. Sediment Sample Grain Size Analytical Results. Additional details on sample collection and analysis are included in Appendix M.2 and Appendix M.3 of the COP, and data is integrated into the benthic habitat assessment in Attachment M. Note that grain size data was generated by two methods: Wentworth and USCS.

In Mount Hope Bay the sediments are primarily fine silts and clays with varying amounts of sand. Sediments in the Sakonnet River ranged from fine silts to sands with varying amounts of gravel. At the mouth of the Sakonnet River (southern end) and moving into Rhode Island Sound the predominant sediment fraction is fine sand mixed with coarse and medium sand.

²⁹ Baldwin et. a. 2016.

3.2.1.3 Potential Project Impacts

Offshore Export Cables

The routing of the ECC has been designed to avoid or minimize impacts to geologic resources in the marine environment. The G&G marine surveys completed by SouthCoast Wind were used to guide refinement of the cable placement within the ECC to avoid or minimize impacts in the marine environment.

The offshore export cables will be buried to a depth range from 3.2 to 13.1 ft (1.0 to 4.0 m) below the seabed, with a target burial depth of approximately 6 feet. Specific target burial depth will vary along the cable route and may be greater or less, based on assessment of the local soil conditions and risk to the buried cables from external risk factors. The primary cable burial objective will be to achieve a suitable target burial depth along the entire ECC as informed by the Cable Burial Risk Assessment (Attachment E- "Confidential", provided under separate cover). Cable routing within the ECC focused on micro-routing the cables to the extent practicable, in order to achieve target burial depth and to avoid surficial geologic and anthropogenic features informed by data collected in the G&G surveys.

Anchoring during cable installation will be limited to shallow water and thus only the Sakonnet River and Mount Hope Bay which are primarily soft bottom. Refer to Section 2.3 and Figure 2-2 for additional information about anchoring.

The cable burial methods are not expected to cause permanent seafloor impacts, and the shallow trench left after the cable-lay and burial is expected to naturally backfill with sediment. The sea-to-shore landfalls will be completed using HDD methodology and will avoid disturbance of the nearshore/ shoreline areas of the Sakonnet River and Mount Hope Bay. Once the cable is buried, the area above the cable, except for those areas with secondary cable protection, will recover through the natural and dynamic migration and deposition of marine sediments.

Permanent impacts to seabed conditions are limited to locations where secondary cable protection is required because conditions do not allow target cable burial or where other infrastructure (pipelines) are crossed. Sediment disturbance will be limited to a swath up to approximately 20 ft (6.0 m) wide within the ECC, and where cable protection is required, it will span approximately 20 ft (6.0 m) across the cable.

As a conservative estimate for planning purposes, SouthCoast Wind estimates up to 15% of the ECC within Rhode Island state waters will require secondary cable protection. Secondary cable protection is expected to be required primarily at the identified cable/pipeline crossing locations in the Sakonnet River, and in Rhode Island Sound where areas of harder seabed have been identified. Generally, the seabed conditions in the remainder of the ECC in the Sakonnet River and Mount Hope Bay are comprised of softer sediments which are expected to be suitable for cable burial and not require substantial secondary cable protection.

The offshore export cable installation and burial methods proposed by SouthCoast Wind will cause temporary disturbances to the seafloor within the ECC as outlined in Table 3-6 below. Sediment redeposition on the seabed following suspension during cable installation is evaluated in the Hydrodynamics and Sediment Dispersion Modeling Technical Report Attachment L ; overall redeposition is localized.

Based on currently available information on the ECC, the percentage of the ECC that may require each type of seabed preparation method, cable installation method, and cable protection was estimated on a preliminary basis. This percentage was then used to estimate the total potential area of temporary seafloor disturbance during offshore export cable construction. These estimates are summarized in Table 3-6 with area of disturbance measured in acres and hectares.

Seabed Disturbance	Area ^{ac} (hectare) ^d				
Export Cable Corridor (ECC)					
Offshore Export Cables					
Seabed Preparation ^a	25.3 (10.2)				
Cable Installation ^b	94.9 (38.4)				
Cable Protection ^c	15.2 (6.2)				
Total Seabed Disturbance Area (Temporary)	136.6 (54.8)				

TABLE 3-6. ESTIMATED TEMPORARY SEABED DISTURBANCE AREAS IN RHODE ISLAND

Notes:

^a Seabed preparation includes boulder field clearance over up to approximately 10 percent of the ECC in Rhode Island state waters, as well as local boulder removal via boulder grabs in other locations. It is also assumed that a grapnel run will be performed along the entire length of the ECC in Rhode Island state waters.

^b Cable installation assumes cable burial along the ECC via one of the several methods under consideration, and conservatively assumes a width of surface impact of 19.7 ft (6.0 m) around each cable. Anchor impacts are considered as well—it is conservatively assumed that an anchored vessel will be used along the entire ECC in Rhode Island state waters. The area of impact due to anchoring assumes that an 8-point mooring spread is used, with an estimated impact diameter of 16.4 ft (5.0 m) per anchor. Where practical and safe, SouthCoast Wind will utilize dynamically positioned vessels, which will reduce anchoring impacts.

^c The primary objective is to achieve a suitable target burial depth of the offshore export cables in the seabed along the entire cable route, by micro-routing the cables within the ECC and by assessing and selecting suitable installation/burial tooling for the seabed conditions. Cable protection impact areas assume mattresses and/or rock placement will be used at cable/pipeline crossings (where burial in the seabed is not possible) and for additional cable protection along the ECC if needed. Based on preliminary understanding of site conditions from desktop studies of the offshore export route, SouthCoast Wind estimates that up to 15% of the ECC in Rhode Island state waters will require additional cable protection, including material used at cable/pipeline crossings. It is assumed that a 19.7 ft (6.0 m) wide rock berm will be constructed if required. At each of the three third-party pipelines expected to be crossed, rock berms and/or a number of 9.8 ft (3.0 m) width x 19.7 ft (6.0 m) length mattresses are assumed to be used for cable separation and protection.

^d Seabed disturbance calculations conservatively assume that the cables are un-bundled along the entire ECC in Rhode Island state waters, so the impact numbers presented assume two separately installed submarine power cables (with one dedicated communications cable installed along with one of the power cables). Where practicable, SouthCoast Wind will install the offshore export cables in a bundled configuration, which will significantly reduce seabed disturbance impacts (seabed disturbance areas will be reduced by approximately half where cables are bundled offshore).

3.2.1.4 Proposed Avoidance, Minimization, and Mitigation Measures

Below is a list of measures applicable to surficial geology and sediments that SouthCoast Wind will adopt:

- SouthCoast Wind will use BMPs to minimize sediment mobilization during offshore export cable installation.
- SouthCoast Wind, when feasible, will use technologies that minimize sediment mobilization and seabed sediment alteration for cable burial operations. This will include targeting to use cable burial methods (such as use of jet-sled cable burial tooling or other methods that employ sediment fluidization) that encourage natural backfill of the cable burial trench with the disturbed sediment during the trenching operation.
- SouthCoast Wind, where practical and safe, will utilize dynamically positioned vessels.
- SouthCoast Wind will utilize HDD for sea-to-shore transition to avoid disturbance to shoreline areas.
- The offshore export cables will be installed in a bundled configuration, where practicable, to reduce installation impact area and post-installation occupied area.
- The primary cable burial objective will be to achieve a suitable target burial depth of the offshore export cables in the seabed along the entire ECC (where possible), by micro-routing the cables within the ECC and by assessing and selecting suitable installation/burial tooling for the seabed conditions.
- SouthCoast Wind has specific burial performance criteria that the cable installation contractor
 will be contractually responsible to meet. The contractor will perform a trenching functional trial
 before operations to demonstrate that the proposed tool is fully functional as designed. The
 tool utilized will be selected based on the soil conditions as determined from the Cable Burial
 Assessment Study.
- Use of secondary cable protection (rock and/or mattresses) will be limited to the extent practicable.

3.2.2 Water Quality

This section discusses offshore surface water uses and water quality in the Project Area. Available data on the affected environment from several sources was reviewed, including the Center for Coastal Studies, the Northeast Fisheries Science Center, NOAA, USEPA, USGS, RIDEM, RI CRMC, and Massachusetts Department of Environmental Protection (MassDEP). Water temperature, salinity, chlorophyll *a*, nutrients, dissolved oxygen, and turbidity were evaluated. SouthCoast Wind has prepared a hydrodynamic model and sediment transport analysis for the Project to evaluate potential for turbidity impacts during construction that is discussed in the sections below and included as Attachment L.

3.2.2.1 Affected Environment

The affected environment is described in this section in terms of regulatory classifications and available water quality data.
RI CRMC Water Use Categories

RI CRMC assigns water use categories for marine and coastal waters in accordance with the State or Rhode Island Coastal Resources Management Program as amended (aka, The Redbook) Section 2.00 Tidal and Coastal Pond Waters A.³⁰ Rhode Island state waters the ECC goes through are depicted on Figure 1-5 and described as follows:

- The Sakonnet River is designated as a Type 2 water. Type 2 waters are defined by the RI CRMC as having high scenic qualities, high value for fish and wildlife habitat, and with some exceptions, good water quality. Densely developed residential areas abut much of the waters in this category, and docks and the activities and small-scale alterations associated with residential waterfronts may be suitable.
- The Cove at Island Park in Portsmouth, Rhode Island will not be crossed by the Project, but is in the vicinity of the Project and is included here for completeness. This water body is designated as a Type 2 water, low-intensity use.
- The ECC in Mount Hope Bay is located in Type 4 waters. Type 4 waters are categorized by: (1) large expanses of open water in Narragansett Bay and the Sounds which support a variety of commercial and recreational activities while maintaining good value as fish and wildlife habitat; and (2) open waters adjacent to shorelines that could support water-dependent commercial, industrial, and/or high-intensity recreational activities.

A short segment of the ECC is located within the lower bay of Mount Hope Bay overlaps with Type 6 waters (see Figure 1-5). To establish the boundaries of Type 6 waters the CRMC established a buffer to federal navigation channels that measures three times the channel depth. Type 6 waters are categorized for: (1) industrial waterfronts; and (2) commercial navigation channels. SouthCoast Wind has consulted with the USACE and has committed to routing the cables to avoid the Mount Hope Bay main shipping channel, the Tiverton channel and the buffer to these federal navigation channels, thus will not place cables within the Type 6 waters.

RIDEM Water Quality Classifications

The RIDEM Surface Water Quality Standards (250-RICR-150-05-1) and Section 401 Water Quality Certification Regulations further categorize water quality standards for each waterbody. The waters of the State of Rhode Island (meaning all surface water and groundwater of the State) are assigned a Use Classification which is defined by the most sensitive uses which it is intended to protect. Waters are classified according to specific physical, chemical, and biological criteria which establish parameters of minimum water quality necessary to support the water Use Classification.

A majority of the ECC including Rhode Island Sound, Sakonnet River, and lower and mid-bay of Mount Hope Bay is mapped as Class SA (see Figure 1-4), which are waters designated for shellfish harvesting, direct human consumption, primary and secondary contact recreational activities, and fish and wildlife habitat. A small portion of the ECC in Mount Hope Bay near the Massachusetts state line is mapped as Class SB, which are waters designated for primary and secondary contact recreational activities, shellfish harvesting for controlled relay and depuration, and fish and wildlife habitat. Another small portion near the Massachusetts state line is mapped as Class SB1 which are waters designated for primary and

³⁰ 650-RICR-20-00-1

secondary contact recreational activities and fish and wildlife habitat and suitable for aquacultural uses, navigation and industrial cooling. Class SA, SB and SB1 waters have good aesthetic value.

Clean Water Act Assessments

The federal CWA, under Section 305(b) requires states to assess and report on the overall quality of waters in their state including the 303(d) List of Impaired Waters. The State of Rhode Island Impaired Waters Report³¹ provides an Integrated List consisting of five categories of water quality assessment information, with the fifth category being the list of impaired waters needing a Total Maximum Daily Load (TMDL). Table 3-7 identifies the waterbodies, water use categories and types, water quality standards and impairment status designated by the RI CRMC and RIDEM. Areas of Mount Hope Bay (Waterbody IDs RI0007032E-01A, RI0007032E-01B, RI0007032E-01C, and RI0007032E-01D) are listed Category 5 impaired waterbodies due to dissolved oxygen, total nitrogen, and fecal coliform. Nearshore areas of the Sakonnet River (Waterbody ID RI0010031E-01A) near the landfall in Portsmouth, Rhode Island are listed as Category 4A, waterbody impairments having approved TMDLs, due to fecal coliform. The TMDL was completed by RIDEM and approved by USEPA on April 7, 2005 so it was removed from the Category 5 Impaired Waters List. Founders Brook (Waterbody ID RI0007032R-01, Stream S2 discussed above in Sections 3.1.2 and 3.2.2) is also listed as Category 5 impaired waterbody due to Enterococcus.

³¹ RIDEM Office of Water Resources. 2022. State of Rhode Island 2022 Impaired Waters Report. February 2022. Accessed from https://dem.ri.gov/sites/g/files/xkgbur861/files/2022-09/2022%20RIDEM%20Impaired%20Waters%20Report%2012-01-2021.pdf.

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Waterbody	Water Use Category ^a	Water Quality Classification ^b	TMDL ^c	Impairment Category ^{d/e}	Special Resource	Other
Sakonnet River (offshore)	2	SA	No	No	Recreation, ecological habitat, federal park, critical habitat (rare & endangered species)	Type 1 waters surround Gould Island
Sakonnet River Nearshore at Aquidneck Island cable landing	2	SA	Fecal Coliform	4A (fecal coliform)	No	TMDL completed 4/7/2005
Mount Hope Bay (mid-bay & lower bay)	4	SA	Fecal Coliform	5 (dissolved oxygen, total nitrogen, & fecal coliform)	No	TMDL for dissolved oxygen and total nitrogen scheduled for 2029.
Mount Hope Bay (upper bay)	4	SB/SB1	Fecal Coliform	5 (dissolved oxygen, total nitrogen, & fecal coliform)	No	TMDL for dissolved oxygen and total nitrogen scheduled for 2029.
Founder's Brook	N/A	А	No	5 (enterococcus)	No	Warm water fishery

TABLE 3-7. SURFACE WATER CATEGORIES AND CLASSIFICATIONS

Notes:

^a Water use categories are defined in accordance with the RI CRMC "Red Book" (650-RICR-20-00-1). The definitions of the water use categories can be found below

^b Water quality classifications are defined in accordance with 250-RICR-150-05-1. The definitions can be found below

^c TMDL is defined in accordance with 73 C.F.R. 41069 - Clean Water Act Section 303(d).

^d The impairment categories for waterbodies in Rhode Island were identified in the State of Rhode Island 2018-2020 Impaired Waters Report.

*RIDEM Office of Water Resources. 2021. Final 2018-2020 Delisting Document - Waterbody Impairments Removed from the Impaired Waters Lists. January 2021.

Category 2: Attaining some of the designated uses; and insufficient or no data and information is available to determine if the remaining uses are attained.

Subcategory 4A: TMDL has been completed and approved by the USEPA.

Subcategory 4B: -Other pollution control requirements are expected to result in attainment of the water quality standard associated with the impairment. Note: These waters will continue to be listed as impaired for aquatic life use with causes of total nitrogen and dissolved oxygen and impaired for shellfishing use and primary and secondary contact use with fecal coliform as the cause.

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Sakonnet River

Water quality data is available for the Sakonnet River collected in 2018 and 2019 by the USGS at Buoy monitoring station 413642071125701 located in the Sakonnet River near Gould Island, Rhode Island (USGS Sakonnet River Station Buoy).³² Data collected for water temperature, salinity, dissolved oxygen, chlorophyll a, turbidity, total nitrogen, and total phosphorus are provided in Table 3-8.

The Sakonnet River remains saline throughout the year due to tidal influence. Water temperatures peak in the summer months when the river also reaches its lowest dissolved oxygen levels (Table 3-8).

A small area in the upper Sakonnet River north of a line extending from the southwestern-most corner of the stone bridge in Tiverton to the eastern-most extension of Morningside Lane in Portsmouth, and including the Project's cable landing area is listed in the State of Rhode Island 2022 Impaired Waters Report as impaired based on fecal coliform.³³ The area is identified as Category 4A – Waterbodies for which a TMDL has been developed. The 0.281-square mile area is impaired for shellfishing due to the presence of fecal coliform.³⁴

TABLE 3-8. WATER QUALITY PARAMETERS MEASURED IN THE SAKONNET RIVER NEAR GOULD ISLANDBY USGS (2018-2019)

Season	Water Temp. (°C) ¹	Salinity (psu) ^{1,2}	Dissolved Oxygen (mg/L) ¹	Chlorophyll <i>a</i> (µg/L) ¹	Turbidity (NTU) ^{1,2}	Total Nitrogen (mg/L) ¹	Total Phosphorus (mg/L) ¹
Spring (n=8) ³	15.9 ± 2.4	29 ± 0.8	7.3 ± 0.4	5.9 ± 3.1	1.7 ± 0.7	0.23 ± 0.04	0.04 ± 0.01
Summer (n=28) ³	22.9 ± 1.7	30.9 ± 0.3	5.9 ± 0.8	6.5 ± 5.5	2.2 ± 0.5	0.29 ± 0.07	0.07 ±0.01
Fall (n=14) ³	15 ± 4.4	29.3 ± 1.1	7.4 ± 0.9	2.7 ± 0.7	2.5 ± 0.7	0.34 ± 0.08	0.08 ± 0.01

Notes:

¹ Results show mean \pm 1 standard deviation. psu = Practical Salinity Units; mg/L = milligrams per liter; μ g/L = micrograms per liter; NTU = Nephelometric Turbidity Units; °C = degrees Celsius.

² Values for turbidity and salinity were only measured in 2018

³ n= number of samples (not all samples were analyzed for all parameters).

Source: USGS. 2019. Water Quality Samples for USA: Sample Data. https://nwis.waterdata.usgs.gov/nwis/qwdata.

Mount Hope Bay

Water quality data was not found for Rhode Island state waters in Mount Hope Bay in Rhode Island, but data from two monitoring buoys in Massachusetts state waters are available. Two fixed-location buoys in Mount Hope Bay maintained by the University of Rhode Island Graduate School of Oceanography and MassDEP in the Cole River and Taunton River collect data during the summer and early fall between May and November. Data collected from these stations are available for the 2017 and 2018 seasons and is presented in Table 3-9.³⁵ Mount Hope Bay Buoy Data Report: 2017 and 2018 Fixed-Site Continuous

³² USGS. 2019. Water Quality Samples for USA: Sample Data. <u>https://nwis.waterdata.usgs.gov/nwis/qwdata</u>.

³³ RIDEM Office of Water Resources. 2022. State of Rhode Island 2022 Impaired Waters Report. February 2022. Accessed from https://dem.ri.gov/sites/g/files/xkgbur861/files/2022-09/2022%20RIDEM%20Impaired%20Waters%20Report%2012-01-2021.pdf.

³⁴ USEPA. n.d.. How's My Waterway? EPA. Retrieved February 10, 2023, from https://mywaterway.epa.gov/waterbody-report/RIDEM/RI0010031E-01A/2022/

³⁵ Narragansett Bay Fixed-Site Monitoring Network. 2018. *Mount Hope Bay Marine Buoys [Water Quality Continuous Multiprobe Data Files]*. <u>https://www.mass.gov/info-details/mount-</u>hope-bay-marine-buoy-continuous-probe-data#data-files-for-mount-hope-bay-marine-buoys-.

Monitoring is the most recently published summary report for the Cole River and Taunton River buoys.³⁶ Raw monitoring result data is available from 2019-2020, though summary statistics for these data sets have not yet been published.³⁷

The four assessment units in the Rhode Island portion of Mount Hope Bay (RI0007032E-01A, RI0007032E-01C, RI0007032E-01D) were previously listed as impaired for aquatic life use due to fish bioassessments in 1996, following a sharp decline in the number and diversity of fish associated with operations of the Brayton Point Power Station in Somerset.³⁸ These segments were also listed for water temperature impairment in 2000 due to the Brayton Point Power Station's thermal inputs. The TMDL for the water temperature impairment has been completed and approved by USEPA and the mid-bay and lower bay of Mount Hope Bay were reclassified from Category 5 (303d list) to Subcategory 4B (other pollution control requirements are reasonably expected to result in attainment of the water quality standard associated with the impairment) for fish bioassessments and water temperature.³⁹ Current monitoring data from this waterbody indicates that water quality standards for the once impaired Bay are now being met. Mount Hope Bay is still listed as an impaired water for dissolved oxygen, total nitrogen, and fecal coliform (see Table 3-8 above).

TABLE 3-9. MEAN AND STANDARD DEVIATION FOR WATER QUALITY PARAMETERS MEASURED IN
MOUNT HOPE BAY (2017-2018)

Year	Site	Water Temp. (°C) ¹	Salinity (psu) ¹	Dissolved Oxygen (mg/L) ¹	Chlorophyll (RFU) ¹	Nitrate-N (mg/L) ¹
2017	Taunton River	20.3 ± 3.2	27.4 ± 1.2	7.4 ± 1.3	2.5 ± 2.2	0.12 ± 0.06
	Cole River	20.5 ± 3.3	27.9 ± 1.9	7.9 ± 1.3	4.3 ± 3.7	0.13 ± 0.06
2018	Taunton River	21.3 ± 4.3	27.2 ± 2.6	7.1 ± 1.2	2.7 ± 2.2	0.18 ± 0.08
	Cole River	21.4 ± 4.4	27.5 ± 2.1	7.5 ±1.2	2.7 ± 2.0	0.16 ± 0.06

Note:

¹ Results show mean ± 1 standard deviation. psu = Practical Salinity Units; mg/L = milligrams per liter; RFU = relative fluorescence units; °C = degrees Celsius.

Source: Narragansett Bay Fixed-Site Monitoring Network. 2018. Mount Hope Bay Marine Buoys [Water Quality Continuous Multiprobe Data Files]. <u>https://www.mass.gov/info-details/mount-hope-bay-marine-buoy-continuous-probe-data#data-files-for-mount-hope-bay-marine-buoys-</u>

Summary of Water Quality Parameters

This section provides a discussion of available water quality data for each parameter including context within the hydrologic system.

³⁶ MassDEP. 2020. Mount Hope Bay Buoy Data Report: 2017 and 2018 Fixed-Site Continuous Monitoring. June 2020.

https://www.mass.gov/doc/technical-memorandum-cn-5300-mount-hope-bay-buoy-data-report/download.

³⁷ Narragansett Bay Fixed-Site Monitoring Network. 2018.

³⁸ State of Rhode Island. 2021. Press Release: RI's List of Impaired Waters Approved by USEPA. February 26, 2021.

³⁹ RIDEM Office of Water Resources. 2021. Final 2018-2020 Delisting Document - Waterbody Impairments Removed from the Impaired Waters Lists. January 2021.

Temperature and Salinity

In tidal estuaries, temperature and salinity are affected by seasonal temperatures, tidal mixing and seasonal fresh water inflows from tributaries. Generally, temperature and salinity are higher in the summer and fall, and lower in the winter and spring. These general trends are illustrated in data presented in Tables 3-8 and 3-9. The Sakonnet River is a tidal straight with most influence coming from the Rhode Island Sound and Atlantic Ocean. Further upstream in Mount Hope Bay, mean salinity (Table 3-9) is slightly lower due to the freshwater influence from the Taunton and Cole rivers as well as the surrounding Narragansett watershed.⁴⁰

Chlorophyll a

Chlorophyll *a* is a photosynthetic green pigment found in most phytoplankton and plant cells. Measuring chlorophyll *a* in the surface water is an indication of how much primary production is occurring in the surface of the ocean. Chlorophyll *a* is used as an indicator for eutrophication and levels will increase with increased phytoplankton production, which is often related to increased nutrient inputs.

The USGS reported Chlorophyll *a* in the Sakonnet River in 2018 and 2019 and there was some seasonal variability (Table 3-8).⁴¹ During the summer, median concentrations of Chlorophyll *a* were 6.5 micrograms per liter (μ g/L) while during the fall median concentrations were 2.7 μ g/L. Upstream in Mount Hope Bay, the Chlorophyll *a* concentrations were slightly lower (Table 3-9).⁴²

Nutrients

Nitrogen and phosphorus are two of the primary nutrients measured in coastal and marine waters. These nutrients are required for the growth of algae and phytoplankton, but excessive levels of these nutrients can lead to eutrophication, reduced water clarity, and lower levels of dissolved oxygen.

The USGS reported total nitrogen and total phosphorus concentrations for the Sakonnet River (Table 3-8), and the Narragansett Bay Fixed-Site Monitoring Network reported nitrate-N concentrations for Mount Hope Bay were much higher than in the Rhode Island Sound (Table 3-9). While both studies reported nutrients differently than the Center for Coastal Studies and USEPA National Coastal Condition Assessment studies, they indicated that nutrients were higher in the Sakonnet River and Mount Hope Bay. The Sakonnet River experienced its highest amount of nutrients, both nitrogen and phosphorus, in the fall season. Nutrient inputs are expected to come from the surrounding Narragansett Bay watershed, consisting of mostly developed land.

Dissolved Oxygen

Dissolved oxygen is essential for maintaining present conditions for aquatic life. Concentrations below 2.0 milligrams per liter (mg/L) can lead to hypoxia, which is detrimental to most organisms. Dissolved oxygen level can be influenced by physical factors (e.g., water temperature) and biological factors (e.g., respiration, photosynthesis, and bacterial decomposition).

⁴⁰ Narragansett Bay Fixed-Site Monitoring Network. 2018. Mount Hope Bay Marine Buoys [Water Quality Continuous Multiprobe Data Files]. https://www.mass.gov/info-details/mount-hope-bay-marine-buoy-continuous-probe-data#data-files-for-mount-hope-bay-marine-buoys-. ⁴¹ USGS. 2019. Water Quality Samples for USA: Sample Data. https://nwis.waterdata.usgs.gov/nwis/gwdata.

⁴² Narragansett Bay Fixed-Site Monitoring Network. 2018. Mount Hope Bay Marine Buoys [Water Quality Continuous Multiprobe Data Files]. https://www.mass.gov/info-details/mount-hope-bay-marine-buoy-continuous-probe-data#data-files-for-mount-hope-bay-marine-buoys-.

In the USGS data, the Sakonnet River dissolved oxygen levels were lowest in the summer months. During the summer the mean dissolved oxygen was about 5.9 mg/L (Table 3-8).⁴³ The Cole River and Taunton River buoys report healthy mean dissolved oxygen levels for Mount Hope Bay of around 7.5 mg/L (Table 3-9).⁴⁴

Turbidity

Turbidity is a measure of water clarity or how much the material suspended in the water column decreases light penetration. Excessively turbid water can be detrimental to water quality if suspended sediments settle out and bury benthic communities, adversely affect filter feeders, or block sunlight needed by submerged vegetation.

Turbidity in the Sakonnet River reported by USGS (Table 3-8) was highest in the summer and fall seasons but overall, relatively low (less than 3 Nephelometric Turbidity Units).⁴⁵

Ambient total suspended solids (TSS) load and concentrations have been monitored in Mount Hope Bay for many years, related to concerns for impacts of the three waste water treatment plants that discharge into the bay and rivers feeding the bay (USEPA 2016; Abdelrhman 2016; Desbonnet et al. 1992)⁴⁶. Ambient TSS concentrations were observed ranging regularly from 2 mg/L to 15 mg/L, with a mean of in the range of 11 mg/L from a combination of the analysis of the river water used in the elutriate analyses (C2D 2003) and past dry and wet weather TSS measurements (Swanson and Isaji 2006).⁴⁷

3.2.2.2 Potential Project Impacts

Construction and Decommissioning

Sediment suspension and effects on water turbidity during cable installation and HDD construction area excavation are the primary concerns for water quality impacts. To evaluate this impact, SouthCoast Wind contracted with Swanson Environmental to complete a hydrodynamic and sediment transport modeling study for cable installation and HDD construction area excavation, which is included as Attachment L.

The model was used to estimate the highest concentration of sediment suspended in the water column (measured as TSS) and the areal extent at any one point during cable installation and HDD construction area excavation. The duration that sediment was suspended in the water as the sediment resettled to the seabed was also estimated.

The water column concentrations presented are the maximum TSS concentration above background anywhere in the water column at each 20 m x 20 m (65 ft x 65 ft) concentration grid cell over the total duration of the cable installation. Ambient TSS load and concentrations have been monitored in Mount Hope Bay for many years, related to concerns for impacts of the three waste-water treatment plants

⁴³ USGS. 2019. Water Quality Samples for USA: Sample Data. https://nwis.waterdata.usgs.gov/nwis/qwdata.

 ⁴⁴ Narragansett Bay Fixed-Site Monitoring Network. 2018. Mount Hope Bay Marine Buoys [Water Quality Continuous Multiprobe Data Files].
 https://www.mass.gov/info-details/mount-hope-bay-marine-buoy-continuous-probe-data#data-files-for-mount-hope-bay-marine-buoys-.
 ⁴⁵ USGS. 2019. Water Quality Samples for USA: Sample Data. https://nwis.waterdata.usgs.gov/nwis/qwdata.

⁴⁶ EPA, 2016. Modeling Total Suspended Solids (TSS) Concentrations in Narragansett Bay, by Mohamed A. Abdelrhman. U.S. Environmental Protection Agency Atlantic Ecology Division NHEERL ORD, 27 Tarzwell Drive Narragansett, RI 02882 USA National Health and Environmental Effects Research Laboratory Office of Research and Development Narragansett, RI 02882 USA. EPA/600/R-16/195, August 2016.

⁴⁷ Swanson. C. and Isaji. T. 2006. Simulation of Sediment Transport and Deposition from Cable Burial Operations for the Alternative Site of the Cape Wind Energy Project. ASA Final Report 05-128.

that discharge into the bay and rivers feeding the bay (USEPA 2016; Abdelrhman 2016; Desbonnet et al. 1992). Ambient TSS concentrations were observed ranging regularly from 2 mg/L to 15 mg/L, with a mean of in the range of 11 mg/L from a combination of the analysis of the river water used in the elutriate analyses (C2D 2003) and past dry and wet weather TSS measurements (Swanson and Isaji 2006).

An overview of the distance from the cable installation point where TSS may be elevated by 100 mg/L and the duration of that concentration as sediment resettles to the seabed is provided in Table 3-10. The 100 mg/L increase is typically used as a biological threshold in water quality evaluations. In the Sakonnet River, suspended sediment concentrations fell below 100 mg/L 20 minutes or less after the cable was installed at a given location. The duration of the elevated water column concentrations in Mount Hope Bay was longer (up to 4.6 hours) apparently due to higher currents in the bay. In Rhode Island Sound, the duration was generally less than 20 minutes, except for an area near the RI state line where the duration was longer (up to 3.0 hours).

TABLE 3-10. TURBIDITY INCREASE DURING CABLE INSTALLATIONEXTENT AND DISSIPATIONOF 100 MG/L TSS

	Maximum Distance from Indicative ECC Centerline (km)	Time for TSS to Drop Below 100 mg/L (min)
Sakonnet River	0.61	20
Mount Hope Bay	1.16	280
RI Sound	0.37	175

The HDD construction area excavation impacts were smaller compared with the impact resulting from cable installation (Table 3-11). The 100 mg/L threshold TSS concentration was contained within 1.2 km (0.75 mi) and was within the ECC boundaries in all cases. The modeling approach was highly conservative, as the source was assumed to be at a single point and continuous over a 16-hour period, releasing 100% of the dredged material into the water column. The area coverage of the 100 mg/L or greater level was contained within an average of 12.0 ha (30 ac).

TABLE 3-11. TUR	BIDITY INCREASE DURING OFF	SHORE HDD CONSTRUCTION	EXCAVATION - EXTENT
	AND DISSIPATIO	ON OF 100 MG/L TSS	

HDD Construction Area	Maximum Distance from Release (km)	Time for TSS to Drop Below 100 mg/L (min)
Brayton Pt HDD	1.22	120
Mount Hope Bay HDD	1.19	160
Sakonnet River HDD	0.77	100

Water quality effects from vessel operations are not anticipated. All operations will be compliant with relevant and applicable state and federal regulations for management, storage and disposal of equipment, fuels, maintenance materials and waste products. Procedures outlined in the Emergency Response Plan Requirements (Attachment F) and the Oil Spill Response Plan (COP, Appendix AA) will be followed, and contractors will develop task specific procedures where necessary prior to in-water construction activities to include spill response, solid waste management, hazardous material management and sanitary waste management.

Water quality impairment issues in the Project Area include coliform bacteria, total nitrogen and dissolved oxygen in Mount Hope Bay and nearshore areas of the Sakonnet River. The Project will not result in any discharges related to these parameters and will not contribute to these water quality impairments.

Increased turbidity during cable installation and HDD excavation will dissipate quickly and will be short term, with no long term effects on water quality.

3.2.3 Proposed Avoidance, Minimization, and Mitigation Measures

Below is a list of measures applicable to water quality that SouthCoast Wind will adopt:

- SouthCoast Wind will select and use BMPs, including the use of an SESC plan for onshore construction (Attachment D-Onshore Engineering Drawings) to minimize sediment mobilization during offshore construction and HDD operations.
- SouthCoast Wind, when feasible, will use technologies that minimize sediment mobilization and seabed sediment alteration for cable burial operations. This will include targeting to use cable burial methods (such as use of jet-sled cable burial tooling or other methods that employ sediment fluidization) that encourage natural backfill of the cable burial trench with the disturbed sediment during the trenching operation.
- Project vessels will follow United States Coast Guard (USCG) requirements at 33 C.F.R. 151 and 46 C.F.R. 162 regarding bilge and ballast water.
- All Project vessels are to comply with regulatory requirements related to the prevention and control of discharges and accidental spills including USEPA requirements under the USEPA 2013 Vessel General Permit and state and local government requirements.
- SouthCoast Wind will comply with the regulatory requirements related to the prevention and control of discharges and accidental spills as documented in the proposed Project's Emergency Response Plan (Attachment F).
- SouthCoast Wind has developed an HDD Inadvertent Release of Drilling Muds Contingency Plan (Attachment G) to mitigate, control, and avoid unplanned discharges related to HDD activities.
- SouthCoast Wind will implement the use of a barge for storing dredge materials prior to reuse for backfill.
- SouthCoast Wind will have a Dredge Quality Management Program in place on vessels containing dredged material.

3.3 BENTHIC AND SHELLFISH RESOURCES

3.3.1 Affected Environment

This section includes and evaluation of benthic and shellfish resources within the ECC. Additional information about shellfish is discussed in the context of essential fish habitat of invertebrate species in Section 3.4.

SouthCoast Wind has collected extensive geophysical data (COP, Appendix E, Marine Site Investigation Report [MSIR]) and benthic survey ground-truth data (COP, Appendices M and M.2, Benthic Resources) to support the mapping and characterization of benthic habitats within the Project Area.

SouthCoast Wind conducted two benthic surveys of the ECC in Fall 2021 and Spring 2022; sediment grab samples (analyzed for grain size, total organic carbon and biological communities) and images of the seabed were collected and analyzed. A total of 180 benthic stations were sampled within the ECC in Rhode Island state waters. Geophysical surveys were also conducted for the entire ECC and resulting datasets on sediment type, boulders, geoforms, and bedforms were also used in to characterize benthic resources in the Study Area. These multiple data streams were integrated to prepare detailed benthic habitat assessment and mapping which is presented in Attachment M.

A total of ~6,036 acres were mapped in the ECC in Rhode Island state waters (Table 3-11), with distinct differences in habitat composition in the estuarine (Mount Hope Bay and Sakonnet River) and offshore (Rhode Island Sound) areas (Figure 3-3). Forty-one percent of the ECC in Rhode Island state waters was comprised of Mud to Muddy Sand habitat, and 21% was Sand habitat, which was primarily mapped at the mouth of the Sakonnet River and in Rhode Island Sound.

Mud to Muddy Sand habitats were the primary habitat types mapped throughout the Sakonnet River and Mount Hope Bay (Figure 3-3), which are both depositional estuarine environments. *Crepidula* Substrate was found overlying these muds in some areas of the upper Sakonnet River and in the lower Mount Hope Bay (Figure 3-3). Very small areas of Mud to Muddy Sand – with Boulder Field(s), Glacial Moraine, and Bedrock habitat types were mapped in the lower portion of Mount Hope Bay near Aquidneck Island (Figure 3-3).

The benthic habitat assessment prepared by Inspire Environmental (Attachment M), makes a distinction between Glacial Moraine A and Glacial Moraine B habitats to distinguish between areas of unconsolidated geological debris: (A) and consolidated geological debris (B); Glacial Moraine B was not mapped within the Project Area. Glacial Moraine B deposits are characteristically poorly sorted and dense with very high boulder densities resulting in greater structural complexity and permanence. By comparison, the surface of Glacial Moraine A units found in the Project Area were reworked with sand and gravel deposits resulting in less structural complexity and permanence.

Glacial Moraine A was mapped in Rhode Island Sound near the Rhode Island state waters line; intermixed with these habitats and extending further north were Mixed-Size Gravel in Muddy Sand to Sand habitats interspersed with Sand habitats (Figure 3-3). The distribution of these habitats is related to the offshore extension of the Buzzards Bay moraine, a terminal moraine that is perhaps an extension of the Point Judith moraine near the mouth of the Sakonnet River.⁴⁸ Clusters of individual surficial boulders generally with gravel components (Glacial Moraine, Mixed-Size Gravel in Muddy Sand to Sand – with Boulder Field(s)) and proximal areas were mapped in Rhode Island Sound and in the lower portion of Mount Hope Bay near Aquidneck Island. The sensitive taxa of the northern star coral *Astrangia poculata* was observed at 80% of the glacial moraine stations along the ECC.

3.3.1.1 Submerged Aquatic Vegetation

Submerged Aquatic Vegetation (SAV) beds, dominated by *Zostera marina*, represent unique habitats in shallow coastal waters. SAV extent varies over time and these aquatic plants experience peak growth during late summer months. SAV are found in mud and muddy sand sediments. SAV distribution is periodically mapped across Narragansett Bay using aerial imagery and field verification by the URI Environmental Data Center on behalf of the state of Rhode Island (URI Environmental Data Center and RIGIS; Figure 4-3, Attachment M). SAV beds were not mapped by URI within the ECC. The closest SAV

⁴⁸ As mapped by Baldwin et al., 2016; COP Appendix E, MSIR.

mapped by URI is near the mouth of the Sakonnet River, located over 1.0 km from the edges of the ECC (Figure 4-3, Attachment M). However, based on distinct side-scan sonar signatures in the geophysical data collected by SouthCoast Wind, SAV and/or macroalgae may be present in the vicinity of the ECC in the Sakonnet River south of the onshore Aquidneck Island crossing, but this area has not yet been field-verified (Figure 4-4, Attachment M). The area will be re-surveyed for SAV prior to construction to guide HDD placement to avoid impacts to SAV as outlined in mutually agreed upon conditions in the Project's 401 Water Quality Certificate and Marine Dredging Permit issued by RIDEM.

3.3.1.2 Consistency with Previous Studies

Several recently published studies are available in the peer-reviewed and gray literature related to benthic habitats and fauna within Narragansett Bay, which include the Sakonnet River and/or Mount Hope Bay (e.g., LaFrance et al. 2019; Hale et al. 2018; Shumchenia and King 2019; Shumchenia et al. 2016)⁴⁹. The benthic habitats and their characterizing sediments and benthic biological communities as mapped for this SouthCoast Wind assessment generally agree with these recent publications. Surficial sediment and benthic habitat maps compiled from a suite of geophysical data and sediment grab samples show Mount Hope Bay as composed primarily of Sandy Mud and Mud (LaFrance et al. 2019). The Sakonnet River was not mapped in this study.

Recent biotopes mapped from a SPI survey conducted throughout Narragansett Bay in 2018 (Shumchenia and King 2019)⁵⁰ provide further support for the habitat types mapped in the Sakonnet River and Mount Hope Bay by SouthCoast Wind. For example, "Mud with Crepidula Beds" was the biotope identified at the sampling station in that study coincident with the Mud and Sandy Mud with *Crepidula* Substrate habitat type mapped by SouthCoast Wind (Tables 3-12 and 3-13) at the northern end of the Sakonnet River. Similarly, "Mud with Shell Hash and burrowers" was documented at two stations sampled in that study at the southwestern end of Mount Hope Bay coinciding with and in the vicinity of Mud and Sandy Mud with Shell/*Crepidula* Substrate habitats where Soft Sediment Fauna and Mollusk Reef Biota Coastal and Marine Ecological Classification System (CMECS) Biotic Subclasses were documented by SouthCoast Wind. There was similar concordance to the northeast in Mount Hope Bay near the Rhode Island-Massachusetts state waters boundary where biotopes of "Mud with burrowers" and "Mud or Organic-rich Mus with small tube-builders" mapped by that study corresponded to Mud to Muddy Sand habitats with Soft Sediment Fauna CMECS Biotic Subclasses mapped by SouthCoast Wind.

 ⁴⁹ LaFrance., M., Shumchenia. E., King. J., Pockalny. R., Oakley. B., Pratt. S., and Boothroyd. 2010. Benthic Habitat Distribution and Subsurface Geology Selected Sites from the Rhode Island Ocean Special Area Management Study Area. Ocean Special Area Management Plan.
 ⁵⁰ Shumchenia. E.J. and King. J.W. 2010.Comparison of Methods for Integrating Biological and Physical Data for Marine Habitat Mapping and Classification. Continental Shelf Research. Volume 30, Issue 16, 30 September 2010, ppg. 1717-1729.

TABLE 3-12. COMPOSITION AND CHARACTERISTICS OF MAPPED BENTHIC HABITAT TYPES WITHIN THE SOUTHCOASTWIND 1 ECC IN RHODE ISLAND STATE WATERS

	Presence in SouthCoast Wind 1 ECC		
SouthCoast Wind 1 ECC - Rhode	-		
(~6,036 acres ma	ipped)	RI State	Waters
		Area (acres)	Percentage
Glacial Moraine A	Predominantly in Rhode Island Sound	185	3.1%
Mixed-Size Gravel in Muddy Sand to Sand	Only in Rhode Island Sound	510	8.5%
Coarse Sediment - with Boulder Field(s)	Only in Rhode Island Sound	0.004	0.0001%
Coarse Sediment	Only in Rhode Island Sound	0.1	0.001%
Sand - with Boulder Field(s)	Only in Rhode Island Sound	61	1.0%
Sand - Mobile with Boulder Field(s)	Only in Rhode Island Sound	33	0.6%
Sand - Mobile	Only in Rhode Island Sound	121	2.0%
Sand	In Rhode Island Sound & the Sakonnet River	1,263	20.9%
Mud to Muddy Sand - with SAV	Only in the Sakonnet River	3.6	0.06%
Mud to Muddy Sand - <i>Crepidula</i> Substrate with Boulder Field(s)	Only in Mount Hope Bay	4.4	0.07%
Mud to Muddy Sand - (Likely) <i>Crepidula</i> Substrate with Boulder Field(s)	Only in Mount Hope Bay	86	1.4%
Mud to Muddy Sand - Shell / Crepidula Substrate	Only in Mount Hope Bay	511	8.5%
Mud to Muddy Sand - Crepidula Substrate	In the Sakonnet River & Mount Hope Bay	704	11.7%
Mud to Muddy Sand - (Likely) Crepidula Substrate	Only in the Sakonnet River	37	0.62%
Mud to Muddy Sand - Mobile	Only in the Sakonnet River	29	0.48%
Mud to Muddy Sand	In the Sakonnet River & Mount Hope Bay	2,476	41.0%
Bedrock	In the Sakonnet River & Mount Hope Bay	3.3	0.06%
Anthropogenic	In the Sakonnet River & Mount Hope Bay	6.7	0.11%

SAV = Submerged Aquatic Vegetation

SouthCoast Wind 1 ECC -	RI State Waters (~6,036 acres mapped)	Glacial Moraine A Predominantly in RI Sound	Mixed-Size Gravel in Muddy Sand to Sand Only in Rl Sound	Sand - with Boulder Field(s) Only in RI Sound	Sand – Mobile Only in RI Sound	Sand In RI Sound & the Sakonnet River	Mud to Muddy Sand – with Boulder Field(s) <i>Only in Mount</i> <i>Hope Bay</i>	Mud to Muddy Sand - <i>Crepidula</i> Substrate <i>In the Sakonnet River &</i> <i>Mount</i>	Mud to Muddy Sand In the Sakonnet River & Mount Hope Bay
SPI/PV Ground -truth	Number of benthic stations ¹ CMECS Substrate Subgroups Observed in Ground-	10 Gravel Pavement, Sandy Gravel, Muddy Sand Gravel, Muddy Gravel, Very	25 Gravel Pavement, Sandy Gravel, Muddy Gravel, Gravelly Sand, Gravelly Muddy Sand, Medium	4 Sandy Gravel, Medium Sand, Fine/Very Fine Sand	4 Gravelly Sand, Medium Sand	20 Medium Sand, Fine/Very Fine Sand	1 N/A	40 Pebble/Granule, Sandy Gravel, Muddy Sandy Gravel, Gravelly Sand, Gravelly Muddy	64 Muddy Gravel, Gravelly Muddy Sand, Muddy Sand, Fine/Very
Values	CMECS Biotic Subclasses Observed in Ground- truth Data	Coarse/Coarse Sand Attached Fauna, Soft Sediment Fauna	Attached Fauna, Inferred Fauna, Soft Sediment Fauna	Inferred Fauna, Soft Sediment Fauna	Attached Fauna, Soft Sediment Fauna	Inferred Fauna, Soft Sediment Fauna	None	Attached Fauna, Inferred Fauna, Mollusk Reef Biota, Soft Sediment Fauna	Inferred Fauna, Soft Sediment Fauna

TABLE 3-13. CHARACTERISTICS OF MAPPED BENTHIC HABITAT TYPES AS INFORMED BY BENTHIC GROUND-TRUTH DATA WITHIN THE SOUTHCOAST WIND 1 ECC IN RI STATE WATERS

SouthCoast Wind 1 ECC - RI State Waters (~6,036 acres mapped)	Glacial Moraine A Predominantly in RI Sound	Mixed-Size Gravel in Muddy Sand to Sand <i>Only in Rl Sound</i>	Sand - with Boulder Field(s) Only in Rl Sound	Sand – Mobile Only in RI Sound	Sand In RI Sound & the Sakonnet River	Mud to Muddy Sand – with Boulder Field(s) <i>Only in Mount</i> <i>Hope Bay</i>	Mud to Muddy Sand - Crepidula Substrate In the Sakonnet River & Mount	Mud to Muddy Sand In the Sakonnet River & Mount Hope Bay
Presence of Attached Fauna Observed in Ground- truth Data (% of stations)	Yes (90.0%)	Yes (28.0%)	No	Yes (25.0%)	No	No	Yes (40.0%)	Yes (1.6%)
Sensitive Taxa Observed in Ground- truth Data (% of stations) ³	Northern Star Coral (80.0%)	Northern Star Coral (12.0%)	None	None	None	None	None	None
Non-Native Taxa Observed in Ground- truth Data (% of stations) ³	None	None	None	None	None	None	None	None

Notes:

N/A = Not Applicable

Of the 18 total habitat types mapped (Table 3-11), 8 intersect with ground-truth stations.

¹Benthic sampling includes SPI/PV, grab, and GrabCam stations

² Substrate Subgroup determined from combined SPI/PV analysis

³ Sensitive and Non-Native Taxa determined from PV analysis

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3.3.1.3 Shellfish

According to the Rhode Island Shellfish Management Plan, the Sakonnet River portion of the ECC is home to several commercially valuable shellfish, including the bay scallop (*Agropected irradians*), ocean quahog (*Arctica islandica*), and soft-shelled clam (*Mya arenaria*).⁵¹ Ocean quahogs have also been observed in Mount Hope Bay, alongside channeled and knobbed whelks. Historic abundances of these species have been reduced by water quality degradation and habitat loss. Currently, the Sakonnet River is protected as a Shellfish Management Area by RIDEM (R.I.G.L. § 20-3-4) for the purposes of shellfish conservation and stock rebuilding. Management strategies employed by RIDEM to achieve these goals include reduced daily harvest limits, no harvest, limited access time, and rotational harvest.⁵²

Shellfishing is currently prohibited in the vicinity of the Project Area in portions of Rhode Island state waters in Mount Hope Bay (Area GA-3) and in portions of the upper Sakonnet River (GA4).⁵³

The ECC does not overlap with any current aquaculture areas, although there are some in the vicinity. There are several approved aquaculture areas (see Figure 3-4) within The Cove on Aquidneck Island and adjacent to Hog Island, both areas are located within the Town of Portsmouth. The aquaculture areas within The Cove and along the east and west banks of the Sakonnet River primarily culture Eastern oysters (*Crassostrea virginica*) and soft-shelled clams (*Mya arenaria*).

SouthCoast Wind will be conducting a whelk pot survey within the Sakonnet River as part of a Fisheries Monitoring Plan (FMP), which RIDEM reviewed and provided comments on. The whelk survey component of the FMP focuses on parts of the ECC that are known whelk fishing grounds. SouthCoast Wind believes the sampling locations for the whelk survey are appropriately located to understand the potential impacts from cable installation. Additionally, as part of mutually agreed upon conditions of the Project's 401 Water Quality Certificate and Marine Dredging Permit issued by RIDEM, SouthCoast Wind will conduct a shellfish survey prior to HDD construction activity to verify that shellfish density in the dredging area does not exceed densities outlined in RIDEM's "Guidance for Conducting Shellfish Surveys for Dredging Projects" document; if densities are found to exceed those, level efforts will be made to relocate those animals to appropriate habitat in close coordination with RIDEM.

3.3.2 Potential Project Impacts

SouthCoast Wind is siting the marine cable based on field data collection, analysis and mapping of the physical and biological characteristics of the seabed and engineering the cable route to minimize bottom disturbance, avoid sensitive resources and to reach target burial depths to the extent practicable. The cable route engineering drawings in Attachment C are a product of a multi-year effort to carefully site the marine cables. The potential impacts to benthic habitat are discussed in the following sections.

Impacts to Glacial Moraine

As discussed above, 185 acres of the ECC (3.1% of the ECC in RI waters) was mapped as moraine habitat, mostly in RI Sound with small area of moraine in lower Mount Hope Bay near the Portsmouth cable landing. Cable route engineering used seabed mapping to avoid moraine and boulders wherever practicable, and to minimize the need to move boulders during pre-installation seabed preparation.

⁵¹ URI Coastal Resources Center. 2014. *Rhode Island Shellfish Management Plan Version II: November 2014*. Available online at: http://www.rismp.org/wp-content/uploads/2014/04/smp_version_2_11.18.pdf.

⁵² URI Coastal Resources Center, 2014

⁵³ RIDEM Office of Water Resources. 2022. Notice of Polluted Shellfishing Grounds May 2022 Amended September 2022. Accessed January 4, 2023. https://dem.ri.gov/sites/g/files/xkgbur861/files/2022-09/shellfish_0.pdf

Where moving boulders is required, the boulders will be moved a minimum distance and within a similar habitat as practicable. During O&M, disturbance to the seafloor could result from temporarily anchored maintenance vessels and secondary cable protection along the export cables where needed. Decommissioning activities will have similar impacts to the seafloor as construction. Because the area of moraine crossed by the cable laying is relatively minimal, cable crossing of moraine within the ECC is minimized through microrouting where practicable, movement of boulders during seabed preparation is mitigated by BMPs, impacts of cable installation are short-term and localized, and no impacts are anticipated during operation, the overall impacts to moraine habitat from the Project are anticipated to be minimal. Independent assessments from subject matter experts, Dr. Bryan Oakley and Dr. John King (Attachment W) generally concur with the SouthCoast Wind Cable Burial Risk Assessment (Attachment E) that careful cable routing would be able to avoid areas of particular concern, specifically where glacial moraine is present.

Impacts to Benthos at HDD Locations

All the potential HDD construction area locations under consideration in RI State Waters are located within Mud to Muddy Sand – Crepidula Substrate or Shell / Crepidula Substrate (Figure 4-2, Attachment M). It is expected that *Crepidula* gastropods would recolonize areas disturbed by the offshore HDD area construction relatively quickly for several reasons. First, in this region, Crepidula are present and extend over a much broader area than the specific areas that would be disturbed at the offshore HDD construction area. This regional population will be a source of larvae to aid in recolonization of the disturbed seafloor. Timing for recolonization will depend on larval recruitment; the gregarious settlement of their larvae on conspecifics (Zhao and Qian 2002)⁵⁴ generally leads to very dense accumulations with a flat, reef-like texture as live shells build over dead shells. Crepidula have relatively high fecundity, typically reproducing in the spring and/or summer, and often females will reproduce twice per year (Pechenik et al. 2017; Proestou et al. 2008; Richard et al. 2006)⁵⁵. These life cycle characteristics aid in the proliferation of *Crepidula* populations and allow for the recovery of populations following disturbance given a source of larvae is maintained. Crepidula are native to the United States Atlantic coast but have been successful at quickly spreading in the United States Pacific Northwest and in Europe where they are not native (SERC 2022). This indicates that Crepidula are capable of recolonizing an area relatively easily following a disturbance such as HDD construction area excavation.

Impacts from Sediment Suspension and Resettlement on the Seabed

During installation of the cable and excavation of the offshore HDD construction areas, disturbed sediments will become suspended in the water column and redeposited on the seabed. According to the results of the Hydrodynamic and Sediment Transport Modelling Report (Attachment L), the sediment deposition footprint resulting from cable installation will be localized along the ECC where the mass settles out quickly. Deposition thicknesses of 1.0 mm (0.04 inch) and greater are generally limited to a corridor with a width of 20 m (65 ft) around the cable centerline; a maximum extent between 124 m (406 ft) and 161 m (528 ft) can occur locally in the areas where there are finer grain sediments.

⁵⁴ Zhao, B., Qian, P. (2002) Larval settlement and metamorphosis in the slipper limpet Crepidula onyx (Sowerby) in response to conspecific cues and the cues from biofilm. Journal of Experimental Marine Biology and Ecology, 269 (1): 39-51.

⁵⁵ Pechenik, J.A., Diederick, C.M., Chaparro, O.R., Montory, J.A., Paraedes, F.J., & Franklin, A.M. (2017). Differences in resource allocation to reproduction across the intertidal-subtidal gradient for two suspension-feeding marine gastropods: Crepidula fornicata and Crepipatella peruviana. Marine Ecology Progress Series, 572: 165-178.

Following construction, currents and tidal action will likely redistribute sediment to pre-construction conditions.

The sedimentation footprint for HDD sites is calculated to be very small with a maximum coverage of the 1.0 mm (0.04 inch) thickness contour of only 5.68 ha (14 ac), extending a maximum distance of 212 m (695 ft) and 9.7 ha (24 ac) for the 0.5 mm (0.02 inch) thickness contour, extending a maximum distance of 294 m (956 ft) from the HDD site. Deposition thicknesses are greater if the location of the release is fixed. Cable burial operations are mobile, and thus will produce smaller maximum deposit thicknesses. The total coverage of the 1.0 mm (0.04 inch) and 0.5 mm (0.02 inch) thickness levels along the entire ECC was 361 ha (892 ac) and 531 ha (1,312 ac), respectively.

Some benthic species exhibit mechanical and possibly physiological adaptations that allow them to survive deposition events of the magnitude commonly encountered in estuarine environments, which can be similar to sediment deposition caused by cable installation.⁵⁶ Burrowing bivalve clams, burrow-forming amphipods, and juvenile oysters were highly tolerant, while a tube-dwelling (*Stresblospio benedict*i) was relatively unsuccessful at moving through the sediment to regain the sediment-water interface.⁵⁷ Benthic substrates that shift constantly due to waves and currents could experience lower potential burial effects.

Sediment redistribution and deposition on the seabed during construction is expected to be localized. Given the naturally occurring tidal currents within the Project Area, local species are expected to have some level of tolerance to sediment redistribution. Following construction, currents and tidal action will likely redistribute sediment to pre-construction conditions.

SouthCoast Wind acknowledges that side-casting may not be the best methodology for the area due to other soft sediment taxa, such as polychaetes, Ampelisca amphipods, etc., present in Rhode Island waters. SouthCoast Wind will work with CRMC and RIDEM to propose alternative methods for dredging material management to implement BMPs. A Benthic Monitoring Plan, developed in accordance with BOEM recommendations (Attachment V), outlines the long-term monitoring initiatives to track and monitor Project impacts.

Displacement of Benthic Communities during Construction Activities

The benthic habitat will also be impacted by short-term displacement during cable installation and anchoring. Benthic communities are expected to recolonize the impact area following construction activities. Recolonization rates of benthic habitats are driven by the benthic communities inhabiting the area surrounding the impacted region. Habitats that can be easily colonized from neighboring areas and communities well adapted to disturbance within their habitats (e.g., sand sheets) are expected to recover quickly. For communities not well adapted to frequent disturbance (e.g., deep boulder communities), recovery depends on a range of factors, such as seasonal larval abundance, and are assumed to generally take longer to become established - upwards of a year to begin recolonization. Depending on the type(s) of cable and scour protection used by SouthCoast Wind, these introduced hard bottom substrates may lead to habitat gain in localized areas for benthic communities and may cause an artificial reef effect, turning biodiversity-poor, soft-sediment habitat into hardbottom, biodiverse communities.

⁵⁶ Hinchey, E.K., L.C. Schaffner, C.C. Hoar, B.W. Vogt, and L.P. Batte. 2006. Responses of Estuarine Benthic Invertebrates to Sediment Burial : The Importance of Mobility and Adaptation. *Hydrobiologia* 556, 85-98. February 2006.

⁵⁷ Hinchey et al., 2006

Impacts are not anticipated to SAV during construction and decommissioning. HDD will be used at cable landings to avoid shallow areas with potential for SAV. Potential SAV identified at the Sakonnet River landing at Portsmouth will be field inspected as needed prior to construction. Given the short-term suspension and redeposition of sediment during the offshore HDD construction area excavation as discussed above, impacts to SAV are not anticipated.

Shellfish resources within the ECC and the offshore HDD construction areas will be disturbed during cable installation. SouthCoast Wind will use HDD at landings to avoid disturbance to nearshore productive shellfish beds to the extent practicable. SouthCoast Wind will select lower impact construction methods where possible and will micro-route cables within the selected ECC to avoid complex habitats to the extent practicable. To further decrease impacts, SouthCoast Wind's ECC was selected with consideration to minimize the length of cable needed.

SouthCoast Wind will, to the greatest extent practicable, bury cables to a target burial depth and use proper burial methods to allow for benthic recolonization after construction is complete. The benthic habitat will be closely monitored through an extensive Benthic Monitoring Plan (Attachment V) developed to assess changes before and after construction on a multi-year timeframe.

Changes in Ambient EMF

As discussed in Section 3.1.8, SouthCoast Wind conducted an EMF analysis including several different modeled offshore export cable burial and cable spacing scenarios to represent both likely (typical) submarine cable conditions and worst-case (atypical) conditions following cable installation (Attachment K).

The highest modeled magnetic field (MF) levels for the typical case (bundled HVDC cables) and atypical (conservative) cases would occur directly above the cables (peaking at 123 mG for the typical installation case, and ranging from 1,909 to 3,785 mG across the two other possible installation cases), with a rapid reduction in MF levels with increasing lateral and vertical distance from the cables. For example, MF cancellation is increased by the bundling of two cables with current in equal but opposite polarity, the analysis shows 93 > 99% reductions in MF levels. At lateral distances of ± 25 ft (± 7.6 m) from the cable bundle centerlines and at lateral distances of ± 25 ft, there is little difference in MF levels for the buried versus the surface-laid cables.

The conservative modeling analysis showed that DC MF levels will be increased only for small areas along the seafloor around certain localized cable locations where conservative (and atypical/worst case) installation conditions are present, contributing to highly localized deviations from the earth's DC geomagnetic field. As discussed in Attachment K, the weight of the currently available scientific evidence does not provide support for concluding there would be population-level harm to marine species from EMFs associated with HVDC submarine transmission.

The offshore export cables will be shielded/armored and buried beneath the seafloor, which is expected to substantially decrease EMF detection by EMF-sensitive marine species. Potential exposure to EMFs will be short- or long-term, depending on the proximity of the species to the cables. Sessile benthic species are expected to be exposed to potential EMFs more than mobile benthic species, which are expected to move in and out of the cable area.

There is limited research indicating that some invertebrate species are able to detect changes in EMF, and that EMF effects from undersea cables could cause disorientation in invertebrate species and may

redirect locomotion in response to the changes in the magnetic environment. ^{58,59} However, given that the target burial depth and the cable shielding/armoring will dampen the EMF effects, EMFs from the proposed export cables are not expected to affect benthic communities.

The steady MFs associated with DC submarine cables do not directly induce electric fields, but weak DC electric fields will be induced by water flow or marine animal movement through the DC MFs associated with DC submarine cables, similar to the induced electric fields associated with water movement and marine animal movement through the earth's geomagnetic field. These motion-induced electric fields are generally weak in nature, including for the typical buried HVDC offshore cable installation case, being small as compared to the motion-induced electric fields associated with movement through the earth's steady geomagnetic field.

CSA Ocean Sciences Inc. and Exponent⁶⁰ referred to DC electric field strengths of approximately 0.075 mV/m (0.000075 V/m) or less for the movement of ocean currents through the earth's geomagnetic field. There is a lack of evidence demonstrating a likelihood of significant impacts/effects from the motion-induced electric fields associated with DC submarine cables. CSA Ocean Sciences Inc. and Exponent discussed how electrosensitive marine species can distinguish natural bioelectric fields used locate prey, mates, and predators from naturally occurring motion induced electric fields. The 2022 Brief titled *Electromagnetic Field Effects on Marine Life* that was authored by researchers at the U.S. Department of Energy's Wind Energy Technologies Office, National Renewable Energy Laboratory, and Pacific Northwest National Laboratory as part of the U.S. Offshore Wind SEER effort considered these motion-induced electric fields in its assessment of the state of the knowledge of the potential impacts of EMFs from submarine cables on marine life. The Brief included the following summary of the overall state of the knowledge:

"Overall, there is no conclusive evidence that EMFs from a subsea cable creates any negative environmental effect on individuals or populations. To date, no impacts interpreted as substantially negative have been observed on electrosensitive or magneto sensitive species after exposure to EMFs from a subsea cable. Behavioral responses to subsea cables have been observed in some species, but a reaction to EMFs does not necessarily translate into negative impacts. Continued research and monitoring are required to understand the ecological context

⁵⁸ Hutchison, Z., Sigray, P., He, H., Gill, A.B., King, J., & Gibson, C. 2018. Electromagnetic Field (EMF) impacts on elasmobranch (shark, rays, and skates) and American lobster movement and migration from direct current cables. OCS Study BOEM 2018-003.

https://espis.boem.gov/final%20reports/5659.pdf.; Love, M.S., M.M. Nishimoto, L. Snook, D.M. Schroeder & A.S Bull. 2017. A Comparison of Fishes and Invertebrates Living in the Vicinity of Energized and Unenergized Submarine Power Cables and Natural Sea Floor off Southern California, USA. Journal of Renewable Energy, 2017, Article ID 8727164. 13 pages. https://doi.org/10.1155/2017/8727164.; Normandeau (Normandeau Associates, Inc.). 2014. Understanding the Habitat Value and Function of Shoal/Ridge/Trough Complexes to Fish and Fisheries on the Atlantic and Gulf of Mexico Outer Continental Shelf: Draft Literature Synthesis pursuant to BOEM Contract No. M12PS00031. https://www.boem.gov/sites/default/files/non-energy-minerals/Final-Draft-Report.pdf.

⁵⁹ Gill, A.B., Gloyne-Phillips, I., Neal, K.J., & Kimber J.A. 2005. The potential effects of electromagnetic fields generated by sub-sea power cables associated with offshore wind farm developments on electrically and magnetically sensitive marine organisms – a review. Collaborative Offshore Wind Research into the Environment (COWRIE), Ltd, UK. 128 pp.

 $https://tethys.pnnl.gov/sites/default/files/publications/The_Potential_Effects_of_Electromagnetic_Fields_Generated_by_Sub_Sea_Power_Cables.pdf.$

⁶⁰ CSA Ocean Sciences Inc and. Exponent. 2019. *Evaluation of Potential EMF Effects on Fish Species of Commercial or Recreational Fishing Importance in Southern New England*. Report to US Department of the Interior, Bureau of Ocean Energy Management (BOEM) OCS Study BOEM. 2019-049. 62p., August.

within which short-term effects are observed and if species experience long-term or cumulative effects resulting from underwater exposure to EMFs."⁶¹

3.3.3 Proposed Avoidance, Minimization, and Mitigation Measures

Below is a list of measures applicable to benthic and shellfish resources that SouthCoast Wind will adopt:

- SouthCoast Wind will use HDD at landfall locations to avoid disturbance to nearshore productive shellfish beds to the extent practicable.
- SouthCoast Wind has developed an HDD Inadvertent Release of Drilling Muds Contingency Plan (Attachment G), which outlines the measures to be implement should there be a pressure loss and release of drillings muds during the HDD operations.
- Design the sea-to-shore transition to reduce the dredging footprint and effects to benthic organisms (e.g., cofferdam and/or gravity cell).
- Use HDD at landings to avoid disturbance to nearshore finfish, invertebrates, EFH, and sensitive habitats (e.g., SAV beds) to the extent practicable and to minimize spatial and temporal effects to benthic organisms.
- Select export cable corridors and micro-route cables within selected corridors to avoid complex habitats, where possible (see Cable Route Engineering Drawings in Attachment C).
- Design the cable burial layout to minimize length of cable needed and bury cables, where possible, to allow for benthic recolonization after construction is complete.
- Use industry standard cable burial and cable shielding methods to reduce potential effects/change in ambient EMF during operations and maintenance. In addition, SouthCoast Wind's Project cable burial layout was designed to minimize length of cable needed to reduce potential effects from EMF.
- Install offshore export cables to target burial depths and use cable shielding materials to minimize effects of EMF.
- Incorporate lower-impact construction and decommissioning methods, where possible, to reduce introduced sound into the environment and to reduce actions that may displace biological resources.
- SouthCoast Wind will select lower impact construction methods, where possible.
- The ECC was designed to minimize length of cable (and associated seabed impacts) needed. SouthCoast Wind will bury cables, where possible, to allow for benthic recolonization after construction is complete. Use of secondary cable protection (rock and/or mattresses) will be limited to the extent practicable, but are expected, at a minimum, to be installed at crossings of existing submarine cables and pipelines in accordance with the International Cable Protection Committee protocols.

⁶¹ US Offshore Wind Synthesis of Environmental Effects Research (SEER). 2022. *Electromagnetic Field Effects on Marine Life*. 13p. Accessed on September 28, 2022 at https://tethys.pnnl.gov/sites/default/files/summaries/SEER-Educational-Research-Brief-Electromagnetic-Field-Effectson-Marine-Life.pdf.

- The offshore export cables will be installed in a bundled configuration where practicable, to reduce installation impact area and post-installation occupied area.
- SouthCoast Wind will monitor the benthic impacts through a multi-year Benthic Monitoring Plan (Attachment V), which will assess the pre and post construction conditions of the Project and evaluate the degree of recovery over the monitoring period.

3.4 FINFISH AND ESSENTIAL FISH HABITAT

This section describes finfish and associated Essential Fish Habitat (EFH) with a focus on species of particular concern in the Rhode Island ECC. Detailed information on EFH in the Project Area is available in the COP, Appendix M3 and Attachment M - Benthic Habitat Mapping Report. Information from both of those sources, along with publicly available data and reports, is integrated into the following section.

Commercially valuable species that have been observed along the ECC include red and silver hake (*Merluccius bilinearis*), summer and winter flounder, and scup.^{62 63} Demersal residents in these nearshore areas include winter flounder, American eel (*Anguilla rostrata*), Atlantic tomcod (*Microgadus tomcod*), and white perch (*Morone americana*).⁶⁴ In recent years, there has been a community shift from year-round resident species to summer migrants (such as summer flounder (*Paralichthys dentatus*), black sea bass (*Centropristis striata*), scup (*Stenotomus chrysops*), and butterfish (*Peprilus triacanthus*).^{65, 66}

Rhode Island Sound provides important linkages between the estuarine, nearshore and offshore systems, including nutrient fluxes, larval transport, and juvenile and adult migrations.⁶⁷ A total of 101 species were recorded in a multiyear fishery-independent survey (2009 to 2012) in Rhode Island and Block Island Sounds.⁶⁸ Biodiversity decreased in Rhode Island Sound during the winter and increased during summer and fall, with an influx of anadromous species, including alewife (*Alosa pseudoharengus*), blueback herring (*Alosa aestivalis*), and striped bass (*Morone saxatilis*).^{69, 70}

3.4.1 Designated Essential Fish Habitat

There are 38 species of finfish, skate, and shark species with mapped EFH in the ECC. Table 3-14 provides an overview of the fishery status and preferred habitats of the species with known EFH in the ECC based on NOAA's *Essential Fish Habitat Mapper* and the SouthCoast Wind Essential Fish Habitat Assessment and Protected Fish Species Assessment (COP Appendix N).

The Magnuson-Stevens Fishery Conservation and Management Act of 1976, as amended in 1996 by the Sustainable Fisheries Act, sets forth a mandate for NMFS, regional Fishery Management Councils, and other federal agencies to identify and protect important marine and anadromous fisheries habitat,

⁶² Malek et al. 2014

 $^{^{\}rm 63}$ Stokesbury 2012 and 2014

⁶⁴ Evans et al. 2015

⁶⁵ Rhode Island Sea Grant. 2018. The Murder Mystery of Narragansett Bay's Winter Flounder. Available online at:

http://seagrant.gso.uri.edu/murder-mystery-narragansett-bays-winter-flounder/.

⁶⁶ Evans et al., 2015

⁶⁷ Malek, A.J., J.S. Collie, and J. Gartland. 2014. Fine-scale spatial patterns in the demersal fish and invertebrate community in a northwest Atlantic ecosystem. *Estuarine and Coastal Shelf Science* 147:1-10.

⁶⁸ Malek et al., 2014

⁶⁹ Evans, N.T., K.H. Ford, B.C. Chase, & J.J. Sheppard. 2015. *Recommended Time of Year Restrictions (TOYs) for Coastal Alteration Projects to Protect Marine Fisheries Resources in Massachusetts*. Report by the Massachusetts Division of Marine Fisheries.

⁷⁰ Malek et al., 2014

referred to as Essential Fish Habitat (EFH), and further requires that EFH consultation be conducted for any activity that may adversely affect important habitats of federally managed marine and anadromous fish species. EFH has been defined as, "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity" (16 U.S.C. 1802[10]).

Common Name	Species Name	Mapped EFH in the Offshore Project Area
Finfish		
Albacore tuna	Thunnus alalunga	 EFH for juvenile and adult life stages in the offshore portion of the ECC. EFH for juvenile life stage only in Sakonnet River/Mount Hope Bay portion of the ECC.
Butterfish	Peprilus triacanthus	 EFH for all life stages in the offshore portion and Sakonnet River/Mount Hope Bay portion of the ECC.
Atlantic cod	Gadus morhua	 EFH for all life stages in the offshore portion and Sakonnet River/Mount Hope Bay portion of the ECC.
Atlantic herring	Clupea harengus	 EFH for all life stages in the offshore portion of the ECC. EFH for larval, juvenile, and adult life stages only in Sakonnet River/Mount Hope Bay portion of the ECC.
Atlantic mackerel	Scomber scombrus	 EFH for all life stages in the Sakonnet River/Mount Hope Bay portion of the ECC EFH for egg, larval, and juvenile life stages only in the offshore portion of the ECC.
Atlantic wolffish	Anarhichas lupus	• EFH for all life stages in the offshore portion of the ECC.
Black sea bass	Centropristis striata	• EFH for juvenile and adult life stages in the offshore portion and Sakonnet River/Mount Hope Bay portion of the ECC.
Bluefin tuna	Thunnus thynnus	 Juvenile and adult life stage EFH in the offshore portion and Sakonnet River/Mount Hope Bay portion of the ECC.
Bluefish	Pomatomus saltatrix	• EFH for juvenile and adult life stages in the offshore portion and Sakonnet River/Mount Hope Bay portion of the ECC.
Haddock	Melanogrammus aeglefinus	• EFH for egg, larval, and juvenile life stages only in the offshore portion and Sakonnet River/Mount Hope Bay portion of the ECC.
Monkfish	Lophius americanus	EFH for all life stages in the offshore portion of the ECC.
Ocean pout	Macrozoarces americanus	• EFH for egg, juvenile, and adult life stages in the offshore portion and Sakonnet River/Mount Hope Bay portion of the ECC.
Offshore hake	Merluccius albidus	Larval life stage EFH in the offshore portion of the ECC.
Pollock	Pollachius and P. virens	 EFH for egg, larval, and juvenile life stages in the offshore portion of the ECC. EFH for juvenile life stage only in the Sakonnet River/Mount Hope Bay portion of the ECC.
Red hake	Urophycis chuss	• EFH for all life stages in the offshore portion and Sakonnet River/Mount Hope Bay portion of the ECC.
Scup	Stenotomus chrysops	 EFH for all life stages in the Sakonnet River/Mount Hope Bay portion of the ECC. EFH for juvenile and adult life stages only in the offshore portion of the ECC.

TABLE 3-14. FINFISH, SKATE, AND SHARK SPECIES WITH MAPPED EFH IN THE SOUTHCOAST WIND 1 ECC

Common Name	Species Name	Mapped EFH in the Offshore Project Area
Silver hake	Merluccius bilinearis	 EFH for egg, larval, and adult life stages only in the offshore portion and Sakonnet River/Mount Hope Bay portion of the ECC.
Skipjack tuna	Katsuwonus pelamis	 EFH for juvenile and adult life stages in the offshore portion of the ECC. EFH for adult life stage only at the Sakonnet River/Mount Hope Bay portion of the ECC.
Summer flounder	Paralichthys dentatus	 EFH for all life stages in the offshore portion of the ECC. EFH for larval, juvenile, and adult life stages only in the Sakonnet River/Mount Hope Bay portion of the ECC.
White hake	Urophycis tenuis	 EFH for larval and juvenile life stages only in the offshore portion of the ECC.
Windowpane flounder	Scophthalmus aquosus	 EFH for all life stages in the offshore portion and Sakonnet River/Mount Hope Bay portion of the ECC.
Winter flounder	Pseudopleuronectes americanus	 EFH for all life stages in the Sakonnet River/Mount Hope Bay portion of the ECC. EFH for larval, juvenile, and adult life stages only in the offshore portion of the ECC.
Witch flounder	Glyptocephalus cynoglossus	 EFH for egg, larval, and adult life stages only in the offshore portion of the ECC.
Yellowfin tuna	Thunnus albacares	 EFH for juvenile and adult life stages in the offshore portion of the ECC. EFH for juvenile life stage only in the Sakonnet River/Mount Hope Bay portion of the ECC.
Yellowtail	Pleuronectes	 EFH for all life stages in the offshore portion and Sakonnet
flounder	ferruginea	River/Mount Hope Bay portion of the ECC.
Skates	I	
Little skate	Leucoraja erinacea	 Juvenile and adult life stage EFH in the offshore portion and Sakonnet River/Mount Hope Bay portion of the ECC.
Winter skate	Leucoraja ocellata	 Juvenile and adult life stage EFH in the offshore portion and Sakonnet River/Mount Hope Bay portion of the ECC.
Sharks		
Basking shark	Cetorhinus maximus	 EFH for all life stages in the offshore portion and Sakonnet River/Mount Hope Bay portion of the ECC.
Blue shark	Prionace glauca	 Neonate, juvenile, and adult life stage EFH in the offshore portion of the ECC.
Common thresher shark	Alopias vulpinus	 EFH for all life stages in the offshore portion and Sakonnet River/Mount Hope Bay portion of the ECC.
Dusky shark	Carcharhinus obscurus	• EFH for all life stages in the offshore portion of the ECC.
Great white shark	Carcharodon carcharias	 EFH for all life stages in the offshore portion of the ECC. EFH for neonate life stage only in Sakonnet River/Mount Hope Bay portion of the ECC.
Sand tiger shark	Carcharias taurus	 Neonate and juvenile life stage EFH in the offshore portion and Sakonnet River/Mount Hope Bay portion of the ECC.
Sandbar shark	Carcharhinus plumbeus	• EFH for juvenile and adult life stages in the offshore portion and Sakonnet River/Mount Hope Bay portion of the ECC.
Shortfin mako shark	Isurus oxyrinchus	 Neonate, juvenile, and adult life stage EFH in the offshore portion of the ECC.

Common Name	Species Name	Mapped EFH in the Offshore Project Area
Smoothhound shark (Atlantic Stock)	Mustelus canis	 EFH for all life stages in the offshore portion and Sakonnet River/Mount Hope Bay portion of the ECC.
Spiny dogfish	Squalus acanthias	 Male and female sub-adult and adult life stage EFH in the offshore portion of the ECC. EFH for sub-adult female and adult male life stages only in the Sakonnet River/Mount Hope Bay portion of the ECC.
Tiger shark	Galeocerdo cuvier	 Juvenile and adult life stage EFH in the portion of the ECC.

3.4.2 Endangered and Threatened Finfish Species

There are two federally and state-listed finfish species that may occur in the ECC: Atlantic sturgeon (*Acipenser oxyrinchus oxyrinchus*) and shortnose sturgeon (*Acipenser brevirostrum*).⁷¹

The Atlantic sturgeon is listed as endangered under the ESA.⁷² It is also a Species of Greatest Conservation Need under the Rhode Island Wildlife Action Plan.⁷³ Due to its preference for inshore coastal water depths and gravelly and sand substrates⁷⁴ Atlantic sturgeon may be present within the ECC and near the landfall locations throughout the year. This species is likely to be more prevalent in the warmer months of the year, when individual adult Atlantic sturgeon migrate to coastal rivers and streams for spawning.⁷⁵

The shortnose sturgeon is listed as endangered under the ESA and as a Species of Greatest Conservation Need under the Rhode Island Wildlife Action Plan.^{76, 77} It is an anadromous finfish species found mainly in large freshwater rivers and coastal estuaries located along the east coast of North America, from New Brunswick to Florida. Based on its habitat preferences, shortnose sturgeon may occur in the nearshore areas of the ECC and landfall locations.

3.4.2.1 Essential Fish Habitat and Habitat Areas of Particular Concern

EFH and Habitat Areas of Particular Concern (HAPC) are designated by the New England Fishery Management Council for certain species and life stages of fish and invertebrates in the nearshore and offshore waters of New England, including the area covered by the Study Area. These designations are comprised of two components: (1) broad geographic areas (e.g., nearshore waters and seafloor shallower than 20 m; mapped 10-min squares) and (2) text documentation that describes the habitat characteristics that constitute EFH and/or HAPC within the designated geographic areas. Therefore,

⁷³ RIDEM. 2015. 2015 Rhode Island Wildlife Action Plan. http://www.dem.ri.gov/programs/bnatres/fishwild/swap/sgcncomm.pdf.

⁷¹ Greater Atlantic Regional Fisheries Office (GARFO). 2019. The Greater Atlantic Region ESA Section 7 Mapper (vers. 2.0). Retrieved October 2020 from: https://noaa.maps.arcgis.com/apps/webappviewer/index.html?id=1bc332edc5204e03b250ac11f9914a27.

⁷² National Oceanic and Atmospheric Administration. NOAA. 2020. Species directory: Atlantic Sturgeon. Available on-line at: https://www.fisheries.noaa.gov/species/atlantic-sturgeon.

⁷⁴ Stein, A.B., Friedland, K.D., & Sutherland, M. 2004. Atlantic sturgeon marine distribution and habitat use along the northeastern coast of the United States. *Transactions of the American Fisheries Society*, 133(3), 527-537.

⁷⁵ Dunton, K.J., A. Jordaan, K.A. McKown, D.O. Conover, and M.G. Frisk. 2010. Abundance and distribution of Atlantic sturgeon (*Acipenser oxyrinchus*) within the Northwest Atlantic Ocean, determined from five fishery-independent surveys. U.S. *National Marine Fisheries Service Fishery Bulletin*, 108, 450–464.

⁷⁶ NOAA 2020.

⁷⁷ RIDEM 2015.

spatial data on the distribution of those habitat characteristics are needed to refine the specific location of EFH and/or HAPC.

HAPC designated by the New England Fishery Management Council for juvenile cod include structurally complex rocky-bottom or vegetated habitat in inshore areas at depths less than 65 ft (20 m) that provide juvenile cod with protection from predation and support a wide variety of prey items (NEFMC 2017). Cobble habitats are essential for the survival of juvenile cod in that they may assist with avoiding predation by older year classes (Gotceitas & Brown 1993)⁷⁸ and recent studies suggest that rocky, hard bottom habitats may be important for reproduction (DeCelles et al. 2017). Additional studies suggest that structures such as boulders and SAV, which provide vertical relief for predator avoidance and feeding, may be the primary drivers of cod settlement and nursery habitat use in Narragansett Bay and coastal Rhode Island rather than complex cobble substrates given that these waters are largely characterized by fine-grained sediments (Langan et al. 2020). The entire seafloor of both the Sakonnet River and Mount Hope Bay is shallower than 20 m, but only very limited areas contain complex rockybottom habitat consistent with characteristics that match the HAPC description for juvenile cod. The majority of the ECC shallower than 20 m was mapped as Sand and Mud to Muddy Sand which are habitats less likely to be used by juvenile cod (Figure 4-6, Attachment M). The majority of the 361 acres (6% of the ECC in Rhode Island state waters;), mapped with HAPC characteristics, is located in Rhode Island Sound.

Winter flounder are a demersal species likely to occur year-round within the Study Area. Adult winter flounder prefer soft bottom muddy and sandy substrates, but also utilize hard bottoms on offshore banks (Pereira et al. 1999)⁷⁹. Adult winter flounder migrate to nearshore/estuarine waters in the late fall and early winter to spawn and then may migrate to cooler, offshore waters in the summer. Winter flounder lay benthic eggs in shallow (<16 ft [5.0 m]) nearshore waters, bays, and estuaries in mud, muddy sand, gravel, macroalgae, and submerged aquatic vegetation (NEFMC 2017)⁸⁰. EFH designated by the New England Fishery Management Council for winter flounder eggs, young-of-the-year (YOY) juveniles, and spawning adults in the Study Area are likely to be found from January through June (Massie 1998)⁸¹ in Mixed-Size Gravel in Muddy Sand to Sand, Coarse Sediment, Sand, and Mud to Muddy Sand habitats, as well as any benthic substrate with SAV. The characteristic of these mapped habitats match the EFH description and have been mapped to encompass 731 acres of the ECC (12.1% of the portion in Rhode Island state waters; Figure 4-7, Attachment M). Non-spawning winter flounder adults and older juveniles are more frequently found in continental shelf benthic habitats and deeper coastal waters than in the shallower habitats utilized by eggs and YOY (NEFMC 2017; Phelan 1992)⁸². Therefore, juveniles and non-spawning adults are likely to utilize Mixed-Size Gravel in Muddy Sand to Sand, Coarse Sediment, Sand, and Mud to Muddy Sand habitats in the Study Area.

 ⁷⁸ Gotceitas, V. & Brown, J.A. (1993). Substrate selection by juvenile Atlantic cod (Gadus morhua): effects of predation risk. Oecologia 93: 31-37.

⁷⁹ Pereira, J. J., Goldberg, R., Ziskowski, J. J., Berrien, P. L., Morse, W. W., & Johnson, D. L. (1999). Essential fish habitat source document: winter flounder, Pseudopleuronectes americanus, life history and habitat characteristics. NOAA Tech Memo NMFS-NE-138; 48 pp.

⁸⁰ New England Fishery Management Council (NEFMC). (2017). Omnibus essential fish habitat amendment 2. Volume 2: EFH and HAPC designation alternatives and environmental impacts. October 25, 2017.

⁸¹ Massie, F. D. (1998). The Uncommon Guide to Common Life on Narragansett Bay. Providence, Rhode Island: Save The Bay.

⁸² Phelan, B. A. (1992). Winter flounder movements in the inner New York Bight. Trans. Am. Fish. Soc., 121: 777-784.

SouthCoast Wind completed an EFH and Protected Fish Species Assessment which was specifically tailored to the ECC.⁸³ The extensively analyzed data mapped the benthic habitat to evaluate EFH, including HAPC for species of concern; from the evaluation potential impacts are being assessed through the federal EFH Consultation. BOEM's EFH Assessment was deemed complete by NMFS on June 24, 2024 and NMFS completed its EFH Consultation and provided Conservation Recommendations to BOEM on September 23, 2024.

3.4.2.2 Potential Project Impacts

Construction Impacts Assessment - Finfish

Most of the potential Project impacts to finfish and EFH would be temporary and reversible in nature. Finfish communities and EFH are expected to return to pre-construction conditions following the Project's construction. Construction activities may temporarily illicit avoidance or attraction behaviors and/or a stress response in finfish. Introduced sound and/or a change in ambient lighting during construction activities may cause this behavioral disturbance. Changes in ambient lighting will occur on a limited, highly localized basis as necessary for safe construction and are not expected to significantly affect finfish.

The actual footprint of Project activities will be smaller than the Study Area (i.e., the entire corridor for which habitats were mapped). Where juvenile cod benthic habitats are found, these habitats would experience some impacts from Project activities that permanently or temporarily disturb the seafloor, such as the burying of export cables and long-term presence of secondary cable protection measures in hard bottom areas where target cable burial depth is not possible. Given their preference for hard bottom/complex habitat, cable mattresses, rock berms, or frond mattresses used as secondary cable protection may provide increased habitat availability for both adult and juvenile cod (Reubens et al. 2013)⁸⁴. Depending on the material used, secondary protection may be colonized by barnacles, tube-forming species, hydroids, and other fouling species found on existing hard bottom habitat in the region. Other Project activities are not expected to result in long term adverse impacts to either adult or juvenile cod EFH.

Impacts from Project activities related to installation of the export cable in shallow nearshore (<16 ft [5.0 m]) waters may temporarily directly affect winter flounder eggs, YOY, and spawning adults. Eggs could be entrained within the jet plow or experience increased mortality due to sediment suspension (Berry et al. 2011)⁸⁵. These impacts are expected to be minor because they will disturb a small portion of available EFH in the area and temporary because the substrates within nearshore portions of the ECC are expected to return to essentially the same as pre-existing conditions, allowing for continued use by spawning winter flounder, YOY, and eggs. Juveniles and adult flounder may also be temporarily displaced by seafloor disturbing activities. Winter flounder are expected to recolonize most areas once construction is complete, however similar to other species that utilize sandy habitats, they may

⁸³ Final Essential Fish Habitat and Protected Fish Species Assessment Prepared by: AECOM 9 Jonathan Bourne Drive Pocasset, MA 02559 August 2021.

 ⁸⁴ Reubens, J., Braeckman, U., Vanaverbeke, J., Van Colen, C., Degraer, S., & Vincx, M. (2013). Aggregation at windmill artificial reefs: CPUE of Atlantic cod (Gadus morhua) and pouting (Trisopterus luscus) at different habitat in the Belgian part of the North Sea. Fish. Res. 139: 28-34.
 ⁸⁵ Berry, W. J., Rubinstein, N. I., Hinchey, E. K., Klein-MacPhee, K. G., & Clarke, D. G. (2011). Assessment of Dredging Induced Sedimentation Effects on Winter Flounder (Pseudopleuronectes americanus) Hatching Success: Results of Laboratory Investigations. Proceedings of the Western Dredging Association Technical Conference and Texas A&M Dredging Seminar. Nashville, TN.

experience small amounts of permanent habitat loss in areas that are converted from sandy sediments to hard bottom habitats should secondary cable protection be needed.

Loss of habitat due to conversion to hard bottom where cable protection is required is not expected to have a significant impact on these species due to the large area of alternate suitable habitat available. See Section 2.3.9 for additional details on the potential need for secondary cable protection.

The concentrations of suspended sediment in the water column (measured as turbidity) will increase for a short period during and following cable installation in the seabed; see Section 3.2.2 of this Assent application and the Hydrodynamics and Sediment Dispersion Modeling Report in Attachment L. Elevated turbidity levels are expected to decrease quickly following cable installation, dropping to under 100 mg/L over ambient concentrations within five hours. Given the short duration and relatively low levels of increase, impacts to fish and fishing activities are not anticipated.

Potential harassment or mortality could occur due to seabed disturbance, planned and unplanned discharges, and other accidental events. The Emergency Spill Response Plan will be followed to prevent and respond to unplanned discharges and accidental events. Reduced prey availability and habitat loss may occur during Project construction. The seabed surface is expected to return to pre-construction conditions due to natural infill from tidal motion, except where secondary cable protection is necessary. In these areas, habitat modification will occur through the addition of cable and scour protection.

EMF Impacts Assessment - Finfish

EMFs are created anywhere there is a flow of electricity, and their strength diminishes within a short distance from the source. Thus, a change in ambient EMF may occur around the submarine power cables. The strength of electric fields depends on voltage, which is the pressure behind the flow of electricity. Magnetic fields are produced by current, which is the flow of electricity. As discussed in Section 3.1.8, a Magnetic Field Analysis study was conducted by POWER and Gradient, Inc. to model the magnetic fields produced by typical offshore cable configurations for the Project and contextualize them to the latest research and guidelines for the marine environment (Attachment K). The modeling analysis focuses on magnetic fields because the electric fields arising from the voltage on the export cables will be shielded by cable materials.

Three configurations of offshore HVDC cables were modeled, including the typical installation case where the two direct current conductors are bundled together as well as two atypical, worst-case installation scenarios.⁸⁶ Only for the two atypical installation cases will magnetic field levels above the offshore export cables appreciably differ from the earth's steady (DC) geomagnetic field, and only within short distances from the cables. The weight of the currently available evidence does not provide support for concluding there would be population-level harms to marine species from EMF associated with HVDC submarine transmission. This conclusion regarding a lack of evidence of population-level harm to marine species from HVDC-related EMFs is supported by findings from recent governmental reports and expert state of the science reviews.

No regulatory thresholds or guidelines for allowable EMF levels in marine environments have been established for either HVDC or HVAC transmission. There is a growing body of evidence suggesting that EMFs from HVDC cables may be perceptible to some electromagnetic (EM)-sensitive marine species, but

⁸⁶ One worst-case installation case assumes the bundled conductors are laid directly on the seafloor surface and covered by a concrete mattress, such as at a cable crossing location. The other is an unbundled installation case where the two DC conductors are separately buried approximately 164 ft (50 m) apart at a target depth of 2.0 m to be used as needed to ensure safe installation and repair of the separate cables, as well as to minimize risk of damage to both cables from threats such as anchor strike.

there remains a lack of evidence indicating potential harmful impacts at the population- or communitylevel for the various types of marine species which may experience exposure to DC EMFs from submarine export cables.⁸⁷ Additional details can be found in Attachment K – Magnetic Field Modeling Report. This conclusion regarding a lack of evidence of population-level harms to marine species from HVDC-related EMFs is supported by findings from recent governmental reports and expert state of the science reviews. A BOEM sponsored study in 2019 concluded, based on its review of the state of the knowledge regarding potential EMF-related impacts on marine life, "The operation of offshore wind energy projects is not expected to negatively affect commercial and recreational fishes within the southern New England area. Negligible effects, if any, on bottom-dwelling species are anticipated. No negative effects on pelagic [*i.e.*, in upper layers of the open sea] species are expected due to their distance from the power cables buried in the seafloor."

Two recent reports^{58,88} commissioned by BOEM have discussed the scientific evidence bearing on the potential impacts of EMFs from submarine power cables on the European eel and the American eel. While acknowledging the evidence indicating that multiple eel species can potentially detect the earth's steady (DC) geomagnetic field and the "mixed evidence" that eel species can detect electric fields, the 2019 report highlighted findings from two studies of European eels supporting a lack of significant effects of AC MFs on eel species. In particular, this report described one laboratory study as reporting no effect of a 950 mG MF from a 50-Hz AC power source on the swim behavior or orientation of European eels, and a field study as reporting findings that migration of European eels was not prevented by an unburied AC power cable. The 2021 report also discussed findings from these two studies of European eels, concluding that they provide "insufficient evidence to confidently decipher the behavioral response to cable EMFs in the context of AC or DC cables."

Importantly, the 2021 Hutchison et al. report described findings from a field investigation of the EMF impacts on American eel movement and migration from a buried DC power cable, specifically the 330-MW bipolar Cross Sound Cable that transects Long Island Sound between New Haven, Connecticut, and Shoreham, New York. For the range of DC MFs encountered by American eels in this study (-17.0 to 86.9 nT, or -0.17 to 0.869 mG).⁸⁸ reported some evidence using highly sensitive tracking metrics that the HVDC cable MFs may have resulted in faster and more directed movement of eels, but these findings did not provide evidence of a barrier to migration. Hutchison et al. highlighted the need for further work to better understand the implications of their findings for migratory behavior of American eels.

The 2019 report concluded overall that the impact consequence of any exposure of American eels to EMFs from buried submarine power cables was "negligible." This conclusion was based on the small and localized portion of the pelagic habitat that would experience detectable EMFs from buried submarine

150p., December.

 ⁸⁷ CSA Ocean Sciences Inc.; Exponent. 2019. "Evaluation of Potential EMF Effects on Fish Species of Commercial or Recreational Fishing Importance in Southern New England." Report to US Department of the Interior, Bureau of Ocean Energy Management (BOEM). OCS Study BOEM 2019-049, 62p., August.; Gill, AB; Desender, M. 2020. "Risk to Animals from Electromagnetic Fields Emitted by Electric Cables and Marine Renewable Energy Devices." Report to Ocean Energy Systems (OES), in OES-Environmental 2020 State of the Science Report: Environmental Effects of Marine Renewable Energy Development Around the World (Eds: Copping, AE; Hemery, LG), p. 87-103. doi: 10.2172/1633088.; US Offshore Wind Synthesis of Environmental Effects Research (SEER). 2022. "SEER Webinar #4: Electromagnetic Fields & Vessel Collision: Effects on Marine Life from Offshore Wind Energy." February 22, 32p. Accessed on March 7, 2022 at https://tethys.pnnl.gov/sites/default/files/events/SEER-EMFVessels-Webinar-Slides.pdf.; Taormina, B; Bald, J; Want, A; Thouzeau, G; Lejart, M; Desroy, N; Carlier, A. 2018. "A review of potential impacts of submarine power cables on the marine environment: Knowledge gaps, recommendations and future directions." Renew. Sustain. Energy Rev. 96 :380-391. doi: 10.1016/j.rser.2018.07.026.
 ⁸⁸ Hutchison, ZL; Sigray, P; Gill, AB; Michelot, T; King, J. 2021. "Electromagnetic Field Impacts on American Eel Movement and Migration from Direct Current Cables." Report to US Department of the Interior, Bureau of Ocean Energy Management (BOEM) OCS Study BOEM 2021-83.

power cables, and the available scientific evidence supporting any biological effects as being either not detectable or small changes. This report highlighted how changes in the earth's magnetic field are potentially just one of many environmental cues (e.g., water temperature, light, salinity) that can guide the migratory behavior of eels.

3.4.2.3 Proposed Avoidance, Minimization, and Mitigation Measures

SouthCoast Wind will conduct activities in accordance with 30 C.F.R. § 585.621. Table 2-9 within Section 2.7.8 of the Project's RI CRMC Assent application and Table 16-1 of the COP Volume II summarizes the various avoidance, minimization and mitigation measures the Project intends to abide by to minimize impact during all phases of construction and operations. These tables also illustrate that the Project intends to apply BMPs that are included in Attachment A of BOEM's Information Guidelines for a Renewable Energy COP.

As indicated in Table 16-1 of the COP, SouthCoast Wind will select and use BMPs including the use of a Stormwater Pollution Prevention Plan (SWPPP) to minimize sediment mobilization during offshore construction of WTGs and OSPs, scour protection placement, and HDD operations. SouthCoast Wind, when feasible, will use technologies that minimize sediment mobilization and seabed sediment alteration for cable burial operations.

As indicated in Table 2-9, SouthCoast Wind will select and use BMPs including the use of a SESC plan to minimize sediment mobilization during offshore construction and HDD operations. SouthCoast Wind will have an HDD Contingency Plan in place to mitigate, control, and avoid unplanned discharges related to HDD activities. SouthCoast Wind will implement an SESC plan during trenching and excavation activities, in accordance with the *Rhode Island Soil Erosion and Sediment Control Handbook*, and in accordance with approved plans and permit requirements. The erosion control devices will function to mitigate construction-related soil erosion and sedimentation and will also serve as a physical boundary to separate construction activities from resource areas.

Impacts associated with the installation of a cofferdam or casing pipe with goal posts (if necessary) would be similar to those discussed for seafloor preparation, but on a smaller scale. The cofferdam or casing pipe with goal posts will be a temporary structure used during construction only. Therefore, no conversion of habitat is expected, and the cofferdam will be removed prior to the operations phase.

Proposed avoidance, minimization, and mitigation measures applicable to the potential impacts to finfish and EFH are presented below.

- SouthCoast Wind will design the sea-to-shore transition to reduce the dredging footprint and effects to benthic organisms (e.g., offshore cofferdam and/or gravity cell).
- Cable route engineering is being completed to achieve target burial depth of 6 ft where practicable, to avoid use of surface cable protection and to minimize the potential for EMF effects.
- The Project will use HDD at landfall locations. avoid disturbance to finfish and invertebrate EFH to the extent practicable.
- SouthCoast Wind will coordinate with RIDFW, RI DMF, RI CRMC, RIDEM, the USFWS and the NMFS to identify appropriate mitigation measures, including seasonal construction constraints, if required.

- SouthCoast Wind will select lower impact construction methods, where possible.
- SouthCoast Wind has engineered the cable route to avoid EFH and sensitive benthic habitats, where possible.
- The ECC was designed to minimize length of cable (and associated seabed impacts). SouthCoast Wind will bury cables, where feasible, to allow for benthic recolonization after construction is complete. Use of secondary cable protection (rock and/or mattresses) will be limited to the extent practicable.
- The offshore export cables will be installed in a bundled configuration where practicable, to reduce installation impact area and post-installation occupied area.

3.4.3 Marine Mammals and Sea Turtles

3.4.3.1 Affected Environment

Marine Mammals

SouthCoast Wind evaluated available literature and government databases, marine mammal-specific surveys conducted for the proposed Project, as well as local and regional information regarding habitat use, abundance, and distribution of marine mammal species known to occur in the waters surrounding the ECC.

Sightings of whales and dolphins in the Sakonnet River, Mount Hope Bay, and nearshore Rhode Island are rare, and there have only been a few reported sightings of marine mammal species, besides seals, within Narragansett Bay.⁸⁹ Harbor seals (*Phoca vitulina*) are routinely sited from fall through spring and several haul-out sites exist at Rome Point, Brenton Point, Citing Rock, Cold Spring Rock, Seal Rock, and Cormorant Cove with the size of the region harbor seal population and number of haul-out sites increasing in recent years.⁹⁰ Since the majority of the Rhode Island ECC is within the Sakonnet River and Mount Hope Bay, the risk of impact to marine mammals in Rhode Island waters is very low given the low overall densities of animals and the avoidance and mitigation measures that SouthCoast Wind vessels are required to implement, such as assigning protected species and environmental observers to operating vessels and implementing strike avoidance measures.

Additional marine mammal species can be found in the Rhode Island Sound, as listed in Table 3-15 Fifteen species are considered common or uncommon in terms of their likely occurrence within the ECC in Rhode Island Sound. The remaining sixteen species are considered rare within the ECC. The marine mammal species listed in Table 3-15 have been previously observed and/or recorded during surveys specific to offshore wind development for BOEM-specific assessments, surveys conducted in and around the Rhode Island/Massachusetts Wind Energy Area and the ECC as part of long-term population assessments, and/or in NOAA Marine Mammal Stock Assessment reports of the Rhode Island/Massachusetts Wind Energy Area.

⁸⁹ Raposa, K.B., and M.L. Schwartz. 2009. *An Ecological Profile of the Narragansett Bay National Estuarine Research Reserve*. 2009. ⁹⁰ Schwartz 2021.

Common Name	Scientific Name	Stock	RI SGCN ^a	Likely Occurrence within Project Area
Baleen whales				
Blue whale	Balaenoptera musculus	Western North Atlantic	-	Rare
Fin whale	Balaenoptera physalus	Western North Atlantic	SGCN	Common
Humpback whale	Megaptera novaeangliae	Gulf of Maine	SGCN	Common
Minke whale	Balaenoptera acutorostrata	Canadian East Coast	-	Common
North Atlantic right whale	Eubalaena glacialis	Western North Atlantic	SGCN	Common
Sei whale	Balaenoptera borealis	Nova Scotia	-	Common
Toothed whales				
Atlantic white-sided dolphin	Lagenohynchus acutus	Western North Atlantic	-	Common
Atlantic spotted dolphin	Stenella frontalis	Western North Atlantic	-	Rare
Blainville's beaked whale	Mesoplodon densirostris	Western North Atlantic	-	Rare
Common bottlenose dolphin ^b	Tursiops truncatus	Western North Atlantic	-	Common
Cuvier's beaked whale	Ziphius cavirostris	Western North Atlantic	-	Rare
Dwarf sperm whale	Kogia sima	Western North Atlantic	-	Rare
Gervais' beaked whale	Mesoplodon europaeus	Western North Atlantic	-	Rare
Killer whale	Orcinus orca	Western North Atlantic	-	Rare
Long-finned pilot whale	Globicephala melas	Western North Atlantic	-	Uncommon
Pantropical spotted dolphin	Stenella attenuata	Western North Atlantic	-	Rare
Pygmy sperm whale	Kogia breviceps	Western North Atlantic	-	Rare
Risso's dolphin	Grampus griseus	Western North Atlantic	-	Uncommon
Short-beaked common dolphin	Delphinus delphis	Western North Atlantic	-	Common
Short-finned pilot	Globicephala	Western North	_	Rare
whale	macrorhynchus	Atlantic	-	nare
Sowerby's beaked whale	Mesoplodon bidens	Western North Atlantic	-	Rare
Sperm whale	Physeter macrocephalus	North Atlantic	-	Uncommon
Striped dolphin	Stenella	Western North	-	Rare

TABLE 3-15. MARINE MAMMAL SPECIES WITH POTENTIAL TO OCCUR IN RHODE ISLAND SOUND

Common Name	Scientific Name	Stock	RI SGCN ^a	Likely Occurrence within Project Area		
	coeruleoalba	Atlantic				
True's beaked whale	Mesoplodon mirus	Western North Atlantic	-	Rare		
White-beaked dolphin	Lagenorhynchus albirostris	Western North Atlantic	-	Rare		
Porpoises						
Harbor porpoise	Phocoena phocoena	Gulf of Maine/Bay of Fundy Stock	SGCN	Common		
Pinnipeds						
Gray seal	Halichoerus grypus	Western North Atlantic	-	Common		
Harp seal	Pagophilus groenlandicus	Western North Atlantic	-	Uncommon		
Harbor seal	Phoca vitulina	Western North Atlantic	SGCN	Common		
Hooded seal	Crysophora cristata	Western North Atlantic	-	Rare		
West Indian Manatee	Trichechus manatus	Florida	-	Rare		

Notes:

^a Species of Greatest Conservation Need (SGCN) are identified by RIDEM and the Rhode Island Chapter of The Nature Conservancy in the Rhode Island Wildlife Action Plan.

Sea Turtles

Four species of sea turtles have the potential to occur in the ECC, all of which are federally listed and listed as a Species of Greatest Conservation Need (SGCN) in Rhode Island (Table 3-15). Sea turtle species that have the potential to occur in and in the vicinity of the ECC include the loggerhead sea turtle (*Caretta caretta*), leatherback sea turtle (*Dermochelys coriacea*), Kemp's ridley sea turtle (*Lepidochelys kempii*) and green sea turtle (*Chelonia mydas*). Federally endangered hawksbill sea turtles (*Eretmochelys imbricata*) generally prefer tropical and subtropical waters and are very rarely seen in Massachusetts and Rhode Island waters (observations are typically the result of cold-stun strandings), and therefore, will not be evaluated further in this assessment.^{91, 92, 93} The sea turtle species listed in Table 3-16 have been previously observed and recorded during surveys for BOEM-specific offshore wind development assessments and/or surveys conducted near and within the ECC as part of long-term population assessments. Although sea turtles could occur in the Sakonnet River and Mount Hope Bay, they are more apt to be in the RI Sound sections of the ECC.

⁹¹ Lutz, P.L. &. Musick, J.A. 1997. The Biology of Sea Turtles. Boca Raton, Florida: CRC Press.

⁹² National Marine Fisheries Service & United State Fish and Wildlife Service. 1993. Recovery Plan for Hawksbill Turtles in the U.S. Caribbean Sea, Atlantic Ocean, and Gulf of Mexico National Marine Fisheries Service, St. Petersburg, Florida.

⁹³ Lazell, J. 1980. New England Waters: Critical Habitat for Marine Turtles. Copeia, 2: 290-295. doi:10.2307/1444006.

Common Name	Scientific Name	ESA Status ^a	RI Status ^a	Occurrence within Project Area
Green sea turtle	Chelonia mydas	Т	SGCN	Uncommon
Kemp's ridley sea turtle	Lepidochelys kempii	E	SGCN	Uncommon
Atlantic Hawksbill sea turtle	Eretmochelys imbricata	E	-	Rare
Leatherback sea turtle	Dermochelys coriacea	E	SGCN	Common
Loggerhead sea turtle	Caretta caretta	Т	SGCN	Common

TABLE 3-16. SEA TURTLE SPECIES WITH POTENTIAL TO OCCUR IN THE ECC

Notes:

^a ESA = Endangered Species Act (16 U.S.C. §.1531 et seq.); Rhode Island Wildlife Action Plan Species Profiles, Species of Greatest Conservation Need (SGCN). SGCN species are identified by RIDEM and the Rhode Island Chapter of The Nature Conservancy in the Rhode Island Wildlife Action Plan. It should be noted that SGCN designation does not represent an equivalent to ESA species listings; rather, this represents a publicly available data source to identify species which Rhode Island considers to be of greatest concern, based on the threat affecting each (RIDEM 2015). E = Endangered; T = Threatened; NL = Not listed.

Data on sea turtle abundance and distribution in Rhode Island state waters are limited. However, available studies suggest that all four species are generally found offshore during the summer and fall.^{94, 95, 96} Loggerhead, leatherback, green, and Kemp's ridley sea turtles are highly migratory and are known to forage in nearby Cape Cod Bay during the summer months when sea surface temperatures range from 61 to 79 degrees Fahrenheit (16 to 26 degrees Celsius).⁹⁷

3.4.3.2 Potential Project Impacts

The risk of impact to marine mammals in Rhode Island waters is very low given the low overall densities of animals and the avoidance and mitigation measures that SouthCoast Wind vessels are required to implement. Also, impact pile driving is not planned within Rhode Island waters, and sound sources will be non-impulsive, which is less of a concern than impulsive noise sources for marine mammals. Noise producing vessels within Rhode Island state waters will include the use of a DP vessel.

During the construction phase, marine mammals and sea turtles may co-occur with, and be affected by, Project activities in the ECC. During the operations phase, marine mammals and sea turtles may cooccur with the proposed ECC, including minimal vessel traffic for maintenance and associated effects. Marine mammal and sea turtle likelihood of co-occurrence with Project activities in specific Project locations is a function of overall occurrence levels that range from "rare" to "common" as listed in Tables 3-14 and 3-15, respectively.

To minimize the potential for vessel strikes, environmental monitoring, reporting, and vessel strike avoidance measures are required during in-water activities as outlined in SouthCoast Wind's COP

⁹⁴ Kraus, S.D., Leiter, S., Stone, K., Wikgren, B., Mayo, C., Hughes, P., Kenney, R.D., Clark, C.W., Rice, A.N., Estabrook, B. & Tielens, J. 2016. Northeast Large Pelagic Survey Collaborative Aerial and Acoustic Surveys for Large Whales and Sea Turtles. U.S. Department of the Interior, Bureau of Ocean Energy Management, Sterling, Virginia. OCS Study BOEM 2016-054. 117 pp. + appendices. ⁹⁵ Lazell. 1980.

⁹⁶ Schwartz. 2021.

⁹⁷ Cetacean and Turtle Assessment Program. 1982. A Characterization of Marine Mammals and Turtles in the Mid and North Atlantic Areas of the U.S. Outer Continental Shelf (Report No. AA551-CT8-48). Report by University of Rhode Island. Report for U.S. Department of the Interior.
Appendix O Marine Mammal and Sea Turtle Monitoring and Mitigation Plan. Given these strike avoidance measures and the low probability of marine mammal occurrence (with the possible exception of seals) in the Sakonnet River and Mount Hope Bay, risk of potential vessel strikes is low in Rhode Island waters. Unplanned discharges will be prevented through the use of BMPs and the Emergency Response Plan (Attachment F).

Pinnipeds that may be present along the ECC could also be susceptible to in-air noise disturbance at haul out sites or pupping grounds, and in-air thresholds have been established by the National Marine Fisheries Service. However, in-air noise producing activities, which do not include pile driving in Rhode Island waters or the Ocean SAMP area, are anticipated to produce relatively low levels of in-air noise and are expected to be short in duration.

During the construction phase of the Project, temporary displacement may occur due to disturbance and modification of habitat and/or temporary disturbance of prey species causing reduced prey availability. Following construction and during the operational phase, the seafloor is expected to return to pre-construction condition through natural movement (transport) and sorting by waves and currents and marine mammals, sea turtles, and their prey are expected to return.

Artificial lighting during construction will be associated with navigational and deck lighting on vessels from dusk to dawn. Only a limited area would be associated with the artificial lighting used on Project vessels relative to the surrounding unlit areas and the linear installation of the ECC will cause the lit area to constantly move along the cable route. Because of the relatively short duration of installation activities, impacts are considered short-term for marine mammals.

3.4.3.3 Proposed Avoidance, Minimization, and Mitigation Measures

Below is a list of measures applicable to marine mammals and sea turtles that SouthCoast Wind will adopt:

- All relevant requirements of the BOEM *Project Design Criteria and Best Management Practices for Protected Species Associated with Offshore Wind Data Collection* will be followed wherever applicable, including strike avoidance measures, vessel speed restrictions, monitoring, mitigation, and reporting.
- Adhere to NMFS vessel speed restrictions and monitor relevant channels for alerts and updates, as appropriate.
- SouthCoast Wind will implement measures as identified in the Project Marine Mammal and Sea Turtle Monitoring and Mitigation Plan (COP, Appendix O) and the final Incidental Take Authorization to be authorized by NMFS.
- Marine construction staff will be trained in species identification, monitoring and mitigation.
- Environmental Monitors and/or Protected Species Observers will be identified on all vessels to perform monitoring and mitigation, as necessary and required.
- Adhere to the NMFS Guidelines for the Northern Right Whale Ship Strike Avoidance Rule.
- SouthCoast Wind will continue to consult with the RIDEM DFW, RIDEM DMF, RI CRMC, USFWS and NMFS to identify appropriate mitigation measures.
- SouthCoast Wind will train construction staff on biodiversity management and environmental compliance requirements.

3.5 COMMERCIAL AND RECREATIONAL FISHING

This section describes and analyzes commercial and recreational fisheries and fishing activity that has the potential to occur in the ECC, followed by an evaluation of potential Project-related effects and corresponding potential avoidance, minimization, and mitigation measures. Fishing activity is impacted by species abundance, market forces, regulations, and a large number of other variables.

3.5.1 Affected Environment

3.5.1.1 Commercial Fishing

Aquaculture

SouthCoast Wind will avoid or minimize adverse impact to aquaculture in Rhode Island and will work with RI CRMC, the RI DMF other relevant agencies, and the local aquaculture industry to achieve that end. RI CRMC is the regulatory body that manages aquaculture leasing and permits within Rhode Island waters. Much of the Rhode Island aquaculture activities occur within the State's several inland salt ponds, but aquaculture is also scattered nearshore in Narragansett Bay.⁹⁸ There are several approved aquaculture areas within The Cove on Aquidneck Island adjacent to Hog Island, and on both the eastern and western shores of the Sakonnet River. The export cable route is adjacent to four aquaculture sites that lie within the Sakonnet River, but none of the sites have direct overlap with the ECC. There are no aquaculture lease sites within the ECC within Rhode Island state waters, based on the RI DMF (2021) mapping of aquaculture lease areas in Rhode Island state waters (Figure 3-4).

SouthCoast Wind is continuing their routing assessment and inventory of marine resources to minimize impacts on recreational fishing and recreational boating with the intention to avoid important recreational fishing areas and established moorings. In the event that any moorings in the Sakonnet River and Mount Hope Bay are temporarily displaced, SouthCoast Wind will coordinate with the applicable Harbor Master and owner of the mooring(s).

Fish Traps

The floating fish trap fishery in Rhode Island is a gear type unique to Rhode Island. Essentially a hybrid of a fishing weir and a fish trap, this gear is predominantly fished in shallower, inshore areas close to shore. While this is a wild capture fishery, it is in some ways permitted and operated as an aquaculture activity. Permits to operate fish traps are tied to specific, permanent locations which offer certainty in the spatial extent of fishing effort, unlike other wild capture fisheries. However, while fish trap locations offer spatial certainty, the issuance of a permit or appearance of a fish trap on the RI DMF Map does not necessarily mean that that fish trap is being actively fished. Fish traps may become actively fished at any time, although there are requirements for the fisherman to provide the necessary notifications.⁹⁹ SouthCoast Wind has conducted outreach, including to the RIDEM DMF, and performed scouting in advance of geophysical and geotechnical surveys to gain temporal knowledge of the location of fish traps in addition to the spatial certainty offered by permit location information. There are currently no licenses in Mount Hope Bay. Several licenses for fish traps have been issued for locations at the mouth of the Sakonnet River. SouthCoast Wind will coordinate with RI DMF and Fisheries Representatives prior

⁹⁸ RIDEM. 2021. RIDEM Marine Fisheries Maps.

https://ridemgis.maps.arcgis.com/apps/webappviewer/index.html?id=8beb98d758f14265a84d69758d96742f.

⁹⁹ J. Livermore. 2021. RIDEM Division of Marine Fisheries [COP], personal communication, July 22, 2021.

to construction operations to confirm permitted locations of fish traps that may likely be fished during the period of Project impacts and will communicate directly with the operators of those fish traps.

3.5.1.2 Commercial Fishing Landings

A diverse array of commercial fishing activity occurs in the region. Fisheries resources are targeted in the region and within the ECC by vessels of different sizes using different gear types and are dictated by seasons, quotas, environmental factors, market forces, and federal and state-led regulations.

Table 3-17 shows the landings for Rhode Island ports in 2019 and 2020 as reported by NMFS. Point Judith on the coast of Narragansett is the highest valued port in Rhode Island. In 2019, it was the 12th highest valued in the United States, and the 18th highest valued in 2020.

	2	2019	2020		
Port	Millions of Pounds	Millions of Dollars	Millions of Pounds	Millions of Dollars	
Point Judith, RI	48.1	\$65.9	42.6	\$46.7	
North Kingstown, RI	19.2	\$14.1	19.6	\$14.4	
Newport, RI	4.9	\$7.8	5.2	\$7.0	
Little Compton, RI	3.9	\$3.4	4.7	\$2.8	
Total	76.1	\$91.2	72.1	\$70.9	

TABLE 3-17. LANDINGS BY PORTS IN RHODE ISLAND (VIA NMFS)

Source: NOAA Fisheries. (NMFS). 2021. NOAA Fisheries Landing Queries. Retrieved from: https://foss.nmfs.noaa.gov/apexfoss/f?p=215:200_

In 2019, these ports landed 76.1 million pounds of fish valued at \$91.2 million. The most commonly landed species in Rhode Island by weight were shortfin squid, longfin squid, and butterfish. The highest landed species by value were sea scallops, longfin squid, and American lobster. In 2020, these ports landed 72.1 million pounds of fish valued at \$70.9 million. The most commonly landed species in Rhode Island by weight were shortfin squid, and skate. The highest landed species by value were longfin squid, sea scallops, and shortfin squid.

Table 3-18 shows the landings for Rhode Island ports in 2020 and 2021 as reported by RIDEM via the Standard Atlantic Fisheries Information System. In Table 3-18 a dash ("-") does not necessarily mean that no landings were reported but can instead mean that landings are confidential. Commercial fisheries landings data have confidentiality protections in place when disclosing landings could feasibly be tied back to an individual business.

Note: Because of what is assumed to be rounding, the total field for the 'Percentage of State Landings by Value' column in Table 3-18 does not sum to exactly 100%. However, it is essentially 100% for both 2020 and 2021 when summing all fields in that column. Also, differences in port and total values for the same areas in the same time frame can be attributed to how source data was collected, packaged, and in some cases withheld to protect confidentiality.

		2020	2020 2021			
Port	Pounds	Dollars	Percent of Total State Landings by Value	Pounds	Dollars	Percent of Total State Landings by Value
Barrington	-	-	-	-		
Bristol	1,767,460	\$1,065,623	2.26%	1,532,789	\$1,003,387	0.98%
Bristol (County)	-	-	-	3,572,204	\$1,098,001	1.07%
Charlestown	-	-	-	-	-	-
Davisville (community)	-	-	-	-	-	-
East Greenwich	-	-	-	-	-	-
Jamestown	23,200	\$37,119	0.03%	31,850	\$86,990	0.08%
Little Compton	3,272,004	\$2,798,250	4.18%	2,130,088	\$2,483,433	2.42%
Melville	-	-	-	-	-	-
Middletown	-	-	-	-	-	-
Narragansett (census name Narragansett Pier)	-	-	-	-	-	-
New Shoreham	15,118	\$35,616	0.02%	14,024	\$46,412	0.05%
Newport	4,824,613	\$6,997,646	6.17%	6,029,861	\$6,378,574	6.22%
Newport (County)(in PMSA 2480,6480)	-	-	-	9,401	\$10,430	0.01%
North Kingstown (local name Wickford)	20,613,405	\$13,597,762	26.34%	18,884,680	\$14,131,846	13.77%
Point Judith	42,240,850	\$45,537,030	53.98%	43,916,203	\$71,079,310	69.27%
Portsmouth	159,809	\$402,232	0.20%	136,212	\$425,457	0.41%
Providence (County)(in PMSA 6060,6480)	-	-	-	-	-	-
Rhode Island (State)	46,892	\$189,030	0.06%	180,987	\$2,975,245	2.90%
South Kingstown (Town of)	58,406	\$179,608	0.07%	76,814	\$218,455	0.21%
Tiverton	335,629	\$400,194	0.43%	463,197	\$808,330	0.79%
Unknown	-	-	-	-	-	-

TABLE 3-18. LANDINGS BY PORTS IN RHODE ISLAND (VIA RIDEM)

		2020			2021	
Port	Pounds	Dollars	Percent of Total State Landings by Value	Pounds	Dollars	Percent of Total State Landings by Value
Wakefield	600	\$512	0.00%	-	-	-
Warren	33,107	\$140,131	0.04%	12,109	\$66,966	0.07%
Warwick	-	-	-	-	-	-
Warwick (RR name Apponaug)	4,837,338	\$1,324,468	6.18%	5,609,852	\$1,695,417	1.65%
Westerly (census name Westerly Center)	25,512	\$71,997	0.03%	-	-	-
Total	78,253,942	\$72,777,217	100.00%	82,600,271	\$102,508,252	100.00%

Source: RIDEM DMF. 2022. Rhode Island Annual Fisheries Report: 2020. March 2022. Retrieved from:

https://dem.ri.gov/sites/g/files/xkgbur861/files/2022-08/AnnualRpt_2020.pdf. and RIDEM DMF. 2022. Rhode Island Annual Fisheries Report: 2021. May 2022. Retrieved from: https://dem.ri.gov/sites/g/files/xkgbur861/files/2022-08/AnnualRpt_2021.pdf.

Year to year variations (e.g. a large decrease from 2019 to 2020 and then an increase from 2020 to 2021) seen in Tables 3-17 and 3-18 can largely be attributed to the Coronavirus pandemic and its severe impact on the fishing industry. Outreach to the commercial fishing industry in Rhode Island by SouthCoast Wind confirmed that there were differential impacts on fisheries (e.g., squid) because of the pandemic's differential impact on restaurant versus at-home seafood consumption and the species typically consumed in those different situations.

While the fishing activity in the ECC is relatively lower than in other areas of the region, there are commercial fishing vessels from Rhode Island, Massachusetts, and other states that fish in the ECC and fish caught in the ECC may be landed in other states besides Rhode Island and Massachusetts. The top 10 ports with the highest annual average landings based on annual totals from 2008 to 2018 in the ECC are presented in Table 3-19. When considering ports with sufficient dealers and unique permits,¹⁰⁰ the top three ports in the ECC were New Bedford, Massachusetts, Point Judith, Rhode Island, and Newport, Rhode Island.

Port Landed	Average Yearly Landings (lbs.)	Average Yearly Value (dollars)
New Bedford, MA	575,459	\$265,404
Point Judith, RI	264,544	\$248,449
Newport, RI	114,982	\$37,928
Little Compton, RI	91,258	\$120,977
All Others	85,044	\$40,282
Fall River, MA	56,161	\$13,358
Gloucester, MA	28,054	\$4,226

TABLE 3-19. ANNUAL AVERAGE LANDINGS AND VALUE FOR TOP 10 PORTS IN THE ECC

¹⁰⁰ Data for ports with an insufficient number of unique dealers and/or permit holders are anonymized and aggregated and fall under the "All Others" category.

Port Landed	Average Yearly Landings (lbs.)	Average Yearly Value (dollars)
Montauk, NY	21,992	\$24,981
Boston, MA	19,966	\$3,646
Barnstable, MA	2,609	\$2,458
Total for All Ports	1,331,827	\$910,751

Source: Source: B. Galuardi, personal communication, 2 July 2021

Vessel Trip Report Data Analysis

National Marine Fisheries Service Vessel Trip Report (VTR) data was used to determine the average fish landings from 2008-2018 as presented below in Table 3-20. VTR is a self-reported data reporting system required for all federally permitted fishing vessels. There are some reasonable limitations to VTR data but it currently represents the best Offshore Project Area-specific data sets available and it is analyzed here to provide a sense of where, when, and how certain species are being caught. Full records of the VTR data analyzed by SouthCoast Wind can be found in Appendix V of the COP - Commercial and Recreational Fisheries and Fishing Activity Technical Report.

Within the ECC, the average annual fish landings were 1,331,827 pounds valued at \$910,751. The most commonly landed species by weight were Atlantic herring, skate wings, and Loligo squid. The most commonly landed species by revenue were American lobster, Loligo squid, and summer flounder/fluke (Table 3-20). Bluefish also represented the highest percent exposure (0.05%) of total landings by weight caught within the ECC. Atlantic herring represented the highest average landings, but also the highest variability. In 2013, landings of Atlantic herring in the ECC totaled \$238,472 and 2,000,563 pounds but did not exceed \$90,492 and 1,081,204 pounds in any other year between 2008 and 2018 (B. Galuardi, personal communication, 6 October 2020).

Species	Average Annual	Average Annual	Species Landings (lbs.) Exposure (percent)		
	Landings (ibs.)/ fear	value (\$)/ fear	Minimum	Maximum	
Atlantic herring	441,022	\$ 50,638	0.0	0.01	
Skate Wings	299,731	\$ 44,196	0.0	0.02	
Loligo Squid	167,324	\$191,311	0.0	0.01	
All others	113,148	\$72,783	N/A	N/A	
Scup/ Porgy	59,187	\$39,147	0.0	0.01	
American lobster	43,638	\$211,205	0.0	0	
Spiny dogfish	31,903	\$7,026	0.0	0.01	
Silver Whiting/hake	27,256	\$15,480	0.0	0	
Summer flounder/fluke	25.457	\$85,426	0.0	0	
Bluefish	21,344	\$10,859	0.0	0.05	
Jonah crab	18,843	\$12,924	0.0	0.0	
Atlantic mackerel	18,229	\$3,921	0.0	0.0	
Monk	11,397	\$18,629	0.0	0.0	
Butterfish	8,961	\$5,917	0.0	0.0	
Black sea bass	8,021	\$30,510	0.0	0.0	

TABLE 3-20. AVERAGE VTR LANDINGS IN THE ECC FROM 2008-2018

Species	Average Annual	Average Annual	Species Landings (lbs.) Exposure (percent)		
	Lanungs (ibs.)/ rear	value (\$)/ fear	Minimum	Maximum	
Channeled whelk (bushel)	6,189	\$48,848	0.0	0.0	
Total for All Species	1,331,827	\$910,751	0.0	0.05	

Source: B. Galuardi, personal communication, 2 July 2021.

Vessel Monitoring System Data Analysis

Vessel Monitoring System (VMS) data was used to supplement the VTR analysis above. Commercial vessels are required by law to carry mechanisms of monitoring on board to aid in management and regulatory enforcement. VMS utilize mobile transceiver units to record and transmit vessel locations at least once per hour (50 C.F.R. § 660.14).

A fishing vessel is required to carry a VMS and transmit a signal indicating its position when fishing for species in a method that triggers VMS requirements. Within the ECC, VMS is broadly required when fishing for Atlantic sea scallops, monkfish, Atlantic herring, Atlantic surf clam, ocean quahog, shortfin squid, longfin squid, butterfish and species managed under the Northeast Multispecies Management and Consolidated Atlantic Highly Migratory Species Management Plans. The results of the VMS data analysis (using data from 2011-2014 and 2015-2016) indicated a varied density of commercial fishing vessel activity within the applicable fisheries; squid, Northeast Multispecies, monkfish, Atlantic herring, Atlantic sea scallop, Atlantic surf clam, and Atlantic mackerel fisheries in the northeast and mid-Atlantic regions. Overall, there is a comparatively higher density of fishing activity in the ECC than the SouthCoast Wind Lease Area, due to the variety of favorable benthic habitat characteristics in the ECC. A characterization of the benthic habitat in the ECC can be found in Section 3.3.

Automatic Identification System Data Analysis

Automatic Identification System (AIS) is an automated, continuous Global Positioning System (GPS) tracking system that provides a record of the operational history of a vessel. Federal regulations (33 C.F.R. § 164.46) mandate which vessels are required to carry AIS; this includes fishing vessels that are greater than 65 ft (20 m) in length and are self-propelled. The AIS data analysis showed that the ECC passes one area of high fishing vessel transit activity within Rhode Island waters, including vessels transiting to and from New Bedford.¹⁰¹ As a caveat, not all fishing vessels carry AIS transponders or have them actively recording vessel locations outside of 12 nm (22 km) from the coastline.

Common Commercial Gear Types in the ECC

Bottom Trawling

Bottom trawling (also referred to as otter trawling or dragging) is a common mobile gear type in the Northeast used for catching target species that live on the seafloor. Each trawl fishery utilizes unique gear designed specifically to capture the target species (i.e., various mesh sizes, often different within various panels of the same net, different panel configurations, various sizes, designs, and varied doors and door spreads). Modern trawling operations sometimes employ sensors that can be monitored from the wheelhouse in real-time to verify that the gear is properly deployed and fishing effectively as it is towed.

¹⁰¹ Northeast Regional Ocean Council (NROC). 2018. Vessel Monitoring Systems (VMS) Commercial Fishing Density, Northeast and Mid-Atlantic Regions. Data download: https://services.northeastoceandata.org/arcgis1/rest/services/OceanUses.

Common species commercially caught in southern New England and within the ECC using bottom trawls include butterfish, flounder species, scup, cod, silver hake, monkfish, and other species.

Pots and Traps

Pots and traps are submerged wire cages that attract target species (usually by bait) and allow them to enter but make it difficult to exit.¹⁰² Fishermen haul the traps back onto their vessel typically using lines attached to the trap with a marker buoy or a high-flyer buoy at the surface to mark its location. Traps can be set individually or strung together in what are called "trawls." Target species for pots and traps include crabs, lobsters, whelk, scup, black sea bass, and eels.¹⁰³ In southern New England, lobsters are the primary species targeted by pots and traps, although whelk is becoming increasingly more common as lobster populations have been declining in recent decades in this area.^{104, 105, 106} Engagement with individual vessels targeting whelk in the ECC has confirmed that gear configurations and deployment/ hauling methods are consistent with standards in the region, pot and trap gear being set in an approximately east-west orientation at regular intervals, although the whelk effort in the Sakonnet River is reported to currently be lower than it had been in recent years.¹⁰⁷

Jonah crab is another species that has seen targeted increases in southern New England in recent years. The increase in Jonah crab landings is generally attributed to the decrease in the abundance of southern New England lobsters, resulting in a shift in fishing activity and an increase in the price of other crab species, creating a substitute market for Jonah crab meat.¹⁰⁸

VTR data from 2008 to 2018 demonstrates that pot and trap fishermen in the ECC landed an annual average of 43,638 pounds of American lobster, 18,843 pounds of Jonah crab, and 6,440 pounds of whelk (channeled and knobbed).

Midwater Trawls

Midwater trawls are similar to bottom trawls that utilize the same general types of equipment (net, doors, etc.), but utilize doors that are configured to allow the gear to be towed at varying levels in the water column off bottom. Common species targeted by midwater trawls include squid, shrimp, and pelagic schooling fish.¹⁰⁹ In southern New England, squid are the primary species targeted with midwater trawl gear. Commercial squid trawling comprises a substantial percentage both by value and by weight of commercial catch landed in Rhode Island.¹¹⁰

Engagement by SouthCoast Wind with the New England squid fishery has confirmed that gear configurations and fishing patterns are consistent with standards for the region. Squid are captured by trawling in either a directed fishery or a mixed species fishery, often with mackerel or butterfish, which is broadly the reason for those species being managed under a shared Fisheries Management Plan.

¹⁰² NMFS. 2019. *Fishing Gear: Traps and Pots*. https://www.fisheries.noaa.gov/national/bycatch/fishing-gear-traps-and-pots. ¹⁰³ NMFS 2019.

 ¹⁰⁴ Atlantic States Marine Fisheries Commission (ASMFC). 2019. *Jonah Crab.* Available at: http://www.asmfc.org/species/jonah-crab.
¹⁰⁵ Gomez-Chiarri, M. & J.S. Cobb. 2012. Shell Disease in the American Lobster, Homarus americanos: A Synthesis of Research from the New England Lobster Research Initiative: Lobster Shell Disease. *Journal of Shellfish Research*, 31(2) : 583-590. https://bioone.org/journals/journal-of-shellfish-research/volume-31/issue-2/035.031.0219/Shell-Disease-in-the-American-Lobster-iHomarus-americanus-i/10.2983/035.031.0219.pdf.
¹⁰⁶ Giannini, C. and P. Howell. 2010. *Connecticut Lobster (Homarus americanus) Population Studies*. NOAA - NMFS, Northeast Region, New London. Connecticut.

¹⁰⁷ Atlantic Coastal Cooperative Statistics Program (ACCSP). 2021. *Comprehensive, species-specific landings database*. https://www.accsp.org. ¹⁰⁸ ASMFC. 2019. *American Lobster*. http://www.asmfc.org/species/american-lobster.

¹⁰⁹ NMFS. 2019. *Fishing Gear: Midwater Trawls*. https://www.fisheries.noaa.gov/national/bycatch/fishing-gear-midwater-trawls ¹¹⁰ Liberman, Ellen. 2017. Squid fishing is a boon to the local economy. *Rhode Island Monthly. May 30, 2017*. Available online: https://www.rimonthly.com/squid-fishing-boon-local-economy/.

Midwater trawling is far more concentrated in state and federal waters along the ECC compared to within the Lease Area, according to VMS data from 2011 to 2016.

Gillnetting

Gillnets trap fish by their gills as they try to swim through the netting.¹¹¹ The size of the gaps in the net determine which species will get caught and which will be able to swim through freely. Gillnets can be configured in a variety of ways, but typically consist of floats along the top of the net and weights along the bottom to keep the panel aligned vertically in the water column.

Common gillnet target species include, but are not limited to: groundfish (cod, haddock, pollock, flounder, hake), herring, black sea bass, sharks, and other species, depending on the region.¹¹² In southern New England, gillnets are typically tended on a daily to semi-weekly basis for groundfish species, managed under the Northeast Multispecies Fisheries Management Plan. Anchored gillnets set very near the seabed are known as 'bottom gillnets or 'sink gillnets' and represent the most common type of gillnetting in the New England commercial fishing industry.^{113, 114}

Hydraulic Clam Dredge

Hydraulic clam dredges harvest bivalves from the soft bottom sediments in which they are buried. This technique of harvesting Atlantic surf clams and ocean quahogs is utilized where soft bottom conditions allow for the gear to penetrate the seafloor enough to make this method efficient for capturing clams. The hydraulic dredges are dragged slowly along the bottom by the fishing vessel as a large hydraulic pump on the fishing vessel pumps sea water through a hose to a manifold on the front of the dredge.

The manifold jets the water into the sand, temporarily fluidizing the sand and allowing the dredge to penetrate the sediment to a depth below the seafloor of approximately 1.0 ft (0.3 m), capturing bivalves (and similarly sized rocks, debris, or fish) in the process.

As this is a depletion fishery, these vessels will make repeated passes through an area until the clam numbers drop. In addition, clams are long-lived bivalves, and it has historically proven difficult to predict where commercially viable volumes may be found, resulting in a high degree of inter-annual variation in landings.

Atlantic surf clams and ocean quahogs are the most common species commercially targeted by this gear in southern New England, but fishing activity is more concentrated outside of the ECC than in it.

Summary of Commercial Fishing in the ECC

VMS, AIS, and VTR data were used to evaluate fishing activity in the ECC. In addition to actively fishing in the ECC, commercial fishing vessels also transit through this area throughout the year. This is based on an analysis of charts of AIS tracks overlaid on the proposed ECC and discussions of relative fishing effort via VMS and VTR data analysis. Based on the time ranges of these datasets, SouthCoast Wind anticipates that fishing vessel transit and activity will continue in this area for the lifetime of the proposed Project.

VTR data shows bottom trawl and pots and trap fishing activity within the Sakonnet River near the cable landfall location in the ECC.

¹¹¹ NMFS. 2019. Fishing Gear: Gillnets. https://www.fisheries.noaa.gov/national/bycatch/fishing-gear-gillnets.

¹¹² NMFS. 2019. Fishing Gear: Gillnets.

¹¹³ NMFS. 2019. Fishing Gear: Gillnets.

¹¹⁴ Pol, M. and H.A. Carr. 2000. Overview of Gear Developments and Trends in the New England Commercial Fishing Industry. *Northeastern Naturalist* 7(4): 329-336.

As shown above in Table 3-18, Point Judith, Rhode Island and New Bedford, Massachusetts received the highest revenue from commercial fish caught and landed from the ECC. The Port of New Bedford is identified as a potential port for Project construction, O&M, and decommissioning activities. SouthCoast Wind has validated fisheries landing data with field observations from geophysical surveys, consultation with fishing stakeholders, including Fisheries Representatives, fishing organizations, and individual vessels. Further consultation with stakeholders as well as fisheries economists will determine the level of exposure that exists for boats using the ports and their use of the ECC.

Fishing is considered exposed in the 2017 Kirkpatrick et al.¹¹⁵ study if it occurs within 1.0 nm (1.9 km) of a Wind Energy Area, which, for the purposes of the proposed Project, is the Kirkpatrick Study Area (composed of both the Rhode Island/ Massachusetts Wind Energy Area and the Massachusetts Wind Energy Area).¹¹⁶ For commercial fisheries, exposure does not measure economic impact or loss but is defined as the potential for a fishery to see an impact from offshore wind development. Based on the exposed fisheries within the Kirkpatrick Study Area¹¹⁷ trawling, midwater trawling, gillnetting, and pots and traps are the most prominent gear types utilized in the area. Bottom trawlers in the Kirkpatrick Study Area target species within the Small Mesh Multispecies Fishery Management Plan (FMP) (silver hake, red hake, offshore hake) as well as Squid, Mackerel, Butterfish FMP (Atlantic mackerel, chub mackerel, longfin squid, shortfin squid, and butterfish).^{118, 119, 120} Gillnetters in the Kirkpatrick Study Area primarily target monkfish, skates, and spiny dogfish, as well as summer flounder, scup, and black sea bass.¹²¹ Pots and traps catch species in the ECC including Jonah crab,¹²² American lobster,¹²³ whelks,¹²⁴ rock crabs,¹²⁵ and black sea bass.¹²⁶ A description of these gear types is provided above.

3.5.1.3 Recreational Fishing

For the purposes of this section, recreational fishing is referred to as saltwater fishing for sport or pleasure, either by for-hire boats or by private anglers.¹²⁷ Saltwater recreational fishing takes place from shore, aboard private or rented boats, and on boats that take passengers for hire. For-hire recreational fishing can be assessed from either a boat level or angler level. Boat level recreational fishing activity is assessed in terms of the average annual number and percentage of exposed boats, trips, and revenues. Angler level recreational fishing activity is assessed in terms of average annual number. Approximately 96 for-hire recreational fishing boats are ported in Rhode Island.¹²⁸ The intensity and locations of recreational fishing within Rhode Island state

¹¹⁵ Kirkpatrick, A.J., S. Benjamin, G.S. DePiper, T. Murphy, S. Steinback, and C. Demarest. 2017. SocioEconomic Impact of Outer Continental Shelf Wind Energy Development on Fisheries in the U.S. Atlantic. Volume II—Appendices. U.S. Dept. of the Interior, Bureau of Ocean Energy Management, Atlantic OCS Region, Washington, D.C. OCS Study BOEM 2017-012. 191 pp.

¹¹⁶ Kirkpatrick et al. 2017

¹¹⁷ Kirkpatrick et al. 2017

¹¹⁸ Kirkpatrick et al. 2017

¹¹⁹ New England Fishery Management Council. 2021. *Small-mesh Multispecies FMP. Plan Overview*. https://www.nefmc.org/management-plans/small-mesh-multispecies

¹²⁰ Mid-Atlantic Fishery Management Council. 2021. Overview. *Mackerel, Squid, and Butterfish*. https://www.mafmc.org/msb.

¹²¹ Kirkpatrick et al. 2017

¹²² Atlantic States Marine Fisheries Commission. (ASFMC). 2021. Jonah Crab. http://www.asmfc.org/species/jonah-crab.

¹²³ ASMFC. 2019. American Lobster. Available online: http://www.asmfc.org/species/american-lobster.

¹²⁴ Massachusetts Division of Marine Fisheries. (MA DMF). 2021. *Whelks and Whelk Management*. https://www.mass.gov/service-details/whelks-and-whelk-management.

¹²⁵ Maine Sea Grant. (n.d.). Maine Seafood Guide – Crab. https://seagrant.umaine.edu/maine-seafood-guide/crab/.

¹²⁶ ASFMC. 2021. *Black Sea Bass*. http://www.asmfc.org/species/black-sea-bass.

¹²⁷ NMFS. 2020. Saltwater Recreational Fishing in the Greater Atlantic Region. Retrieved November 2020 from:

https://www.fisheries.noaa.gov/new-england-mid-atlantic/recreational-fishing/saltwater-recreational-fishing-greater-atlantic.

¹²⁸ Steinback, S. & A. Brinson. 2013. *The Economics of the Recreational For-hire Fishing Industry in the Northeast United States,* 2nd ed. Northeast Fisheries Science Center Social Sciences Branch, NOAA Fisheries. Woods Hole, MA. https://www.savingseafood.org/images/recreational_econ.pdf.

waters are not expected to be affected. In fact, the proposed Project may provide some positive effects to recreational fisheries by creating new fish-friendly habitats for certain species.¹²⁹ It has been recognized that the Project infrastructure may function as fish aggregating devices¹³⁰ and provide additional habitat for certain species.

Species targeted by this fishing community exist throughout the entire near-coastal region and within the Kirkpatrick Study Area. Commonly caught species for recreational fishing include striped bass, Atlantic mackerel, scup, black sea bass, and haddock (Table 3-21).

Rank	Species	Pounds (lbs.)
1	Scup	2,856,492
2	Striped bass	2,299,617
3	Tautog	1,483,139
4	Black sea bass	1,225,072
5	Bluefish	932,001
6	Summer flounder	837,116
7	Atlantic cod	143,753
8	Atlantic menhaden	135,763
9	Atlantic bonito	102,213
10	Striped sea robin	53,819

TABLE 3-21. COMMONLY CAUGHT RECREATIONAL FISH SPECIES IN RHODE ISLAND (2019)

Source: NMFS. 2019. *Recreational Fishing Data and Statistics Queries*. Accessed from NOAA Fisheries Recreational Fishing Data: https://www.fisheries.noaa.gov/recreational-fishing-data/recreational-fishing-data-and-statistics-queries.

Total expenditures of recreational fishing between 2007 and 2012 in Rhode Island were \$1.1 million with 3.8 percent exposed to Wind Energy Areas.¹³¹ Recreational fishing aboard and private boats is considered exposed if it occurs within 1.0 nm (1.9 km) of the Offshore Project Area. In 2019, 3,739,018 angler trips via shore fishing, private/rental boats, charter boats, and party boats were estimated to occur in state and federal waters off the coast of ¹³² Rhode Island.

Recreational fishing locations occur throughout the Sakonnet River, Mount Hope Bay, and Rhode Island Sound. Recreational fishing boats may also transit through the ECC to reach a site, but their exact transit routes are not represented on commonly used, publicly available datasets, as these vessels do not have the VTR, VMS, or AIS requirements discussed previously for commercial fishing vessels. However, recreational fishing effort is known to exist in and around the ECC and much of the effort is clustered in several locations as these boats target these locations (Table 3-22).

¹²⁹ Kirkpatrick, A.J., S. Benjamin, G.S. DePiper, T. Murphy, S. Steinback, and C. Demarest. 2017. SocioEconomic Impact of Outer Continental Shelf Wind Energy Development on Fisheries in the U.S. Atlantic. Volume I—Report Narrative. U.S. Dept. of the Interior, Bureau of Ocean Energy Management, Atlantic OCS Region, Washington, D.C. OCS Study BOEM 2017-012. 150 pp. Retrieved from: https://espis.boem.gov/final%20reports/5580.pdf

¹³⁰ Kramer, S. H., C. D. Hamilton, G. C. Spencer, and H. D. Ogston. 2015. Evaluating the Potential for Marine and Hydrokinetic Devices to Act as Artificial Reefs or Fish Aggregating Devices, Based on Analysis of Surrogates in Tropical, Subtropical, and Temperate U.S. West Coast and Hawaiian Coastal Waters. OCS Study BOEM 2015-021. U.S. Department of Energy, Energy Efficiency and Renewable Energy, Golden, Colorado. ¹³¹ Kirkpatrick et al. 2017

¹³² NMFS. 2019. Recreational Fishing Data and Statistics Queries. Accessed from NOAA Fisheries Recreational Fishing Data:

https://www.fisheries.noaa.gov/recreational-fishing-data/recreational-fishing-data-and-statistics-queries.

Name of Fishing Location	Location	Fish species targeted a/
Brown's Ledge	Offshore of Sakonnet Point	Scup, black sea bass, striped bass, summer flounder, bluefish
Beavertail State	The opening of the West Passage,	Scup, black sea bass, striped bass, summer
Park	inshore	flounder, bluefish
Brenton Point State	The opening of the West Passage,	Scup, black sea bass, striped bass, summer
Park	inshore	flounder, bluefish
Sachuest Point National Wildlife Refuge	The opening of the East Passage, inshore	Scup, black sea bass, striped bass, summer flounder, bluefish
Breakwater at	Inshore of the East Passage, Sakonnet	Scup, black sea bass, striped bass, summer
Sakonnet	River	flounder, bluefish

TABLE 3-22. FOR-HIRE RECREATIONAL FISHING LOCATIONS WITHIN OR NEAR THE ECC

Sources: CRMC. 2010. Rhode Island Ocean SAMP. https://seagrant.gso.uri.edu/oceansamp/pdf/samp_crmc_revised/RI_Ocean_SAMP.pdf.

For-hire recreational fishing typically occurs from spring through fall for summer flounder, black sea bass, and scup and in late summer/early fall for yellowfin, bluefin, and albacore tuna, sharks, bonito, and false albacore. Striped bass recreational fishing typically occurs in the spring, summer, and fall.

In the Sakonnet River, there are relatively low levels of recreational shellfishing, notably for hard clams. Rhode Island allows recreational harvesting of whelk and bay scallops by Rhode Island residents (with no license requirement), and for the recreational harvesting of lobster and crabs (with a license requirement.¹³³ In Rhode Island waters, oysters may be harvested with a state permit from September-May, and bay scallops may be harvested in November and December, depending on the gear type.¹³⁴

3.5.2 Potential Project Impacts

This analysis includes potential impacts to commercial and recreational fishing (both for-hire and private anglers).

3.5.2.1 Aquaculture

Although there are several approved aquaculture areas within The Cove on Aquidneck Island and adjacent to Hog Island, the export cable route is not directly adjacent or co-located with any of these sites. Further, the ECC is being engineered to select the most feasible and least impactful route centerline and therefore the entire width of the ECC will not be disturbed during cable installation. No impacts are anticipated on aquaculture facilities.

3.5.2.2 Commercial and Recreational Fishing

Commercial and recreational fishermen may be temporarily excluded from actively fishing within or transiting through the localized construction areas and safety exclusion zones during construction of the Project. This may result in a temporary loss of access to fishing grounds. Short-term disturbance of species targeted by commercial or recreational fisheries may occur during the construction phase of the proposed Project, resulting from cable burying and disturbance to the seafloor. However, these impacts will be temporary and localized to discrete zones within the ECC.

 ¹³³ RIDEM. 2021. *Recreational Fishing*. http://www.dem.ri.gov/programs/marine-fisheries/recreational-fishing.php.
¹³⁴ RIDEM. 2021

Construction activities will cover discrete and localized portions of the offshore Project Area on a temporary basis, relative to the available open water to navigate through, or grounds to fish within. Once construction activities are completed within safety exclusion zones, marine activities, including commercial and recreational fishing, will be allowed to continue as they were prior to construction. SouthCoast Wind will provide the fishing community with advance notice, prior to formal LNMs being issued, describing the location, extent, and duration of construction activities. Should fixed gear become separated from marker buoys, set adrift inadvertently, or mobile gear becoming snagged on, or entangled in cables or other Project components, SouthCoast Wind will work with fishermen through a lost gear claims form process to determine if reimbursement is warranted. A process to compensate fishermen for entanglements of fishing gear by geophysical and geotechnical survey gear has already been developed jointly with other offshore wind developers and with input from the fishing industry via Fisheries Representatives. This joint developer gear loss compensation application form has been made publicly accessible and is available on SouthCoast Wind's website. Additionally, the SouthCoast Wind Fisheries Manager proactively contacts fishermen if their gear is entangled by geophysical and geotechnical survey operations and will continue to do so in later phases of the proposed Project, including during construction.

Short-term disturbance of species targeted by commercial or recreational fisheries may also occur during the construction phase of the proposed Project, resulting from cable burying and disturbance to the seafloor. However, these impacts will be temporary and localized to discrete zones within the ECC. These commercially and recreationally targeted species are expected to disperse to other nearby locations accessible by commercial or recreational fishing vessels.

The concentrations of suspended sediment in the water column (measured as turbidity) will increase for a short period during and following cable installation in the seabed; see Sections 3.2.2 of this Assent application and the Hydrodynamics and Sediment Dispersion Modeling Report in Attachment L. Elevated turbidity levels are expected to decrease quickly following cable installation, dropping to under 100 mg/L over ambient concentrations within 5 hours. Given the short duration and relatively low levels of increase, impacts to fish and fishing activities are not anticipated.

As conveyed in Table 3-21, the ECC is more frequently used for vessels transiting through to their desired fishing locations than for active fishing. As construction begins, commercial and recreational fishermen may find their route extended at times to accommodate certain construction activities, which could temporarily increase their steam times to access fishing grounds.

SouthCoast Wind will coordinate with commercial and recreational fishermen and the RI DMF to provide advance notice of the pre-lay grapnel run/ gear clearance plan, which is performed to clear the centerline of the cable route to facilitate burial of the cable via the jet-plow. The advance notice is intended to allow fishermen the opportunity to remove their deployed fishing gear.

SouthCoast Wind will coordinate with fishermen and the USCG ahead of marine construction operations to review operational planning and schedules to identify areas where fishing operations may be temporarily displaced. These strategies include broad communication strategies (e.g., USCG LNMs and also targeted, direct outreach) to coordinate construction and fishing activities in order to minimize risks to the commercial and recreational fishing industries and deployed gear, as well as other mariners.

Vessel activity during the operational phase will typically involve single vessels transiting at far less frequent intervals than during construction (or decommissioning phases), and therefore is not expected to create measurable interference with commercial or recreational fisheries activities. Therefore, once the proposed Project is operational, fishing vessels will not be considerably impeded from accessing

their home ports or their fishing grounds within or outside of the ECC. As part of the future decommissioning of the Project, should the buried export cables be retired in-place, effects on commercial and recreational fishing are not expected.

Secondary cable protection (e.g., mattresses, rock placement, fronded mattress) will be used at cable crossings and for additional cable protection along the ECC if needed where target burial depth is not achieved. Cable protection may result in that area of bottom being a snag concern for trawling or dredging (i.e., due to the potential for gear hangs). Cable protection areas will be marked appropriately on nautical charts, which will limit the likelihood of interaction with fixed or mobile gear. In some cases, areas of hardbottom may have already been known seabed obstructions (snags) prior to construction, as they often represent pre-existing surficial obstructions. Lobster, crabs, and other invertebrate species may also seek shelter within cable protection, resulting in localized, indirect changes in species assemblages and concentrations.

SouthCoast Wind has conducted a Cable Burial Risk Assessment (see Attachment E- "Confidential", provided under separate cover) to calculate the target cable lowering depth to minimize risks to the offshore export cables from damage, and to mitigate potential conflicts between commercial or recreational fishermen and the new structure. This also includes potential risks to the cable from trawling activity along the ECC. To minimize conflicts between fishing gear and the proposed Project's offshore export cables, the offshore export cables will be buried at depths of 3.2 to 13.1 ft (1.0 to 4.0 m), with a target burial depth of 6.0 ft.

For unplanned maintenance of the offshore export cables, a vessel may require anchoring within the ECC. If required, this would also be a low-frequency, short-term activity. In addition, SouthCoast Wind will continue to ensure that all Project-related vessels follow appropriate navigational routes and other USCG requirements, communicate via USCG LNMs, issue regular mariner updates and/or direct offshore radio communications to help mitigate risks to the commercial and recreational fishing industries, as well as other mariners.

Within the Brayton Point export cable corridor, the annual yearly landings for all species were valued at \$910,751. Loligo squid and lobster represented the highest annual value per year in the ECC from 2008 to 2018. Once the proposed Project is operational, the gear types primarily used by these fisheries (e.g., midwater trawls for squid, pots for lobster) are not expected to be impacted by the presence of the buried offshore export cables within the ECC. Therefore, following installation of the proposed Project, these fisheries are expected to continue to account for landings within the ranges reported from 2008 to 2018, barring outside sources of variance (e.g., inter-annual variation of population abundance, geographic shifts, climate change, or other factors, such as market forces or regulations).

Impacts resulting from decommissioning of the proposed Project are expected to be similar to or less than those already described for construction. The proposed Project's offshore export cables may be left in place to minimize environmental impact, which will also result in a reduction in vessel traffic along the ECC. If cable removal is required, vessel activity for removing the offshore export cables will be limited temporally to the cable removal process, limited spatially to the offshore export cable route, and similar to those experienced during cable installation. Furthermore, decommissioning techniques are expected to advance during the lifetime of the proposed Project. Prior to the decommissioning phase, a full decommissioning plan will be provided to the appropriate regulatory agencies for approval, along with a re-evaluation of potential impacts within the context of the best available science to be considered at that time.

Overall, adverse effects to commercially and recreationally targeted species are expected to be negligible within the context and scale of the southern New England region.¹³⁵

3.5.2.3 Commercial Fishing Landings

Vessel intensity for the Atlantic herring, pelagic species (herring, mackerel, squid), monkfish, and squid fisheries are medium-high to very high along portions of the ECC; therefore, these fisheries are most likely to be affected during installation of the ECC. During O&M, commercial and recreational fisheries are expected to experience none to limited effects from the presence of the offshore export cables because they will be buried beneath the seabed. SouthCoast Wind has and will continue to work to limit the amount of protection associated with cable crossings and areas in which target burial depth is infeasible. Cable crossings are coordinated with pre-existing cable owners and areas in which target burial depth is infeasible are typically areas of hard bottom, so any added cable protection closely resembles the existing bottom type. SouthCoast Wind will make available the locations of cable protection and use design and installation methods for protection that minimize impacts to both fisheries resources and fishing activity.

The USCG's stated policy is that in the United States vessels will have the freedom to navigate through [wind farms], including export cable routes.¹³⁶ Commercial and recreational fishermen will have the ability to continue to fish along the ECC. SouthCoast Wind is currently working with a fisheries economist to prepare an economic exposure analysis to provide a more detailed estimation of impacts to commercial fishing landings (as well as impacts to recreational fisheries) from Project impacts.

3.5.2.4 Proposed Fisheries Monitoring Research and Activities

SouthCoast Wind has prepared an FMP (included as Attachment P) for Rhode Island state waters. This plan is a product of engagement with RI DMF and outreach to the recreational and commercial fishing industry. In addition, in federal waters, SouthCoast Wind is working with the University of Massachusetts Dartmouth's School for Marine Science and Technology, the Anderson Cabot Center of Ocean Life at the New England Aquarium to conduct baseline surveys of existing fisheries information in and around the Offshore Project Area and establish monitoring plans for pre-construction, construction, post-construction. These fisheries monitoring plans will be designed to align with Bureau of Ocean Energy Management guidelines (BOEM 2020a), and additional recommendations provided by the Responsible Offshore Science Alliance (ROSA) Fisheries Monitoring Working Group. SouthCoast Wind began a regional monitoring study of Highly Migratory Species and recreational fishing in 2021; collaborating with the New England Aquarium, Inspire Environmental, and other Rhode Island/ Massachusetts Wind Energy Area developers. SouthCoast Wind is also actively participating in regional efforts with other developers, the fishing industry, and academic researchers to promote and standardize fisheries monitoring research and non-extractive survey methods.

The SouthCoast Wind Project will help fuel innovation, advance research, and build consistency across modeling, monitoring and research efforts.

¹³⁵ CRMC. 2010. *Rhode Island Ocean SAMP*. https://seagrant.gso.uri.edu/oceansamp/pdf/samp_crmc_revised/RI_Ocean_SAMP.pdf. ¹³⁶ See Coast Guard Navigation and Vessel Inspection Circular 01-19 dated 1 August 2019

3.5.3 Proposed Avoidance, Minimization, and Mitigation Measures

Below is a list of measures applicable to commercial and recreational fisheries that SouthCoast Wind will adopt:

- SouthCoast Wind has developed a Fisheries Communication Plan (COP, Appendix W) with the aid of a Fisheries Manager and multiple Fisheries Representatives.
- SouthCoast Wind has taken Input from the commercial fishing industry on Project siting, design, navigation, and access.
- SouthCoast Wind has developed a process for financial compensation to commercial fishermen for damages to or loss of fishing gear as well as lost revenue due to gear loss from Project activities.
- SouthCoast Wind has and will continue to add fishermen with local experience as Fisheries Onboard Representatives on geophysical survey vessels, when possible, to coordinate survey activities with fishing activities
- SouthCoast Wind will work with municipal shellfish constables to coordinate shellfish seeding with planned activities prior to construction activities.
- SouthCoast Wind is currently not aware of any aquaculture lease sites that would be directly affected by the ECC, but will continue to coordinate with RI CRMC, the Habitat Advisory Board, and the Fishermen's Advisory Board.
- SouthCoast Wind is currently working with commercial and recreational fishermen as well as fisheries representatives to determine construction timing and locations with fishing vessels to anticipate and avoid/minimize/mitigate gear interactions that may occur during construction.
- Temporary safety zone restrictions associated with construction activities will limit direct access to areas with construction activity for the safety of mariners and Project employees, but these areas will be limited spatially and temporally.
- SouthCoast Wind will implement temporary safety zones around active construction areas in consultation with USCG and in communication with RIDEM.
- SouthCoast Wind will notify mariners via LNMs of the presence and location of partially installed structures.
- The SouthCoast Wind Fisheries Manager will proactively contact fishermen if their gear is entangled during construction.
- SouthCoast Wind will consider the use of fixed mooring buoys at various strategic locations in the Project Area to avoid the need for anchoring.
- SouthCoast Wind will continue to ensure that all Project-related vessels follow appropriate navigational routes and other USCG requirements, communicate via USCG LNMs, issue regular mariner updates and/or direct offshore radio communications to help mitigate risks to the commercial and recreational fishing industries, as well as other mariners.

3.6 COASTAL AND MARINE BIRDS

This section describes the coastal and marine bird species with potential to occur in the Project Area and includes an evaluation of potential Project-related impacts. RIDEM provided a list of species for the ECC and onshore Project components in Rhode Island on June 24, 2021. In addition, SouthCoast Wind

generated an Official Species List from the USFWS using the IPaC tool on June 23, 2021, which can be found in COP, Appendix J, Terrestrial Vegetation and Wildlife Assessment Report.

3.6.1 Affected Environment

Rhode Island has approximately 429 documented species of birds, approximately 24% of these occur rarely (vagrants) and approximately 231 have been documented as breeding within the state.¹³⁷ The Project Area is located within the Atlantic Flyway and within the North Atlantic/Shorebird Migratory Route, which are used by various migratory species. The Project Area supports diverse avifauna, including both resident and migratory species, and encompasses a variety of coastal habitats that are important to the ecology of coastal and marine bird species.

The coastal and marine bird species with potential to occur in the Project Area include coastal birds, such as shorebirds, waterfowl, wading birds, raptors, and songbirds, and marine birds such as seabirds and sea ducks.

Table 3-23 provides a representative inventory of the coastal and marine bird species that may occur in the vicinity of the ECC located in Rhode Island state waters at least on a seasonal basis. Installation of the offshore export cables and HDDs at the coastal landfalls has the potential to disturb or displace these species on a temporal and localized basis during the construction phase of the in-water activities, and the individual species may be affected based upon the seasonality of in-water work.

¹³⁷ RIBird.org. 2020. Rhode Island Checklist. https://ribird.org/ri_checklist.

Species	Offshore Waters (Rhode Island Sound, mouth of Narragansett Bay)	Nearshore Waters (Sakonnet River & Mount Hope Bay)	Salt Marsh, Estuary, Coastal Beach, Tidal Flat Habitats	Abundant Presence in Spring Season	Abundant Presence in Summer Season	Abundant Presence in Fall Season	Abundant Presence in Winter Season
Seabirds	T	Γ				ſ	
Herring gull (Larus argentatus)	X			X	X	X	X
Great black-backed gull (L. marinus)	X			X	X	X	X
Common loon (Gavia immer)	X						Х
Red-throated loon (G. stellata)	X						Х
Northern gannet (Morus bassanus)	X						Х
Razorbill (Alca torda)	X						Х
Common Murre (Uria aalge)	X						Х
Dovekie (Alle alle)	X						Х
Atlantic puffin (Fratercula arctica)	X						X
Black scoter (Melanitta americana)	X						X
Surf scoter (M. perspicllata)	X						X
White-winged scoter (<i>M. fusca</i>)	X						X
Common eider (Somateria mollissima)	X						X
Double-crested cormorant		Y		Y	Y	Y	Y
(Nannopterum auritum)		Л		Л	~	Λ	Χ
Wading Birds							
Great blue heron (Ardea herodias)			X	X	X	X	X
Great egret (Ardea alba)			X	X	X		
Snowy egret (Egretta thula)			X	X	X		
Green heron (Butorides virescens)			X			X	X
Black-crowned night-heron (Nycticorax nycticorax)			X	X	X	X	X
Glossy Ibis (Plegadis falcinellus)			X	X	X		

TABLE 3-23. REPRESENTATIVE LIST OF COASTAL AND MARINE BIRD SPECIES POTENTIALLY OCCURRING IN RHODE ISLAND STATE WATERS

Species	Offshore Waters (Rhode Island Sound, mouth of Narragansett Bay)	Nearshore Waters (Sakonnet River & Mount Hope Bay)	Salt Marsh, Estuary, Coastal Beach, Tidal Flat Habitats	Abundant Presence in Spring Season	Abundant Presence in Summer Season	Abundant Presence in Fall Season	Abundant Presence in Winter Season
Waterfowl							
Mute swan (Cygnus olor)		X		X	X	X	X
Tundra swan (C. columbianus)		X					X
Canada goose (Branta canadensis)		X		X	X	X	X
Brant (B. bernicla)		X					X
Dabbling Ducks						[
Wood duck (Aix sponsa)		X	X	X	X	X	
Mallard (Anas platyrhynchos)		X	X	X	X	X	X
American black duck (A. rubripes)		X	X	X	X	X	X
Gadwall (A. strepera)		X	X				X
Northern pintail (A. acuta)		X	X				X
American wigeon (A. americana)		X	X				X
Green-winged teal (A. crecca)		X	X	X	X	X	
Northern shoveler (Spatula clypeata)		X	X				X
Diving Ducks							
Greater scaup (Aythya marila)		X					X
Lesser scaup (A. affinis)		X					X
Ring-necked duck (A. collaris)		X					X
Redhead (A. americanus)		X					X
Common goldeneye (Bucephala clangula)		X					X
Barrow's goldeneye (B. islandica)		X					X
Bufflehead (<i>B. albeola</i>)		X					Х
Ruddy duck (Oxyura jamaicensis)		X				Х	X
Hooded merganser (Lophodytes cucullatus)	X	X					X

Species	Offshore Waters (Rhode Island Sound, mouth of Narragansett Bay)	Nearshore Waters (Sakonnet River & Mount Hope Bay)	Salt Marsh, Estuary, Coastal Beach, Tidal Flat Habitats	Abundant Presence in Spring Season	Abundant Presence in Summer Season	Abundant Presence in Fall Season	Abundant Presence in Winter Season
Red-breasted merganser (Mergus serrator)	Х	X					X
Common merganser (Mergus merganser)	X	X					X
Canvasback (Aythya valisineria)		X					X
Harlequin duck (Histrionicus histrionicus)		X					X
Long-tailed duck (Clangula hyemalis)	X	X					X
Threatened and Endangered Species (Shore	birds)						
Roseate tern (<i>Sterna dougallii</i>) Endangered	X	X	Coastal Beach, Coastal Dune	x	X		
Piping plover (Charadrius melodus)		x	Coastal Beach, Coastal Dune	X	X		
Red knot (Calidris canutus)		X					X

Sources:

Winiarski, K., Paton, P., McWilliams, S, and Miller D. 2012. Studies Investigating the Spatial Distribution and Abundance of Marine Birds in the Nearshore and Offshore Waters of Rhode Island. Rhode Island Ocean Special Area Management Plan.

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3.6.1.1 Coastal Birds

Shorebirds that use coastal and near-coastal environments for nesting, feeding, and resting include sandpipers, avocets, stilts, oystercatchers, plovers, and others. Most shorebird species breed and forage in coastal habitats, including along beaches and in coastal mudflats and marshes. Few shorebirds breed on the United States Atlantic Coast; American oystercatcher (*Haematopus palliatus*), piping plover, and willet (*Tringa semipalmata*) breed in Rhode Island coastal areas. Piping plover and the *rufa* subspecies of the red knot (*Calidris canutus rufa*) are federally listed under the *Endangered Species Act* and also in Rhode Island.^{138, 139}

There are no state-listed waterfowl species in Rhode Island,¹⁴⁰ and no federally listed species likely to occur in the Project Area (see Attachment J - USFWS IPaC Consultation). Occurrence of most waterfowl species is expected to be primarily restricted to nearshore waters during the winter. In general, waterfowl in Rhode Island include duck, geese, and swan species that spend most of the year in terrestrial or coastal wetland habitats, as well as species that are considered to have a stronger affinity for marine environments, termed "sea ducks." Some diving ducks, such as scoters, typically winter on open freshwater. Mergansers, scaups, goldeneyes, buffleheads, and stifftails (e.g., ruddy ducks [*Oxyura jamaicensis*]), generally winter on open freshwater, but may also winter in marine habitats. However, most are usually found within shallow, nearshore waters and do not stray far offshore.¹⁴¹

Wading birds include long-legged wading species such as herons and egrets, and other aquatic species such as bitterns, coots, moorhens, and rails. Wading birds forage in shallow, freshwater, and brackish habitats, and may breed in coastal wetland habitats in Rhode Island. There are no federally listed wading bird species that are likely to occur in the Project Area (see Attachment J - USFWS IPaC Consultation). Three state-listed wading birds that occur in Rhode Island have the potential to occur in the Project Area include state-endangered American bittern (*Botaurus lentiginosus*), state-threatened least bittern (*Ixobrychus exilis*), and Special Concern king rail (*Rallus elegans*).¹⁴² These species may be present during the breeding season in tidal freshwater marshes adjacent to the potential landfall locations.

Raptor species may be present in coastal habitats and adjacent upland habitats during the breeding season. State-listed raptor species that have the potential to occur in or adjacent to the potential landfall locations include the northern harrier (*Circus hudsonius*; state-endangered) and short-eared owl (*Asio flammeus*; state-endangered). Both species may be affected by Project activities at the landfall locations. Additionally, the barn owl is listed as a state endangered species in Rhode Island and may occur on Aquidneck Island.^{143, 144}

Songbirds almost exclusively use terrestrial, coastal, and aquatic habitats (i.e., for breeding, overwintering and stopover), many of which may occur in and adjacent to the landfall locations under

¹⁴⁴ RIDEM. 2015. Rhode Island Wildlife Action Plan. Available online at: http://www.dem.ri.gov/programs/fish-wildlife/wildlifehuntered/swap15.php.

¹³⁸ RIDEM. 2006. Rare Native Animals of Rhode Island. Revised: March 2006. https://rinhs.org/wp-content/uploads/2012/05/ri_rare_animals_2006.pdf.

¹³⁹ RIDEM. 2015. Rhode Island Wildlife Action Plan. Available online at: http://www.dem.ri.gov/programs/fish-wildlife/wildlifehuntered/swap15.php.

¹⁴⁰ RIDEM. 2015. Rhode Island Wildlife Action Plan. Available online at: <u>http://www.dem.ri.gov/programs/fish-</u> wildlife/wildlifehuntered/swap15.php.;

¹⁴¹ Owen, M., & Black, J. M. 1990. Waterfowl Ecology. In. Chapman & Hall, New York, NY.

¹⁴² RIDEM. 2015. Rhode Island Wildlife Action Plan. Available online at: http://www.dem.ri.gov/programs/fish-wildlife/wildlifehuntered/swap15.php.

¹⁴³ eBird. 2020. eBird: An online database of bird distribution and abundance [web application]. eBird, Cornell Lab of Ornithology, Ithaca, New York. Available: http://www.ebird.org. Accessed November 2020.

consideration. The grasshopper sparrow (*Ammodramus savannarum*) is a state-threatened species in Rhode Island and may occur in coastal habitats along the Sakonnet River and Aquidneck Island during migration.^{145, 146} There are no federally listed songbird species likely to occur in the Project Area.

3.6.1.2 Marine Birds

A total of 83 marine bird species are known to regularly occur off the coast of the eastern United States.¹⁴⁷ Marine birds or seabirds are considered to be species that spend most of their time on open ocean waters, come to shore only to breed, and can be categorized by the marine zones in which they tend to forage (e.g., pelagic, nearshore). Pelagic seabirds that forage over the open ocean during both the breeding and non-breeding seasons include shearwaters, petrels, fulmars, phalaropes, and gannets. Nearshore seabirds forage in coastal waters and winter in coastal zones relatively close to shore; these include sea ducks, loons, grebes, terns, and most gulls.

Roseate tern is federally listed under the *Endangered Species Act*. The roseate tern and common tern are listed as Species of Greatest Conservation Need in Rhode Island. Least tern is listed as a State Threatened species in Rhode Island.

3.6.1.3 Federally and State-Listed Coastal and Marine Birds

USFWS IPaC Consultation

SouthCoast Wind generated an official species list from the USFWS using the IPaC tool on March 30, 2022, regarding the Project's Study Area including the ECC, landfall locations, and onshore underground export cables. An official species list is an official letter from the local USFWS office containing information to assist in evaluating the potential impacts of a project. It includes a list of species and critical habitat that should be considered under *Section 7* of the ESA, as well as a project tracking number and other pertinent information from the local field office.

The official species list generated by IPaC on March 30, 2022, indicated that the federally endangered roseate tern (*Sterna dougallii dougallii*) has the potential to occur within the Study Area. The IPaC list also indicated that there are no Critical Habitats for the roseate tern within the Study Area.

The roseate tern is a medium-sized gull-like tern that is approximately 15 inches (38 centimeters) long and prefers shoreline habitat.¹⁴⁸ The roseate tern is a specialist feeder, eating fish almost exclusively, and feeding by plunge diving. Habitat for the roseate tern includes nesting habitat along sandy shores and barrier islands and under hollows or dense vegetation. Roseate tern is identified in the 2015 Rhode Island Wildlife Action Plan as a species of greatest conservation need.¹⁴⁹ No more than five pairs of roseate terns have nested in Rhode Island since the 1950s. The last breeding record is of two individuals in 1984, although immature and summer roseate terns continue to be observed in Rhode Island, indicating that the species may still nest in small numbers. Roseate terns are seasonally common in

¹⁴⁵ eBird. 2020. eBird: An online database of bird distribution and abundance [web application]. eBird, Cornell Lab of Ornithology, Ithaca, New York. Available: http://www.ebird.org. Accessed November 2020.

¹⁴⁶ RIDEM. 2006. Rare Native Animals of Rhode Island. Revised: March 2006. https://rinhs.org/wpcontent/uploads/2012/05/ri_rare_animals_2006.pdf.

¹⁴⁷ Nisbet, I.C.T., R.R. Veit, S.A. Auer & T.P. White. 2013. Marine Birds of the Eastern United States and the Bay of Fundy. *Nuttall Ornithological Monographs, No. 29*, Cambridge, Massachusetts.

¹⁴⁸ USFWS. 2022. Environmental Conservation Online System: Roseate tern (Sterna dougalli dougalli). <u>https://ecos.fws.gov/ecp/species/B070</u>. Accessed April 15, 2022.

¹⁴⁹ RIDEM. 2015. *Rhode Island Wildlife Action Plan*. <u>http://www.dem.ri.gov/programs/fish-wildlife/wildlifehuntered/swap15.php</u>. Accessed April 15, 2022.

Rhode Island as a migrant, typically during post-breeding dispersal, and have been consistently recorded staging at a few coastal sites including Trustom Pond, Charlestown Breachway, Great Salt Pond on Block Island, and at Napatree Point.¹⁵⁰

At the conclusion of the ESA consultation on September 1, 2023, USFWS issued a Biological Opinion, which considered the potential adverse effects of operating the Project, including the Clean Energy Resource, on the federally threatened Atlantic Coast piping plover (*Charadrius melodus*) and red knot (*Calidris canutus rufa*). The Biological Opinion also assessed BOEM's determination that the proposed action "may affect, but is not likely to adversely affect," the federally endangered roseate tern, northern long-eared bat, and sandplain gerardia (*Agalinis acuta*). USFWS concurred with BOEM's determination that the Project may affect, but is not likely to adversely affect roseate tern, northern long-eared bat, and sandplain gerardia. Additionally, USFWS's Biological Opinion concluded that the Project is not likely to jeopardize the continued existence of the piping plover or rufa red knot.

RIDEM Natural Heritage Area Review

Pursuant to the Rhode Island Endangered Species Act, SouthCoast Wind has consulted with the Rhode Island Natural Heritage Program. SouthCoast Wind reviewed the RIDEM Natural Heritage Area overlays available on the RIDEM Environmental Resource Mapping website and determined that there are three natural heritage areas that overlap the Project Study Area, indicating potential state-listed species.¹⁵¹ SouthCoast Wind contacted RIDEM on April 8, 2022, to inquire about the species listing for these areas. RIDEM responded on April 11, 2022, with a list of species of concern identified near the Project Area. RIDEM confirmed the updated list of species of concern near the Project Area on February 10, 2023. The following list contains all of the marine and coastal bird species of concern that have been identified near the Project Area (see Table 3-24). The full list shared by RIDEM contained the species listed below and salt marsh tiger beetle.

Scientific Name	Common Name	RI* Status
Ardea alba	Great egret	SC
Ardea herodias	Great Blue Heron	SC
Bubulcus ibis	Cattle egret	SC
Egretta caerulea	Little blue heron	SC
Egretta thula	Snowy egret	SC
Falco peregrinus	Peregrine falcon	SE
Haematopus palliates	American oystercatcher	SC
Nycticorax	Black-crowned night heron	SC
Plegadis falcinellus	Glossy ibis	SC
Sterna antillarum	Least tern	ST

TABLE 3-24. RHODE ISLAND COASTAL AND MARINE BIRD SPECIES OF CONCERN IDENTIFIED NEAR THE PROJECT AREA

Notes:

*Rhode Island Status Codes (under RIDEM): SE= State Endangered; ST= Sate Threatened, SC= Special Concern Source: RIDEM. 2022. Natural Heritage Screening. Natural Heritage Consultation Email. April 11, 2022.

¹⁵⁰ RIDEM. 2015. *Rhode Island Wildlife Action Plan*. <u>http://www.dem.ri.gov/programs/fish-wildlife/wildlifehuntered/swap15.php</u>. Accessed April 15, 2022.

 $^{^{\}rm 151}$ RhodeMap, RIGIS, and RIDEM. "Layer: Natural Heritage Area (ID: 7)."

https://risegis.ri.gov/hosting/rest/services/RIDEM/Conservation_Opportunity_Areas/MapServer/7. Accessed April 23, 2022.

3.6.2 Potential Project Impacts

3.6.2.1 Seabed Disturbance

The landfall locations on Aquidneck Island are unlikely to have any nesting activity for piping plover. Additionally, no locations within the Project Area were identified as priority habitat by NHESP. The export cable landfalls will be installed using HDD technology and no open cutting or excavation for trenches in the nearshore marine waters or coastal habitats, including on beaches, will occur. HDD activities for cable installation at the landfall location will primarily be conducted under beaches and parking lots or lawns adjacent to parking lots in disturbed and developed areas. Potential effects to bird species associated with the construction activities at the landfall locations will largely be dependent on the time of year, e.g., breeding periods for species that are within or adjacent to the landfall locations. Abundant presence of marine and coastal birds by season is presented in Table 3-23. Species in the area are not expected to be affected by the short-term and temporary construction activity, due to the small footprint required relative to available habitat.

Construction and installation of the offshore export cables will temporarily disturb the seafloor, which will temporarily disturb or disperse fish and other prey species along the ECC. Since the cables are to be buried and habitat returned to the original form, any impacts to habitat and prey species would be temporary and limited to the narrow width of the ECC compared to the amount of suitable habitat available. Because the effects will be short-term, temporary, and localized (see Section 3.4, Finfish and Essential Fish Habitat), it is expected that seafloor disturbance will have insignificant effects on marine birds and their foraging habits.

Introduced Sound

Introduced sound during construction and decommissioning could cause temporary displacement and avoidance surrounding areas of construction activities and vessel traffic. Potential effects relating to introduced sound are expected to be minimal as the noise from activities will be limited to areas where work is directly being performed (e.g., local), and will be temporary and short-term. Studies also indicate that most birds that are disturbed by offshore wind farm construction return to the area after the completion of the construction activities that initially disturbed the birds.¹⁵²

Changes to Ambient Lighting

Temporary changes in ambient lighting may occur due to vessel activities during construction and decommissioning and planned and unplanned maintenance during the operational phase.

Migratory birds typically use natural sources of light for navigation while migrating.^{153, 154, 155} Many birds are nocturnal migrants, and it is well documented that artificial lighting can attract and disorient

¹⁵² Adams, J., Kelsey, E.C., Felis, J.J., & D.M. Pereksta. 2017. *Collision and displacement vulnerability among marine birds of the California Current System associated with offshore wind energy infrastructure* (ver. 1.1, July 2017): U.S. Geological Survey Open-File Report 2016-1154, 116 p., https://doi.org/10.3133/ofr20161154.

 ¹⁵³ Pollet, I. L., A. L. Bond, A. Hedd, C. E. Huntington, R. G. Butler, & R. Mauck. 2020. Leach's Storm-Petrel (*Oceanodroma leucorhoa*), version 1.0.
In *Birds of the World* (S. M. Billerman, B. K. Keeney, P. G. Rodewald, and T. S. Schulenberg, Editors). Cornell Lab of Ornithology, Ithaca, NY, USA.
¹⁵⁴ Kerlinger, P., J. L. Gehring, W. P. Erickson, R. Curry, A. Jain, and J. Guarnaccia. 2010. Night Migrant Fatalities and Obstruction Lighting at Wind Turbines in North America. *The Wilson Journal of Ornithology, 122(4)*:744-754.

¹⁵⁵ Rubega, M. A., D. Schamel, and D. M. Tracy. 2020. Red-necked Phalarope (*Phalaropus lobatus*), version 1.0. In *Birds of the World* (S. M. Billerman, Editor). Cornell Lab of Ornithology, Ithaca, N.Y., USA. https://doi.org/10.2173/bow.renpha.01

nocturnal migrating birds. Additionally, "fall out" events may occur as nocturnal migrants are drawn to artificial sources of light in adverse weather.¹⁵⁶

Coastal and marine birds have the potential to be displaced or attracted to lit vessels during construction in the ECC; however, as stated in the Vineyard Wind Draft Environmental Impact Study, although the temporary displacement of birds and/or temporary collision hazard may occur as a result of maintenance vessels and associated activities, adverse effects are not expected to occur as a result.¹⁵⁷

Lighting and night work will be minimized during offshore construction activities to reduce potential effects related to ambient lighting, where practicable. The Project within Rhode Island will not consist of any lit structures once constructed.

Accidental Events

Accidental events such as collisions, oiling or fatality from accidental spills, or ingestion of marine debris are possible. Accidental spills and contamination are not expected to be produced by the proposed Project during the construction, O&M, or decommissioning phases. In the event a spill does occur in the proposed Project Area, the proposed Project will implement the Emergency Response Plan (Attachment F).

Most birds within the ECC are likely habituated to vessel traffic. Although unlikely, there is a small potential for avian collision with vessels during low-visibility conditions. Most avian species (excluding gulls) are not likely to be attracted to vessels during fair weather conditions. Therefore, because of the limited exposure to construction vessels, short term duration of construction and further behavioral limitation of proximity during fair weather conditions, no population level effects are expected for marine and coastal birds.

The ingestion of marine debris has been shown to be a significant cause of mortality in seabird species, with *Procellariiformes* species (i.e., albatrosses, shearwaters, petrels, storm-petrels) exhibiting the highest incidence of marine debris ingestion.¹⁵⁸

Marine debris is not expected to be produced by the proposed Project. Any marine debris produced will be removed from the Project Area in accordance with all regulations under the Clean Water Act, as well as the Bureau of Safety and Environmental Enforcement's Notice to Lessees and Operators No. 2015-G03.¹⁵⁹

3.6.3 Potential Avoidance, Minimization, and Mitigation Measures

Environmental protective measures proposed by SouthCoast Wind are summarized in Section 2.7. Below is a list of measures applicable to coastal and marine birds:

• SouthCoast Wind's preferred installation method is to target use of a burial method that employs sediment fluidization (such as high-pressure water jet-plow), in which case any

 ¹⁵⁶ Rebke, M., Dierschke, V., Weiner, C.N., Aumüller, R., Hill, K. & R. Hill. 2019. Attraction of nocturnally migrating birds to artificial light: The influence of colour, intensity and blinking mode under different cloud cover conditions. *Biological Conservation, 233*, 220-227.
¹⁵⁷ BOEM. 2018. *Vineyard Wind Offshore Wind Energy Project Draft Environmental Impact Statement*. OCS EIS/EA BOEM 2018-060. https://www.boem.gov/sites/default/files/renewable-energy-program/State-Activities/MA/Vineyard-Wind/Vineyard_Wind_Draft_EIS.pdf.
¹⁵⁸ Roman, L., Bell, E., Wilcox, C., Hardesty, B. D., & Hindell, M. 2019. Ecological drivers of marine debris ingestion in Procellariiformes Seabirds. *Scientific reports, 9(1), 1-8.*

¹⁵⁹ Bureau of Safety and Environmental Enforcement. 2015. *Marine Trash and Debris Awareness and Elimination*. Bureau of Safety and Environmental Enforcement NTL No. 20 I 5-G03. December 17, 2015. https://www.bsee.gov/sites/bsee.gov/files/notices-to-lessees-ntl/alerts/ntl-2015-g03.pdf

displaced sediments would naturally backfill to partially bury the cable or would be directly discharged at the disturbance location within the export cable corridor.

- SouthCoast Wind will incorporate use of HDD at landfall locations, to avoid disturbance to shorelines and coastal habitats to the extent practicable.
- SouthCoast Wind will coordinate with the Rhode Island Natural Heritage Program, RIDFW, RI CRMC, RIDEM, and USFWS to identify appropriate mitigation measures, if required.
- SouthCoast Wind will train construction staff in biodiversity management and environmental compliance requirements.
- SouthCoast Wind will comply with the regulatory requirements related to the prevention and control of discharges and accidental spills as documented in the proposed Project's OSRP (COP, Appendix AA) and Emergency Response Plan requirements (Attachment F).
- The Inadvertent Release of Drilling Muds Contingency Plan included as Attachment G will be implemented to minimize the potential risks associated with release of drilling fluids during HDD operations.
- Measures outlined in the Emergency Response Plan (Attachment F) and the Oil Spill Response Plan (COP Appendix AA) will be followed to avoid releases and to manage and mitigate should a release occur.

3.7 MARINE ARCHAEOLOGICAL RESOURCES

SouthCoast Wind has submitted to BOEM and the Rhode Island Historic Preservation and Heritage Commission (RI HPHC) [COP, Appendix Q].

In accordance with BOEM's Guidelines for Providing Archaeological and Historic Property Information Pursuant to 30 C.F.R. 585, avoidance and mitigation actions for cultural resources will be developed through Section 106 consultation with BOEM as the lead federal agency, the RIHPHC and Native American Tribes. SouthCoast Wind will determine avoidance, minimization, and mitigation measures for terrestrial and submarine historical and archaeological resources within the Project Area in consultation with the Tribes, BOEM, RIHPHC, and the Massachusetts Board of Underwater Archaeological Resources through the Section 106 process.

Based on the MARA, avoidance zones have been identified around sensitive marine cultural resources and cable routing will not go through these areas to the extent practicable.

3.8 RECREATIONAL BOATING AND TOURISM

This section describes the recreation and tourism activities in areas that may be affected by the proposed Project and includes an evaluation of potential Project-related effects, as well as proposed avoidance, minimization, and mitigation measures.

3.8.1 Affected Environment

3.8.1.1 Tourism

Newport County is home to six municipalities including the City of Newport, Jamestown, Little Compton, Middletown, Portsmouth, and Tiverton. Newport County is home to many popular tourism activities and

was once termed America's First Resort.¹⁶⁰ Much of the tourism in Newport County is dominated by activity within the City of Newport. A popular tourist destination within the City of Newport is the Cliff Walk, a 3.5-mi public access walk that traverses the eastern shore of the city. The City of Newport is along the ECC.

According to Tourism Economics' Study on the Economic Impact of Tourism in the City of Newport and Aquidneck Island, 2018 (August 2019),¹⁶¹ direct visitor spending in the City of Newport was \$633 million, compared to \$954 million for all of Aquidneck Island. This includes only the spending of visitors who spent the night or traveled at least 50 mi for a day trip. All impacts (direct, indirect, and induced) of all travelers, including non-commuters from within 50 mi as well as the impact of tourism-related construction, and industries providing services to resident travelers resulted in \$919 million in direct visitor spending in the City of Newport and \$1.4 billion in Aquidneck Island.

SouthCoast Wind will work with the Town of Portsmouth to develop a traffic management plan that minimizes the disruptions to residences and commercial establishments in the vicinity of construction and installation activities. All areas temporarily affected by installation and construction activities, including roads, beaches, parking areas, green spaces, etc., will be restored to an equal or better condition, as appropriate for the existing land use.

3.8.1.2 Ocean SAMP Mapping

The Ocean SAMP provides maps of offshore organized recreational activities including sailboat racing areas in Rhode Island Sound and no recreational boating areas designated as Areas of Particular Concern are located within the SouthCoast Wind 1 Project Area (see Figure 6 in § 11.10.2(I) of the Ocean SAMP).

Offshore dive sites within the Ocean SAMP area are shown in Figure 2 in the Ocean SAMP policies (650-RICR-20-05-11.10.2). No offshore dive sites shown in Figure 2 of the Ocean SAMP are located within the ECC. The ECC will not cross directly through any designated offshore dive sites.

3.8.1.3 Nearshore- and Water-based Recreation and Tourism

Nearshore-based recreational activities in Newport County, Rhode Island primarily include sailing, swimming, and surfing.¹⁶² Water-based recreational activities include fishing, boating races, parasailing, sailing, wildlife viewing, and deep-sea diving.

Boating

A 2012 survey of recreational boating patterns and economic activity of 373,766 qualified registered boaters from Massachusetts, Maine, New Hampshire, Rhode Island, Connecticut, and New York found that the majority of recreational boating occurs within 3.0 nm (5.5 km) of shore and within state waters.¹⁶³ The survey identified 5,114 boating routes and 4,635 activity points.¹⁶⁴

In Mount Hope Bay and the Sakonnet River, boating density was relatively even across the bay with less density towards the northern terminus. Of the estimated 907,400 boating trips in ocean and coastal

¹⁶⁰ Rhode Island Commerce Corporation 2021

¹⁶¹ https://assets.simpleviewinc.com/simpleview/image/upload/v1/clients/newportri/2018_Economic_Impact_2018_9ab62c13-709f-4662-ad87-e0ec2a62a17a.pdf.

¹⁶² Rhode Island Commerce Corporation. 2021. *Newport County, Rhode Island*. Accessed from: https://www.visitrhodeisland.com/plan/regions/newport-county/.

¹⁶³ Starbuck K, & A. Lipsky. 2013. 2012 Northeast Recreational Boater Survey: A Socioeconomic and Spatial Characterization of Recreational Boating in Coastal and Ocean Waters of the Northeast United States. Technical Report Dec 2013. Boston (MA): Doc #121.13.10, p.105. ¹⁶⁴ Starbuck and Lipsky, 2013.

areas during 2012, 7.0 percent (65,042 trips) were attributed to vessels registered in Rhode Island. Most boating trips occur between May and October, with a peak in July and August. The survey estimated that boaters with vessels registered in the study region (Massachusetts, Maine, New Hampshire, Rhode Island, Connecticut, and New York) spent almost \$2 billion on recreational boating and related activities in 2012, of which \$134 million occurred in Rhode Island. The ECC does not overlap with any marinas within the Sakonnet River and Mount Hope Bay.

Cable laying activities are anticipated to take several months but will affect any given area for a much shorter duration. During construction, SouthCoast Wind intends to maintain access for recreational boating while maintaining safe separation distances from construction vessels, resulting in temporary impacts. SouthCoast Wind will implement construction safety zones in consultation with local communities, the recreational boating community and the USCG and communicate to local mariners regarding upcoming and ongoing construction activities within the ECC.

Fishing and Other Activities

Fishing was the most frequently recorded activity for recreational boaters. Additional information about recreational fishing can be found in Section 3.8 and COP, Appendix V. Recreational fishing vessels can launch from most harbors in the region. The entire near-coastal region along with numerous offshore locations listed previously in Table 3-21 may host species targeted during recreational fishing. Recreational fishing locations occur throughout the Sakonnet River and Rhode Island Sound. Recreational fishing boats may also transit through the ECC to reach a site, but their exact transit routes are not represented on commonly used, publicly available datasets, as these vessels do not have the VTR, VMS, or AIS requirements discussed previously for commercial fishing vessels.

Although recreational fishing occurs year-round in the area of interest, it is more prominent during the warmer weather, and tends to follow the timing of migratory fish species' "run" through the area of interest, although the timing of offshore fishing is much less variable than nearshore fishing. For-hire recreational fishing typically occurs from spring through fall for summer flounder, black sea bass, and scup and in late summer/early fall for yellowfin, bluefin, and albacore tuna, sharks, bonito, and false albacore. Striped bass recreational fishing typically occurs in the spring, summer, and fall. In the Sakonnet River, there are relatively low levels of recreational shellfishing, notably for hard clams. Rhode Island allows recreational harvesting of whelk and bay scallops by Rhode Island residents (with no license requirement), and for the recreational harvesting of lobster and crabs (with a license requirement.¹⁶⁵ In Rhode Island state waters, oysters may be harvested with a state permit from September-May, and bay scallops may be harvested in November and December, depending on the gear type.¹⁶⁶

The species most targeted during recreational fishing and saltwater fishing tournaments include Atlantic cod (*Gadus morhua*), black sea bass (*Centropristis striata*), bluefish (*Pomatomus saltatrix*), striped bass (*Morone saxatilis*), haddock (*Melanogrammus aeglefinus*), and bluefin and yellowfin tuna (*Thunnus thynnus* and *Thunnus albacares*).

3.8.2 Potential Project Impacts

Safety zones will be established around cable installation activities, but these effects on other marine users and navigation will be localized and temporary, resulting in minimal impacts to other marine users.

¹⁶⁵ RIDEM. 2021. *Recreational Fishing*. http://www.dem.ri.gov/programs/marine-fisheries/recreational-fishing.php. ¹⁶⁶ RIDEM. 2021

SouthCoast Wind will develop an onshore construction schedule to minimize effects to recreational users and tourism-related activities to the extent feasible, such as scheduling nearshore construction activities to avoid the height of the summer tourist season.

During operation, the Project is not expected to affect recreational boating and tourism as the cables will be buried beneath the seabed.

3.8.3 Proposed Avoidance, Minimization, and Mitigation Measures

Potential impacts on recreational boating and tourism will be reduced by implementation of the following avoidance, minimization and mitigation measures:

- SouthCoast Wind will develop a construction schedule to minimize the effects on recreational use and tourism-related activities to the extent feasible, such as scheduling construction activities to avoid the height of the summer tourist season.
- SouthCoast Wind will work with and coordinate with stakeholders/visitors' bureaus to schedule construction activities outside of major events taking place in the Town of Portsmouth.
- SouthCoast Wind will have a construction schedule webpage to alert recreational boaters and anglers, abutters, residents, and other stakeholders of construction locations, dates, activities.
- SouthCoast Wind's Project Fisheries Liaison Officer will routinely communicate with the commercial and recreational fishing communities to provide updates on Project schedule, progress, and location.
- SouthCoast Wind will post LNMs on the SouthCoast Wind website.
- SouthCoast Wind will implement construction safety zones in consultation with USCG and communicate to local mariners regarding upcoming and ongoing construction activities.

3.9 NAVIGATION

3.9.1 Affected Environment

A Navigation Safety Risk Assessment (NSRA) was prepared for the Project, was included in the COP, and is included here as Attachment N. Appendix G of the NSRA is focused on the ECC. The NSRA was conducted per the guidance in USCG *Navigation and Vessel Inspection Circular No. 01-19* (NVIC 01-19).¹⁶⁷ The marine traffic in the vicinity of the ECC was assessed using summary traffic data from the following sources:

• Vessel transit counts for the year 2019 based on AIS data.¹⁶⁸ AIS statistics for 2020 are not relied on for the purposes of the NSRA because of potential effects from COVID-19 on traffic patterns. Use of 2019 data was discussed with USCG prior to preparation of the SouthCoast Wind NSRA.

¹⁶⁷ USCG. 2019. "Navigation and Vessel Inspection Circular No. 01-19, Guidance on the Coast Guard's Roles and Responsibilities for Offshore Renewable Energy Installations (OREI)", COMTPUB P16700.4, 1 August 2019.

¹⁶⁸ MarineCadastre. 2021. Marine Transportation Data hosted by Northeast Ocean Data, downloaded files: Vessel Density for 2017 through 2020., source data: MarineCadastre.gov, http://marinecadastre.gov/ais/; Nationwide Automatic Identification System, United States Coast Guard; Northeast Regional Ocean Planning White Paper Update: Overview of the Maritime Commerce Sector in the Northeastern United States – Appendix A, neoceanplanning.org. Download page: https://www.northeastoceandata.org/data-download/?data=marine%20transportation.

- VTR and recreational survey data maps from the Northeast Ocean Data Portal.^{169, 170}
- VMS reported vessel activity.¹⁷¹

Deep draft vessel (cargo and tankers) traffic is light along most of the ECC, and largely limited to Rhode Island Sound. Cargo vessel traffic in the vicinity of the ECC was predominantly coastwise traffic, crossing the ECC approximately 3.0 nm (5.5 km) south of the entrance to the Sakonnet River. See Figure G-3 in Attachment N – Navigation Safety Risk Assessment for a view of the transit counts for cargo vessels in the vicinity of the ECC in 2019.

In Mount Hope Bay and the Sakonnet River, shallow draft vessels comprise most of the vessel traffic, primarily passenger and pleasure types. Cargo and tanker densities are very low, averaging a few port calls per month or fewer. Because there is no access for large vessels from the Sakonnet River to the Port of Fall River, cargo and tanker traffic in the Project Area is limited to Mount Hope Bay and RI Sound.

In Rhode Island Sound, cargo vessels, carriers, and tankers largely make use of the Narragansett Bay Traffic Separation System (TSS) on approach to and departure from ports. A TSS "is an internationally recognized measure that minimizes the risk of collision by separating vessels into opposing streams of traffic through establishment of traffic lanes."¹⁷² Vessel use of TSS is voluntary.¹⁷³ The AIS data show that the cargo/carriers and tankers transit to/from the Precautionary Area for Narragansett and Buzzards Bay, at the seaward end of the Narragansett Bay TSS. The west-east portion of the ECC crosses the corner of the outbound lane of the Buzzards Bay TSS and the Recommended Vessel Route for deep draft vessels and tugs/barges. Cargo/carrier vessels in the vicinity of Rhode Island Sound had an average length overall of 295 ft (90 m).

SouthCoast Wind has consulted with the USACE and has committed to routing the cables to avoid the Mount Hope Bay main shipping channel, the Tiverton channel and the buffer to these federal navigation channels.

3.9.2 Potential Project Impacts

Limited interaction with local navigation will result from temporary safety zones in place surrounding construction activities. SouthCoast Wind does not anticipate any substantial impacts to navigation and shipping in Rhode Island waters from the Project. SouthCoast Wind will coordinate and communicate with local marine users, local communities and the fishing industry to minimize navigation use conflicts and will post LNMs on the SouthCoast Wind website. SouthCoast Wind will submit LNMs to the USCG and Fleet Command prior to the commencement of offshore construction activities. SouthCoast Wind will utilize on-scene safety vessel(s) and/or personnel to advise mariners of construction activity, as necessary.

¹⁶⁹ Northeast Ocean Data Portal (NEODP). 2020. Fishing Monthly Vessel Transit Counts from – 2019 AIS, Northeast and Mid-Atlantic United States, April 2020. Prepared by Jeremy Fontenault, RPS, Source data: Nationwide Automatic Identification System, United States Coast Guard. ¹⁷⁰ SeaPlan. 2013. "Recreational Boater Activities, Northeast United States", July 15, 2013, http://www.northeast.acadata.com/files/match.com/files

http://www.northeastoceandata.org/files/metadata/Themes/Recreation/RecreationalBoaterActivities.pdf.

¹⁷¹ Northeast Regional Ocean Council (NROC). 2018. "Vessel Monitoring Systems (VMS) Commercial Fishing Density, Northeast and Mid-Atlantic Regions", data download:

https://services.northeastoceandata.org/arcgis1/rest/services/OceanUses/VMS_Multispecies2015To2016/MapServer/0, Accessed 21 September 2020.

¹⁷² International Maritime Organization (IMO). 2019. "International Maritime Organization: Ships' routing", webpage:

http://www.imo.org/en/OurWork/Safety/Navigation/Pages/ShipsRouteing.aspx, Accessed 17 October 2019.

¹⁷³ USCG. 2017. "Voluntary Safety Initiatives and Good Marine Practices for Commercial Fishing Industry Vessels", Office of Commercial Vessel Compliance, USCG HQ, January 2017.

The potential for vessel anchoring to penetrate to the depth of the buried cable during the operational period was evaluated in the Cable Burial Risk Assessment included in Attachment E - "Confidential", provided under separate cover. The anchoring risk assessment evaluated the size of vessels using a given area, the penetration depth of anchors and the cable burial depth required to reduce risk of anchor interactions.

A review of the 2019 AIS data and charted anchorages gives no indication that planned anchoring occurs in or near the ECC. As a result, once constructed, the export cables are not anticipated to affect planned cargo/carrier, tanker, or cruise ship anchorage operations.

3.9.3 Proposed Avoidance, Minimization, and Mitigation Measures

Environmental protective measures proposed by SouthCoast Wind are summarized in Section 2.7. Below is a list of measures applicable to commercial shipping that SouthCoast wind will adopt:

- Vessels laying the cable will meet the requirements to exhibit lights and shapes as required in Convention on the International Regulations for Preventing Collisions at Sea (COLREGS) Rule 27,¹⁷⁴ which will facilitate passing vessels to properly identify their obligation to give way.¹⁷⁵
- SouthCoast Wind will post LNMs on the SouthCoast Wind website. SouthCoast Wind will submit LNMs to the USCG and Fleet Command prior to the commencement of offshore construction activities.
- SouthCoast Wind will implement rolling temporary safety zones in consultation with USCG and communicate to local mariners regarding upcoming and ongoing construction activities.
- SouthCoast Wind will utilize on-scene safety vessel(s) and/or personnel to advise mariners of construction activity, as necessary.

3.10 OTHER MARINE USES

This section describes other human activities in the ECC that may be affected by the proposed Project and includes an evaluation of potential Project-related effects, as well as proposed avoidance, minimization, and mitigation measures (refer to Figure 3-5). Discussions of the affected environment, potential impacts, and mitigation measures directly relating to commercial and recreational fishing are discussed in Section 3.5, recreational boating and tourism in Section 3.8, and navigation in Section 3.9.

3.10.1 Affected Environment

The following were **not** identified within 2.3 mi (3.7 km) of the ECC (additional details can be found in Attachment N- Navigation Safety Risk Assessment of the Brayton Point Offshore Export Cable Corridor):

- Pilot boarding areas
- Anchorage areas

¹⁷⁴ International Maritime Organization (IMO) (1972), "Convention on the International Regulations for Preventing Collisions at Sea" (COLREGS), Adoption: 20 October 1972; Entry into force: 15 July 1977.

¹⁷⁵ It is noted that from the entrance of the Sakonnet River and further inland vessels are subject to the Inland *Navigation Rules Act of 1980*, rather than COLREGS, but the requirements are similar.

- Danger Zones and Restricted Areas (offshore firing/bombing ranges and areas used for other military purposes)
- Oil and gas platforms or wells, or oil and gas leases
- Sand and gravel leases
- Mining
- Ocean disposal sites

3.10.1.1 Military and National Security Uses

National security uses in the vicinity of the ECC include any activities by military and national security entities, such as the Navy, the USCG, the Air Force, North American Aerospace Defense Command (NORAD), the Department of Homeland Security (DHS), and the Federal Aviation Administration (FAA).

Military uses in the region mainly revolve around the presence of several naval bases,¹⁷⁶ including Naval Station Newport in Rhode Island and the Newport Naval Undersea Warfare Center.¹⁷⁷ A section of the offshore ECC overlaps with the Narraganset Bay Navy Operating Area, within federal waters, outside of the jurisdictional area relevant to this application.

The ECC does not overlap the Navy Undersea Warfare Center Testing Range, the Cape Cod Torpedo Exercise Area, or any other Danger Zone/Restricted Areas, or Warning Areas. While naval vessels occasionally transit in the vicinity of the ECC, they are not involved in any type of range activity in proximity to the ECC.¹⁷⁸

The ECC does not overlap any submarine transit lanes, torpedo exercise areas, danger zones or restricted areas, or safety, security, and regulated zones.¹⁷⁹ The ECC intersects one land based Formerly Used Defense Site (FUDS) which extends into the Sakonnet River. The status for the FUDS is listed as complete and closed out.¹⁸⁰

To evaluate the risk of Unexploded Ordnance (UXO) occurring within the Project ECC, SouthCoast Wind performed an Unexploded Ordnance Risk Assessment (provided as Attachment U, *Confidential* - provided under separate cover).

3.10.1.2 Aviation

As the export cables will be buried beneath the seafloor, the Project is not expected to impact airborne military activities, commercial and recreational aviation, or public and private-use airports in the region. Airborne military activity may occur in regulated airspace areas, such as special use airspace. There is special use airspace (W-105A) that overlies a portion of the Lease Area.

¹⁷⁶ BOEM. 2013. Commercial Wind Lease Issuance and Site Assessment Activities on the Atlantic Outer Continental Shelf Offshore Rhode Island and Massachusetts, Revised Environmental Assessment. Office of Renewable Energy Programs. OCS EIS/EA. BOEM 2013-1131. https://www.boem.gov/renewable-energy/state-activities/commercial-wind-leasing-offshore-rhode-island-and-massachusetts.

¹⁷⁷ Rhode Island Coastal Resources Management Council. 2010. Rhode Island Ocean, *Special Area Management Plan*. Adopted by the RI CRMC on October 19, 2010. http://seagrant.gso.uri.edu/oceansamp/documents.html.

¹⁷⁸ AECOM. 2020. *Mayflower Wind, Military Activity Study*.

¹⁷⁹ AECOM. 2020. Mayflower Wind, Military Activity Study.

¹⁸⁰ USACE, Environmental Programs. 2021. SACHUEST PT-NPORT NCM Formerly Used Defense Sites Program Management Action Plan. https://fudsportal.usace.army.mil/ems/inventory/map?id=59663.

3.10.1.3 Cables and Pipelines

Three pipelines will be crossed within the ECC in Rhode Island state waters at two locations, as explained in Table 3-25. SouthCoast Wind will coordinate with the owners of the pipelines listed below, and any other unanticipated cable or pipeline crossings not identified, to agree on detailed cable crossing design, installation, and maintenance requirements. Crossing design will be determined by the crossing's proximity to shore and the third-party crossing agreement requirements. Minimum separation distances will be determined so that both assets can be safely operated with risk of damage to either asset mitigated to the extent practicable.

Cable Description	Number of Cables / Pipelines to be Crossed	Location
Potential Crossing Area 1	1 existing pipeline ^a	Sakonnet River (charted Pipeline Area)
Potential Crossing Area 2	2 existing pipelines ^b	Sakonnet River (charted Pipeline Area)

TABLE 3-25. PROPOSED CABLE/PIPELINE CROSSINGS

^a Gas pipeline owned by Enbridge as part of the Algonquin Gas Transmission system.

^b Water pipelines (20-inch and 24-inch) owned by the City of Newport Department of Utilities.

3.10.1.4 Aids to Navigation and Water Quality Monitoring

Buoys

Aids to Navigation are structures intended to assist a navigator in determining position or safe course, or to warn of dangers or obstructions to navigation. Approximately 19 navigation buoys and one seasonal water quality monitoring buoy are located in the vicinity of the ECC. All navigation aids are marked on the nautical charts.

3.10.2 Potential Project Impacts

3.10.2.1 Military Uses

As a submarine cable, the buried export cables are not anticipated to affect the ability of emergency response assets or personnel to respond, present any obstructions to air navigation, or interfere with any radar systems.

SouthCoast Wind engaged with the U.S. Navy during route planning stages to discuss route options under consideration to avoid potential impacts to Navy activities and restricted areas around Newport, Rhode Island. During this meeting, SouthCoast Wind was advised that the U.S. Navy would not have conflicts with the selected route through the Sakonnet River.

SouthCoast Wind has and will continue to engage with the USCG to avoid any potential waterway conflicts with the installation of the offshore Project components. During installation, SouthCoast Wind will maintain regular contact with the USCG and submit Local Notices to Mariners through the USCG to avoid waterway conflicts to the extent feasible.

Vessels use navigation lighting during construction, operation and maintenance, and decommissioning activities. Introduced lighting may cause temporary and localized changes in ambient lighting. Vessel lighting will be aligned with USCG and BOEM's *Guidelines for Lighting and Marking of Structures*

*Supporting Renewable Energy Development*¹⁸¹ and all relevant military entities will be made aware of Project activities.

3.10.2.2 Cables and Pipelines

A potential impact to cables and pipelines is accidental damage from Project activities. SouthCoast Wind conducted geophysical and geotechnical surveys to provide sufficient information on the seabed and shallow sub-seabed conditions to support planning, engineering, and installation of export cables. These surveys confirmed the burial and positions of the three pipelines crossing the Sakonnet River. The surveys will mitigate the possibility of encountering unidentified cables or pipelines or damaging the identified pipelines.

SouthCoast Wind will use well established standard techniques for adequately avoiding, minimizing, or mitigating interactions between existing cables and pipelines and the newly installed Project offshore export cables. SouthCoast Wind will coordinate with the owners of the existing pipelines intersected by the ECC, and any other unanticipated cable crossings not identified above in Table 3-25, to agree on detailed crossing design, installation, and maintenance requirements.

3.10.2.3 Aids to Navigation and Water Quality Monitoring Buoys

No effects are anticipated to Federal Aids to Navigation or visual navigation from the export cables. Because the offshore export cables in the ECC will be buried during the Project's operational phase, no cable risks are anticipated to aids to navigation. During construction and decommissioning, SouthCoast Wind will implement construction safety zones in consultation with the USCG and communicate to local mariners regarding upcoming and ongoing construction activities.

Locations and details of offshore Project components such as the export cables will also be provided to NOAA so they can be included on nautical charts.

3.10.3 Proposed Avoidance, Minimization, and Mitigation Measures

Potential impacts on other marine uses will be reduced by implementation of the following avoidance, minimization and mitigation measures:

- A rolling, temporary safety zone surrounding cable-lay vessels will be implemented while cable laying operations are ongoing.
- Vessels laying the cable will meet the requirements to exhibit lights and shapes as required in Convention on the International Regulations for Preventing Collisions at Sea Rule 27,¹⁸² which will facilitate passing vessels to properly identify their obligation to give way.¹⁸³
- Updates about the Project will be communicated via Local Notices to Mariners, updates on the Project website, and through direct outreach to the commercial and recreational fishing industries and communities and other mariners.

¹⁸¹ BOEM. 2021. *Guidelines for Lighting and Marking of Structures Supporting Renewable Energy Development.*

https://www.boem.gov/sites/default/files/documents/renewable-energy/2021-Lighting-and-Marking-Guidelines.pdf.

¹⁸² International Maritime Organization (IMO) (1972), "Convention on the International Regulations for Preventing Collisions at Sea" (COLREGs), Adoption: 20 October 1972; Entry into force: 15 July 1977.

¹⁸³ It is noted that from the entrance of the Sakonnet River and further inland vessels are subject to the Inland *Navigation Rules Act of 1980*, rather than COLREGS, but the requirements are similar.

- Project safety vessel(s) and/or personnel will be on scene to watch for vessels that are on course with the cable lay activity and to advise mariners of construction/decommissioning activity, as necessary.
- SouthCoast Wind will use well established standard techniques for adequately avoiding, minimizing, or mitigating potential impacts to existing cables and pipelines and the newly installed Project offshore export cables.
- SouthCoast Wind will coordinate with the owners of existing cables and pipelines intersected by the ECC, and any other unanticipated cable crossings not identified, to agree on detailed crossing design, installation, and maintenance requirements.
- SouthCoast Wind will investigate means to update navigation charts with NOAA to improve communications for on-water activities.
- SouthCoast Wind will establish mariner diligence and offshore standard work safety practices for all Project-related vessels.
4. CRMP REGULATORY STANDARDS

The portions of the SouthCoast Wind ECC located in Rhode Island state waters state are subject to the jurisdiction of the Rhode Island Coastal Resources Management Council (RI CRMC) pursuant to the CRMP as amended, *a.k.a.* Red Book (650-RICR-20-00-01).

The SouthCoast Wind ECC in state waters from the mouth of Narragansett Bay seaward to the 3.0-nm limit is also subject to the policies and regulations of the Ocean SAMP, 650-RICR-20-05-11, and subject to review by the RI CRMC under the Category B Assent review criteria. Section 5 describes SouthCoast Winds' compliance with the standards of review for activities located in the Ocean SAMP.

The Brayton Point ECC from seaward of the three-nautical mile limit of state waters to the edge of the Ocean SAMP jurisdictional area in federal waters is addressed through the Rhode Island CZMA Federal Consistency Review only. On March 15, 2022, SouthCoast Wind filed its CZMA Consistency Determination under the Federal Zone Management Act (16 U.S.C. §§ 1451-1464) and in accordance with the RI CRMP and SAMPs. The Federal Consistency Review commenced when SouthCoast Wind filed the CZMA Consistency Determination. A public hearing was held and the Federal Consistency Determination for the Project was made at the RI CRMC Semi-Monthly Meeting on December 12, 2023. At that meeting the Council voted unanimously to approve concurrence with the mutually agreed upon conditions and the fisheries compensatory mitigation package between SouthCoast Wind and the RI CRMC. The Federal Consistency Concurrence Letter was sent to BOEM from RI CRMC on December 19, 2023, informing the agency that RI CRMC issued concurrence with mutually agreed upon conditions for the Project.

Portions of the onshore export cable route across Portsmouth are located within the 100 ft continuous area to freshwater wetlands and the 200 ft contiguous area of river stream, and therefore subject to review under the RI CRMC Rules and Regulations Governing the Protection and Management of Freshwater Wetlands in the Vicinity of the Coast (650-RICR-20-00-9). Section 6 describes SouthCoast Winds' compliance with the standards of review for activities located within Freshwater Wetlands in the Vicinity of the Coast.

Below SouthCoast Wind sets forth the applicable CRMP regulatory criterion and provides its response. The responses provided below are presented to demonstrate SouthCoast Wind's compliance with the applicable CRMP standards.

4.1 CRMP Section 1.1.5 - Review Categories and Water Types

The Sakonnet River is designated as a Type 2 water. Type 2 waters are defined by the RI CRMC as having high scenic qualities, high value for fish and wildlife habitat, and with some exceptions, good water quality. Densely developed residential areas abut much of the waters in this category, and docks and the activities and small-scale alterations associated with residential waterfronts may be suitable.

The Cove at Island Park in Portsmouth, Rhode Island will not be crossed by the Project but is in the vicinity of the Project and is included here for completeness. This water body is designated as a Type 2 water, low-intensity use.

The ECC in Mount Hope Bay is located in Type 4 waters. Type 4 waters are categorized by: (1) large expanses of open water in Narragansett Bay and the Sound which support a variety of commercial and recreational activities while maintaining good value as fish and wildlife habitat; and (2) open waters

adjacent to shorelines that could support water-dependent commercial, industrial, and/or high-intensity recreational activities.

A short segment of the ECC is located within the lower bay of Mount Hope Bay and overlaps with Type 6 waters (see Figure 1-5). To establish the boundaries of Type 6 waters, the CRMC established a buffer to federal navigation channels that measures three times the channel depth. Type 6 waters are categorized for (i) industrial waterfronts, and (ii) commercial navigation channels. SouthCoast Wind has consulted with the USACE and USCG and has committed to routing the cables to avoid the Mount Hope Bay main shipping channel, the Tiverton channel and the buffer to these federal navigation channels, thus will not place cables within the Type 6 waters.

According to Table 1 in Section 1.1.5(A) of the CRMP, activities classified as "Energy-related Activities/Structures," "Dredging-Improvement," and "Filling in Tidal Waters" in Tidal Waters designated as Type 4 require a Category B Assent. Similarly, activities listed in Table 2 in Section 1.1.5(B) of the CRMP specify energy related structures require a Category B Assent Application.

4.2 CRMP Section 1.1.6 - APPLICATIONS FOR CATEGORY B COUNCIL ASSENTS

Subparts A-E, G and H of Section 1.1.6 of the CRMP are noted and/or do not apply to the Project and are therefore not restated herein. Subparts F through I of Section 1.1.6 are applicable to the Project and addressed below.

4.2.1 CRMP Section 1.1.6(F) – Category B Applications

1. Applicants for activities and alterations listed as "B" in Tables 1, 2, or 3 in § 1.1.5 of this Part, in addition to adhering to the applicable policies, prerequisites, and standards, are required to address all Category B requirements as listed in applicable sections of the program and, where appropriate, other issues identified by the Council.

Response: As stated herein, SouthCoast Wind's responses to the CRMP review criteria are offered to demonstrate conformance with the goals, policies, prerequisites, informational requirements, and review standards of the CRMP.

2. Formal notice will be provided to all interested parties once completed forms for a Category B application have been filed with the Council. The notice shall set forth the nature of the application, any variances requested and the applicable sections of the CRMP from which a variance is requested. A public hearing will be scheduled if there are one or more substantive objections to the project, or at the consensus of four or more members of the Council.

Response: Noted. SouthCoast Wind is prepared to present the Project to the RI CRMC and other interested stakeholders.

3. A Category B Assent shall be issued if the Council finds that the proposed alteration conforms to the goals, policies, prerequisites, informational requirements, and standards of this Program.

Response: As stated herein, SouthCoast Wind's responses to the CRMP review criteria are offered to demonstrate conformance with the goals, policies, prerequisites, informational requirements, and review standards of the CRMP.

4.2.2 CRMP Section 1.1.6(I) – Coastal Hazard Analysis Application Requirements

1. The following new projects when subject to the jurisdiction of the CRMC must file a coastal hazard analysis with their CRMC application using the "CRMC Coastal Hazard Application Guidance" provided in Chapter 5 of the CRMC Shoreline Change Special Area Management Plan (Beach SAMP):

b. construction of new commercial and industrial structures as defined in § 1.1.2 of this Part;

e. construction of any new infrastructure project subject to §§ 1.3.1(F), (H), and (M) of this Part;

Response: A Coastal Hazard Analysis was conducted on behalf of SouthCoast Wind for the onshore Project components in the Town of Portsmouth (see Attachment Q). Based on SouthCoast Wind's lease term for the operational phase of 33 years, a projected sea level rise of 5.0 ft (1.5 m) was used for the Hazard Assessment. A 5.0-ft (1.5-m) rise in sea levels affects the locations of the TJBs on the northeast side of the intersection of Boyds Lane and Park Avenue, and approximately 900 ft (274 m) of the onshore underground export cables along Boyds Lane from the HDD work area to just south of Norseman Drive. The onshore facilities (i.e., TJBs) to be installed in the parking lot at the Montaup County Club and/or on the northeast side of Anthony Road (*aka* RWU North parcel) are located well inland of any sea level rise or storm surge projections for Mount Hope Bay as identified by StormTools.

Buried transmission lines are often subject to groundwater inundation and the cables are designed to be resilient to inundation. The cable and joints are designed for water submersion. The power conductor is protected by insulation, a lead sheath and steel armoring. All TJB hardware and cable supports will be non-corrosive to ensure the system can operate with corrosive water inside the TJBs for extended periods. For these reasons, a 5.0-ft (1.5-m) rise in sea levels will not negatively impact the onshore Project components and TJB hardware and cable supports.

2. The following modifications to existing projects subject to the jurisdiction of the CRMC must file a coastal hazard analysis with their CRMC application using the "CRMC Coastal Hazard Application Guidance" provided in Chapter 5 of the CRMC Shoreline Change Special Area Management Plan (Beach SAMP).

Response: Not applicable. SouthCoast Wind does not propose modification to existing projects or facilities.

3. All projects meeting the analysis thresholds established in §§ 1.1.6(I)(1) and (2) of this Part above shall complete the CRMC coastal hazard application worksheet

(http://www.crmc.ri.gov/coastalhazardapp.html) and provide the following information as part of the application: (list of information omitted).

Response: The information referenced in this standard is included in the Coastal Hazard Analysis completed for the Project (see Attachment Q).

4. All projects meeting the analysis thresholds established in §§ 1.1.6(I)(1) and (2) of this Part above shall provide site plans of the proposed project with the following overlays: (list of information omitted).

Response: The required overlays are provided in Attachment Q, Coastal Hazard Analysis.

5. All projects meeting the analysis thresholds established in §§ 1.1.6(I)(1) and (2) of this Part above shall describe the proposed coastal adaptation techniques incorporated into the project design to overcome or accommodate any coastal hazard exposure risks resulting from the analyses required by § 1.1.6(I) of this Part.

Response: The onshore Project components will consist of the onshore export cables and TJBs that will be cast-in-place or be delivered as precast concrete underground vaults.

A section of the underground, onshore export cables approximately 900 ft (274 m) located along Boyds Lane and the TJBs at the intersection of Boyds Lane and Park Avenue will be inundated based upon the projections using the 5.0 ft (1.5 m) of sea-level-rise scenario in the RI CRMC Coastal Hazard Assessment StormTools model. Buried transmission cables are often subject to groundwater inundation. The cable joints are designed for water submersion. The conductor and cross-linked polyethylene (XLPE) insulation both contain outer layers of water swellable tapes. All manhole hardware and cable supports will be non-corrosive to ensure the system can operate with corrosive water inside the manhole for extended periods. The submarine cables will be installed at the landfalls via HDD methodology, which will result in the cables being buried approximately 20 ft (6.0 m) below the centerline of Park Avenue, 28 ft (8.5 m) below the seawall and 40 ft (12 m) below the seafloor, transitioning up to onshore and offshore HDD work areas. The design (offshore and at the landfall locations) anticipates that the cable will be submerged and incorporates watertight sheathing around the cable to protect the conductors. The design bears all the inherent features of a marine cable meant to be fully immersed in water and installed and operated at high-sea depths under considerable water pressures.

The TJBs provide a clean, dry environment for splicing the offshore export cables to the onshore export cables, and to protect the completed splice. The sheaths from the connection of the offshore and onshore export power cables will be terminated into the link box located in the TJBs. Access to the TJBs for operation and maintenance is provided via manhole covers installed at grade. The fiber optic communications cable will be joined inside the communications handhole installed adjacent to the TJB with its own access cover.

4.2.3 Section 1.1.7 – Variances

A. Applicants desiring a variance from a standard shall make such request in writing and address the six criteria listed below in writing. Except as otherwise provided herein, the application shall then be granted a variance only if the Council finds that the following six criteria are met.

Response: Not applicable. SouthCoast Wind does anticipate requiring a variance from any standard in the CRMP. Refer to Sections 5.2.2 for a description of the SouthCoast Wind 1 Project components located within Areas of Particular Concern (APC) and Section 5.2.3 for a description of Prohibitions and Areas Designated for Preservation in Rhode Island state waters.

4.2.4 Section 1.1.8 – Special Exceptions

A. Special exceptions may be granted to prohibited activities to permit alterations and activities that do not conform to a Council goal for the areas affected or which would otherwise be prohibited by the requirements of this document only if and when the applicant has demonstrated that:

1. The proposed activity serves a compelling public purpose which provides benefits to the public as a whole as opposed to individual or private interests. The activity must be one or more of the following:

a. An activity associated with public infrastructure such as utility, energy, communications, transportation facilities, however, this exception shall not apply to activities proposed on all classes of barriers, barrier islands or spits except as provided in § 1.2.2(C)(4)(i) of this Part;

b. A water-dependent activity or use that generates substantial economic gain to the state; and/or

c. An activity that provides access to the shore for broad segments of the public.

2. All reasonable steps shall be taken to minimize environmental impacts and/or use conflict.

3. There is no reasonable alternative means of, or location for, serving the compelling public purpose cited.

B. Special exceptions may be granted only after proper notice in accordance with R.I.G.L. Chapter 42-35, the Administrative Procedures Act, a public hearing has been held, and the record of that hearing has been considered by the full Council. The Council shall issue a written decision including findings of fact and conclusions upon which the decision to issue a special exception is based.

Response: The Project does not require a special exception. SouthCoast Wind does not propose to conduct any of the prohibited activities listed under Section 1.1.5A., Table 1, or any other prohibited activities in tidal or coastal pond waters, or on shoreline features and their contiguous areas as listed in Sections 1.3.1.B. through 1.3.1.R.

4.2.5 Section 1.1.9 – Setbacks

A. A setback is the minimum distance from the inland boundary of a coastal feature at which an approved activity or alteration may take place.

B. Setbacks shall be maintained in areas contiguous to coastal beaches, coastal wetlands, coastal cliffs and banks, rocky shores, and existing manmade shorelines, and apply to those categories of activities and alterations listed in §1.1.9.

Response: SouthCoast Wind acknowledges the standards set forth in Section 1.1.9 and does not restate those standards herein. SouthCoast Wind notes that none of the standards set forth in Section 1.1.9 are not applicable to the Project because the there is an exception to filling, removal, or grading when the Project is part of an approved alteration involving a water dependent use or activity or structure in accordance with CRMP Section 1.1.9 (B). The SouthCoast Wind 1 Project is a water dependent use, and therefore the setbacks are not applicate to the Project.

The SouthCoast Wind 1 Project is a transmission cable project designed to connect infrastructure in a BOEM offshore wind energy lease area located in federal waters to an interconnection point onshore that is a part of the regional electric grid. The Project must necessarily cross Rhode Island and Massachusetts state waters in order to achieve the Project's purpose of delivering renewable clean energy from the offshore wind clean energy resource to the New England regional grid. Therefore, SouthCoast Wind is of the opinion that the entire SouthCoast Wind 1 Project is water dependent.

4.2.6 Section 1.1.10 – Climate Changes and Sea Level Rise

Response: Based on a sea level rise assessment using StormTools (see Attachment Q - Coastal Hazard Analysis), the TJBs and approximately 900 ft (274 m) of the onshore cable route along Boyds Lane will be affected by a 5.0-ft (1.5-m) sea level rise. Buried transmission lines are often subject to groundwater

inundation. The cable and cable joints are designed for water submersion. The conductor and XLPE insulation both contain outer layers of water swellable tapes. All manhole hardware and cable supports will be non-corrosive to ensure the system can operate with corrosive water inside the manhole for extended periods. The submarine export cable will be installed at the landfalls via HDD methodology, which will result in the cable being buried below ground, transitioning up to the onshore and offshore HDD work areas. The design (offshore and at the landfall locations) anticipates that the cable will be submerged and incorporates watertight sheathing around the cable to protect the conductors. The design bears all the inherent features of a marine cable meant to be fully immersed in water and installed and operated at high-sea depths under considerable water pressures.

4.2.7 Section 1.1.11 – Coastal Buffer Zones

Response: SouthCoast Wind acknowledges these policies and notes that the Project will not negatively affect the benefits of the Coastal Buffer Zones.

The onshore export cables are routed within existing roadway ROW. The HDD work areas and associated cable construction will be primarily located within previously disturbed lands, namely public roadway ROW and parking areas. The HDD landfall construction areas proposed at the corner of Boyds Lane and Park Avenue, and the HDD landfall staging under consideration on land owned by Roger Williams University along Anthony Road (*aka* RWU North parcel HDD construction area) will require some mowing and removal of scrub-shrub vegetation and select trees to prepare a safe and level work area. The RWU North parcel HDD construction area located on the northeast side of Anthony Road is situated between the existing electric transmission ROW to the west and commercial development and the Montaup Golf course to the east. After construction is complete, the disturbed areas will be restored, stabilized, and reseeded. Should additional restoration of plantings be required, SouthCoast Wind will develop a supplemental restoration approach.

The onshore Project components do not lie within a RIDEM-mapped Natural Heritage Area (RIDEM 2021b)¹ for state-listed rare species.

4.3 CRMP SECTION 1.2.1 – TIDAL AND COASTAL PONDS

Response: Subparts A-D and F of Section 1.2.1 of the CRMP are not applicable to the Project and are therefore not restated herein; however, Subparts E and G of Section 1.2.1 are applicable to the Project and addressed below. Please see Figure 1-5, RI CRMC Water Use Designations (2011).

- E. Type 4 Multipurpose Waters
- 1. This category includes:

a. Large expanses of open water in Narragansett Bay and the Sounds which support a variety of commercial and recreational activities while maintaining good value as a fish and wildlife habitat; and

b. Open waters adjacent to shorelines that could support water dependent commercial, industrial, and/or high intensity recreational activities.

Response: A portion of the submarine export cables will be installed within Type 4 Multipurpose Waters. Type 4 Waters are located in the Project area extending from the 3 nautical mile limit north

¹ RIGIS. 2021. Rhode Island Department of Environmental Management.

toward the mouth of the Sakonnet River, and again in Mount Hope Bay north of Aquidneck Island to the Rhode Island and Massachusetts boundary.

2. Polices

a. The Council's goal is to maintain a balance among the diverse activities that must coexist in Type 4 waters. The changing characteristics of traditional activities and the development of new water dependent uses shall, where possible, be accommodated in keeping with the principle that the Council shall work to preserve and restore ecological systems.

Response: SouthCoast Wind proposes to install two HVDC submarine power cables and associated communications cabling in state waters to a target burial depth of 6.0 ft (1.8 m) beneath the seabed under Type 4 Waters. SouthCoast Wind has developed the Project engineering in consultation with stakeholders, including the U.S. Navy, to avoid conflicts with traditional activities and disturbance of sensitive ecosystems. Localized, short term, on-water use conflicts could occur during cable installation. In the longer term, the cables will be buried wherever practicable to avoid use conflicts and impacts to natural resources. Use conflicts will also be minimized where practicable through micro-routing of the offshore export cables to avoid sensitive marine resources, to the extent practicable and through avoidance of high-use seasons. Following construction, benthic habitat is expected to quickly recover.

b. The Council recognizes that large portions of Type 4 waters include important fishing grounds and fishery habitats, and shall protect such areas from alterations and activities that threaten the vitality of Rhode Island fisheries.

Response: Refer to Sections 3.3, 3.4, 3.5 and Attachment M - Benthic Habitat Modeling Report, and (COP, Appendix V – Commercial and Recreational Fisheries and Fishing Activity Report) of this Category B Assent application for a discussion of benthic and shellfish resources, finfish and EFH, and commercial and recreational fisheries, respectively. Potential impacts to these resources resulting from installation of the ECC are localized and short-term in nature and will occur over a limited portion of the available fishing grounds; therefore, installation and operation of the ECC will not threaten the vitality of Rhode Island fisheries. In addition, the burial depth of the ECC will allow static and mobile gear fisheries to operate along the cable corridor following installation.

c. Aquaculture leases

Response: Not Applicable. There are no aquaculture leases within the Project area.

d. The Council shall work to promote the maintenance of good water quality within the Bay. While recognizing that stresses on water quality will always be present in urban areas such as the Providence River, the Council shall work to promote a diversification of activities within the upper Bay region through the water quality improvement process.

Response: The Project is expected to result in short-term increased turbidity in the water column which will generally dissipate within hours in the Sakonnet River and Mount Hope Bay during marine cable installation. The potential for increased turbidity during cable installation was assessed through a quantitative model, which is summarized in the Hydrodynamics and Sediment Dispersion Modeling Report included in Attachment L. Also, the Project will not contribute to identified water quality impairments related to coliform bacteria in the area. Refer to Section 3.2.2.3 of this Category B Assent application for a discussion of these short-term impacts to water quality. SouthCoast Wind received its Section 401 Water Quality Certificate from RIDEM on March 14, 2024, which contained mutually agreed

upon conditions to avoid, minimize, and mitigate potential impacts to water quality in the upper Bay region.

G. Type 6 Industrial waterfronts and commercial navigation channels

1. These water areas are extensively altered in order to accommodate commercial and industrial water dependent and water enhanced activities.

Response: The ECC is mapped within a small portion Type 6 Industrial Waterfronts and Commercial Navigation Channels. These waters within the Project include a small portion of the Mount Hope Bay main shipping channel and the Tiverton shipping channel northeast of Portsmouth in Mount Hope Bay. SouthCoast Wind has consulted with the USACE and the USCG, and SouthCoast Wind has committed to routing the offshore export cables outside of Type 6 waters including the Mount Hope Bay main shipping channel, the Tiverton channel, and outside of the buffers to these federal navigation channels.

2. Policies

a. The Council's goals for Type 6 waters and adjacent lands under Council jurisdiction are to encourage and support modernization and increased commercial activity related to shipping and commercial fisheries.

b. Highest priority uses of Type 6 waters and adjacent lands under Council jurisdiction are:

(1) berthing, loading and unloading, and servicing of commercial vessels;

(2) construction and maintenance of port facilities, navigation channels, and berths; and

(AA) The Council shall prohibit activities that substantially detract from or interfere with these priority uses.

Response: The Project's offshore export cables will not interfere with the existing navigation channels, berthing, loading and unloading, and servicing of commercial vessels, or maintenance of port facilities.

c. The Council will encourage and support port development and modernization and increased economic activity in the marine industries by participating wherever possible in the joint long-range planning and development activities with other state and local agencies, including the R.I. Port Authority, the Department of Environmental Management, and coastal cities and towns.

Response: Noted. SouthCoast Wind is committed to supporting offshore wind education and supply chain and workforce development for the growing offshore wind industry in the South Coast of New England region. The Project will support the state's efforts to stimulate regional growth and economic activity while meeting the renewable energy goals in New England. In addition to the revenues SouthCoast Wind will pay to the state of Rhode Island for the submerged lands lease for the offshore route in state waters, SouthCoast Wind executed a Host Community Agreement with the Town of Portsmouth on January 16, 2024 that provides economic benefits to the town. In addition, SouthCoast Wind has been and will continue to work closely with the Rhode Island Commerce and the Supply Rhode Island Initiative to find ways to connect with Rhode Island businesses, in particular minority and womenowned business enterprises.

d. Through its Special Area Management Plan for Providence Harbor, and other planning initiatives, the Council will identify and designate acceptable disposal solutions and sites adequate to meet the need for dredging, and provide the assurances required by industry that channel depths will be maintained, while minimizing environmental effects ...

Response: Not applicable.

4.4 CRMP Section 1.2.2 – Shoreline Features

Subparts B, D, E and G of Section 1.2.2 are not applicable to the Project and are therefore not stated herein; however, Subparts A, C, and F of Section 1.2.2 are applicable to the Project and addressed below.

- A. Coastal Beaches
- 1. Policies
- a. The Council's goals are:

(1) to preserve the qualities of, and public access to those beaches which are an important recreational resource (adjacent to Type 1 and 2 waters);

Response: Island Park Beach, a Coastal Beach adjacent to Type 2 Waters is located south of the Project's landfall location at Boyds Lane and Park Avenue. No work is proposed at Island Park Beach. Access to Island Park Beach may be temporarily disrupted during the HDD staging and installation of the onshore export cables along Boyds Lane, but any disruption will be intermittent during the limited construction period. SouthCoast Wind will develop an onshore construction schedule to minimize effects to residents, members of the public, recreational uses and tourism-related activities to the extent feasible, such as scheduling nearshore construction activities to avoid the height of the summer tourist season. SouthCoast Wind will work and coordinate with stakeholders and visitors' bureaus to schedule outside of major events taking place onshore. SouthCoast Wind will also develop and implement an onshore traffic management plan prior to construction to address vehicular, bicycle, and pedestrian safety. Once construction begins, SouthCoast Wind will also have a construction webpage available to the public and will maintain an updated construction schedule and alert abutters, residents, and other stakeholders of construction locations, dates, activities, and traffic control measures.

As described in Section 3.1.1.1, the Montaup Country Club HDD Trajectory Bayshore also includes Coastal Beach adjacent to Type 2 Waters. This location is north of the country club main parking lot within the HDD trajectory where coastal beach abuts the privately owned Montaup Country Club golf course. To reiterate, the HDD landfall approach is designed to avoid the coastal beaches by installing the offshore export cables well below the surfaces of the beach to mitigate impacts to natural resources. Therefore, there will be no impacts to, or the qualities of, the coastal beach. Additionally, the coastal beach transitions upward into a flat upland that extends inland for approximately 125 ft between the Country Club and the beach. This area is dominated by red cedar trees, honeysuckle, bayberry, common reed, and grasses. The location of this strip of coastal beach adjacent to a private country club, make it unlikely that public access would be impacted by the related construction work to the HDD trajectory. Similar to work near Island Park Beach, where the HDD staging and installation of the onshore export cables will take place at the Montaup Country Club along Anthony Road, any disruption will be intermittent during the limited construction period.

(2) to prevent activities that will significantly disrupt longshore and/or onshore offshore beach processes, thereby creating an erosion or flooding hazard; and,

Response: The Project will not disrupt longshore and/or onshore-offshore beach processes. Utilizing an HDD methodology, the ECC will make landfall beneath the intertidal zone, coastal beach, manmade shoreline and coastal buffer zone. The use of HDD will avoid activities that could temporarily or permanently affect longshore or onshore beach processes.

(3) to prevent construction in high hazard areas; and

Response: High hazard areas associated with Project construction along the shoreline are limited to the FEMA-designated Coastal Velocity Zone (VE Elevations 15 and 17) and FEMA Zone AE Elevations 15 and 13 in other landward portions of the landfall work areas. The Project infrastructure will be entirely below ground within these flood zones and will not be affected by these hazard conditions.

Further, CRMC's Shoreline Change Mapping (RI CRMC 2003) indicates that the landfall section of shoreline has experienced little erosion and in fact have accreted at a rate of approximately 0.6 ft (0.19 m) per year (reference transect 3650 in Attachment Q - Coastal Hazard Assessment).

(4) to protect the scenic and ecologic value of beaches.

Response: All Project infrastructure near Island Park Beach (i.e., the ECC, TJBs, and onshore export cables) will be installed below-ground and, therefore, will not affect the scenic value of the beach. Also, no work is proposed at Island Park Beach and, therefore, the ecological value of the beach will not be affected.

Access to Island Park Beach may be temporarily disrupted during the HDD staging and installation of the onshore export cables along Boyds Lane, but any disruption will be intermittent during the limited construction period. SouthCoast Wind will develop an onshore construction schedule to minimize effects to residents, members of the public, recreational uses and tourism-related activities to the extent feasible, such as scheduling nearshore construction activities to avoid the height of the summer tourist season. SouthCoast Wind will work and coordinate with stakeholders and visitors' bureaus to schedule outside of major events taking place onshore. SouthCoast Wind will also develop and implement an onshore traffic management plan prior to construction to address vehicular, bicycle, and pedestrian safety. Once construction begins, SouthCoast Wind will also have a construction webpage available to the public and will maintain an updated construction schedule and alert abutters, residents, and other stakeholders of construction locations, dates, activities, and traffic control measures.

b. Alterations to beaches adjacent to Type 1 and Type 2 waters are prohibited except where the primary purpose of the project is to preserve or enhance the area as a natural habitat for native plants and wildlife. In no case shall structural shoreline protection facilities be used to preserve or enhance these areas as a natural habitat or to protect the shoreline feature.

Response: The Project will not alter a Coastal Beach. The HDD landfall approaches are designed to avoid the coastal beaches along the Sakonnet River and Mount Hope Bay by installing the offshore export cables well below the surfaces of the beaches.

c. Alterations to beaches adjacent to Type 3, 4, 5, and 6 waters may be permitted if: (subparts omitted)

Response: The Project will not alter a Coastal Beach. The HDD landfall approaches are designed to avoid the coastal beaches along the Sakonnet River and Mount Hope Bay by installing the offshore export cables well below the surfaces of the beaches.

d. Vehicular use of beaches where not otherwise prohibited or restricted by property owners or by private or public management programs is permitted only under the following conditions: (subparts omitted)

Response: Not applicable. The Project does not propose vehicular use on a Coastal Beach.

2. Prohibitions

a. The construction of new structures other than access ways, walkover structures, and beach facilities, are prohibited in setback areas.

Response: Not applicable. The Project will install the offshore export cables several meters below the seabed and beneath nearshore coastal wetlands using an HDD methodology and will not construct new structures that interfere with the Council's goals for the setback.

b. The use of plastic snow fencing is prohibited due to hazards presented to fish, marine mammals, and other wildlife in the aftermath of a storm event.

Response: SouthCoast Wind will comply.

c. Alterations to beaches adjacent to Type 1 and Type 2 waters are prohibited except where the primary purpose of the project is to preserve or enhance the area as a natural habitat for native plants and wildlife.

Response: Not applicable. The Project will not alter a Coastal Beach.

C. Coastal Wetlands

Response: SouthCoast Wind acknowledges the prerequisites, standards, and prohibitions set forth in Section 1.2.2(C) and does not restate those herein.

The Project will not alter Coastal Wetland. The onshore export cables are located within 10.5 ft (3.04 m) of Coastal Wetland W10 (see Attachment D - Onshore Engineering Drawings). However, construction and installation of the onshore export cables near Coastal Wetland W10 will be confined to within the existing paved roadway; thus, there will be no impact to or effect on existing functions and values of this Coastal Wetland. BMPs will also be used for the onshore construction work areas to control erosion and sedimentation in accordance with the Rhode Island Pollutant Discharge Elimination System (RIPDES) Construction General Permit requirements. BMPs to be installed will include catch basin inlet protection to prevent the discharge of sediments to sensitive coastal environments. SouthCoast Wind intends to meet with the Town of Portsmouth Building Official to provide a copy of the RIPDES application and to file under Chapter 320 of the Portsmouth Soil Erosion and Sediment Control Ordinance for the onshore construction activities proposed within Portsmouth.

F. Manmade Shorelines

Response: SouthCoast Wind acknowledges the prerequisites, standards, and prohibitions set forth in Section 1.2.2(F) and does not restate those herein.

The export cable landfall locations include Manmade Shoreline which currently consists of a 36-inchhigh concrete seawall parallel with Park Ave (refer to the Onshore HDD and SESC Engineering Drawings, Attachment D and Offshore Export Cable Engineering Drawings, Attachment C). Using an HDD method to install the export cables at the landfall location, the Project avoids alteration of the existing concrete seawall. SouthCoast Wind will have no ownership, repair, or maintenance interest in the existing Manmade Shoreline.

4.5 CRMP Section 1.2.3 – Areas of Historic and Archaeological Significance

A. Policies

1. The Council's goal is to, where possible, preserve and protect significant historic and archaeological properties in the coastal zone.

Response: SouthCoast Wind will avoid adverse impacts to historic or archaeological resources to the extent practicable. BOEM is required to satisfy Section 106 of the NHPA, which requires consultation with State Historic Preservation Offices (SHPOs), Tribal Historic Preservation Offices (THPOs), and other interested parties, as well as assessment and mitigation of unavoidable adverse effects to historic properties. SouthCoast Wind has submitted to BOEM a MARA (COP, Appendix Q). SouthCoast Wind also submitted to BOEM a TARA for the Project in Portsmouth, including Phase I site identification archaeological testing, prepared by PAL (COP, Appendix R). Copies of the TARA and MARA have been provided to the RIHPHC and relevant THPOs.

No adverse impacts to historic or archaeologic resources are anticipated from construction of the onshore components of the Project. Phase I subsurface archaeological testing performed by PAL identified two archaeological sites. PAL recommends that these sites are potentially eligible for listing in the National Register under Criteria A and D. Based upon the archaeological field investigations performed by PAL, PAL recommends avoidance of the two archaeological sites and archaeological materials that may be identified during construction. PAL further recommended archaeological monitoring of during HDD operations to document any pre- or post-Contact archaeological features or deposits that may be encountered during boring for the HDDs. SouthCoast Wind also developed and will implement a Historic Properties Treatment Plan (Attachment X) to minimize and mitigate adverse effects to archaeological sites within the onshore Project Area in Portsmouth, Rhode Island. This Historic Properties Treatment Plan has been shared with RIHPHC and the Narragansett Indian Tribe for review and comment as part of the Section 106 consultation.

2. Preservation of significant historic and archaeological properties is a high priority use of the coastal region. Activities which damage or destroy important properties shall be considered a low priority.

Response: As noted above, SouthCoast Wind will avoid adverse impacts to historic and archaeological resources to the extent practicable. SouthCoast Wind will adhere to recommendations from the RIHPHC by having cultural resources monitors on-site during construction in areas determined to be archaeologically sensitive, and to allow the cultural resources monitors to investigate any areas of interest prior to advancing construction. Any unavoidable adverse impacts will require mitigation, as determined through BOEM's Section 106 Consultation process.

3. The Council shall require modification of or shall prohibit proposed actions subject to its jurisdiction where it finds a reasonable probability of adverse impacts on properties listed in the National Register of Historic Places. Adverse impacts are those which can reasonably be expected to diminish or destroy those qualities of the property which make it eligible for the National Register of Historic Places. The Council shall solicit the recommendations of the RI Historical Preservation and Heritage Commission regarding impacts on such properties.

Response: BOEM is consulting with the RIHPHC in order to satisfy Section 106 of the NHPA. SouthCoast Wind has shared information and data with the RIHPHC to support their review of the Project under Section 106 of the NHPA.

4. Prior to permitting actions subject to its jurisdiction on or adjacent to properties eligible for inclusion (but not actually listed in the National Register of Historic Places), and/or areas designated as historically or archaeologically sensitive by the RI Historical Preservation and Heritage Commission as the result of their predictive model, the Council shall solicit the recommendations of the Commission regarding possible adverse impacts on these properties. The Council may, based on the Commission's recommendations and other evidence before it, including other priority uses of this Program, require modification of or may prohibit the proposed action where such adverse impacts are likely.

Response: BOEM is consulting with the RIHPHC in order to satisfy Section 106 of the NHPA. SouthCoast Wind has shared information and data with the RIHPHC to support their review of the Project under Section 106 of the NHPA. Additionally, as mentioned above, a Historic Properties Treatment Plan (Attachment X) was developed to minimize and mitigate adverse effects to archaeological sites within the onshore Project Area in Portsmouth, Rhode Island.

5. Structural shoreline protection facilities may be permitted in Type 1 Waters provided that the structure is necessary to protect a structure which is currently listed in the National Register of Historic Places.

Response: Not applicable.

4.6 CRMP SECTION 1.3.1 – IN TIDAL AND COASTAL POND WATERS AND THEIR CONTIGUOUS AREAS

Response: Subpart A of Section 1.3.1 is reviewed in Section 1.3.2 of this Category B Assent application. Subparts B, C, F-J, and R of Section 1.3.1 of the CRMP are applicable to the Project and addressed in the following subsections. Subparts A, D, E, and K-Q of Section 1.3.1 are not applicable to the Project and are therefore not restated herein.

4.6.1 CRMP Section 1.3.1(B) – Filling, Removing, or Grading of Shoreline Features

1. Policies

a. Established agricultural practices in areas contiguous to shoreline features are excluded from this section.

Response: Not applicable.

b. All filling, removing or grading activities shall be done in accordance with the policies and standards of this section and the standards and specifications set forth in the most recent edition of the Rhode Island Soil Erosion and Sediment Control Handbook.

Response: No filling or grading will occur on the shoreline or coastal features. The Boyds Lane HDD construction area is located approximately 175 ft (11 m) from the shoreline feature (Seawall) and approximately 35 ft (11 m) form the coastal features (Salt Marsh); and the HDD construction area at the Montaup Country Club is located approximately 975 ft (297 m) inland from the coastal feature (see

Attachment D Onshore HDD and SESC Engineering Drawings). The onshore export cables traverse 200-ft contiguous area of coastal features at various locations along the route. Approximately 1,751 ft of the onshore cable along Boyds Lane is located within the 200-ft contiguous area extending from the manmade shoreline and Coastal Wetlands W8, W10 and W11. Approximately 1,904 ft of the onshore cable along Anthony Road is located within the 200-foot Contiguous Area extending from Coastal Wetland W8 and from Old Orchard Cove.

Temporary excavation and backfill of the HDD landfall work areas and trenching for the onshore export cable will be carried out with appropriate sediment and erosion controls in place that are consistent with the Rhode Island Soil Erosion and Sediment Control Handbook (see Soil Erosion and Sediment Control Plan, Attachment D).

c. All new activities subject to §§ 1.3.1(C) (residential, commercial, and industrial structures), 1.3.1(M) and 1.3.3 of this Part, or those activities which disturb more than five thousand (5,000) square feet of land on a site shall prepare and implement an erosion and sediment control plan approved by the Council which references all necessary practices for erosion and sediment control. All erosion and sediment control plans shall be consistent with applicable policies and standards contained in the Rhode Island Coastal Resources Management Program and the standards and specifications set forth in the most recent edition of the Rhode Island Soil Erosion and Sediment Control Handbook. All erosion and sediment control plans shall be strictly adhered to.

Response: Refer to SouthCoast Wind's SESC Plan (Attachment D) prepared for RIPDES Program authorization under the Construction General Permit. All SESC plans are consistent with applicable policies and standards in the CRMP, and the standards and specifications set forth in the most recent edition of the Rhode Island SESC Handbook.

d. The Council recognizes the most recent version of the Rhode Island Soil Erosion and Sediment Control Handbook, and its amendments, published jointly by the Rhode Island Department of Environmental Management and the United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS), as containing appropriate Best Management Practices (BMP) for use within the CRMC's jurisdiction. All erosion and sediment control plans shall be consistent with this manual. Applicants are also encouraged to consult the most recent version of the Rhode Island Stormwater Design and Installation Standards Manual during the preparation of their erosion and sediment control plan in order to ensure consistency with the Council's stormwater management requirements (see § 1.3.1(F) of this Part).

Response: SouthCoast Wind will implement an SESC Plan (see Attachment D) during trenching and excavation activities, in accordance with the Rhode Island SESC Handbook, and in accordance with approved plans and permit requirements. The erosion control devices will function to mitigate construction-related soil erosion and sedimentation and will also serve as the limits of disturbance. A majority of the onshore construction will occur within previously disturbed areas such as public road ROW. A separate permit application will be filed by SouthCoast Wind under the RIPDES General Permit for Storm Water Associated with Construction Activities. We note that the utility installation work in roadways does not trigger the Stormwater Management Design and Installation Rules in accordance with Minimum Standard 6 A.4. Pavement excavation and patching that is incidental to the primary purpose, such as replacement of a collapsed storm drain, is not classified as redevelopment.² In this instance, the Project purpose is the installation of underground export cables.

² Rhode Island Stormwater Design and Installation Standards Manual, Amended March 2015.

e. Routine filling, removing, or grading of bulk materials (e.g. coal, salt, etc.) that occurs as part of the normal operations of an existing bulk transfer facility (e.g., the Port of Providence) which is adjacent to Type 6 waters is excluded from the provisions of this section...

Response: Not applicable.

f. Filling, removing, or grading activities shall be reviewed at the Category B level when:

(1) the filling or removing involves more than 10,000 cubic yards of material;

(2) the affected area is greater than two acres; or

(3) the affected area is a designated historic area or archaeologically sensitive site.

Response: Construction of the onshore Project components will disturb more than 1.0 ac of land, though this disturbance will be sequential and not occur at one given time. SouthCoast Wind understands the Project is being reviewed at the Category B level. The majority of the onshore construction will occur within previously disturbed areas such as paved public roadway ROW and parking areas and restoration efforts, including final grading, pavement restoration and installation of permanent erosion control devices, will be completed following Project construction.

2. Prohibitions (list omitted)

Response: Not applicable. SouthCoast Wind does not propose any activities listed in this subpart.

3. Standards

a. The following standards apply in all cases where filling, removal, or grading is undertaken:

(1) Fill slopes shall have a maximum grade of thirty percent (30%);

Response: Excavations associated with the landfall work areas and the onshore export cables are temporary and will be backfilled and restored to pre-existing grades and conditions, in accordance with specifications stipulated by the RIDOT and the Town of Portsmouth DPW.

(2) All excess excavated materials, excess fill, excess construction materials, and debris shall be removed from the site and shall not be disposed in tidal waters or on a coastal feature;

Response: Excess excavated material, excess fill, excess construction materials, and debris will be collected, sorted for recycling or disposal, and re-interred within the construction footprint if appropriate or transported offsite to an appropriately approved, licensed disposed facility (e.g., soils excavated from the trench that are to be displaced by the concrete duct bank). Waste storage and disposal will be conducted in accordance with applicable state and federal requirements.

(3) Disturbed uplands adjacent to a construction site shall be graded and re-vegetated or otherwise stabilized to prevent erosion during or immediately after construction. Nutrients shall be applied at rates necessary to establish and maintain vegetation without causing significant nutrient runoff to surface waters;

Response: Portions of the Project are within the 200-ft contiguous areas to coastal wetlands, though the proposed construction zone is located predominantly within previously disturbed public road ROW. The onshore export cable installation will be carried out following the Project-specific SESC Plan. Stabilization of disturbed soil and ground surfaces will be undertaken in accordance with the time frames provided in the RIPDES Construction General Permit (to be filed at a later date with the state of Rhode Island).

(4) Removal or placement of sediments along jetties or groins may be permitted only as part of an approved dredging or beach nourishment project (see § 1.3.1(I) of this Part);

Response: Not Applicable. SouthCoast Wind does not propose removal or placement of sediments along jetties or groins.

(5) All fill shall be clean and free of materials which may cause pollution of tidal waters;

Response: Where excavated materials are unsuitable for re-use, certified clean and structurally acceptable fill material will be imported to the site, in accordance with RIDEM Remediation Regulation requirements, as applicable. Concrete trucks will be mobilized to the Project work zones to deliver concrete for the duct banks to be poured in-place. The TJBs will be delivered to the sites in sections and lowered into excavations to construct the final TJBs. Temporarily stockpiled soils will be backfilled over the newly installed duct bank, stabilized, and restored. As such, no significant or long-term impact is expected.

(6) Cutting into rather than filling out over a coastal bank is the preferred method of changing upland slopes; and

Response: No coastal bank will be altered by the Project activities. The coastal features within the Project area include coastal beach backed by manmade shoreline and coastal wetlands. The Project will not alter existing coastal features as both the landfall and the exit from Aquidneck Island will use HDD. HDD would enable cable installation to pass beneath the nearshore area, intertidal zone, coastal beach, manmade seawall, and adjoining coastal dune areas while minimizing impact to these marine resources.

(7) Limit the application, generation, and migration of toxic substances and ensure that toxic substances are properly stored and disposed of onsite in accordance with all applicable federal, state, and local requirements.

Response: The Project does not include application of toxic substances as part of the construction activities. SouthCoast Wind will require its construction contractor to ensure that all vehicles and equipment are in proper working condition prior to arriving on-site. The construction contractor will implement a spill control, containment, and countermeasures plan to respond to any inadvertent spills or releases, including adhering to the RIDEM spill notification requirements. Refueling of equipment and storage of fuels and other lubricants and fluids may impact surface waters if a release were to occur. Proper storage of fuels and other lubricants, as well as the use of secondary containment during refueling will reduce the chances of inadvertent release to the environment. Temporary containment will be required for equipment that cannot be practically moved and must be parked overnight within 100 ft (30.5 m) of a wetland or other water resources. SouthCoast Wind will use a secondary contain any minor amounts of fuel inadvertently dripped or released during refueling.

b. The following upland and shoreline earthwork standards shall be required in those cases where the Council determines that additional measures are warranted in order to protect the environment of the coastal region. Such requirements shall be listed on Assents as stipulations.

Response: Noted, see responses below.

c. For earthwork on shoreline features:

(1) Prior to initiation of construction, the contractor may be required to meet on site with the CRMC staff to discuss and clarify the conditions of the permit;

Response: Noted; however, no earthwork on a shoreline feature is proposed.

(2) A re-vegetation plan shall be submitted for review and approval when construction is undertaken on a barrier beach. This plan shall describe plant material, methods of planting, time of planting, soil amendments, and maintenance;

Response: Not applicable. The Project does not include construction on a barrier beach.

(3) Construction materials and excavated soils shall not be placed or stored on any shoreline feature excepting developed barrier beaches and manmade shorelines;

Response: Excavated material is not proposed to be stored on a shoreline or coastal feature.

(4) All disturbed soils shall be graded smooth to a maximum 3:1 slope and re-vegetated immediately after construction, or temporarily stabilized with mulch, jute matting, or similar means until seasonal conditions permit such re-vegetation;

Response: No new slopes will be graded within the CRMC contiguous area. All excavations associated with the landfall work areas and onshore export cable will be backfilled and graded to restore preconstruction grades and conditions. Soils and ground surfaces disturbed during construction will be stabilized, repaved or re-vegetated with approved seed mixtures and native plant species.

(5) In sensitive areas, work shall be carried out from areas above slope from coastal features. Machinery and construction equipment shall normally not be allowed to operate on a coastal wetland. For unavoidable work on a coastal wetland, a protective cover shall be deployed to minimize disturbance;

Response: Equipment will not be operated on coastal features or on a coastal wetland.

(6) In instances where the CRMC permits temporary disturbance of a coastal feature, shoreline slope, buffer zone, or area of beach grass, the disturbed area shall be completely restored by the owner under the guidance of CRMC staff; and

Response: Disturbance of coastal or shoreline features is not proposed. The landfall work areas and onshore export cables are to be located within previously disturbed public road ROW, paved areas and grassed shoulders. Segments of the onshore construction will occur within the 200-ft contiguous area to coastal features. These disturbed areas will be stabilized and restored as a post-construction requirement of the Project. At the landfall locations, the offshore export cables will be installed using HDD and will avoid coastal and shoreline features.

(7) Concrete structures which will come in contact with salt water shall be constructed with concrete which utilizes a Type II or Type V air entraining Portland cement or an equivalent that is resistant to sulfate attacks of seawater.

Response: Not applicable. No onshore concrete structures are proposed within shoreline features for the Project.

d. For upland earthwork measures shall be taken to minimize erosion:

(1) A line of staked hay bales or other erosion preventing devices (including diversion ditches, check dams, holding ponds, filter barrier fabric, jute or straw mulch) shall be placed at the downslope perimeter of the proposed area of construction prior to any grading, filling, construction, or other earthwork. Hay bales shall be toed-in to a depth of 3 to 4 inches and maintained by replacing bales

where necessary until permanent re-vegetation of the site is completed. No soils or other materials are authorized to pass beyond the bale line;

Response: All perimeter soil erosion and sediment controls will be selected and installed consistent with the latest version of the Rhode Island SESC Handbook. The erosion control devices will function to mitigate construction-related soil erosion and sedimentation and will also serve as a physical boundary to separate construction activities from resource areas. Refer to SouthCoast Wind's Onshore Engineering Drawings and SESC Plan (Attachment D).

(2) All slopes shall be returned to the original grade unless otherwise specified;

Response: Noted. All excavations associated with the landfall work areas and onshore cable will be backfilled and graded to restore pre-construction grades and conditions. The RIDOT and Town of Portsmouth DPW are expected to specify their restoration requirements, including appropriate seed mixtures and plantings that are to be implemented post-construction.

(3) Where natural or manmade slopes are or have become susceptible to erosion, the slopes shall be graded to a suitable slope and re-vegetated with thick rooting brush vegetation. Mulch shall be applied as necessary to provide protection against erosion until the vegetation is established;

Response: The Project SESC Plan and notes illustrated on Onshore HDD and SESC Engineering Drawings (Attachment D) specify the construction BMPs to avoid and mitigate soil erosion. The measures will comply with the latest version of the Rhode Island Soil Erosion and Sediment Control Handbook. The onshore export cables will be installed within previously disturbed roadway ROW and parking areas which will be restored to their pre-construction conditions when the Project is completed. The RIDOT and Town of Portsmouth DPW are expected to specify their restoration requirements, including appropriate seed mixtures and plantings that are to be implemented post-construction.

(4) Construction shall be timed to accommodate stream and/or runoff flow and not allow flows over exposed, un-stabilized soils, or into or through the excavation. Flows shall not be restricted in such a manner that flooding or inhibition or normal flushing occurs;

Response: Not applicable. The Project does not involve in-stream work. Construction will occur over or under existing culverts to avoid impacts to ambient stream flows.

(5) Any pumping of groundwater which may be necessary for de-watering shall be discharged into sediment traps consisting of a minimum of staked hay bale rings enclosing crushed stone or trap rock of a size sufficient to disperse inflow velocity. Hay bales shall be recessed 4 to 6 inches into the soil and maintained; and

Response: Noted. All groundwater discharges will be governed by the applicable limitations of the RIPDES General Permit for Construction Activity. If groundwater is encountered, SouthCoast Wind will require the construction contractor to implement industry standard dewatering methods to include, but not be limited to, the use of temporary settling basins, dewatering filter bags, or temporary holding or frac tanks. The dewatering wastewaters will be directed to well-vegetated uplands away from wetlands or other water resources to allow for infiltration to the soil of the discharged water.

(6) There shall be no discharge of sediment laden waters into storm drains. Storm drains shall be surrounded by staked hay bales to intercept sediment.

Response: Storm drain inlet protection will be provided. Discharges will be directed to temporary settling basins, dewatering filter bags, or temporary holding or frac tanks away from sensitive receptors

and storm drains. Discharges will be directed to well-vegetated uplands away from wetlands or other water resources to allow for infiltration to the soil of the discharged water.

(e) For any disturbance of steep slopes (over 15 percent): (standards omitted)

Response: Not applicable. Existing steep slopes over 15% will not be altered by the Project.

4.6.2 CRMP Section 1.3.1(C) – Residential, Commercial, Industrial, and Recreational Structures

Response: SouthCoast Wind acknowledges the policies and prerequisites set forth in Section 1.3.1(C)(1) and (2) and does not restate those herein. The export power cables and associated communications cabling will be co-located within a single corridor through the Sakonnet River, make intermediate landfall on Aquidneck Island in Portsmouth, Rhode Island, traverse the Town of Portsmouth underground for approximately 2.0 mi (3.2 km), and return to the water in Mount Hope Bay, with both landfall and exit from Aquidneck Island using HDD to minimize impacts. There will be two landfall work areas on Aquidneck Island in Portsmouth for HDD construction activities. One landfall work area on the northeast (Sakonnet River) side of Portsmouth will occupy the corner of Boyds Lane and Park Avenue. One landfall work area on the northwest (Mount Hope Bay) side of Portsmouth will be located either within the Montaup Country Club parking lot (preferred) or within land owned by Roger Williams University on the northern side of Anthony Road (*aka* RWU North Parcel, alternate HDD construction area).

The Project does not require public water or sewer system connections, or permanent on-site water withdrawal and/or sewage disposal. Temporary water withdrawal from municipal hydrants will be required to facilitate the HDD operations SouthCoast Wind will coordinate with the Town of Portsmouth to obtain the necessary approval and use of a water meter at the hydrant(s) to monitor withdrawal volumes and rates.

At the municipal level, street opening and curb cuts permits and/or easements for the portion of the Project on Boyds Lane, Park Avenue, and/or Anthony Road will be obtained from the Town of Portsmouth prior to construction.

3. Prohibitions

Subparts 1.3.1(C)(3)(a-f) do not apply to the Project. Subpart 1.3.1(C)(3)(g) relates to activities proposed in the 200-foot Contiguous Area landward of the coastal feature.

Response: SouthCoast Wind provides the following responses:

- Filling, removal, and grading of shoreline features See Section 4.6.1 of this application.
- Residential buildings Not applicable.
- Commercial and industrial structures features See Section 4.6.2 of this application
- Recreational structures Not applicable.
- Municipal sewage treatment facilities Not applicable.
- Onsite wastewater treatment systems Not applicable.
- Point discharges Not applicable. See Section 4.6.3 of this application.

- Point discharges other Not applicable. See Section 4.6.3 of this application.
- Structural shoreline protection Not applicable.
- Non-structural shoreline protection Not applicable.
- Upland dredged material disposal Not applicable.
- Energy related structure See Section 4.6.5 of this application.
- Mining Not applicable.
- Construction of public roads, bridges, parking lots, railroad lines, and airports Not applicable.
- Associated residential structures Not applicable.

4. Standards

a. General:

(1) See standards given in "Filling, Removing, or Grading of Shoreline Features" in § 1.3.1(B) of this Part, as applicable.

Response: Refer to Section 4.6.1 of this Category B Assent Application.

(2) See standards given in "Sewage Treatment and Disposal" in § 1.3.1(F) of this Part, as applicable.

Response: Refer to Section 4.6.3 of this Category B Assent of this Application.

(3) Commercial and Industrial docks, wharves and piers shall be designed and certified by a registered professional engineer.

Response: Not applicable.

(4) All commercial and industrial structures and operations in tidal waters shall have a defined structural perimeter for in-water facilities, which shall describe and limit that area in which repair or alteration activities may take place. Structural perimeters shall be defined on the basis of in-water facilities in place as of September 30, 1971, or subsequently assented structures. All new or modified structural perimeter limit lines shall be a maximum of ten (10) feet (3 m) outside of the structures. The structural perimeter limit (SPL) shall be designated on all plans with the corners designated by their State Plane Coordinates. However, in all cases the SPL shall be setback at least fifty (50) feet (15.24 m) from approved mooring fields. In addition, the SPL shall be setback at least three times the authorized project depth from federal navigation projects (e.g. navigation channels and anchorage areas).

Response: SouthCoast Wind is seeking a license and/or submerged lands lease for the Project's renewable energy infrastructure and activities within tidal waters of Rhode Island, rather than a structural perimeter limit, from CRMC pursuant to CRMC's Enabling Act, R.I.G.L. Section 46-23-1 et seq. and applicable CRMC regulations. The Project's offshore export cable is a submarine facility buried below the sea floor and will not conflict with navigation or preclude other uses of Rhode Island state waters. The Project's offshore export cable corridor was sited to avoid conflicts with Department of Defense use areas and navigational areas identified by the USCG, as applicable.

(5) It is permissible to have vessels berthed at a facility outside of the structural perimeter limit if, in the opinion of the Executive Director, there are no conflicts with other users, impacts to resources, or

conflicts with the DEM Shellfish Program. All vessels shall be berthed parallel to piers and docks if outside of the structural perimeter limit.

Response: Not applicable.

b. All new or existing commercial marine facilities (CMF) as defined in § 1.1.2 of this Part shall perform fitness of purpose inspections in accordance with the CRMC "Guidelines for Fitness of Purpose Investigations and Certifications." The addition of new structural components or systems on existing CMFs that are structurally independent of the existing components or systems shall be considered as "new." (subparts omitted)

Response: Not applicable.

c. Residential, commercial, industrial, and recreational buildings:

(1) Excavation and grading shall be restricted to those activities and areas necessary for the construction of the building and/or appurtenant structures (see § 1.3.1(B) of this Part).

(2) Applicants shall be required to reduce the inflow of pollutants carried by surface runoff in accordance with the policies and standards contained in § 1.3.1(F) of this Part and as detailed in the most recent version of the Rhode Island Stormwater Design and Installation Standards Manual.

Response: SouthCoast Wind will comply with this standard. SouthCoast Wind will be filing separately with the RIDEM to obtain coverage under the RIPDES Stormwater Construction General Permit. Please refer to Attachment D Onshore Engineering Drawings - SESC Measures, Onshore Engineering and HDD to illustrate the soil and erosion control BMPs.

6. Flood zone construction. In many instances lands under the jurisdiction of the CRMC are by virtue of their topographic position subject to flooding. The Federal Emergency Management Agency (FEMA) has evaluated the risk of flooding and has established one hundred (100) year return frequency elevations of the flood waters (i.e., the Base Flood Elevation, (BFE) for all of the State's coastal communities. The approximate limits of the flood zones and the associated Base Flood Elevations are shown on the FEMA Flood Insurance Rate Maps, which are commonly available at each communities building official's office. In recognition that structures located within Flood Hazard Zones must be designed to meet more severe conditions than those not, the Rhode Island State Building Code, (RISBC) contains specific requirements for flood zone construction.

Response: Based on available Flood Insurance Rate Map Panels, portions of the onshore cable route are located in FEMA-designated Coastal Zone VE with base flood elevations of 15 ft and 17 ft and FEMA Zone AE with base flood elevations 15 ft and 13 ft. The other portions are within areas mapped as Zone X or unmapped areas. The Project infrastructure will be entirely below ground within these flood zones and will not be affected by these hazard conditions. Compliance with the Rhode Island State Building Code will be addressed through consultation with the State Building Commission and is demonstrated by the enclosed signed Building Official Form.

a. The CRMC requires all applicants proposing construction within flood hazard zones to demonstrate that all applicable portions of the RISBC are to be met. This demonstration shall be made by submitting

to the CRMC at the time of application a building official's form properly completed and signed by the local building official.

Response: The signed Building Official Form (Town of Portsmouth) is provided herein with this Application found in Attachment S.

7. Construction in flood hazard zones. In addition to the requirements of the RISBC, the CRMC suggests that applicants incorporate the following items into their proposed designs:

a. For construction in wave velocity (V) zones as defined by FEMA Flood Insurance Rate Maps: (list omitted)

Response: Not applicable. SouthCoast Wind does not propose above grade structures within the FEMA velocity zone.

b. For construction in coastal (A) Flood Zones. (list omitted)

Response: Portions of the landfall work areas and onshore export cables are located within coastal AE and VE zones. These facilities will be entirely below grade and are not intended for habitation.

4.6.3 CRMP Section 1.3.1(F) – Treatment of Sewage and Stormwater

Response: SouthCoast Wind acknowledges the policies and prerequisites set forth in Section 1.3.1(F) (1) and (2) and does not restate those herein.

The utility installation work in roadways does not trigger the Stormwater Management Design and Installation Rules in accordance with Minimum Standard 6 A.4. *Pavement excavation and patching that is incidental to the primary purpose, such as replacement of a collapsed storm drain, is not classified as redevelopment.*³ The Project will not result in the construction or introduction of any new aboveground facilities, buildings or new impervious areas, and therefore a stormwater management design is not *required.* SouthCoast Wind will be filing separately with the RIDEM to obtain coverage under the RIPDES Stormwater Construction General Permit. Please refer to Onshore HDD and SESC Engineering Drawings (Attachment D) to illustrate the soil and erosion control and construction BMPs. SouthCoast Wind will also file for approval under Chapter 320 of the Portsmouth Soil Erosion and Sediment Control Ordinance.

The Project does not propose any new or increased discharges and will not directly discharge to salt marshes, tidal channels, unconsolidated coastal banks or bluffs. The Project does not require public water or sewer system connections, or on-site water withdrawal and/or sewage disposal. Temporary water withdrawal from municipal hydrants will be required to facilitate the HDD operations. SouthCoast Wind will coordinate with the Town of Portsmouth to obtain the necessary approval and use of a water meter at the hydrant(s) to monitor withdrawal volumes and rates.

The Project requires authorization under the RIPDES Construction General Permit and requires a Section 401 Water Quality Certification from RIDEM. The Project received the 401 Water Quality Certification from RIDEM on March 14, 2024.

³ Rhode Island Stormwater Design and Installation Standards Manual, Amended March 2015

3. Prohibitions

a. Point source discharges of sewage and/or stormwater runoff are prohibited on unconsolidated coastal banks and bluffs.

Response: Not applicable. SouthCoast Wind will not have any such permanent point source discharges.

b. New and enlarged stormwater discharges to the high salt marsh environment bordering Type 1 and Type 2 waters and within salt marshes designated for preservation which border Type 3, 4, 5, and 6 waters are prohibited. Stormwater discharges to existing well flushed tidal channels within high marshes shall not be subject to this prohibition. All such discharges, however, shall meet the applicable standards contained herein.

Response: Not applicable. SouthCoast Wind will not have any new or enlarged discharges to salt marsh or tidal channels.

c. Point source discharges of sewage are prohibited in Type 1 waters.

Response: Not applicable. SouthCoast Wind will not generate or discharge sewage.

4. Standards

a. For Onsite Wastewater Treatment Systems (OWTS):

Response: Not applicable. SouthCoast Wind does not propose an onsite wastewater treatment system.

b. The requirements of the RIDEM Stormwater Management, Design and Installation Rules (250-RICR-150-10-8) shall apply to all CRMC applications.

Response: The utility installation work in roadways does not trigger the Stormwater Management Design and Installation Rules in accordance with Minimum Standard 6 A.4.

c. For stormwater management the Council requires, in accordance with the "Smart Development for a Cleaner Bay Act of 2007" (see R.I. Gen. Laws Chapter 45-61.2), that all applicable projects meet the following requirements:

(1) Maintain pre-development groundwater recharge and infiltration on site to the maximum extent practicable;

(2) Demonstrate that post-construction stormwater runoff is controlled, and that post-development peak discharge rates do not exceed pre-development peak discharge rates; and

Response: The utility installation work in roadways does not trigger the Stormwater Management Design and Installation Rules in accordance with Minimum Standard 6 A.4.

(3) Use low impact-design techniques as the primary method of stormwater control to the maximum extent practicable.

Response: Not applicable.

d. Residential, commercial, industrial or public recreational structures as defined in § 1.3.1(C) of this Part shall provide treatment and management of stormwater runoff for all new structural footprint expansions, including building rooftops, greater than six (600) hundred square feet in size and any new impervious pavement, driveways, sidewalks, or parking areas, regardless of size. Applicable projects shall submit a stormwater management plan that demonstrates compliance with the eleven (11) minimum stormwater management standards and performance criteria as detailed in the most recent version of the RIDEM Rhode Island Stormwater Design and Installation Standards Manual. Single-family dwelling projects, however, may meet these provisions as detailed below in §§ 1.3.1(F)(3)(h) and (i) of this Part, below.

Response: The utility installation work in roadways does not trigger the Stormwater Management Design and Installation Rules in accordance with Minimum Standard 6 A.4. No aboveground structures are to be constructed within the Town of Portsmouth. Pavement excavation and patching that is incidental to the primary purpose, such as replacement of a collapsed storm drain, is not classified as redevelopment.⁴

e. Roadways, highways, bridges, and other projects subject to § 1.3.1(M) of this Part shall.... provide treatment and management of stormwater runoff for all new impervious surfaces. These projects shall submit a stormwater management plan that demonstrates compliance with the eleven (11) minimum stormwater management standards and performance criteria as detailed in the most recent version of the RIDEM Rhode Island Stormwater Design and Installation Standards Manual. Any improvement projects to existing roads, highways and bridges and other projects subject to § 1.3.1(M) of this Part that result in the creation of new impervious surfaces shall provide treatment and management of stormwater as above for all new impervious surfaces. Maintenance activities such as pavement resurfacing projects, replacement of existing drainage systems, minor roadway repairs, or emergency roadway and drainage repairs are excluded from these requirements provided the project does not result in an expansion of the existing impervious surface area, new or enlarged stormwater discharges, or the removal of roadway materials down to the erodible soil surface of ten thousand (10,000) square feet or more of existing impervious area.

Response: The Project does not propose any new roadways, but SouthCoast Wind will bury the onshore export cables underground beneath local roadways or public road ROW in the Town of Portsmouth. Soil erosion and sediment control measures will be implemented during construction complying with applicable standards.

Because the Project does not propose any new public roadways, bridges, parking lots, railroad lines, and airports subject to Section 1.3.1(M), the policies prohibitions and standards in 1.3.1(M) are not applicable to the Project.

f. Unless exempted as a maintenance activity herein, any redevelopment that disturbs ten thousand (10,000) square feet or more of existing impervious surface coverage shall comply with Minimum Stormwater Standard 6: Redevelopment and Infill Projects of the RIDEM Stormwater Management, Design and Installation Rules (250-RICR-150-10-8). Maintenance activities subject to § 1.3.1(N) of this Part are excluded from these requirements provided there is no expansion of the existing impervious surface area and no new or enlarged stormwater discharges resulting from the maintenance activity.

Response: The onshore export cables and landfall work area construction is exempt from Minimum Standard 6 as stipulated under Minimum Standard 6 A.4. Pursuant to 250-RICR-150-10-8.12(A)(4), pavement excavation and patching that is incidental to the primary project purpose, such as replacement of a collapsed storm drain, is not classified as redevelopment. The Project will be installed primarily within existing public road ROWs and pavement excavation and patching will be incidental to

⁴ Rhode Island Stormwater Design and Installation Standards Manual, Amended March 2015.

the primary Project purpose, thus the Project is not classified as roadway redevelopment. Should any existing stormwater features need to be displaced or replaced, SouthCoast Wind will consult with the RIDOT and/or the Town of Portsmouth DPW.

g. All stormwater management plans shall take into consideration potential impacts associated with the discharge of stormwater runoff into the coastal environment. Applicants shall address these potential impacts to include, but not limited to, the following:

(1) Impacts to coastal wetlands such as changes in species composition due to the introduction of freshwater to high marsh areas;

(2) Changes in the salinity of tidal receiving waters;

(3) Thermal impacts to receiving waters;

(4) Effects of introducing stormwater runoff to receiving waters that have low dissolved oxygen concentrations; and

(5) Other potential water quality impacts as may be identified by CRMC staff.

Response: The utility installation work in roadways does not trigger the Stormwater Management Design and Installation Rules in accordance with Minimum Standard 6 A.4. SouthCoast Wind will be filing separately with the RIDEM to obtain coverage under the RIPDES Stormwater Construction General Permit. Please refer to Onshore HDD and SESC Engineering Drawings (Attachment D) to illustrate the soil and erosion control BMPs.

h. Applicants for single-family residential dwellings and accessory structures ...

Response: Not applicable. SouthCoast Wind does not propose any single-family dwellings.

i. Applicants for single-family dwellings and accessory structures located on CRMC-designated barriers shall manage stormwater runoff as follows: (list omitted)

Response: Not applicable. SouthCoast Wind does not propose any single-family dwellings or accessory structures located on CRMC-designated barriers.

j. New or enlarged stormwater discharges to salt marshes and well flushed tidal channels within high marshes ...

Response: Not applicable. SouthCoast Wind does not propose any new or enlarged discharges to salt marsh or tidal channels.

k. Stormwater open drainage and pipe conveyance systems must be designed to provide adequate passage for flows leading to, from, and through stormwater management facilities for at least the ten (10) year, twenty-four (24) hour Type III storm event. Applicants may not be required to control post-development peak discharge rates at pre-development peak discharge rates provided the project design provides for non-erosive stormwater discharges to tidal waters.

Response: Not applicable. SouthCoast Wind does not propose any stormwater management facilities including drainage or conveyance systems. SouthCoast Wind intends to route its onshore export cables to avoid existing infrastructure including storm water management facilities that may be present within the roadways.

I. Applicants may be required to submit a pollutant loading analysis to demonstrate that a proposed project will not unduly contribute to, or cause, water resource degradation when such projects are located in sensitive coastal resource areas. When a pollutant loading analysis is required, the applicant shall use the method detailed in the RIDEM Stormwater Management, Design and Installation Rules (250-RICR-150-10-8). If the Council determines that any proposed stormwater discharge will result in an unacceptable discharge of pollutants to the tidal waters of Rhode Island, the Council shall require the applicant to mitigate the pollutant loads to acceptable levels using the practices detailed in the stormwater rules. Frequently, this can be accomplished using these practices in series to achieve higher pollutant removal efficiencies.

Response: Not applicable. SouthCoast Wind does not propose any permanent stormwater management facilities. The temporary discharge of dewater pumpate or storm water that is collected within the work zone will be appropriately filtered and discharged, in accordance with the Project SESC Plan and RIPDES Stormwater Construction General Permit stipulations. The utility installation work in roadways does not trigger the Stormwater Management Design and Installation Rules in accordance with Minimum Standard 6 A.4.

m. The use of proprietary hydrodynamic (swirl) separator or filter devices ...

Response: Not applicable. SouthCoast Wind does not propose the use of any proprietary treatment devices.

n. For outfalls:

(1) Work on outfalls, drainage channels, etc., shall proceed from the shoreline toward the upland in order that no unfinished or un-stabilized lower channel portions be subjected to erosion-producing velocities from upstream. If this cannot be accomplished, all flow shall be diverted from the unfinished areas until stabilization is completed.

Response: Not applicable. The Project does not propose work on outfalls, drainage channels, etc.

(2) Where possible, outfall pipe slopes shall be designed for an exit velocity of less than five (5) feet per second

Response: Not applicable. SouthCoast Wind does not propose any stormwater management facilities or new outfall pipes.

(3) Screens or grates shall be placed over the end of large outfalls to trap debris.

Response: Not applicable. The Project does not include the construction of large outfalls.

(4) Beaches or other coastal features in front of outfalls shall be returned to original grade.

Response: Not applicable. SouthCoast Wind does not propose outfalls on beaches or other coastal features.

(5) Riprap placed on beaches shall not increase the grade of the beach higher than one foot in order to maintain lateral access below mean high water.

Response: Not applicable. SouthCoast Wind does not propose riprap on beaches or other coastal features.

(6) Riprap shall be compact, hard, durable, angular stone, with an approximate unit weight of one hundred sixty-five (165) lbs/cubic foot.

Response: Not applicable. The Project does not propose riprap on beaches or other coastal features.

(7) Riprap shall be placed with an adequate bedding of crushed rock or other suitable filtering material.

Response: Not applicable. The Project does not propose riprap for armoring of any coastal or shoreline features.

o. Applicants with new or modified single-family dwelling projects subject to the stormwater management provisions herein shall submit the following information: (list omitted)

Response: Not applicable. SouthCoast Wind does not propose any single-family dwellings.

p. Applicants for all other projects subject to the stormwater management provisions herein shall submit the following information:

(1) 8.5 x 11 inch site plan depicting the location of all structural stormwater (LID or otherwise) components;

Response: Not applicable. SouthCoast Wind does not propose any permanent stormwater management facilities. Temporary stormwater controls and construction BMPs will be implemented prior to soil disturbing construction activities. SouthCoast Wind has developed Onshore HDD and SESC Engineering Drawings (Attachment D).

(2) Operation & Maintenance Plan that meets the specifications detailed in the most recent version of the RIDEM Rhode Island Stormwater Design and Installation Standards Manual; and

Response: Not applicable. SouthCoast Wind does not propose any permanent stormwater management facilities that would trigger the need to prepare an O&M plan to address the service life of such facilities.

(3) Following completion of the approved project, a post-construction certification by a Rhode Island registered P.E. and Rhode Island registered Landscape Architect, where required, demonstrating that all stormwater structures, LID components, and requisite planting materials necessary for the function of the stormwater management system were installed in accordance with the approved permit, specifications and approved site plans.

Response: Not applicable. SouthCoast Wind does not propose any stormwater management facilities.

4.6.4 CRMP Section 1.3.1(G) – Construction of Shoreline Protection Facilities

Response: Not applicable. The Project does not include construction of shoreline protection facilities. HDD technology is proposed, in part, to avoid the existing shoreline protection facility (seawall) that is installed on the landward side of Island Park Beach along Park Avenue. The HDD located at the Montaup Country Club parking lot will not interfere with any shoreline protection facilities, nor impact the shoreline at the interface with Mount Hope Bay.

4.6.5 CRMP Section 1.3.1(H) – Energy-Related Activities and Structures

Planning for energy facilities; and

Planning policies.

(1) For applicable policies and standards pertaining to offshore renewable energy facilities see Subchapter 05 of this Chapter (CRMC Rhode Island Ocean Special Area Management Plan).

Response: Not applicable. Offshore renewable energy facilities are referred to in Chapter 20 Subchapter 05 of the Ocean SAMP. The Ocean SAMP applies to all offshore renewable energy facilities that are proposed for or located within state waters of the Ocean SAMP area and/or located with the GLDs. There are no power generation facilities associated with the Project located within state waters or state boundaries.

2. Siting of energy facilities

a. Policies and regulations

(1) Facilities for the processing, transfer and storage of petroleum products and the production of electrical power provide services necessary to support and maintain the public welfare and the state's economy. Such facilities, whether sited in the coastal region or elsewhere, have a high probability of affecting coastal resources and land uses because of their large size, environmental and aesthetic impacts, and impacts on surrounding land uses and broad development patterns.

(2) In order to properly and effectively discharge legislatively delegated responsibilities related to the location, construction, alteration and/or operation of energy facilities, including facilities for the processing, transfer and storage of petroleum products and the production of electrical power, the Council finds a need to require in all instances a permit for such location, construction, alteration and/or operation within the State of Rhode Island where there is a reasonable probability of conflict with a Council plan or program, or damage to the coastal environment.

Response: Noted. SouthCoast Wind complies with this standard through submission of this Category B Assent Application for the portion of the Project within the state of Rhode Island.

(3) The siting, construction, alteration and/or operation of petroleum processing, transfer or storage facilities and power generating facilities within the State of Rhode Island shall require a Council permit when there is reasonable probability demonstrated by reliable and probative evidence that the proposal will:

(AA) Conflict with any Council management plan or program.

Response: SouthCoast Wind complies with CRMC's management plans and programs as documented herein.

(BB) Make any area unsuitable for any uses or activities to which it is allocated by a Council Plan or Program, or

Response: SouthCoast Wind complies with this policy. Project components located within areas that are allocated a designated use include the landfall work areas and the offshore export cables. Temporary disruption of allocated uses and activities in these areas may occur during construction. Operation and maintenance of the export cables is not anticipated to interfere with any uses or activity allocated by the

Council. Should repair or replacement of any of the Project components be required in the future, temporary disruption of the allocated uses may be expected. SouthCoast Wind will maintain and repair the cables and keep the facilities in good condition and in accordance with the terms and conditions of the permits and approvals issued for the Project. Decommissioning of the export cables and appurtenance may temporality disrupt allocated uses and activities, unless the proposed facilities are to be retired in-place and not removed.

(CC) Significantly damage the environment of the coastal region.

Response: SouthCoast Wind has conducted an extensive analysis of environmental conditions in the Project area. The Project will not result in significant damage to the environment. Where impacts are unavoidable, SouthCoast Wind intends to implement various avoidance, minimization, and mitigation measures, as outlined in Section 3.

(4) Applicants for energy facilities must consider the projected impacts of climate change, including but not limited to projected storm surge, coastal erosion and sea level rise to these facilities.

Response: Refer to Section 4.2.6 of this Category B Assent application.

(5) Applicants shall be further required to demonstrate by reliable and probative evidence that:

(AA) Alternative sites have been considered and rejected for environmental, economic and/or operational reasons.

Response: Refer to Section 2.1 for a description of alternatives considered.

(BB) Construction and/or operation will be in conformance with all applicable environmental standards, guidelines and objectives.

Response: In addition to the Category B Assent requested in this application, the Project requires other local, state, and federal permits and approvals summarized in Table 1-2 in Section 1. SouthCoast Wind has initiated consultation with the agencies having jurisdiction over the Project and will be required to meet the standards, guidelines, and objectives of these agencies.

(CC) Siting will not cause secondary developments that are inconsistent with the State Guide Plan or approved municipal comprehensive plans.

Response: SouthCoast is not aware of secondary developments that may arise that would be inconsistent with the State Guide Plan or the Town of Portsmouth Comprehensive Plan.

Response: SouthCoast Wind is not aware of secondary developments that may arise that would be inconsistent with the State Guide Plan or the Town of Portsmouth Comprehensive Plan. The purpose of the Project is to deliver 1,287 MW of renewable clean energy from SouthCoast Wind's offshore wind energy resource to the Rhode Island and Massachusetts. The SouthCoast Wind 1 Project is necessary to meet the needs of the state and/or region for substantial reductions in GHG emissions and substantial increase to the renewable clean energy supply, delivered safely and reliably to the mainland from offshore wind at the lowest reasonable cost to the consumer to meet the need. The policies and legislative directives of the New England states, including Rhode Island and Massachusetts, express a clear need for additional renewable clean energy generation from offshore wind.

(DD) Operation will not degrade aquifers or water bodies utilized for public water supply, and

Response: Refer to Sections 3.1.3 and 3.1.4 of this application.

(EE) Adequate procedures for the safe transport and/or disposal of products, materials and/or wastes hazardous to man or the coastal environment will be taken, including emergency containment and cleanup.

Response: SouthCoast Wind will comply with this standard. The Project will implement an ERP/OSRP for the work in the offshore environment (COP, Appendix AA). Onshore, the Project will comply with the applicable state and federal regulations regarding solid waste and hazardous waste storage, transport and disposal, and oil pollution control.

SouthCoast Wind will comply with the regulatory requirements related to the prevention and control of discharges and accidental spills as documents in the proposed Project's OSRP.

(6) Where on the basis of such evidence and/or demonstrations the Council finds a reasonable probability of noncompliance with any applicable policy or regulation, including § 1.3.8(B) of this Part, it shall require appropriate modification of or shall deny the application in question.

Response: SouthCoast Wind has designed the Project to comply with applicable policies and regulations.

(7) Recipients of approved Council permits shall be required to maintain such records as may be necessary to monitor and ensure compliance of facility operations with all applicable Policies as set forth above.

Response: SouthCoast Wind will comply with this standard.

(8) Offshore renewable energy projects shall comply with the policies and standards in Subchapter 05 of this Chapter (CRMC Rhode Island Ocean Special Area Management Plan).

Response: Compliance with Ocean SAMP policies and standards is demonstrated in Section 5 of this application.

3. Certified verification agent (CVA) requirement for energy-related activities defined in § 1.1.2 of this Part for which the CRMC has jurisdiction or requires a permit in accordance with §§ 1.1.4 and 1.3.3 of this Part, and as required by the CRMC executive director to review projects that are outside the scope of CRMC staff expertise. (subparts omitted)

Response: SouthCoast Wind has submitted a CVA nomination to BOEM, which was approved in November 2020.

4. Prerequisites

a. Applicants must demonstrate that all relevant local zoning ordinances, building codes, flood hazard standards, and all state safety codes, fire codes, and environmental requirements have or will be met.

Response: Refer to Section 4.6.2 of this application.

5. Prohibitions

a. Industrial operations and structures are prohibited in Type 1 and 2 waters or on shoreline features and their contiguous areas abutting these waters.

Response: Not applicable. The Project does not propose any long-term industrial operations in Type 1 or Type 2 waters. The offshore export cables will be installed beneath the seabed in areas mapped and classified as Type 2 waters.

6. Additional Category B requirements

a. Unless preempted under the regulations of the Federal Energy Regulatory Commission the following summary defines the scope of the topics that shall be addressed by applicants for power generating and petroleum processing and storage as they apply to construction, operation, decommissioning, and waste disposal:

Response: SouthCoast Wind has addressed the below-referenced criteria herein this Category B Assent application, as well as within the application filed with the Rhode Island Energy Facility Siting Board (Docket No. SB-2022-02).

(1) Environmental impacts,

Response: The avoidance, minimization and mitigation measures to be implemented by SouthCoast Wind to reduce environmental impacts are described in Section 3.

(2) Social impacts,

Response: SouthCoast Wind has, and will maintain, a stakeholder engagement plan with outreach and communications mechanisms to share information and gather input from external stakeholders, including the Town of Portsmouth. SouthCoast Wind will continue to regularly host open houses and attend community events, and will widely advertise those events utilizing numerous outlets, including direct mail, email, web, digital media, and posting in municipal and community bulletins. SouthCoast Wind will develop and implement a Traffic Management Plan to minimize disruptions to the Town of Portsmouth residents during construction of the onshore, underground export cable route.

(3) Economic impacts,

Response: The Project will enable the delivery of renewable clean energy of 1,287 MW to the POI at Brayton Point for the benefit of the region. The Project will add a major new source of renewable clean energy to the region, thereby substantially contributing to meeting the regional need for reduced GHG emissions, increased supply of renewable clean energy from offshore wind generation and development of the offshore wind industry, while providing significant economic and societal benefits to the region.

The Project will provide renewable clean energy benefits to Rhode Island and contribute to mitigating the impact of climate change. The Project will also provide economic benefits to Rhode Island, including, among others, jobs, spending, submerged lands lease fees for the offshore route in state waters, and tax revenues from the new onshore underground transmission assets of the Project in the Town of Portsmouth. SouthCoast Wind executed a Host Community Agreement with the Town of Portsmouth on January 16, 2024.

The Project will create positive economic development in the region, including in Rhode Island, with jobs and training opportunities in a range of fields. SouthCoast Wind will encourage the hiring of personnel from the Project region to fill the required positions.

SouthCoast Wind estimates that the Project will draw 44% of its local workforce from EJ communities and 58% from economically distressed communities. SouthCoast Wind has committed to supporting offshore wind education and supply chain and workforce development for the growing offshore wind industry in the region. The Project will support the state's efforts to stimulate regional growth and economic activity while meeting the renewable energy goals in New England. In addition to the revenues SouthCoast Wind will pay to the state of Rhode Island for the submerged lands lease fees for

the offshore route in Rhode Island state waters, the Town of Portsmouth will directly benefit through tax revenues from the new onshore transmission assets of the Project.

(4) Alternative sites,

Response: SouthCoast Wind performed an extensive evaluation of alternatives to the Project, as detailed in Attachment B - Route Alternatives Assessment- Assessment.

(5) Alternative means to fulfill the need for the facility,

Response: SouthCoast Wind performed an extensive evaluation of alternatives to the Project, as detailed in Attachment B - Route Alternatives Assessment.

(6) Demonstration of needs, and

Response: SouthCoast Wind is developing the Project to meet the regional need for renewable clean energy from offshore wind generation. That need is driven by the public policies and legislative directives of the various New England states, including Rhode Island and its neighboring coastal states, Massachusetts and Connecticut. Refer to Section 1.2 of this Category B Assent application for further description of the Project's purpose and need. The proposed export cables are a water dependent use proposed in Type 2, Type 4, and Type 6 waters which will facilitate transfer of renewable energy generated by the Project to the New England electrical grid. The Project was sited, planned, and designed to avoid and minimize impacts to ecological resources. To the extent there are potential adverse impacts that cannot be avoided, these will be mitigated.

(7) Consistency with state and national energy policies.

Response: SouthCoast Wind is developing the Project to meet the regional need for renewable clean energy from offshore wind generation. That need is driven by the strong public policies and legislative directives of the various New England states, including Rhode Island and its neighboring coastal states, Massachusetts, and Connecticut. Those policies and legislative requirements require substantial reductions of GHG emissions and substantial increase of renewable clean energy into the regional electricity supply mix, including specifically from offshore wind.

Among those policies, the Project will significantly advance Rhode Island's policies set forth in the state energy plan, Energy 2035, which calls for Rhode Island to "increase sector fuel diversity, produce net economic benefits, and reduce greenhouse gas emissions by 45 percent by the year 2035" in part "through support for state and federal offshore wind projects." Rhode Island's Office of Energy Resources set the goal of converting Rhode Island to one hundred percent renewable by 2030. The Project substantially contributes to the transformation of the New England energy system to a carbon free renewable energy system. With a regional system more heavily dominated by renewables, Rhode Island will be better able to attain its ambitious renewable clean energy goals.

In 2021, the General Assembly amended the Rhode Island Resilient Act through the passage of the 2021 Act on Climate with the intent of increasing Rhode Island's efficiency and effectiveness in responding to climate change. The 2021 Act on Climate sets mandatory and enforceable targets for reducing greenhouse-gas emissions and transitioning to a low carbon economy. The 2021 Act on Climate requires that the Rhode Island Executive Climate Change Coordinating Council update the GHG Emissions Reduction Plan to develop a plan to reduce climate emissions to net zero by 2050. Additional information is provided in greater detail in Section 1.2 of this application.

b. Shorefront sites shall demonstrate the need for access to navigable waters or cooling and/or process water.

Response: Not applicable. The Project does not require access to navigable waters or cooling and/or process water.

c. The above requirements for energy facilities do not have to be addressed if the proposal is for an electrical generating facility of forty (40) megawatt capacity or less, or for a petroleum storage facility of less than two thousand four hundred (2,400) barrel capacity. Such small-scale facilities shall be considered commercial or residential structures (see § 1.3.1(C) of this Part).

Response: Not applicable.

7. Standards

a. See standards given in "Filling, removing, or grading" in § 1.3.1(B) of this Part, as applicable.

Response: Refer to Section 4.6.1 of this Category B Assent application.

b. See standards given in "Residential, commercial, industrial, and public recreational structures" in § 1.3.1(C) of this Part, as applicable.

Response: Refer to Section 4.6.3 of this Category B Assent Application.

c. See standards given in "Treatment of sewage and stormwater" in § 1.3.1(F) of this Part, as applicable.

Response: Refer to Section 4.6.3 of this Category B Assent application.

8. Transfer of petroleum products (list omitted)

Response: Not applicable. The SouthCoast Wind 1 Project is not proposed to transfer petroleum products.

4.6.6 CRMP Section 1.3.1(I) – Dredging and Dredged Material Disposal

1. Policies

a. The Council shall support necessary maintenance dredging activities in Type 2, 3, 4, 5, and 6 waters, provided environmentally sound disposal locations and procedures are identified.

Response: Not applicable. The Project is not a maintenance dredging activity.

b. Where beneficial re-use options as set forth in R.I.G.L. § 46-6.1-3 are not practical, the Council favors offshore open-water disposal for large volumes of dredged materials, providing that environmental impacts are minimized.

Response: The Project does not propose disposal of dredged material. Excavated material at the HDD seaward end of the HDDs will be stored on barges or similar method prior to being re-used for backfill of the offshore HDD work areas as outlined with the 401 Water Quality Certification and Marine Dredging Permit issued to SouthCoast Wind by RIDEM on March 14, 2024. Sediments disturbed during installation of the offshore export cables will naturally backfill or fall back into the cable trench. It is anticipated that the offshore work areas and offshore cable trench will be reconstituted with natural sediments after several tidal cycles.

c. The Council encourages the use of innovative nearshore methods of dredged materials disposal, particularly when small volumes of material must be disposed. These options include but are not limited to the creation of wetlands, shellfish habitat, and beach nourishment in suitable areas.

Response: As noted above, the Project will re-use excavated material at the offshore HDD work areas for backfill and is not proposing offshore ocean disposal or onshore re-use of excavated material. This method will minimize impacts to benthic resources in the disturbance area. Also, sediments disturbed during the offshore export cable installation beyond the offshore HDD work areas will naturally backfill or fallback with the cable installation methods and the offshore cable trench will be reconstituted with natural sediments after several tidal cycles, as described in Section 2.2.3 of this Category B Assent application.

d. For disposal of dredged material resulting from maintenance dredging operations, a Category A Review may be permitted provided the Executive Director determines that the disposal is conducted consistent with the RIDEM's dredging regulations and that the disposal is at an approved disposal facility, or at an approved federal disposal facility. Category A reviews may also be permitted when: (list omitted)

Response: Not applicable. The Project is not a maintenance dredging operation.

e. For beach replenishment, a Category A review may be permitted for the placement of clean sands provided the Executive Director determines that the placement of the materials shall be for beach replenishment only, and the proposal meets the standards of §§ 1.1.4(E) and 1.3.1(I) of this Part as applicable.

Response: Not applicable. The Project does not involve beach replenishment.

f. The Council utilizes and follows the prescribed processes outlined in the army corps regulations and manuals for both upland and in-water dredged material disposal.

Response: Not applicable. The Project does not propose upland or in-water disposal of dredge material.

g. The Council may require performance assurance bonds for projects that utilize in-water disposal or transit federal channels with loaded scows.

Response: Not applicable. The Project does not propose in-water disposal of dredge material or transit federal channels with loaded scows.

2. Prerequisites: R.I.G.L. § 46-6.1-7 specifies that approvals for dredging and dredged material disposal require Council and DEM approval. Further, the Council, as the lead agency for dredging, shall be the initial point of contact for application submittals. The Council and DEM have developed protocols that set out how proposed dredging activities shall be coordinated for review. A pre-application consultation request with the Council and DEM (and other agencies as appropriate) is an element of these protocols and is strongly encouraged for all applicants.

Response: SouthCoast Wind acknowledges the standards set forth in Section 1.3.1(I)(2)(a-g) and does not restate those standards herein. See Section 3 of this Category B Assent application for a discussion regarding analytical sediment sampling results. SouthCoast Wind has participated in meetings and conference calls with RIDEM and RI CRMC on numerous occasions and continues to hold bi-weekly meetings with both agencies to discuss the status of the marine surveys, engineering design and permitting requirements for the SouthCoast Wind 1 Project.

The Project received a Dredge Permit on March 14, 2024 in conjunction with the Water Quality Certification from RIDEM pursuant to the Rules and Regulations for Dredging and the Management of Dredged Materials (250-RICR-150-05-2.1 et seq.) for temporary excavation and backfill of offshore HDD work areas.

3. Prohibitions

a. The disposal of dredged materials on or adjacent to coastal wetlands...

Response: Not applicable. The Project does not propose disposal of dredge material on coastal features or coastal wetlands.

b. No dredging for navigational purposes is permitted in Type 1 waters...

Response: Not applicable. The Project does not propose dredging for navigational purposes in Type 1 or Type 2 waters. Limited dredging / temporary excavation is proposed within the Sakonnet River and Mount Hope Bay for the purposes of facilitating the HDD export cable landfall approaches onto Portsmouth.

c. It is prohibited to utilize any mechanical system to remove, relocate, wash or otherwise alter the seabed in any Rhode Island waters...

Response: SouthCoast Wind is seeking a Council Assent for the Project through this application. The Project proposes a temporary excavation of sediments at the offshore HDD work areas for the purposes of the HDD installation.

4. Additional Category B requirements

a. Applicants for all dredging projects shall provide accurate soundings in the area of the proposed dredging operation.

Response: Attachment C Offshore Export Cable Engineering Drawings provide the necessary hydrographic, seafloor contour, side scan sonar and benthic habitat types for the offshore export cable corridor and the offshore HDD locations.

b. Applicants shall describe any temporary or permanent disturbance to a coastal feature...

Response: Not applicable. SouthCoast Wind will utilize HDD for export cable installation at landfalls. HDD is a "trenchless" process used for installing cables or pipes which enables the cables to remain buried below the beach and intertidal zone while avoiding or limiting environmental impact during installation.

c. When fine-grained sediments are to be removed, the applicant shall employ proper turbidity controls as necessary to control the transport of materials placed in suspension by dredging unless the applicant demonstrates to the Council on the basis of competent professional analysis that such transport will not be significant or will be controlled by other measures.

Response: SouthCoast Wind had a Hydrodynamics and Sediment Dispersion Modeling Report (see Attachment L) prepared for the Project. SouthCoast Wind expects to implement the use of a barge for storing dredge materials prior to reuse for backfill, as is outlined in the Project's 401 Water Quality Certificate and Marine Dredging Permit. These activities will be coordinate closely with RIDEM staff.

d. The applicant shall limit dredging and disposal to specific times of the year...

Response: SouthCoast Wind is consulting with the NOAA, NMFS and the RI DMF in regard to potential seasonal or TOY restrictions and the schedule for the pre-lay grapnel run and route clearing activities.

e. Applicants for improvement dredging projects...

Response: Not applicable. SouthCoast Wind does not propose an improvement dredging project.

f. When dredged materials are removed from a marine to an upland environment for disposal...

Response: Not applicable. SouthCoast Wind does not propose upland disposal of sediments.

g. Applicants proposing dredging operations associated with residential boating facilities...

Response: Not applicable. SouthCoast Wind does not propose dredging associated with a residential boating facility.

5. Standards: All applications submitted to the Council for dredging and disposal shall demonstrate that they have met all applicable sections of the CRMC/DEM dredging application checklist.

a. All materials to be dredged for either open water disposal or upland disposal must be classified by the Department of Environmental Management (DEM). Applicants for dredging or open water disposal of dredged materials shall also be required to obtain a dredging permit (which contains the Section 401 Clean Water Act Water Quality Certification) from the DEM.

Response: SouthCoast Wind will comply with this standard. The Project received the Section 401 Water Quality Certification and Dredging Permit from RIDEM on March 14, 2024. The Project does not propose disposal of dredged materials.

b. For dredging:

(1) Bottoms of dredged areas shall slope downward into the waterway so as to maximize tidal flushing.

Response: SouthCoast Wind does not propose a permanent excavation of sediments therefore maximizing of tidal flushing is not proposed nor is it optimal given the temporary nature of the excavations.

(2) Bottom slopes at the edges of dredged areas shall have a maximum slope of fifty percent (50%) percent.

Response: SouthCoast Wind does not propose a permanent excavation of sediments therefore the slopes of the excavations will be determined based on the engineering parameters of the offshore HDD work areas.

(3) Dredging shall be planned so as to avoid undermining adjacent shoreline protection facilities and/or coastal features.

Response: The proposed offshore HDD work area excavations in the Sakonnet River and Mount Hope Bay are sited at minimum of approximately 1,000 ft (305 m) from the shoreline at the Sakonnet River and Mount Hope Bay, which includes a +/- 1,000 ft (305 m) setback from the seawall located near the intersection of Boyds Lane and Park Avenue. The HDD drill trajectories will be located at depths well below the shoreline features and shoreline protection facility (seawall) located at the interface of Island Park Beach and Park Avenue.
(4) Shellfish dredged from waters classified SB or lower shall not be made available for human consumption or bait.

Response: Not applicable. Shellfish dredging is not proposed.

(5) All dredging at any marina shall be bounded to the footprint of the Marina Perimeter Limit (MPL). Side slopes associated with such dredging shall be allowed to extend beyond the MPL and then only when all adjacent structures are not impacted.

Response: Not applicable. Dredging at the marina is not proposed.

c. For dredged materials disposal in open water: (list omitted)

Response: Not applicable. SouthCoast Wind does not propose dredged materials disposal. Excavated material at the offshore HDD work areas will be re-used for backfill to cover the seaward ends of the conduits and the offshore export cables.

4.6.7 CRMP Section 1.3.1(J) – Filling in Tidal Waters

1. Policies

a. It is the Council's policy to discourage and minimize the filling of coastal waters.

Response: SouthCoast Wind proposes to install two HVDC submarine power cables and associated communications cabling in coastal waters of Rhode Island Sound, the Sakonnet River, and Mount Hope Bay to bring renewable clean energy into the regional transmission grid serving Rhode Island and Massachusetts. The cables will be installed in a bundled configuration where practicable. The cables will be co-located within a single corridor through the Sakonnet River, make intermediate landfall on Aquidneck Island in Portsmouth, Rhode Island, traverse the Town of Portsmouth underground for approximately 2.0 mi (3.2 km), and return to the water in Mount Hope Bay, with both landfall and exit from Aquidneck Island using HDD to minimize impacts. The target burial depth of the offshore ECC will be 6.0 ft (1.8 m) below seabed. Use of secondary cable protection (rock and/or mattresses) will be limited to the extent practicable, but are expected, at a minimum, to be installed at crossings of existing submarine cables and pipelines in accordance with the International Cable Protection Committee protocols. SouthCoast Wind estimates that up to 15% or approximately 15.2 ac (6.2 ha) of the offshore export cable route in Rhode Island state waters may require secondary cable protection. Refer to Sections 2.3, 2.4 and 2.5 of this Category B Assent application for additional detail regarding cable burial and secondary cable protection, respectively. In addition, concrete mattresses or equivalent protection will be used to protect the HDPE conduit at the HDD work areas.

b. Filling which is determined by the Council to be incidental to activities conducted in accordance with § 1.3.1(G) of this Part is not "filling in tidal waters" and is addressed by the policies, prerequisites, prohibitions, requirements, and standards contained in § 1.3.1(G) of this Part.

Response: Not applicable. The Project does not involve the construction or maintenance of a Shoreline Protection Facility.

c. In considering the merits of any given proposal to fill tidal waters, the Council shall weigh the public benefit to be served by the proposal against the loss or degradation of the affected public resource(s).

Response: Refer to Section 1.2 for a description of the purpose and need of the Project.

d. Filling may be permitted where necessary for an approved erosion control or bulkheading project, but only when it has been demonstrated that the amount of filling has been minimized in accordance with the requirements of § 1.3.1(G) of this Part.

Response: The Project does not propose bulkheading or coastal erosion control.

e. It is the Council's policy to require a public access plan, in accordance with § 1.3.6 of this Part, as part of any application for filling of tidal waters. A variance from this policy may be granted if an applicant can meet the variance requirements set forth in § 1.1.7 of this Part and demonstrate that no significant public access impacts will occur as a result of the proposed project.

Response: Not applicable. The Project will not result in a significant impact to public access to the shoreline. Temporary blockage of some roads during installation activities may restrict access to some local areas, although it is unlikely that access to specific establishments will be completely inhibited. As detailed in the Project indicative construction schedule the disruptions in access will occur for a short period at any given location as installation of equipment progresses along the underground onshore export cables. SouthCoast Wind will develop an onshore construction schedule to minimize effects to recreational uses and tourism-related activities to the extent feasible, such as scheduling nearshore construction activities to avoid the height of the summer tourist season. SouthCoast Wind will work with and coordinate with stakeholders/visitors' bureaus to schedule construction activities outside of major events taking place onshore. To keep stakeholders informed, SouthCoast Wind will have a construction schedule webpage that will alert abutters, residents and visitors of construction locations, dates, activities, and traffic control measures.

f. In accordance with R.I.G.L. §§ 46-23-6(4)(iii) and 46-23-16, the Council is authorized to grant, modify, or deny licenses, permits, and easements for the use of coastal resources which are held in trust by the state for all its citizens, and impose fees for private use of these resources. Licenses, permits and easements issued by the Council for the use of public trust resources remain subject to the public trust, convey no title, are valid only with the conditions and stipulations with which they are granted, and imply no guarantee of renewal.

Response: Through the information presented in this application, and a subsequent filing expected with the RI CMRC, SouthCoast Wind will seek a license and/or commercial lease of submerged lands for renewable energy development from CRMC pursuant to CRMC's Enabling Act, R.I.G.L. Section 46-23-1 et seq, and applicable CRMC regulations. All other real estate licenses, permits, and easements will be negotiated by the Project with the state, local or private entity having authority over the Project area (Refer to Proof of Ownership documentation provided with this application). SouthCoast Wind has acquired site control, in the form of Option Agreements, of all private properties across Aquidneck Island along the onshore export cable route. These notices of options were filed with the Town of Portsmouth on April 4, 2024.

g. Filling which is determined by the Council to be incidental to activities conducted in accordance with § 1.3.1(G) of this Part is not "filling in tidal waters" and is addressed by the policies, prerequisites, prohibitions, requirements, and standards contained in § 1.3.1(G) of this Part.

Response: Refer to response to § 1.3.1(G) above.

2. Prerequisites

a. Except for federal consistency reviews, applicants for projects requiring filling in tidal waters shall be required to obtain a Section 401 (Clean Water Act 33 U.S.C. §§ 1251–1387) Water Quality Certification...

Response: The Project received a Section 401 Water Quality Certificate from RIDEM on March 14, 2024.

b. Permits for projects requiring filling in tidal waters must be obtained concurrently from the Army Corps of Engineers and the Council....

Response: SouthCoast Wind has filed an application with the USACE - New England District for an Individual Permit for activities subject to the jurisdiction of Section 404 of the CWA, and Section 10 of the Rivers and Harbors Appropriation Act of 1899. USACE deemed the Individual Permit application complete on February 2, 2023. USACE is on track to issue the final Section 10/404 permit authorization by March 27, 2025.

3. Prohibitions

a. Filling in Type 1 and 2 waters is prohibited.

Response: The Project is not located in areas classified as Type 1 Waters. Within Type 2 waters in Mount Hope Bay, north of Montaup Country Club, offshore work activities within Type 2 Waters includes the installation of the offshore export cables utilizing HDD technology and installation of the offshore export cables using other cable installation burial methodologies, such as jet-plow technology.

b. Regulations governing the filling and other disturbances to wetlands are set forth in § 1.2.2(D) of this Part.

Response: Not applicable. The Project avoids filling and disturbance of coastal wetlands.

c. Filling in Type 3, 4, 5, and 6 waters is prohibited unless:

(1) The filling is made to accommodate a designated priority use for that water area;

(2) The applicant has examined all reasonable alternatives and the Council has determined that the selected alternative is the most reasonable; and

(3) The filling is the minimum necessary to support the priority use.

Response: Refer to response to Section 1.3.1(J)(1)(a) above.

4. Fees

Response: Not applicable. The Project does not propose to create land by the filling of tidal waters or the dead storage of vessels.

4.6.8 CRMP Section 1.3.1(R) – Submerged Aquatic Vegetation and Aquatic Habitats of Particular Concern

1. Policies

a. The Council's goal is to preserve, protect and where possible, restore SAV habitat....

Response: The Project is designed to avoid SAV and, therefore, will not result in permanent loss or significant alteration of SAV. As summarized in Section 3.3, SAV and mud to muddy sand habitats with

the potential for SAV may be found within the nearshore zone at the southern Aquidneck Island cable landfall within the Sakonnet River. There is no SAV mapped within the Sakonnet River by URI Environmental Data Center or RIGIS CRMC.⁵ The potential SAV mapped by the seafloor survey conducted by Fugro extends approximately 984 ft (300 m) offshore from the Aquidneck Island shoreline in a portion of the ECC. SAV will be avoided either by micro-routing of the offshore export cables or through HDD installation beneath them. SouthCoast Wind will also perform a preconstruction SAV survey in accordance with the Section 401 Water Quality Certification conditions from RIDEM.

b. Activities under CRMC jurisdiction...shall avoid and minimize impacts to SAV habitat.

Response: As noted above, the Project is designed to avoid SAV, and therefore, will not result in permanent loss or significant alteration of SAV. SAV has not been confirmed in areas near the ECC, although a potential area was indicated by geophysical data in a small area at the Sakonnet River HDD landing area. This is indicated on the Offshore Cable Engineering Drawings in Attachment C.

Impacts to nearby benthos and potential SAV resulting from cable installation and HDD activities would be associated with sediment resuspension and subsequent deposition during cable burial and offshore HDD work areas. Detailed sediment transport modeling has been performed to accurately predict the volume of sediment resuspension, concentration of sediments in the water column during construction activities, the extent of this sediment plume from the location of activity, and the spatial distribution of sediment deposition depths from the activity (refer to Attachment L Hydrodynamics and Sediment Dispersion Modeling Technical Report). The results of this model aid in assessing the potential impacts on SAV as a result of increased turbidity and sediment deposition.

Installation of the export cables will result in elevated total suspended solids in the water column (sediment suspension) and sediment deposition. The hydrodynamic and sediment dispersion modeling indicated that TSS concentrations above 100 mg/L will become suspended in the vicinity of the cable installation during construction around the cable route center line in Mount Hope Bay. Where suspended sediments are the most widespread, TSS concentrations of 100 mg/L are predicted to extend to a maximum of 3,800 ft (1.16 km) from the cable installation center lines in Mount Hope Bay. TSS dissipates upon cessation of construction activities and is expected to fall below 100 mg/L after approximately 280 minutes in Mount Hope Bay. Turbidity levels associated with HDD excavation exceeding 100 mg/L are predicted at a maximum distance less than 4,000 ft (1.22 km) at the Brayton Point preferred landfall HDD work area. TSS is expected to fall below 100 mg/L after approximately 120 minutes after construction activity ceases.

Through Mount Hope Bay, accretion greater than 0.02 inch (0.5 mm) deep may occur within 876 ft (267 m) of the disturbance; the majority of accretion is less than 0.02 inch (0.5 mm) deep. Deposition exceeding 0.04 inch (1.0 mm) may cover a maximum area of 104 acres (42 ha) in Mount Hope Bay. The dredging/temporary excavation, and resultant sediment deposition at the offshore HDD work areas is anticipated to be completely contained within the footprint of the ECC. Sediment deposition of 0.04 inches (1.0 mm) may occur up to 695 ft (212 m) from any of the offshore HDD work areas. The areas potentially covered by sediment up to 0.04 inch (1.0 mm) are up to 14 ac (5.68 ha) at any of the offshore HDD work areas.

⁵ University of Rhode Island Environmental Data Center and RIGIS. 2016. Submerged Aquatic Vegetation (SAV) in RI Coastal Waters (2012), Feature Layer. August 3, 2016.

c. The Council supports cooperative efforts to determine the current status and identify trends in the health and abundance of SAV species in Rhode Island using the best information as it becomes available.

Response: SouthCoast Wind has been in contact with several agencies and organizations involved with the management and documentation of eelgrass and other potential SAV habitat distribution in the Sakonnet River and Mount Hope Bay.

Rhode Island's Eelgrass Mapping Task Force monitors the status of seagrasses and provides maps of the location and extent of seagrass beds. The task force is comprised of a number of organizations, including the RI CRMC, Save the Bay, the University of Rhode Island, and others. The task force uses GIS aerial photography, remote sensing, and field monitoring with sample collection to document eelgrass populations. The most recent mapping available from 2016 surveys (RIGIS 2016)⁶ shows no eelgrass beds mapped within the ECC.

d. Deep water habitats include subtidal waters bordering the immediate shoreline where a depth of three (3) or more meters is typically achieved within 100 to 200 feet seaward of the MLW mark. In these areas, eelgrass is typically limited to the shoreline fringe. This environmental setting is typical of the open waters of Narragansett Bay, Block Island and Rhode Island Sounds. Examples of these areas include the shorelines of Prudence Island, Jamestown and Block Island.

Response: Noted.

e. Shallow water habitats include subtidal waters where a depth of 3 meters is not attained within 100 – 200 feet of the shoreline and where the average waterbody depth is generally less than 3 meters. This situation is typical of the salt ponds and other shallow coastal embayments.

Response: Shallow water habitats occur at the Project's landfall location at Aquidneck Island, in the northern end of the Sakonnet River and in the nearshore waters of Mount Hope Bay on the north side of Portsmouth.

f. The Council shall assess the potential impacts to SAV and its habitat from proposed activities on a caseby-case basis. Such impacts may include, but shall not be limited to the introduction of excess nutrients, sedimentation, shading, and/or disruption of SAV and SAV habitats.

Response: The ECC avoids SAV and, therefore, will not result in permanent loss or significant alteration of SAV. Impacts to any nearby SAV resulting from cable installation would be associated with sediment resuspension and subsequent deposition during cable burial and offshore HDD work area excavations and are described above in response to Section 1.3.1(R)(1)(b). The Project does not involve the introduction of excess nutrients.

g. All impacts to SAV and SAV habitat shall be avoided where possible and minimized to the extent practicable. Where the impacts are substantial or cannot be avoided or minimized, the Council may deny the application. The Council may exercise greater discretion if the proposed site is adjacent to or includes a restoration site and/or the site includes the sole source of SAV habitat.

Response: As noted above, the offshore ECC avoids known SAV habitat, although temporary impacts associated with sediment resuspension are possible. Refer to response 1.3.1(R)(1)(b) above.

In the mid-1990s, Save the Bay led an effort to restore eelgrass beds in Narragansett Bay by transplanting healthy eelgrass to locations that could support eelgrass, including offshore in Portsmouth

⁶ RIGIS. 2016. Rhode Island Department of Environmental Management.

and Tiverton. The transplanted eelgrass was not observed during short-term and long-term assessments. Researchers determined the eelgrass did not survive likely due to photosynthetically active radiation getting blocked by algal blooms caused by poor water quality and nutrient pollution. As mentioned above in response to Section 1.3.1(R)(1)(f), the Project does not involve the introduction of excess nutrients.⁷

The Project is not expected to affect any ongoing SAV restoration activities.

h. SAV habitats designated for preservation within the boundaries of the Narragansett Bay National Estuarine Reserve (NBNERR)...

Response: Not applicable. No Project activities are in the vicinity of the Narragansett Bay National Estuarine Reserve.

i. In tidal waters where applicants propose activities under §§ 1.3.1(C), (D), (F), (I), (J), (K), and (O) of this Part, and the Council's staff determines that SAV habitat is not present, an SAV survey will not be required. When such activities are proposed in areas of current or historic SAV habitat, an SAV survey shall be required (see § 1.3.1(R)(3) of this Part).

Response: The most recent mapping available from the Rhode Island Eelgrass Mapping Task Force from their 2016 surveys shows no eelgrass beds mapped within the ECC. Potential SAV was mapped by the Summer 2021 seafloor survey conducted by Fugro extending approximately 984 ft (300 m) offshore from the Aquidneck Island shoreline at the edge of the ECC. SAV beds will be avoided either by microrouting of the offshore export cable or through HDD installation beneath them. A pre-construction survey for potential eelgrass at the Sakonnet River landing site will be conducted to support finalization of HDD location selection.

j. It is the policy of the Council that SAV surveys shall be completed during peak biomass. SAV surveys shall be completed in Narragansett Bay between July 1 and September 15....

Response: Consistent with this policy, SouthCoast Wind conducted a Summer 2021 benthic sampling program (from July 14 to July 26) along the ECC, that included sediment grab sampling, sediment profile and plan view imaging and video transects. Fugro conducted the field work, with sediment profile and plan view imaging interpretation by Integral Consulting, Inc, and sample analysis by AECOM. The subsequent survey prior to HDD construction will also occur within the peak growth window.

k. Aquaculture operations, which utilize floating racks and bottom culture techniques, can shade SAV....

Response: Not applicable. The Project does not propose any aquaculture operations.

2. Prohibitions (list omitted)

Response: Not applicable. None of the prohibitions listed in this standard are applicable to the Project.

⁷ Save the Bay, Inc. 2019. 50 Ways We've Saved The Bay: Growing Community and Conversation with Eelgrass. December 5, 2019. https://www.savebay.org/restore-eelgrass-beds/.

3. Standards

a. For activities under §§ 1.3.1(C), (D), (F), (I), (J), (K), and (O) of this Part, where the Council's staff is satisfied that SAV is not present within the limits of the proposed activity, an SAV survey will not be required.

Response: Refer to the response to Section 1.3.1(R)(3)(i) above.

b. For activities under §§ 1.3.1(C), (D), (F), (I), (J), (K), and (O) of this Part, the Council shall require SAV surveys in tidal waters of the south shore salt ponds and other shallow water embayments, around Jamestown, Newport and in other areas when the Council's staff has evidence of SAV habitats. In areas where the Council's Staff lacks enough evidence to make a determination of SAV presence or absence, an SAV survey may be required.

Response: Refer to the response to Section 1.3.1(R)(3)(i) above.

d.A survey that has been conducted three or more years prior to the date of the application will not satisfy the requirements of this section.

Response: The Summer 2021 benthic sampling program was performed within two years of this Category B Assent application. SouthCoast Wind will also perform a preconstruction SAV survey to confirm the presence and extent of SAV beds prior to construction to avoid impacts to SAV to the extent practicable

d. Where an SAV survey is required, the following standards are required. CRMC staff may require additional information: (list omitted)

Response: Noted.

e. Standard design options for the construction of residential boating facilities in areas of SAV habitat.

Response: Not applicable. The Project does not involve the construction of residential boating facilities.

f. In order to minimize impact upon SAV, all operations and docking of vessels shall be confined to the terminal portion of the facility. Docking and operation of motorized boats and/or other vessels elsewhere along the facility shall only be permitted over areas of no SAV habitat, as determined during staff review.

Response: Not applicable. The Project does not involve the construction or operation of boating facilities.

4.6.9 CRMP Section 1.3.3 – Inland Activities and Alterations that are Subject to Council Permitting

A. Policies

1. For consistency with state land development legislation, the Council hereby adopts the activities identified by R.I. Gen Laws. § 45-23-27 as applicable for review.

Response: Noted. SouthCoast Wind is not proposing any subdivision of land that would affect local regulations per §45-23-27.

2. The Council shall review all proposals inland of the area contiguous to shoreline features which involve any of the above identified activities and alterations....

Response: SouthCoast Wind acknowledges CRMC's authority to require an Assent for the Project as demonstrated by this application for Category B Assent.

3. Council Assents are also required for any other activity or alteration not listed in Table 1, Table 1A, or Table 1B, but which has a reasonable probability of conflicting with the Council's goals and its management plans or programs, and/or has the potential to damage the environment of the coastal region.

Response: SouthCoast Wind acknowledges CRMC's authority to require an Assent for the Project as demonstrated by this application for Category B Assent.

4. Persons proposing subdivisions, cooperatives, and other multi ownership facilities, [of six (6) units or more] or activities generating more than 40,000 square feet (3,716 m^2) of impervious surface any portion of which extends onto a shoreline feature or its contiguous area, or within critical coastal areas, or those areas as identified in R.I. Gen. Laws § 45-23-27 are required to apply for a Council Assent.

Response: Not applicable. The Project does not propose a subdivision. SouthCoast Wind does not propose to generate 40,000 sf (3,716 m²) impervious surfaces on a shoreline feature or its 200-ft (61-m) contiguous area.

5. Applicants proposing any of these activities shall satisfy all requirements specified in the RICRMP and any applicable special area management plan. Applicants shall also submit the following with their applications:

a. A stormwater management plan as required in § 1.3.1(F) of this Part and as described in the most recent version of the DEM Stormwater Management, Design, and Installation Rules (250-RICR-150-10-8).

Response: The onshore export cable installation in roadway ROW does not trigger the Stormwater Management Design and Installation Rules in accordance with Minimum Standard 6 A.4. No new or increased impervious surfaces or aboveground structures are proposed.

SouthCoast Wind will be filing separately with the RIDEM to obtain coverage under the RIPDES Stormwater Construction General Permit. Please refer to Onshore HDD and SESC Engineering Drawings (Attachment D) to illustrate the soil erosion and sediment controls and construction BMPs.

b. A soils map of the property (suggested scale 1:200) with an accompanying analysis of the best use potential of the soils present; the soils maps and use potentials analysis prepared by the U.S.D.A. Natural Resources Conservation Service should be used as the basis for this analysis.

Response: A soils map depicting the onshore export cable corridor and HDD construction areas is provided as Figure 4-1 in Attachment A (Project Figures).

c. An overlay map showing the principal vegetation types or any significant features identified by the R.I. Natural History Survey and the R.I. Historic Preservation and Heritage Commission on the property; the maps prepared by McConnell (1974) and Kupa and Whitman (1972) may be the basis for information on vegetation.

Response: A map depicting vegetation coverage types, Rhode Island Natural History Survey data, and RI HPHC data along the onshore export cable corridor and HDD construction areas is provided as Figure 4-2 in Attachment A (Project Figures).

d. An overlay showing the proposed subdivision layout, including buildings, roadways, parking areas, drainage systems, sewage treatment and disposal facilities, and undisturbed lands.

Response: The Project does not propose a subdivision or to construct a sewage treatment sewage.

e. A Site Plan as detailed in the most recent version of the Rhode Island Stormwater Design and Installation Standards Manual.

Response: Not applicable. SouthCoast Wind is not proposing any facilities that would require the implementation of permanent stormwater management facilities for the Project.

f. Prior to permitting, an archeological survey when recommended by the state Historical Preservation & Heritage Commission.

Response: SouthCoast Wind has performed surveys to identify buried archaeological sites in areas of potential ground disturbance focusing on the onshore Project area. SouthCoast Wind is continuing to investigate the potential impacts to terrestrial archaeological resources in consultation with RIHPHC and Native American Tribes. The TARA (COP, Appendix R) has been provided to BOEM and to the RIHPHC.

6. Applicants shall submit this information to the Council for review at the earliest stages of planning such projects and are required to utilize the Council's Preliminary Determination process in accordance with applicable requirements of the Land Development and Subdivision Review Enabling Act (R.I. Gen. Laws § 45-23-25 et seq.). Where so requested, all parties shall discuss their findings and recommendations at the municipality's pre-application conference, preliminary hearing, or similar proceeding. The findings and recommendations resulting from the coordinated, joint review shall be forwarded to the full Council. Where the Council finds a reasonable probability of conflict with this Program or with an adopted CRMC Special Area Management Plan, or finds there is a potential to damage the coastal environment, the Council shall require that suitable modification to the proposal be made or shall deny its Assent.

Response: SouthCoast Wind has coordinated closely with the RI CRMC leading up to a submission of this Category B Assent application. SouthCoast Wind has participated in Project updates with the RI CRMC and the RIDEM, including ongoing bi-weekly meetings with additional meetings and phone calls as needed, since May 2022. Discussion topics included the status of the marine surveys, engineering design and permitting requirements for the SouthCoast Wind 1 Project. SouthCoast Wind has also previously participated in meetings with the Fisheries Advisory Board (FAB) and the Habitat Advisory Board (HAB) and will continue to consult with member or former members of the organization to the extent practicable.

7. In those cases where a subdivision has been approved by the Council, any person wishing to conduct an approved activity, in accordance with the stipulations of the Council Assent, need not apply for a separate Assent unless so required by a stipulation of the Assent.

Response: Not applicable. The Project does not propose a subdivision.

8. Applicants proposing the following projects are required to submit these projects for the Council's review:

a. Power generating plants over 40 megawatts;

Response: Not applicable. This application only involves the transmission components of the Project that are located in state waters or onshore within RI CRMC jurisdiction, which do not include power generation.

b. Chemical or petroleum processing, transfer or storage facilities (excluding storage facilities of less than 2,400 barrel capacity);

Response: Not applicable. The Project does not propose these petroleum facilities.

c. Freshwater wetlands in the vicinity of the coast

Response: Sections of the onshore export cables are proposed to be constructed in areas subject to this regulation. Review criteria provided in 650-RICR-20-00-2.10 are presented in Section 6 addressing project activities which are subject to the Freshwater Wetlands In the Vicinity of the Coast regulations. SouthCoast Wind is concurrently seeking a seeking Freshwater Wetlands Permit and Category B Assent from the RI CRMC.

d. Minerals extraction;

Response: Not applicable. The Project does not propose minerals extraction.

e. Sewage treatment and disposal facilities (excluding onsite wastewater treatment systems);

Response: Not applicable. The Project does not propose sewage treatment or disposal facilities.

f. Solid waste disposal facilities; and,

Response: Not Applicable. The Project does not propose solid waste disposal facilities.

g. Desalination plants.

Response: Not Applicable. The Project does not propose desalination plants.

9. Applicants proposing these activities shall demonstrate in writing that the Additional Category B requirements contained in § 1.3.1(A) of this Part have been satisfied. If the Council determines that there is a reasonable probability that the project may impact coastal resources, then it shall be required to obtain a Council Assent in accordance with all applicable requirements of this program.

B. Prerequisites

1. Solid waste disposal: permits from the Department of Environmental Management are required pursuant to the Solid Waste Management Act; and Air Quality Permit will have to be obtained from DEM if disposal practices include incineration. Disposal of hazardous wastes requires DEM permits pursuant to the R.I. Hazardous Waste Management Program as well as EPA permits.

Response: Not applicable. The Project disposal practices do not include incineration of hazardous waste. Solid waste generated during construction, operation and decommissioning of the Project will be disposed of at an appropriately licensed facility.

2. Minerals extraction

Response: Not applicable. The Project does not include any mineral extraction or mining activities.

3. Chemical processing, transfer, and storage....

Response: Not applicable. The Project does not include chemical processing, transfer, or storage.

4. Power generation: persons proposing a hydroelectric plant are required by DEM to obtain a Wetlands Permit, Dam Safety Certificate, and a Section 401 Water Quality Certification; a Preliminary Permit will also have to be obtained from the Federal Energy Regulatory Commission (FERC). Other power generating facilities may require a DEM Air Quality Certificate, Section 401 Water Quality Certification, and Spill Contingency Plan. An NPDES permit may have to be obtained from EPA Region 1.

Response: Not applicable. The Project does not include a hydroelectric plant. SouthCoast Wind has received a 401 Water Quality Certification and will file a RIPDES Authorization under the Construction General Permit closer to the start date of construction and in coordination with RIDEM.

5. Petroleum processing, transfer, and storage....

Response: Not applicable. The Project does not include chemical processing, transfer, or storage.

6. Sewage treatment and disposal....

Response: Not applicable. The Project does not include sewage treatment or disposal.

4.6.10 CRMP Section 1.3.5 – Policies for the Protection and Enhancement of the Scenic Value of the Coastal Region

A. Policies

1. The primary goal of all Council efforts to preserve, protect, and, where possible, restore the scenic value of the coastal region is to retain the visual diversity and often unique visual character of the Rhode Island coast as it is seen by hundreds of thousands of residents and tourists each year from boats, bridges, and such public vantage points as roadways, public parks, and public beaches.

Response: The onshore export cables will be installed underground, and the offshore export cables are submarine cables. Therefore, these Project components will not be visible once constructed.

2. Every effort should be made to safeguard from obstruction significant views to and across the water from highways, scenic overlooks, public parks, and other vantage points enjoyed by the public.

Response: The Project will introduce no permanent above-ground structures into the Town of Portsmouth, Rhode Island, and therefore will not cause any visual effects.

3. The importance of the skyline as seen from tidal waters in determining the character of a view site must be recognized; it should, where possible, not be disrupted by visually intrusive structures.

Response: Not applicable. The Project will introduce no permanent above-ground structures into the Town of Portsmouth, Rhode Island, and therefore photo-simulations to depict long-term impacts to visual receptors such as residences, parks, public open spaces, etc., is not warranted. There will be only temporary visual effects impacts during the construction-phase of the Project, such as construction-

related equipment and vehicles. There will be no long-term visual impacts from the Project, which will be underground.

4. On sites in or adjacent to historic features and districts, new structures should be designed to provide continuity with the existing scenic and historic character. Within historic districts, applicants shall consult with the Historic Preservation Commission to identify means for minimizing disruption and, where possible, enhancing the historic value of the area.

Response: The preferred onshore route variant for the Project is not within a Historic District.

5. Excellent guidance for preserving the visual character and quality of coastal landscapes in Rhode Island are contained in "Building at the Shore: A Handbook for Residential Development on the Rhode Island Coast." Review copies are available at the Council's office in Wakefield.

Response: Noted. The facilities proposed by SouthCoast Wind will be located underground and are not expected to impact the visual character or quality of the coastal landscape in the Town of Portsmouth or adjacent Rhode Island communities.

B. In and Adjacent to Type 1, 2, and 4 Water

1. Structures along the water's edge should be screened by vegetation, preferably with native species typical to the area rather than exotic.

2. Trees that form the first line of visual definition as one looks landward from the water should be preserved.

3. In new developments, trees should be planted in the drifts that generally follow land contours and parallel the water's edge rather than in lines that cut across landscape contours.

4. Disruptions of natural landform and vegetation should be minimized.

5. New developments should not compete visually with such significant shoreline features as coves, peninsulas, cliffs, and bluffs; they should be set back and screened.

Response: The offshore export cables will be installed within Type 2 and Type 4 waters. The onshore cables will be buried with no visible infrastructure. HDD technology will be used at cable landings to avoid disruption to or interference with shoreline features. The offshore export cables will be buried below the seafloor and will not be visible once installed. No aboveground features are proposed by the Project to Type 1 or Type 2 waters, or along the water's edge, with the exception of possible secondary cable protection, in the event that target burial depth is not achieved.

C. In and Adjacent to Type 3, 5, and 6 Waters

1. In all areas adjacent to Type 3 and 5 waters and, where appropriate, adjacent to Type 6 waters, the public should, where possible, be provided a sense of the water from within the townscape. Views to and across the water through yards, between houses, and from roadways should be preserved and, where possible, created.

Response: A small portion of the ECC is mapped within Type 6 Industrial Waterfronts and Commercial Navigation Channels (see Figure 1-5). Type 6 Waters are areas that are used to accommodate commercial and industrial water-dependent and water-enhanced activities. To establish the boundaries of Type 6 waters, the CRMC established a buffer to federal navigation channels that measures three times the channel depth. Type 6 waters are categorized for (i) industrial waterfronts, and (ii) commercial

navigation channels. Type 6 Waters are areas that are used to accommodate commercial and industrial water-dependent and water-enhanced activities. SouthCoast Wind has consulted with the USACE and the USCG, and SouthCoast Wind has committed to routing the offshore export cables outside of Type 6 waters including the Mount Hope Bay main shipping channel, the Tiverton channel and outside of the buffers to these federal navigation channels.

2. When new structures are proposed adjacent to Type 3 and 5 waters....

Response: Not applicable. The Project is proposed in Type 2, 4 and 6 waters.

4.6.11 CRMP Section 1.3.6 – Protection and Enhancement of Public Access to the Shore

A. Policies

1. As trustee of Rhode Island's coastal resources and in accordance with state and federal statutory mandates, the Council has a responsibility to ensure that public access to the shore is protected, maintained and, where possible, enhanced for the benefit of all.

2. It is the Council's policy to protect, maintain and, where possible, enhance public access to and along the shore for the benefit of all Rhode Islanders.

Response: The Project will not prevent public access to the shore. The nearest public access point to the shore is Island Park Beach, approximately 175 ft (53 m) away from the Project's landfall location. No work is proposed at Island Park Beach. Access to Island Park Beach may be temporarily disrupted during the HDD staging and installation of the onshore transmission cable along Boyds Lane, but any disruption will be intermittent during the limited construction period. SouthCoast Wind will develop an onshore construction schedule to minimize effects to residents, members of the public, recreational uses and tourism-related activities to the extent feasible, such as scheduling nearshore construction activities to avoid the height of the summer tourist season. SouthCoast Wind will work and coordinate with stakeholders and visitors' bureaus to schedule outside of major events taking place onshore. SouthCoast Wind will also develop and implement an onshore traffic management plan prior to construction to address vehicular, bicycle, and pedestrian safety. Similar coordination will be made with the Board at the Montaup Country Club to minimize recreational impacts at the golf course. SouthCoast Wind will continue its communication with the Town of Portsmouth and the RIDOT to ensure that the Newport Dinner Train can continue without disruption.

3. It is the Council's policy to require applicants to provide, where appropriate, on-site access of a similar type and level to that which is being impacted as the result of a proposed activity or development project.

Response: Refer to response in Section 4.6.11 - 1.3.6.(A)(2) above.

4. Certain activities which require the private use of public trust resources to the exclusion of other public uses necessarily impact public access. Due to their likelihood of impacting public access and/or the public's use and enjoyment of Rhode Island's public trust resources, it is the Council's policy to require that applications for the following activities include a public access plan. (a-c omitted)

Response: Refer to response in Section 4.6.11 - 1.3.6.(A)(2) above.

5. In accordance with § 1.1.7 of this Part, a variance from this policy may be granted if an applicant can demonstrate that no significant public access impacts will occur as a result of the proposed project.

Response: Refer to response in Section 4.6.11 - 1.3.6.(A)(2) above. The Project does not require a variance from this policy.

6. Publicly funded beach nourishment projects shall contain a public access component.

Response: Not applicable.

7. In accordance with R.I.G.L. § 32-6-5(b), limited liability applies when the CRMC stipulates public access as a permit condition and when the Council designates a public right-of-way to the shore.

Response: Noted.

B. General Policies

1. Any public access impacts associated with a proposed project should be avoided and minimized to the maximum extent possible.

Response: Refer to response in Section 4.6.11 - 1.3.6.(A)(2) above.

2. Any public access created to compensate for proposed project impacts should be of a type and level similar to that which will be impacted.

Response: Not applicable. The Project will not prevent public access to the shore in a manner that requires compensation.

3. In cases where access cannot practically be provided onsite, due to safety, security, environmental or other considerations, the Council may permit access be provided offsite.

Response: Not applicable. Refer to response in Section 4.6.11 - 1.3.6.(A)(2) above.

4. All structural shoreline protection facilities should be designed and constructed in a manner which does not reasonably interfere with the public's right to pass and re-pass along the shore.

Response: Not applicable. The Project does not propose new shoreline protection facilities.

C. Policies for the development of public access plans

Response: Not applicable. The proposed export cable corridor will be installed as a buried submarine cable system in Rhode Island state waters, and underground within an onshore duct bank and manhole system, and therefore, will not affect the development of public access plans to the coastline.

5. OCEAN SPECIAL AREA MANAGEMENT PLAN REGULATORY COMPLIANCE

For the purposes of this Category B Assent Application and as discussed at the beginning of Section 4, the portion of the Project from the mouth of Narragansett Bay to the three-nautical mile limit of state waters is subject to the policies and regulations of the Ocean SAMP (650-RICR-20-05-11) (see Figure 1-3). For Project components beyond the three-nautical mile state waters boundary, including GLDs, the RI CRMC will review the Project components under its enforceable policies of RI CRMC's federally approved coastal resources management program approved under Section 307 of the *Coastal Zone Management Act of 1972* (the CZMA), also known as the federal consistency provision. Applicable sections from these enforceable policies and regulations in the Ocean SAMP are referenced below followed by SouthCoast Wind's responses.

5.1. OCEAN SAMP §11.9 GENERAL POLICIES

The "General Policies" in § 11.9 of this Part are policies the CRMC applies through its various management and regulatory functions, but the General Policies are not "enforceable policies" for purposes of the federal CZMA federal consistency provision (16 U.S.C. § 1456 and 15 C.F.R. Part 930). For CZMA federal consistency purposes the General Policies are advisory only and cannot be used as the basis for a CRMC CZMA federal consistency concurrence or objection.

However, for state permitting purposes, offshore developments proposed to be sited in state waters are bound by both the General Policies (§ 11.9 of this Part) and regulatory standards (§ 11.10 of this Part) listed herein, the Policies of the Ocean SAMP. The "regulatory standards" in § 11.10 of this Part are enforceable policies for purposes of the federal CZMA federal consistency provision (16 U.S.C. § 1456 and 15 C.F.R. Part 930).

Response: SouthCoast Wind acknowledges the Project underwater cables within Rhode Island state waters are subject to applicable sections of both the General Policies (§ 11.9 of the Ocean SAMP) and regulatory standards (§ 11.10 of the Ocean SAMP). The following sections demonstrate compliance of the Project in Rhode Island state waters with the General Policies of the Ocean SAMP (Section 11.9).

B. § 11.9 of this Part presents all Ocean SAMP general policies, while § 11.10 of this Part integrates the regulatory standards into a regulatory process that ensures the Council's ability to uphold its mandatory requirements.

Response: See previous response above.

C. Any assent holder of a CRMC-approved offshore development, as defined in § 11.10.1(A) of this Part, shall:

1. Design the project and conduct all activities in a manner that ensures safety and shall not cause undue harm or damage to natural resources, including their physical, chemical, and biological components to the extent practicable; and take measures to prevent unauthorized discharge of pollutants including marine trash and debris into the offshore environment.

Response: Refer to Section 2.7 for a description of environmental compliance measures and BMPs that SouthCoast Wind will implement to avoid undue harm or damage to natural resources. In addition, refer to Emergency Response Plan (Attachment F to this Assent application) and COP, Appendix AA - Oil Spill Response Plan.

2. Submit requests, applications, plans, notices, modifications, and supplemental information to the Council as required;

Response: SouthCoast Wind will comply with this policy.

3. Acknowledge, in writing, any oral request or notification made by the Council, within three (3) business days and follow up in writing on such request or notification within a reasonable period of time as determined jointly by the assent holder and CRMC considering the circumstances;

Response: SouthCoast Wind will comply with this policy.

4. Comply with the terms, conditions, and provisions of all reports and notices submitted to the Council, and of all plans, revisions, and other Council approvals, as provided in § 11.10.5 of this Part;

Response: SouthCoast Wind will comply with this policy.

5. Make all applicable payments on time;

Response: SouthCoast Wind will comply with this policy.

6. Conduct all activities authorized by the assent in a manner consistent with the provisions of this document, the Rhode Island Coastal Resources Management Program, and all relevant federal and state statutes and regulations;

Response: SouthCoast Wind will comply with this policy.

7. Compile, retain, and make available to the Council within the time specified by the Council any information related to the site assessment, design, and operations of a project; and

Response: SouthCoast Wind will comply with this policy to the extent the Council requires additional information.

8. Respond to requests from the Council in a timeframe specified by the Council.

Response: SouthCoast Wind will comply with this policy.

D. Administrative processing fee: For large-scale offshore developments, underwater cables, and other projects as determined by the Council, the CRMC may assess the applicant with an administrative processing fee to help defray costs to conduct the CZMA federal consistency review, including the mitigation negotiations. This fee shall be \$20,000. The Council cannot issue a conditional concurrence or an objection for failure to pay the fee.

Response: The CRMC federal consistency review hearing and vote for the Project took place on December 12, 2023. CRMC issued a concurrence with mutually agreed upon conditions. A formal letter was filed with BOEM on December 19, 2023, notifying the agency of this determination.

5.1.1. Ocean SAMP §11.9.1 Ecology

A. The Council recognizes that the preservation and restoration of ecological systems shall be the primary guiding principle upon which environmental alteration of coastal resources will be measured. Proposed activities shall be designed to avoid impacts and, where unavoidable impacts may occur those impacts shall be minimized and mitigated.

Response: Noted. SouthCoast Wind completed a detailed analysis of interconnection alternatives with potential impacts to sensitive ecological systems as a key criterion. See Attachment B - Route Alternatives Assessment for a summary of the alternatives SouthCoast Wind evaluated and down-selected in regard to environmental and other impacts. Within the chosen route ECC, extensive data was collected to characterize ecological systems, and avoidance of sensitive habitat was a key driver of cable route engineering. Where unavoidable impacts may occur, those impacts will be minimized and mitigated as described in Section 3 of this application.

B. As the Ocean SAMP is an extension and refinement of CRMC's policies for Type 4 multipurpose waters as described in § 00-1.2.1(E) of this Chapter, CRMC will encourage a balance among the diverse activities, both traditional and future water dependent uses, while preserving and restoring the ecological systems.

Response: Noted. The ECC was sited, planned, and designed to avoid and minimize impacts and foster coexistence with other water-dependent uses. To the extent there are potential impacts that cannot be avoided, these will be minimized and mitigated, as described in Section 3. Overall, the ECC is consistent with CRMC's policies for Type 4 multipurpose waters as it is a water dependent use and will not have any long-term adverse impacts to activities that coexist in Type 4 waters. Refer to Sections 3.1 through 3.2 for discussions regarding potential impacts to other water-dependent uses associated with the ECC and proposed avoidance, minimization, and mitigation measures.

C. The Council recognizes that while all fish habitat is important, spawning and nursery areas are especially critical in providing shelter for these species during the most vulnerable stages of their life cycles. The Council will ensure that proposed activities shall be designed to avoid impacts to these sensitive habitats, and, where unavoidable impacts may occur, those impacts shall be minimized and mitigated. In addition, the Council will give consideration to habitat used by species of concern as defined by the NMFS Office of Protected Resources.

Response: As discussed in Section 3.3 Benthic and Shellfish Resources and 3.4 Finfish and Essential Fish Habitat (EFH), the ECC is designed to avoid and minimize adverse impacts to sensitive habitats. Where impacts cannot be fully avoided, they will be minimized and mitigated. SouthCoast Wind has conducted field surveys and extensive mapping of benthic habitat to support the Essential Fish Habitat consultation between NMFS and BOEM under the Magnuson-Stevens Act, which focuses on protection of fish habitat. SouthCoast Wind is also engaging through recent meetings held with the RI DMF, MA DMF, NMFS, USACE, and RI CRMC to identify installation schedule constraints that protect sensitive fish species. The SouthCoast Wind Project will help fuel innovation, advance research, and build consistency across modeling, monitoring and research efforts.

D. Because the Ocean SAMP is located at the convergence of two eco-regions and therefore more susceptible to change, the Council will work with partner federal and state agencies, research institutions, and environmental organizations to carefully manage this area, especially as it relates to the projected effects of global climate change on this rich ecosystem.

Response: Noted. SouthCoast Wind has also coordinated with other federal and state agencies, research institutions, and environmental organizations in the region in the planning of the Project. The Project is also being reviewed by federal agencies, including NOAA, USACE, USFWS and BOEM, and Massachusetts agencies where the Project overlaps Massachusetts state waters.

E. The Council shall appoint a standing Habitat Advisory Board (HAB) which shall provide advice to the Council on the ecological function, restoration and protection of the marine resources and habitats in the Ocean SAMP area and on the siting, construction, and operation of offshore development in the Ocean SAMP study area and in NOAA-approved geographic location descriptions (GLDs).

Response: Noted. SouthCoast Wind will continue to participate in joint meetings with the FAB and the HAB (or similar constituent group), as appropriate and applicable, to discuss potential fishery impacts and mitigation.

5.1.2. Ocean SAMP §11.9.2 Global Climate Change

A. The Council recognizes that the changes brought by climate change are likely to result in alteration of the marine ecology and human uses affecting the Ocean SAMP area. The Council encourages energy conservation, mitigation of greenhouse gasses and adaptation approaches for management. The Council, therefore, supports the policy of increasing offshore renewable energy production in Rhode Island as a means of mitigating the potential effects of global climate change.

Response: As an offshore renewable clean energy project, the Project is consistent with this policy.

B. The Council shall incorporate climate change planning and adaptation into policy and standards in all areas of its jurisdiction of the Ocean SAMP and its associated land-based infrastructure to proactively plan for and adapt to climate change impacts such as increased storm intensity and temperature change, in addition to accelerated sea level rise. For example, when evaluating Ocean SAMP area projects and uses, the Council will carefully consider how climate change could affect their future feasibility, safety and effectiveness. When evaluating new or intensified existing uses within the Ocean SAMP area, the Council will consider predicted impacts of climate change especially upon sensitive habitats, most notably spawning and nursery grounds, of particular importance to targeted species of finfish, shellfish and crustaceans.

Response: Noted. SouthCoast Wind has incorporated climate change planning into the design of the Project. The Coastal Hazard Assessment worksheets are included in Attachment Q. The associated land-based Project components have been designed with climate change in mind and are expected to be resilient to sea level rise. All Project components at the landfall location and along the onshore route will be buried and designed for submerged conditions. Buried transmission lines are often subject to groundwater inundation. The cable joints are designed for water submersion. The conductor and XLPE insulation both contain outer layers of water swellable tapes. All manhole hardware and cable supports will be non-corrosive to ensure the system can operate with corrosive water inside the manhole for extended periods. The submarine cables will be installed at the landfalls via HDD methodology, which will result in the cables being buried below ground, transitioning up to the entry and exit pits. The design

(offshore and at the landfall locations) anticipates that the cable will be submerged and incorporates watertight sheathing around the cable to protect the conductors. The design bears all the inherent features of a marine cable meant to be fully immersed in water and installed and operated at high-sea depths under considerable water pressures.

The Project will also help to meet the needs of Rhode Island and the region for reduced greenhouse gas emissions and increased renewable clean energy supply, delivered safely and reliably to the mainland from offshore wind. The Project is consistent with this CRMC policy and §11.9.2(A) above as it will contribute new offshore renewable energy to the region to expand the region's efforts to mitigate climate change.

C. The Council will convene a panel of scientists, biannually, to advise on findings of current climate science for the region and the implications for Rhode Island's coastal and offshore regions, as well as the possible management ramifications.

Response: Noted.

D. The Council will prohibit those land-based and offshore development projects which based on a sea level rise scenario analysis will threaten public safety or not perform as designed resulting in significant environmental impacts. The U.S. Army Corps of Engineers has developed and is implementing design and construction standards that consider impacts from sea level rise. These standards and other scenario analyses should be applied to determine sea level rise impacts.

Response: The modeled five feet of sea level rise during the life of the Project is not expected to impact the onshore Project components in a manner that threatens public safety or impacts the environment. The onshore Project components have been designed to withstand projected future tidal inundation. See Attachment Q for the Coastal Hazard Application Worksheets for additional information. Please refer to the response to 5.1.2(B) above.

E. The Council supports the application of enhanced building standards in the design phase of rebuilding coastal infrastructure associated with the Ocean SAMP area, including port facilities, docks, and bridges that ships must clear when passing underneath.

Response: Not applicable. The Project does not involve rebuilding coastal infrastructure.

F. The Council supports the development of design standards for marine platforms that account for climate change projections on wind speed, storm intensity and frequency, and wave conditions and will work with the U.S. Bureau of Ocean Energy Management, Department of the Interior, Department of Energy, and the U.S. Army Corps of Engineers to develop a set of standards that can then be applied in Rhode Island projects. The Council will re-assess coastal infrastructure and seaworthy marine structure building standards periodically not only for sea level rise, but also for other climate changes including more intense storms, increased wave action, and increased acidity in the sea.

Response: Not applicable. The offshore portion of the Project applicable to this Category B Assent does not include marine platforms.

G. The Council supports public awareness and interpretation programs to increase public understanding of climate change and how it affects the ecology and uses of the Ocean SAMP area.

Response: Noted. The SouthCoast Wind 1 Project is being the developed to address climate change by providing a clean renewable energy source, and all our presentations include information on climate

change, including the goals of the state of Rhode Island. SouthCoast Wind has and continues to conduct extensive public outreach including presentations at open house meetings to seek public comment and to address questions posed by the general public about the SouthCoast Wind 1 Project design, impacts, benefits, and effects on the local communities. SouthCoast Wind has hosted five virtual open houses for local communities as part of the series *The Future of Clean Energy is Here*. Two of these virtual open houses were curated specifically for the Portsmouth community. The first was held on May 4, 2022, and gave a virtual 3D tour of the SouthCoast Wind 1 Project including all offshore and onshore components in Portsmouth, Rhode Island and Somerset, Massachusetts. Ahead of this virtual open house, SouthCoast Wind representatives completed door to door outreach in the Portsmouth neighborhoods adjacent to the proposed cable crossing. The second virtual open house was held on August 16, 2022, and included a presentation on the Project's proposed intermediate cable crossing in Portsmouth. Ahead of this virtual open house, SouthCoast Wind sent out an informational mailing to all Portsmouth residents. The virtual open house recordings are available on SouthCoast Wind's events page and YouTube channel (southcoastwind.com/events/).

Additionally, SouthCoast Wind has held in-person informational events in Portsmouth with several SouthCoast Wind team members available to answer questions and connect with community members: December 6, 2022 at the Portsmouth Free Public Library and December 7, 2022 at Ragged Island Brewing Company. SouthCoast Wind is committed to continue to host information sessions for local stakeholders. The most recent drop-in informational session was held on October 12, 2023.

SouthCoast Wind sponsors and attends community events on a regular basis. For example, SouthCoast Wind sponsored Portsmouth Little League for the spring 2023 and 2024 seasons to continue to foster community awareness. SouthCoast Wind has also participated as a guest speaker with several community groups such as Common Fence Point Community Center, Middletown High School, and Innovate Newport.

SouthCoast Wind has met with municipal officials and other key stakeholders, including the Town of Portsmouth.

5.1.3. Ocean SAMP §11.9.3 Cultural and Historic Resources

A. The Council recognizes the rich and historically significant history of human activity within and adjacent to the Ocean SAMP area. These numerous sites and properties, that are located both underwater and onshore, should be considered when evaluating future projects.

Response: SouthCoast Wind has submitted a Marine Archaeological Resources Assessment evaluating cultural and historic resources potentially affected by the Project to the BOEM, the lead federal agency reviewing the Project and the RIHPHC, the state agency for historical preservation and heritage programs, which acts as the Rhode Island State Historic Preservation Office (SHPO). Archaeological marine and terrestrial surveys were coordinated at the state level in Rhode Island with the RIHPHC. SouthCoast Wind completed site reconnaissance geophysical and geotechnical surveys in 2021 to provide complete full coverage of the ECC. No buried paleolandforms were interpreted by the Qualified Marine Archaeologist to have archaeological significance within the Rhode Island state waters of the Ocean SAMP Area subject to this Category B Assent application. Four avoidance areas around potential historic maritime sites were flagged by the Qualified Marine Archaeologist. The four sites are not inventoried in NOAA¹ or BOEM² databases, but each site appears to each be a very disarticulated

² BOEM, Office of Offshore Renewable Energy Programs. 2013. Archaeological Resource Information Database (ARI). (Not for Public Release).

¹ NOAA. 2020. Wrecks and Obstructions Database. Electronic database,

https://nauticalcharts.noaa.gov/data/wrecks-and-obstructions.html, accessed November 29, 2021.

shipwreck. The high level of deterioration and disarticulation indicate that these sites may not retain identifiable characteristics or yield important historical information that could warrant consideration for listing in either the National Register of Historic Places (NRHP) (36 C.F.R. 60) or the State Register of Historic Places; however, as a determination cannot be made using high-resolution geophysical survey data alone, additional research and visual investigation are required to determine the sites' eligibility.

All the sites discovered have been marked for avoidance with an avoidance buffer derived from a review of seismic profiles and informed by the ground model to ensure that it covers the extent of the potentially preserved features. The archaeological avoidance areas are determined using several factors; each avoidance area has a 164-ft (50-m) minimum radius buffer.

Section 106 of the *National Historical Preservation Act of 1966* (NHPA), as amended, requires federal agencies such as BOEM to take into account the impact of federally permitted projects on historic properties, and work with relevant SHPOs, Tribal Historic Preservation Offices (THPOs), and other recognized stakeholders, to avoid or mitigate any adverse effect on historic or archaeological sites with the potential to be listed on the NRHP as significant properties. BOEM initiated Section 106 consultation for the Project on November 1, 2021 and the consultation is due to conclude by December 19, 2024. SouthCoast Wind also developed a Historic Properties Treatment Plan (Attachment X) to minimize and mitigate adverse effects to archaeological sites within the onshore Project Area in Portsmouth, Rhode Island. This Historic Properties Treatment Plan was shared with RIHPHC and the Narragansett Indian Tribe for review and comment as part of the Section 106 consultation.

B. The Council has a federal obligation as part of its responsibilities under the federal Coastal Zone Management Act to recognize the importance of cultural, historic, and tribal resources within the state's coastal zone, including Rhode Island state waters. It has a similar responsibility under the Rhode Island Historic Preservation Act. The Council will not permit activities that will significantly impact the state's cultural, historic and tribal resources.

Response: Noted. As stated in response to § 11.9.3(A) above BOEM, as the lead federal agency, is required to satisfy Section 106 of the NHPA which requires consultation with SHPOs, THPOs, and other interested parties, as well as an assessment and mitigation of any adverse effects to historic properties.

C. The Council will engage federal and state agencies, and the Narragansett Indian Tribe's Tribal Historic Preservation Office (THPO), when evaluating the impacts of proposed development on cultural and historic resources. The Rhode Island Historic Preservation and Heritage Commission (RIHPHC) is the State Historic Preservation Office (SHPO) for the State of Rhode Island and is charged with developing historical property surveys for Rhode Island municipalities, reviewing projects that may impact cultural and historic resources, and regulating archaeological assessments on land and in state waters. For other tribes outside of Rhode Island that might be affected by a federal action it is the responsibility of the applicable federal agency to consult with affected tribes.

Response: Noted. SouthCoast Wind has engaged with applicable federal and state agencies, the Rhode Island Historic Preservation and Heritage Commission, and the THPOs from the Narragansett Indian Tribe, Mashpee Wampanoag Tribe, Wampanoag Tribe of Gay Head (Aquinnah), Mashantucket Pequot, Delaware Tribe of Indians, and Shinnecock Indian Tribe of New York as part of cultural resource investigations and assessments performed for the Project.

D. Project reviews will follow the policies outlined in §§ 00-1.2.3 (Areas of Historic and Archaeological Significance) and 00-1.3.5 of this Chapter (Guidelines for the Protection and Enhancement of the Scenic Value of the Coastal Region) of the State of Rhode Island Coastal Resources Management Program, as

amended (Subchapter 00 Part 1 of this Chapter). The standards for the identification of cultural resources and the assessment of potential effects on cultural resources will be in accordance with the National Historic Preservation Act Section 106 regulations, 36 C.F.R. Part 800, Protection of Historic Properties.

Response: Noted. SouthCoast Wind has engaged with applicable federal and state agencies, the Rhode Island Historic Preservation and Heritage Commission, and Native American Tribes as part of cultural resource investigations and assessments performed for the Project. All tasks associated with the archaeological site examinations were conducted in accordance with the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation pursuant to the NHPA (48 Federal Register 44716–44742) and the RIHPHC's (2021) "Performance Standards and Guidelines for Archaeology in Rhode Island." Key personnel involved in the surveys meet the Secretary of the Interior's Professional Qualifications Standards (36 C.F.R. Appendix A to Part 61).

E. Historic shipwrecks, archeological or historical sites located within Rhode Island's coastal zone are Areas of Particular Concern (APCs) for the Rhode Island coastal management program. Direct and indirect impacts to these resources must be avoided to the greatest extent possible. Other areas, not noted as APCs, may also have significant archeological sites that could be identified through the permit process. For example, the area at the south end of Block Island waters within the 30 foot depth contour is known to have significant archeological resources. As a result, projects conducted in the Ocean SAMP area may have impacts to Rhode Island's underwater archaeological and historic resources.

Response: As noted above, four avoidance areas around potential historic maritime sites of archaeological interest were identified during Project surveys within Rhode Island state waters of the Ocean SAMP Area subject to this Category B Assent application. SouthCoast Wind will avoid the identified sites and the 164-ft (50-m) minimum radius buffer during installation of the offshore export cables to the greatest extent practicable.

Mitigation of any unavoidable adverse impacts to historic properties will continue to be addressed through the Section 106 process led by BOEM.

F. Archaeological surveys shall be required as part of the permitting process for projects which may pose a threat to Rhode Island's archaeological and historic resources. During the filing phase for state assent, projects needing archaeological surveys will be identified through the joint review process. The survey requirements will be coordinated with the SHPO and, if tribal resources are involved, with the Narragansett THPO.

Response: SouthCoast Wind has completed archaeological surveys within the portion of the ECC in the Ocean SAMP area consistent with state and federal guidelines and in consultation with RIHPHC/SHPO and THPOs, including the Narragansett THPO.

G. Areas of Particular Concern may require a buffer or setback distance to ensure that development projects avoid or minimize impacts to known or potential historic or archaeological sites. The buffer or setback distance during the permitting process will be determined by the SHPO and if tribal resources are involved, the Narragansett THPO.

Response: Noted. SouthCoast Wind's Qualified Marine Archaeologist has recommended avoidance buffers for resources identified within the ECC. SouthCoast Wind will avoid the identified buffers to the greatest extent practicable. SouthCoast Wind understands buffer distances may be adjusted through consultation with BOEM, SHPOs and THPOs per Section 106 of the NHPA and as detailed in the Project's mitigation plans.

H. In addition to general Area of Particular Concern buffer/setback distances around shipwrecks or other submerged cultural resources, the Council reserves the right, based upon recommendations from RIHPHC, to establish protected areas around all submerged cultural resources which meet the criteria for listing on the National Register of Historic Places.

Response: Noted. Four potential historic maritime sites were flagged by the Qualified Marine Archaeologist in the portion of the ECC that lies within the Ocean SAMP in Rhode Island state waters. The four sites, are not inventoried in NOAA³ or BOEM⁴ databases. The high level of deterioration and disarticulation of these sites indicate that these sites may not retain identifiable characteristics or yield important historical information that could warrant consideration for listing in either the NRHP (36 C.F.R. 60.40) or the State Register of Historic Places; however, as a determination cannot be made using high-resolution geophysical survey data alone, additional research and visual investigation are required to determine the sites' eligibility if avoidance is not practical.

I. Projects conducted in the Ocean SAMP area may have impacts that could potentially affect onshore archaeological, historic, or cultural resources. Archaeological and historical surveys may be required of projects which are reviewed by the joint agency review process. During the filing phase for state assent, projects needing such surveys will be identified and the survey requirement will be coordinated with the SHPO and if tribal resources are involved, with the Narragansett THPO.

Response: The Project onshore components lie outside of the Ocean SAMP area. SouthCoast Wind has performed surveys to identify buried archaeological sites in areas of potential ground disturbance onshore. SouthCoast Wind is continuing to investigate the potential for impacts to terrestrial archaeological resources in consultation with RIHPHC and the THPOs from the Narragansett Indian Tribe, Mashpee Wampanoag Tribe, Wampanoag Tribe of Gay Head (Aquinnah), Mashantucket Pequot, Delaware Tribe of Indians and Shinnecock Indian Tribe of New York. The THPOs were notified of the Project, informed of the fieldwork schedule, and invited in advance to attend and observe the fieldwork. Any identified archaeological sites will be avoided where practicable, and if this is not possible, archaeological monitoring of the cable duct trench excavation will occur in the vicinity of the sites.

A Terrestrial Archaeological Resources Assessment (TARA) was prepared on behalf of SouthCoast Wind, a copy of which was filed with the Rhode Island Historic Preservation and Heritage Commission, and is included in the SouthCoast Wind COP, Appendix R, under *confidential* cover.

J. Guidelines for onshore archaeological assessments in the Ocean SAMP area can be obtained through the RIHPHC in their document, "Performance Standards and Guidelines for Archaeological Projects: Standards for Archaeological Survey" (RIHPHC 2007), or the lead federal agency responsible for reviewing the proposed development. In addition, guidelines for landscape and visual impact assessment in the Ocean SAMP area can be obtained through the lead federal agency responsible for reviewing the proposed development.

Response: Noted. SouthCoast Wind has performed onshore archaeological surveys consistent with state and federal guidelines and in consultation with SHPOs and THPOs. A visual impact assessment of Project components within the Ocean SAMP area subject to this Category B Assent application was not conducted because the Project components will be buried and will not be visible.

³ NOAA. 2020. Wrecks and Obstructions Database. Electronic database,

https://nauticalcharts.noaa.gov/data/wrecks-and-obstructions.html, accessed November 29, 2021.

⁴ BOEM, Office of Offshore Renewable Energy Programs. 2013. Archaeological Resource Information Database (ARI). (Not for Public Release).

5.1.4. Ocean SAMP §11.9.4 Commercial and Recreational Fisheries

A. The commercial and recreational fishing industries, and the habitats and biological resources of the ecosystem they are based on, are of vital economic, social, and cultural importance to Rhode Island's fishing ports and communities. Commercial and recreational fisheries are also of great importance to Rhode Island's economy and to the quality of life experienced by both residents and visitors. The Council finds that other uses of the Ocean SAMP area could potentially displace commercial or recreational fishing activities or have other adverse impacts on commercial and recreational fisheries.

Response: Refer to Sections 3.4 and 3.5 of this Category B Assent application for an assessment of the commercial and recreational fisheries within Rhode Island state waters and potential impacts associated with cable installation within the offshore ECC. Impacts to the commercial and recreational fishing industries related to construction are expected to be temporary and localized within the limits of the ECC because of the nature and short duration of this Project phase. However, commercial and recreational fishermen may be excluded from temporary safety zones during construction. These temporary safety zones will be of as short of a duration and small of a spatial extent as practicable. This may result in a temporary loss of access to fishing grounds inside of those temporary safety zones. Once construction activities are completed within temporary safety zones, marine uses, including commercial and recreational fishing, can continue as they were prior to construction.

Impacts related to O&M are expected to be limited because of the routing and burial of the cable. In certain instances, SouthCoast Wind will be required to install secondary cable protection (e.g., articulated concrete matting) which will also be limited to the minimal amount practicable on up to 15% of the ECC. The offshore cables, similar to other offshore cables, pipelines and telecommunication facilities, will be made available on NOAA nautical charts. These areas are not charted to preclude fishing, but to alert mariners of the presence of this infrastructure. Likely depending on gear type (e.g., bottom contacting mobile gears), some commercial fishermen may decide to avoid fishing in these localized areas to reduce the potential of interaction between the secondary cable protection and their gear.

Impacts related to decommissioning may be reduced even further if the cables are retired in-place, resulting in no incremental impact to the seafloor. Commercial and recreational fishermen will have the ability to continue to fish and navigate through the offshore ECC unimpeded other than for temporary safety zones and during construction, for some fishing gear types, areas with secondary cable protection during O&M.

B. The Council recognizes that finfish, shellfish, and crustacean resources and related fishing activities are managed by a host of different agencies and regulatory bodies which have jurisdiction over different species and/or different parts of the SAMP area. Entities involved in managing fish and fisheries within the SAMP area include, but are not limited to, the Atlantic States Marine Fisheries Commission, the R.I. Department of Environmental Management, the Rhode Island Marine Fisheries Council, the NOAA National Marine Fisheries Service, the New England Fishery Management Council, and the Mid-Atlantic Fishery Management Council. The Council recognizes the jurisdiction of these organizations in fishery management and will work with these entities to protect fisheries resources. The Council will also work in coordination with these entities to protect priority habitat areas. **Response:** Noted. SouthCoast Wind describes the regulatory regime for commercial and recreational fisheries in Sections 2.1 and 3.1 of Attachment P (Fisheries Monitoring Plan) of this Category B Assent application. SouthCoast Wind monitors activities and rulings of the regulatory bodies mentioned above as they pertain to the Project, offshore wind more broadly, and to the aspects of commercial and recreational fisheries affected by these activities and rulings that could impact the interactions of the Project and these fisheries.

C. The Council's policy is to protect commercial and recreational fisheries within the Ocean SAMP area, and the 2011 and 2018 GLDs, from the adverse impacts of other uses, while supporting actions to make ongoing fishing practices more sustainable. The Council anticipates that over time there will be improved scientific knowledge of the impacts of fishing on habitats and fish populations. Improvements in more sustainable gear technology, fishing practices, and management tools may improve the state of fisheries resources. A general goal of the Council is to improve the health of the Ocean SAMP area ecosystem and the populations of fish and shellfish it provides. Cooperative research, using the unique skills and expertise of the fishing community, will be a cornerstone to this goal.

Response: SouthCoast Wind supports regional cooperative research efforts to improve the scientific knowledge regarding the interaction of fisheries resources and activity with the SouthCoast Wind 1 Project activities in a number of ways. SouthCoast Wind financially supports and has employees that serve in a variety of roles for both the Responsible Offshore Science Alliance (ROSA) and the Regional Wildlife Science Collaborative (RWSC). These organizations identify and address questions raised by stakeholders to better understand the interactions between offshore wind and habitats, fish populations, fishing activity, and other critical questions on these topics.

SouthCoast Wind is committed to supporting Roger Williams University's Blue Tech Challenge: Innovating for a Sustainable Coastal Future. The challenge works to bring together teams, faculty and community partners like SouthCoast Wind to propose solutions to environmental challenges facing coastal regions.

SouthCoast Wind worked with Inspire Environmental to design pre/during/post-construction fisheries monitoring surveys in the ECC in Rhode Island state waters. These surveys, designed in consultation with relevant state agencies, including RIDEM, and fishing industry representatives, will identify changes to species identified as commercially and recreationally important from SouthCoast Wind's activities in that area (i.e., the construction and O&M of the offshore cables). The Fisheries Monitoring Plan developed specifically for the SouthCoast Wind Project in Rhode Island state waters is included as Attachment P. The attached plan details the intent and methodology for trap surveys (targeting whelk) and acoustic telemetry surveys (targeting a variety of species such as striped bass, summer flounder, tautog, and little tunny).

SouthCoast Wind is also working with the University of Massachusetts Dartmouth's School for Marine Science and Technology and the Anderson Cabot Center of Ocean Life at the New England Aquarium to conduct baseline of existing fisheries information in and around the Lease Area and establish monitoring plans for pre-construction, construction, operations, and decommissioning phases of the Project area. SouthCoast Wind has worked with our research partners and other organizations that focus on fisheries monitoring efforts to prepare fisheries monitoring plans that are aligned with BOEM guidelines (BOEM 2020) and additional recommendations provided by the ROSA Fisheries Monitoring Working Group and standardization measures put in place by organizations like the Northeast Trawl Advisory Panel.

D. Commercial and recreational fisheries activities are dynamic, taking place at different places at different times of the year due to seasonal species migrations and other factors. The Council recognizes

that fisheries are dynamic, shaped by these seasonal migrations as well as other factors including shifts in the regulatory environment, market demand, and global climate change. The Council further recognizes that the entire Ocean SAMP area is used by commercial and recreational fishermen employing different fishing methods and gear types. Changes in existing uses, intensification of uses, and new uses within the area could cause adverse impacts to these fisheries. Accordingly, the Council shall:

1. In consultation with the Fishermen's Advisory Board, as defined in § 11.3(E) of this Part, identify and evaluate prime fishing areas on an ongoing basis through an adaptive framework.

Response: SouthCoast Wind attended a meeting with the FAB coordinated by RI CRMC, and also engaged with FAB members through ongoing outreach to the fishing industry described below. SouthCoast Wind prepared the Fisheries Monitoring Plan, included in Attachment P, with input and feedback from industry representatives and relevant stakeholders. Through implementation of that Plan and through construction and O&M phases, SouthCoast Wind will have ongoing engagement with the FAB or similar constituent group, building on our activities over the past three years as described below.

SouthCoast Wind's Fisheries Manager and other members of the team talk directly with fishermen, sit on boards and working groups of organizations alongside fishermen, and engage directly with fishermen in scientific research and other efforts. Project development has been and will continue to incorporate input from stakeholders in the fishing industry in a way that allows it to minimize interference with fishermen that have been fishing in the area for hundreds of years. SouthCoast Wind will continue to strengthen existing and build new relationships with fishing organizations throughout the life of the Project. A list of selected outreach engagements with entities involved in the overlap of fisheries and offshore wind to date is provided in Table 5-1.

SouthCoast Wind is currently working with three Fisheries Representatives, including the Commercial Fisheries Center of Rhode Island (CFCRI), the Massachusetts Lobstermen's Association (MLA), and the New Bedford Port Authority (NBPA). SouthCoast Wind's three Fisheries Representatives, the CFCRI, the MLA, and the NBPA, collaborate on initiatives that minimize impacts to fisheries in the offshore Project area, provide information to SouthCoast Wind from the fishing industry and disseminate information from SouthCoast Wind to the fishing industry. The MLA is a member-driven organization that accepts and supports the interdependence of species conservation and the members' collective economic interests. The CFCRI was founded to preserve commercial fishing as a profession, culture, and way of life through promoting the sustainability of the resource and brings fishermen, scientists, managers, and elected officials together in a collaborative effort to improve fisheries and the understanding of the marine environment.

Entity	Regional	Massachusetts	Rhode Island
Anderson Cabot Center for Ocean Life at the New England Aquarium	\checkmark		
Atlantic Offshore Lobstermen's Association	\checkmark		
Cape Cod Commercial Fisherman's Alliance		\checkmark	
CFCRI			\checkmark
Commercial Fisheries Research Foundation			\checkmark
Coonamessett Farm Foundation	\checkmark		
Fisheries Survival Fund	\checkmark		

TABLE 5-1.SELECTED SOUTHCOAST WIND OUTREACH TO ENTITIES INVOLVED IN THE
OVERLAP OF FISHERIES AND OFFSHORE WIND TO DATE

Entity	Regional	Massachusetts	Rhode Island
Massachusetts EEA Fisheries Working Group on Offshore Wind Energy		\checkmark	
MLA		\checkmark	
Mid-Atlantic Fishery Management Council	\checkmark		
NBPA		\checkmark	
New England Fishery Management Council	\checkmark		
New Bedford Ocean Cluster		\checkmark	
New York State Renewable Energy Development Authority's Fisheries Technical Working Group	\checkmark		
Patriot Party Boats		\checkmark	
Recreational Fishers Association	\checkmark		
Regional Wildlife Science Collaborative	\checkmark		
Responsible Offshore Development Alliance	\checkmark		
Responsible Offshore Science Alliance	\checkmark		
Rhode Island Commercial Fishermen's Association			\checkmark
Rhode Island Lobstermen's Association			\checkmark
Rhode Island Division of Marine Fisheries			\checkmark
Rhode Island Saltwater Anglers Association			\checkmark
Seafreeze Ltd. and Seafreeze Shoreside			\checkmark
Sustainable Scalloping Fund	\checkmark		
The Town Dock			\checkmark
University of Massachusetts Dartmouth School for Marine Science and Technology	\checkmark		

2. Review any uses or activities that could disrupt commercial or recreational fisheries activities.

Response: Potential impacts of the Project, including those that could disrupt commercial or recreational fisheries activities are detailed in Sections 2 and 3 of COP Appendix V. Impacts and disruption to activities during construction will be limited temporally and spatially during construction. Since the cable is buried, impacts during operations will be limited to areas with cable protection on the seabed.

The highest landed species by value in recent years are typically sea scallops, longfin squid, shortfin squid, American lobster, and summer flounder, generally in that order.

E. The Council shall work together with the U.S. Coast Guard, the U.S. Navy, the U.S. Army Corps of Engineers, NOAA, fishermen's organizations, marine pilots, recreational boating organizations, and other marine safety organizations to promote safe navigation, fishing, and recreational boating activity around and through offshore structures and developments, and along cable routes, during the construction, operation, and decommissioning phases of such projects. The Council will promote and support the education of all mariners regarding safe navigation around offshore structures and developments and along cable routes.

Response: Cooperation between offshore wind developers and the USCG will help limit gear interactions that may occur during all Project phases. SouthCoast Wind continues to work with commercial and recreational fishermen as well as Fisheries Representatives, regional collaborative efforts, and regulatory agencies to determine construction timing and locations with fishing vessels to

anticipate and avoid, minimize, and mitigate gear interactions that may occur. SouthCoast Wind has already developed a gear loss compensation process in consultation with Fisheries Representatives and in coordination with other offshore wind developers in the Massachusetts/Rhode Island Wind Energy Area (MA/RI WEA). The form detailing this process is available on SouthCoast Wind's website and SouthCoast Wind compensates fishermen for lost gear as well as revenue lost during the period between the gear loss and gear replacement.

During construction, the presence of partially installed Project components, such as buoys, anchors, anchor lines, etc., may increase the risk of gear entanglement with mobile and fixed fishing gear. Temporary safety zone restrictions associated with construction activities will limit direct access to areas with construction activity for the safety of mariners and Project employees, but these areas will be limited spatially and temporally. To promote the safety of the public and work crews during construction, SouthCoast Wind will implement temporary safety zones around active construction areas in consultation with USCG and will work with relevant state agencies (i.e., RIDEM) to communicate this information to the commercial and recreational fishing industries and communities. This proposed nature of these zones is based on USCG regulations (33 C.F.R. 147), as well as precedents set by other recent offshore wind projects constructed in the United States. Since construction in Rhode Island state waters are limited to cable installation, limited, short-term safety zones will be needed. With a temporary safety zone of this scale, gear entanglements, snags, or other interactions with Project components will be unlikely to occur unless surface buoys/lines became separated from deployed gear and drift into partially installed Project components. SouthCoast Wind will notify mariners via Local Notice to Mariners (LNMs) of the presence and location of partially installed structures. SouthCoast Wind will consider the use of fixed mooring buoys at various strategic locations in the Project area to avoid the need for anchoring.

Combined with the direct outreach activities anticipated during construction, SouthCoast Wind will provide the fishing community with advance notice, prior to formal LNMs being issued, specific planned activities, schedules and how to file lost gear compensation forms if needed. SouthCoast Wind will work with fishermen through a lost gear claims form process to determine if reimbursement is. A process to compensate fishermen for entanglements of fishing gear by geophysical and geotechnical survey gear has already been developed jointly with other offshore wind developers and with input from the fishing industry via Fishery Representatives. This joint developer gear loss compensation application form has been made publicly accessible and is available on SouthCoast Wind's website. Additionally, the SouthCoast Wind Fisheries Manager proactively contacts fishermen if their gear is entangled by geophysical and geotechnical survey operations and will continue to do so in later phases of the proposed Project, including during construction.

SouthCoast Wind will coordinate with the USCG, USACE, RIDEM, and fisheries stakeholders including individual fishermen as well as relevant regulatory bodies to identify the location of secondary cable protection installed in the offshore ECC. The location of secondary cable protection will be made available to commercial and recreational fishermen to avoid potential gear interactions and entanglements.

F. Discussions with the U.S. Coast Guard, the U.S. Department of the Interior Bureau of Ocean Energy Management and the U.S. Army Corps of Engineers have indicated that no vessel access restrictions are planned for the waters around and through offshore structures and developments, or along cable routes, except for those necessary for navigational safety. Commercial and recreational fishing and boating access around and through offshore structures and developments and along cable routes is a critical means of mitigating the potential adverse impacts of offshore structures on commercial and recreational fisheries and recreational boating. The Council endorses this approach and shall work to ensure that the waters surrounding offshore structures, developments, and cable routes remain open to commercial and recreational fishing, marine transportation, and recreational boating, except for navigational safety restrictions. The Council requests that federal agencies notify the Council as soon as is practicable of any federal action that may affect vessel access around and through offshore structures and developments and along cable routes. The Council will continue to monitor changes to navigational activities around and through offshore developments and along cable routes. Any changes affecting existing navigational activities may be subject to CZMA federal consistency review if the federal agency determines its activity will have reasonably foreseeable effects on the uses or resources of Rhode Island's coastal zone.

Response: SouthCoast Wind will continue to consult with the USCG in terms of recommended vessel safety zones during the construction phase of the Project, and to ensure that "vessels will have the freedom to navigate through offshore renewable energy installations (OREI)," in accordance with the Coast Guard Navigation and Vessel Inspection Circular 01-19 dated 1 August 1, 2019. Further, while SouthCoast Wind's Lease Area (and most of the offshore ECC) lies outside of Rhode Island state waters, SouthCoast Wind appreciates the importance of the ability for Rhode Island-ported fishing vessels and other vessels landing catch at Rhode Island ports to navigate safely throughout the entire Project area.

G. The Council recognizes that commercial and recreational fishermen from other states, such as the neighboring states of Connecticut, New York, and Massachusetts, often fish in the Ocean SAMP area. The Council also recognizes that many fish species that are harvested in adjacent waters may rely on habitats and prey located within the Ocean SAMP area. Accordingly, the Council will work with neighboring states to ensure that offshore development and other uses of the Ocean SAMP area do not result in significant impacts to the fisheries resources or activities of other states.

Response: SouthCoast Wind also recognizes this fact and has conducted an analysis of landings in the Project area tied to specific ports from Rhode Island as well as Connecticut, New York, Massachusetts and even states as far south as North Carolina. This analysis is contained in Section 2.3 of COP, Appendix V. Field observations during site characterization surveys and direct outreach by the SouthCoast Wind Fisheries Manager to the commercial and recreational fishing industries confirm this. Because of this fact, SouthCoast Wind works with regional efforts that work across multiple states and also tracks developments in the regulatory bodies mentioned in SouthCoast Wind's response to Section 5.1.4(B) above, notably the New England Fishery Management Council (Maine to Connecticut), the Mid-Atlantic Fishery Management Council (New York to North Carolina), and the Atlantic States Marine Fisheries Commission (Maine to Florida). SouthCoast Wind will avoid, minimize, and mitigate potential negative impacts of the Project, largely by avoiding unreasonable interference with existing offshore activities, including commercial and recreational fishing. As described above, SouthCoast Wind works with the commercial and recreational fishing industries and communities.

SouthCoast Wind's Project design of its offshore facilities is meant to promote co-existence with the commercial and recreational fishing industries and communities. The Project's success depends upon the ability to reasonably co-exist alongside those in the fishing community who fish in areas including the Project area.

H. The Council shall appoint a standing FAB which shall provide advice to the Council on the siting and construction of other uses in marine waters. The FAB is an advisory body to the Council that is not intended to supplant any existing authority of any other federal or state agency responsible for the management of fisheries, including but not limited to the Marine Fisheries Council and its authorities set

forth in R.I.G.L. § 20-3-1 et seq. The FAB is defined in § 11.3(E) of this Part. When there are two members representing a fishing interest, only one vote may be cast on behalf of that interest. If the two members representing that fishery cannot agree on their vote, then there shall be no vote for that fishery for the item under consideration. In any vote on a matter, there shall be no more than 7 votes total for RI interests and no more than 3 votes total for MA interests. The FAB members may elect a chair and a vicechair from amongst its members. In addition, the FAB may establish rules governing its members such as a minimum number of meetings each member must attend to maintain standing as a member. FAB members shall serve four-year terms. The Council shall provide to the FAB a semi-annual status report on Ocean SAMP area fisheries related issues, including but not limited to those of which the Council is cognizant in its planning and regulatory activities, and shall notify the FAB in writing concerning any project in the Ocean SAMP area. The FAB shall meet not less than semi-annually with the Habitat Advisory Board and on an as needed basis to provide the Council with advice on the potential adverse impacts of other uses on commercial and recreational fishermen and fisheries activities, and on issues including, but not limited to, the evaluation and planning of project locations, arrangements, and alternatives; micrositing (siting of individual wind turbines within a wind farm to identify the best site for each individual structure); access limitations; and measures to mitigate the potential impacts of such projects on the fishery. In addition, the FAB may aid the Council and its staff in developing and implementing a research agenda. As new information becomes available and the scientific understanding of the Ocean SAMP planning area evolves, the FAB may identify new areas with unique or fragile physical features, important natural habitats, or areas of high natural productivity for designation by the Council as Areas of Particular Concern or Areas Designated for Preservation.

Response: SouthCoast Wind seeks to continue engaging with the FAB and the HAB or similar consistent group to discuss potential fishery impacts and mitigations. SouthCoast Wind's primary cable burial objective is to achieve the target burial depth of the offshore export cables in the seabed along the entire offshore ECC by micro-routing the cables and by assessing and selecting suitable installation/burial tooling for the seabed conditions. Achieving the target burial depth will minimize interactions with fishing gear that is deployed over and adjacent to the buried offshore export cables and mitigate impacts to both fisheries resources and fishing activity.

5.1.5. Ocean SAMP §11.9.5 Recreation and Tourism

A. The Council recognizes the economic, historic, and cultural value of marine recreation and tourism activities in the Ocean SAMP area to the state of Rhode Island. The Council's goal is to promote uses of the Ocean SAMP area that do not significantly interfere with marine recreation and tourism activities or values.

Response: Refer to Section 3.8 of this Category B Assent application for an evaluation of recreation and tourism within state waters and potential impacts associated with the Project. Potential impacts to marine recreation and recreational boating will be very limited both spatially and temporally to the active construction areas as the cable installation progresses. Construction schedules will also be aligned with seasonal recreation and tourism uses to avoid impacts as practicable. As a submarine cable, the Project components relevant to this Application will have no impact on recreation and tourism activities once installed.

SouthCoast Wind will work with the Town of Portsmouth to develop a traffic management plan that minimizes the disruptions to residences and commercial establishments in the vicinity of construction and installation activities. All areas temporarily affected by installation and construction activities,

including roads, beaches, parking areas, green spaces, etc., will be restored to an equal or better condition, as appropriate for the existing land use.

B. When evaluating proposed offshore developments, the Council will carefully consider the potential impacts of such activities on marine recreation and tourism uses. Where it is determined that there is a significant impact, the Council may modify or deny activities that significantly detract from these uses.

Response: Refer to response to § 11.9.5(A) above.

C. The Council will encourage and support uses of the Ocean SAMP area that enhance marine recreation and tourism activities.

Response: Noted.

D. The Council recognizes that the waters south of Brenton Point and within the 3-nautical mile boundary surrounding Block Island are heavily used recreational areas and are commonly used for organized sailboat races and other marine events. The Council encourages and supports the ongoing coordination of race and marine event organizers with the U.S. Coast Guard, the U.S. Navy, and the commercial shipping community to facilitate safe recreational boating in and adjacent to these areas, which include charted shipping lanes and Navy restricted areas (see Ocean SAMP Chapter 7, Marine Transportation, Navigation, and Infrastructure). The Council shall consider these heavily used recreational areas when evaluating offshore developments in this area. Where it is determined that there is a significant impact, the Council may suitably modify or deny activities that significantly detract from these uses. The Council also recognizes that much of this organized recreational activity is concentrated within the circular sailboat racing areas as depicted in Figure 6 in § 11.10.2(I) of this Part, and accordingly has designated these areas as Areas of Particular Concern. See § 11.10.2 of this Part for requirements associated with Areas of Particular Concern.

Response: The Project avoids organized recreational activity as shown in Figure 6 in § 11.10.2(I) of the Ocean SAMP and designated shipping lanes, anchorages, and military testing and disposal sites as shown in Figure 5 in § 11.10.2(I) of the Ocean SAMP. SouthCoast Wind has and will continue to engage with the USCG and the organizers of major marine events in state waters to avoid any potential waterway conflicts with the installation of the offshore Project components. During installation, SouthCoast Wind will maintain regular contact with the USCG and submit Local Notices to Mariners through the USCG to avoid waterway conflicts to the extent feasible.

SouthCoast Wind engaged with the U.S. Navy during route planning stages to discuss route options under consideration to avoid potential impacts to Navy activities and restricted areas around Newport, Rhode Island. During this meeting, SouthCoast Wind was advised that the U.S. Navy would not have conflicts with the selected route through the Sakonnet River.

E. See § 11.9.4(*E*) of this Part for policy regarding safe navigation around and through offshore structures and developments and along cable routes.

Response: Refer to response to § 11.9.4(E) above in Section 5.1.4 of this Category B Assent application.

F. See § 11.9.4(*F*) of this Part for policy regarding vessel access around and through offshore structures and developments and along cable routes.

Response: Refer to response to § 11.9.4(F) above in Section 5.1.4 of this Category B Assent application.

G. The Council recognizes that offshore wildlife viewing activities are reliant on the presence and visibility of marine and avian species which rely on benthic habitat, the availability of food, and other environmental factors. The Council shall consider these environmental factors when evaluating proposed offshore developments in these areas. Where it is determined that there is a significant impact, the Council may modify or deny activities that significantly detract from these uses.

Response: Wildlife viewing activities were considered and addressed in SouthCoast Wind's COP, Section 10. The ECC in Rhode Island was not noted in the COP to be a significant area for wildlife viewing. A report to BOEM, *Socio-Economic Impact of Outer Continental Shelf Wind Energy Development on Fisheries in the U.S. Atlantic*, reported that wildlife viewing, mainly related to bird watching was a less common activity in the ECC.⁵

Refer to Section 3.2 of this Category B Assent application for an evaluation of biological and benthic resources, including marine and avian species, within state waters and potential impacts associated with the Project. As described in the applicable subsections in Section 3, significant impacts to these resources are not anticipated in state waters given the limited scale and intensity of the Project activities. SouthCoast Wind has conducted detailed analysis including mapping of seabed habitat to support cable siting and engineering. Also, the construction schedule is developed to minimize use conflicts and impacts to sensitive habitat, where practicable.

Additionally, SouthCoast Wind will use HDD technology at the Sakonnet River and Mount Hope Bay landfall approaches to avoid impacts to nearshore benthic habitats and shoreline features.

5.1.6. Ocean SAMP §11.9.6 Marine Transportation

A. The Council recognizes the importance of designated navigation areas, which include shipping lanes, precautionary areas, recommended vessel routes, pilot boarding areas, anchorages, military testing areas, and submarine transit lanes to marine transportation and navigation activities in the Ocean SAMP area. The Council also recognizes that these and other waters within the Ocean SAMP area are heavily used by numerous existing users who have adapted to each other with regard to their uses of ocean space. Any changes in the spatial use patterns of any one of these users will result in potential impacts to the other users. The Council will carefully consider the potential impacts of such changes on the marine transportation network. Changes to existing designated navigational areas proposed by the U.S. Coast Guard, NOAA, the R.I. Port Safety and Security Forums, or other entities could similarly impact existing uses. The Council requests that they be notified by any of these parties if any such changes are to be made to the transportation network so that they may work with those entities to achieve a proper balance among existing uses.

Response: Refer to the Navigation Safety Risk Assessment (Attachment N) and Sections 3.8 and 3.9 of this Category B Assent application for an evaluation of commercial shipping and other marine uses (e.g., anchorage areas, ferry routes, pilot boarding areas), respectively, within state waters and potential impacts associated with the Project.

SouthCoast Wind does not intend to request that the USCG modify any precautionary areas, recommended vessels routes, pilot boarding areas, etc. Based on Figure 5 in § 11.10.2(H) of the Ocean

⁵ Kirkpatrick, A.J., S. Benjamin, G.S. DePiper, T. Murphy, S. Steinback, and C. Demarest. 2017. *Socio-Economic Impact of Outer Continental Shelf Wind Energy Development on Fisheries in the U.S. Atlantic. Volume I—Report Narrative*. U.S. Dept. of the Interior, Bureau of Ocean Energy Management, Atlantic OCS Region, Washington, D.C. OCS Study BOEM 2017-012. 150 pp.

SAMP, the ECC does not cross any precautionary areas, pilot boarding areas, anchorage areas, military testing areas, or submarine transit lanes. Project activities in these areas will be limited spatially and temporally and will be communicated with other vessels via LNMs. SouthCoast Wind will continue to coordinate with the USCG ahead of Project activities to ensure safety within the Ocean SAMP area.

B. The Council recognizes the economic, historic, and cultural value of marine transportation and navigation uses of the Ocean SAMP area to the state of Rhode Island. The Council's goal is to promote uses of the Ocean SAMP area that do not significantly interfere with marine transportation and safe navigation within designated navigation areas, which include shipping lanes, precautionary areas, recommended vessel routes, pilot boarding areas, anchorages, military testing areas, and submarine transit lanes. See § 11.10.2 of this Part for discussion of navigation areas which have been designated as Areas of Particular Concern.

Response: Refer to response to § 11.9.6(A) above.

C. The Council will encourage and support uses of the Ocean SAMP area that enhance marine transportation and safe navigation within designated navigation areas, which include shipping lanes, precautionary areas, recommended vessel routes, pilot boarding areas, anchorages, military testing areas, and submarine transit lanes.

Response: Refer to response to § 11.9.6(A) above.

D. See § 11.9.4(E) of this Part for policy regarding safe navigation around and through offshore structures and developments and along cable routes.

Response: Refer to response to § 11.9.4(E) above in Section 5.1.4 of this Category B Assent application. SouthCoast Wind conducted a Navigation Safety Risk Assessment (Attachment N) to inform navigation safety precautions for the Project. Temporary safety zones, in consultation with the USCG, during construction activities will limit direct access to areas with construction activity for the safety of mariners and Project employees, but these areas will be limited spatially and temporally. The nature of these proposed zones is based on USCG regulations (33 C.F.R. 147), as well as precedents set by other recent offshore wind projects constructed in the United States. SouthCoast Wind will notify mariners via LNMs of the presence and location of partially installed structures.

E. See § 11.9.4(*F*) of this Part for policy regarding vessel access around and through offshore structures and developments and along cable routes.

Response: Refer to the response to § 11.9.6(D) above.

5.1.7. Ocean SAMP §11.9.7 Offshore Renewable Energy and Other Offshore Development

A. The Council supports offshore development in the Ocean SAMP area that is consistent with the Ocean SAMP goals, which are to:

1. Foster a properly functioning ecosystem that can be both ecologically effective and economically beneficial;

2. Promote and enhance existing uses; and

3. Encourage marine-based economic development that considers the aspirations of local communities and is consistent and complementary to the state's overall economic development needs and goals.

Response: SouthCoast Wind is developing the Project to meet the regional need for renewable clean energy from offshore wind generation. That need is driven by the public policies and legislative directives of the various New England states, including Rhode Island and its neighboring coastal states, Massachusetts and Connecticut. Refer to Section 1.2 of this Category B Assent application for further description of the Project's purpose and need.

SouthCoast Wind will create positive economic development in the region, including in Rhode Island, with jobs and training opportunities in a range of fields. SouthCoast Wind has committed to supporting offshore wind education and supply chain and workforce development for the growing offshore wind industry in the region. As mentioned, SouthCoast Wind will support the state's efforts to stimulate regional growth and economic activity while meeting the renewable energy goals in New England. In addition to the revenues, SouthCoast Wind will pay the state of Rhode Island for the submerged lands lease fees for the offshore route in Rhode Island state waters. The Town of Portsmouth will directly benefit through a host community agreement from the new onshore transmission assets; this agreement with the Town was successfully executed on January 16, 2024.

SouthCoast Wind will have a positive effect on employment in the region, including in Rhode Island through: workforce hiring; procurement of materials; equipment, and services, including port use and vessel charters, and indirect economic effects to local businesses, such as restaurants and hotels to support workforce needs. SouthCoast Wind will prioritize hiring locally including coordination with unions, training facilities and schools in the region, and has estimated that the Project will draw 44% of its local workforce from EJ communities and 58% from economically distressed communities. SouthCoast Wind has also been working closely with the Rhode Island Commerce and its Supply Rhode Island Initiative to find ways to connect with Rhode Island businesses, in particular minority and womenowned business enterprises.

SouthCoast Wind has and continues to engage in programs that support workers in the transition to and the development of programs to recruit, train, and retain women, people of color, indigenous people, veterans, formerly incarcerated people, and people living with disabilities in jobs related to a cleaner energy economy. For example, SouthCoast Wind has successfully launched its Tribal Protected Species Observer Training Program in partnership with RPS, which provides full training and job opportunities to actively engage in monitoring and mitigation potential impacts of the industry on protected species. A recent PSO training program was held during the week of September 16, 2024 at the SouthCoast Wind Fall River office.

Additionally, SouthCoast Wind recognizes that the Project components are within close proximity of leading Rhode Island institutions and data experts offering regional competitive advantage for technological growth. SouthCoast Wind is an active supporter and contributor to Southern New England Blue Economy Initiatives. Investing in areas of overlap in the Blue Economy supports economic development while also ensuring a diverse set of industries provide resilience to Rhode Island and the broader region's economy. For example, SouthCoast Wind has actively engaged in discussions with the University of Rhode Island and Roger Williams University on ways to collaborate and support research and data sharing.

B. The Council supports the policy of increasing renewable energy production in Rhode Island. The Council also recognizes:

1. Offshore wind energy currently represents the greatest potential for utility-scale renewable energy generation in Rhode Island;

2. Offshore renewable energy development is a means of mitigating the potential effects of global climate change;

3. Offshore renewable energy development will diversify Rhode Island's energy portfolio;

4. Offshore renewable energy development will aid in meeting the goals set forth in Rhode Island's Renewable Energy Standard;

5. Marine renewable energy has the potential to assist in the redevelopment of urban waterfronts and ports.

Response: As an offshore wind energy project, the Project is consistent with this policy of the Ocean SAMP. It will also bring reliability and energy security benefits for Rhode Islanders who rely on the integrated regional grid system. The Project will increase the renewable clean energy in the regional supply mix , thus mitigating the effects of global climate change. Specifically, among those policies, the Project will significantly advance Rhode Island's policies set forth in the State energy plan, Energy 2035, which calls for Rhode Island to "increase sector fuel diversity, produce net economic benefits, and reduce greenhouse gas emissions by 45 percent by the year 2035" in part "through support for state and federal offshore wind projects."⁶ Rhode Island's Office of Energy Resources set the goal of converting Rhode Island to one hundred percent renewable by 2030. The Project substantially contributes to the transformation of the New England energy system to a carbon-free renewable energy system. With a regional system more heavily supplied by renewable clean energy resources, Rhode Island will be better able to attain its ambitious renewable clean energy goals. The Project also directly advances the vision outlined by Governor McKee in the Rhode Island 2030 Vision Plan "Rhode Island 2030: Charting a Course for the Future of the Ocean State."⁷ The vision plan focuses on harnessing the State's "Blue Economy" as well as the "Green Economy."

The Project will bring offshore wind to the regional grid and contribute to the innovation, enhancement and evolution of both the Blue Economy and the Green Economy. As an Infrastructure and Transportation Objective, Rhode Island 2030 states that it is an objective to develop "infrastructure that supports the Blue Economy and life sciences, including ports that support offshore wind activity and site readiness work that enables future industrial and commercial development."⁸ The vision plan notes that the State will continue to invest in needed infrastructure for offshore wind in pursuit of Rhode Island's renewable energy goals with the passage of legislation for an additional 600 to 1,000 MW of newly developed offshore wind capacity.⁹ The Project will also help Rhode Island to meet its climate goals as set forth in the General Assembly's passage of the 2021 Act on Climate with the intent of increasing Rhode Island's efficiency and effectiveness in responding to climate change.¹⁰ The 2021 Act sets mandatory and enforceable targets for reducing GHG emissions and transitioning to a low carbon economy. The 2021 Act on Climate requires that the Rhode Island Executive Climate Change Coordinating Council update the Greenhouse Gas Emissions Reduction Plan to develop a plan to reduce climate emissions to net zero by 2050. Finally, the SouthCoast Wind 1 Project will also facilitate the revitalization of a Brownfields waterfront site at Brayton Point in Somerset, Massachusetts, for a clean energy project.

⁸ Id. at 50.

⁶ Rhode Island Division of Planning, Energy 2035: Rhode Island State Energy Plan (2015)

http://www.planning.ri.gov/documents/LU/energy/energy15.pdf.

⁷ Rhode Island 2030: Charting a Course for the Future of the Ocean State, Working Document (2021)

https://www.ri2030.com/_files/public/RI%202030_final.pdf.

⁹ R.I.G.L. § 39-31-10

¹⁰ R.I.G.L. §§ 42-6.2-1 et seq.

C. The Council's support of offshore renewable energy development shall not be construed to endorse or justify any particular developer or particular offshore renewable energy proposal.

Response: Noted.

D. The Council may require the applicant to fund a program to mitigate the potential impacts of a proposed offshore development to natural resources and existing human uses. The mitigation program may be used to support restoration projects, additional monitoring, preservation, or research activities on the impacted resource or site.

Response: Noted.

E. To the greatest extent possible, offshore development structures and projects shall be made available to researchers for the investigation into the effects of large-scale installations on the marine environment, and to the extent practicable, educators for the purposes of educating the public.

Response: As explained in Section 3.5, SouthCoast Wind is committed to collaborative science, including the commercial and recreational fishing communities in the region. SouthCoast Wind is an active member of ROSA and RWSC, which are focused on bringing together regulators, project developers and environmental advocacy groups to support research and data sharing on the potential effects of offshore wind. SouthCoast Wind is also focused on public education and bringing diverse groups into the industry in a meaningful way. An example is the SouthCoast Wind successful Tribal Protected Species Observer training program which provides full training and job opportunities to actively engage in monitoring and mitigation potential impacts of the industry on protected species. SouthCoast Wind is also actively engaged in discussions with URI and RWU on ways to collaborate and support research and data sharing.

F. The Council shall work in coordination with the U.S. Department of the Interior Bureau of Ocean Energy Management to develop a seamless process for review and design approval of offshore wind energy facilities that is consistent across state and federal waters.

Response: SouthCoast Wind supports this policy. SouthCoast Wind has and will continue to coordinate with BOEM throughout the Project and would benefit from a streamlined process for review and design approval of the Project.

G. The Council shall work together with the U.S. Coast Guard, the U.S. Navy, the U.S. Army Corps of Engineers, NOAA, fishermen's organizations, marine pilots, recreational boating organizations, and other marine safety organizations to promote safe navigation, fishing, and recreational boating activity around and through offshore structures and developments, and along cable routes, during the construction, operation, and decommissioning phases of such projects. The Council will promote and support the education of all mariners regarding safe navigation around offshore structures and developments and along cable routes.

Response: SouthCoast Wind has and will continue to work with all agencies and groups listed above to promote safe navigation and preserve other marine uses during the Project. SouthCoast Wind distributed information to mariners about the survey area and vessel operating schedule ahead of marine surveys, in addition to formal LNMs through the USCG. Interested parties can also review mariner updates and sign up for notification of mariner updates on SouthCoast Wind's website (<u>https://SouthCoastwind.com/our-commitment/marine-users/</u>). There are three contracted Fisheries Representatives for the Project who regularly attend local and regional fishing industry meetings to
provide Project updates and communicate with mariners. SouthCoast Wind's Fisheries Manager also attends monthly port hours in New Bedford, Massachusetts and Narragansett, Rhode Island.

SouthCoast Wind also worked with the USCG, BOEM, the other leaseholders, and other regulators and stakeholders to develop the uniform grid for the offshore structures in the wind farm portion of the Project in federal waters to allow for multiple, straight-line navigation safety corridors through the MA/RI WEA.

H. To coordinate the review process for offshore wind energy developments, the Council shall adopt consistent information requirements similar to the requirements of the U.S. Department of the Interior's Bureau of Ocean Energy Management for offshore wind energy. All documentation required at the time of application shall be similar with the requirements followed by the U.S. Department of the Interior Bureau of Ocean Energy Management when issuing renewable energy leases on the Outer Continental Shelf. For further details on these regulations see 30 C.F.R. §§ 285 et seq. The Council shall continue to monitor the federal review process and information requirements for any changes and will make adjustments to the Ocean SAMP policies accordingly.

Response: SouthCoast Wind supports this policy. This Category B Assent application includes a summary of the information presented in the Project's COP. The Project's COP is available on BOEM's project website (https://www.boem.gov/renewable-energy/state-activities/SouthCoast-wind).

I. The Council shall coordinate with the appropriate federal and state agencies to establish project specific requirements that shall be followed by the applicant during the pre-construction, construction, operation and decommissioning phases of an offshore development...

Response: Noted. SouthCoast Wind has and will continue to coordinate with all applicable federal and state agencies throughout the Project.

J. The Council identifies the following industry goals for offshore projects. These are not required standards at this time but are targets project proponents should try to meet where possible to alleviate potential adverse impacts:

1. A goal for the offshore wind farm applicant and operator is to have operational noise from wind turbines average less than or equal to 100 dB re 1 μ Pa2 in any 1/3 octave band at a range of 100 meters at full power production.

2. The applicant and manufacturer should endeavor to minimize the radiated airborne noise from the wind turbines.

3. A monitoring system including acoustical, optical and other sensors should be established near these facilities to quantify the effects.

Response: Not applicable to this CRMC Assent application; the Project's wind turbines are located in federal waters and are not subject to this Category B Assent application.

5.1.8. Ocean SAMP §11.9.8 Application Requirements in State Waters

A. Applicants shall meet the site assessment plan (SAP) requirements in § 11.10.5 of this Part and the following: (§§ 11.10.5[A][1-9] omitted)

Response: The SouthCoast Wind Site Assessment Plan (SAP) (Lease Area OCS-A 0521) dated July 29, 2019, prepared by ESS Group, Inc. was submitted to BOEM for meteorological evaluations and site assessment. BOEM approved the SAP on May 26, 2020. BOEM performed a consistency review and issued a Regional Consistency Determination finding that SAP activities anticipated for the MA/RI WEAs, including the installation, operation and decommissioning of meteorological towers and buoys, are consistent with the provisions of the Coastal Management Programs of the state of Rhode Island.¹¹

Therefore, SouthCoast Wind has complied with the SAP requirements in § 11.9.8(A).

B. Applicants shall meet the construction and operation plan (COP) requirements in § 11.10.5 of this Part and the following: (§§ 11.10.5[B][1-8] omitted)

Response: SouthCoast Wind's COP is consistent with the requirements in § 11.10.5. BOEM published a Notice of Intent to Prepare an Environmental Impact Statement for the SouthCoast Wind Project's COP on November 1, 2021 (https://www.boem.gov/renewable-energy/state-activities/SouthCoast-wind). BOEM issued the Draft Environmental Impact Statement for the SouthCoast Wind Project on February 13, 2023, with a Final Environmental Impact Statement anticipated on November 15, 2024. The Project's Oil Spill Response Plan is included in the COP. A Safety Management System (SMS) was prepared by SouthCoast Wind and submitted to BOEM as a confidential appendix to the COP. The SMS is not included with this application because it contains confidential commercial information not subject to disclosure under the Access to Public Records Act (R.I.G.L. § 38-2-1) or the Freedom of Information Act (5 U.S.C. § 552) (see COP Appendix Z).

Refer to Attachment T for a review of the Project's COP relative to the content requirements in § 11.10.5 of this Part.

8. If the application and COP is approved, prior to construction the applicant shall submit to the Council for approval the documents listed below in §§ 11.9.8(B)(8)(a), (b), (c), (d) and (e) of this Part: (§§ 11.9.8[B][8][a-e] omitted).

Response: Noted. SouthCoast Wind will comply with this standard by establishing a protocol with RI CRMC to share documents relevant to RI CRMC's jurisdictional geographic areas and activities, filed with BOEM to meet relevant requirements.

SouthCoast Wind submitted a Certified Verification Agent nomination to BOEM under confidential cover. BOEM accepted the Certified Verification Agent (CVA) nomination on November 4, 2020.

9. Based on the Council's environmental and technical reviews, if approved, the Council may specify terms and conditions to be incorporated into any approval the Council may issue. The applicant shall submit a certification of compliance annually (or another frequency as determined by the Council) with certain terms and conditions which may include: (§§ 11.9.8[B][9][a-b] omitted).

10. After the applicant's COP, facility design report, and fabrication and installation report is approved, and the Council has issued a permit and lease for the project site, construction shall begin by the date

¹¹ U.S. Department of the Interior and BOEM. 2013. Biological opinion for programmatic environmental impact statement for Atlantic OCS proposed geological and geophysical activities in the Mid-Atlantic and South Atlantic planning areas.

given in the construction schedule included as a part of the approved COP, unless the Council approves a deviation from the applicant's schedule.

11. The applicant shall seek approval from the Council in writing before conducting any activities not described in the applicant's approved COP. The application shall describe in detail the type of activities the applicant proposes to conduct. The Council shall determine whether the activities the applicant proposes are authorized by the applicant's existing COP or require a revision to the applicant's COP. The Council may request additional information from the applicant, if necessary, to make this determination.

12. The Council shall periodically review the activities conducted under an approved COP. The frequency and extent of the review shall be based on the significance of any changes in available information, and on onshore or offshore conditions affecting, or affected by, the activities conducted under the applicant's COP. If the review indicates that the COP should be revised, the Council may require the applicant to submit the needed revisions.

13. The applicant shall notify the Council, within 5 business days, any time the applicant ceases commercial operations, without an approved suspension, under the applicant's approved COP. If the applicant ceases commercial operations for an indefinite period which extends longer than 6 months, the Council may cancel the applicant's lease, and the applicant shall initiate the decommissioning process.

14. The applicant shall notify the Council in writing of the following events, within the time periods provided: (§§ 11.9.8[B][14][a-c] omitted).

15. The applicant may commence commercial operations within thirty (30) days after the CVA has submitted to the Council the final fabrication and installation report.

16. The applicant shall submit a project modification and repair report to the Council, demonstrating that all major repairs and modifications to a project conform to accepted engineering practices. (§§ 11.9.8[B][16][a-d] omitted).

Response: SouthCoast Wind acknowledges requirements of § 11.9.8(B)(9-16). SouthCoast Wind will comply with this standard by establishing a protocol with RI CRMC to share documents relevant to RI CRMC's jurisdictional geographic areas and activities, filed with BOEM to meet relevant requirements.

SouthCoast Wind submitted a Certified Verification Agent nomination to BOEM under confidential cover. BOEM accepted the CVA nomination on November 4, 2020.

Refer to Attachment T for the Contents of the SouthCoast Wind COP.

C. Design, fabrication and installation standards (§§ 11.9.8[C][1-21] omitted)

Response: SouthCoast Wind acknowledges with requirements of § 11.9.8(C)(1-21). SouthCoast Wind will comply with this standard by establishing a protocol with RI CRMC to share documents relevant to RI CRMC's jurisdictional geographic areas and activities, filed with BOEM to meet relevant requirements.

SouthCoast Wind submitted a Certified Verification Agent nomination to BOEM. BOEM approved the CVA nomination on November 4, 2020.

D. Pre-construction standards (§§ 11.9.8[D][1-3] omitted)

Response: SouthCoast Wind acknowledges and will comply with the pre-construction requirements of § 11.9.8(D)(1-3). Refer to Table 1-1 in Section 1.1 of this Category B Assent application for a summary of other state and federal approvals that SouthCoast Wind will obtain prior to construction.

4. The Council shall consult with the U.S. Coast Guard, the U.S. Navy, marine pilots, the Fishermen's Advisory Board as defined in § 11.3(E) of this Part, fishermen's organizations, and recreational boating organizations when scheduling offshore marine construction or dredging activities. Where it is determined that there is a significant conflict with season-limited commercial or recreational fishing activities, recreational boating activities or scheduled events, or other navigation uses, the Council shall modify or deny activities to minimize conflict with these uses.

Response: SouthCoast Wind has and will continue to work with all agencies and groups listed above to promote safe navigation and preserve other marine uses during all phases of the Project. SouthCoast Wind distributed information to mariners about the survey area and vessel operating schedule ahead of marine surveys, in addition to formal LNMs through the USCG. Interested parties can also review mariner updates and sign up for notification of mariner updates on SouthCoast Wind's website (<u>https://SouthCoastwind.com/our-commitment/marine-users/</u>). There are three contracted Fisheries Representatives for the Project who regularly attend local and regional fishing industry meetings to provide Project updates and communicate with mariners. SouthCoast Wind's Fisheries Manager also attends monthly port hours in New Bedford, Massachusetts and Narragansett, Rhode Island.

5. The Council shall require the assent holder to provide for communication with commercial and recreational fishermen, mariners, and recreational boaters regarding offshore marine construction or dredging activities. Communication shall be facilitated through a project website and shall complement standard U.S. Coast Guard procedures such as Notices to Mariners for notifying mariners of obstructions to navigation.

Response: SouthCoast Wind will comply with this policy. Refer to previous response.

6. For all large-scale offshore developments, underwater cables, and other development projects as determined by the Council, the assent holder shall designate and fund a third-party fisheries liaison. The fisheries liaison must be knowledgeable about fisheries and shall facilitate direct communication between commercial and recreational fishermen and the project developer. Commercial and recreational fishermen shall have regular contact with and direct access to the fisheries liaison throughout all stages of an offshore development (preconstruction; construction; operation; and decommissioning).

Response: SouthCoast Wind has three contracted third-party Fisheries Representatives for the Project (CFCRI, MLA, and NBPA) who regularly attend local and regional fishing industry meetings to provide Project updates and communicate with mariners.

SouthCoast Wind has developed a Fisheries Communication Plan (COP, Appendix W) to facilitate direct communication between commercial and recreational fishermen and SouthCoast Wind. SouthCoast Wind's designated Fisheries Manager attends monthly port hours in New Bedford, Massachusetts and Narragansett, Rhode Island. The Fisheries Manager's contact information can be found on the SouthCoast Wind website (https://SouthCoastwind.com/our-commitment/marine-users/).

7. Where possible, offshore developments should be designed in a configuration to minimize adverse impacts on other user groups, which include but are not limited to: recreational boaters and fishermen,

commercial fishermen, commercial ship operators, or other vessel operators in the project area. Configurations which may minimize adverse impacts on vessel traffic include, but are not limited to, the incorporation of a traffic lane through a development to facilitate safe and direct navigation through, rather than around, an offshore development.

Response: SouthCoast Wind will continue to consult with the USCG in terms of recommended vessel safety zones during the construction phase of the Project, and to ensure that "vessels will have the freedom to navigate through offshore renewable energy installations (OREI)," in accordance with the Coast Guard Navigation and Vessel Inspection Circular 01-19 dated 1 August 1, 2019. Further, while SouthCoast Wind's Lease Area (and most of the offshore ECC) lies outside of Rhode Island state waters, SouthCoast Wind appreciates the importance of the ability for Rhode Island-ported fishing vessels and other vessels landing catch at Rhode Island ports to navigate safely throughout the entire Project area.

8. Any assent holder of an approved offshore development shall work with the Council when designing the proposed facility to incorporate where possible mooring mechanisms to allow safe public use of the areas surrounding the installed turbine or other structure.

Response: Project components in Rhode Island jurisdictional waters (offshore export cables) will be buried beneath the seafloor and will not infringe on safe public use of the areas surrounding the export cables. The need for mooring mechanisms referenced here is not anticipated.

9. The facility shall be designed in a manner that minimizes adverse impacts to navigation. As part of its application package, the project applicant shall submit a navigation risk assessment under the U.S. Coast Guard's Navigation and Vessel Inspection Circular 02-07, "Guidance on the Coast Guard's Roles and Responsibilities for Offshore Renewable Energy Installations."

Response: A Navigation Safety Risk Assessment is included as Attachment N to this Category B Assent application. The export cables will be buried to sufficient depths (target burial of 6 ft [1.8 m]) to minimize impact on other user groups and not interfere with navigation.

10. Applications for projects proposed to be sited in state waters pursuant to the Ocean SAMP shall not have a significant impact on marine transportation, navigation, and existing infrastructure. Where the Council, in consultation with the U.S. Coast Guard, the U.S. Navy, NOAA, the U.S. Bureau of Ocean Energy Management, Regulation and Enforcement, the U.S. Army Corps of Engineers, marine pilots, the R.I. Port Safety and Security Forums, or other entities, as applicable, determines that such an impact on marine transportation, navigation, and existing infrastructure is unacceptable, the Council shall require that the applicant modify the proposal or the Council shall deny the proposal. For the purposes of marine transportation policies and standards as summarized in Ocean SAMP Chapter 7, impacts will be evaluated according to the same criteria used by the U.S. Coast Guard, as follows:

Response: Refer to response to § 11.9.8(D)(9) above.

11. Prior to construction, the Applicant shall provide a letter from the U.S. Coast Guard showing it meets all applicable U.S. Coast Guard standards.

Response: SouthCoast Wind will comply with all USCG permitting requirements and will provide RI CRMC documentation of such permits when obtained. Additionally, SouthCoast Wind has met with USCG since January 2020 and will continue to meet regularly to discuss Project operations to minimize impacts to marine transportation and navigation.

E. Standards for construction activities

1. The assent holder shall use the best available technology and techniques to minimize impacts to the natural resources and existing human uses in the project area.

Response: Refer to Section 3 of this Assent application, and specifically the avoidance, minimization and mitigation sections for each resources area.

2. The Council shall require the use of an environmental inspector to monitor construction activities. The environmental inspector shall be a private, third-party entity that is hired by the assent holder, but is approved and reports to the Council. The environmental inspector shall possess all appropriate qualifications as determined by the Council. This inspector service may be part of the CVA requirements.

Response: SouthCoast Wind will comply with this provision, likely under the existing CVA role/requirements. Refer to Section 2.7 for SouthCoast Wind's commitments to compliance monitoring during construction.

3. Installation techniques for all construction activities should be chosen to minimize sediment disturbance. Jet plowing and horizontal directional drilling in near-shore areas shall be required in the installation of underwater transmission cables. Other technologies may be used provided the applicant can demonstrate they are as effective, or more effective, than these techniques in minimizing sediment disturbance.

Response: As described in Section 2.4, SouthCoast Wind is proposing the use of HDD at the landfall locations, although the Project's landfall locations are outside the Ocean SAMP Area. Also as described in Section 2.3, jet plowing is one of the cable installation methods under consideration for use within the Ocean SAMP area. SouthCoast Wind has completed a Cable Burial Risk Assessment (CBRA; "Confidential" – provided under separate cover) to evaluate the site conditions and choose appropriate cable installation methods.

4. All construction activities shall comply with the policies and standards outlined in the Rhode Island Coastal Resources Management Program (RICRMP), as well as the regulations of other relevant state and federal agencies.

Response: Refer to Section 4 of this Category B Assent application for review of the Project's compliance with the Rhode Island CRMP. Also see Section 1.3 for a summary of other state and federal permits and approvals that SouthCoast Wind will seek for the Project.

5. The applicant shall conduct all activities on the applicant's permit under this part in a manner that conforms with the applicant's responsibilities in § 11.10.1(E) of this Part, and using:

a. Trained personnel; and

Response: SouthCoast Wind will comply with this policy.

b. Technologies, precautions, and techniques that shall not cause undue harm or damage to natural resources, including their physical, atmospheric, chemical and biological components.

Response: SouthCoast Wind has designed the Project to utilize the best-available technologies, precautions, and techniques to avoid and minimize harm to natural resources.

6. The assent holder shall be required to use the best available technology and techniques to mitigate any associated adverse impacts of offshore renewable energy development.

a. As required, the applicant shall submit to the Council:

(1) Measures designed to avoid or minimize adverse effects and any potential incidental take of endangered or threatened species as well as all marine mammals;

(2) Measures designed to avoid likely adverse modification or destruction of designated critical habitat of such endangered or threatened species; and

(3) The applicant's agreement to monitor for the incidental take of the species and adverse effects on the critical habitat, and provide the results of the monitoring to the Council as required.

Response: SouthCoast Wind will comply with these policies. SouthCoast Wind has proposed measures to avoid and minimize potential impacts resulting from construction and operation of the Project, which are summarized in Sections 2.7 and 3.1 of this application and presented by resource in Section 3 of this application. SouthCoast Wind will obtain an Incidental Take Authorization for Project activities pursuant to the *Marine Mammal Protection Act* and *Endangered Species Act* from NMFS. SouthCoast Wind anticipates such authorizations will specify specific conditions to avoid, minimize, and monitor potential adverse effects and incidental take of endangered and threatened species as well as marine mammals.

SouthCoast Wind generated an official list of threatened and endangered species that may occur in the proposed Project location using the USFWS' IPaC tool on March 30, 2022. Based on the tool output, there are no critical habitats within the Project area under the jurisdiction of the USFWS.

7. If the assent holder, the assent holder's subcontractors, or any agent acting on the assent holder's behalf discovers a potential archaeological resource while conducting construction activities or any other activity related to the Assent Holder's project, the applicant shall: (§§ 11.9.8[E][7][a-c] omitted).

Response: SouthCoast Wind will comply with this policy. A thorough Marine Archaeological Resources Assessment was performed for the Project utilizing data from surveys. The Project has also developed necessary mitigation and avoidance plans and a Marine Unanticipated Discovery Plan (UDP) (COP, Appendix Q.1) and a Terrestrial UDP (COP, Appendix R.1) which have been submitted to BOEM and shared with the relevant SHPOs and THPOs.

8. Post construction, the assent holder shall provide a side scan sonar survey of the entire construction site to verify that there is no post construction debris left at the project site. These side-scan sonar survey results shall be filed with the Council within ninety (90) days of the end of the construction period. The results of this side-scan survey shall be verified by a third-party reviewer, who shall be hired by the assent holder but who is pre-approved by and reports to the Council.

Response: SouthCoast Wind will comply with the survey and reporting requirements of this provision. Refer to Section 2.7. SouthCoast Wind will conduct an as-built survey along the cable routes within state waters following installation.

9. All pile-driving or drilling activities shall comply with any mandatory best management practices established by the Council in coordination with the Joint Agency Working Group and which are incorporated into the RICRMP.

Response: Pile driving is not anticipated to occur during installation of the cables within the Ocean SAMP Area subject to this Category B Assent application.

10. The Council may require the assent holder to hire a CVA to perform periodic inspections of the structure(s) during the life of those structure(s). The CVA shall work for and be responsible to the council.

Response: SouthCoast Wind submitted a CVA nomination to BOEM under confidential cover. BOEM approved the CVA nomination on November 4, 2020.

F. When mitigation is required by the Council, the reasonable costs associated with mitigation negotiations, which may include data collection and analysis, technical and financial analysis, and legal costs, shall be borne by the applicant. The applicant shall establish and maintain either an escrow account to cover said costs of the negotiations or such other mechanism as set forth in the permit or approval condition pertaining to mitigation.

Response: Noted. SouthCoast Wind will comply pursuant to 650-R.I.C.R. 20-05-5.3.2(D).

G. The CRMC shall convene a Wind Energy Industry-Fishery Coordination Board that will be composed of invited representatives of wind energy developers with projects located within state waters and the Rhode Island 2011 and 2018 GLDs, fishery representatives of the major sectors from the states of Rhode Island and Massachusetts, and state fishery and coastal management representatives from each state, including any other representatives of state or federal agencies deemed necessary. The Board will meet semi-annually to discuss and resolve fishery and wind industry interactions during and after the construction phase of each wind energy project.

Response: Noted.

5.1.9. Ocean SAMP §11.9.9 Baseline Assessment Requirements and Standards in State Waters

A. The Council in coordination with the Joint Agency Working Group, as described in § 11.9.7(I) of this Part, shall determine requirements for the development of baseline assessments prior to, during, and post construction for all offshore projects. Monitoring of offshore projects is essential to determine whether construction and operation activities may have an adverse impact on the physical and biological components of offshore waters. In particular, establishment of pre-construction baseline assessments of commercial and recreational fishery resource conditions (i.e., community structure, biodiversity, and species biomass, abundance, size distribution) is necessary for evaluation of any potential coastal effects. Assessments and monitoring are essential to determine whether there are any potential coastal effects and potential cumulative impacts resulting from the construction and operation of multiple wind energy projects. Specific assessment and monitoring requirements shall be determined on a project-by-project basis and may include but are not limited to the assessment and monitoring of: (list omitted).

Response: See Section 3 for descriptions of baseline surveys and evaluations, impacts assessment and proposed minimization, monitoring and mitigation commitments. In addition, SouthCoast Wind is including a Fisheries Monitoring Plan (Attachment P) to establish baseline fisheries conditions.

B. The Council shall require where appropriate that project developers perform systematic observations of recreational boating intensity at the project area at least three times: preconstruction; during construction; and post-construction. Observations may be made while conducting other field work or aerial surveys and may include either visual surveys or analysis of aerial photography or video photography. The Council shall require where appropriate that observations capture both weekdays and weekends and reflect high-activity periods including, but not limited to, the July 4th holiday weekend, the week in June when the Block Island Race Week typically takes place, and other recreational boating events within Narragansett Bay, and Rhode Island and Block Island Sounds. The quantitative results of such observations, including raw boat counts and average number of vessels per day, will be provided to the Council.

Response: Noted. SouthCoast Wind will comply if required by the Council. Please see the Navigation Safety Risk Assessment (Attachment N).

C. The items listed below shall be required for all offshore developments:

1. A biological assessment of commercially and recreationally targeted fishery species shall be required within the project area for all offshore developments for the periods specified in § 11.9.9(E) of this Part. This assessment shall assess the relative abundance, distribution, and different life stages of these species at all four seasons of the year. This assessment shall comprise a series of surveys, using survey equipment and methods that are appropriate for sampling finfish, shellfish, and crustacean species at the project's proposed location. This assessment may include evaluation of survey data collected through an existing survey program, if data are available for the proposed site.

Response: SouthCoast Wind has worked with Inspire Environmental to develop a Fisheries Monitoring Plan and Benthic Monitoring Plan which are included as Attachment P and Attachment V respectively and includes details on the types of surveys planned. Relevant information may also be found in the Benthic Habitat Characterization Report and summarized in Section 3.3. Refer to the response to § 11.9.9(E) below also.

2. An assessment of commercial and recreational fisheries effort, landings, and landings value shall be required for all proposed offshore developments. The assessment shall focus on the proposed project area and any alternatives. This assessment shall evaluate commercial and recreational fishing effort, landings, and landings value at three different stages: preconstruction (to assess baseline conditions); during construction; and during operation, as specified in § 11.9.9(E) of this Part. At each stage, all four seasons of the year must be evaluated. Assessment may use existing fisheries monitoring data but shall be supplemented by interviews with commercial and recreational fishermen. Assessment shall address whether fishing effort, landings, and landings value has changed in comparison to baseline (preconstruction) conditions.

Response: SouthCoast Wind has conducted a pre-construction assessment of commercial and recreational fisheries effort, landings, and landings value (Sections 3.4 and 3.5). SouthCoast Wind intends to implement the Fisheries Monitoring Plan included in Attachment P.

D. The Council in coordination with the Joint Agency Working Group may also require facility and infrastructure monitoring requirements that may include but are not limited to:

1. Post construction monitoring including regular visual inspection of inner array cables and the primary export cable to ensure proper burial, foundation and substructure inspection.

Response: Noted. The SouthCoast Wind inter-array cables, foundations and substructures are located outside of RI jurisdiction. Post-construction monitoring of the export cables within RI state waters will occur on a regular basis.

E. Assessment standards—applicants shall provide the following biological assessments necessary to establish the baseline conditions of the fishery resource conditions during the project phases detailed

below so that an analysis of comparison between project phases can be completed to assess whether project construction, installation and operation has resulted in significant adverse impacts to the commercial and recreational fishery resources.

1. Pre-construction baseline biological assessments of commercial and recreational targeted fishery species as specified in § 11.9.9(C) of this Part for a minimum of two (2) complete years before offshore construction and installation activities begin;

2. During construction biological assessments of commercial and recreational targeted fishery species as specified in § 11.9.9(C) for each year (if construction extends beyond a single year) of construction and installation; and

3. Post-construction biological assessments of commercial and recreational targeted fishery species as specified in § 11.9.9(C) of this Part for three (3) complete years following completion of construction and installation activities and during the operational phase of the project.

Response: SouthCoast Wind is committed to collaborative science with the commercial and recreational fishing industries. SouthCoast Wind has worked with Inspire Environmental to develop a Fisheries Monitoring Plan which is included as Attachment P and includes details on the types of survey planned. These studies will be conducted in collaboration with the local fishing industry and local organizations and will build upon monitoring efforts being conducted at other offshore wind farms in the region.

SouthCoast Wind began a regional monitoring study of Highly Migratory Species and recreational fishing in 2021; collaborating with the New England Aquarium, Inspire Environmental, and other MA/RI WEA developers. SouthCoast Wind is also actively participating in regional efforts with other developers, the fishing industry, and academic researchers to promote and standardize fisheries monitoring research and non-extractive survey methods. The SouthCoast Wind Project will help fuel innovation, advance research, and build consistency across modeling, monitoring and research efforts.

F. The Council shall require post-construction assessments of commercial and recreational targeted fishery species at five (5) year intervals following the post-construction monitoring required in § 11.9.9(E)(3) of this Part. The assessments shall be conducted during the four seasons of a year as specified in § 11.9.9(C) of this Part. If the analysis of post-construction assessments demonstrate adverse impacts to fishery species as compared to the baseline assessments required in § 11.9.9(E) (1) of this Part that are attributable to the construction or operation of a wind energy project, then the Council may require mitigation measures consistent with §§ 11.10.1(E) and (F) of this Part.

Response: Refer to response above to Section 5.1.9(E)(1)(2)(3).

5.2. OCEAN SAMP §11.10 REGULATORY STANDARDS

This section contains regulatory standards outlined in the Ocean SAMP. Pursuant to the Ocean SAMP, SouthCoast Wind is addressing the following standards in this Category B Assent application:

- § 11.10.1 Overall Regulatory Standards
- § 11.10.2 Areas of Particular Concern
- § 11.10.4 Other Areas
- § 11.10.5 Application Requirements
- § 11.10.6 Monitoring Requirements

5.2.1. Ocean SAMP §11.10.1 Overall Regulatory Standards

A. All offshore developments regardless of size, including energy projects, which are proposed for or located within state waters of the Ocean SAMP area, are subject to the policies and standards outlined in §§ 11.9 and 11.10 of this Part (except, as noted above, § 11.9 of this Part shall not be used for CRMC concurrence or objection for CZMA federal consistency reviews). For the purposes of the Ocean SAMP, offshore developments are defined as: (§§ 11.10.1[A][1-7] omitted).

Response: The Project within Ocean SAMP which is the subject of this Application is an underwater cable and, therefore, SouthCoast Wind understands is subject to the policies and standards outlined in §§ 11.9 and 11.10 of the Ocean SAMP.

B. In assessing the natural resources and existing human uses present in state waters of the Ocean SAMP area, the Council finds that the most suitable area for offshore renewable energy development in the state waters of the Ocean SAMP area is the renewable energy zone depicted in Figure 1 in § 11.10.1(O) of this Part, below. The Council designates this area as Type 4E waters. In the Rhode Island Coastal Resources Management Program (Subchapter 00 Part 1 of this Chapter) these waters were previously designated as Type 4 (multipurpose) but are hereby modified to show that this is the preferred site for large scale renewable energy projects in state waters. The Council may approve offshore renewable energy development elsewhere in the Ocean SAMP area, within state waters, where it is determined to have no significant adverse impact on the natural resources or human uses of the Ocean SAMP area. Large-scale offshore developments shall avoid areas designated as Areas of Particular Concern consistent with § 11.10.2 of this Part. No large-scale offshore renewable energy development shall be allowed in Areas Designated for Preservation consistent with § 11.10.3 of this Part.

Response: The purpose of the SouthCoast Wind transmission cables is to connect the offshore wind energy facility located in federal waters to the POI at Brayton Point, and there would be no purpose to site the Project within the renewable energy zone depicted in Figure 1 in § 11.10.1 which is near Block Island.

The Ocean SAMP considers underwater cables as offshore development and identifies the development of offshore renewable energy as an important policy objective. The offshore export cables cross the Ocean SAMP. SouthCoast Wind demonstrated to BOEM through the COP process and to the CRMC through the Federal Consistency Review process that the offshore facilities are sited and will be constructed to avoid significant adverse impacts on the natural resources or human uses of the Ocean SAMP area relevant to the SouthCoast Wind Project. The third party Benthic-Geological Assessment of the ECC confirmed that these resources could successfully be avoided through micro-routing and details are provided in the subject matter experts reports available in Attachment W That portion of the Project offshore facilities that is the subject to the Category B Assent is limited to the bundled export cables that have been routed and will be buried beneath the seafloor to avoid impacts to Areas of Particular Concern (APC) to the greatest extent feasible, as demonstrated in Sections 3 and 4 of this Assent application.

C. Offshore developments shall not have a significant adverse impact on the natural resources or existing human uses of the Rhode Island coastal zone, as described in the Ocean SAMP. In making the evaluation of the effect on human uses, the Council will determine, for example, if there is an overall net benefit to the Rhode Island marine economic sector from the development of the project or if there is an overall net loss. Where the Council determines that impacts on the natural resources or human uses of the Rhode Island coastal zone, the project or the natural resources or human uses of the Rhode Island coastal determines that impacts on the natural resources or human uses of the Rhode Island coastal zone through the pre-construction, construction, operation, or decommissioning phases of

a project constitute significant adverse effects not previously evaluated, the Council shall, through its permitting and enforcement authorities in state waters and through any subsequent CZMA federal consistency reviews, require that the applicant modify the proposal to avoid and/or mitigate the impacts or the Council shall deny the proposal.

Response: SouthCoast Wind collected G&G and benthic/habitat field survey data within the entire ECC, which is 1,640 ft (500 m) to 2,300 ft (700 m) wide. The width of the surveyed ECC is designed to allow for micro-routing to avoid sensitive resources and obstacles, and to provide for maneuverability during construction and maintenance. Micro-routing is the primary strategy for avoiding geohazards, obstructions, and sensitive habitats. Based on these survey data, sensitive environmental and cultural resources and geohazards were mapped to guide cable routing within the ECC with the objectives (to the extent practicable) of meeting the cable burial target depth, minimizing the impacts to sensitive marine and coastal habitats, and avoiding surficial geologic and anthropogenic features as informed by data collected in the G&G surveys. Cable routing and sensitive resource mapping are integrated in Attachment M. The independent benthic-geological reviews (Attachment W) also confirm that these sensitive resources can be avoided through the micro-routing process.

The Project will have substantial benefits to the South Coast region and the Rhode Island marine economic sector from the development of the Project through production of clean renewable energy delivered to consumers, reduction in GHG and mitigation of climate change, workforce hiring and training opportunities, and contributions to the economy through procurement of materials, equipment, and services. SouthCoast Wind has engaged with fisheries representatives to conduct a fisheries exposure assessment to determine potential monetary impacts to the Rhode Island fishing industry. SouthCoast Wind has also engaged with the Town of Portsmouth, Rhode Island to develop a mutually acceptable agreement for the Project siting in Portsmouth which was successfully executed in the form of an HCA on January 16, 2024.

Also, SouthCoast Wind is currently providing support and looking to develop long term relationships with the following Rhode Island-based organizations:

- Roger Williams University
- SupplyRI w/Rhode Island Commerce
- Commercial Fisheries Center of Rhode Island
- Clean Ocean Access
- Greater Newport County Chamber of Commerce
- Portsmouth Business Association
- US Sailing and US Powerboating

D. Any large-scale offshore development, as defined in § 11.3(H) of this Part, shall require a meeting between the Fisherman's Advisory Board (FAB), the applicant, and the Council staff to discuss potential fishery-related impacts, such as, but not limited to, project location, wind turbine configuration and spacing, construction schedules, alternative locations, project minimization and identification of high fishing activity or habitat edges. For any state permit process for a large-scale offshore development this meeting shall occur prior to submission of the state permit application

1. For purposes of BOEM's renewable energy program under the Outer Continental Shelf Lands Act, the CZMA federal consistency process cannot begin until a construction and operations plan (COP) has been submitted for BOEM's review and approval

Response: SouthCoast Wind filed the COP on February 15, 2021. The COP has since been revised in response to BOEM and other agency comments, and the most recent version, Revision G, was filed on July 31, 2024. On March 18, 2022, SouthCoast Wind filed a federal consistency certification with RI CRMC; federal consistency was determined and official notice was sent to BOEM on December 19, 2023. On May 26, 2022, RI CRMC facilitated a meeting between SouthCoast Wind and both the FAB and HAB. On February 13, 2023, BOEM released the Draft Environmental Impact Statement, based on the SouthCoast Wind COP.

E. The Council shall prohibit any other uses or activities that would result in significant long-term negative impacts to Rhode Island's commercial or recreational fisheries. Long-term impacts are defined as those that affect more than one or two seasons.

Response: Noted. Construction and decommissioning activities associated with the Project are expected to have short-term, localized impacts on access to fishing grounds due to temporary safety zones. During the O&M phase of the Project, commercial and recreational fisheries are expected to experience none to limited effects because the cables will be sufficiently buried and the need for secondary cable protection is expected to be limited.

F. The Council shall require that the potential adverse impacts of offshore developments and other uses on commercial or recreational fisheries be evaluated, considered and mitigated as described in § 11.10.1(G) of this Part.

Response: Noted. SouthCoast Wind continues to engage with fisheries representatives to determine potential impacts on fisheries and mitigation measures. Also, see the response to § 11.10.1(E) above.

G. For the purposes of fisheries policies and standards as summarized in Ocean SAMP Chapter 5, Commercial and Recreational Fisheries, §§ 5.3.1 and 5.3.2 of this Subchapter, mitigation is defined as a process to make whole those fisheries user groups, including related shore-side seafood processing facilities, that are adversely affected by offshore development proposals or projects. Mitigation measures shall be consistent with the purposes of duly adopted fisheries management plans, programs, strategies and regulations of the agencies and regulatory bodies with jurisdiction over commercial and recreational fisheries, including but not limited to those set forth above in § 11.9.4(B) of this Part. Mitigation shall not be designed or implemented in a manner that substantially diminishes the effectiveness of duly adopted fisheries management programs. Mitigation measures may include, but are not limited to, compensation, effort reduction, habitat preservation, restoration and construction, marketing, and infrastructure and commercial fishing fleet improvements. Where there are potential impacts associated with proposed projects, the need for mitigation shall be presumed (see § 11.10.1(F) of this Part). Mitigation shall be negotiated between the Council staff, the FAB, the project developer, and approved by the Council. The final mitigation will be the mitigation required by the CRMC and included in the CRMC's Assent for the project or included within the CRMC's federal consistency decision for a project's federal permit application.

Response: Noted. As demonstrated in Section 3, SouthCoast Wind is committed to minimizing Project impacts on commercial and recreational fisheries. SouthCoast Wind has developed a Fisheries

Communication Plan (COP, Appendix W) and will continue to engage with the FAB and HAB or similar group of constituents and the commercial and recreational fishing industries and communities.

H. The Council recognizes that moraine edges, as illustrated in Figures 3 and 4 in § 11.10.2 of this Part, are important to commercial and recreational fishermen. In addition to these mapped areas, the FAB may identify other edge areas that are important to fisheries within a proposed project location. The Council shall consider the potential adverse impacts of future activities or projects on these areas to Rhode Island's commercial and recreational fisheries. Where it is determined that there is a significant adverse impact, the Council will modify or deny activities that would impact these areas. In addition, the Council will require assent holders for offshore developments to employ micro-siting techniques in order to minimize the potential impacts of such projects on these edge areas.

Response: Noted. Refer to response to § 11.10.2(C)(3) below.

I. The finfish, shellfish, and crustacean species that are targeted by commercial and recreational fishermen rely on appropriate habitat at all stages of their life cycles. While all fish habitat is important, spawning and nursery areas are especially important in providing shelter for these species during the most vulnerable stages of their life cycles. The Council shall protect sensitive habitat areas where they have been identified through the Site Assessment Plan or Construction and Operation Plan review processes for offshore developments as described in § 11.10.5(C) of this Part.

Response: Noted. Refer to § 11.10.2(C)(3) below and the response to § 11.10.1(E) above.

J. Any large-scale offshore development, as defined in this Part, shall require a meeting between the HAB, the applicant, and the Council staff to discuss potential marine resource and habitat-related issues such as, but not limited to, impacts to marine resource and habitats during construction and operation, project location, construction schedules, alternative locations, project minimization, measures to mitigate the potential impacts of proposed projects on habitats and marine resources, and the identification of important marine resource and habitat areas. For any state permit process for a large-scale offshore development, this meeting shall occur prior to submission of the state permit application.

1. For purposes of BOEM's renewable energy program under the Outer Continental Shelf Lands Act, the CZMA federal consistency process cannot begin until a construction and operations plan (COP) has been submitted for BOEM's review and approval

Response: Noted. Refer to the response to § 11.10.1(D) above.

K. The potential impacts of a proposed project on cultural and historic resources will be evaluated in accordance with the National Historic Preservation Act and Antiquities Act, and the Rhode Island Historical Preservation Act and Antiquities Act as applicable. Depending on the project and the lead federal agency, the projects that may impact marine historical or archaeological resources identified through the joint agency review process may require a marine archaeology assessment that documents actual or potential impacts the completed project will have on submerged cultural and historic resources.

Response: BOEM is the lead federal agency reviewing the Project and is required to satisfy Section 106 of the NHPA. Section 106 of the NHPA requires federal agencies such as BOEM to take into account the impact of federally permitted projects on historic properties, and work with SHPOs, THPOs, and other recognized stakeholders, to avoid or mitigate any adverse effect on historic or archaeological sites with the potential to be listed on the NRHP as significant properties. Section 106 consultation was initiated

for the Project on November 1, 2021. To date SouthCoast Wind has participated in four Section 106 consultation meetings with the fifth and final meeting to be held in October 2024.

L. Guidelines for marine archaeology assessment in the Ocean SAMP area can be obtained through the RIHPHC in their document, "Performance Standards and Guidelines for Archaeological Projects: Standards for Archaeological Survey" (RIHPHC 2007), or the lead federal agency responsible for reviewing the proposed development.

Response: Noted. SouthCoast Wind has completed marine archaeological surveys consistent with state and federal guidelines and in consultation with SHPOs and THPOs.

M. The potential non-physical impacts of a proposed project on cultural and historic resources shall be evaluated in accordance with 36 C.F.R. § 800.5, assessment of adverse effects, including the introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features. Depending on the project and the lead federal agency, the Ocean SAMP Interagency Working Group may require that a project undergo a visual impact assessment that evaluates the visual impact a completed project will have on onshore cultural and historic resources.

N. A visual impact assessment may require the development of detailed visual simulations illustrating the completed project's visual relationship to onshore properties that are designated National Historic Landmarks, listed on the National Register of Historic Places, or determined to be eligible for listing on the National Register of Historic Places. Assessment of impacts to specific views from selected properties of interest may be required by relevant state and federal agencies to properly evaluate the impacts and determination of adverse effect of the project on onshore cultural or historical resources.

O. A visual impact assessment may require description and images illustrating the potential impacts of the proposed project.

Response: As a submarine cable buried beneath the seafloor, the Project will not result in long-term visual impacts.

5.2.2. Ocean SAMP §11.10.2 Areas of Particular Concern

A. Areas of Particular Concern (APCs) have been designated in state waters through the Ocean SAMP process with the goal of protecting areas that have high conservation value, cultural and historic value, or human use value from large-scale offshore development. ...

Response: Noted. See the response to § 11.10.2(C) below regarding APCs applicable to the portion of the ECC in the Ocean SAMP area.

B. The Council has designated the areas listed below in § 11.10.2(C) of this Part in state waters as Areas of Particular Concern. All large-scale, small-scale, or other offshore development, or any portion of a proposed project, shall be presumptively excluded from APCs. This exclusion is rebuttable if the applicant can demonstrate by clear and convincing evidence that there are no practicable alternatives that are less damaging in areas outside of the APC, or that the proposed project will not result in a significant alteration to the values and resources of the APC. When evaluating a project proposal, the Council shall not consider cost as a factor when determining whether practicable alternatives exist. Applicants which successfully demonstrate that the presumptive exclusion does not apply to a proposed project because there are no practicable alternatives that are less damaging in areas outside of the APC must also

demonstrate that all feasible efforts have been made to avoid damage to APC resources and values and that there will be no significant alteration of the APC resources or values. Applicants successfully demonstrating that the presumptive exclusion does not apply because the proposed project will not result in a significant alteration to the values and resources of the APC must also demonstrate that all feasible efforts have been made to avoid damage to the APC resources and values. The Council may require a successful applicant to provide a mitigation plan that protects the ecosystem. The Council will permit underwater cables, only in certain categories of Areas of Particular Concern, as determined by the Council in coordination with the Joint Agency Working Group. The maps listed below in § 11.10.2(C) of this Part depicting Areas of Particular Concern may be superseded by more detailed, site-specific maps created with finer resolution data.

Response: SouthCoast Wind has sited the ECC to avoid APC to the extent practicable. To the extent any portion of the ECC subject to this Category B Assent application overlaps with APC, no practicable alternatives exist that are less damaging in areas outside of the APC, and the Project will not result in a significant alteration to the values and resources of the APC. SouthCoast Wind will make all feasible efforts to avoid damage to APC resources and values. Refer to the response to § 11.10.2(C) below regarding APCs applicable to the portion of the ECC in the Ocean SAMP area.

C. Areas of particular concern that have been identified in the Ocean SAMP area in state waters are described as follows:

1. Historic shipwrecks, archeological or historical sites and their buffers as described in Ocean SAMP Chapter 4, Cultural and Historic Resources, Sections 440.1.1 through 440.1.4, are Areas of Particular Concern. For the latest list of these sites and their locations please refer to the Rhode Island State Historic Preservation and Heritage Commission.

Response: SouthCoast Wind understands shipwrecks are designated as APCs per the Ocean SAMP. Four potential shipwrecks were flagged within the Rhode Island state waters of the Ocean SAMP area by the Qualified Marine Archaeologist during marine surveys of the ECC. SouthCoast Wind will avoid these shipwrecks and associated buffers to the extent practicable. The four sites are not inventoried in NOAA,¹² BOEM,¹³ or Rhode Island State Historic Preservation and Heritage Commission databases. The level of deterioration and disarticulation indicate that the sites may not retain identifiable characteristics or yield important historical information that could warrant consideration for listing in either the NRHP (36 C.F.R. 60.44ad) or the State Register of Historic Places; additional research and visual investigation are required to determine the sites' eligibility. The sites have been marked for avoidance with an avoidance buffer.

2. Offshore dive sites within the Ocean SAMP area, as shown in Figure 2 in § 11.10.2 of this Part, are designated Areas of Particular Concern. The Council recognizes that offshore dive sites, most of which are shipwrecks, are valuable recreational and cultural ocean assets and are important to sustaining Rhode Island's recreation and tourism economy.

Response: There are no offshore dive sites located within the ECC corridor within Rhode Island state waters as identified on Figure 2 in § 11.10.2 of the Ocean SAMP. The nearest dive site is the P.T. Teti which is located approximately 115 ft (35 m) from the western edge of the ECC.

¹³ BOEM, Office of Offshore Renewable Energy Programs. 2013. Archaeological Resource Information Database (ARI). (Not for Public Release).

¹² NOAA. 2020. Wrecks and Obstructions Database. Electronic database,

https://nauticalcharts.noaa.gov/data/wrecks-and-obstructions.html, accessed November 29, 2021.

3. Glacial moraines are important habitat areas for a diversity of fish and other marine plants and animals because of their relative structural permanence and structural complexity. Glacial moraines create a unique bottom topography that allows for habitat diversity and complexity, which allows for species diversity in these areas and creates environments that exhibit some of the highest biodiversity within the entire Ocean SAMP area. The Council also recognizes that because glacial moraines contain valuable habitats for fish and other marine life, they are also important to commercial and recreational fishermen. Accordingly, the Council shall designate glacial moraines as identified in Figures 3 and 4 in § 11.10.2 of this Part as Areas of Particular Concern.

Response: The ECC crosses glacial moraines mapped in the Ocean SAMP in Figures 3 and 4 in Ocean SAMP § 11.10.2. SouthCoast Wind prepared detailed mapping of benthic habitats, including identification of moraine areas, based on two rounds of benthic data and geophysical data collected in 2021 and 2022; these are included and described in the Benthic Habitat Assessment in Attachment M. Mapping of moraine and benthic habitats was used to guide cable route engineering and microrouting as depicted in Attachment C Offshore Export Cable Engineering Drawings.

SouthCoast Wind sited the ECC to avoid Glacial Moraine to the extent practicable and micrositing the cable will further reduce impacts. Complete avoidance of Glacial Moraine habitats is not practicable, SouthCoast Wind will take all feasible efforts to avoid any damage to the glacial moraine benthic habitats (see Figure 3-3 in Attachment A for the benthic habitat types including glacial moraine surveyed within the ECC), as described in Section 2. Given the relatively small area of moraine that would be impacted, the short duration of construction activities, and the efforts SouthCoast Wind has committed to minimize impacts to the extent practicable (see Section 2), overall effects to marine habitat are expected to be minimal. An independent review of the Project's ECC with the Rhode Island GLD and in state waters was conducted as part of the Federal Consistency Review (Attachment W). This assessment confirmed that sensitive habitats including glacial moraine can be avoided through micro-routing.

4. Navigation, military, and infrastructure areas including: designated shipping lanes, precautionary areas, recommended vessel routes, ferry routes, dredge disposal sites, military testing areas, unexploded ordnance, pilot boarding areas, anchorages, and a coastal buffer of 1 km as depicted in Figure 5 in § 11.10.2 of this Part are designated as Areas of Particular Concern. The Council recognizes the importance of these areas to marine transportation, navigation and other activities in the Ocean SAMP area.

Response: The Project avoids designated shipping lanes, precautionary areas, dredge disposal sites, military testing areas, unexploded ordnance (UXO), pilot boarding areas, anchorages, and the coastal buffer as shown in Ocean SAMP § 11.10.2(I) Figure 5. SouthCoast Wind has and will continue to engage with the USCG, the U.S. Navy, and other marine stakeholders. The ECC was sited to avoid conflicts with Department of Defense activities and restricted areas. Additional information can be found in the response to § 11.9.5(D). SouthCoast Wind has also completed an assessment to evaluate UXO risk in the Project area (Attachment U- UXO Risk Assessment is provided separately under "confidential" cover).

5. Areas of high fishing activity as identified during the pre-application process by the Fishermen's Advisory Board, as defined in § 11.3(E) of this Part, may be designated by the Council as Areas of Particular Concern.

Response: Noted. As explained in Table 3-17, fishing activity near the ECC within the Ocean SAMP in Rhode Island state waters is clustered in distinct locations located outside of the ECC. Refer to Section 3.5 for evaluation of fishing activity in the vicinity of the ECC.

6. Several heavily used recreational boating and sailboat racing areas, as shown in Figure 6 in § 11.10.2 of this Part, are designated as Areas of Particular Concern. The Council recognizes that organized recreational boating and sailboat racing activities are concentrated in these particular areas, which are therefore important to sustaining Rhode Island's recreation and tourism economy.

Response: The Project avoids organized recreational activity as shown in *Figure 6* in § 11.10.2(I) of the Ocean SAMP. SouthCoast Wind will coordinate with organizers of major marine events to ensure safety for all marine users and preservation of Rhode Island's recreation and tourism economy. Sailing regattas are common in Mount Hope Bay and therefore SouthCoast Wind will communicate with these recreational uses of the bay to provide notification of the construction schedule and any required, temporary exclusion zones.

7. Naval fleet submarine transit lanes, as described in Ocean SAMP Chapter 7, Marine Transportation, Navigation, and Infrastructure Section 720.7, are designated as Areas of Particular Concern.

Response: SouthCoast Wind engaged with the U.S. Navy during route planning stages to discuss route options under consideration to avoid potential impacts to U.S. Navy activities and restricted areas around Newport, Rhode Island. During this meeting, SouthCoast Wind was advised that the U.S. Navy would not have conflicts with the selected route through the Sakonnet River.

8. Other Areas of Particular Concern may be identified during the preapplication review by state and federal agencies as areas of importance.

Response: Noted.

D. Developers proposing projects for within the renewable energy zone as described in § 11.10.1(B) of this Part shall adhere to the requirements outlined in § 11.10.2 of this Part regarding Areas of Particular Concern in state waters, including any Areas of Particular Concern that overlap the renewable energy zone (see Figure 7 in § 11.10.2 of this Part).

Response: Not applicable. The Project is not proposed in the renewable energy zone around Block Island.

5.2.3. Ocean SAMP §11.10.3 Prohibitions and Areas Designated for Preservation

A. Areas Designated for Preservation are designated in the Ocean SAMP area in state waters for the purpose of preserving them for their ecological value. Areas Designated for Preservation were identified by reviewing habitat and other ecological data and findings that have resulted from the Ocean SAMP process. Areas Designated for Preservation are afforded additional protection than Areas of Particular Concern (see § 11.10.2 of this Part) because of scientific evidence indicating that large-scale offshore development in these areas may result in significant habitat loss. The areas described in § 11.10.3 of this Part are designated as Areas Designated for Preservation. The Council shall prohibit any large-scale offshore development, mining and extraction of minerals, or other development that has been found to be in conflict with the intent and purpose of an Area Designated for Preservation. Underwater cables are exempt from this prohibition. Areas Designated for Preservation include:

1. Ocean SAMP sea duck foraging habitat in water depths less than or equal to 20 meters [65.6 feet] (as shown in Figure 8 in § 11.10.2 of this Part) are designated as Areas Designated for Preservation due to their ecological value and the significant role these foraging habitats play to avian species, and existing evidence suggesting the potential for permanent habitat loss as a result of offshore wind energy development. The current research regarding sea duck foraging areas indicates that this habitat is depth

limited and generally contained within the 20 meter depth contour. It is likely there are discreet areas within this region that are prime feeding areas, however at present there is no long-term data set that would allow this determination. Thus, the entire area within the 20 meter contour is being protected as an Area Designated for Preservation until further research allows the Council and other agencies to make a more refined determination.

Response: The installation of the offshore export cables will temporarily disturb approximately 0.66 ac (0.26 ha) of sea duck foraging habitat designated as Areas Designated for Preservation in state waters, based on the mapping provided in *Figure 8.54* of the Ocean SAMP (see Figure 5-1, Attachment A). Micro-routing cables will minimize the Project footprint in this area, as practicable, and the resultant overlap with habitat is expected to be minimal. The cable will be installed between 3.2 to 13.1 ft (1.0 to 4.0 m) below the seabed with no impacts to benthic habitat during operations. Sea duck foraging habitat that cannot be avoided will be temporarily disturbed by the installation of the cables via jet sled / jet plow, but the cable trench will be backfilled and is expected to be naturally reconstituted to allow for the re-establishment of sea duck foraging habitat. Given the short-term effects within a very small area, the impacts to duck foraging habitat is expected to be minimal.

Under §8.5.2(C)(2) *Areas if Particular Concern* of the Ocean SAMP, "The Council may require a successful applicant to provide a mitigation plan that protects the ecosystem. The Council will permit underwater cables, only in certain categories of Areas of Particular Concern, as determined by the Council in coordination with the Joint Agency Working Group."

2. The mining and extraction of minerals, including sand and gravel, from tidal waters and salt ponds is prohibited. This prohibition does not apply to dredging for navigation purposes, channel maintenance, habitat restoration, or beach replenishment for public purposes.

Response: The Project does not involve the mining or extraction of minerals from Rhode Island state waters or within the boundaries of the Ocean SAMP.

3. The Council shall prohibit any offshore development in areas identified as Critical Habitat under the Endangered Species Act.

Response: The USFWS was consulted on March 30, 2022, through the IPaC consultation process for the Official Species List for Rhode Island. The IPaC response stated that there are no critical habitats within the Project area under the United States Department of the Interior Fish and Wildlife Service's jurisdiction.

Where the ECC traverses the boundaries of the Ocean SAMP, the Project is not located within North Atlantic right whale critical habitat, as mapped by NMFS.

According to § 520.4. Critical Habitat of the Ocean SAMP - "Under the Endangered Species Act, Critical Habitat is designated for species listed under the Act as threatened or endangered. The ESA describes Critical Habitat as those areas that are "essential to the conservation of the species and which may require special management considerations or protection." According to the NOAA Northeast Regional Office Protected Resources Division, there is no Critical Habitat for any listed finfish species within the Ocean SAMP area (Crocker, pers. comm. a.)."

4. Dredged material disposal, as defined and regulated in § 00-1.3.1(I) of this Chapter, is further limited in the Ocean SAMP area by the prohibition of dredged material disposal in the following Areas of Particular Concern as defined in § 11.10.2 of this Part: historic shipwrecks, archaeological, or historic sites; offshore dive sites; navigation, military, and infrastructure areas; and moraines. Beneficial reuse may be allowed in Areas Designated for Preservation, whereas all other dredged material disposal is prohibited in those areas. All disposal of dredged material will be conducted in accordance with the U.S. EPA and U.S. Army Corps of Engineers' manual, Evaluation of Dredged Material Proposed for Ocean Disposal.

Response: The Project does not involve the disposal of dredged material within the Ocean SAMP nor within Areas of Particular Concern as defined in §11.10.2 of the Ocean SAMP regulations

5.2.4. Ocean SAMP §11.10.4 Other Areas

A. Large-scale projects or other development which is found to be a hazard to commercial navigation shall avoid areas of high intensity commercial marine traffic in state waters. Avoidance shall be the primary goal of these areas. Areas of high intensity commercial marine traffic are defined as having 50 or more vessel counts within a 1 km by 1 km grid, as shown in Figure 9 in § 11.10.4(B) of this Part.

Response: Please see the response to 11.10.1(B) above. Further, the portion of the Project offshore facilities that is the subject to the Category B Assent is limited to the underwater cables that are to be buried beneath the seafloor to avoid hazards and conflicts with commercial marine navigation.

SouthCoast Wind sited the Project to avoid areas of higher intensity commercial marine traffic (see Attachment N – Navigation Safety Risk Assessment for more information). Attachment B – Route Alternatives Assessment provides a discussion of alternative routes considered by SouthCoast Wind, including the East Passage of Narragansett Bay, which is used by most commercial and deep-draft vessels. The Sakonnet River route is rarely used by commercial vessels, as shown in *Figure 9* in § 11.10.4(B) of the Ocean SAMP, for a variety of reasons, including water depth limitations, lack of access to the Port of Providence, lack of a clearly marked navigation channel, and the absence of marine pilots qualified to conn a ship within the river.

5.2.5. Ocean SAMP §11.10.5 Application Requirements

Response: SouthCoast Wind acknowledges §§ 11.10.5(A) and (B) of this part and does not restate those herein.

C. Prior to construction, the following sections shall be considered necessary data and information:

1. Site assessment plan – A SAP is a pre-application plan that describes the activities and studies (e.g., installation of meteorological towers, meteorological buoys) the applicant plans to perform for the characterization of the project site. The SAP shall describe how the applicant shall conduct the resource assessment (e.g., meteorological and oceanographic data collection) or technology testing activities. For projects in state waters the applicant shall receive the approval of the SAP by the Council (see § 11.9.8 of this Part). For projects within Type 4E waters (depicted in Figure 1 in § 11.10.1 of this Part), preconstruction data requirements may incorporate data generated by the Ocean SAMP provided the data was collected within 2 years of the date of application, or where the Ocean SAMP data is determined to be current enough to meet the requirements of the Council in coordination with the Joint Agency Working Group.

The applicant shall reference information and data discussed in the Ocean SAMP (including appendices and technical reports) in their SAP. For a SAP required by BOEM under the Outer Continental Shelf Lands Act for projects in federal waters, if BOEM combines the SAP with the COP, then the SAP and COP would be filed at the same time. If BOEM does not require a SAP for a project in federal waters, then the SAP shall not be necessary data and information for federal consistency reviews (§§ 11.10.5[C][1][a-h] omitted).

Response: The SouthCoast Wind Site Assessment Plan (Lease Area OCS-A 0521) dated July 29, 2019, was submitted to BOEM for meteorological evaluations and site assessment. BOEM approved the SAP on May 26, 2020.

BOEM performed a consistency review and issued a Regional Consistency Determination finding that SAP activities anticipated for the MA/RI WEAs, including the installation, operation and decommissioning of meteorological towers and buoys, are consistent with the provisions of the Coastal Management Programs of the state of Rhode Island.¹⁴

2. Construction and operations plan (COP) - The COP describes the applicant's construction, operations, and conceptual decommissioning plans for the proposed facility, including the applicant's project easement area (§§ 11.10.5[C][2][a-g] omitted).

Response: SouthCoast Wind's COP is consistent with the requirements outlined in this subpart. Refer to Attachment T for a review of the Project's COP relative to the content requirements of this subpart.

5.2.6. Ocean SAMP §11.10.6 Monitoring Requirements

A. The Council in coordination with the Joint Agency Working Group, as described in § 11.9.7(I) of this Part, shall determine requirements for monitoring as specified in § 11.9.9 of this Part. For CZMA federal consistency purposes the Council must identify any baseline assessments and construction monitoring activities during its CZMA six-month review of the COP.

Response: SouthCoast Wind is committed to conducting monitoring prior to, during, and post construction and will coordinate with the Council and other key stakeholders in the development of specific monitoring plans, as necessary. SouthCoast Wind will implement the following monitoring plans:

- Rhode Island Fisheries Monitoring Plan, see Attachment P.
- Compliance with the Rhode Island Pollutant Discharge Elimination System Construction General Permit, which will include requirements of the SESC Plan included as Attachment D.
- Environmental compliance monitoring during the construction phase of the Project.
- Benthic Monitoring Plan, see Attachment V.
- Compliance with any Incidental Harassment Authorizations required under the Marine Mammal Protection Act and other monitoring in compliance with the Endangered Species Act, including monitoring for marine mammals and other protected species.
- Implement measures as identified in the Project Marine Mammal and Sea Turtle Monitoring and Mitigation Plan (COP, Appendix O).

See also the responses to § 11.9.9 of this Part (Section 5.1.9 above).

¹⁴ U.S. Department of the Interior and BOEM. 2013. Biological opinion for programmatic environmental impact statement for Atlantic OCS proposed geological and geophysical activities in the Mid-Atlantic and South Atlantic planning areas.

6. RI CRMC REVIEW CRITERIA - WETLANDS IMPACTS, AVOIDANCE, MINIMIZATION AND MITIGATION

The following sections address Section 9.7.2 Review Criteria (650-RICR-20-00-9) of the Coastal Management Program.

6.1. AVOIDANCE MEASURES

(a). Avoidance: All persons must satisfactorily demonstrate to the CRMC in the form of a written narrative that all probable impacts to freshwater wetlands functions and values have been avoided to the maximum extent possible. The written narrative must describe what steps were taken to avoid impacts to freshwater wetlands. At a minimum, applicants must consider and address the following issues:

Response: The onshore Project footprint is not within biological wetlands (coastal and freshwater). Because the Project is water-dependent, the Project route is proposed to cross a coastal community that is abutted by coastal and freshwater wetlands, and therefore sections of the Project route will encroach upon the 200 ft contiguous area of coastal wetlands, 200 ft contiguous area of river/stream, and 100 ft contiguous area of freshwater wetlands (see Figure 3-1, Attachment A) for the locations of jurisdictional areas overlaid with the onshore Project footprint). The Project is primarily routed through transportation corridors under the jurisdiction of the RIDOT or the Town of Portsmouth DPW, and these corridors have been filled or otherwise altered in the past.

(1) Whether the primary proposed activity is water-dependent, or whether it requires access to freshwater wetlands as a central element of its primary purpose (e.g., a pier);

Response: The purpose of the SouthCoast Wind 1 Project is to deliver clean renewable energy to the onshore electric grid from the offshore wind energy generation facility in federal waters and is thus a water-dependent activity. The intermediate landfall at Portsmouth, Rhode Island is required to transition the export cables from the Sakonnet River into Mount Hope Bay for connection at Brayton Point. SouthCoast Wind has routed the majority of the cable in Portsmouth through roadway ROW that are not within wetlands areas but are within the jurisdictional contiguous areas. BMPs, avoidance, minimization and mitigation measures to protect wetlands and adjacent waters are described in Section 3.1.

(2) Whether any areas within the same property or other properties owned or controlled by the applicant could be used to achieve the project purpose without altering the natural character of any freshwater wetlands;

Response: The onshore routing of the export cable corridor is sited along previously disturbed areas including state and town public roadways and roadway ROW, and existing privately owned land to avoid impacts to freshwater wetlands. Sections of the onshore export cable route are located within the 200 ft

contiguous area to coastal wetlands, 100 ft contiguous area to freshwater wetlands, and 200 ft contiguous area to river/stream, where SouthCoast Wind will implement construction BMPs to avoid direct impacts to freshwater wetlands (see Section 3.1). Areas within the limits of disturbance located within the contiguous areas will be stabilized and restored post-construction, as described in Sections 3.1 and 3.2.

(3) Whether any other properties reasonably available to, but not currently owned or controlled by, the applicant could be used to achieve the project purpose while avoiding wetland alterations. A property is reasonably available if, in whole or in part, it can be acquired without excessive cost, taking individual circumstances into account, or, in the case of property owned or controlled by the same family, entity, group of affiliated entities, or local, state or federal government, may be obtained without excessive hardship;

Response: The Project is water-dependent and requires landing at a coastal location. The onshore cable route crosses approximately 2.0 mi (3.2 km) of a coastal community that is abutted by coastal and freshwater wetlands, and therefore constructing the Project within RI CRMC jurisdictional areas is unavoidable. The onshore Project footprint (including cable routing and HDD work locations) was sited to avoid biological wetlands (coastal and freshwater) and to minimize encroachment within the 200 ft contiguous area of coastal wetlands, 200 ft contiguous area of river/stream, and 100 ft contiguous area of freshwater wetlands. BMPs will be implemented to avoid, minimize and mitigate construction-related disturbances within RI CRMC jurisdictional areas, as further described in Sections 3.1 and 3.2. SouthCoast Wind has also engaged in discussions with private landowners to identify potential alternative HDD construction areas to reduce impacts. SouthCoast Wind evaluated multiple offshore and onshore route alternatives to avoid and minimize impacts to wetlands and jurisdictional areas (see Attachment B, Route Alternatives Assessment).

(4) Whether alternative designs, layouts or technologies could be used to avoid freshwater wetlands or impacts on functions and values on the subject property or whether the project purpose could be achieved on other property that is reasonably available and would avoid wetlands;

Response: One of the major siting factors that SouthCoast Wind considered in their routing analysis is to avoid and minimize impacts to the natural environment, including flood hazard areas, freshwater and coastal wetlands and waters, state-listed rare species, public water supplies, conservation, recreation, and public lands, and limiting tree/vegetation removal. SouthCoast Wind selected the Project route based on multiple considerations including but not limited to minimizing impacts to the environment, constructability, reliability, and costs. Please refer to Attachment B, Route Alternatives Assessment. SouthCoast Wind plans to collocate the onshore export cable along previously developed corridors such as state and local roadway ROW, to the maximum extent practicable. SouthCoast Wind will implement BMPs to avoid and minimize construction-related disturbances, as described in Sections 3.1 and 3.2. The overall footprint of the Project will be designed and constructed to comply with industry standards and requirements including the National Electrical Safety Code (NESC), which sets standards for the design and installation of high voltage electric facilities.

(5) Whether the applicant has made any attempts (and if so what they were) to avoid alterations to freshwater wetlands by overcoming or removing constraints imposed by zoning, infrastructure, parcel size or the like; and

Response: Based on the current plan, the routing design avoids the Project footprint within biological wetlands. Because the Project is water-dependent and it is located within a coastal community, the majority of the area is contiguous to coastal wetlands and waters. SouthCoast Wind has engaged and will continue to engage with the Town of Portsmouth including but not limited to the Town Administrator, the Portsmouth Building Inspector, the Director of the Department of Public Works and the Director of the Planning Department regarding the locations and avoidance of existing public utilities, and the issuance of local building permits/approvals, street opening permits, approvals under the Town of Portsmouth soil erosion and sediment control ordinance, and/or easements that may be required. These special use permits, approvals and easements will be obtained prior to construction. SouthCoast Wind continues to engage with the local regulatory officials to route and construct the project to avoid existing infrastructure and to avoid direct impacts to freshwater wetlands and other sensitive resources.

(6) Whether feasible alternatives that would not alter the natural character of any freshwater wetlands on the subject property or on property that is reasonably available, if incorporated into the proposed project, would adversely affect public health, safety or the environment.

Response: The onshore Project footprint was routed to avoid biological wetlands (coastal and freshwater). The Project is water-dependent and the Project was routed to minimize encroachment within the 200 ft contiguous area of coastal wetlands, 200 ft contiguous area of river/stream, and 100 ft contiguous area of freshwater wetlands. The Project route does make landfall and crosses approximately 2.0 mi (3.2 km) of a coastal community that is abutted by coastal and freshwater wetlands, and therefore constructing the Project within RI CRMC jurisdictional areas is unavoidable.

The feasibility of other route alternatives (offshore and onshore) was evaluated by SouthCoast Wind to avoid and minimize the alteration of, among a host of natural and social resources, the natural character of freshwater wetlands (refer to Attachment B, Route Alternatives Assessment). For all alternatives, SouthCoast Wind will construct the Project to avoid adversely affecting public health, safety and the environment, by adhering to applicable state and local regulations, and industry standards and guidelines established for the protection of the public. Specifically, the Project will be designed, built, and maintained in accordance with the NESC. The facilities will be designed in accordance with sound engineering practices using established design codes and guidelines published by, among others, the Institute of Electrical and Electronic Engineers (IEEE), the American Society of Civil Engineers (ASCE), the American Concrete Institute (ACI), the American National Standards Institute (ANSI) and the Occupational Safety and Health Administration (OSHA) regulations.

Practices that will be used to protect the public during construction will include, but not be limited to, establishing traffic control plans for construction traffic on busy streets to maintain safe driving conditions, restricting public access to potentially hazardous work areas, noise and dust control management, and coordination with the Town of Portsmouth and RIDOT during construction.

6.2. MINIMIZATION MEASURES

(b) Minimization: For any impact to freshwater wetlands that cannot be avoided, the applicant must satisfactorily demonstrate to the CRMC in the written narrative that the impact to wetland functions and values have been reduced to the maximum extent possible. At a minimum, applicants must consider and address the following issues:

Response: The construction of the onshore Project facilities is not anticipated to adversely affect wetland functions and values, because the Project is not routed through biological coastal or freshwater wetlands. Components of the onshore facilities will be located within the 200 ft contiguous area to coastal wetlands, 200 ft contiguous area to river/stream, and 100 ft contiguous area to freshwater wetlands; to include the HDD construction area located at the intersection of Boyds Lane and Park Avenue, and the alternate HDD construction area on the northeast side of Anthony Road (referred to as the RWU North parcel HDD construction area) located across the street from the Roger Williams University residence hall building. Temporary impacts will involve vegetation and limited tree removal, earth disturbance and excavation. The implementation of construction BMPs will further avoid, minimize and mitigate potential effects on wetlands, such as soil erosion and sedimentation, siltation and stormwater discharges, as discussed in Section 2.7 and Sections 3.1 and 3.2.

As discussed in Section 3.1.1 Coastal Features and Coastal Wetlands, and Section 3.1.2 Freshwater Wetlands in the Vicinity of the Coast, SouthCoast Wind has routed the majority of the onshore Project components along existing transportation corridors and previously disturbed areas. SouthCoast Wind has considered avoidance, minimization and mitigation measures in the routing and design of the Project to reduce impacts on freshwater wetlands. Table 3-3 in Section 3 presents the estimated areas of temporary disturbance within the 200 ft contiguous areas associated with the HDD construction areas and the onshore, underground export cable route. The impact calculations are based upon the "limits of disturbance" shown on the Onshore Engineering Drawings in Attachment D.

Construction activities and associated land disturbances may result in temporary disruption to wildlife behavior and may temporarily displace wildlife. Since the onshore export cable route is primarily located along existing public roadway ROW, including highways in some instances, the species temporarily affected are expected to be limited in number and are expected to return once construction is complete. Wildlife currently utilizing the habitat edges of the Project route may be temporarily affected by the construction of the Project. Larger, more mobile species, such as eastern white-tailed deer, eastern coyote and red fox, may leave the construction area. Individuals of some songbirds and waterbirds may also be temporarily displaced. Depending on the time of year of the construction activities, the temporary displacement could impact breeding and nesting activities. Smaller and less mobile animals such as small mammals, reptiles, and amphibians may be temporarily affected during the more intense construction activities such as the trenching, excavation and drilling. (1) Whether the proposed project is necessary at the proposed scale or whether the scale of the wetland alteration could be reduced and still achieve the project purpose;

Response: The scale of the SouthCoast Wind 1 Project is designed to enable delivery of approximately 1,200 MW of renewable clean energy to the New England regional electric grid. The design and routing of the offshore and onshore Project facilities minimizes the Project footprint to avoid coastal and freshwater biological wetlands. The BMPs, avoidance, minimization and mitigation measures that will be implemented for the Project are further discussed in Section 2.7 and Sections 3.1 and 3.2.

The Project design includes elements for the construction of a spare underground conduit at landfall and onshore to accommodate an additional 1,200-MW HVDC circuit if needed in the future. This approach would mean only one disturbance of the natural (coastal and freshwater wetlands) and developed environment for trenching and HDD landfall, rather than a second disturbance to accommodate an additional 1,200-MW HVDC circuit if needed in the future for additional export cables. To the extent that SouthCoast Wind seeks to use this additional infrastructure for additional export cables, SouthCoast Wind would obtain all necessary state and local approvals including but not limited to RI CRMC, RIDEM, the RI EFSB and the Town of Portsmouth.

To minimize the Project footprint, the offshore export cables will be installed in a bundled configuration, consisting of two HVDC power cables plus associated communications cabling installed together, where practicable. It is anticipated the offshore HVDC cables will be installed unbundled at landfall.

(2) Whether the proposed project is necessary at the proposed location or whether another location within the site could achieve the project purpose while resulting in less impact to the wetland;

Response: SouthCoast Wind performed an extensive evaluation of offshore and onshore alternatives for routing the export cables in Rhode Island state waters and onshore landfall options, as described in Attachment B, Route Alternatives Assessment. The onshore Project footprint was routed to avoid biological wetlands (coastal and freshwater). The Project is water-dependent and was routed at the landing to minimize encroachment within the 200 ft contiguous area of coastal wetlands, 200 ft contiguous area of river/stream, and 100 ft contiguous area of freshwater wetlands. The Project route does make landfall and crosses underground approximately 2.0 mi (3.2 km) of a coastal community that is abutted by coastal and freshwater wetlands, and therefore constructing the Project within RI CRMC jurisdictional areas is unavoidable. The Project is primarily routed through transportation corridors under the jurisdiction of the RIDOT or the Town of Portsmouth DPW, and these corridors have been filled or otherwise altered in the past. BMPs will be implemented to avoid, minimize and mitigate construction-related disturbances within RI CRMC jurisdictional areas, as further described in Sections 3.1 and 3.2.

(3) Whether there are feasible alternative designs, layouts, densities or technologies, that would result in less impact to the wetland while still achieving the project purpose; and

Response: Please refer to the response to questions in Sections 6.1(a)(3), 6.1(a)(4), 6.1(a)(6), 6.2(b)(2) and 6.2(b)(4) above, and responses to questions in Sections 5.1.1(A), 5.2.2(B) and 5.2.3(A) of this Category B Assent application. Also refer to Attachment B, Route Alternatives Assessment.

(4) Whether reduction in the scale or relocation scale of the proposed project to minimize impact to the wetland would result in adverse consequences to public health, safety or the environment.

Response: Please refer to the response to the questions in Section 6.2(1) above. The design and routing of the offshore and onshore Project facilities minimizes the Project footprint to avoid coastal and freshwater biological wetlands. The proposed limits of disturbance account for avoiding wetlands and reducing the Project footprint's encroachment into jurisdictional contiguous areas, and to avoid adverse consequences to public health, safety or the environment, to the greatest extent practicable. The BMPs, avoidance, minimization and mitigation measures that will be implemented for the Project are further discussed in Section 2.7 and Sections 3.1 and 3.2. SouthCoast Wind conducted an extensive review of alternatives to the Project, as described in Attachment B – Route Alternatives Assessment and presented a similar evaluation of alternatives in the filing with the Rhode Island Energy Facility Siting Board (Docket SB-2022-02). The onshore export cable route selected by SouthCoast Wind and presented in this application balances a reduction and minimization of impacts to wetlands, including jurisdictional contiguous areas, with minimization of risk exposure to public health, safety or the environment.

6.3. MITIGATION MEASURES

c. Mitigation measures. Measures, methods, or best management practices to avoid alterations of and minimize impacts to wetlands are described in § 2.9(B)(1)(d)(3) of the Freshwater Wetland Rules.

(AA) Preserving natural areas in and around wetlands;

Response: Sections of the onshore export cables are located within the 200 ft contiguous area of coastal wetlands, 200 ft contiguous area of river/stream, and 100 ft contiguous area of freshwater wetlands. As discussed in Section 2.7 and Sections 3.1 and 3.2 and the list below is a summary the various avoidance, minimization, and mitigation measures that SouthCoast Wind intends to implement, as appropriate to avoid, minimize or mitigate impacts on freshwater and coastal wetlands:

- SouthCoast Wind will clearly mark the proposed limits of disturbance prior to construction to avoid encroachment into RI CRMC and/or federal wetlands.
- SouthCoast Wind will utilize HDD for export cable installation at landfalls. HDD is a "trenchless" process used for installing cables or pipes which enables the cables to remain buried below the beach and intertidal zone while avoiding or limiting environmental impact during installation.
- SouthCoast Wind will implement erosion and sediment control measures in accordance with Rhode Island regulations and industry BMPs throughout the onshore Project area to abate technical and biological erosion.
- If groundwater is encountered, SouthCoast Wind will perform dewatering measures using standard construction BMPs for dewatering, including, but not limited to, use of temporary settling basins, dewatering filter bags, or temporary holding or frac tanks.
- The dewatering wastewaters will be directed to well-vegetated uplands away from wetlands or other water resources to allow for infiltration to the soil of the discharged water. SouthCoast Wind will place temporary construction mats to minimize soil disturbance, if site conditions require. SouthCoast Wind will require the construction contractor to have spill control and

containment kits on site to allow for immediate response and cleanup in the event of an accidental release of fuel, oils, or other hazardous materials. SouthCoast Wind and their construction contractor will store petroleum products in upland areas more than 100 ft (30.5 m) from wetlands and waterbodies.

- Temporary containment will be required for equipment that cannot be practically moved and must be parked overnight within 100 ft (30.5 m) of a wetland or other water resources.
- SouthCoast Wind will use a secondary containment system for refueling that needs to occur within 100 ft (30.5 m) of wetlands to contain any minor amounts of fuel inadvertently dripped or released during refueling.
- SouthCoast Wind and their construction contractor will store petroleum products in upland areas more than 100 ft (30.5 m) from wetlands and waterbodies. SouthCoast Wind will set up cement cleanout tubs in areas at least 100 ft (30.5 m) from wetlands or other water resources to contain and hold any residual cement and washout from cement trucks prior to their departure from the site.
- Discharges as a result of dewatering will be managed in accordance with the requirements for applicable RIDEM and RI CRMC regulations pertaining to dewatering.

(BB) Minimizing the extent of disturbed areas and encouraging the preservation of land in its natural state;

Response: The Project will be constructed underground primarily within previously disturbed public road ROW; therefore, it will not displace existing land uses, or affect the preservation of land in its natural state. The Project will not displace any open space of active or passive recreational spaces.

Construction activities have been designed to be compatible with local conditions and the majority of construction will occur in developed areas where the original ground surface is already disturbed (e.g., public road ROW, parking lot). To protect resource areas throughout construction all earth disturbances will be conducted in compliance with the RIPDES Construction General Permit, which will include a site-specific SESC Plan and weekly monitoring until disturbed areas are stabilized and restored after construction. The SESC Plan will specify BMPs including erosion and sediment controls and spill protection measures that will be implemented by SouthCoast Wind. Any off-site disposal of excavated materials will be in accordance with applicable regulations and guidance. SESC Measures and Onshore Engineering Drawings are provided in Attachment D and depict the locations of the limits of disturbance and SESCs.

(CC) Designing dense plantings of shrubs and trees between the developed areas and the remaining natural areas: (i). to "buffer" impacts from loss of wildlife habitat and loss of natural areas and (ii). to reduce the impacts of noise, lighting and other disturbances upon wildlife and the remaining natural areas;

Response: SouthCoast Wind intends to stabilize and restore areas temporarily disturbed during construction to include the replanting and re-establishment of vegetation along the roadway shoulders on state and local roadway ROW. During construction, the limits of disturbance will be clearly marked in the field and public shade trees that are located within and/or immediately adjacent to the construction

corridor will be marked and protected. Should RIDOT, Town of Portsmouth, or a private landowner require the replacement of vegetation that is removed to facilitate safe construction, SouthCoast Wind will develop an approach for review.

(DD) Maintaining unrestricted fish and wildlife passage;

Response: The construction of the onshore components of the Project is not anticipated to restrict the migration, movements or passage of fish and wildlife. Two culvert crossings were identified during field surveys - one under Boyds Lane and the second underneath Anthony Road, which carries the flow of Founders Brook. SouthCoast Wind will design the export cables at these culvert crossings to avoid restriction of or interruption with ambient flows, which may also serve as wildlife passages.

(EE) Designing structures and alterations so that they are located outside of flood plain, floodway, areas subject to flooding, flowing bodies of water or other freshwater wetlands;

Response: The Project is water-dependent as it involves the delivery of offshore wind energy to the transmission grid located on the mainland, at Brayton Point, and therefore avoidance of areas subject to flooding when making an intermediate onshore underground crossing of a coastal community are not entirely feasible. The Project is incorporating measures that seek to reduce potential vulnerability to anticipated climate risks and improve resiliency for future climatic conditions. Importantly, the TJBs, which serve as the landfall connection between the offshore and onshore export cables, and the underground duct bank and cable systems are designed to withstand being submerged and operating in salt water in marine and coastal environments and would not be adversely affected by flooding or storm surge, including underground facilities located within the limits of the FEMA flood boundaries (see Attachment D - Onshore Engineering Drawings - SESC Measures). Cables and splices will be designed to be sealed from water intrusion, and quality control and construction processes will be implemented to assure that construction is completed properly in this regard.

(FF) Using best management practices for the stabilization of disturbed areas and the selection, use, and maintenance of temporary or permanent soil erosion and sediment controls in accordance with the latest version of the RI Soil Erosion and Sediment Control Handbook and the RIDEM "Stormwater Management, Design and Installation Rules", 250-RICR-150-10-8;

Response: SouthCoast Wind has prepared Onshore Engineering Drawings - SESC Measures, Onshore Engineering and HDD (Attachment D) and construction activities will be conducted in compliance with the requirements of *Rhode Island Soil Erosion and Sediment Control Handbook, the Rhode Island Stormwater Design and Installation Standards Manual*, and the RIDEM Wetland BMP Manual.

(GG) Using best management practice selection and design criteria in accordance with the latest version of the RIDEM "Stormwater Management, Design and Installation Rules," 250- RICR-150-10-8, to reduce post-development stormwater flows and maximize the control, treatment and maintenance of systems that reduce stormwater impacts to acceptable levels;

Response: There are no aboveground facilities or new or expanded permanent impervious surfaces proposed and therefore there are no permanent impacts to storm water volumes or rates of flow or

discharge anticipated that would require a design in compliance with the RIDEM Stormwater Management Design and Installation Rules. BMPs will be implemented during construction to avoid, minimize and mitigate stormwater flows and discharges during the construction phase of the Project. SouthCoast Wind and its contractor will comply with the requirements of the RIPDES construction General Permit for Stormwater Discharges Associated with construction Activity.

However, SouthCoast Wind will implement soil erosion and sediment control measures and construction BMPs (see Attachment D) to manage stormwater during the construction phase of the Project.

(HH) Minimizing impervious surface areas such as roads, parking, paving or other surfaces;

Response: The Project does not involve the addition of any impervious surfaces or the construction of roads, parking lots or other paved surfaces. Roads that are disturbed during construction will be restored and re-paved to preconstruction or better condition.

(II) Incorporating compensatory flood storage area(s) where necessary and in compliance with these Rules;

Response: No permanent aboveground facilities or impervious areas are proposed and therefore there are no compensatory flood storage areas proposed as a component of the Project.

(JJ) Encouraging infiltration of non-contaminated run-off into uncontaminated soils;

Response: Infiltration is a practice generally associated with the management of stormwater for new aboveground structures or facilities, which are not proposed under this Project. Construction BMPs will be used for the temporary construction-phase of the Project. Stormwater that accumulates within the construction zone may be discharged into a secondary dewater containment area with acceptable filtration measures, including the use of a containment area, filter bags, oil absorbent filter socks, catch basin inlet protection and erosion controls.

Any temporary dewatering required during construction will be performed in compliance with the Rhode Island regulations and industry BMPs throughout the onshore Project areas. Any dewatering required during the construction phase of the Project will be applied for under coverage of the RIPDES Construction General Permit for Stormwater Discharges Associated with Construction. The groundwater management plan will include the following elements:

- Dewatering discharge under a RIPDES Permit.
- Off-site water disposal, if required.
- On-site discharge of construction dewatering with the use of BMPs.
- Dewatering effluent management plan.
- If groundwater is encountered, SouthCoast Wind will perform dewatering measures using standard construction BMPs for dewatering, including, but not limited to, use of temporary settling basins, dewatering filter bags, or temporary holding or frac tanks.

- The dewatering wastewaters will be directed to well-vegetated uplands away from wetlands or other water resources to allow for infiltration to the soil of the discharged water.
- Discharges as a result of dewatering will be managed in accordance with the requirements for applicable Rhode Island state regulations pertaining to dewatering.

(KK) Preventing channelization or piping of run-off and encouraging sheet flow;

Response: No permanent channels, piping or other changes to stormwater patterns are proposed. The BMPs and SESC measures to be installed by the Contractor will account for preventing channelized flow of stormwater to avoid direct discharges to freshwater and coastal wetlands and to reduce the risk of rill and gulley erosion.

(LL) Landscaping with gradual slopes to maximize sheet flow and infiltration while minimizing channelization;

Response: As stated in the response to Section 6.3(FF) above, SouthCoast Wind will implement BMPs to comply with the requirements outlined in the *Rhode Island Soil Erosion and Sediment Control Handbook, the Rhode Island Stormwater Design and Installation Standards Manual*, and the RIDEM Wetland BMP Manual. SouthCoast Wind intends to stabilize and restore areas temporarily disturbed during construction to include surface grading, reseeding of slopes and roadway shoulders and repaving, as applicable. Should RIDOT, the Town of Portsmouth, or a private landowner require the replacement of vegetation that is removed to facilitate safe construction, SouthCoast Wind will develop an approach for review.

(MM) Minimizing or eliminating the use or increase of any pollutants, fertilizers, pesticides, herbicides, or any other chemical or organic application which increase pollutant and nutrient loadings;

Response: The application of the products referenced above in item (MM) will not be used for the SouthCoast Wind 1 Project to the extent the nutrient loadings would be increased to receiving waters. During post-construction restoration and reseeding of disturbed ground surfaces, an initial application of fertilizer may be used to facilitate the re-establishment of groundcover. Should the RI CRMC disagree with this procedure, seeding and mulching can be performed without the application of fertilizers.

(NN) Maximizing setbacks of septic systems and other land disturbances from wetlands; and

Response: Not applicable. There are no septic systems or other permanent discharge systems proposed.

(OO) Minimizing the withdrawal of surface water or groundwater from wetlands or uplands adjacent to wetlands, especially during dry periods, and minimizing any reduction in river or stream flow.

Response: There will be no withdrawals of water from wetlands and waterways for this Project.

6.4. RI CRMC REVIEW CRITERIA FOR FRESHWATER WETLANDS IN THE VICINITY OF THE COAST

The subsections below address the regulatory review criteria for work in or adjacent to freshwater wetlands in the vicinity of the coast. The Project makes an intermediate landfall in the Town of Portsmouth and travels approximately 2 mi (3.2 km) from the Sakonnet River, onshore along existing public roadway ROW, and continues to Mount Hope Bay.

6.4.1. Summary of Project Activities within Freshwater Wetlands Jurisdiction

The onshore components of the Project will be constructed underground primarily within previously disturbed public road ROWs, cleared shoulders and parking lots. The onshore components are designed to accommodate the landfall of up to four HDD/HDPE conduits, two onshore export cables, consisting of two HVDC power cables with a nominal voltage of +/- 320 kV plus associated communications cabling, all contained within an underground infrastructure, beneath previously disturbed areas.

The majority of the onshore portion of the SouthCoast Wind 1 Project is routed through previously disturbed transportation corridors, which is an activity that may qualify as an exempt activity under the RI CRMC Rules and Regulations Governing the Protection and Management of Freshwater Wetlands in the Vicinity of the Coast at Section 9.6 (Section 9.6.10(A)) of the CRMC Rules and Regulations.

Section 9.6.10(A), exempt activity provisions, states, "the installation, in accordance with § 9.6.1 of this Part, of new utility lines, poles, pipes, structures, equipment or facilities is permissible only where installation occurs on, above, or beneath existing or approved paved roadways and their existing or approved cleared shoulders, or on, above or beneath existing or approved railroad beds and their existing or approved cleared shoulders; and where anti-seepage collars are used as appropriate to prevent sub-draining effects on freshwater wetlands."

Although SouthCoast Wind is of the opinion that this exempt activity provision may apply to some of the Project, it is acknowledged that portions of the onshore construction activities will occur outside of paved roadways and approved cleared shoulders. Specifically, the HDD construction areas located at the corner of Boyds Lane and Park Avenue, and on the northeast side of Anthony Road are partially located within vegetated areas located outside of the public roadway ROW. In these instances, the HDD construction areas are located within the 200-ft and 100-ft contiguous areas to coastal wetlands and freshwater wetlands, respectively. SouthCoast Wind will implement avoidance, minimization, and mitigation measures to reduce encroachment and minimize impact within the contiguous areas, including the implementation of soil erosion and sediment control measures and other construction BMPs.

Therefore, as part of the SouthCoast Wind 1 joint Category B Assent and Freshwater Wetlands application, SouthCoast Wind is filing herein a Request for a *Preliminary Determination of Applicability (PDA) seeking a Wetlands Permit or an Insignificant Alteration to Freshwater Wetlands Permit* from the CRMC. SouthCoast Wind has demonstrated herein that this application meets the standards outlined in §9.11 *Application for a Freshwater Wetlands Permit*. Please see Section 3 of this Application for a further description of the activities and mitigation measures to protect freshwater wetlands.

The proposed TJBs and duct banks will not be located within freshwater wetlands and will avoid existing culverted streams by being routed above or below the elevation of existing culverts. There is one existing culvert located across Boyds Lane that will be crossed by the proposed duct bank. The duct bank will be installed below the elevation of the culvert and the existing infrastructure will not be disrupted or otherwise impacted. There is a large (~6.0 ft [1.5m]) reinforced concrete pipe (culvert) that conveys the flow of Founders Brook under Anthony Road near the intersection with Boyds Lane. The proposed duct bank will be installed above the elevation of the existing culvert to avoid interference or disruption with the existing stream culvert. Please refer to Attachment D Onshore Engineering Drawings.

During installation of the duct banks, SouthCoast Wind will evaluate the need for and feasibility of installing "trench plugs" or similar measures to prevent preferential flow of groundwater along the route of the duct bank.

Upon completion of construction, the disturbed areas will be stabilized and restored, including restoration of the preconstruction contours. The permits and agreements with the RIDOT and the Town of Portsmouth DPW will specify the restoration requirements for work activities within state and local roadway ROW.

No work is proposed within freshwater wetlands. Segments of the underground work will occur within the 100-ft contiguous area to freshwater wetlands and within the 200-ft contiguous area of river/stream. SouthCoast Wind does acknowledge that segments of the underground construction is located proximate to freshwater and coastal wetlands, and recognizes groundwater levels and tidal cycles need to be accounted for in the construction sequencing and schedule to protect adjacent wetlands.

Areas disturbed during construction will be restored to preconstruction condition or better condition to include the re-establishment of vegetation and restoration of pre-construction contours. The Contractor will be responsible for final site stabilization, revegetation and restoration of contours, which will be captured within the as-builts plans.

The Onshore Engineering Drawings - Soil Erosion and Sediment Control, Onshore Engineering and HDD (Attachment D) incorporate measures for properly dewatering trench excavations. The HDD operations include activity-specific measures for dewatering excavations, decanting and mud management for the drilling operations.

6.4.2. Review Criteria

The RI CRMC Rules and Regulations Governing the Protection and Management of Freshwater Wetlands in the Vicinity of the Coast at Section 9.7.2 Review Criteria states that:

A. The following review criteria will be used by the CRMC to determine the impacts of all projects and activities, either individually or cumulatively, upon the functions or values of freshwater wetlands, buffers, floodplains, areas subject to flooding and areas subject to storm flowage. All such projects and activities shall be subject to all of the review criteria contained within this Part and must incorporate those best management practices, best available technologies, and any maintenance or inspection schedules necessary to comply with the applicable criteria.

1. A project or activity determined by the CRMC to meet the standards in § 9.7.1 of this Part is presumed to satisfy the review criteria below in § 9.7.2(B);

Response: Each criterion of the CRMC standards is addressed below.

2. No project or activity shall result in the adverse impacts identified in § 9.7.2(B) of this Part below; and

Response: Compliance with this standard is addressed below.

3. No project or activity shall result in any random, unnecessary or undesirable alteration of a freshwater wetland, buffer, floodplain, area subject to flooding or area subject to storm flowage.

Response: The SouthCoast Wind 1 Project is not random or unnecessary. The purpose of the Project is to deliver approximately 1,200 MW of renewable clean energy from SouthCoast Wind's offshore Clean Energy Resource to the New England region. The SouthCoast Wind 1 Project is necessary to meet the needs of the state and region for substantial reductions in GHG emissions and substantial increase to the renewable clean energy supply, delivered safely and reliably to the mainland from offshore wind at the lowest reasonable costs to the consumer to meet the need, while minimizing impact to the natural and social environment. The state of Rhode Island's and its neighboring coastal states' legislative requirements call for substantial reductions in GHG emissions and substantial increase of renewable clean energy into the regional electricity supply mix, including specifically from offshore wind. Additionally, the SouthCoast Wind 1 Project has been selected to deliver 1,087 MW to the Commonwealth of Massachusetts and 200 MW to the State of Rhode Island. This amount represents the total capacity for the SouthCoast Wind 1 Project.

B. Before issuing a permit, the CRMC must determine that a proposed project or alteration will not result in:

4. Significant reduction in the overall wildlife production or diversity of a freshwater wetland or buffer;

Response: The onshore construction activities located within the 100-ft contiguous area to freshwater wetlands and 200-ft contiguous area to river/stream will be temporary and localized, and therefore will not reduce overall wildlife production or diversity within freshwater wetlands or buffer.

5. Significant reduction in the ability of a freshwater wetland or buffer to satisfy the needs of a particular wildlife species;

Response: The majority of the onshore construction will occur within existing transportation corridors along the fringes of freshwater wetlands and buffers. There should be no reduction in the freshwater wetland proximate to the Project route to continue to provide habitat for native wildlife.

6. Significant displacement or extirpation of any wildlife species from a freshwater wetland or surrounding areas due to the alteration of the freshwater wetland or buffer;

Response: The temporal and limited footprint proposed within the freshwater wetland buffer will not result in the displacement or extirpation of wildlife species that currently inhabit or utilize the freshwater wetlands or buffers. Temporary displacement of some wildlife species may occur on a seasonal basis depending on the seasonality and duration of onshore construction.

7. Any reduction in the ability of the freshwater wetland or buffer to ensure the long-term viability of any rare animal or rare plant species;

Response: There are no known state-listed species located within the onshore export cable route, and therefore there is no impact expected to the long-term viability of rare flora or fauna.

8. Any degradation in the natural characteristic(s) of any rare freshwater wetland type;

Response: The Project footprint does not encroach upon biological freshwater wetlands, and no degradation to freshwater wetlands is expected, as soil erosion and sediment control measures (see Attachment D - SESC Measures) will be implemented to protect freshwater wetlands.

9. Significant reduction in the suitability of any freshwater wetland or buffer for use by any resident, migratory, seasonal, transient, facultative, or obligate wildlife species, in either the short or long-term as a travel corridor; feeding site; resting site; nesting site; escape cover; seasonal breeding or spawning area;

Response: Once the onshore export cables and TJBs are buried and covered, no reduction is expected in the freshwater wetlands or buffers to provide migratory, nesting, feeding or escape cover functions. The select removal of vegetation, including some trees, along the Project noise, and the construction itself, could temporarily displace some species including those, such as passerine songbirds, that may nest in some the scrub-shrub habitat that will need to be temporarily mowed/removed to facilitate construction.

10. Any more than a minimal intrusion of, or increase in, less valuable, invasive or exotic plant or animal species in a freshwater wetland or buffer;

Response: Some non-native, invasive plant species have been identified along the Project route including staghorn sumac, multiflora rose and tall reed. SouthCoast Wind will work with its contractors to develop an approach to avoiding and minimizing the spread of invasive plant species. Such measures may include avoiding ground disturbance in areas dominated by non-native species, inspecting and thoroughly cleaning vehicles, equipment and construction mats to remove excess soils that may contain seeds of non-native plants, prior to mobilizing to another location along the Project route, and implementing proper soil handling and stockpiling to avoid cross-contamination of soil materials that may contain non-native plants.

11. Significant reduction in the wildlife habitat functions and values of any freshwater wetland or buffer which could disrupt the management program for any game or non-game wildlife species carried out by State or Federal fish, game, or wildlife agencies; **Response**: As discussed in Section 3, SouthCoast Wind does not anticipate any long-term effects on the freshwater wetlands or buffer to provide habitat characteristics for potential state or federal rare species.

12. Significant reduction in overall current or potential ability of a freshwater wetland or buffer to provide active or passive recreational activities to the public;

Response: Construction of the SouthCoast Wind 1 Project within the freshwater wetland buffer should not reduce active or recreational use of adjacent wetlands. These recreational activities include walking along established trails (e.g., Aquidneck Island Land Trust), bird watching, and possibly hunting for waterfowl.

13. Significant disruption of any on-going scientific studies or observations performed by or in cooperation with Federal, State, or municipal agencies or educational institutions;

Response: SouthCoast Wind is not currently aware of any scientific studies or observations that may be performed within proximity to the Project route. SouthCoast Wind will always make itself available to meet with stakeholders to discuss any concerns with disruption to any scientific or educational activities.

14. Elimination of, or severe limitation to traditional human access to, along the bank of, up or down, or through any rivers, streams, ponds, or other freshwater wetlands or buffers;

Response: The Project will not eliminate public access to rivers, streams, freshwater wetlands or buffers. Access to pedestrian or bicycle use may be temporarily disrupted along the Project route but detours can be established as necessary to allow safe access.

15. Any reduction in water quality functions and values or negative impacts to natural water quality characteristics, either in the short or long-term, by modifying or changing: water elevations, temperature regimes, volumes, velocity of flow regimes of water; increasing turbidity; decreasing oxygen; causing any form of pollution; or modifying the amount of nutrients so as to negatively impact freshwater wetland functions and values;

Response: SouthCoast Wind will implement soil erosion and sediment control measures and construction BMPs to avoid impacts to the water quality of receiving freshwater wetlands and waters (see Attachment D - Onshore Engineering Drawings - SESC Measures). Temporary dewatering of excavations and open trenches, as required, will be conducted in compliance under a RIPDES Permit. If groundwater is encountered, SouthCoast Wind will perform dewatering measures using standard construction BMPs for dewatering, including, but not limited to, use of temporary settling basins, dewatering filter bags, or temporary holding or frac tanks.

16. Any placement of any matter or material beneath surface water elevations or erection of any barriers within any ponds or flowing bodies of water which could cause any hazards to safety;

Response: No in-water work is proposed within freshwater wetlands or waters and no barriers to any ponds, rivers or streams is proposed for the SouthCoast Wind 1 Project.
17. Significant loss of important open space or significant modification of any uncommon geologic features or archaeological sites that are listed on the National Register of Historic Places or eligible for listing;

Response: Based on the due diligence and field investigations performed on behalf of SouthCoast Wind, there are no known uncommon geologic features on or along the Project Route. Further, a TARA has been prepared and filed with the RIHPHC. SouthCoast Wind has also committed to engaging on-site archaeological monitors during the onshore export cable trench excavation, in the vicinity of two identified archaeological sites, if the identified sites cannot be avoided. SouthCoast Wind has also developed and will implement a Historic Properties Treatment Plan (Attachment X) to minimize and mitigate adverse effects to archaeological sites within the onshore Project Area in Portsmouth, Rhode Island.

18. Significant modification to the natural characteristics of any freshwater wetland or buffer area of unusually high visual quality;

Response: SouthCoast Wind does not anticipate any long-term adverse effect on what may be considered unusually high viewsheds. Once the onshore export cables and TJBs are buried and cover, there will be no above-ground structures that could potentially modify a viewshed to Island Park Beach "The Cove," Founders Brook Memorial Park, or the Aquidneck Island Land Trust Bertha K. Russel Preserve.

19. Any decrease in the flood storage capacity of any floodplain or area subject to flooding which could impair its ability to protect life or property from flooding or flood flows;

Response: Since the onshore Project facilities are proposed as underground facilities/utilities, there will be no decrease in flood storage capacity or impact to flood flows.

20. Significant reduction of the rate at which flood water is stored by any floodplain or area subject to flooding during any flood event;

Response: As stated in the response to Standard 16 above, the below-ground facilities will not reduce floodplain or areas subject to flooding.

21. Restriction or significant modification of the path or velocities of flood flows for the one (1) year, ten (10) year, or one hundred (100) year frequency, twenty-four (24) hour, Type III storm events so as to cause harm to life, property, or other functions and values provided by freshwater wetlands, buffers or floodplain;

Response: There are no above-ground structures proposed onshore in Portsmouth and therefore there will be no adverse impact to flooding or storm events. During construction, SouthCoast Wind will implement measures to safeguard the work site and adjacent properties should a severe coastal storm occur during the construction phase of the Project.

22. Placement of any structure or obstruction within a floodway so as to cause harm to life, property, or other functions and values provided by freshwater wetlands or their associated buffers;

Response: The only structures to be installed will be buried. No above-ground structures will be erected in a floodway or flood zone within the Town of Portsmouth.

23. Any increase in run-off rates over pre-project levels or any increase in peak flood elevations within freshwater wetlands, buffers, floodplains, areas subject to flooding or areas subject to storm flowage for the one (1) year, ten (10) year, or one hundred (100) year frequency, twenty-four (24) hour, Type III storm events which could impair their ability to protect life or property from flooding or flood flows;

Response: The proposed underground facilities are not expected to result in an increase in rates or volumes of runoff that could affect freshwater wetlands. SouthCoast Wind will implement soil erosion and sediment control measures and construction BMPs (see Attachment D) to reduce the potential of stormwater runoff from construction adversely affecting freshwater wetlands.

24. Any increase in run-off volumes and discharge rates which could, in any way, exacerbate flooding conditions in flood-prone areas;

Response: As stated in the response to Standard 20 above, the Project is not expected to result in exacerbating stormwater runoff of flooding conditions in flood-prone areas.

25. Significant changes in the quantities and flow rates of surface or groundwater to or from isolated freshwater wetlands (e.g., those freshwater wetlands without inflow or outflow channels);

Response: The installation of the underground duct bank, TJBs and splice vaults is not anticipated to significantly change quantities or flow rates of surface water, groundwater or stormwater, nor affect the water balance of bordering or isolated freshwater wetlands.

The proposed underground infrastructure will be installed within previously disturbed roadway corridors and is not expected to divert or interfere with groundwater or surface water flows that would adversely impact freshwater wetlands. During installation of the duct banks, SouthCoast Wind will evaluate the need for and feasibility of installing "trench plugs" or similar measures to prevent preferential flow of groundwater along the route of the duct bank.

26. Placement of any structural stormwater best management practices within freshwater wetlands, or proposal to utilize freshwater wetlands as a stormwater best management practice;

Response: SouthCoast Wind will implement soil erosion and sediment control measures during the construction phase of the Project. However, soil erosion and sediment controls will be setback from the edges of freshwater wetlands to the greatest extent feasible. No freshwater wetlands or waters will be used for the impoundment of stormwater that may be temporarily generated by the Project.

27. Any more than a short-term decrease in surface water or groundwater elevations within any freshwater wetland;

Response: The Project is not expected to result in any short-term decrease in surface water or groundwater elevations. As stated in the response to Standard 12 above, temporary dewatering of excavations and trenches may be required, and will be performed in accordance with industry accepted dewatering methods in in compliance with State of Rhode Island requirements.

28. Non-compliance with the DEM's Water Quality Regulations, 250-RICR- 150-05-1; or

Response: SouthCoast Wind received a Section 401 Water Quality Certification and Dredge Permit from RIDEM on March 16, 2024 and will comply with the Rhode Island Water Quality Regulations and conditions outlined in the permit.

29. Any detrimental modification of the ability of a freshwater wetland or buffer to retain or remove nutrients or act as a natural pollution filter.

Response: The Project does not entail the alteration or modification of a freshwater wetland or buffer that would affect the functions or nutrient retention. SouthCoast Wind will implement soil erosion and sediment control measures (see Attachment D), an Emergency Response Plan (see Attachment F) to respond to accidental releases of fuel or oil, and an HDD Contingency Plan (see Attachment G) to monitor and respond to an inadvertent release of drilling returns/muds during the HDD operations.