COMMONWEALTH OF MASSACHUSETTS
ENERGY FACILITIES SITING BOARD

Petition of SouthCoast Wind Energy LLC Pursuant to G.L. c. 164 § 69J for Approval to Construct Transmission Facilities in Massachusetts for the Delivery of Energy from an Offshore Wind Energy Generation Resource Located in Federal Waters to the Regional Transmission System at Brayton Point in the Town of Somerset, Massachusetts	EFSB 22-04
Petition of SouthCoast Wind Energy LLC Pursuant to G.L. c. 164 § 72 for Authority to Construct and Operate New Transmission Facilities for the Delivery of Energy from an Offshore Wind Energy Generation Resource Located in Federal Waters to the Regional Transmission System at Brayton Point in the Town of Somerset, Massachusetts	D.P.U. 22-67
Petition of SouthCoast Wind Energy LLC Pursuant to G.L. c. 40A, § 3 for Individual and Comprehensive Exemptions from the Operation of the Town of Somerset Zoning Bylaw for the Construction and Operation of New Transmission Facilities for the Delivery of Energy from an Offshore Wind Energy Generation Resource Located in Federal Waters to the Regional Transmission System at Brayton Point in the Town of Somerset, Massachusetts	D.P.U. 22-68

FINAL DECISION

Robert J. Shea
Presiding Officer
October 4, 2024

On the Decision:
Timothy J. Reilly
Nathaniel Strosberg
Andrew Greene

The Siting Board translates materials into other languages to assist people with limited English proficiency. The Siting Board has reasonably attempted to provide an accurate translation of the original material, but due to the nuances in translating to a foreign language, slight differences may exist. While the Siting Board has provided translated versions, the English version is the official version of the Siting Board's decision.

APPEARANCES: Eric K. Runge, Esq.
Gemma Cashman, Esq.
William M. Pezzoni, Esq.
Day Pitney LLP
One Federal Street, 29th Floor
Boston, MA 02110

and

Margaret Czepiel, Esq.
Day Pitney LLP
555 11th Street
Washington, DC 20004
FOR: SouthCoast Wind Energy LLC
Petitioner

Mark R. Rielly, Esq.
New England Power Company d/b/a National Grid
40 Sylvan Road
Waltham, MA 02451

and

David S. Rosenzweig, Esq.
Erika J. Hafner, Esq.
Keegan Werlin LLP
99 High Street
Boston, MA 02110
FOR: New England Power Company d/b/a National Grid
Intervenor

George X. Pucci, Esq.
KP Law, P.C.
101 Arch Street, 12th Floor
Boston, MA 02110
FOR: Town of Somerset
Intervenor

Adam P. Kahn, Esq.
Zachary Gerson, Esq.
Aaron Lang, Esq.
Foley Hoag LLP
Seaport West
155 Seaport Boulevard
Boston, MA 02210
FOR: Commonwealth Wind LLC
Limited Participant

Kathy Souza
130 Pocasset Street
Somerset, MA 02725
Limited Participant

Nicole McDonald
30 Admirals Way
Somerset, MA 02725
Limited Participant

Patrick W. McDonald
30 Admirals Way
Somerset, MA 02725
Limited Participant

Lloyd R. Mendes
46 Anawan Street
Somerset, MA 02725
Limited Participant

Table of Contents

Abbreviations

AUL	Activity and Use Limitations
BMP	Best Management Practices
BOEM	Bureau of Ocean Energy Management
BUAR	MA Board of Underwater Archaeological Resources
Cape Wind 2005 Decision	Cape Wind Associates, LLC, and Commonwealth Electric Company d/b/a NSTAR Electric, EFSB 02-2 (2005)
CEC	MA Clean Energy Center
CECP	MA Clean Energy and Climate Plan
CFR	Code of Federal Regulations
CMP	Construction Management Plan
CMR	Code of Massachusetts Regulations
CO_2	Carbon Dioxide
Company	SouthCoast Wind Energy LLC
CRMC	RI Coastal Resources Management Council
CZM	MA Office of Coastal Zone Management
dBA	A-weighted decibels
DEIR	Draft Environmental Impact Report (MEPA)
DEIS	Draft Environmental Impact Statement (BOEM)
Department	Department of Public Utilities
DGA	Designated Geographic Area
DMF	MA Division of Marine Fisheries
DPA	Designated Port Area
DPU	Massachusetts Department of Public Utilities
EDC	Electric Distribution Company
EEA	Massachusetts Executive Office of Energy and Environmental Affairs
EFSB	Massachusetts Energy Facilities Siting Board
EIR	Environmental Impact Report (MEPA)

EJ	Environmental Justice
EMF	Electric and Magnetic Fields
ENF	Environmental Notification Form (MEPA)
EPA	U.S. Environmental Protection Agency
Exh.	Exhibit
FEIR	Final Environmental Impact Report (MEPA)
FEIS	Final Environmental Impact Statement (BOEM)
GCC	Ground Continuity Conductors
GCEP	Greater Cambridge Energy Project, NSTAR Electric Company d/b/a Eversource Energy, EFSB 22-03/D.P.U. 22-21 (2024)
G.L. c.	MA General Laws chapter
GHG	Greenhouse Gas
GW	Gigawatt
GWSA	Global Warming Solutions Act of 2008
HDD	Horizontal Directional Drilling
HVAC	High Voltage Alternating Current (transmission cable)
HVDC	High Voltage Direct Current (transmission cable
ICNIRP	International Commission of Non-Ionizing Radiation Protection
ISO-NE	Independent System Operator – New England
KOPs	Key Observation Points
kV	Kilovolt
LCS	Land Containing Shellfish
LSCSF	Land Subject to Coastal Storm Flowage
LSP	Licensed Site Professional
LUO	Land Under the Ocean
MassDEP	MA Department of Environmental Protection
MassDOT	MA Department of Transportation
MassWildlife	MA Division of Fisheries and Wildlife
MCP	Massachusetts Contingency Plan

MEPA	Massachusetts Environmental Policy Act (Office)
MF	Magnetic Fields
MHC	Massachusetts Historical Commission
Mid-Cape Reliability Project	NSTAR Electric Company d/b/a Eversource Energy, EFSB 19-06/D.P.U. 19-142/143 (2022)
MW	Megawatt
NAVD88	North American Vertical Datum
NEPOOL	New England Power Pool
NHESP	Natural Heritage and Endangered Species Program
NMFS	National Marine Fisheries Service
NNSR	EPA Nonattainment New Source Review
NOI	Notice of Intent
NOx	Nitrogen Oxides
NPDES	National Pollution Discharge Elimination System
OCSLA	Outer Continental Shelf Lands Act
OECC	Offshore Export Cable Corridor
OGF	SouthCoast Wind Offshore Generating Facility
OMP	Massachusetts Ocean Management Plan
OSP	Offshore Substation Platform
PCH	Public Comment Hearing
PCW	Park City Wind LLC, EFSB 20-01/D.P.U. 20-56/20-57 (2023)
POI	Point of Interconnection
PM	Particulate Matter
PPA	Power Purchase Agreement
PSO	Protected Species Observer
QMA	Qualified Marine Archaeologist
RA	Riverfront Area
RIDEM	Rhode Island Department of Environmental Management
RIEFSB	Rhode Island Energy Facilities Siting Board
RMAT	ResilientMASS Action Team

RMAT Tool	RMAT Climate Resilience Design Standards Tool
ROD	Record of Decision (BOEM)
RTN	Release Tracking Number
ROW	Right-of-Way
SCW	SouthCoast Wind Energy LLC
Secretary	Secretary of Massachusetts Executive Office of Energy and Environmental Affairs
SFEIR	Supplemental Environmental Impact Report (MEPA)
Siting Board	Massachusetts Energy Facilities Siting Board
SO_2	Sulfur Dioxide
SPCC	Spill Prevention Control and Countermeasures Plan
SSU	Special, Sensitive and Unique
TJB	Transition Joint Bay
TMP	Traffic Management Plan
TOY	Time of Year
Tr.	Transcript
TSS	Total Suspended Solids
URAM	Utility Related Abatement Measure
USACE	U.S. Army Corps of Engineers
USCG	U.S. Coast Guard
USFWS	U.S. Fish and Wildlife Service
Vineyard Wind	Vineyard Wind LLC, EFSB 17-05/D.P.U. 18-18/18-19 (2019)
VOC	Volatile Organic Compounds
WDU	Water Dependent Use
WHOI	Woods Hole Oceanographic Institute
WPA	MA Wetlands Protection Act
WTG	Wind Turbine Generator

Summary of Final Decision

The Final Decision recommends approval with conditions of SouthCoast Wind Energy LLC's ("SCW" or "Company") proposed electric transmission lines and converter station (together, the "Project") that would connect SCW's proposed offshore wind energy generating facility to the New England power grid at the National Grid Brayton Point Substation in Somerset, Massachusetts. Two 320 kilovolt ("kV") direct current ("DC") offshore power cables would begin at the Lease Area in federal waters (30 miles south of Martha's Vineyard), where SCW would construct up to 147 wind turbine generators, with as much as 2,400 megawatts ("MW") of generating capacity, although the current Project is designed to transmit 1,200 MW. The 113-mile-long offshore cables would include 90.5 miles in federal waters, 20.4 miles in Rhode Island waters (including a crossing at Aquidneck Island, Rhode Island), and 2.1 miles within Massachusetts waters (only the Massachusetts portions are subject to Massachusetts Energy Facilities Siting Board review). After making final landfall in Massachusetts, the lines would run 0.6 miles underground at Brayton Point to SCW's new direct current to alternating current ("DC-to-AC") converter station, and then continue 0.2 miles underground to the existing 345 kV Brayton Point Substation. The Brayton Point site was previously the location of the largest coal-fired power plant in New England, which was shut-down and decommissioned in 2017.

Initially selected to provide 1,204 MW of wind power to Massachusetts's electric distribution companies, SCW sought Department of Public Utilities ("DPU") approval to terminate the contracts in June 2023 citing inflation, supply chain issues, and financing cost increases affecting the U.S. offshore wind industry. The DPU approved the contract termination in September 2023. In March 2024, SCW re-submitted bids to sell its power to Connecticut, Massachusetts, and Rhode Island electric distribution companies in a multistate bid process. Governor Maura Healey and the Massachusetts Department of Energy Resources announced on September 6, 2024 that Massachusetts had selected 1,087 MW of SCW's capacity and Rhode Island Governor Dan McKee announced Rhode Island's selection of 200 MW. Following the announcement in early September, SCW is negotiating contracts with the electric distribution companies for DPU and Rhode Island Public Utilities Commission review. The Final Decision finds that the Project is needed based on indicators of project progress, and finds that the Project is consistent with the Commonwealth's energy and environmental policies. The Final Decision includes a requirement for final issuance by the U.S. Bureau of Ocean Energy Management ("BOEM") of its Record of Decision approval before SCW can begin construction of the Project.

The Company considered several potential locations for the Project's landfall site, substation interconnection, onshore routes, and converter station, and it evaluated the feasibility, environmental impacts, reliability, and cost of route alternatives. The Final Decision finds that the Company's proposed Project route and site locations best meet the identified need in a reliable manner, with a minimum environmental impact, at the lowest possible cost. The Final Decision also recommends approval of a proposal by SCW for installing spare cable conduits at the landfall and in the onshore cable duct bank in conjunction with the Project, thereby reducing long-term costs and environmental impacts of increased future wind energy deliveries to Brayton Point from the Lease Area.

The Company has engaged with a diverse group of stakeholders and community organizations in the region to enhance the Project's environmental and economic benefits for area residents and Environmental Justice ("EJ") populations. The Final Decision notes that SCW has made substantial commitments for local and regional workforce development, training, and employment opportunities in clean/renewable energy as a central part of its Project development plans.

Pursuant to G.L. c. 164, § 69J, the Massachusetts Energy Facilities Siting Board ("Siting Board") hereby APPROVES, subject to the conditions set forth below, the petition of SouthCoast Wind Energy LLC to construct offshore and onshore electric transmission lines, underground transmission vaults, and a converter station. Pursuant to G.L. c. 164, § 72, the Siting Board hereby APPROVES, subject to the conditions set forth below, the petition of SouthCoast Wind Energy LLC for a determination that the proposed transmission lines are necessary, serve the public convenience, and are consistent with the public interest. Pursuant to G.L. c. 40A, § 3, the Siting Board hereby GRANTS individual and comprehensive zoning exemptions from the Town of Somerset Zoning Bylaws in connection with the proposed transmission facilities as described herein.

I. INTRODUCTION

A. Description of Proposed Project

SouthCoast Wind Energy LLC ("SCW" or the "Company")[1] proposes to construct a series of offshore wind turbine generators and offshore substation platforms (collectively, the Wind Offshore Generating Facility, "OGF") to be located in federal waters (Exh. SW-1, at 1-1, 1-3). The Company's plan is for up to 1,200 megawatts ("MW") from the OGF to be delivered to the electric grid at a point of interconnection ("POI") located on the Brayton Point peninsula, in Somerset, Massachusetts ("Brayton Point" or the "Peninsula") (Exhs. SW-1, at 1-2, 1-3; SW-3, at 1-2 & n.1, 2, 4, 6). The POI and surrounding area are the location of the former Brayton Point

---

[1] The Company operated under the name "Mayflower Wind Energy LLC" (Exhs. SW-3, at 1; SW-4, at 1; SW-5, at 1). By letter dated February 1, 2023, the Company's counsel informed the Siting Board and the service list that its name had been changed to "SouthCoast Wind Energy LLC." When the Petitions were filed, the Company constituted a joint venture between Shell New Energies US LLC and Ocean Winds North America LLC ("Ocean Winds") (Exhs. EFSB-N-1(S1)(1); SW-3, at 3). Ocean Winds itself is a joint venture between EDP Renewables and ENGIE (Exh. SW-3, at 3). By letter of March 22, 2024, counsel for the Company informed the Presiding Officer that SCW is now wholly owned by Ocean Winds.

Power Station, a coal- and oil-fired generating facility decommissioned in 2017 (Exh. SW-1, at 3-3, 3-4). In these consolidated proceedings, the Company seeks approval of the Siting Board for that portion of the transmission lines, a converter station, and related infrastructure that would lie within the Commonwealth (Exhs. SW-1, at 1-2, 1-3; SW-3, at 1-4).[2]

The Company is seeking approval of the following infrastructure that is jurisdictional to Massachusetts: (1) two high voltage direct current ("HVDC") offshore export power cables, each rated at approximately 320 kilovolts ("kV") and associated communications cabling installed beneath Massachusetts waters (together "Offshore Export Cables"); (2) a landfall location at Brayton Point with underground transition vaults where the Offshore Export Cables would come onshore; (3) two underground HVDC onshore power cables, also rated at approximately 320 kV, from the landfall to the converter station ("Onshore Cables"); (4) a new converter station located in the central portion of the Brayton Point site that would convert the 320 kV HVDC power to 345 kV high voltage alternating current ("HVAC") ("Converter Station") for transmission to the Brayton Point POI; and (5) six underground 345 kV HVAC power cables that would interconnect the Converter Station to the existing 345 kV transmission facilities at the POI ("Grid Interconnection") (Exh. SW-1, at 5-54). The Company also proposes a Noticed Variation, an enhancement (described below) that could facilitate the potential future delivery of an additional 1,200 MW from SCW's offshore lease area – for a total of 2,400 MW (Exh. SW-3, at 8-9). Together, the Offshore Export Cables (with the Noticed Variation), Onshore Cables, Converter Station, and Grid Interconnection constitute the "Project." New England Power Company d/b/a National Grid ("National Grid") would be responsible for any upgrades or modifications necessary to the POI, which is an existing 345 kV substation at Brayton Point owned and operated by National Grid (Exh. SW-1, at 110).

---

[2] The Siting Board did not review the OGF (including the turbine array, related equipment, and a portion of the transmission line) as it would be located in federal waters and therefore is subject to federal jurisdiction and review. Additionally, the Siting Board did not review the portion of the transmission facilities that would be located in Rhode Island; these will be subject to Rhode Island jurisdiction and review.

The Brayton Point property site for the Project is approximately thirteen acres of leased land, approximately ten acres of which would be occupied by the onshore converter station and 3.3 acres by the transition joint bays ("TJB"s), onshore underground duct bank and splice vaults (Exhs. SW-6, at 3-3, and Att. P, at 4; see also, Company Brief at 13, 172). The Company, through a wholly owned subsidiary, has entered into an Option for Ground Lease with Brayton Point LLC for this property (RR-EFSB-25)(1)(Confidential).[3] The OGF is located approximately 51 nautical miles offshore from Brayton Point in Somerset (Exh. SW-1, at 2-6).[4] There is no existing electric infrastructure serving the federal waters where the OGF would be built (Exh. SW-1, at 2-6). The Offshore Export Cables would follow an offshore export cable corridor ("OECC") passing through federal and Rhode Island waters and making an initial landfall at Aquidneck Island in Rhode Island (Exh. SW-1, at 1-2 to 1-5, 1-7 to 1-10).[5] The OECC would enter Massachusetts waters southwest of Brayton Point in Mount Hope Bay (Exh. SW-1, at 3-5). The Company provided two alternative routes by which the Offshore Export Cable would approach Brayton Point, make landfall, and continue onshore to the POI (Exh. SW-1, at 4-22).[6]

The Company's preferred route, called the Lee River Route (see Figure 2 below), proceeds northeast from Rhode Island waters for approximately 2.1 miles through Mount Hope Bay and

---

[3] The terms of this option are confidential pursuant to a ruling of the Presiding Officer dated June 25, 2024.

[4] The Company plans to develop offshore generating facilities in this lease area that would be capable of generating 2,400 MW (Exh. SW-1, at 1-1).

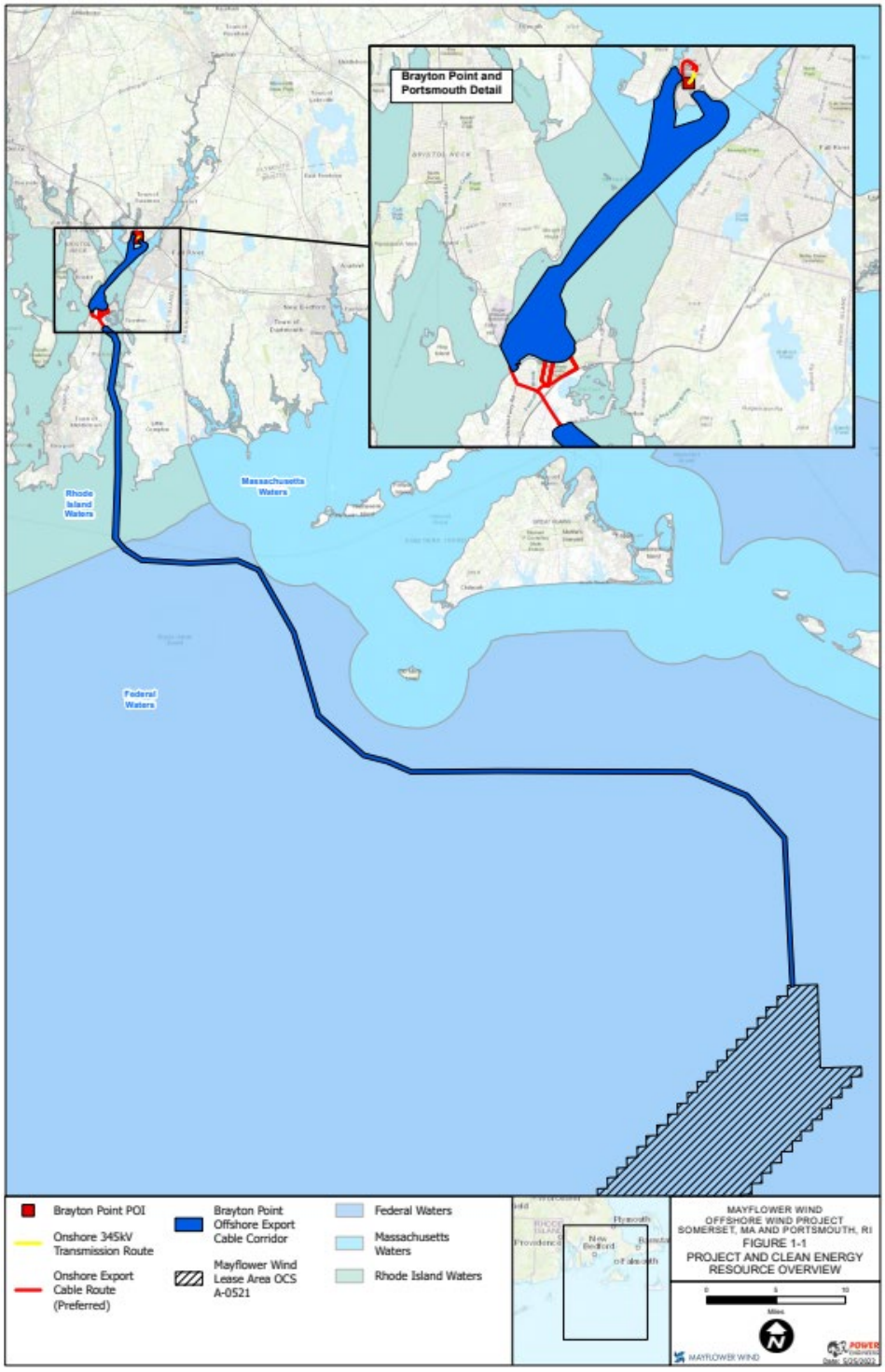
[5] Portions of the Offshore Export Cable route also go through Rhode Island waters and land. The Rhode Island Energy Facilities Siting Board is reviewing its jurisdictional facilities in its own proceeding: Rhode Island Energy Facilities Siting Board SB-2022-02 (Exh. EFSB-G-10(S2)).

[6] The Siting Board has jurisdiction only over those aspects of the Project located in the Commonwealth or within Massachusetts state waters (Exh. SW-1, at 1-1; 1-3, 1-4; Company Brief at 7). The OECC would pass through federal and Rhode Island waters, make an intermediate landfall at Aquidneck Island in Rhode Island, and proceed through Massachusetts waters (Exh. SW-1, at 1-2 to 1-5, 1-7 to 1-10). The Rhode Island Energy Facilities Siting Board has jurisdiction over the portions of the Project located within that state (Exhs. EFSB-N-1(S1)(1); EFSB-G-10(S2)).

enters the mouth of the Lee River to the west of Brayton Point (Exhs. SW-1, at 3-5; SW-4, at 11; see also, Figure 1, infra). Using this route, the Offshore Export Cables would make landfall on the western side of the Peninsula (Exhs. SW-1, at 3-5; SW-4, at 11; see also, Figure 1, infra). The Company's Noticed Alternative Route, called the Taunton River Route, proceeds northeast from Rhode Island waters for approximately 2.4 miles through Mount Hope Bay and enters the mouth of the Taunton River to the east of Brayton Point (Exhs. SW-1, at 3-6; SW-4, at 11; see also, Figure 1, infra). Using this route, the offshore export cables would make landfall on the eastern side of the Peninsula (Exh. SW-1, at 3-6; SW-4, at 11; see also, Figure 1, infra).

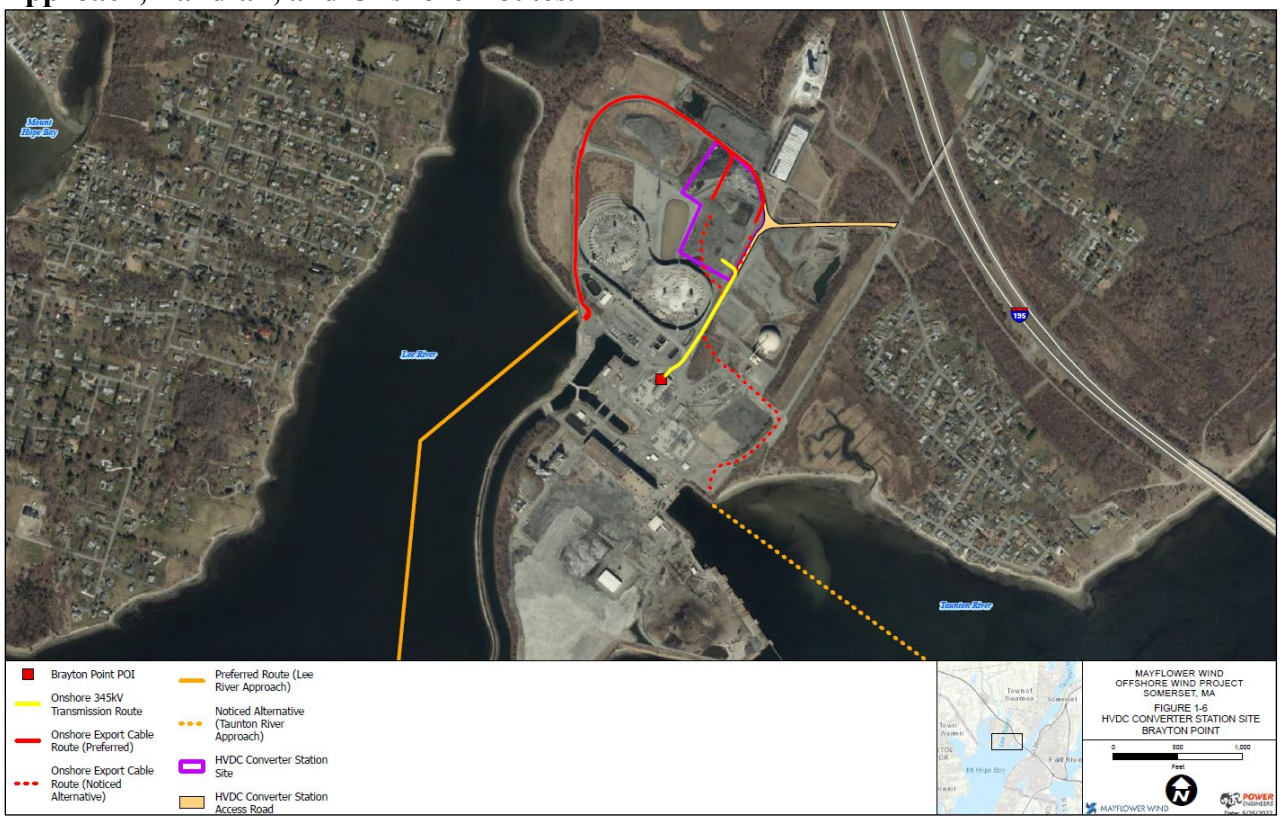
From landfall, the Onshore Cables would run approximately 0.6 miles long along the Lee River Route (for the Company's Preferred Route), and 0.4 miles long along the Taunton River Route (for the Noticed Alternative Route) to the Converter Station (Exh. SW-1, at 1-8, 1-12, 3-5, 3-6). The Onshore Cables would enter the Converter Station site from either the west or from the southeast corner; the 0.2-mile Grid Interconnection would exit the Converter Station site from the southeast corner connecting to the National Grid substation POI, and the regional transmission system (Exh. SW-1, at 1-10; 3-11).

Figure 1. Project Overview.



Source: Exh. SW-2, Att. A, Figure 1-1.

Figure 2. Detailed View of Company's Preferred and Noticed Alternative Offshore Approach, Landfall, and Onshore Routes.



Source: Exh. SW-2, Att. A, Figure 1-6.

The Noticed Variation would facilitate the delivery of an additional 1,200 MW of future offshore generation by installing spare conduits at the landfalls and onshore cable portions of both the Company's Preferred Route and its Noticed Alternative Route (Exh. SW-1, at 1-1). These conduits would be capable of accommodating an additional circuit, consisting of two power cables and associated communications cabling (Exhs. SW-1, at 1-1 n.1, 5-2; SW-3, at 9). Two additional (spare) horizontal directional drilling ("HDD") conduits would be constructed at landfall, which would require two additional exit pits (Exhs. SW-1, at 1-1 n.1; SW-3, at 9). The primary difference between the Project and Noticed Variation is the physical size of the underground infrastructure (Exh. SW-1, at 4-19).

The Company is also seeking multiple individual exemptions from the Somerset Zoning Bylaw (Exh. SW-4, at 22-36). The Company asserts that these exemptions are required to construct and operate the Project (Exh. SW-4, at 25-36). In addition, the Company is seeking a

comprehensive zoning exemption from the operation of the Somerset Zoning Bylaw (Exh. SW-4, at 36-41).

B. Related Actions

1. MEPA and BOEM Environmental Review

The Project and related infrastructure consist of components located both within federal and Commonwealth waters as well as onshore land within the Commonwealth (Exhs. SW-6, at 1-1, 1-2; SW-7, at 1, 2). Therefore, the Project and related infrastructure are subject to environmental review by both the Bureau of Ocean Energy Management ("BOEM"), under the National Environmental Policy Act ("NEPA"), and by the Massachusetts Environmental Policy Act ("MEPA") Office (Exhs. SW-1, at 6-4 n.12, 6-5). See also, Park City Wind LLC, EFSB 20-1/D.P.U. 20-56/20-57, at 5 (2023) ("Park City Wind"); Vineyard Wind LLC, EFSB 17-05; D.P.U. 18-18/18-19, at 8 (2019) ("Vineyard Wind").

BOEM acts as the lead federal permitting agency for wind energy projects, and it coordinates other federal agency reviews (Exhs. SW-1, at 6-4; EFSB-W-19). See Park City Wind at 5. In addition to BOEM, the federal agencies reviewing the Project and related infrastructure include the National Marine Fisheries Service ("NMFS"), United States Fish and Wildlife Service ("USFWS"), the U.S. Environmental Protection Agency ("EPA"), the United States Army Corps of Engineers ("USACE"), the United States Coast Guard ("USCG"), and the Bureau of Safety and Environmental Enforcement (Exhs. SW-1, at 6-4 n.12; EFSB-W-19).

BOEM has jurisdiction over the assets located in federal waters pursuant to the Outer Continental Shelf Lands Act ("OCSLA"), 43 U.S.C. §§ 1131 et seq. (Exh. EFSB-W-19 & n.1). See also, Park City Wind at 5. The OCSLA authorizes the Secretary of the Interior to enter into leases for submerged land in the Outer Continental Shelf (Exh. SW-8, at 1-6; and 3.6.6-1).[7]

---

[7] The Energy Policy Act of 2005, Public Law 109-58, amended the OCSLA by adding a new subsection 8(p) that authorizes the Secretary of the Interior to issue leases, easements, and rights-of-way in the Outer Continental Shelf for activities that "produce or support production, transportation, or transmission of energy from sources other than oil and gas,"

BOEM, acting pursuant to powers delegated to it, awarded the Company a lease for the offshore area in which the OGF would be located and this lease was awarded as result of a competitive auction (Exhs. SW-1, at 2-7; SW-8, at 1-6; EFSB-N-4(S3) at 6 n.7). Although BOEM's authority under the OCSLA extends only to activities on the Outer Continental Shelf, it also uses the Environmental Impact Statement ("EIS") to address various alternatives related to offshore, nearshore, and onshore elements of the Project and related infrastructure (Exh. SW-8, at 2-1).[8]

BOEM's regulations require the Company's Construction and Operations Plan ("COP") to describe all planned facilities that the lessee would construct and use for the Project, including onshore and support facilities and all anticipated Project easements (Exh. SW-8, at 2-1). 30 CFR §585.620. The Company filed a COP with BOEM on February 15, 2021 (Exh. EFSB-N-4(S3) at 6). On August 30, 2021, October 28, 2021, and March 16, 2022, SCW filed revisions and updates to its COP and responded to BOEM environmental and engineering comments (Exh. EFSB-N-4(S3) at 7). On November 1, 2021, BOEM published a Notice of Intent to Prepare an EIS for the review of the SCW COP (Exh. EFSB-N-4(S3) at 7). BOEM issued the DEIS for the Project on February 13, 2023, and completed a 60-day public comment period on April 18, 2023 (Exhs. EFSB-G-19(S1); EFSB-G-10(S3)(1) at 18). During the public comment period, BOEM held three public meetings (Exh. EFSB-N-4(S1) at 7). BOEM is preparing the Final Environmental Impact Statement ("FEIS") for the project which will be followed by a Record of

---

which include wind energy projects (Exh. SW-8, at 1-6). The Secretary of the Interior delegated this authority to BOEM (Exh. SW-8, at 1-6). The final regulations implementing the authority for renewable energy leasing under the OCSLA (30 C.F.R. § 585) were promulgated on April 22, 2009 (Exh. SW-8, at 1-6). These regulations also prescribe BOEM's responsibility for determining whether to approve, approve with modifications, or disapprove a proponent's Construction and Operations Plan (30 C.F.R. § 585.628) (Exh. SW-8, at 1-6).

[8] This decision uses the term "SCW Energy Facility" to encompass all elements of South Coast Wind's development proposal, regardless of agency jurisdiction, from the OFG array in federal waters to the POI at the National Grid substation at Brayton Point.

Decision ("ROD") (Exh. EFSB-N-4(S1) at 7). As of the date of this Decision, BOEM has not issued its FEIS.[9]

Federal and state environmental reviews have proceeded concurrently with the Siting Board's review of the Project (Exh. SW-1, at 2-8, 6-3, 6-4 & n.12, 6-5). Regarding MEPA review, the Company filed an environmental notification form ("ENF"), a Draft Environmental Impact Report ("DEIR"), a Final Environmental Impact Report ("FEIR"), and a Supplemental FEIR ("SFEIR") on August 19, 2022, February 3, 2023, July 21, 2023, and October 31, 2023, respectively (Exhs. SW-6; SW-9; SW-11; SW-13; SW-14). The Secretary of Energy and Environmental Affairs ("Secretary") issued certificates on these filings on February 3, 2023, July 17, 2023, October 10, 2023, and December 19, 2023, respectively (Exhs. SW-7; SW-10; SW-12; SW-15). The MEPA review culminated in the certificate on the SFEIR which concluded the SFEIR adequately and properly complies with MEPA and its implementing regulations (Exh. SW-15, at 1).

In addition to the Siting Board, the Department of Public Utilities ("Department"), and MEPA, the Massachusetts agencies involved in reviewing the Project include the Massachusetts Department of Environmental Protection ("MassDEP"), Massachusetts Department of Transportation ("MassDOT"), the Massachusetts Board of Underwater Archaeological Resources ("BUAR"), the Massachusetts Division of Fisheries and Wildlife ("MassWildlife") Natural Heritage and Endangered Species Program ("NHESP"), the Massachusetts Historical Commission ("MHC"), the Massachusetts Division of Marine Fisheries ("DMF"), and the Massachusetts Office of Coastal Zone Management ("CZM") (Exh. SW-1, at 6-6, 6-7). Local agencies with the authority to review the Project include the Somerset Conservation Commission, the Somerset Highway Department, the Somerset Select Board, and the Swansea Conservation Commission (Exhs. SW-1, at 6-7; EFSB-N-4(S5)(2)).

---

[9] According to the Federal Infrastructure Permitting Dashboard, the most recent targeted issuance date of the FEIS on the COP is November 2024, with the ROD to follow in December 2024. https://www.permits.performance.gov/permitting-project/fast-41-covered-projects/southcoast-wind-energy-llc-southcoast-wind (accessed September 19, 2024).

2. Power Purchase Agreements

At the time the Company initiated this proceeding, it had executed long-term power purchase agreements ("PPAs") with Massachusetts electric distribution companies ("EDCs") for purchase of up to 1,200 MW of power to be produced by the Project (Exhs. SW-3, at 5-6; SW-1, at 2-4; EFSB-N-1(S1)(1) at 4). On June 5, 2023, the Company informed the Siting Board and other parties that it intended to terminate these PPAs (Exh. EFSB-N-1(S1)(1), at 4, 5). The Company represented that the existing PPAs would not be "economic" due to "unforeseen inflation, supply chain and financing cost increases affecting the U.S. offshore wind industry" (Exh. EFSB-N-1(S1)). Therefore, the Company asserted, termination of the PPAs would likely be the "most prudent" course of action (Exh. EFSB-N-1(S1)). Despite its intended termination of said PPAs, however, the Company represented that it remained committed to developing offshore wind energy generation (Exh. EFSB-N-1(S1)(1) at 5, 6). SCW further represented that it would submit bids for offshore energy in the next round of bidding under Section 83C of Chapter 169 of the Acts of 2008 ("Section 83C") (Exh. EFSB-N-1(S1)(1) at 6-8).[10] Between August 29, 2023, and September 1, 2023, the Massachusetts EDCs filed with the Department executed termination agreements regarding the PPAs (Exh. EFSB-N-1(S3). The Department approved the termination agreements on September 29, 2023 (Exh. EFSB-N-1(S4)).

On October 3, 2023, the Commonwealth of Massachusetts entered into a memorandum of understanding ("MOU") with the states of Rhode Island and Connecticut, which states that "the three states together will seek multi-state offshore wind proposals that would expand benefits for

---

[10] Chapter 169 of the Acts of 2008 is entitled the "Green Communities Act." The Green Communities Act has been amended by: the Global Warming Solutions Act, St. 2008, c. 298, § 6 (a/k/a Chapter 21N, Climate Protection and Green Economy Act); the Energy Diversity Act, St. 2016, c. 188; the Clean Energy Act, St. 2018, c. 227; the Climate Roadmap Act, St. 2021, c. 8; and the Offshore Wind Act, St. 2022, c. 179 (Exhs. SW-1, at 6-3; EFSB-CPC-1; EFSB-CPC-2). The Green Communities Act introduced the Section 83C bidding process. See also, 220 CMR 23.01.

the region" (Exh. EFSB-N-1(S4) at 4). The Commonwealth is coordinating with Connecticut and Rhode Island pursuant to the MOU in the current solicitation of offshore wind energy.[11]

Regarding the current round of bidding, on May 2, 2023, the Massachusetts Department of Energy Resources ("DOER") issued a draft request for proposals ("RFP") for up to 3,600 MW of renewable energy to be generated by offshore wind (Exh. EFSB-N1(S1)(1) at 6). Long-Term Contracts for Offshore Wind Energy Generation Pursuant to Section 83C of Chapter 169 of the Acts of 2008, D.P.U. 23-42. Connecticut, Massachusetts, and Rhode Island issued a multistate RFP in October 2023 (Exh. EFSB-N-1(S5). On March 27, 2024, the Company submitted bids to each of Connecticut, Massachusetts, and Rhode Island pursuant to this multistate RFP (Exh. EFSB-N-1(S5)). On September 6, 2024, Massachusetts selected 1,087 MW and Rhode Island selected 200 MW from SCW's bid.[12] The current deadlines for the next steps are November 8, 2024, for the execution of long-term contracts, and December 18, 2024, for the submission of long-term contracts for Department review.

3. Rhode Island Energy Facilities Siting Board

The OECC would pass through federal and Rhode Island waters and make an initial landfall at Aquidneck Island in Rhode Island (Exh. SW-1, at 1-2 to 1-5, 1-7 to 1-10). The Rhode Island Energy Facilities Siting Board ("RI EFSB") is reviewing the portion of the Project to be located in that state in its own proceeding: RI EFSB SB-2022-02 (Exh. EFSB-G-10(S2)). On July 18, 2023, the RI EFSB issued a written order staying the SCW proceeding (Exhs. EFSB-G-10; EFSB-G-10(S2)). The RI EFSB order stays the proceeding until October 1, 2024, or until certain other actions take place (Exhs. EFSB-G-10; EFSB-G-10(S1)(1)).

---

11 See www.macleanenergy.com/2024/08/06/revised-83c-round-iv-solicitation-schedule/.

12 See https://www.mass.gov/news/massachusetts-and-rhode-island-announce-largest-offshore-wind-selection-in-new-england-history?.

C. Procedural History of the Siting Board Proceedings

On May 27, 2022, the Company filed three petitions with the Siting Board and the Department, each of which relate to the Project. The three petitions include: (1) a petition for approval to construct the proposed Project ("Petition to Construct") pursuant to G.L. c. 164, §69J, docketed as EFSB 22-04 (Exh. SW-3); (2) a petition for approval to construct transmission lines pursuant to G.L. c. 164, § 72 ("Section 72 Petition"), docketed as D.P.U. 22-67 (Exh. SW-5); and (3) a petition seeking individual and comprehensive exemptions from the Town of Somerset Zoning Bylaw ("Zoning Petition"), docketed as D.P.U. 22-68 (Exh. SW-4). All three petitions together are referred to as the "Petitions." With the Petitions, the Company simultaneously filed a motion to consolidate the Petitions for review and decision by the Siting Board. On July 5, 2023, the Chair of the Department, acting pursuant to G.L. c. 164, § 69H(2), issued a Referral and Consolidation Order referring the Section 72 Petition and the Zoning Petition to the Siting Board for review and decision together with the Petition to Construct. The Siting Board accordingly conducted a single adjudicatory proceeding and developed a single evidentiary record with respect to the Petitions, docketed as EFSB 22-04/D.P.U. 22-67/22-68.

The Siting Board directed the Company to comply with several notice requirements in advance of the public comment hearing. In accordance with these requirements, the Company published the Notice of Adjudication and Public Comment Hearing ("Notice") on two consecutive weeks in the Fall River Herald News and the Somerset Spectator (Affidavit of Eric K. Runge, Esq., ¶ 8 and Attachment D) ("Runge Affidavit").[13] In addition, the Company posted copies of the Notice and the Petitions on its website, which have remained available for public review (Runge Affidavit ¶3). The Company also sent electronic and hard copies of the Notice to the Somerset

[13] The Siting Board staff's analysis of relevant language demographic data determined that there were no Census tracts within 300 feet of the Project's proposed transmission line corridors and within one-quarter mile of the proposed Converter Station with more than five percent of the respective population who speak a specific language other than English and speak English "less than very well." The Siting Board did not receive any requests for additional language services. Therefore, the Siting Board did not require SCW to provide language translation or interpretation services.

Town Clerk's Office and to the Somerset Public Library with the request that they be posted to the Town's website and at the Town Clerk's Office until the close of the comment period (Runge Affidavit ¶ 4 and Attachment A). The Company sent hard copies of the Petitions and its attachments to the Town Clerk's Office and the Town Public Library with the request that the Petitions and attachments be available for public review until the Siting Board issues its final decision in this proceeding (Runge Affidavit ¶ 5). The Company also sent hard copies of the Notice to the Somerset Town Clerk, Public Works Department, Conservation Commission, Zoning Board, Planning Board and Select Board, and to the Planning Boards for the towns of Swansea, Dighton, Berkley, and Freetown and the City of Fall River (Runge Affidavit, ¶ 6). The Siting Board also directed the Company to mail a copy of the Notice to: (1) abutters, owners of land directly opposite on any public or private street or way, and abutters to abutters within three hundred feet of both the Company's Preferred Route (including the Noticed Variation) and the Noticed Alternative Route (including the Noticed Variation); and (2) all owners of land within one-quarter mile of the parcel boundaries of the Converter Station (Letter of September 2, 2022, from Presiding Officer to Company Counsel at 2) ("Publication Letter"). All Notices were to be mailed to owners as they appeared on the most recent tax list, regardless of the town in which the property is located; and the term "owners" was to include individual owners of residential condominiums (Publication Letter at 2).

Furthermore, the Company was also directed to mail a copy of the Notice to: (1) all U.S. Mail addresses (including rental properties) within three hundred feet of both the Company's Preferred Route (including the Noticed Variation) and the Noticed Alternative Route (including the Noticed Variation); and (2) all U.S. Mail addresses (including rental properties) within one-quarter mile of the parcel boundaries of proposed Converter Station (Publication Letter at 2). For U.S. Mail addresses, the Company was directed to identify those addresses through MassGIS or similar database (Publication Letter at 2). The Company complied with these directives (Runge Affidavit).

The Siting Board conducted a virtual public comment hearing on October 11, 2022 to receive comments from the public on the proposed Project. At the public comment hearing ("PCH"), residents raised concerns regarding electromagnetic fields and the construction noise that

the Project would generate (PCH Tr. at 41-57). One resident stated that there would be further industrial development on the Peninsula, and he expressed concern about cumulative environmental impacts and the need for additional security (PCH Tr. at 52). Another resident asked questions about the extent to which energy generated by the Project would displace energy generated by using fossil fuels, as well as details of Project financing (PCH Tr. at 58-59). The Siting Board also solicited written comments on the Project. One commentor, residing in Rhode Island, objected to the Company's Preferred Route because it transverses Rhode Island waters. Another commentor submitted a five-page original document that called for a "macro reassessment" of the Project in light of the Company's termination of the PPAs, asserting that there was a conflict between the date of the PCH and the deadline for submitting comments to five states (Massachusetts, Connecticut, Maine, New Hampshire, and Rhode Island) on a proposed Modular Offshore Wind Integration Plan.

The Siting Board received two timely petitions to intervene and five timely requests for limited participant status. On November 18, 2022, the Presiding Officer issued a ruling granting the intervention petitions of the Town of Somerset and National Grid. The ruling also granted limited participant status to one entity and four individual Somerset residents: Commonwealth Wind LLC ("Commonwealth Wind"), Kathy Souza, Nicole McDonald, Patrick McDonald, and Lloyd Mendes.

The parties issued multiple rounds of information requests from April 7, 2023 to June 29, 2023. These include three rounds of information requests from the Siting Board to the Company; one round of information requests from the Town to the Company; one round of information requests from the Company to the Town; and one round of information requests from the Siting Board to the Town. National Grid did not propound any discovery.

On June 5, 2023, the Town submitted its pre-filed direct testimony. Those testifying on the part of the Town included Tim Turner, the Town's Conservation and Health Agent, as well as several Town residents: Nancy Thomas, Nicole McDonald, Patrick McDonald, Kathleen Souza, Dr. Paul Healey, and Peter Pelletier. Each of the Town residents testified solely in his, her, or their individual capacity as residents of the Town and not as an agent or expert witness for the Town (Tr. 5, at 808-809, 876-880). National Grid did not submit any pre-filed direct testimony.

The Siting Board conducted six days of evidentiary hearings on July 18, 19, 20, 26, 27 and August 7, 2023. The Company presented sixteen witnesses for cross-examination, ten of whom worked for the Company: Kathleen Freeman, senior manager, permitting & environmental; Jennifer Flood, permitting director; Daniel Hubbard, general counsel; Kelly Smith, onshore transmission package manager; Kelsey Perry, community liaison coordinator; Timothy Reiher, export and array cables package manager; Lawrence Mott, transmission development manager; Eric Frazer, HVDC system package manager; Sam Asci, fisheries manager; and Victor Mastone, senior archaeologist and tribal liaison. The other SCW witnesses were: Jamie Durand, senior environmental project manager at POWER Engineers; Andrea Wood, electrical engineer at POWER Engineers; Chris Hauck, project manager at POWER Engineers; Chris Long, principal at Gradient Corp; Daniel Mendelsohn, principal at Innovative Environmental Science; and Jennifer Ehrhardt, air permitting and compliance project manager at AECOM.

The Town presented eight witnesses for cross-examination. In addition to the five witnesses who submitted pre-filed testimony, the Town also introduced testimony from Mark Ullucci, the town administrator, Paul Healey, and Peter Pelletier.

More than 300 exhibits were entered into the evidentiary record. These exhibits include the Company's Petitions and attachments; its MEPA submissions, including ENF; its DEIR, FEIR and SFEIR; and the EEA Secretary Certificates on the ENF, DEIR, FEIR, and SFEIR. The exhibits also include the documents related to the Project issued by BOEM such as the DEIS, as well as SCW's responses and supplemental responses to the Siting Board's and the Town's information and record requests (Company Brief at 37; SCW's Exhibit List as of September 11, 2024).

During this proceeding, the Company filed seven motions seeking protective treatment of specific document and one motion seeking to have data protected as Confidential Energy Infrastructure Information ("CEII"). The Company filed its CEII motion on April 24, 2023, and the Presiding Officer issued a ruling on January 19, 2024. The Company filed its seven motions for protective treatment on the following dates: May 27, 2022; June 5, 2023; July 24, 2023; July 27, 2023; August 2, 2023; November 3, 2023; and November 16, 2023. The Presiding Officer issued a single ruling, addressing each motion separately, on June 21, 2024.

On July 7, 2023, the Town filed a Motion to Dismiss or Stay the Proceedings ("Motion to Stay"). In its Motion to Stay, the Town argued that the Siting Board should dismiss or stay the proceedings because the Company had repudiated its PPAs (Motion to Stay at 2-6). The Company and the limited participant Commonwealth Wind each filed oppositions on July 12, 2023. The Town filed a reply to the oppositions on July 21, 2023. On July 26, 2023, SCW filed a Surreply addressing arguments raised by the Town in its July 21 Reply. A ruling on the Motion to Stay is set forth below in Section III.E.

On August 8, 2023, the Presiding Officer set a briefing schedule, with initial briefs due on October 3, 2023, and reply briefs due on October 16, 2023. On September 27, 2023, the parties jointly moved to extend the deadline for filing briefs by two weeks ("September 27 Joint Motion"). As grounds therefore, the parties represented that they were actively engaged in negotiating a Host Community Agreement ("HCA") (September 27 Joint Motion at 1). The Presiding Officer allowed this motion on the same day. On October 12, 2023, the Company and the Town filed a motion seeking a three-week extension for the filing of briefs, again representing that the parties were negotiating an HCA. The Presiding Officer also allowed this motion. On November 2, 2023, the same parties again filed a joint motion for a two-week extension of time to file briefs to allow for negotiation of and HCA. The Presiding Officer also allowed this motion. On November 17, the Town filed a motion requesting a two-day extension of time to file briefs, which the Presiding Officer also allowed. In the November 17 motion, Town counsel represented that HCA negotiations were ongoing. No HCA was filed with the Siting Board.

Both the Company and the Town filed initial briefs on November 22, 2023. The Company filed a reply brief on December 6, 2023. Neither National Grid nor any of the limited participants submitted a brief.

Siting Board staff issued a copy of the Tentative Decision in English, Spanish and Portuguese to all parties for review and comment on September 20, 2024. In addition, on September 20, 2024, Siting Board staff issued a copy of the Tentative Decision in this matter and a Notice of Siting Board Meeting to all persons and entities on the service list, to community-based organizations ("CBOs"), and to state legislators for the area in which the Project would be located.

The parties were given until September 27, 2024, to file written comments. The Siting Board received timely written comments from the Company, the Town of Somerset, and National Grid.

The Siting Board conducted a hybrid public meeting, with simultaneous interpretation provided in Spanish, Portuguese and Cape Verdean Creole, to consider the Tentative Decision on October 1, 2024. The Siting Board heard oral comments from the Company, the Town of Somerset, National Grid, Nicole McDonald, Patrick McDonald, Kathleen Souza, and Paul Healey on the Tentative Decision. After deliberation, the Board directed staff to prepare a Final Decision approving the Petitions, subject to conditions, as set forth below.

II. JURISDICTION AND STANDARD OF REVIEW UNDER G.L. C. 164, § 69J

G.L. c. 164, § 69J provides that the Siting Board should approve a petition to construct a facility if the Siting Board determines that the petition meets certain requirements, including that the plans for the construction of the applicant's facility are consistent with the policies stated in G.L. c. 164, § 69H, to provide a reliable energy supply for the Commonwealth with a minimum impact on the environment at the lowest possible cost. Pursuant to G.L. c. 164, § 69J, a project applicant must obtain Siting Board approval for the construction of proposed energy facilities before any construction permits may be issued by another state agency. See Town of Sudbury v. Energy Facilities Siting Board, 487 Mass. 737, 746-747 (2021) ("Town of Sudbury").

G.L. c. 164, § 69G defines a "facility" to include, among other things, "a new electric transmission line having a design rating of 69 kilovolts or more and which is one mile or more in length on a new transmission corridor." A Section 69G transmission facility also includes "an ancillary structure which is an integral part of the operation of any transmission line which is a facility." G.L. c. 164, § 69G. The Company's proposed high-voltage Offshore Export Cables and Onshore Cables and Grid Interconnection together would be greater than 69 kV, greater than a mile in length, and would run along new transmission corridors (Exhs. SW-1, at 1-2; SW-3, at 3, 8). Furthermore, the Company's proposed underground sea-to-shore transition vaults and the Converter Station are ancillary structures which are integral parts of the operation of the transmission line facilities (Exhs. SW-1, at 1-2, 5-1; SW-3, at 8). Therefore, the Project elements

together constitute a "facility" that is subject to Siting Board review pursuant to Section 69J (Exhs. SW-1, at 1-2; SW-3, at 3, 8).[14]

The Siting Board requires that an applicant demonstrate that its proposal meets the following requirements: (1) that additional energy resources are needed (see Section III, *infra*); (2) that, on balance, the proposed project is superior to alternative approaches in terms of reliability, cost, and environmental impact, and in its ability to address the identified need (see Section IV, *infra*); (3) that the applicant has considered a reasonable range of practical facility siting alternatives and that the proposed facilities are sited in locations that minimize costs and environmental impacts while ensuring a reliable energy supply (see Section V, *infra*); (4) that environmental impacts of the project are minimized and the project achieves an appropriate balance among conflicting environmental concerns as well as among environmental impacts, cost, and reliability (see Section VI, *infra);* and (5) that plans for construction of the proposed facilities are consistent with the current health, environmental protection, and resource use and development policies of the Commonwealth (see Section VII, *infra*).

III. NEED FOR PROPOSED PROJECT

A. Standard of Review

In accordance with G.L. c. 164, § 69H, the Siting Board is charged with the responsibility for implementing energy policies to provide a reliable energy supply for the Commonwealth with a minimum impact on the environment at the lowest possible cost. In carrying out this statutory mandate with respect to proposals to construct electrical transmission facilities in the Commonwealth, the Siting Board is required to evaluate whether there is a need for additional

---

[14] Any upgrades or modifications to the existing National Grid 345 kV substation to enable the POI for the Project would be undertaken by National Grid and were described by both the Company and National Grid as not requiring Siting Board or Department approvals (Exhs. SW-1, at 1 10, 3-11; EFSB-G-4). SCW maintains that the modifications to the existing 345 kV substation are outside the scope of the Project and can be made by National Grid without need of Siting Board or Department approval (Exhs. SW-1, at 3-11; EFSB-G-4).

transmission resources. The Siting Board reviews the need for proposed transmission facilities to meet reliability, economic efficiency, or environmental objectives. G.L. c. 164, §§ 69H, 69J.

The Siting Board in 2005 established the standard of review governing the proposed construction of in-state transmission facilities that would interconnect to the regional electric grid a new or expanded generating facility. See Cape Wind Associates, LLC, and Commonwealth Electric Company d/b/a NSTAR Electric, EFSB 02-2, at 16-17 (2005) ("Cape Wind 2005 Decision").[15] The Siting Board requires an applicant seeking to construct such a transmission facility to show: (1) that the existing transmission system is inadequate to interconnect the new or expanded generator; and (2) that the new or expanded generator is likely to be available to contribute to the regional energy supply. Cape Wind 2005 Decision at 16-17. To show that the new or expanded generator is "likely to be available," the Siting Board has developed standards that vary according to the status of the generator:

> If the new or expanded generator exists, or is under construction, the availability showing will be deemed to have been made. If the generator is planned, and is subject to the Siting Board's jurisdiction, that showing may be made by obtaining the Siting Board's approval of the generating facility. If the generator is planned, and not subject to the Siting Board's jurisdiction, the showing may be made on a case-by-case basis based on indicators of project progress (e.g., progress in permitting or in obtaining project financing).

Cape Wind 2005 Decision at 16-17. See also Park City Wind at 21-22; Vineyard Wind at 12.

---

[15] The Siting Board expressly stated that "in order to avoid any confusion about the standard to be applied in future cases, the Siting Board takes this opportunity to articulate a single standard of review for need to be applied in all cases where a transmission line is proposed to interconnect new or expanded generation. This new standard must be broad enough to encompass both transmission lines serving generators subject to the Siting Board's jurisdiction, and transmission lines serving generators that are too small to be subject to our jurisdiction, generators that are located in another state, or generators that are located in federal territory" (emphasis added). Cape Wind 2005 Decision at 16.

B. Company Position

1. Company Advocates for a Change to the Need Standard

The Company advocates that the Siting Board amend its standard of review for need in this proceeding and in all other offshore wind transmission connector proceedings (Company Brief at 46; Exhs. SW-1, at 2-6; SW-3, at 13; see also Exh. SW-5, at 11-12 n.7 (Zoning Petition)). The Company states that the need standard could appropriately be refined and improved by expressly taking into account public policy requirements and legislative directives driving the need for transmission infrastructure to integrate public policy generation resources, especially offshore wind, into the regional grid (Exhs. SW-3, at 13; SW-1, at 2-6; see also Company Brief at 51). The Company asserts that such refinement of the standard would be appropriate given the legislative changes, including decarbonization mandates, that have occurred since the development of the Cape Wind standard in 2005 (Exhs. SW-3, at 13; SW-1, at 2-6). Finally, the Company suggests that an affirmative statement that a PPA is not required to demonstrate need at the time of siting approval will help provide clarity and certainty to the development and siting process (Company Brief at 53).[16]

In support of its position, the Company points to: (1) the current Cape Wind 2005 Decision standard not requiring approved PPAs as a prerequisite to demonstrate need, but rather, requiring some demonstration of indicators of progress in developing the generation that will contribute to the regional energy supply; (2) the governing statute not requiring approved PPAs as a prerequisite; and (3) BOEM not requiring a PPA or similar commercial offtake agreement as a prerequisite to approval (Company Brief at 52). The Company recommends that if the Siting Board wishes to guard against speculative projects being built, it could condition commencement of "substantial construction" on: (1) the existence of a PPA or similar offtake agreement (as it has

---

16 In a surreply on the Town's Motion to Dismiss or Stay the proceedings, the Company asserted that no developer of major energy infrastructure would commence construction without having all major permits and acceptable offtake agreements in hand (Company Surreply at 8, 9).

suggested for the Project in this proceeding); and (2) the Company obtaining a ROD from BOEM (Company Brief at 53, 60).

Finally, the Company requested that if the Siting Board incorporates these conditions into its decision, that it provide flexibility for the Company to conduct preliminary construction activities, such as scheduling and implementing preparatory work with long lead times (Company Brief at 60). The Company asserts that these preparatory activities could allow the Company to begin post-ROD construction activities promptly and in accordance with scheduling and applicable time-of-year ("TOY") restrictions (Company Brief at 60).

2. Company Asserts the Project is Needed

The Company argues that the Project meets the Siting Board's standard of review for need first articulated in the Cape Wind 2005 Decision. Regarding the first prong of the Cape Wind need standard, the Company maintains that the existing transmission system is inadequate to interconnect the OGF for the Project's 1,200 MW of capacity (Company Brief at 46). The Company emphasizes that there are no existing transmission facilities that can deliver the initial 1,200 MW of capacity from the OGF to the regional transmission system at Brayton Point, much less the Company's full 2,400 MW anticipated build-out of the SCW offshore lease area (Company Brief at 46-47).

Regarding the second prong, the Company contends that the electricity produced by the OGF is likely to be available to contribute to the regional energy supply (Company Brief at 47-48). The Company argues that it has made and is making significant progress in its state and federal permitting and continues to invest significant time and money into the Project and OGF (Company Brief at 47). The Company contends that it satisfies the second prong based on public policy requirements, studies, and forecasts showing need for the type of energy that the Project would produce, and regional winter energy security concerns for New England (Company Brief at 47). The Company, therefore, asserts that it is well-positioned to serve the urgent need for clean energy from offshore wind in Massachusetts and the region (Company Brief at 48).

The Company argues that the wind energy produced by the OGF is likely to contribute to regional energy needs as evidenced by the following specific indicators of progress and its commitments to Project development:[17,18]

- The Company submitted bids for a 1,200 MW project to the multistate Request for Proposals issued by Connecticut, Rhode Island, and Massachusetts on March 27, 2024 (Exhs. EFSB-N-4(S4); EFSB-N-1(S5)).[19]

- BOEM issued the DEIS for the Project on February 13, 2023, and completed a 60-day public comment period on April 18, 2023 (Exhs. EFSB-G-19(S1); EFSB-G-10(S3)(1) at 18). Additionally, the USFWS completed its Endangered Species Act Consultation with BOEM on September 1, 2023 (Exh. SW-13), and the NMFS is currently conducting an Endangered Species Act Consultation with BOEM, with anticipated completion November 7, 2024.

- The Company filed other federal permitting applications in 2022 and 2023, including the Incidental Take Regulations application with the NMFS, with authorization that would be effective from April 1, 2027 through March 31, 2032[20]; the Outer Continental Shelf Air Permit with the EPA, with final decision/approval anticipated on February 25, 2025;[21] and the Section 10/Section 404 Individual Permit with the USACE, with final

---

17 The BOEM website also provides updates on Project milestones: https://www.boem.gov/renewable-energy/state-activities/southcoast-wind-formerly-mayflower-wind.

18 This permitting dashboard is another source of updates on Project milestones: https://www.permits.performance.gov/permitting-project/fast-41-covered-projects/southcoast-wind-energy-llc-southcoast-wind.

19 On September 6, 2024, Massachusetts and Rhode Island governors announced that they selected the Company's bid for 1,087 MW in Massachusetts and 200 MW in Rhode Island. The Company is negotiating contracts with electric distribution companies in Massachusetts, which will be filed with DPU for review.

20 https://www.federalregister.gov/documents/2024/06/27/2024-13770/takes-of-marine-mammals-incidental-to-specified-activities-taking-marine-mammals-incidental-to-the.

21 https://www.permits.performance.gov/proj/southcoast-wind-energy-llc-southcoast-wind/outer-continental-shelf-ocs-air-permit.

verification/decision anticipated on March 27, 2025[22] (Exhs. EFSB-G-10(S3)(1) at 19; EFSB-N-4(S1) at 7).

- The Company is actively pursuing development of the Project and OGF and has budgeted approximately $100 million for development expenses in 2023 (Exhs. EFSB-N-1(S1)(1); EFSB-N-1(S2)(1)). The Company added that it had more than 75 full-time employees solely dedicated to Project/OGF development (Exh. EFSB-N-1(S1)(1); Company Brief at 49). The Company retained Woods Hole Oceanographic Institute ("WHOI") to conduct a fisheries economic exposure analysis -- dated November 16, 2023[23] -- to assist in the Company's ongoing discussions with the Rhode Island Coastal Resources Management Council ("CRMC") and Massachusetts DMF and CZM (Exhs. EFSB-G-10(S3)(1); EFSB-N1(S2)(1) at 12; Company Brief at 50). The Company has also completed geotechnical, geophysical, and benthic studies that mobilized 17 vessels and employed 925 people (Exh. EFSB-N-4(S1) at 8). According to SCW, this effort has resulted in 32,103 square acres of mapped seafloor and related substantial financial investments in marine science (Exhs. EFSB-N-4(S1) at 8; EFSB-G-10(S3)(1) at 20; Company Brief at 50).

- The Company has secured interconnection rights into the regional transmission system at Brayton Point with supporting land rights at "significant" financial cost (Exhs. EFSB-G-10(S3)(1) at 19; EFSB-N-4(S1)). SCW added that interconnection at this location would allow the Project to deliver energy to "key" load centers, including in Southeastern Massachusetts, Boston, and Rhode Island (Exhs. EFSB-G-10(S3)(1) at 19; EFSB-N-4(S1)). The Company executed an Elective Transmission Upgrade agreement with National Grid, with milestones for the construction of interconnection-related facilities (Exhs. EFSB-G-10(S3)(1) at 20; EFSB-N-4(S1) at 6; Company Brief at 49).

- The Company has an option to lease the Project site at Brayton Point (RR-EFSB-25).

- The Company received a certificate on its SFEIR from the Secretary on December 15, 2023. The SFEIR addressed Project modifications that would further mitigate impacts and responded to feedback from state regulators and municipal officials (Company Brief at 49).

- The Company has filed its federal consistency review with the CRMC, and its Water Quality Certificate and Marine Dredging application with the Rhode Island Department of Environmental Management (Exh. EFSB-N-4(S4)) at 8; Company Brief at 50).

---

22 https://www.permits.performance.gov/permitting-project/fast-41-covered-projects/southcoast-wind-energy-llc-southcoast-wind.

23 http://www.crmc.ri.gov/windenergy/southcoast/SCW_FisheriesEconExposureAnalysis_231116.pdf.

- On December 20, 2023, SCW filed its combined Application for Licenses/Permits for Chapter 91 Waterways and State Water Quality Certification (Exh. EFSB-N-4(S4) at 16, 17).

- In January 2024, SCW completed the Project Sediment Sampling and Analysis Report for the Massachusetts 401 Water Quality Certification (Exh. EFSB-N-4(S4)(1)). The Company maintains that this report supports the water quality impact assessment for the Water Quality Certification (Exh. EFSB-W-21).

- On April 24, 2024, SCW issued public notice regarding the Project's waterways application to construct and maintain submarine cables and perform dredging associated with the installation of the cables at Brayton Point in Somerset and Swansea (Exh. EFSB-N-4(S4) at 17). The public comment period was open for 30 days and closed on May 24, 2024 (Exh. EFSB-N-4(S4) at 17).

- On May 7, 2024, MassDEP issued the 401 Water Quality Certification, determining that there is reasonable assurance the project or activity, as conditioned herein, will be conducted in a manner which will not violate applicable water quality standards (314 CMR 4.00) and other requirements of state law (Exh. EFSB-N-4(S4) at 17).

- On March 8, 2024, SCW filed the Swansea Wetlands Notice of Intent ("NOI") (DEP SE 072-1812). On March 15, 2024, SCW filed the Somerset Wetlands Notice of Intent (DEP SE 070-0548). The Swansea Conservation Commission held its first hearing on March 25, 2024, approved the Notice of Intent on August 12, 2024, and issued an Order of Conditions on August 27, 2024 (Exh. EFSB-N-4(S5)(2)).[24] The Somerset Conservation Commission held its first hearing on April 22, 2024, approved the Notice of Intent on August 29, 2024, and issued an Order of Conditions on September 9, 2024 (Exh. EFSB-N-4(S5)(2)).

- On May 31, 2024, SCW and the CZM entered into a Memorandum of Agreement ("MOA") regarding the Massachusetts Fisheries Compensatory Mitigation Fund and the Contribution to the Massachusetts Fisheries Innovation Fund (Exh. EFSB-N-4(S4) at 18).

- On September 10, 2024, MassDEP issued a Draft Chapter 91 Waterways License (EFSB-N-4(S5)(3)).

SCW asserts that public policy requirements and related studies and forecasts that call for new or expanded clean energy generation provide further support for project need (Company Brief

[24] https://cms8.revize.com/revize/swanseama/con%20com%208.12.24%20mins.pdf.

at 55). The Company pointed to the following Massachusetts public policy requirements as particularly relevant (see Section III.B.1, above) (Company Brief at 55):

- An Act Driving Clean Energy and Offshore Wind (St. 2022, c. 179) ("Clean Energy Act"): The Clean Energy Act codified the Commonwealth's goal to procure 5,600 MW of offshore wind by 2027. The Company alleges that the Clean Energy Act and the Section 83C of the Green Communities Act (St. 2008, c. 169) direct the EDCs to solicit proposals for offshore wind energy generation show that offshore wind is both important to and accepted by the Commonwealth (Company Brief at 55-56).

- An Act Creating a Next-Generation Roadmap for Massachusetts Climate Policy (St. 2021, c. 8) ("Roadmap Act"): The Roadmap Act sets a statewide goal of net zero greenhouse gas ("GHG") emissions by 2050 (Company Brief at 56). According to SCW, the Roadmap Act mandates and studies point to offshore wind as a critical way to achieve this goal (Company Brief at 56).

- Global Warming Solutions Act (2008) ("GWSA"): The GWSA mandates that the Commonwealth reduce GHG emissions between 10 and 25 percent from 1990 levels by 2020, and by at least 80 percent from 1990 levels by 2050 (St. 2008, c. 298). According to the Company, the primary driver for offshore wind projects in the region is their ability to deliver zero-carbon renewable energy that will provide economical bulk power, as reflected in the GWSA (Exh. VW-1 at 1-5).

- In a report published by the Massachusetts Office of Climate Innovation and Resilience, Recommendations of the Climate Chief, offshore wind energy is designated as a key source of power generation for the Commonwealth that is urgently needed to respond to climate change (Company Brief at 56, citing Exh. EFSB-N-4(S3)(1)).

- Net Zero Requirement: The Company argues that offshore wind is critical to achieving the Commonwealth's policy goal of net zero GHG emissions by 2050 (Company Brief at 57). In the Massachusetts Clean Energy and Climate Plan for 2050 ("2050 CECP")," the Commonwealth declared that offshore wind "will be a cornerstone of the Massachusetts energy supply in the next three decades, through 2050, enabling the Commonwealth to meet its decarbonized energy demand while sustaining economic growth." The Company alleges that the Project is well-poised to contribute to the decarbonized energy supply in Massachusetts because of the Project's advanced permitting stage, the Company's significant financial commitment to the Project so far, and the Company's experienced team supporting the Project (Company Brief at 57).

In addition to these public policy requirements, the Company maintains that need for the Project is demonstrated by studies and forecasts that illustrate the need for offshore wind energy (Company Brief at 57):

- Commonwealth of Massachusetts, Energy Pathways to Deep Decarbonization (December 2020): According to SCW, the report noted that one of the main pathways for the Commonwealth to reach the Net Zero Requirement is through offshore wind (Company Brief at 57).

- Brattle Group: Achieving 80 percent GHG Reduction in New England by 2050 (September 2019): SCW stated that the report showed that "between 2019 and 2050, between 3.5 GW and 6.6 GW of renewable capacity, including 2-5 GW of solar and 2-3 GW of wind, will need to be added each year on average" (Company Brief at 57-58).

- ISO-NE, NEPOOL 2021 Economic Study: Future Grid Reliability Study Phase 1 (July 29, 2022): A report predicting that large amounts of offshore wind will be built in response to public policy requirements and will be an integral feature of the future grid in New England (Company Brief at 58).

- The Analysis Group, Pathways Study: Evaluation of Pathways to a Future Grid (April 2022): An analysis of upgrades and system impacts associated with large amounts of renewable energy introduced to the grid, a scenario that would allow New England states to meet decarbonization goals. The analysis assumes that large amounts of offshore wind will be built in response to public policy requirements and will be an integral feature of the future grid in New England (Company Brief at 58).

- ISO-NE, Operational Impact of Extreme Weather Events (November 14, 2023): A probabilistic energy adequacy study examining the risks to the energy security of the future grid from extreme weather conditions. The study recognizes the importance of offshore wind in helping to provide energy security in the winter as the system evolves in accordance with public policy requirements. The study concludes that "[t]imely additions of BTM and utility-scale PV, offshore wind, and incremental imports from NECEC [New England Clean Energy Connect] are critical to…[mitigating] energy shortfall risks that result from significant winter load growth retirements" (Company Brief at 58).

- ISO-NE, Economic Planning for the Clean Energy Transition Pilot Study (most recent presentation, October 18, 2023): Models the future New England grid with the assumption, among others, that large amounts of installed offshore wind will meet the public policy requirements of the New England states (Company Brief at 58).

- ISO-NE, 2050 Transmission Study (most recent presentation, October 18, 2023): Examines the need for transmission in New England, predicated on the assumption that the current public policy requirements of the New England states regarding decarbonization and clean energy supply will be met (Company Brief at 58-59).

- United States Department of Energy, Roadmap to Accelerate Offshore Wind Transmission and Improve Grid Resilience and Reliability (September 2023): Provides a comprehensive

action plan to "catalyze offshore wind energy, strengthen the domestic supply chain, and create good-paying, union jobs" as part of a broader effort to develop 30 GW of offshore wind by 2030 (Company Brief at 59).

3. Noticed Variation

SCW proposes a design variation to the Project, referred to as the Noticed Variation, which could provide for potential future expanded delivery of offshore wind energy by authorizing increased trenching and spare conduits from the landfall to the HVDC converter station to accommodate an additional 1,200 MW HVDC circuit in the future – for a total of 2,400 MW (Exh. SW-1, at 1-1). The Company is seeking approval of the Noticed Variation for either its Preferred Route or the Noticed Alternative Route (Exh. SW-1, at 1-1). The Noticed Variation is not a request for approval of an additional export cables or an additional converter station but, rather, is a request to construct the onshore infrastructure necessary to more easily accommodate additional export cables in the future (Company Brief at 109). Specifically, two additional (spare) HDD conduits would be constructed at landfall, which require two additional exit pits (Exh. SW-1, at 1-1 n.1, 4-19). The incremental costs of the Noticed Variation would be paid solely by the Company (Exh. EFSB-RS-7). The Company maintains that the construction of the Noticed Variation in conjunction with the Project would provide long term cost savings and reduce environmental impacts of separate construction work in the future (Exh. SW-1, at 1-1 n.1, 4-19; Tr. 3 at 405).

The Company maintains that the Noticed Variation is needed and is a prudent planning measure consistent with Siting Board precedent (Company Brief at 112). The Company argues that the Noticed Variation would satisfy the two prongs of the need standard set by the Cape Wind 2005 Decision (Company Brief at 110). Regarding the first prong (i.e., the existing transmission system is inadequate to interconnect the new or expanded generator), the Company notes that a transmission system that can accommodate the full 2,400 MW of capacity from the OGF is non-existent (Company Brief at 110). Regarding the second prong (i.e., the new or expanded generator is likely to be available to contribute to the regional energy supply), the Company argues that: (1) the OGF is being permitted at the federal level at its full 2,400 MW size; (2) the OGF is under federal jurisdiction, and therefore, indicators of progress at the federal level are critical to

satisfying the second prong; and (3) the indicators of progress that the Company presented at the federal level show that the electricity produced by the OGF is likely to be available to contribute to the regional energy supply (Exh. SW-1, at 2-6 to 2-11). See Section III.B.2.

The Company also argues that the Noticed Variation is consistent with Siting Board precedent, i.e., the Siting Board's approval of the proposed use of a 345 kV-capable line that uses slightly taller structures than the proposed Project at 115 kV (Company Brief at 110-111, citing NSTAR Electric Company d/b/a Eversource Energy, EFSB 19-06/D.P.U. 19-142/19-143, at 2 (2022) ("Mid Cape Reliability Project"). In the Mid Cape Reliability Project, the Siting Board found that: (1) the Noticed Variation would be required for additional offshore wind facilities to interconnect; and (2) Eversource had an appropriate cost recovery mechanism. Mid Cape Reliability Project at 25, 26. With reference to these two findings, SCW argues that the case for the Noticed Variation in this Project is simpler: (1) the rules of the regional transmission operator, ISO-NE, require no more than 1,200 MW for a single interconnection and, therefore, at least two transmission facilities would be required to develop the OGF to the full 2,400 MW; and (2) the incremental costs for the Noticed Variation would be entirely covered by the Company (Company Brief at 111).

C. Positions of the Parties

Neither intervenor addresses the request for a change to the standard of review on brief. As described below, the Town filed a Motion to Dismiss or Stay the proceedings predicated on the Company's termination of its PPAs.

D. Analysis and Findings

1. Company's Request to Change the Need Standard of Review

The Company asks the Siting Board to revise its standard of review for need in two ways: (1) to consider public policy requirements in the need assessment; and (2) explicitly state that a PPA is not required to make a finding that a project is needed. The Company also wants flexibility to conduct "preliminary construction activities."

As an initial matter, we address whether it is appropriate for the Siting Board to make a change in the standard of review and apply that new standard in this proceeding. In the Joint Petition for Approval of Merger between NSTAR Electric and Northeast Utilities, D.P.U. 10-170 (2011) ("Joint Petition"), the Department addressed the question of its authority to change its standard of review, stating "there is a presumption in favor of a long-standing course of behavior." Joint Petition at 11. Consequently, for us to change our need standard of review, the Company must overcome this presumption.

Furthermore, the proposed new standard of review has not been articulated in any prior Siting Board decision. This raises the question of whether the intervenors had sufficient notice of the new standard to address it in the proceeding. The Supreme Judicial Court ("SJC") has held that: "It is generally unacceptable for an agency to announce a new standard in its final decision in an adjudicatory proceeding and then rule . . . that the party that had no notice of that standard failed to meet it." Boston Gas Company v. Department of Public Utilities, 405 Mass. 115, 121 (1989) ("Boston Gas").[25]

In the same vein, the SJC addressed the due process implication of the Siting Board's change in its standard of review in the case of Alliance to Protect Nantucket Sound, Inc. v. Energy Facilities Siting Bd., 448 Mass. 45, 52 (2006) ("Alliance"). The Court held that an agency conducting an adjudicatory proceeding is required to give all parties "sufficient notice of the issues involved to afford them reasonable opportunity to prepare and present evidence and argument." Alliance at 53, citing G.L. c. 30A, § 11(1). See also LaPointe v. License Bd. of Worcester, 389 Mass. 454, 458 (1983) ("Due process requires that, in any proceeding to be accorded finality, notice must be given that is reasonably calculated ... to afford [an interested party] an opportunity to present his case"). The Alliance Court further held that: "If the board had created a new standard that required substantive fact finding, it clearly could not have done so without giving notice to the parties and granting each a fair opportunity to prepare arguments and submit evidence

---

[25] In Boston Gas, the SJC accepted the new standards articulated by the Department but remanded the case to allow the Department to grant the Company "the opportunity to meet those new standards." Boston Gas, 405 Mass. at 116.

in order to meet that standard." Alliance at 52, citing Boston Gas Co. v. Department of Pub. Utils., 405 Mass. 115, 120–121 (1989).

While the Company did suggest the revised standard early in this proceeding, we need not implement a significant change to the need standard here. The Company's proposed change to the need standard of review would "expressly [take] into account public policy requirements and legislative directives driving the need for transmission infrastructure to integrate public policy generation resources, especially offshore wind, into the regional grid" (Exhs. SW-3, at 13; SW-1, at 2-6; see also Company Brief at 51). The current Cape Wind standard of review already allows the Board to consider the Commonwealth policies promoting wind energy in its analysis. The Company's proposal to enable some of the wind energy is a relevant factor in our current analysis under the Cape Wind standard. In addition, we here reiterate our statement in Park City Wind: "there is both demand and strong state and federal policy and regulatory impetus behind offshore wind energy in New England, which additionally bolsters the case that an OGF is likely to be available, and transmission interconnection facilities also necessary." Park City Wind at 30. Federal and state offshore wind policies are relevant to a determination of need but, nevertheless, they are not explicitly recognized in the need standard of review. Park City Wind at 30.

Notwithstanding, we do see a benefit of clarifying the existing standard of review to respond to the Company's concerns here. First, the Siting Board explicitly recognizes that federal and state offshore wind policies are considered in its standard of review.[26] Second, we reiterate that the Siting Board does not require a petitioner to have entered into a PPA as a condition of approval. Park City Wind at 29, 30. We explore this issue in more detail in our ruling on the Town's Motion to Dismiss or Stay the Proceeding (§III.E.6, supra). We have, however, previously

---

[26] The Massachusetts offshore wind policies would include the GWSA, the Roadmap Act, the Net Zero Policy, the 2050 Clean Energy and Climate Plan, the Environmental Justice Policy, and the Smart Growth/Smart Energy Policy. See Section VII.C, supra. The federal offshore wind policies would include the joint goal of the Departments of the Interior, Energy, and Commerce to deploy 30 gigawatts of offshore wind in waters of the United States by 2030 and FERC's strategic plan for fiscal years 2022-2026, which includes "Facilitating the Development of Electricity and Infrastructure Needed for Changing Resource Mix" (Exh. SW-1, at 2-5).

held that the existence of a PPA for a project's output may be relevant to the issue of whether the extra-jurisdictional OGF is likely to be available to contribute to the regional energy supply. Park City Wind at 30 ("While PPAs are an important indicator of progress . . . there are other project indicators that provide varying degrees of assurance that the OGF would be built and operational"). The same reasoning applies here.

2. Need Based on Current Need Standard

The Cape Wind 2005 Decision two-part test applies to petitions to construct transmission facilities connecting new generating facilities located beyond the Commonwealth jurisdiction to the regional grid. Cape Wind 2005 Decision at 16-17; Vineyard Wind at 11-12; Park City Wind at 28. The first prong of the Siting Board's standard establishes whether the generating facility would be able to interconnect to the grid absent new transmission facilities. The record shows that the Company's proposed OGF is approximately 51 nautical miles offshore from Brayton Point in Somerset, and there is no existing electric infrastructure in the waters between the proposed OGF and the regional grid to which SCW has access and can use to provide wind energy. The Siting Board finds that the Company has demonstrated that there is a need for additional transmission resources to interconnect the OGF to the regional transmission grid.

The second prong of the Siting Board's standard attempts to ensure that the extra-jurisdictional OGF is likely to be available to contribute to the regional energy supply. The Company has provided evidence of multiple indicators of progress relating to the development of its OGF. In Park City Wind, the Siting Board pointed to several indicators that offshore generating facility would reach commercial operation: favorable characteristics for offshore wind energy generation in the Lease Area; early and extensive outreach to address stakeholder concerns; advancement of the offshore generating facility through the BOEM process; and receipt of a MEPA Secretary's Certificate on the project's FEIR. Park City Wind at 29. Similarly, SCW has described numerous indicators of progress, i.e., (1) SCW obtained a lease from BOEM in the Lease Area off the South Coast of New England; (2) SCW invested in the development of the Project including budgeting approximately $100 million for Project and OGF development expenses in 2023; (3) SCW secured interconnection rights into the regional transmission system at

Brayton Point with supporting land rights, at significant financial cost; and (4) SCW received a SFEIR certificate in the MEPA review process. The indicators provided by SCW are similar to the ones on which the Siting Board based its Park City Wind decision.

As in Park City Wind, the Company was awarded PPAs through the Commonwealth's competitive solicitations for offshore wind generation, pursuant to Section 83C II and III. However, the Company's PPAs have been terminated due to economic challenges. The Company argues that PPAs are not required as a prerequisite to demonstrate need because of the Cape Wind 2005 Decision standard, the governing statute (i.e., Section 69J), and that BOEM does not require a PPA as a prerequisite. While a PPA is an indicator of project progress, it is not the only indicator and is not required. The Siting Board notes that SCW has bid into the Commonwealth's fourth offshore wind solicitation (Exh. EFSB-N1(S5)). On September 6, 2024, Massachusetts selected 1,087 MW and Rhode Island selected 200 MW from SCW's bid.[27]

Regarding the Town's opposition to the Company's need argument, the Town maintains that: (1) evidence shows that the Company lacks permits; and (2) the RI EFSB stayed its proceeding (Town Motion to Dismiss at 4-5; Town Reply to Oppositions to Motion to Stay at 2). The Siting Board finds that there are many factors that can be used as indicators of progress and, that while the permitting timeline and PPA status are germane, the Company has reasonably demonstrated Project need through other factors. The record shows that there is also strong policy and regulatory impetus behind offshore wind energy in New England, which additionally bolsters the case that the OGF is likely to be available, and transmission interconnection facilities will be necessary.

In both Vineyard Wind and Park City Wind, the Siting Board required that, prior to commencing construction, the Companies submit a copy of the BOEM ROD approving the Projects as evidence that the proposed energy facilities were likely to be available to contribute to the regional energy supply. Park City Wind at 31; Vineyard Wind at 161. In both these cases, the Companies requested some "flexibility" to begin certain construction activities before BOEM

---

27 https://www.mass.gov/news/massachusetts-and-rhode-island-announce-largest-offshore-wind-selection-in-new-england-history

approval. Park City Wind at 31; Vineyard Wind Company Letter of March 31, 2020, to Presiding Officer. In Vineyard Wind, the Siting Board granted the Company a limited waiver. Park City Wind at 31; Vineyard Wind Director's Waiver Letter of June 10, 2020. In Park City Wind, the Siting Board stated that it would review any requests for construction before the filing of a ROD from BOEM on a case-by-case basis. Park City Wind at 31.

In the present case, the Siting Board chooses to act consistently with our Vineyard Wind and Park City Wind precedent. Therefore, the Siting Board directs the Company to submit to the Siting Board, prior to commencing construction of the Project, a copy of the BOEM ROD approving the Company's proposed OGF. The Company may not commence construction of the proposed transmission Project, with the exception of procuring equipment and services, until it has complied with this condition. The Siting Board will review requests for flexibility in the application of this condition on a case-by-case basis. The Siting Board finds that, subject to compliance with the above condition, SCW has demonstrated that there is a need for additional transmission resources to interconnect its SCW OGF to the regional transmission grid.

3. Noticed Variation

The Company introduced a Noticed Variation to the Project, which would position the Company to efficiently meet the need for transmission facilities for the full 2,400 MW of the OFG, as additional capacity is warranted. The Noticed Variation would allow the Company to leverage construction of the Project to also pre-construct the adjacent landfall and conduits that would facilitate the future interconnection of the next 1,200 MW of the Company's offshore lease areas. By pre-constructing these components in conjunction with the Project, the Company expects to minimize long term impacts and costs and would assume all costs and risks of doing so.

The record shows that the Noticed Variation would satisfy the first prong of the need standard because there is currently no transmission system that can accommodate the full 2,400 MW of capacity from the OGF. The record also shows that the Noticed Variation would satisfy the second prong of the need standard because the OGF is being permitted at the federal level and, thus, the Company's indicators of progress would also apply. The Siting Board finds that this variation satisfies the two-pronged need standard. The Siting Board has approved similar

pre-construction approaches intended to minimize and optimize long term impacts and costs, provided that ratepayers do not assume the risks of doing this. See, Mid-Cape Reliability Project.

For the Mid-Cape Reliability Project, the Siting Board found that the Noticed Variation was needed for interconnection of offshore wind facilities, and that Eversource had an appropriate cost recovery mechanism. The Company pointed out that in this case, the incremental costs for the Noticed Variation would be entirely covered by the Company, and thus, not borne by the ratepayers (Company Brief at 109, citing Exh. EFSB-RS-7). Further, the Company stressed that the need for the Noticed Variation in this case is even more clear-cut, as the rules of ISO-NE allow no more than 1,200 MW for a single interconnection. Thus, at least two transmission facilities would be required to develop the OGF to the full 2,400 MW. The Siting Board finds that the Company has established that it is appropriate for it to build the Noticed Variation along with other Project components.[28]

E. Town's Motion to Stay or Dismiss the Proceedings

1. Town's Motion and Response

On July 7, 2023, the Town filed its Motion to Stay the proceedings on the grounds that the Company had decided to terminate its Power Purchase Agreements ("PPA").[29] The Town argues that the Siting Board should dismiss or stay the proceedings because: (1) SCW lacks "legal standing to seek relief" – specifically, zoning relief – from the Siting Board without existing PPAs; (2) SCW cannot demonstrate project need without existing PPAs; and (3) SCW cannot prove requisite economic viability without existing PPAs (Motion to Stay at 3-6). The Town argues that

---

[28] The Siting Board notes that if SCW plans to construct transmission facilities to support another 1,200 MW to land at Brayton Point, it would need to file a new petition to construct. See G.L. c. 164, § 69J.

[29] On July 21, 2023, the Town relinquished its request for dismissal of the proceedings: "On further consideration, the Town agrees that a stay consistent with that issued by the Rhode Island Energy Facilities Siting Board, versus an outright dismissal, would be an appropriate course of action" (Town Reply at 1 n.1).

without "permits in hand and with the uncertainty of how the termination of PPAs will impact other permitting efforts for this project," the Company cannot show need for this project because it cannot show that a new generator is likely to be available to contribute to the regional energy supply (Motion to Stay at 5). The Town also argues that the decision of the RI EFSB to stay the parallel proceeding in that state argues in favor of staying this proceeding as well (Town Response to Commonwealth Wind and Company's Opposition at 1).

The Town also contends that the Siting Board's Procedural Rules do not reference the treatment of motions to dismiss or stay (Motion to Stay at 2-3). The Town points out, however, that the Department's Procedural Rules do contain such a rule: 220 CMR 1.06(6)(e) which establishes a standard for motions to dismiss (Motion to Stay at 2).

2. Commonwealth Wind's Opposition to the Motion to Stay

In its opposition to the motion to stay ("Commonwealth Wind Opposition"), filed on July 12, 2023, the limited participant Commonwealth Wind[30] argues that the Siting Board's need standard does not require the existence of PPAs as evidence of need for non-jurisdictional generation facilities (Commonwealth Wind Opposition at 3). In support, Commonwealth Wind cites to the Cape Wind 2005 Decision and to Vineyard Wind, both of which articulate the "indicators of project progress" standard (Commonwealth Wind Opposition at 3, citing Vineyard Wind at 12; Cape Wind 2005 Decision at 17). Commonwealth Wind also rebuts the Town's "economic viability" argument by stating that economic viability is only a factor in Section 69J approval when the Siting Board is reviewing an oil facility (Commonwealth Wind Opposition at 6-7).

---

30 Pursuant to 980 CMR 1.05(2)(c), a limited participant has only the right to submit a brief and comment on the tentative decision unless the Presiding Officer directs otherwise. Commonwealth Wind did not request permission from the Presiding Officer, or anyone else, to file a brief on the Motion to Stay. Consequently, it is arguable that Commonwealth Wind, as a limited participant, did not have the right to file an objection to the Motion to Stay. Nevertheless, the Town did not raise such an objection and, therefore, we deem any such objection to have been waived.

3. Company Response to Motion to Stay and Surreply

In its response to the Town's Motion to Stay ("Company Response"), filed on July 12, 2023, the Company also refers to the Department for a standard of review. The Company's recommended standard of review emphasizes the "high" bar that the moving party must clear for the Siting Board to issue such a stay (Company Response at 4).

The Company further argues that the Motion to Stay misconstrues the applicable standard for determining need (Company Response at 4-9). Neither the applicable statute nor Siting Board precedent requires that a Company have "permits in hand" or "any commercial offtake agreement" (Company Response at 5) (internal punctuation omitted). Rather, the Siting Board directly addressed the standard for determining need in the Cape Wind 2005 Decision (Company Response at 5).

Under this standard, the Company has provided numerous indicators of progress (Company Response at 7-8; Exh. EFSB-N-1(S1)(1)). These indicators of progress, the Company argues, show that the generator is likely to be available to contribute to the regional energy supply (Company Response at 8). Therefore, the Company concludes, it has established that the Project is needed according to the standard articulated in the Cape Wind 2005 Decision (Company Response at 8).

Regarding the Company's standing to seek relief pursuant to the Zoning Petition, the Company contends that its standing to request zoning relief is based solely on the statutory requirements of G.L. c. 40A, § 3 (Company Response at 16). According to the Company, the termination of the PPAs is irrelevant to the issue of the Company's standing to seek zoning exemptions (Company Response at 17).

Regarding viability, the Company contends that there is no legal requirement that an applicant under Section 69J must prove viability through a PPA (Company Response at 14). The Company argues that there are other factors that may be considered when assessing viability, such as the investment that a developer has made and is making into a Project (Company Response at 15).

In its surreply, the Company maintains that the Project fully meets the Siting Board's current Cape Wind 2005 Decision need standard (Company Surreply at 2). Furthermore, the Company praises that standard as being "reasonable and flexible" and well-suited to "the complexity of large infrastructure, multi-jurisdictional project development" (Company Surreply at 2-3). The Company also asserts that this standard "does not require a PPA as a prerequisite for a demonstration of need" (Company Surreply at 2-3). Instead, the standard "looks to various indicators of progress and development commitment to determine whether the generator is likely to be available to contribute to the regional energy supply, thereby creating a need for the transmission connector facilities" (Company Surreply at 3).

The Company states that it would not oppose a condition of siting approval that the applicant have a PPA or similar firm offtake agreement prior to commencement of substantial construction activity (Company Surreply at 8). The Company also argues that no developer of major energy infrastructure would commence construction without having all major permits and acceptable offtake agreements in hand (Company Surreply at 8). These two conditions, taken together, the Company asserts, provide assurance that the Siting Board's approval of a Section 69J petition will not result in the construction of a transmission project that would end up serving no purpose (Company Surreply at 8).

4. Ruling on Motion to Stay

The Company and the Town have articulated different standards of review that may be applicable to this motion. However, both standards of review refer only to a motion to dismiss, not a motion to stay. As mentioned above, the Town has relinquished its request for dismissal. Therefore, we find that neither standard is applicable to the present motion. Consequently, we look to other sources of law, including relevant precedent.

The Siting Board has consistently applied the "indicators of project progress" standard in determining whether a new generator is likely to be available, one of the two prongs of the test for

need for the proposed Project.[31] Park City Wind at 21-22; Vineyard Wind at 12; Cape Wind 2005 Decision at 16-17. We therefore apply that standard in ruling on the Town's Motion to Stay. As noted above, there are several indicators of project progress in the present case. Furthermore, we found that these indicators of project progress are convincing. See Section III.D.2. In that section, the Siting Board finds that the generator is likely to be available to contribute to the regional energy supply. Therefore, the Siting Board rejects the Town's argument that the Company has not established Project need

In Park City Wind, the Siting Board approved a petition to construct transmission lines linking an offshore generator outside Siting Board jurisdiction to the grid. Park City Wind at 1. In that case, as in the present case, the petitioner did not have PPAs in place when the Siting Board issued its final decision. Park City Wind at 8, 28. We held that: [w]hile PPAs are an important indicator of progress, there are numerous other project indicators that provide varying degrees of assurance that the OGF would be built and operational, and that the Project remains necessary to interconnect the OGF. Park City Wind at 30. The Siting Board recognized that despite recent terminations of offshore wind energy PPAs in Massachusetts and other states, Massachusetts, Connecticut, and Rhode Island, individually and together, under a recently executed Memorandum of Understanding, are pressing forward with additional procurement solicitations for offshore wind energy resources. Park City Wind at 30. While the Company has stated that it would not object to the Siting Board requiring the execution of PPAs as a condition of approval before the Company can begin substantial construction, we do not view this condition as a necessary measure to address the motion to dismiss. As noted above in Section D.2., we have found that requiring an executed PPA prior to construction is not required by the Cape Wind 2005 Decision need standard and has not been otherwise imposed as a Siting Board construction condition regarding its approvals of offshore wind interconnection facilities.

---

[31] The other prong is: "that the existing transmission system is inadequate to interconnect the new or expanded generator." Park City Wind at 21; Vineyard Wind at 11; Cape Wind 2005 Decision at 16-17. The Town does not allege that the Company has failed to establish this prong.

Regarding viability, there is no legal requirement that an applicant under Section 69J must prove viability through a PPA. In addition, as Commonwealth Wind notes, the statutory and associated regulatory language refer to "viability" only in the context of approval to construct an oil facility.

Accordingly, we deny the Town's Motion to Stay.[32]

IV. ALTERNATIVE APPROACHES TO MEETING IDENTIFIED NEED

A. Standard of Review

G.L. c. 164, § 69J requires a project proponent to present alternatives to the proposed facility, which may include: (1) other methods of transmitting or storing energy; (2) other sources of electrical power; or (3) a reduction of requirements through load management.[33]
In implementing its statutory mandate, the Siting Board requires a petitioner to show that, on balance, its proposed project is superior to such alternative approaches in terms of cost, environmental impact, and ability to meet the identified need. In addition, the Siting Board requires a petitioner to consider reliability of supply as part of its showing that the proposed project is superior to alternative project approaches. NSTAR Electric Company d/b/a Eversource Energy, EFSB 22-03/D.P.U. 22-21, at 30 (2024) ("GCEP"); Park City Wind at 31-32; Mid Cape Reliability Project at 88.

B. Alternatives Considered

In addition to the proposed Project, the Company performed an analysis of potential alternatives to address the identified need (Company Brief at 61 citing Exh. SW-1 at § 3; SW-6 at § 2). The Company stated that the analysis included assessing alternatives at each level of

---

[32] In addition, the Motion to Stay is now moot, given that we are rendering a decision on the Petitions in this document.

[33] G.L. c. 164, § 69J also requires an applicant to present "other site locations." Compliance with the requirement is evaluated in Section V, *infra*.

Project design: (1) no-build option, (2) alternative technologies, (3) alternative designs, (4) alternative routes (onshore and offshore), (5) alternative landfall sites, (6) alternative sites for the Converter Station, and (7) alternative POIs (Exhs. SW-1, at § 3; SW-6, at 2-1 to 2-12).

The Company stated that under the no-build alternative, the Project would not be constructed (Company Brief at 61 citing Exh. SW-1, at 6-9). SCW asserts that the no-build alternative would: (1) prevent the Company's delivery of 1,200 MW of energy and the elimination of over two million metric tons of GHG emissions annually; (2) fail to meet the public policy requirements of the Commonwealth and region; (3) prevent the realization of the purpose of the Project, including provision of extensive environmental, economic, and reliability benefits; and (4) deprive the Commonwealth and region of a key project for strengthening energy security (Company Brief at 61-62 citing Exhs. SW-1, at 2-1 to 2-5, 3-2 to 3-3, 6-9; EFSB-N-4(S1); EFSB-CPC-1; EFSB-CPC-2). Similarly, the Company argues that non-wires alternatives (e.g., energy efficiency, load management, large-scale demand response, solar, onshore wind, and combustion-based generation), which would also forego the Project, fail to meet legislative requirements for increasing the clean energy supply through offshore wind (Company Brief at 62 citing Exh. SW-1, at 3-2). Therefore, the Company dismissed both the "no-build" and non-wires alternatives (Exh. SW-1, at 3-2 to 3-3).

The Company considered two electric power transmission technologies for the Project: HVAC and HVDC (Exh. SW-1, at 3-11). The Company stated that HVDC is well-suited for large-capacity transmission of power for distances of more than about 75 miles, including for this Project, given its overall distance of about 113 miles (Exhs. SW-1, at Table 1-1, 3-12; EFSB-G-20(S1)(2) at 20; EFSB-PA-3. The Company explained that an equivalent HVAC system for this distance would require four to five cable circuits and likely a midpoint compensation substation offshore, both of which would increase cost and construction impacts (Exh. EFSB-PA-3). The Company added that an HVAC system over this distance has a greater risk of technical issues (e.g., wind turbine stability, harmonics, transient overvoltages) that could adversely impact reliability, and that the reactive power generated in HVAC cables increases electrical losses as distance increases (Exh. EFSB-PA-3). The Company indicated, therefore, that its use of HVDC

would be more cost-effective, reduce seafloor impacts, and result in substantially reduced electrical losses (Company Brief at 64-65, citing Exh. EFSB-PA-3).

The Project would use an operating voltage of +/- 320 kV, which SCW stated is the common standard in the offshore wind industry in Europe and the U.S. (Exh. EFSB-PA-5). The Company stated that, to bring the Project's power to shore, a nominal voltage of 320 kV is most suitable for the HVDC export cables (Exh. SW-3, at 15). The Company explained that higher voltages would not significantly change the size of the export cable or result in material reductions in potential impact to the seafloor associated with installation (Exh. SW-3, at 15). The Company added that using cable voltages lower than the proposed 320 kV would require more cables to be placed along the seafloor, which would enlarge the impact area in the offshore environment and may increase the overall energy loss through transmission (Exh. SW-3, at 15). The Project would use cross-linked polyethylene ("XLPE") cable technology for both the Project's offshore and onshore cables (Exh. SW-1, at 3-12). The Company indicated that XLPE technology: (1) is state-of-the-art for offshore transmission worldwide; (2) has been proven to have greater reliability and ease of handling than high pressure fluid-filled and oil impregnated cables; and (3) allows for standard and quicker jointing and termination (Company Brief at 65, citing Exh. SW-1, at 3-13).

The Company also considered whether the Project should interconnect with the regional electric grid at Brayton Point or at other potential POIs (Exhs. SW-1, at 1-14, 3-3 to 3-4, 4-1; EFSB-RS-5). The Company stated that overall, it evaluated ten POIs, including Brayton Point (Exh. SW-1, 4-4 to 4-6). The Company stated that it chose Brayton Point because: (1) Brayton Point would allow for a robust interconnection without major transmission upgrades; (2) implementing the Project on a brownfield would improve the site and foreclose its use for more environmentally impactful operations; and (3) the Company obtained a favorable queue position[34] from ISO-NE at Brayton Point (Exhs. SW-1, at 1-14, 3-3, 4-6; SW-6, at 2-4 to 2-5; EFSB-

---

[34] After ISO-NE validates a project interconnection request, it assigns a queue position to a project in the ISO interconnection queue for determining any upgrades and cost responsibility and to establish the sequence for the ISO to perform interconnection studies. https://www.iso-ne.com/participate/applications-status-changes/interconnection-process-guide.

N-4(S1)(1); EFSB-CM-34; EFSB-G-20; EFSB-CPC-1, at 3). The Company related that other POIs were eliminated due to concerns about excessive distance, capacity constraints, equipment issues, and contending with infrastructure congestion and footprints of other proposed projects (Exh. SW-1, at 4-4 to 4-6). The Company stated that the Falmouth Tap substation area, one of the prospective POIs, has been chosen by ISO-NE as the location that would be the POI for the Company's Falmouth Connector Project (SW-1, at 4-5). However, the Company also stated that during the analysis of potential POIs for the Falmouth Connector Project, Brayton Point was identified as the preferred POI because of its favorable ISO-NE queue position and feasibility (Exh. SW-1, at 4-6).

Finally, the Company considered whether the Project should be part of a "mesh" transmission system that could potentially be shared by multiple offshore wind projects or whether a direct connection from the OGF to the POI, as proposed by SCW, would be best (Exh. EFSB-G-20, at 1; Tr. 1, at 73-80). The Company acknowledges that shared or mesh transmission could potentially have lower costs and greater efficiency in interconnection, siting, and construction (Company Brief at 67; Exh. EFSB-G-20, at 1; Tr. 1, at 73-80). However, the Company explained that shared transmission would require significant alignment among key stakeholders and development of rules to provide a framework for its construction (Company Brief at 67; Exh. EFSB-G-20, at 1; Tr. 1, at 73-80). The Company estimated that the use of mesh transmission for offshore wind in this region is likely to be ten or more years out in the future (Company Brief at 67; Exh. EFSB-G-20, at 1; Tr. 1, at 73-80). Thus, the Company argues that a shared/mesh transmission approach is currently not a viable option based on timing and lack of readiness (Company Brief at 67; Exh. EFSB-G-20, at 1; Tr. 1, at 73-80). The Company points out, however, that it is actively advancing efforts to promote shared/mesh transmission, e.g., submitting comments in response to the Request for Information issued by the five New England States[35]

---

[35] See, New England Energy Vision, New England States Transmission Initiative Notice of Request for Information (Sept. 2022) https://newenglandenergyvision.com/new-england-states-transmission-initiative/; see, also, Comments of Mayflower Wind Energy LLC in response to New England States Regional Transmission Initiative – Request for

(Exh. EFSB-G-20, at 2). Tables 1 and 2, below, summarize both the advantages and current challenges (respectively) of a shared/mesh approach for this Project, as stated by the Company.

Table 1: Advantages of a Shared/Mesh Offshore Connection.

Advantages to shared/mesh	**Description**
Lower aggregate costs	Potentially lower costs in aggregate as opposed to the costs associated with multiple independent transmission connector projects (Company Brief at 67, citing Exh. EFSB-G-20, at 1; Tr. 1, at 73-80)
Greater physical efficiencies	Greater efficiency in interconnection, siting, and construction of shared facilities (Company Brief at 67, citing Exh. EFSB-G-20, at 1; Tr. 1, at 73-80)
Widely considered	Being discussed by many groups and authorities (Company Brief at 67, citing Exh. EFSB-G-20, at 1; Tr. 1, at 73-80)
Procurement legislation	There is legislation that authorizes procurement of shared transmission: An Act Driving Clean Energy and Offshore Wind, St. 2022, c. 179, § 70 (Company Brief at 67; Exh. EFSB-G-20, at 1; Tr. 1, at 73-80).
Goal	Networked transmission remains a goal per the 2019 Anbaric/Commercial Development Company (CDC) vision (Exh. EFSB-G-20, at 1)

Table 2: Current Challenges with a Shared/Mesh Offshore Connection.

Current Challenges w/shared/mesh	**Description**
No opportunity for participation	Currently no opportunity to participate in shared transmission for offshore wind (Company Brief at 67, citing Exh. EFSB-G-20, at 1; Tr. 1, at 73-80)
10+ year time horizon	Realization of shared transmission is over ten years away (Company Brief at 67, citing Exh. EFSB-G-20, at 1; Tr. 1, at 73-80)
Requires significant alignment,	Requires significant alignment with regional authorities, interstate cooperation and commercial arrangements, changes to the interconnection

Information (Oct. 28, 2022) https://newenglandenergyvision.files.wordpress.com/2022/11/mayflower-comments.pdf (Exh. EFSB-G-20, at 2).

Current Challenges w/shared/mesh	Description
changes, and studies	and siting processes, and significant transmission studies (Company Brief at 67; Exh. EFSB-G-20, at 1; Tr. 1, at 73-80)
Revision of rules	A variety of tariff and operational rules would require revision to allow for the shared transmission approach, potentially including items such as ISO-NE's "single-source contingency" reliability requirement, which is in place to ensure that the loss of a single piece of equipment does not result in a net loss of more than 1,200 MW of energy resources from the regional system. This Project would deliver 1,200 MW via a single HVDC circuit, thereby meeting the rule, while maximizing use of the transmission asset under the current reliability requirements (Company Brief at 67; Exh. EFSB-G-20, at 2).

No other party commented on the Company's alternative analysis.

C. Analysis and Findings

The Company presented several alternative approaches to the Project. As described above in Section III, new transmission facilities are needed to connect the Company's proposed OGF to the New England power grid. Consequently, no-build and non-transmission alternatives would not address the identified need. The Company proposes to use +/- 320 kV HVDC XLPE transmission lines. As the Company noted, the use of HVAC cables for offshore wind connectors at distances over 75 miles is unfavorable relative to HVDC technology in terms of cost, electrical losses, and seafloor footprint. Seafloor disruption would be greater with HVAC because it would require construction of four to five cable circuits and likely an offshore midpoint compensation substation. Given that the entirety of the project, at 113 miles in length, exceeds that distance by almost 40 miles, HVDC technology appears to be advantageous and the better choice. In addition, the Company's nominal voltage choice of +/- 320 kV is reasonable because: (1) higher voltages would not result in material reductions in the area of potential seafloor impact associated with installation; and (2) lower voltages would require additional cable placement along the seafloor, which would enlarge the offshore impact area and may increase overall energy loss through transmission.

The Company considered alternative approaches to interconnect the proposed OGF to the regional grid. These included using other POIs or constructing a shared/mesh transmission line for use with multiple offshore wind projects. The record shows that the Brayton Point POI is superior to the alternatives because of its currently available robust interconnection, brownfield status, and strong ISO-NE queue position (see review in Section V.B.2, below). Regarding the Company's preference for a direct tie approach rather than a shared/mesh approach, the record shows that momentum is building toward a shared/mesh approach: it remains a goal per the 2019 Anbaric/Commercial Development Company vision, procurement legislation has been enacted, it is widely discussed among stakeholders and other actors, and the Company is actively advancing associated efforts. A shared/mesh approach also looks promising in terms of fostering considerable economies of scale because: (1) it could potentially lower costs in aggregate in contrast to the costs associated with multiple independent transmission connector projects; and (2) it would foster greater efficiency in interconnection, siting, and construction of shared facilities. Yet the Company's preference for a direct tie approach is reasonable in light of the substantial timing and readiness constraints associated with the shared/mesh approach in the region.

Accordingly, for the reasons cited above, the Siting Board finds that, on balance, the Project is superior to the other alternatives evaluated with respect to cost, environmental impact, meeting the identified need, and providing a reliable energy supply for the Commonwealth with minimum impact on the environment at the lowest possible cost.

V. ROUTE SELECTION

A. Standard of Review

G.L. c. 164, § 69J requires a petition to construct to include a description of alternatives to the facility, including "other site locations." Thus, the Siting Board requires an applicant to demonstrate that it has considered a reasonable range of practical siting alternatives and that its proposed facilities are sited in locations that minimize cost and environmental impacts while ensuring a reliable supply. To do so, an applicant must meet a two-pronged test. First, the applicant must establish that it developed and applied a reasonable set of criteria for identifying

and evaluating alternative routes in a manner that ensures that it has not overlooked or eliminated any routes that, on balance, are clearly superior to the proposed route. Second, the applicant generally must establish that it identified at least two noticed sites or routes with some measure of geographic diversity. GCEP at 37; Park City Wind at 3637; NSTAR Electric Company d/b/a Eversource Energy, EFSB 17-02/D.P.U. 17-82/17-83, at 71 (2019) ("Sudbury-Hudson") affirmed, Town of Sudbury (supra). But see Colonial Gas Company d/b/a National Grid, EFSB 1601, at 28-29 (2016) ("Colonial 2016"); Colonial Gas Company d/b/a National Grid, EFSB 18-01/D.P.U. 1830, at 40-42 (2019) ("Colonial 2019"), where the Siting Board found the company's decision not to notice an alternative route to be reasonable.

B. Company's Approach to Route Selection

1. Introduction

The Company stated that its route selection process included the following steps:

- Identify potential POIs with the electric grid, potential land parcels for HVDC Converter Station development, and potential landfall locations;
- Identify geographic Study Area that incorporates the POI, proposed HVDC Converter Station location, proposed landfall locations, and adjacent offshore areas in state waters;
- Assess potential routing options within the Study Area that would connect landfall, HVDC Converter Station, and POI;
- Evaluate potential routing options for fatal flaws and move forward with candidate routes; and
- Evaluate compiled scoring of candidate routes.

(Exh. SW-1, at 4-2).

2. Potential POIs

The Company stated that it initially considered multiple coastal interconnection points including: (1) a future 345 kV switching station in Bourne; (2) West Barnstable Substation; (3) Falmouth Bulk Substation; (4) Falmouth Tap Substation; (5) Carver Substation; (6) Canal

Substation in Sandwich; (7) Pilgrim Substation in Plymouth; (8) Kent County Substation in Rhode Island; (9) Mystic Substation in Everett; (10) K Street Substation in Boston; and (11) Brayton Point Substation (Exh. SW-1, at 4-4 to 4-6). The Company stated that it narrowed the list of POIs down to Brayton Point due to several disadvantages for the other sites (Exh. SW-1, at 4-4 to 4-6).

Regarding the Bourne option, the Company evaluated the construction of a new 345 kV interconnection switching station in the vicinity of Eversource's 115 kV Bourne switching station and southeast of the Cape Cod Canal (Exh. SW-1, at 4-4). The Company related that planned upgrades by Eversource in this area on Cape Cod would include a POI to the south, at the Eversource Falmouth Tap Substation, which is closer to the coast and a shorter distance to the OGF (Exh. SW-1, at 4-4). Therefore, the Company concluded that, in comparison, Bourne was not a feasible option (Exh. SW-1, at 4-4). For the West Barnstable Substation option, the Company noted that this POI already had two interconnections planned, therefore, it considered the option infeasible (Exh. SW-1, at 4-5). For the Falmouth Bulk Substation, the Company stated that the two 115 kV circuits at that substation were limited in capacity (less than 400 MW) (Exh. SW-1, at 4-5). Consequently, the Company contends that to meet ISO-NE interconnection criteria, a POI at the Falmouth Bulk Substation would necessitate significant upgrades and was, therefore, not feasible (Exh. SW-1, at 4-5). The Company plans to use the Falmouth Tap Substation as the POI for its Falmouth Connection project, as affirmed by ISO-NE (Exh. SW-1, at 4-5). The Company has petitioned for the Falmouth Connection project and the project is docketed as EFSB 21-03/D.P.U. 21-142/21-143. The Company, however, emphasized that even during its analysis of potential POIs for the Falmouth Connection project, it identified Brayton Point as a feasible POI (Exh. SW-1, at 4-6).

The Company noted that the Carver Substation met basic electrical criteria for a POI but would require a substantial onshore route to access the substation, i.e., more than double the distance relative to other POIs considered (Exh. SW-1, at 4-5). For the Canal Substation, the Company stressed that access to the substation would require passing the new Bourne station anyway, resulting in no advantage to interconnecting at Canal rather than Bourne (Exh. SW-1, at 4-5). Additionally, the Company stated that it would be difficult to connect to the Canal substation because the equipment at the substation is aged and could require a complete rebuild

(Exh. SW-1, at 4-5). The Company noted that: (1) interconnection to Pilgrim Substation would encounter electrical challenges; and (2) would likely require a long marine route around Cape Cod, since the USACE has resisted cable access along the Cape Cod Canal (Exh. SW-1, at 4-5). Therefore, the Company stressed that for the above reasons, it eliminated the Carver, Canal, and Pilgrim locations from further consideration (Exh. SW-1, at 4-5).

Regarding the 345 kV Kent County Substation, the Company stated that the offshore and onshore routes to access the substation would have feasibility challenges (Exh. SW-1, at 4-5). Specifically, the Company noted that the onshore route would encounter dense congestion of underground utilities in the roadway, and the offshore route would need to avoid other proposed projects, thereby limiting the available area for installation activities (Exh. SW-1, at 4-5). Therefore, the Company noted that it did not pursue the Kent County location (Exh. SW-1, at 4-5).

Regarding the Mystic River Substation, the Company stated this POI would be the greatest distance from the OGF relative to any of the other options it considered (Exh. SW-1, at 4-5). The Company contended that while the substation is sited adjacent to the Mystic River, its ability to route offshore cable from the OGF would have multiple obstacles, including the need to avoid Boston Harbor (Exh. SW-1, at 4-5). Regarding the K Street Substation, the Company stated that this substation would also require a long marine route around Cape Cod (Exh. SW-1, at 4-6). Furthermore, the Company contends that the K Street Substation lacked the electrical capacity found at the Mystic Substation, and the K Street Substation site is small and difficult to expand because it is an active industrial site (Exh. SW-1, at 4-6). Therefore, the Company noted that for the above reasons, it did not pursue the Mystic or K Street locations (Exh. SW-1 at, 4-5 to 4-6).

The following table, Table 3, summarizes the challenges described by the Company for each of the above options.

Table 3: Summary of Feasibility of POI Options.

Potential POI	Impediment	Description
Bourne Switching Station	Distance	ISO-NE plans to advance an alternative that is a shorter distance to the coast and OGF (Exh. SW-1, at 4-4)
West Barnstable Substation	Capacity Constraint	There are already two connections planned for this POI (Exh. SW-1, at 4-5)

Table 3: Summary of Feasibility of POI Options.

Potential POI	Impediment	Description
Falmouth Bulk Substation	Capacity Constraint	Limited circuit capacity (Exh. SW-1, at 4-5)
Falmouth Tap Substation	ISO-NE Queue Position, Feasibility	Company plans to use this POI for the Falmouth Connection project (Exh. SW-1, at 4-5)
Carver Substation	Distance	More than double the distance to onshore location relative to other POIs considered (Exh. SW-1, at 4-5)
Canal Substation	Distance, Equipment	Would require passing the new Bourne station; aging equipment that could require complete rebuild (Exh. SW-1, at 4-5)
Pilgrim Substation	Distance	Long marine route around Cape Cod (Exh. SW-1, at 4-5)
Kent County Substation	Congestion	Dense congestion of underground utilities onshore, need to avoid other proposed projects offshore (Exh. SW-1, at 4-5)
Mystic River Substation	Distance	Greatest distance from the OGF relative to the other options (Exh. SW-1, at 4-5)
K Street Substation	Distance, Equipment, Expansion Constraints	Would require long marine route around Cape Cod; small site size, would be difficult to expand (Exh. SW-1, at 4-6)

The Company noted that in addition to a favorable ISO-NE queue position, it considered the Brayton Point site advantageous for the following reasons: (1) the existing and available robust 345 kV regional transmission infrastructure; (2) its brownfield status, which reduces impacts to the natural environment and allows for revitalization of the property for low-impact, clean energy use, and the benefit to the community; (3) its waterfront location, which allows for direct access to the property and Converter Station site, thereby precluding disturbance of other properties in accessing the site; (4) lack of conservation land and public space restrictions on the site, which avoids loss of conservation land and the need to obtain approvals to overcome such restrictions; (5) lack of an adversely impacted EJ population; and (6) relatively few residential abutters (Exhs. SW-1, at 3-3, 4-6; SW-6, at 2-4 to 2-5; EFSB-CPC-1).

3. Selection of Candidate Routes

With Brayton Point selected as its preferred POI, the Company stated that it considered 14 potential routes from the OGF to the POI, determining the proposed route that would result in the fewest impacts and allow for safe, practical, and long-term cable installation, maintenance, and operation as compared to the alternatives considered (RR-EFSB-12(1) at 3, 28). Regarding OECC, the Company stated that identifying these corridors required careful planning and route optimization in the context of factors including offshore physical hazards, existing submarine cables, economic and recreational use areas, protected marine areas, and the interconnection points (Exh. SW-1, at 3-4). The Company stated that: (1) physical hazards could include shipwrecks, unexploded ordnance, other existing (and planned) cables, and sea floor and subsurface obstructions; (2) economic or recreational uses could include commercial or recreational fishing, recreational boating and tourism, and anchoring; and (3) protected areas could include areas protected for biological, cultural, or historical purposes (Exh. SW-1, at 3-4).

The Company maintained that it carefully considered: (1) longer onshore crossings in Rhode Island, through Middletown, Portsmouth, Little Compton, and Tiverton; and (2) longer offshore Rhode Island routes through the East Passage and West Passage of Narragansett Bay, and through the northern passage of the Sakonnet River in Portsmouth – with no intermediate crossing (Exh. SW-1, at 3-8). The Company related that it also evaluated a Massachusetts-only route (after the route would traverse federal waters) that would traverse Buzzards Bay for about 7.6 miles and make landfall in Westport (Exh. SW-1, at 3-8).

The Company stated that it identified potential landfall locations using nine criteria: (1) available land for HDD activities and necessary permanent offshore-to-onshore transition infrastructure; (2) corridors of sufficient width to accommodate installation of the duct bank and manholes; (3) sufficient water depths to accommodate support barges at the HDD exit location; (4) avoidance of existing infrastructure that would make construction infeasible; (5) avoidance or minimization of construction impacts to the public; (6) avoidance of hazardous materials and environmental containment sites at Brayton Point; (7) avoidance of risks to cable exposure; (8) avoidance or minimization of impacts on wetland resource areas; (9) avoidance or

minimization of impacts on EJ populations; and (10) minimization of overall length of the onshore route balanced against avoidance of adverse impacts (Exh. SW-1, at 4-11).

Ultimately, the Company stated that it decided on a route that would run north up the Sakonnet River, making intermediate landfall underground at Aquidneck Island in Rhode Island, and then proceed underground across Aquidneck Island to Mount Hope Bay (Company Brief at 16; Exh. SW-1, at 3-10). The Company noted that upon entering Mount Hope Bay, the proposed OECC diverges into two alternative approaches and landfall locations, the Lee River Route and the Taunton River Route – the Company's Preferred and Noticed Alternative Routes, respectively (Exh. SW-1, at 3-5). The Company advanced the two candidate routes to the scoring phase of the route analysis (Exh. SW-1, at 4-11). The Company contended that the Onshore Cable routes were directly linked to the alignments of the Offshore Export Cable route, the landfall location, and the POI (Exh. SW-1, at 3-8). The Company stated that both candidate routes would include the installation of the same underground HVAC transmission lines that would transmit the converted power from the HVDC Converter Station to the POI at the existing National Grid Brayton Point 345 kV Substation, approximately 0.2 miles south of the proposed HVDC Converter Station (Exh. SW-1, at 4-12).

The Company pointed out that within the universe of offshore and onshore cable routes considered, there was just one Massachusetts-only route (i.e., a route that did not enter Rhode Island after leaving federal waters) (Exh. SW-1, at 3-7). The Company noted that the route would traverse Buzzards Bay in Massachusetts state waters for about 7.6 miles, make landfall at either Horseneck Beach or the Westport River in Westport, then head north along Route 88 for approximately twelve miles through Westport and to the intersection with State Route 6 (Exh. SW-1, at 3-9, 4-8). According to the Company, the route would then head in a westerly direction, following State Route 6 for 1.2 miles into Fall River and then to the Ferry Street parcel, also in Fall River (Exh. SW-1, at 3-9).

The Company related that both landfall options for this Massachusetts-only route are problematic (Exh. SW-1, at 4-8). The Company stated that the Horseneck Beach option would require either suspending cable from the existing draw bridge or utilizing HDD to cross under the Westport River – the former is technically infeasible and the latter is infeasible due to the presence

of marshlands and abutting residential properties (Exh. SW-1, at 4-8). The Company contended that the Westport River option is problematic because: (1) it would require laying a cable up the Westport River, which is a productive eelgrass and shellfish habitat, and also a popular recreational boating location; (2) there would be a dearth of landfall points due to marshlands abutting residential properties and a lack of suitable roadway or parking lots; and (3) the area west of Route 88 is designated a Local Historic District (Exh. SW-1, at 4-8).

Tables 4A and 4B, and Figure 3, below, list and depict (respectively) the universe of Offshore and Onshore Cable routes considered by the Company.

Table 4A: Offshore and Onshore Cable Routes Considered.

Route Category	Route ID	Route Description	1st Intermediate Landfall	2nd Intermediate Landfall	Brayton Point Landfall
Sakonnet River with intermediate onshore crossing of Portsmouth	1	Sakonnet River to Boyds Ln. to RWU	Boyds Ln. (Portsmouth, RI)	RWU (Portsmouth, RI)	Lee River
	2	Sakonnet River to Boyds Ln. to Montaup Country Club	Boyds Ln. (Portsmouth, RI)	Montaup Country Club (Portsmouth, RI)	Lee River
	3	Sakonnet River to Boyds Ln. to RIDEM/Aquidneck Land Trust	Boyds Ln. (Portsmouth, RI)	DEM/Aquidneck Land Trust (Portsmouth, RI)	Lee River
	4	Sakonnet River to Boyds Ln. to Mt. Hope Bridge	Boyds Ln. (Portsmouth, RI)	Mt. Hope Bridge (Portsmouth, RI)	Lee River
	5	Sakonnet River to Boyds Ln. to RWU	Boyds Ln. (Portsmouth, RI)	RWU (Portsmouth, RI)	Taunton River
Offshore routes to Brayton Point	6	Sakonnet River north	-	-	Lee River
	7	Narragansett Bay East Passage	-	-	Lee River
	8	Narragansett Bay West Passage	-	-	Lee River
Routes with intermediate RI onshore	9	Second Beach, Paradise Ave., & Rte. 138 to RWU	Second Beach (Middletown, RI)	RWU (Portsmouth, RI)	Lee River
	10	Second Beach, Paradise Ave., & Rte. 138 to Mt. Hope Bridge	Second Beach (Middletown, RI)	Mt. Hope Bridge (Portsmouth, RI)	Lee River

Route Category	Route ID	Route Description	1st Intermediate Landfall	2nd Intermediate Landfall	Brayton Point Landfall
crossing bypassing the Sakonnet River	11	Second Beach, Mitchell's Ln., & Rte. 138 to RWU	Second Beach (Middletown, RI)	RWU (Portsmouth, RI)	Lee River
	12	Rte. 77, Rte. 177, Fish Rd., & Souza Rd. to Schooner Dr.	Breakwater Point (Little Compton, RI)	Schooner Dr. (Tiverton, RI)	Lee River
	13	South Shore Beach, Rte. 81, Rte. 177, Fish Rd., & Souza Rd. to Schooner Dr.	South Shore Beach (Little Compton, RI)	Schooner Dr. (Tiverton, RI)	Lee River
Massachusetts-only route	14	Horseneck Beach, Rte. 88, Rte. 6, Brayton Ave., & S. Main St. to Ferry St.	Horseneck Beach (Westport, MA)	Ferry St. (Fall River, MA)	Taunton River

Table 4B: Offshore and Onshore Cable Routes Considered Continued.

Route Category	Route ID	Length in miles							
		Offshore				Onshore			Total
		Federal waters	RI state waters[b]	MA state waters	Total	RI jurisdiction	MA jurisdiction	Total	
Sakonnet River with intermediate onshore crossing of Portsmouth	1	90.1	20.9	2.1	**113.2**	1.0	0.6	**1.5**	**114.7**
	2	90.1	20.6	2.1	**112.9**	1.7	0.6	**2.2**	**115.1**
	3	90.1	20.8	2.1	**113.0**	1.0	0.6	**1.6**	**114.6**
	4	90.1	21.2	2.1	**113.4**	1.2	0.6	**1.8**	**115.2**
	5	90.1	20.9	2.4	**113.5**	1.0	0.4	**1.4**	**114.9**
Offshore routes to Brayton Point	6	90.1	20.7	2.4	**113.2**	0	0.6	**0.6**	**113.8**
	7	90.4	30.4	2.1	**122.9**	0	0.6	**0.6**	**123.4**
	8	90.4	41.9	2.1	**134.4**	0	0.6	**0.6**	**134.9**
Routes with intermediate RI onshore crossing bypassing the Sakonnet River	9	90.1	11.8	2.1	**104.0**	11.0	0.6	**11.6**	**115.6**
	10	90.1	12.0	2.1	**104.2**	10.9	0.6	**11.5**	**115.7**
	11	90.1	11.8	2.1	**104.0**	11	0.6	**11.5**	**115.5**
	12	90.1	8.7	2.4	**101.3**	15.8	0.6	**16.3**	**117.6**
	13	86.1	2.7	7.1	**95.9**	16.3	0.6	**16.9**	**112.8**
Massachusetts-only route	14	83.8	0	7.6	**91.4**	0	17.3	**17.3**	**108.7**

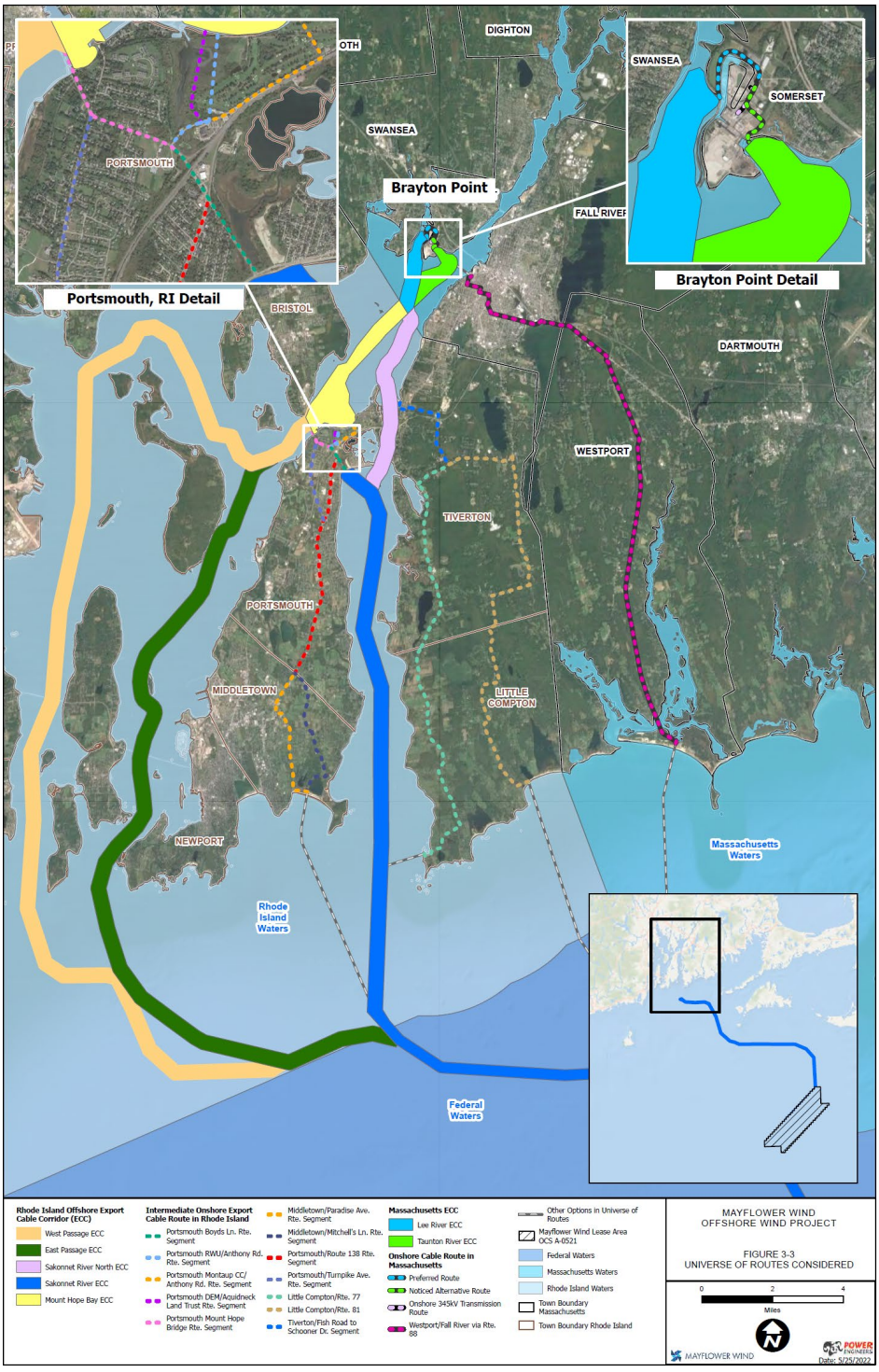
Notes (for Tables 4A and 4B): Numbers may not compute precisely due to rounding.

[a] The tables summarize 14 export cable routes considered, many of which were down selected. The list captures a representative array of route segment combinations considered by the Company.

[b] Offshore export cable route length in federal waters is subject to adjustment based on selection of final OSP location(s) from the defined WTG/OSP positions in the Lease Area in federal waters. This will not impact the cable route lengths in RI state waters or MA state waters or any route comparisons presented here.

Source: Exh. SW-1, at 3-7.

Figure 3: Universe of Routes Considered by the Company.



Source: Exh. SW-2, Attachment A, Part 2, at 1.

4. Converter Station Sites

Besides the Brayton Point site, the Company also considered an 8.28-acre industrial parcel – the Ferry Street parcel – at the intersection of Almond and Ferry Streets in Fall River (Exh. SW-1, at 3-9, 4-10). The Company pointed out that a converter station at this location could connect to Brayton Point via submarine cabling across the mouth of the Taunton River, south of the Interstate 195 Braga Bridge; a Braga Bridge crossing is not technically feasible (Exh. SW-1, at 3-9 to 3-10). However, the Company related that a submarine route under the Taunton River – running beneath a federal shipping/navigation channel – would extend approximately 1.3 miles, likely overextending the length of a single continuous HDD (Exh. SW-1, at 3-10). The Company asserted that this would require implementation of supplementary offshore cable installation techniques to bury the remainder of the export cable within the Taunton River, resulting in installation disturbance to the riverbed (Exh. SW-1, at 3-10). The Company stressed that the Ferry Street parcel is also problematic because of its location in a dense, industrial/commercial/residential area that includes an EJ population (Exh. SW-1, at 4-10).

The Company stated that the Brayton Point Converter Station site, had several advantages: (1) proximity to the Brayton Point POI; (2) available land; (3) robust connection to the regional transmission system; (4) brownfield status; (5) good access and egress; (6) overall suitability; and (7) an executed lease agreement and positive communications with the landowner (Exh. SW-1, at 4-10).

In sum, the Company stated that the Ferry Street parcel was dismissed in favor of the Brayton Point site (Exh. SW-1, at 4-10). The Company further stated that among the universe of potential onshore cable routes, it chose two routes that it advanced to the scoring phase of the route analysis (Exh. SW-1, at 4-11).

5. Route Analysis and Scoring

The Company stated that it analyzed the Lee River and Taunton River Route options (from landfall to the POI) using two types of criteria (Exh. SW-1, at 4-12). The first type, developed environment criteria, included: (1) presence of residential units along the route; (2) presence of sensitive receptors; (3) potential for traffic congestion; (4) presence of historic resources;

(5) presence of archaeological resources; and (6) potential to encounter subsurface contamination (Exh. SW-1, at 4-12). The second type, natural environment criteria, included: (1) presence of flood hazard and wetland resource areas; (2) presence of state-listed rare species habitat; (3) proximity to public water supplies; (4) use of Article 97-jurisdictional land; and (5) need for tree removal (Exh. SW-1, at 4-12 to 4-13).

The Company stated that it assigned weighted values to individual criteria related to both the developed and natural environment based on its professional judgment and siting experience to ensure that scoring results reflected the importance of each respective criterion (Exh. SW-1, at 4-13). According to the Company, the criteria were developed based on the Company's routing objectives, environmental considerations, and feedback from consultations with state agencies and municipal officials (Exh. SW-1, at 4-13). The Company developed a scale of 1-to-3 for weighting the criteria, with 1 being the lowest weight and 3 being the highest to reflect the relative importance of each criterion (Exh. SW-1, at 4-13). The Company assigned: (1) a weight of 3 to Residential Units and Potential for Traffic Congestion; (2) a weight of 2 to Sensitive Receptors, Flood Hazard Areas and Wetlands, Rare Species Habitat, Article 97-Jurisdictional Land, and Tree Removal; and (3) a weight of 1 to Historical and Archaeological Resources, Potential to Encounter Subsurface Contamination, and Public Water Supplies (Exh. SW-1, at 4-13).

The Company stated that it assessed each criterion based on raw data (gathered field and online data, and mapping) for each Candidate Route and identified the Candidate Route that had the highest score (Exh. SW-1, at 4-17). The Company maintained that the raw scores of the routes were then compared against the number of the highest scored route to arrive at a "ratio score" for each Candidate Route; ratio scores were on a scale of 0 to 1 (Exh. SW-1, at 4-17 to 4-18). The Company explained that the routes were assigned a fraction relative to that highest weighted route, e.g., for the residential unit criterion, if route X had a score of 4, route Y had a score of 8, and route Z had a score of 16, then the ratio scores would be: X = 0.25, Y = 0.5 and Z = 1.0, respectively (Exh. SW-1, at 4-18). Thus, the Company emphasized that the lowest ratio score equates to the lowest potential for impact (Exh SW-1, at 4-18).

As a next step, the Company multiplied the ratio score for each criterion by its assigned weight to produce a weighted score that reflected the relative importance of the criterion (Exh.

SW-1, at 4-18). For each Candidate Route, the Company's analysis generated: (1) a "total ratio score" – by summing all of the individual ratio scores from the scoring criteria; and (2) a "total weighted score" – by summing all of the individual weighted scores from the scoring criteria (Exh. SW-1, at 4-18). The Company stated that the total weighted scores were then sorted from low to high to identify a given Candidate Route's "rank" (Exh. SW-1, at 4-18). The Company again asserted that the lowest weighted score equates to the lowest potential for impact (Exh. SW-1, at 4-18).[36]

Table 5, below, displays results of the Company's environmental scoring – the raw, ratio and weighted scores – for the Preferred and Noticed Alternative Routes, taking into account the Noticed Variation.

---

[36] The Company emphasized that the Project's Noticed Variation, which would facilitate delivery of an additional estimated 1,200 MW of renewable clean energy by "right-sizing" certain facilities (primarily trenching and conduit for onshore underground transmission cables) to minimize any likely siting, cost, community, and environmental impacts, did not impact the scoring of the criteria (Exh. SW-1, at 4-19).

Table 5: Raw, Ratio, and Weighted Scores of the Candidate Routes.

Route Name			Brayton Point – Lee River	Brayton Point – Taunton River
		Landfall Site Route End Point	Lee River HVDC Converter Station	Taunton River HVDC Converter Station
		Length, miles	0.6	0.4
Scoring Criteria	**Weight**	**Score Type**		
Residential Units	3	Raw Ratio Weighted	0.00 0.00 0.00	0.00 0.00 0.00
Sensitive Receptors	2	Raw Ratio Weighted	0.00 0.00 0.00	0.00 0.00 0.00
Potential for Traffic Congestion	3	Raw Ratio Weighted	1.00 0.50 1.50	2.00 1.00 3.00
Historic Resources	1	Raw Ratio Weighted	1.00 1.00 1.00	1.00 1.00 1.00
Archaeological Resources	1	Raw Ratio Weighted	0.00 0.00 0.00	0.00 0.00 0.00
Potential to Encounter Subsurface Contamination	1	Raw Ratio Weighted	4.00 1.00 1.00	4.00 1.00 1.00
Subtotal – Human Environment (weighted score)			**3.50***	**5.00**
Flood Hazard Areas and Wetlands	2	Raw Ratio Weighted	0.03 0.75 1.50	0.04 1.00 2.00
State-listed Rare Species Habitat	2	Raw Ratio Weighted	0.00 0.00 0.00	0.00 0.00 0.00
Public Water Supplies	1	Raw Ratio Weighted	0.00 0.00 0.00	0.00 0.00 0.00
Article 97 Jurisdictional Areas	2	Raw Ratio Weighted	0.00 0.00 0.00	1.00 1.00 2.00
Tree Removal	2	Raw Ratio Weighted	0.00 0.00 0.00	0.00 0.00 0.00
Subtotal – Natural Environment (weighted score)			**1.50**	**4.00**
		Total Ratio Score	**3.25***	**5.00**
		Total Weighted Score	**5.00***	**9.00**
Ranking (no cost consideration)			**1**	**2**

*Note that the subtotal and total weighted scores, as well as the total ratio score, for the Lee River Route were incorrectly calculated by the Company, although the ranking remained the same regardless. The table reflects corrections made by Siting Board staff.

Source: Exh. EFSB-CM-1(S3)(1).

The Company assessed the landfall portions of two candidate routes and stated that the Lee River Route was the more feasible of the two and thus its Preferred Route (Exh. SW-1, at 4-9). The Company noted that the main advantages of the Lee River Route included: (1) good egress and elevation; (2) protection by an armored shoreline; and (3) avoidance of the main shipping channel in Mount Hope Bay, and the shipping channel and turning basin at the mouth of the Taunton River (Exh. SW-1, at 4-9).

The Company noted that the Taunton River Route landfall location's disadvantages, including: (1) difficulty maintaining separation distance between the Offshore Export Cables within active federal and private navigation channels; (2) a privately maintained shipping channel, turning basin, and berth would be impacted during cable laying; (3) the proximity of the route to the Borden Flats Lighthouse, which is on the National Register of Historic Places; (4) the presence of Borden Flats, where there are shallow water depths, which could result in damage to the cables from use of deeper-draft offshore vessels; and (5) HDD operations in proximity to a tidal creek and salt marsh ecosystem, and Brayton Point Beach (Exh. SW-1, at 4-9).

The Company related that the sea-to-shore transition vault construction equipment and staging operations for the Taunton River Route would be located immediately south and offshore from Brayton Point Beach, therefore, residential properties would likely experience greater visual and noise impacts during construction in comparison to work conducted for the Lee River Route (Exh. SW-1, at 4-9). Further, the Company stressed that the Taunton River Route, as compared to the Lee River Route, would have a nearer residence to both the overall construction Project and HDD site, about 680 feet away and 1,345 feet away, respectively (Exh. SW-1, at 5-18). An additional disadvantage of the Taunton River Route, as emphasized by the Company, was that it would impact Brayton Point Road, which provides access for both commercial and industrial operations at Brayton Point, whereas the Lee River Route would not impact public roadways or Brayton Point site access (Exh. SW-1, at 4-36). Consequently, the Company pointed out that construction costs would be lower for the Lee River Route (Exh. SW-1, at 4-36). Table 6, below, presents a summarized comparison of the Lee River and Taunton River Route options.

Table 6: Comparison of the Lee River and Taunton River Landfall Options.

Factor	Brayton Point – Lee River	Brayton Point – Taunton River
Adequate space for onshore HDD	Yes	Yes
Access to public roads/ways	Yes	Yes
Conflicts with existing offshore cable areas	No	Potential
Potential for environmental impacts	Low	Low
Navigation/shipping impacts	No	Yes
Proximity to the residential community	Farthest of the Two	Nearest of the Two
Road impact	No	Yes
Retained for routing analysis	**Yes**	**Yes**

Source: Exh. SW-1, at 4-10, 5-18.

SCW also evaluated the OECC portions of the two candidate routes. The Company's evaluation of the OECC focused on both the Lee River and Taunton River Route options within Massachusetts waters (Exh. SW-1, at 4-1). The Company employed several criteria in its evaluation of the OECC shown (Exh. SW-1, at 4-21, 4-27 to 4-28). Table 7, below, lists these criteria and describes how they were applied, while Table 8 provides a summary comparison of the OECCs.

Table 7. The Company's OECC Evaluation Criteria and Application of Criteria.

Criteria	Application
Cable Route Length	Minimizing cable length would reduce the number of offshore splices and thereby reduce costs (Exh. SW-1, at 4-23). The Lee River Route option would be shorter (Exh. SW-1, at 4-23).
Water Depth	Water depths greater than 20 feet would be most suitable for accommodating the cable laying vessels that are likely to be utilized for the Project (Exh. SW-1, at 4-21). Shallower depths are feasible, but may require specialized installation equipment (i.e., shallow-draft cable lay barge) (Exh. SW-1, at 4-21). Due to the similarity in water depths for both routes, neither is favored in terms of water depth (Exh. SW-1, at 4-23).
Seafloor Conditions	Sand waves and highly mobile sediments: The Company did not favor either route (Exh. SW-1, at 4-24). Boulders/boulder fields: Some surface boulders were identified along both OECC options (Exh. SW-1, at 4-24). Therefore, the Company deemed the routes equivalent on this factor.

Criteria	Application
	The route should be perpendicular, or nearly perpendicular, to any large seafloor slopes: The Company encountered steep seafloor slopes for the Taunton River Route associated with the dredged shipping channel flanks (Exh. SW-1, at 4-24). Shallow gas accumulation: The Taunton River Route crosses a greater area of mapped shallow gas accumulation than the Lee River Route option, which could signify buried geohazards and thus posing risk to cable performance and long-term integrity (Exh. SW-1, at 4-24). Sediments with low thermal conductivity: Sediment thermal conductivity is relevant to cable performance and long-term integrity. The Company identified sediments with organic content and thus low thermal conductivity in samples taken from both the Taunton River and Lee River Routes (Exh. SW-1, at 4-24). The Company regarded the routes as equivalent on this factor (Exh. SW-1, at 4-24).
Anthropogenic Hazards	Planned/existing cables: The Company expects that both routes would avoid crossing existing cables and/or pipelines within Massachusetts state waters (Exh. SW-1, at 4-25). Navigation Buoys: There are no navigation buoys or Rhode Island Department of Environmental Management ("RIDEM") water quality monitoring buoys along the Lee River Route, whereas there are four charted buoys within the Taunton River Route (Exh. SW-1, at 4-25). Volume or density of anthropogenic debris: According to the Company, the routes are equivalent (Exh. SW-1, at 4-25). Volume or density of Bottom Fishing Activity: According to the Company, the routes are equivalent (Exh. SW-1, at 4-26). Dredging: The Taunton River Route would cross a dredged shipping channel that runs along the eastern shore of Mount Hope Bay and into the Taunton River (Exh. SW-1, at 4-26). Therefore, the Company preferred the Lee River Route. Shipwrecks and Paleo landforms: Because the identified potential avoidance areas overlap, the Company deems the routes equivalent (Exh. SW-1, at 4-26).

Criteria	Application
Ocean Management Plan Resources	The Project is not located in or adjacent to any state-designated Special, Sensitive, and Unique ("SSU") or Water-Dependent Use ("WDU") within Massachusetts state waters (Exh. SW-1, at 4-27 to 4-28). The Company deemed the routes equivalent (Exh. SW-1, at 4-28).
Other Environmental Resources	Both options traverse mapped Shellfish Suitability areas (Exh. SW-1, at 4-28). The Lee River Route option traverses suitable Quahog habitat while the Taunton River Route option traverses suitable habitat for both the Quahog and American Oyster (Exh. SW-1, at 4-28).

Table 8: Summary Comparison of OECCs.

Characteristics	Western (Lee River)	Eastern (Taunton River)
Offshore Length[a]	2.1 miles	2.4 miles
Minimum Water Depths[b]	0 feet to -16 feet	0 feet to -16 feet
Sand Waves Present (Y/N)	N	N
Highly Mobile Sediments Present (Y/N)	N	N
Steep Seafloor Slopes Present (Y/N)	N	Y
Boulders/Boulder Fields Present (Y/N)	Y	Y
Shallow Gas Present (Y/N)	Y	Y
Planned and Existing Cables and Pipelines[c] (Y/N)	N	Y
Moored Buoys	0	4
Dredged Channel (Y/N)	N	Y
Shipwrecks and Paleolandforms	3	3
Recreational Uses	N	Y

[a] *Length shown is for each route segment within Commonwealth waters. The two ECC options are co-located for a large portion of the total ECC length, differing only in route at the approach to landfall at Brayton Point.*
[b] *The water depth profile and bathymetric trends along the Brayton Point ECC were determined in surveys in 2020 and 2021. Water depth is relative to MLLW.*
[c] *Existing cables and pipelines referenced here refer only to those within state waters. Existing cables and pipelines referenced here refer to the charted cable area near Brayton Point Beach, which are expected to be avoidable by micro-routing within the ECC, but are noted due to proximity.*
Source: Exh. SW-1, at 4-27.

6. Geographic Diversity

The Company stated that it selected just two alternative approaches to Brayton Point due to the relatively small size and scope of possible approaches to the Brayton Point peninsula

(Company Brief at 90-91). The Company indicated that these two approaches, in addition to associated potential onshore cable routes to the Converter Station, provide a measure of geographic diversity that is consistent with Siting Board standards and precedent (Exh. SW-1, at 4-20; Tr. 3, at 424 to 431). The Company further explained that given the relatively small geographic area of the Brayton Point property, similar to an urban environment, geographic diversity is not measured through physical distance (Company Brief at 91). Rather, the Company maintains that it is based on the varying degrees of environmental impact and cost associated with alternative landfall sites and Onshore Cable routes to the Converter Station (Company Brief at 91).

7. Cost

The Company stated that it considered a variety of factors in assessing route costs, including route length, easements, surface cover, and existing subsurface utility density (Exh. SW-1, at 4-36). The Company noted that it sought to minimize costs where feasible, consistent with other considerations, such as constructability and minimizing environmental impact (Exh. SW-1, at 4-36). According to the Company, one of the key factors that reduced the cost of its Preferred Route, as compared to the Noticed Alternative Route, was colocation with existing commercial activities (Exh. SW-1, at 4-36). The Company contended that Offshore Export Cables would need to be installed at a minimum depth of ten feet below the bottom elevation of the existing dredged channels, creating greater cost for the Noticed Alternative Route (Exh. SW-1, at 4-36). Consequently, the Company pointed out that construction costs would be lower for its Preferred Route (Exh. SW-1, at 4-36).

The Company stated that a second factor that reduced the cost of its Preferred Route was its colocation with the National Grid ROW (Exh. SW-1, at 4-37). The Company contended that the Noticed Alternative Route, on the other hand, crosses the existing National Grid ROW to reach the HVDC Converter Station site, which would introduce additional coordination and cost with respect to easements and construction requirements (Exh. SW-1, at 4-37).

8. Reliability

The Company stated that it evaluated reliability for its Preferred Route and Noticed Alternative Route (Exh. SW-1, at 4-37). The Company stressed that: Onshore Cable routes to the HVDC Converter Station site would use underground installation for both its Preferred and Noticed Alternative Routes; and, therefore, aside from a slight difference in length, there were no reliability differences between its Preferred Route and Noticed Alternative Route (Exh. SW-1, at 4-37). The Company further highlighted that while increased length could increase the risk of potential faults, in this case, route lengths were similar enough that this would not result in any significant difference in reliability (Exh. SW-1, at 4-37).

The Company stated that the Noticed Alternative Route (Taunton River Route) would likely present higher risks to the integrity of a buried submarine cable (Exh. SW-1, at 4-37). For example, the Company explained the option crossed a dredged shipping channel and turning basin (Exh. SW-1, at 4-37). Additionally, the Company stated that the Taunton River Route crossed a greater area of mapped shallow gas accumulation than the Lee River Route, potentially concealing buried geohazards and posing additional risk to cable performance and long-term integrity (Exh. SW-1, at 4-37). The Company stressed that reducing the Offshore Export Cables' integrity risk or exposure to other third-party impact is paramount in maintaining the reliability of the Offshore Export Cables and, by extension, the reliability of the Project (Exh. SW-1, at 4-37).

9. Company Conclusion on Route Selection

The Company argues that its route selection process comprehensively addressed the Siting Board's standards for energy facilities (Exh. SW-1, at 4-37). In describing its process, the Company emphasized that it: (1) identified various routes as potential alternatives to satisfy the Project need, and used a process designed to ensure that no clearly superior route was overlooked; (2) systematically compared possible routes based on reasonable criteria to evaluate the environmental impacts, cost, and reliability of the identified route alternatives; and (3) identified Preferred and Noticed Alternative Routes (Exh. SW-1, at 4-37). The Company argued that its selection of routes balanced environmental impacts, costs, and reliability, and would enable the Project to meet the identified need (Exh. SW-1, at 4-37).

The Company asserted that the Lee River Route would: (1) facilitate construction that avoids or minimizes impacts to the natural and developed environments; (2) be technically feasible; and (3) be more environmentally favorable than the other options considered (Exh. SW-1, at 4-37). The Company also contends that in light of the characteristics of the Brayton Point site (i.e., constricted space, limited feasible landfall locations, and desire to avoid environmental hazards), the Taunton River Route provides some measure of geographic diversity in accordance with the Siting Board's standards and precedent (Exh. SW-1, at 4-37).

No other party commented on the Company's route selection analysis.

C. Analysis and Findings

The Siting Board requires that applicants consider a reasonable range of practical siting alternatives, and that proposed facilities be sited in locations that minimize cost and environmental impacts. In past decisions, the Siting Board has found various criteria to be appropriate for identifying and evaluating route options for transmission lines and related facilities. These criteria include natural resource impacts, land use impacts, community impacts, cost, and reliability. NSTAR Electric Company d/b/a Eversource Energy, EFSB 16-02/D.P.U. 16-77, at 30 (2018) ("Needham-West Roxbury") citing NSTAR Electric Company d/b/a Eversource Energy, EFSB 15-04/D.P.U. 15-140/15-141, at 65 (2018) ("Woburn-Wakefield"); Boston Edison Company d/b/a NSTAR Electric, EFSB 04-1/D.P.U. 04-5/04-6, at 43-44 (2005) ("Stoughton-Boston"). The Siting Board has also found the specific design of scoring and weighting methods for chosen criteria to be an important part of an appropriate route selection process. Needham-West Roxbury at 30, citing Woburn-Wakefield at 65; Stoughton-Boston at 43-44.

The record shows that the Company undertook a systematic approach to identify and analyze potential offshore and onshore routes for the Massachusetts component of the Project. The Company's route selection process entailed the following steps: identification of (1) suitable POIs, (2) landfall locations, (3) Converter Station sites, and (4) offshore and onshore cable routes.

The Company's assessment first identified ten POIs. The record shows that the Company's choice of the Brayton Point POI is optimal for several reasons. Brayton Point: (1) is situated high in the ISO-NE queue; (2) would minimize environmental impacts due to its brownfield status,

which avoids development in environmentally sensitive locations; and (3) includes a robust 345 kV regional transmission infrastructure that would provide reliable interconnection. Additionally, the other POI options each have significant drawbacks: distance is an impediment for the Bourne, Carver, Canal, Pilgrim, Mystic River, and K Street substation options; the West Barnstable and Falmouth Bulk substation options each has capacity constraints; the Falmouth Tap Substation option is lower in the ISO-NE queue than Brayton Point; the Canal and K Street substation options have equipment-based constraints, and the K Street Substation option has constraints on expansion; and the Kent County Substation option would require overcoming underground utility congestion and avoiding other proposed offshore projects.

The record shows that the Company then considered 14 offshore and onshore Cable routes between the POI and the OGF, including routes that made intermediate landfall in Massachusetts as well as Rhode Island. The record further shows that the Company's identification of cable routes required careful planning and optimization of factors including offshore physical hazards, existing submarine cables, economic and recreational use areas, protected marine areas, and interconnection points.

Regarding a Massachusetts-only route, the record shows that it would require suspending cable from an existing drawbridge (over the Westport River), which is technically infeasible, or utilizing HDD to traverse beneath the river, which is also infeasible due to unavoidable impacts to marshlands and abutting residences. The record shows that the Company's chosen Offshore Export Cable route would traverse Rhode Island state waters and then enter Massachusetts state waters southwest of Brayton Point. In Massachusetts waters, the proposed route diverges into two alternative approaches and landfall locations named for the rivers from which the routes approach the Brayton Point peninsula – the Lee and Taunton River Routes. The record shows that the Company scored the Lee and Taunton River Routes (from landfall to the POI) using developed environment criteria and natural environment criteria, and that the Lee River Route scored more favorably than the Taunton River Route. The record shows that the Lee River Route approach is preferable for several reasons. The Lee River approach: (1) has good egress and elevation; (2) is protected by an armored shoreline; (3) avoids the main shipping channel in Mount Hope Bay, as well as the shipping channel and turning basin located at the mouth of the Taunton River; and

(4) is more removed from residential uses. While the Taunton River Route option has good egress, it has several key drawbacks, i.e., difficulty in maintaining separation distance between cables within active federal and private navigation channels; and the privately maintained shipping channel, turning basin, and berth would be impacted during the cable-lay.

Regarding the two sites considered for the Converter Station, the record shows that the Company's chosen option – Brayton Point – is preferable. Brayton Point is only 0.2 miles north of the POI. There are significant drawbacks associated with the alternative Ferry Street parcel in Fall River because of: (1) its location in a dense industrial, commercial, and residential area that includes an EJ population; and (2) the Converter Station would need to connect to the Brayton Point POI via submarine cabling, which would likely require implementation of supplementary offshore cable installation techniques and result in disturbance to the riverbed of the Taunton River.

The Company compared the onshore impacts of the Taunton and Lee River Routes using weighted scoring. The Siting Board has previously found that this type of evaluation is acceptable for transmission projects and the approach taken here is reasonable and generally consistent with Siting Board precedent. New England Power Company d/b/a National Grid, EFSB 13-2/D.P.U. 13-151/13-152, at 38-39 (2014) ("Salem Cables"); New England Power Company d/b/a National Grid, EFSB 12-1/D.P.U. 12-46/12-47, at 45 (2012) ("IRP"); Stoughton-Boston at 43-45. In this case, the Company's weighted scoring employed criteria for both the developed and natural environments, for both the Lee and Taunton River Routes. The results clearly point to the Lee River Route as having a lesser impact (total weighted score of 5.00 versus 9.00).

The Company also evaluated whether the OECC for the Lee River Route is preferable to the OECC for the Taunton River Route. The record shows that the Lee River Route OECC has a shorter length; lacks steep seafloor slopes; has no planned/existing cables/pipelines, dredged channels, or recreational uses (all of which are present for the Taunton River Route); and no moored buoys (as opposed to four for the Taunton River Route). In the subsequent analysis of Project impacts in Section VI, the Siting Board evaluates the environmental impacts of the Lee and Taunton River Routes.

Regarding the two-pronged test required by the Siting Board, the Company successfully satisfied the first prong because it developed and applied a reasonable set of criteria for identifying and evaluating alternative routes in a manner that ensured that it had not overlooked or eliminated any routes that, on balance, are clearly superior to the proposed route.

Finally, with respect to the second prong, the record shows that the Company identified two transmission line routes to Brayton Point that have varying degrees of environmental impacts and costs associated with alternative landfall sites and Onshore Cable routes to the Converter Station. Given the relatively small size and scope of possible approaches to the Brayton Point peninsula, the Siting Board therefore concludes that the Lee and Taunton River Routes encompass a measure of geographic diversity.

Accordingly, based on the route selection process described above, the Siting Board finds that the Company has: (1) developed and applied a reasonable set of criteria for identifying and evaluating alternative routes in a manner that ensures that it has not overlooked or eliminated any routes that are clearly superior to the proposed project; and (2) identified at least two transmission line routes with some measure of geographic diversity. Therefore, the Siting Board finds that the Company has demonstrated that it examined a reasonable range of practical siting alternatives while seeking to minimize cost and environmental impacts.

VI. ANALYSIS OF PROJECT IMPACTS

In Sections VI.C through VI.E, *infra*, the Siting Board addresses the environmental and safety related impacts of the Project in the following sequence: (1) the Offshore Export Cables landfall site; (2) the Onshore Cables from the landfall to the Converter Station and the Grid Interconnection line from the Converter Station to the POI; and (3) the Converter Station. As discussed below, the Siting Board finds that the Lee River Route (including the Noticed Variation) is preferable to the Taunton River Route.

A. Standard of Review

In implementing its statutory mandate under G.L. c. 164, §§ 69H and 69J, the Siting Board requires a petitioner to show that its proposed facility minimizes costs and environmental impacts

while ensuring a reliable energy supply. GCEP at 102; Park City Wind at 58; New England Power Company d/b/a National Grid, EFSB 10-1/D.P.U. 10-107/10-108, at 39 (2012) ("Hampden County"). To evaluate the proposed facility, the Siting Board first determines whether the petitioner has provided sufficient information regarding environmental impacts and potential mitigation measures to enable the Siting Board to make such a determination. The Siting Board then examines the environmental impacts of the proposed facilities and determines: (1) whether environmental impacts would be minimized; and (2) whether an appropriate balance would be achieved among conflicting environmental impacts as well as among environmental impacts, cost, and reliability. Mid Cape Reliability Project at 50-51; Beverly-Salem at 41-42; Sudbury-Hudson at 78.

B. Description of Project Elements

For the Lee River Route, the offshore portion (in Massachusetts waters) is 2.1 miles long, and the Onshore Cable Route is 0.6 miles long, totaling 2.7 miles (Exh. SW-1, at 3-5). The Taunton River Route is 2.4 miles (offshore in Massachusetts waters) and 0.4 miles onshore, totaling 2.8 miles (Exh. SW-1, at 3-6). The Lee River Route is shorter than the Taunton River Route offshore (and overall), but longer than the Taunton River Route onshore. The Company proposes the Lee River Route as the Preferred Route, and the Taunton River Route as the Noticed Alternative Route.

1. Offshore Export Cable Routes and Landfall Locations

The OECC extends from the Lease Area in federal waters south of Martha's Vineyard to Rhode Island Sound, then north up through the Sakonnet River, making intermediate landfall underground at Aquidneck Island in Rhode Island, and then proceeds underground across Aquidneck Island (Company Brief at 16; Exh. SW-1, at 3-10), entering Massachusetts state waters in Mount Hope Bay southwest of the landfall at Brayton Point (Exh. SW-1, at 1-12). SCW intends to maintain an OECC width between approximately 1,640 feet to 2,300 feet to allow for

maneuverability during installation and maintenance, accommodate sensitive locations, and provide sufficient area for anchoring and landfall (Exh. SW-1, at 4-22).

The Company will install the two Offshore Export Cables bundled together and buried in the seafloor where practicable (Exh. SW-1, at 5-25). However, the Company represented that it may need to install the cables separately in shallow water and near the landfall approach (Exhs. SW-1, at 4-22; EFSB-G-11). In that case, the Company will maintain adequate separation (approximately 164 feet apart) between the cables for safe installation, burial, and repair (Exh. SW-1, at 4-22, 5-25 n.19). At cable crossings, the Company would lay the bundled conductors directly on the seafloor surface covered by concrete mattresses (Exh. SW-1, at 5-25 n.19).

The Project landfall would occur at Brayton Point in Somerset where the two Offshore Export Cables would come ashore through HDD conduits and SCW would install underground TJBs for the Offshore Export Cables to connect to the Onshore Cables (Exh. SW-5, at 4), including (1) construction of two HDD conduits at landfall, which would require two HDD exit pits; (2) onshore trenching activities for the concrete-encased conduit system (i.e., duct bank); and (3) construction of vaults at locations along the route where segments of cable must be spliced. The Noticed Variation would entail: (1) construction of two additional HDD conduits at landfall, which would require two additional HDD exit pits; (2) onshore trenching activities for the concrete-encased conduit system (i.e., duct bank), which would require excavating approximately 1.0 foot deeper; and (3) construction of an additional vault at locations along the route where segments of cable must be spliced (Exh. SW-1, at 1-1 n.1). According to the Company, the Noticed Variation would allow for only one disturbance of the natural and developed environment if an additional, 1,200 MW connector project were implemented (Exh. SW-1, at 1-1 n.1).

Brayton Point is an industrial site surrounded by water on the west, south, and east sides of the point.[37] Brayton Point LLC is in the process of repurposing the former Brayton Point power

---

[37] There are no residential structures, residential units, businesses, sensitive land uses, open spaces, and conservation and recreational lands within 300 feet of the Lee River Route and Noticed Variation (Exh. EFSB-LU-8, at 2). However, Brayton Point Beach and DCR's Brayton Point Wildlife Management Area/Ripley Street Parcel (located on the Taunton

station industrial site as a renewable energy hub (Exh. EFSB-T-1, at 1). Accordingly, the Company is coordinating closely with Brayton Point LLC in connection with its overall development plans for the Brayton Point site (Exh. EFSB-T-1, at 1). SCW also has directly consulted and coordinated with Prysmian Projects North America, LLC ("Prysmian") regarding the Prysmian Brayton Point Project (EFSB-T-1, at 1).[38]

The Company's preferred route (the Lee River Route) for the Offshore Export Cables proceeds northeast for approximately 2.1 miles through Mount Hope Bay, entering the mouth of the Lee River in Somerset and makes landfall on the western side of Brayton Point (Exh. SW-1, at 4-22). The Taunton River Route would also begin where the Offshore Export Cables enter Massachusetts state waters in Mount Hope Bay southwest of Brayton Point (Exh. SW-1, at 5-1). Within Mount Hope Bay, the Taunton River Route would diverge from the Lee River Route, travelling northeast and entering the mouth of the Taunton River on the east side of Brayton Point (Exhs. SW-1, at 5-1 to 5-2). The Taunton River Route proceeds northeast for approximately 2.4 miles through Mount Hope Bay, entering the mouth of the Taunton River on the eastern side of Brayton Point in Somerset, near the Somerset-Fall River municipal line (Exh. SW-1, at 4-22).

2. Onshore Cable Routes and Grid Interconnection

The onshore portion of the Project in Massachusetts would be located entirely at Brayton Point in Somerset (Exh. SW-5, at 6). The Company would use HDD technology to make landfall for the sea-to-shore transition, and the Offshore Export Cables would transition to Onshore Cables within TJBs southwest of the Converter Station for the Lee River Route, and southeast of the Converter Station for the Taunton River Route (Exh. SW-1, at 5-1). From the TJBs, the Lee River Route would be routed to the north then east alongside an existing access road for approximately 0.6 miles to the proposed Converter Station (Exh. SW-1, at 5-1). Onshore cable installation is

---

River side of Brayton Point) lies within 200-300 feet of both onshore and offshore portions of the Taunton River Route (Exh. EFSB-LU-8, at 3).

[38] Prysmian is partnering with the Commonwealth and the Town of Somerset to bring a submarine cable manufacturing facility to Brayton Point (Exh. EFSB-T-1, at 1).

proposed via open-cut trenching to accommodate a buried concrete duct bank and associated splice vaults at a burial depth ranging between 2.0 feet and 15.0 feet with a target depth of 3.0 feet (Exh. SW-1, Table 1-2).

The Taunton River Route would also begin where the Offshore Export Cables enter Massachusetts state waters in Mount Hope Bay southwest of Brayton Point (Exh. SW-1, at 5-1). Within Mount Hope Bay, the route would diverge from the Lee River Route, travelling northeast and entering the mouth of the Taunton River on the east side of Brayton Point (Exhs. SW-1, at 5-1 to 5-2). From the TJBs, the Taunton River Route would be routed alongside Brayton Point Road to the north then west following existing access roads and crossing the National Grid ROW for a total distance of approximately 0.4 miles to the Converter Station (Exh. SW-1, at 5-1 to 5-2).

The Grid Interconnection between the Converter Station and POI would be housed within a concrete duct bank similar to the Onshore Cables (Exh. SW-1, at 3-11). The target underground burial (i.e., from top of buried duct bank up to the ground surface) of the Grid Interconnection is 3.0 feet with an underground burial depth range of 2.0 feet to 15.0 feet (Exh. SW-1, at 1-8). The Company indicated that the cables would interconnect to a breaker at the POI outside the National Grid Brayton Point substation building, as well as connect with communication/fiber cables and associated substation equipment (Exh. SW-1, at 3-11). The Company anticipated that National Grid will upgrade the substation including an expansion of the National Grid substation building to accommodate an additional breaker bay position, upgrades to two 115 kV transmission lines, and pole relocation on an existing 345 kV line segment at Brayton Point (Exh. SW-1, at 3-11).

3. Converter Station

The Company noted that the proposed site for the Converter Station and its surrounding area (8-10 acres) would be large enough to accommodate storage, parking, access and egress, and stormwater management elements (Exh. SW-1, at 1-10). The maximum footprint of the converter station yard will be approximately 7.5 acres (Exh. SW-1, at 1-10). The Company would enclose the new facilities within security fencing and take measures to ensure safety and restrict access to the Converter Station to authorized personnel (Exh. SW-1, at 1-10, 5-57). SCW designed the

Converter Station to serve as an unmanned station with personnel on site periodically for inspections, maintenance, and repairs (Exh. EFSB-T-9, at 2).

The Converter Station yard would include the following major components and equipment: (1) Converter Station steel building; (2) current transformers; (3) voltage transformers; (4) circuit breakers; (5) an auxiliary transformer; (6) backup power generator (for emergency lighting and alarms); (7) control building (to house electrical components); (8) storage building; (9) spare transformer; (10) water tank (for recirculating cooling system); (11) oil/water separator; (12) AC transformers; (13) steel overhead busbar; (14) cooling towers; (15) station service transformers; (16) ventilation and air conditioning ("V/AC") (for building climate control); (17) an 85-foot lightning mast; (18) a stormwater management system; and (19) access, parking area and laydown area (Exhs. SW-1, at 5-57; SW-6, at 12-12).

C. Offshore Export Cable and Landfall Impacts

1. Offshore Export Cable Construction

SCW estimated that Offshore Export Cable installation will require approximately 15 months (SW-11, at 1-19). SCW stated that typical construction hours would be 7:00 a.m. to 7:00 p.m. on weekdays and 9:00 a.m. to 7:00 p.m. on Saturdays and legal holidays (Exh. EFSB-CM-9, at 1). The Town of Somerset Noise Control Bylaw provides that longer construction hours are acceptable, specifically 7:00 a.m. to 10:00 p.m. on weekdays and 8:00 a.m. to 10:00 p.m. on weekends or legal holidays (Exh. EFSB-CM-9, at 1). The Company noted that it would coordinate with the Town of Somerset to establish construction schedule, hours, and logistics, as well as seek approval when work is needed outside of these hours (Exh. EFSB-CM-9, at 2).

The Company would prepare the seafloor prior to cable installation by removing debris and boulders (Exh. SW-6, at 13-5). If necessary, the Company would conduct a pre-lay grapnel run to clear the cable burial route of buried hazards such as abandoned mooring lines, wires, or fishing equipment (Exhs. SW-1, at 5-50; SW-6, at 13-3). The cables would be transported and installed from a carousel-equipped cable-lay vessel (Exh. SW-6, at 13-6). SCW would target a cable burial depth of approximately 6.0 feet below stable seafloor (with a depth range of 3.2 to 13.1 feet) to protect the cables from potential anchor strikes or fishing activities (Exh. SW-6, at 13-3).

According to SCW, based on its current understanding of seafloor conditions, burial of the bundled Offshore Export Cables in Massachusetts state waters would primarily use an anchored cable-lay barge in Mount Hope Bay and the Lee River, and jet-sled technology farther offshore (Exh. SW-6, at 13-6). The barge would be configured and equipped with the cable reel(s), a jet sled, and other burial tools (Exh. SW-6, at 13-6). The barge is typically maneuvered in place by a support tugboat and deploys a minimum of a 5-point anchor scheme to hold it in position and provide the thrust to tow the jet sled (Exh. SW-6, at 13-6, 6-5). The jet sled is a skid-mounted burial tool that is towed by the cable-lay barge (Exh. SW-6, at 13-6, 6-5). As the cable is laid on the seafloor from the vessel, a narrow trench of the seafloor surrounding the cable would be fluidized by the jet sled *in situ*, lowering the cable to the target burial depth (Exh. SW-6 at 13-6, 6-5). Offshore Export Cable installation will temporarily alter the seafloor by suspending seafloor sediments and would settle onto the seafloor in approximately 2-4 hours; these effects are expected to be temporary, short-term, and localized (SW-1, at 4-30, 6-21).

The Company indicated that secondary cable protection methods including concrete mattress placement, the creation of a rock berm, rock placement, and fronded mattresses may be used to protect cable ends at pull-in areas and where trenching is not possible (Exh. SW-1, at 5-52). However, SCW claims that it does not anticipate the need for secondary cable protection for more than a small portion (15 percent at most) of the OECC in Massachusetts waters based on geophysical and geotechnical surveys (Exh. SW-14, at 9-32). The Company added that there would be no cable or pipeline crossings in Massachusetts waters (Exh. SW-14, at 5-7). Should secondary cable protection be required, the Company would deploy an anchored barge to install the protection device and document these cable protection areas on applicable nautical charts (Exh. SW-11, at 4-3).

Decommissioning activities will be similar to the construction phase but less intensive (Exh. SW-1, at 5-44). The decommissioning of Project structures, as well as the rehabilitation of Project offshore, landfall and onshore sites, will require the hiring of workers, but fewer than during the construction phase (Exh. SW-1, at 5-44). Transporting the dismantled equipment and material would also require the services of local providers in the region (Exh. SW-1, at 5-44). The decommissioning work will generate short-term economic benefits in the region; however,

following the decommissioning of the Project, the region would lose the permanent jobs that are necessary during operations (Exh. SW-1, at 5-44).

2. Landfall Construction

The main construction activities at the landfall site are: (1) excavation of HDD exit pits; (2) drilling of the HDD pilot holes and insertion of conduits for sea-to-shore transition of the export cables; and (3) cable pulling of the Offshore Export Cables through the conduits to be spliced with the Onshore Cables though TJBs (Exh. SW-1, at 5-54 to 5-56). The cables would be unbundled at landfall with each HVDC power cable requiring a separate HDD borehole and conduit (Exh. SW-6, at 13-9). Two spare HDD conduits would be constructed at landfall for the Noticed Variation, which would require two additional exit pits (Exhs. SW-1, at 1-1 n.1; SW-3, at 9). HDD is a trenchless process which enables the cables to remain buried below coastal resources and intertidal zone while limiting environmental impact during installation. (Exh. SW-6, at 13-15, n.6). The Company stated that: (i) exit pit excavation would take approximately one week; (ii) drilling operations would take two to four months; and (iii) cable pull-in activities would take approximately 30 days (Exhs. EFSB-LF-2; SW-14, at 3-13). HDD drilling would need to be a continuous effort that occurs throughout the day and night (Exh. EFSB-CM-9, at 2). The proposed HDD trajectories are anticipated by the Company to be approximately 0.3–0.6 miles in length and reach a depth of up to approximately 40 feet below the seafloor (Exh. SW-6, at 13-9). The HDD bores would be separated by approximately 10 to 33 feet (Exh. SW-6, at 13-9).

The Company would stage the HDD unit and associated equipment (temporary electric generators, water and slurry tanks, mud circulating system and support vehicles) onshore at Brayton Point (Exh. SW-6, at 13-9). The HDD operations would also be supported by offshore vessels (a jack-up barge or anchored barge, as well as support crew transport vessel(s)) (Exh. SW-6, at 13-9). HDD exit point(s) offshore would be dredged prior to pulling the Offshore Export Cables through the installed conduits (Exh. SW-6, at 13-9).

The Company would use drilling fluids/muds during the drilling and reaming operation (Exh. SW-1, at 6-26). The main components of the drilling fluids consist of naturally occurring bentonite clay, other additives and freshwater (Exh. SW-1, at 6-26). During this activity, the

Company stated that it would use best management practices ("BMPs") to minimize release of drilling fluids in the marine environment offshore and particulate matter ("PM")/dust in the onshore environment (Exh. SW-1, at 5-54 to 5-56).

Once the exit pits are completed, the Company would commence drilling (Exh. SW-1, at 5-52 to 5-53). The Company would ream HDD bore holes to the necessary diameter of approximately 30 inches, followed by conduit insertion (Exh. SW-1, at 5-53; SW-6, at 13-9). According to the Company, the loudest types of equipment used for HDD are the drilling rig, generator, and pump exhausts (Exh. ESFB-NO-2). SCW intends to reduce construction noise using temporary noise barriers, muffling enclosures, and equipment silencers at all HDD locations (Exhs. SW-1 at 5-20; SW-6, at 1-43, 13-17, 13-19, and 14-8; SW-14, at 3-13, 3-14, 8-13, and 8-14).

The Offshore Export Cables will be spliced with the Onshore Cables within TJBs installed underground at landfall locations at Brayton Point (Exh. SW-1, at 5-53). TJBs are cast-in-place or precast concrete underground vaults estimated to be 30' L x 10' W x 8' H (Exh. SW-1, at 5-53). The purpose of a TJB is to provide a clean, dry environment for the splicing of the Offshore Export Cables to the Onshore Cables, as well as to protect the completed splice (Exh. SW-1, at 5-53). The sheaths from the Offshore Export Cable and the Onshore Cable will be terminated into the link box in the TJBs (Exh. SW-1, at 5-53). Access to the TJBs is obtained via manhole covers installed at grade (Exh. SW-1, at 5-53). The fiber optic communications cable will be joined inside the communications handhole installed adjacent to the TJB with its own access cover (Exh. SW-1, at 5-53). Each TJB can accommodate jointing for one to two power cables, which is driven by site-specific considerations with respect to how the vaults and cables can be configured spatially (Exh. SW-1, at 5-54). The Project includes one to two TJBs, and the Noticed Variation includes an additional one to two TJBs as spare vaults for an additional circuit (Exh. SW-1, at 5-54).

After conduits have been inserted, SCW would install cables (Exh. SW-1, at 5-53). A cable barge/vessel would be positioned offshore equipped with cable reels (Exh. SW-6, at 13-10). An onshore HDD rig would be used to pull the cable from sea to shore through the conduits (Exh. SW-6, at 13-10).

3. Environmental Impacts

a. Marine Resources Impacts

i. Seafloor Impacts

The Company represented that disturbance to the sea bottom from Offshore Export Cable installation would include the trench footprint, the area surrounding the trench where sediment suspended during installation would settle, and the footprint of any secondary cable protection (Exh. SW-1, at 4-28). The Offshore Export Cables would be buried beneath the Land Under Ocean ("LUO") resource area and Land Containing Shellfish ("LCS") resource area (Exh. SW-1, at 4-30, 5-3). Permanent impacts to seafloor conditions would include areas where the seafloor is occupied by the cables (Exh. SW-12, at 16) and locations where secondary cable protection is required (Exh. SW-6, at 13-5). The Company has not identified specific areas as requiring secondary cable protection (Exh. SW-6, at 1-9).

The Company maintained that temporary seafloor impacts, including to LUO and LCS, may occur through site preparation (including boulder clearing and pre-lay grapnel run) and cable burial (jetting/trenching and temporary vessel anchoring) over an area approximately 160 feet wide along the cable route for 1.2 miles in the nearshore area, including the locations of the HDD exit pits (Exh. SW-6, at 6-3). The Company also represented that LCS would be impacted by the excavation/dredging of the offshore HDD construction areas to facilitate landfall at Brayton Point (Exh. SW-11, at 4-2). The Company noted that Mount Hope Bay presents continuously shifting seafloor conditions, where silty materials are continuously deposited, resuspended, transported and redeposited (RR-EFSB-13, at 1). Accordingly, the Company asserts that the benthic communities are expected to recolonize the impacted areas following construction activities (Exh. SW-6, at 8-16).

(A) Lee River Route

For the Lee River Route, the Company represented that cables installation would result in temporary impacts to approximately 10.4 acres of LUO, including the area associated with the

temporary HDD exit pits for two HDD (Exhs. SW-14, at Table 5-1; SW-1, at 5-3). The route would also permanently impact 1.7 acres of LUO in the seafloor area occupied by the cables (Exh. SW-12, at 16). The Noticed Variation would require two additional temporary HDD pits during construction and would result in temporary impacts to approximately 11.0 acres of LUO (and 1.7 acres of permanent impacts as above) for the Lee River Route (Exhs. SW-1, at 5-4; SW-14, at 5-4). The Company stated that typical dimensions of the offshore HDD offshore construction areas would be 160 feet long by 50 feet wide (Exh. SW-11, at 4-6).

The Company represented that the Lee River Route traverses mapped suitable Quahog habitat (Exh. SW-1, at 4-28). The Company estimated temporary LCS impacts from the Lee River Route to be 13,890 square feet (0.3 acres), or 27,780 square feet (0.6 acres) (including the Noticed Variation) from installation of the offshore export cables and dredging of HDD pits (Exhs. SW-6 at 6-10; SW-14 at 5-4; SW-11, at 4-4).

(B) Taunton River Route

For the Taunton River Route, including its Noticed Variation, the Company indicated that installation would result in temporary impacts to approximately 12.5 acres of LUO, including the temporary HDD exit pits for four HDDs (Exh. SW-1, at 5-4). The Company stated that permanent impacts to LUO would be 1.7 acres for the occupied area of the cables (Exh. SW-12, at 16). The Company represented that the Taunton River Route traverses suitable habitat for both Quahog and American Oyster (Exh. SW-1, at 4-28).

ii. Marine Water Quality

The Company stated that installation of the Offshore Export Cables would have localized and temporary effects on marine water quality, primarily related to trenching and dredging at HDD pits (Exhs. SW-1, at 4-30; SW-6, at 6-9). The Company maintains that temporary sediment disturbance associated with Project activities for both candidate routes would cause minor, short-term, and localized increases in total suspended solids ("TSS") along the OECCs (Exhs. SW-6, Att. I at v; SW-1, at 4-30). The Company contends that use of cable burial methods that employ soil fluidization (i.e., jet-plowing) would minimize sediment disturbance (Exh. SW-1, at 4-30). A

Company-sponsored hydrodynamics and sediment transport modeling study indicated that there could be TSS concentrations above 100 mg/L[39] during construction to a maximum of 3,800 feet from the cable installation center lines in Mount Hope Bay (Exh. SW-1, at 4-30). In all simulated scenarios, the Company represented that the maximum TSS level dropped below 10 mg/L within two hours and below 1.0 mg/L after less than four hours (Exh. SW-1, at 4-30). The modeling also showed that TSS levels associated with HDD dredging would be much lower than those associated with cable trenching (Exh. SW-1, at 4-30). For example, TSS levels exceeding 100 mg/L were predicted at a maximum distance of less than 820 feet at the Brayton Point Lee River landfall HDD pit areas (Exh. SW-1, at 4-30).

According to SCW, sediment deposition thickness exceeding 0.4 inches would cover an area of approximately 104 acres or a maximum of 406 feet from the OECC centerline (Exh. SW-6, Att. I at 4-22). The Company contends that the highest fluidized sediment deposition thicknesses would be contained primarily within a 65-foot corridor around the OECC centerline (i.e., completely within the OECC) (Exh. SW-6, Att. I at 4-22). Sediment deposition thickness of greater than 1.2 inches as a result of construction activities would extend a maximum of 156 feet from the route centerline, covering 46 acres and representing 0.56 percent of area identified as spawning grounds for winter flounder (Exh. SW-14, at 6-8; see also Exh. SW-6, Att. I). According to SCW, past studies have shown that hatching success of winter flounder eggs exposed to less than 0.4 inches of sediment burial was not statistically significant from controls, but that hatching success rates decreased when buried in more than 1.2 inches of sediment (Exh. SW-14, at 6-8).

According to SCW, HDD activities could further affect water quality from inadvertent release of drilling fluids (Exhs. SW-1, at 6-26; SW-6, at 13-9). SCW developed an HDD Contingency Plan which outlines BMPs and includes prevention measures, response and

---

39 The Company explained that it is a common industry practice to use the 100 mg/L as an indicator of the threshold for biological significance: research indicates that reductions in growth and mortality of certain species can occur when concentrations above 100 mg/L persist for over 24 hours (RR-EFSB-17; Exh. SW-14, at 6-8).

containment plans, and reporting information to monitor for and mitigate inadvertent returns and avoid unplanned discharges related to HDD activities (Exh. SW-6, Att. M).

iii. Marine Biological Resources

The impacts described in this section are similar for both the Lee River and Taunton River Routes.

(A) Shellfish and Benthic Organisms

SCW contends that benthic habitat would be displaced in the short-term during cable installation (Exh. SW-6, at 8-16). As described above, the Company expects benthic communities to recolonize impacted areas following construction activities (Exh. SW-6, at 8-16). The Company explained that 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 (Exh. SW-6, at 8-16). For communities not well adapted to frequent disturbance (e.g., deep boulder communities), recovery would depend on a range of factors, such as seasonal larval abundance, and could take upwards of a year to begin recolonization (Exh. SW-6, at 8-16). The Company represented that both OECC route options traverse mapped Shellfish Suitability Areas (Exh. SW-1, at 4-28). See Section VI.C.3.a.i.

The Company stated that it would select lower impact construction methods where possible and micro-route cables within the OECC to avoid complex habitats to the extent practicable (Exh. SW-11, at 4-16). SCW added that it selected the OECC to minimize the length of cables needed to further decrease impacts (Exh. SW-11, at 4-16). SCW also noted that it would work with municipal shellfish constables to coordinate shellfish seeding with planned activities prior to construction (Exh. SW-11, Att. J). The Company will also work with NMFS and DMF to determine appropriate levels of monitoring and mitigation measures for any loss of habitat for shellfish (Company Brief at 145).

(B) Fish and Fisheries

The Project area includes habitat and prey species relied upon by marine mammals, birds and fish, including rare species, as well as shellfish and finfish species that are important to the commercial and recreational fishing industries (Exh. SW-12, at 19). The Company anticipates that construction and installation activities may temporarily affect navigation and fishing activities in the immediate vicinity of construction and installation vessels (Exh. SW-1, at 4-35). Commercial and recreational fishermen would be excluded from actively fishing within or transiting through construction areas and safety zones around construction vessels during construction of the Project, resulting in a temporary loss of access to fishing grounds (Exh. SW-1, at 4-34). Nevertheless, the Company represented that each construction activity would only cover discrete and localized portions offshore on a temporary basis (Exh. SW-1, at 4-34). According to SCW, once construction activities are completed within safety zones, marine activities, including commercial and recreational fishing, would be allowed to continue as they normally would (Exh. SW-1, at 4-34). SCW did not propose any restrictions on navigation, fishing, or the placement of fixed or mobile fishing gear for the post-construction period (Exh. SW-1, at 4-35).[40]

SCW has prepared a Fisheries Monitoring Plan focused on the Sakonnet River, where species of importance are concentrated[41]; the Company does not propose dedicated sampling in the

---

40 A component of local fishing activities is bottom fishing, comprising predominantly trap fishing, shellfish dredging and groundfish trawling (Exh. SW-1, at 4-25). SCW contends that burial of the export cable would minimize risk of damage to the cable and prevent disruption to the fishing industry (Exh. SW-1, at 4-26). The Company maintains that trap fishing is not expected to pose a hazard to a buried cable, and shellfish dredging is also unlikely to penetrate more than 0.7 feet into the seabed (Exh. SW-1, at 4-25). The Company stated that rocking chair dredges used to target hard clams or quahogs could potentially penetrate up to 1.6 feet into the soft sediments of northern Mount Hope Bay (Exh. SW-1, at 4-26).

41 Fishery monitoring studies include pre-construction populations baseline studies and potential construction impacts of whelk for the commercial fishery, and monitoring the movements, presence, and persistence, using acoustic telemetry, of commercially and/or recreationally viable species such as striped bass, fluke, tautog, and false albacore (Exh. SW-11, Att. F, at 7 and 11).

Massachusetts portion of Mount Hope Bay (Exh. SW-11, Att. F; Company Brief at 139 to 140). SCW explained that the Fisheries Monitoring Plan is still representative given the hydrologic connectivity between the Sakonnet River and Mount Hope Bay (Exh. SW-11, at 5-3).

The Company maintains that the alignment of the OECC is intended to avoid, or minimize, impacts to fish and fishing (Exh. SW-6, at 8-6). The Company's fisheries mitigation measures include the following actions:

- Design the sea-to-shore transition to reduce the dredging footprint and effects to benthic organisms (Exh. SW-6, at 8-11);
- Incorporate use of HDD at landfall locations, as appropriate, to minimize spatial and temporal effects to benthic organisms including finfish and invertebrates (Exh. SW-6, at 8-11);
- Burial of the export cable to minimize risk of damage to the cable and prevent disruption to the fishing industry (Exh. SW-1, at 4-26);
- Coordinate with CZM, DMF, and other relevant state agencies, and federal agencies, including USFWS and NMFS, to identify appropriate mitigation measures, if required (Exh. SW-6, at 8-11);
- Select lower impact construction methods, where possible (Exh. SW-6, at 8-11);
- Engineer and layout the route position to micro-route cables within the OECC to avoid sensitive habitats, where possible (Exh. SW-6, at 8-11);
- Coordinate with Massachusetts DMF, Rhode Island DMF and NMFS regarding a TOY seasonal window for installation of the offshore export cables within Massachusetts and Rhode Island state waters (i.e., avoiding marine construction between January 15 to May 31 to avoid direct impact on spawning winter flounder (Exhs. SW-11, at 5-2; EFSB-MC-7));
- Work with the Massachusetts Lobstermen's Association, the New Bedford Port Authority, and the Commercial Fisheries Center of Rhode Island and a SCW Fisheries Liaison Officer to collaborate on initiatives that mitigate for impacts to fisheries, provide information to SCW from the fishing industry, and disseminate information from the Company to the fishing industry (Exh. SW-1, at 4-34);
- Provide the fishing community with advance notice, prior to USCG Local Notices to Mariners, describing the location, extent, and duration of construction activities (Exh. SW-6, at 6-6);

- Work with fishermen to: (1) retrieve and relocate their gear caught on Project equipment; or (2) work through a lost gear claims process to determine if reimbursement is warranted (Exh. SW-6, at 6-6);

- Bury cables deep enough, where practicable, to allow for benthic recolonization after construction is complete (Exh. SW-6, at 8-11); and

- Install cables in a bundled configuration, where practicable, to reduce installation impact area and post-installation occupied area (Exh. SW-6, at 8-11).

Additionally, the Company is working with WHOI to estimate the economic exposure of Massachusetts fisheries (Company Brief at 139). The Company has presented its findings to CZM staff and the Massachusetts Fisheries Working Group (Exh. SW-14, at 6-7). In accordance with federal consistency review guidelines, SCW plans to establish direct and indirect fisheries compensation funds with Massachusetts through CZM and the Massachusetts Fisheries Working Group, based on the economic analysis (Company Brief at 139; Exh. SW-14, at 6-7). On May 31, 2024, SCW and CZM entered into an MOA regarding the Massachusetts Fisheries Compensatory Mitigation Fund and the Contribution to the Massachusetts Fisheries Innovation Fund (Exh. EFSB-N-4(S4) at 18).

(C) Avian Resources

SCW indicated that the Lee River and Taunton River Routes, including the landing site, Onshore Cable route, and Converter Station are not located within areas mapped as Priority and Estimated Habitat for state-listed avian (or other) species (Exh. SW-1, at 4-32; SW-6, at 8-2; SW-11, at 5-1; EFSB-F-1, at 1). However, comments from NHESP noted that Project components located outside Massachusetts state waters exist within migratory habitats and foraging areas for state-listed species, including the roseate, common and least terns, and piping plover (Exh. EFSB-F-1, at 1). These species and their habitats are protected pursuant to the Massachusetts Endangered Species Act and its implementing regulations, while rare wetland wildlife habitat is protected pursuant to Massachusetts Wetlands Protection Act ("WPA") (Exh. EFSB-F-1, at 1).

The Company will continue coordinating with NHESP, RIDEM and USFWS to identify and implement appropriate mitigation measures for avian impacts (Exh. SW-6, at 8-5; SW-14, at 9-27). SCW stated that avian impacts and mitigation would also be addressed as a component of BOEM's federal permitting process (Exhs. SW-6, at 8-4; SW-14, at 6-6). SCW filed with BOEM a Draft Post-Construction Avian and Bat Monitoring Framework, pertaining to the offshore Project components within the federally regulated Lease Area (Exh. SW-11, at 5-1). SCW stated that it anticipated that avian impacts and mitigation would be addressed as a component of BOEM's federal permitting process (Exhs. SW-6, at 8-4; SW-14, at 6-6).

According to SCW, certain marine bird species may be disturbed by vessel-based construction activities (Exh. SW-1, at 4-33). The Company described the potential risk of avian collisions with lighted vessels during marine construction in low-visibility conditions (Exh. SW-6, at 8-3). The Company explained that most avian species (excluding gulls) are not likely to be attracted to vessels during fair weather conditions (Exh. SW-1, at 4-33). The Company will also use down-shielding of lighting to the extent practicable to limit bird attraction and disorientation (Exhs. SW-1, at 4-33; EFSB-F-1, at 1). SCW argues that because of the limited exposure to construction vessels, and the short-term duration of construction and behavioral limitation of proximity during fair weather conditions, it expects no population level effects from construction on marine and coastal birds (Exh. SW-1, at 4-33).

The Company asserts that temporary displacement from forage areas associated with construction activities would be of short duration, with no long-term impacts (Exh. SW-1, at 4-33). Further, the Company asserts that the temporary increases in turbidity caused by Offshore Export Cable installation would be unlikely to adversely affect foraging behavior or reduce feeding grounds for terns or other birds (Exh. SW-6, at 8-4).

(D) Protected Marine Species and SSU Habitats

SCW noted that marine mammals seasonally present within Mount Hope Bay include the harbor seal, gray seal, harp seal, and hooded seal (Exh. SW-1, at 4-34). However, the Company asserts that the occurrence of marine mammals within the Project area in Massachusetts waters is low (Exh. SW-6, at 8-19). Therefore, the potential exposure to vessels is very low (Exh. SW-1,

at 4-35). In the vicinity of the OECC during construction, marine mammal species could be exposed to temporary stressors such as noise, increased vessel traffic, and equipment in the water (Exh. SW-1, at 4-34). The Company stated that ship engines and vessel hulls, such as cable installation vessels, emit continuous sound which overlaps with the hearing frequency range for all marine mammals (Exh. SW-1, at 4-34). The Company noted that researchers report a change in the distribution and behavior of marine mammals in areas experiencing increased vessel traffic, likely due to increases in ambient noise from concentrated vessel activity (Exh. SW-1, at 4-35). The Company maintains that possible effects from vessel noise are variable and would be contingent on species and other factors such as the marine mammal activity, proximity to vessels, and habituation to vessel traffic noise and vessel movements (Exh. SW-1, at 4-35).

The Company contends that there is no North Atlantic right whale habitat in the OECC within Massachusetts state waters; rather, the offshore OECC travels through North Atlantic right whale core habitat in federal waters (Company Brief at 135; Exh. SW-1, at 4-32). SCW's Marine Mammal and Sea Turtle Monitoring and Mitigation Plan outlines measures that would be undertaken to protect North Atlantic right whales, including visual and acoustic monitoring, clearance zones, and use of additional advanced technologies during periods of night work or other low visibility conditions (Company Brief at 135; Exh. SW-1, at 4-33).

The Company would implement Project mitigation measures designed to reduce or eliminate vessel strikes with protected marine species, including:

- Protected Species Observers ("PSO") to monitor for whales, other marine mammals, and sea turtles on active construction vessels;
- Shut-down procedures when protected species are detected in their respective clearance zones in the Project area;
- Lower impact construction methods, where possible;
- Installation of Offshore Export Cables in a bundled configuration where practicable, to reduce installation impact area and post-installation occupied area;
- Measures identified in the Marine Mammal and Sea Turtle Monitoring and Mitigation Plan and the Incidental Take Authorization, to be authorized by NMFS; and

- Continued consultations with the BOEM, NMFS, and relevant state agencies to identify appropriate mitigation measures

(Company Brief at 140-141, citing Exh. SW-6, at 8-19 to 8-20).

Further, the Company noted that both OECC routes in Massachusetts state waters are located outside of SSU mapped Estimated or Priority Habitat, and no work would occur within Priority or Estimated Habitat of rare species (Exh. SW-1, at 5-5 to 5-6). SCW stated that it would continue consultations with the NHESP and the Massachusetts DMF to ensure that impacts to rare marine species located within the OECC are avoided or mitigated to the greatest extent practicable (Exh. SW-1, at 4-32).

iv. Marine Archaeological and Historical Resources

Based on a geohazard marine survey completed by SCW within Mount Hope Bay, the Company identified one potential historic maritime site and two interpreted submerged paleo-landforms (Exhs. SW-6, at 11-3; SW-1, at 4-26 and 4-33). [42] These identified potential "avoidance areas" overlap between the Lee River and Taunton River Routes, so the routes are equivalent on the basis of shipwrecks and paleo-landforms (Exh. SW-1, at 4-26). SCW will continue its consultations with BOEM, BUAR and MHC to develop appropriate avoidance and mitigation measures (Exh. SW-1, at 4-33).

SCW's Qualified Marine Archaeologist established avoidance areas/buffers zones around each submerged cultural resource and Ancient Submerged Landforms (Exh. EFSB-RS-12, at 1). SCW represented that it would maintain avoidance buffers around identified wrecks and obstructions and mark identified paleo landscapes for avoidance, as appropriate (Exhs. SW-6, Att. N1 and N2; SW-11, at 8-9). If avoidance is not practicable, SCW would conduct additional surveys within areas identified as potentially sensitive for presence of previously unknown historic or archaeological resources (Exh. SW-6, at 11-4). The Company's mitigation plan also outlines

---

[42] Paleo-landforms are natural or anthropogenic land features that may preserve evidence of human occupation since approximately 13,000 years before the present (Exh. SW-1, at 4-26, 4-33).

the necessary steps to be followed which are aimed at minimizing any adverse impacts (Exh. EFSB-RS-12, at 1). Additionally, the Company stated that it would implement an Unanticipated Discovery Plan that would include stop-work and notification procedures to be followed if a cultural resource is encountered during installation (Exhs. SW-6, Att. N1 and N2; SW-11, at 8-9).

v. Vessel Impacts

The impacts described in this section are similar for both the Lee River and Taunton River Routes.

(A) Vessel Traffic

The Project would generate vessel traffic to and from the ports during Project construction, operation and maintenance ("O&M"), and decommissioning (Exh. SW-14, at 3-8). The Company estimated that construction would result in, on average, between 15 and 35 vessels operating at any given time in the Lease Area and Offshore Export Cable route (Exhs. SW-14, at 3-8). Vessel traffic generated by the Project could result in temporary, periodic congestion within and near ports, leading to potential delays and increased risk of allision, collision, and spills, which would result in economic costs for vessel owners (Exh. SW-14, at 3-8). However, in its DEIS, BOEM concluded that potential delays from increased congestion and increased risk of damage from collisions would have "short-term, and minor impacts during construction and negligible impacts during operations" (Exhs. SW-8, at 3.6.3-18; SW-14, at 3-8).

As described above, during construction, commercial and recreational fishermen may be temporarily excluded from actively fishing within or transiting through the localized construction areas and safety zones around cable-lay vessels and barges (Exhs. SW-1 at 4-34; EFSB-T-13, at 1; EFSB-T-14, at 1). According to the Company, similar temporary restrictions may apply to other vessels transiting through construction areas and safety zones during the construction phase of the Project (Exh. EFSB-T-12, at 1). According to Vessel Automatic Identification System data, vessel traffic in Mount Hope Bay is generally highest between May and October (Exh. EFSB-T-12). The Company indicated that it will work with Massachusetts DMF and CZM regarding offshore construction TOY restrictions (Exhs. SW-14, at 6-8; EFSB-MC-7). Post-construction, the

Company maintains that there would be no regular Project-related impacts to marine navigation (Exh. SW-1 at 4-35).

SCW would undertake several measures to minimize and mitigate temporary construction-related impacts to navigation and fishing activities near its vessels, including:

- Short duration of cable laying in state waters;
- Coordination with commercial and recreational fishermen and the DMF to provide advance notice of the pre-lay grapnel run/gear clearance plan;
- Coordination with fishermen and the USCG ahead of marine construction operations to review operational planning and schedules and to identify areas where fishing operations may be temporarily displaced; and
- Employment of strategies including broad communication strategies (i.e., USCG Local Notice to Mariners) and targeted, direct outreach to coordinate construction and fishing activities to minimize risks to the commercial and recreational fishing industries, deployed fishing gear, and other mariners (Exh. SW-6 at 6-6 to 6-7).

(B) Vessel Air Emissions

For the Offshore Export Cable construction, SCW contends that air emissions would be primarily from internal combustion engines, including marine diesel engines, diesel engines on construction equipment, and diesel generators (Exhs. SW-1, at 5-23; SW-6, at 12-11, 13-11). The Company asserts that the Project does not trigger state air permitting requirements (RR-EFSB-8, at 3). The Company stated that marine engines and generators used would be certified by the manufacturer to comply with applicable marine engine emission standards for nitrogen oxides (NOx), carbon dioxide (CO_2), volatile organic compounds (VOCs), and PM (Exh. SW-1, at 5-24). The Company also represented that sulfur dioxide (SO_2) and PM emissions would be mitigated with the use of ultra low-sulfur fuels in compliance with the air pollution requirements established by the International Maritime Organization and EPA emission standards for marine compression-ignition engines, and EPA's Outer Continental Shelf ("OCS") Air Regulations (40 CFR Part 55) (Exhs. SW-1, at 5-23 to 5-24; EFSB-A-1). The Company noted that the specific vessels used for the Project would be further refined with BOEM (Exh. SW-1, at 5-23).

The Company indicated that vessels would operate within one-half mile of Fall River, and that this distance will provide a sufficient buffer to avoid impacts to neighborhoods in Fall River (Exh. SW-12, at 11). Supplemental information confirms that no vessels will be docked in Fall River or otherwise travel close to shore in Fall River (Exh. SW-12, at 11). SCW has executed a lease option with the Massachusetts Clean Energy Center ("MassCEC") for the use of the New Bedford Marine Commerce Terminal ("NBCMT") as a staging and deployment base during construction (Exh. EFSB-N-4(S1); Company Brief at 28).

SCW provided an estimation of net avoided emissions during the Project construction and operational phases, shown in Table 9 below, including on- and offshore Project components (Exh. SW-1 at 1-14). For modeling vessel emissions, the Company assumed vessels operating 24 hours per day for the maximum predicted time set forth in the construction schedule (Exh. SW-11, at 2-6). SCW maintains that the Project is designed to yield significant environmental benefits (Exh. SW-6, at 5-6). The Company explained that the Project would eliminate over two million metric tons of GHG emissions annually, equivalent to more than five million miles driven each year (average passenger vehicle) (Exh. SW-6, at 5-7).

Table 9. Estimation of Avoided Net Emissions from SCW Project

Pollutant	Carbon Dioxide (CO_2)	Nitrogen Oxides (NO_x)	Sulfur Dioxide (SO_2)
Annual Avoided Emissions in New England (tons/year)	2,358,509	945	1,235
Avoided Emissions over Project Lifespan in New England (tons)	77,830,809	31,176	40,740

Source: Exh. SW-1, at 1-14.

(C) Vessel Refueling

SCW stated that smaller vessels would refuel in port, while larger installation vessels may require offshore refueling (Exh. SW-1, at 4-32). The Company plans to use a Jones Act-compliant bunker barge or vessel for offshore refueling (Exh. SW-1, at 4-32). While in certain cases it may be necessary to relocate the installation vessel to a sheltered location for refueling, the Company indicated that offshore locations in Mount Hope Bay generally are sheltered and proximal to port

facilities (Exh. SW-1, at 4-32). SCW will follow all federal, state, and local regulations pertaining to chemical and oil transfer, disposal, and accidental releases (Exh. SW-1, at 4-32).

vi. Accidental Spills and Emergency Response

The Company represented that BMPs for vessel refueling and equipment servicing would be in place during construction and decommissioning (Exh. SW-1, at 4-32). SCW has prepared an Emergency Response Plan ("ERP") to avoid and minimize the risk of impacting the water column and benthic habitats from accidental releases of oil or other hazardous materials (Exh. SW-6, at 6-8). The Company will include its Spill Prevention, Control and Countermeasures ("SPCC") Plan in a construction management plan ("CMP") and a spill response plan in its ERP (Exhs. EFSB-W-20; and SW-6, at 6-8, 6-13, 9-3, 13-21, 14-14). The Company stated that it expects to assemble a CMP and complete its ERP(s) as part of the Project's overall safety management system closer to the start of the construction phase to incorporate and reflect current site conditions and the latest engineering design plans (Exh. EFSB-W-20). The construction contractor(s) working on the Project will be required to submit individual emergency response plans for offshore and onshore activities, prior to construction, detailing their methods for containment of oil and hazardous materials including spill response, containment, control, clean-up and reporting to applicable agencies, as appropriate (Exh. EFSB-W-20).

The Company maintains that Project vessels would follow USCG requirements regarding bilge and ballast water, and all Project vessels would comply with regulatory requirements related to the prevention and control of discharges and accidental spills (Exh. SW-6, Att. M; SW-6, at 6-8).

The Company's contractors would be required to comply with all applicable regulations for the prevention and control of accidental spills, conduct all activities in a manner that would prevent a release to the environment, and would be responsible for implementing oil spill prevention and response procedures for all equipment (Exh. SW-6, at 6-8). The Company indicated that vessels, barges and equipment are to arrive free of leaks and all hoses and other oil or hydraulic components are to be inspected for wear and leaks (Exh. SW-6, at 6-8). The Company also noted that spill control materials would be located on-site (Exh. SW-6, at 6-8).

vii. Magnetic Fields

Electric and Magnetic Fields ("EMF") are created anywhere there is a flow of electricity (current), and their strength diminishes within a short distance from the source. The strength of electric fields depends on voltage, which is the pressure behind the flow of electricity (Exh. SW-1, at 5-24). Electric fields are not an issue for the proposed cables because the electric fields arising from the voltage will be shielded by the cable materials (Exh. SW-1, at 5-24).

In contrast to the time-varying EMF generated by 60 Hertz ("Hz") alternating current ("AC") power frequency transmission lines, steady (i.e., static) MFs with a frequency of 0 Hz are produced by HVDC transmission lines such as the Offshore Export Cables (Exh. EFSB-MF-2, at 1). This lack of time variation is the key difference between the magnetic fields from HVDC transmission lines versus the magnetic fields from HVAC transmission lines, as they are both still expressed as magnetic flux density in units of gauss (G) or milligauss (mG), have field strengths that are proportional to the size of the current in the cables, and have field strengths that similarly decrease with distance from the conductors (Exh. EFSB-MF-2, at 1).

There are a number of common natural and anthropogenic sources of static EMFs, including, most notably, the earth's geomagnetic field (Exh. EFSB-MF-2, at 1). The earth's static geomagnetic field, which is associated with direct current flow in the earth's liquid core as well as metallic crustal elements, is the largest source of DC MFs for both marine and terrestrial environments (Exh. EFSB-MF-2, at 1). The intensity of the background geomagnetic field at the earth's surface varies between about 300 mG near the equator to the highest values of ~700 mG near the south and north poles (Exh. EFSB-MF-2, at 1). Along the southern New England coast, the earth's MF has a magnitude of about 515 to 520 mG (Exh. EFSB-MF-2, at 1).

The Company modeled maximum current MF for three configurations of the Offshore Export Cables, including the typical installation case where the two HVDC conductors are bundled together as well as two atypical, "worst-case" installation scenarios (Exh. SW-1, at 5-25). Only for the two atypical installation cases (cases 2 and 3 in Table 10) would MF levels above the Offshore Export Cables appreciably differ from the earth's steady geomagnetic field, and only within short distances from the cables (Exh. SW-1, at 5-25).

Table 10. Submarine Magnetic Field Study Results.

Case		Magnetic Field [a] (milligauss [b])			
		Max	10 ft	25 ft	50 ft
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]	3785	55.7	9.0	2.2
3	HVDC offshore, non-bundled, 164 ft cable separation, 6.6 ft burial depth. [c]	1909	1120	579	360

[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.

Source: Exh. SW-1, at 5-25.

However, while cable burial may provide good protection from MF, it is understood that (1) storms (hurricanes and nor'easters) may change the depth of burial, and (2) up to 15 percent of cables may be laid on the seafloor and require secondary protection (Exh. SW-14, DMF Letter at 2).

The Company maintains that no regulatory thresholds or guidelines for allowable MF levels in marine environments have been established for either HVDC or HVAC transmission (Exhs. SW-1, at 5-25; SW-6, at 8-14). SCW further asserts that currently available evidence from recent governmental reports and expert state-of-the-science reviews do not provide support for concluding there would be population-level harms to marine species from MF associated with HVDC submarine transmission (Exh. SW-1, at 5-25). For example, the Company cites a 2019 BOEM report[43] summarizing what is currently known about potential EMF impacts in coastal marine environments, with a specific focus on fish species of commercial or recreational

---

43 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 (Exh. SW-2, Appendix K, at 7).

importance in southern New England (Exh. SW-2, Appendix K, at 6). Based on its review of the state of the knowledge regarding potential EMF-related impacts on marine life, 2019 BOEM study concluded:

> "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" (Exh. SW-2, Appendix K, at 6).

This conclusion is based on the growing number of recent research studies published by US and European researchers, as well as information available from fish surveys conducted in Europe where both AC and DC submarine export cables have been operated in coastal environments for more than a decade (Exh. SW-2, Appendix K, at 6).

The Company maintains that both the bundling of the conductors, as well as their burial beneath the sea floor, would serve to reduce MF strength at the sea floor as well as within the water column (Exh. EFSB-MF-7, at 1). In addition, the use of HDD to bring the offshore cables ashore would result in deeper cable burial depths at the landfall location and reduced magnetic field strengths at the landfall (Exhs. EFSB-MF-7, at 1; EFSB-MF-8, at 1). The peak modeled magnetic field for the HDD landfall installation case at a height of one meter above the ground surface is 261 mG (Exh. EFSB-MF-8, at 1). This level is less than the corresponding peak modeled magnetic field level of 433 mG for an onshore single-circuit HVDC underground duct bank installation case and comparable to the corresponding peak modeled magnetic field levels of 252 and 259 mG for the two onshore double-circuit HVDC underground duct bank installation cases that were modeled (Exh. EFSB-MF-8, at 1). In its DEIS Appendix G titled "Mitigation and Monitoring," BOEM notes that employing the industry standard for cable burial and cable shielding are best practices to minimize the potential effects of EMF to marine organisms (Exh. SW-8, app. G at G-13, G-14, G-20, G-30).

b. Additional Landfall Impacts

i. Noise

The Company stated that HDD drilling could require two to four months of mostly continuous drilling, including at night (Exhs. EFSB-LF-2; SW-14, at 3-13). SCW also stated that the operation of HDD equipment could produce higher sound levels than other anticipated construction activities (RR-EFSB-5(1), at 1). The Company represented that the primary sources of noise for the HDD activities would be the drilling rig, generators, and pumps (RR-EFSB-5, at 1 to 2, Attachment). Nevertheless, the Company asserts that the Project complies with the applicable noise ordinances and otherwise minimizes noise (RR-EFSB-5, at 1).

To address these construction-related noise sources, the Company stated that it would comply with the Somerset Noise Control Bylaw the MassDEP Air Quality Noise Regulations at 310 CMR 7.10 (1).[44] and BMPs to mitigate noise (RR-EFSB-5, at 1; RR-EFSB-5(1), at 9-12; Company Brief at 116; Town Brief at 4).

The Company stated that it anticipates certain construction-related activities (e.g., HDD) would be continuous efforts that occur throughout the day and night (Exh. SW-6, at 13-18). The Company maintains that continuous HDD activity during the up to four-month drilling period would facilitate faster completion of the drilling and, therefore, shorter duration of the HDD impacts on residents near Brayton Point (Company Brief at 166 n.31).

The Company explained that its noise modeling reflected the use of "critical grade" silencers on all HDD construction equipment exhaust as noise mitigation (RR-EFSB-5(1), at 2; Exh. SW-14, Table 8-1, at 8-13).[45] According to SCW, the two candidate landfall routes were predicted to produce similar maximum estimated noise levels (RR-EFSB-5, at 1). The Company represented that audible noise produced by the HDD construction at the Lee River location is

---

44 MassDEP Air Quality Regulations at 310 CMR 7.10, subsections (1) and (2), pertain to the use of sound-emitting equipment in a manner so as to reduce unnecessary noise. (Exh. SW-11, at 7-4).

45 The Company maintains that a critical grade silencer can reduce noise from construction equipment by up to approximately 32 dBA (RR-EFSB-5(1)).

expected to be 58 dBA[46] or less at the nearest residences in Swansea, MA, and less than 50 dBA in Somerset, MA (RR-EFSB-5, at 1). The audible noise produced by the HDD construction at the alternate Taunton River location is expected to be 58 dBA or less at the nearest residences in Somerset, MA, and less than 50 dBA in Swansea, MA (RR-EFSB-5, at 1).[47]

The Company stated that it intends to coordinate and consult with Towns of Somerset and Swansea to minimize construction noise and vibrations from HDD through the following strategies (Exh. SW-14, at 8-12):

- The Company would require the construction contractor to operate construction equipment such that construction-related noise levels comply with applicable sections of the MassDEP Air Quality Regulations at 310 CMR 7.10 (Exhs. SW-11 at 7-3; SOM-10; SOM-8).

- The Company would minimize the amount of work conducted outside of typical construction hours. The Company would develop construction hours in accordance with the Somerset noise Control Bylaw and municipal regulated construction hours (to the extent practicable), and in coordination with town (Exh. SW-11 at 7-3).

- The Company would use critical grade silencers for noise reduction on construction equipment used during HDD activities and otherwise as appropriate, thereby reducing noise levels on construction equipment by up to 32 dBA (RR-EFSB-5; RR-EFSB-5(1) - see Updated Construction Noise Report, at 16).

- The Company would maintain construction equipment and use newer models to the extent practicable to provide the quietest performance (Exh. SW-11 at 7-3).

- The Company would use enclosures, where practicable, on continuously operating equipment such as compressors and generators (Exh. SW-11 at 7-3).

- The Company would turn off construction equipment when not in use and minimize idling times (Exh. SW-11 at 7-3).

---

46 Noise measurements taken are A-weighted, an international standard weighting network built into sound level meters that is designed to approximate the hearing frequency range of most people. The A-weighted decibel results are presented in units of dBA (RR-EFSB-5(1), at 5).

47 SCW indicated that ranges of 50 to 60 dBA are similar to noise in a typical business office (RR-EFSB-5, at 1).

- The Company would mitigate the impact of noisy equipment on sensitive locations by using temporary barriers or buffering distances as practicable (Exhs. SW-11 at 7-3 to 7-4; SOM-8, at 3).

- The Company would require locating continuous noise sources such as generators and compressors away from residential properties and have enclosed mufflers. SCW would also use low-noise generators to reduce noise impacts (Exh. SW-11 at 7-4).

ii. Wetlands Impacts

The Company asserts that the Lee River and Taunton River Routes are equivalent with respect to the low impacts to these coastal resource areas (Exh. SW-1, at 5-3). An on-site wetland delineation performed by the Company in December 2021, identified coastal features such as barrier beaches, coastal dunes, coastal banks, wetland resource areas, bordering vegetated wetland, rocky shoreline, and a salt marsh (Exh. SW-1, at 5-3). The field investigation also identified an inland water resource, the Lower Supply Basin, regulated pursuant to the WPA (Exh. SW-1, at 5-3). Landfall using HDD technology would advance cables beneath shoreline features and coastal wetland resources areas, including a riprap armored coastal bank (Exh. SW-14, at 1-3). According to the Company, landfall would occur within previously disturbed areas at Brayton Point that are adjacent to and within the existing perimeter road (Exh. SW-14, at 1-3). For the Lee River Route, the Company maintained that the recently modified HDD landfall location moves the onshore HDD construction area and associated TJBs outside the boundaries of the LSCSF, avoiding onshore construction and installation of facilities within LSCSF (Exh. EFSB-CM-1(S2) at 3). In addition, the Company indicated that the modified HDD for the Lee River Route moves the onshore HDD construction area outside the boundaries of historic tidelands jurisdiction and reduces the impacts within the 200-foot Riverfront Area ("RA") to 0.3 acres from the prior estimate of approximately 0.5 acres (Exh. SW-14, at 1-2 to 1-3). The Company indicated that the Taunton River Route onshore HDD construction area slightly encroaches upon LSCSF and would result in approximately 0.005 acres (236 square feet) of temporary impact to LSCSF (Exh. SW-14, at 1-2 to 1-3). For both routes, the Company noted that there are no above-ground structures constructed within LSCSF, and, therefore, no permanent impacts to storm drainage or flood control (Exh. SW-6, at 6-13).

The Chapter 91 areas of geographical jurisdiction over the Project include the following: (1) Flowed Tidelands – e xtends from the mean high-water line seaward three miles, to the state limit of territorial jurisdiction; and (2) Filled Tidelands - Inside Designated Port Areas, the historic mean high-water shoreline (i.e., former submerged land, all filled areas) (Exh. SW-6, at 7-1). Accordingly, the Company obtained a draft Chapter 91 license for portions of the HDD landfall operations and construction of the underground duct bank and manhole system partially located within areas designated as historically filled tidelands located on the Lee River side of Brayton Point and Offshore Export Cable installations located within jurisdictional flowed tidelands (Exh. SW-6, at 7-1). The Company maintained that Project activities that occur within the 200-foot RA of the Lee River are largely exempt from the RA performance standards under the WPA regulations at 310 CMR 10.58(6)(i), specifically, due to a Chapter 91 Exemption, which exempts structures and activities subject to a Chapter 91 waterways license or permit, or authorized prior to 1973 by a special act, provided the structure or activity is subject to jurisdiction and obtains a license, permit, or authorization under 310 CMR 9.00: Waterways (310 CMR 10.58(6)) (Exh. SW-6, at 6-3 and 6-14). On September 10, 2024, MassDEP issued a Draft Chapter 91 Waterways License (Exh. EFSB-N-4(S5)(3)).

However, the Company indicated that it would address that portion of the Project extending into the RA and not subject to a Chapter 91 waterways license or permit and, therefore, not exempt from the RA provisions (Exh. SW-11, at 9-19). SCW filed an NOI in accordance with the Massachusetts WPA and its regulations, and in accordance with the "limited project provisions" at 310 CMR 10.24(7)(a) & (b) with the Somerset and Swansea Conservation Commissions and MassDEP for applicable regulated wetland resource areas within the Project area (Exh. SW-11, at 9-19). The WPA NOIs included information necessary to determine the Project's compliance with the performance standards to each of the resource areas affected. (Exh. SW-11, at 9-19). The Somerset Conservation Commission approved the Project's NOI on August 29, 2024, and issued an Order of Conditions on September 9, 2024 (Exh. EFSB-N-4(S5)(1)). The Swansea Conservation Commission approved the Project's NOI on August 12, 2024, and issued an Order of Conditions on August 27, 2024 (Exh. EFSB-N-4(S5)(2)).

The Company related that the WPA RA regulations at 310 CMR 10.58(5) include provisions for the "Redevelopment Within Previously Developed Riverfront Areas; Restoration and Mitigation," stating that the issuing authority (i.e., local conservation commission, MassDEP) may allow work to redevelop a previously developed RA, provided the work improves existing conditions (Exh. SW-11, at 4-10). SCW asserts that it proposes to improve existing conditions by reusing approximately 0.5 acres of degraded, previously developed RA to install underground electric transmission infrastructure thus enabling the delivery of 1,200 MW of renewable energy (Exh. SW-11, at 4-10). SCW indicated that it would restore areas of disturbance to their original or better condition after construction (Exh. SW-11, at 4-14). In addition, per MassDEP's ENF comments, the Project would be reviewed under Section 401 Water Quality Certification requirements (Exh. SW-11, at 9-19).

iii. Public Access

The Company would require a temporary, short-term restriction on access to the waterfront within the immediate construction work areas and HDD path for safety reasons (Exh. SW-1, at 4-26). However, the Company asserts that there would be no long-term impacts to immediate waterfront areas, public access, or vessel related activities along the waterfront area (Exh. SW-1, at 4-26), particularly for the Lee River Route, as the Lee River has few recreational uses (Exh. SW-1, at 4-27). The Company stated that the Lee River Route interferes less with public access than the Taunton River Route as it avoids USACE's dredged channels, an active wharf, and the boat ramp at Brayton Point (Exh. SW-1, at 4-26). The Taunton River Route passes by Brayton Point Beach and a walking area adjacent to residences (Exh. SW-1, at 4-27).

iv. Visual/Light Impacts

SCW indicated that during HDD operations there would be two primary sources of visual lighting impacts: (1) from vessels offshore engaged in the HDD activities; and (2) from any lighting set up to support the HDD activity onshore (Exhs. SW-6, at 1-53 to 1-56; SW-11, at 7-8; SW-14, at 3-17). Navigation lighting will comply with the USCG requirements for all navigation lights aboard vessels (Exhs. SW-11, at 7-8; SW-14, at 3-17). Task lighting during construction

would be used only as needed, and construction lighting would be equipped with light shields to prevent light from encroaching into adjacent areas (Exhs. SW-11, at 7-8; SW-14, at 3-17). Lighting of offshore vessels and navigation lighting would comply with USCG requirements (Exh. SW-14, at 3-17). The Company maintains that there would be no permanent visual impacts at the landfall site, as all transmission facilities would be located underground (Exh. SW-1, at 5-15).

c. Positions of the Parties

i. Town of Somerset

The Town of Somerset states that it is generally in support of the Project (Town Brief at 1); however, the Town requests that the Siting Board approve the Project subject to conditions, which address a range of integrated environmental and public health marine and upland impact issues (Town Brief at 1-2). These proposed conditions, additional zoning exemption related conditions, as well as the Company's responses are discussed in Section VIII. The conditions proposed by the Town address concerns voiced by town residents who spoke on behalf of the Town in the proceeding (i.e., Dr. Paul Healy, Kathleen Souza, Patrick McDonald, Nicole McDonald and Nancy Thomas) (Town Brief at 2-7; Exh. SW-SOM-1). During their pre-filed direct testimonies, the residents assert that the Town needed independent third-party experts to analyze Project impacts, noise, hazardous materials, traffic, stormwater and wastewater runoff, air quality, and related Project issues and concerns (Exhs. TOS-3; TOS-4; TOS-5; TOS-6; TOS-7).

For example, Dr. Healy stated in his testimony that Project impacts on the environment and the health of the residents of Somerset would be more fully informed by using a qualified industrial hygienist and licensed site professional with experience working at a superfund cleanup site (Exh. TOS-3, at 4). Dr. Healy alleges that independent professional consultants are crucial to adequately assess the hazardous waste, noise, and water contamination issues at the Project site, and to provide recommendations for mitigating exposure to workers, the environment, and residents in the local area (Exh. TOS-3, at 4). Dr. Healy also recommended that SCW fund qualified town site professionals to oversee all construction and pre-construction activities which involve work in or around documented contaminated areas on site (Exh. TOS-3, at 4). Dr. Healy also recommended that SCW fully cooperate with the Town's consultants and be responsive to all

reasonable conditions and recommendations of the Town's consultants (Exh. TOS-3, at 4). Patrick McDonald stated that an independent detailed analysis regarding the effects of the continuous flow of 1,200 MW and up to 3,600 MW coming into Brayton Point should be made available to the public (Exh. TOS-5, at 3).

ii. Company Response

SCW asserts that it has made numerous commitments regarding minimizing environmental impacts (Company Reply Brief at 4). According to the Company, many of those commitments stated by SCW in its Brief are the same as those proposed by the Town in its Brief (Company Reply Brief at 4). The Company asserts that this demonstrates that it has engaged with the Town regarding complying with the specified conditions (Company Reply Brief at 4). Where there are divergences between the Town's conditions and the Company's commitments, the Company asserts that it is confident that those divergences could be resolved in a mutually acceptable agreement (Company Reply Brief at 4). The Town's conditions, additional zoning exemption related conditions, as well as the Company's responses are addressed in section VIII.D of this Decision.

d. Analysis and Findings on Marine and Landfall Environmental Impacts

For the Lee River and Taunton River Routes, the Company proposes to install the same equipment using the same construction methods. In many cases relative marine and shoreline resource impacts along the Lee River Route (2.1 miles in length, offshore route in state waters) are proportionally less than similar resource impacts along the Taunton River Route (2.4 miles long, offshore route in state waters) since the Lee River Route is 0.3 miles shorter, and, therefore, impacts fewer resources as indicated in a number of sections below. Therefore, much of the difference between the two routes is attributable to the difference in lengths. In fact, both routes in state waters are the same but for the divergence of the routes just south of Brayton Point. Analysis and findings regarding both routes in the sections below also include each route's Noticed Variation.

i. Marine Resources

(A) Seafloor

The record shows that impacts to the seafloor (i.e., LUO, and LCS) from the Project would be driven by site preparation, cable burial by jet plowing, and HDD pit installation in the subtidal nearshore environment. Given the 0.3 miles longer routing of the Taunton River Route relative to the Lee River Route, the former would require additional cable burial and, therefore, additional seafloor disruption.

The Company would mitigate seafloor Project impacts in its design through routing of the cable within the OECC to avoid sensitive resources, proposing a jet-plow cable burial strategy, and deep cable burial to minimize impacts to the benthic biological community.

The Board finds that the Lee River Route and its Noticed Variation is preferable to the Taunton River Route (and its Noticed Variation) given the shorter routing of the Lee River Route. With mitigation measures proposed by the Company, the Siting Board finds that seafloor impacts related to the construction of the Lee River Route would be minimized.

(B) Marine Water Quality

The record shows that installation of the Offshore Export Cables would have localized and temporary effects on marine water quality, primarily related to trenching and dredging at HDD pits, and jet-plowing. The record shows that the Company's cable burial methods that employ soil fluidization (i.e., jet plowing) would minimize sediment disturbance. The record also shows that the shorter length of the Lee River Route, relative to the Taunton River Route, results in less cable laying, therefore less sediment fluidization and lower overall turbidity and TSS, thereby resulting in reduced water quality impacts.

The Board finds that the Lee River Route is preferable to the Taunton River Route given the reduced impact to marine water quality. The Siting Board finds that the Company has minimized Project marine water quality impacts.

(C) Marine Biological Resources

(1) Shellfish and Benthic Organisms

The record shows that the Company selected lower impact construction methods and would micro-route cables within the OECC to avoid complex habitats to the extent practicable. The Company selected the OECC route to minimize the length of cables needed. The Company also plans to coordinate with municipal shellfish constables regarding shellfish seeding prior to construction activities, and with the NMFS and DMF to determine appropriate levels of monitoring and mitigation measures for any loss of habitat for shellfish due to dredging associated with offshore HDD activities. Potential impacts from installation of the Offshore Export Cables and dredging of HDD pits would be temporary as the seafloor would be restored through natural current/tidal processes. Benthic habitat displacement where cable laying would occur is expected to be temporary, and recolonization and recovery would be expected to begin soon after construction ends. Both route options traverse mapped Shellfish Suitability Areas. The Lee River Route traverses suitable Quahog habitat, while the Taunton River Route crosses suitable habitat for both Quahog and American Oyster.

The Board finds that the Lee River Route is preferable to the Taunton River Route given the reduced impacts to shellfish and benthic organisms. With implementation of mitigation measures proposed by the Company, the Siting Board finds that impacts to shellfish and benthic organisms related to the construction of the Lee River Route would be minimized.

(2) Fish and Fisheries

The record indicates that commercial and recreational fishermen would be temporarily excluded from actively fishing within or transiting through the construction areas and safety zones around vessels during the construction phase of the Project, resulting in a temporary loss of access to fishing grounds. The record shows that there are no proposed further restrictions on navigation, fishing, or the placement of fixed or mobile fishing gear post-construction. The Company anticipates negotiating a seasonal window for installation of the offshore export cables within Massachusetts state waters during the period between January 15 to May 31 to avoid direct impact on spawning winter flounder.

Construction impacts to fish species would be mitigated through cable burial, micro-routing of the OECC, application of HDD in the nearshore area, TOY restrictions (for spawning winter flounder) and state/federal agency coordination regarding fisheries mitigation. Economic impacts to fishermen resulting from fisheries closures and restrictions during Project construction would be mitigated through Company retrieval and relocation of fishing gear; establishment of a lost gear claims reimbursement process; establishment of a fund(s) to compensate fishermen who suffer financial losses due to being displaced; provision of advanced mariner notice to fishermen during construction operations; and fishing community and Company coordination. Despite fish monitoring in the Sakonnet River, the record does not reflect fish monitoring within Massachusetts state waters, leaving in question a thorough understanding of fish community and fishing impacts from the Project over time in Massachusetts state waters.

The Siting Board directs the Company to continue consultations with the Massachusetts DMF on planned inshore fisheries monitoring efforts, including post-construction monitoring, and to report annually on post-construction monitoring efforts to Massachusetts DMF and the Siting Board for the duration of such monitoring activity, as required by the SouthCoast Wind Inshore Fisheries Monitoring Plan.

The Siting Board finds a slight advantage to the Lee River Route given its shorter length. Given the mitigation strategies proposed by the Company, the Siting Board finds that fish and fisheries impacts related to the construction and operation of the Project would be minimized.

(3) Avian Resources

The record shows that neither the Lee River Route nor the Taunton River Route is located within areas mapped as Priority and Estimated Habitat for state-listed avian species. The Siting Board notes that the offshore Project components that will be located outside Massachusetts state waters will exist within migratory habitats and foraging areas for state-listed species including the roseate terns, common terns, least terns, and piping plover. The record shows that marine bird species may be disturbed by vessel-based construction activities, with potential risk of avian collisions with lighted vessels during marine construction in low-visibility conditions.

Nevertheless, because of the short-term duration of construction, no population-level effects are expected for marine and coastal birds.

The record shows that the Company would reduce the potential for collision risk with the use of down-shielding of lighting to the extent practicable. Additionally, SCW filed with BOEM a Draft Post-Construction Avian and Bat Monitoring Framework, and avian impacts and mitigation would be addressed as a component of BOEM's federal permitting process.

The Siting Board finds a slight advantage to the Lee River Route given its shorter length relative to the Taunton River Route, thereby resulting in lower construction impacts. The Siting Board finds that avian impacts related to the construction and operation of the Project would be minimized with the impact mitigation strategies describe herein.

(4) Protected Marine Species and SSU Habitat

The record shows that marine mammals seasonally present (i.e., September – May) within Mount Hope Bay include the harbor seal, gray seal, harp seal, and hooded seal. There is no North Atlantic right whale habitat in the OECC within Massachusetts state waters; rather, the offshore OECC travels through North Atlantic right whale core habitat in federal waters. SCW's Marine Mammal and Sea Turtle Monitoring and Mitigation Plan outlines measures that would be undertaken to protect North Atlantic right whales, including visual and acoustic monitoring, clearance zones, and use of additional advanced technologies during periods of night work or other low visibility conditions. The Company would implement Project mitigation measures designed to reduce or eliminate vessel strikes with protected marine species, including PSOs to monitor for whales, other marine mammals, and sea turtles on active construction vessels.

During construction, these species could be exposed to temporary stressors such as noise, increased vessel traffic, and equipment in the water, which may result in short-term, localized disturbances to individuals. Project construction vessels would be stationary on site for significant periods of time; and large construction vessels would travel to and from the Project Area at low speeds. The Company proposed mitigation measures designed to reduce or eliminate vessel strikes with marine species.

Further, the record shows that both the Lee River and Taunton River Routes in Massachusetts state waters are located outside of mapped SSU habitats and Estimated or Priority Habitat for rare species. SCW will continue consultations with the NHESP and the Massachusetts DMF to ensure that impacts to rare marine species are avoided or mitigated to the greatest extent practicable.

The Siting Board finds a slight advantage to the Lee River Route given its shorter length and corresponding lower construction impacts. Further, the Siting Board finds that the impacts to marine mammals in state waters have been minimized based on the proposed marine mammal mitigation strategies.

(D) Marine Archaeological and Historical Resources

There is one potential historic maritime site and two interpreted submerged paleo-landforms in the OECC area identified as "avoidance areas." The record shows that the potential avoidance areas overlap between the Lee River Route and the Taunton River Route. SCW's Qualified Marine Archaeologist established avoidance areas/buffer zones around each submerged cultural resource and Ancient Submerged Landforms. The Company will conduct additional surveys within areas identified as potentially sensitive for presence of previously unknown historic or archaeological resources, as necessary. SCW will continue its consultations with BOEM, BUAR and MHC to develop appropriate avoidance and mitigation measures. The Company also developed a mitigation plan which outlines the necessary steps to be followed if avoidance is not possible, as well as an Unanticipated Discovery Plan if a cultural resource is encountered during installation.

The Siting Board finds the two routes equivalent with respect to marine archaeological and historical resources. The Siting Board finds that the Project has minimized and mitigated impacts to marine archaeological and historical underwater resources based on the proposed mitigation strategies. The Siting Board expects the Company to continue consultations with BOEM, MBUAR and MHC to develop appropriate avoidance and mitigation measures regarding potential and discovered archaeological and historical resources.

(E) Vessel Impacts

(1) Vessel Traffic

During construction, commercial and recreational fishermen may be temporarily excluded from actively fishing within or transiting through the localized construction areas and safety zones. Post-construction, the record shows that there are no anticipated regular Project-related impacts to marine traffic. SCW would undertake several measures to minimize and mitigate temporary construction-related impacts to navigation and fishing activities near its vessels (see supra VI.C.3.a.v.B).

The Siting Board finds a slight advantage to the Lee River Route given its shorter length relative to the Taunton River Route, resulting in lower duration of construction operations, and less vessel traffic impact in state waters (i.e., avoidance of the Taunton River dredged channels and an active wharf). Greater vessel impacts are anticipated with the Taunton River Route due to increased baseline vessel traffic along that route. With implementation of the Company-proposed mitigation measures, the Siting Board finds that vessel traffic impacts have been minimized.

(2) Vessel Air Emissions

Offshore emissions from the Project would consist of vessel emissions from cable laying activity in Mount Hope Bay. The record indicates that the Project would not trigger state air permitting requirements. The record shows that marine engines and generators used during this Project would be certified by the manufacturer to comply with the applicable marine engine emission standards. The Company would also use of ultra-low-sulfur fuels in compliance with international standards and federal requirements. In addition to these measures, the Siting Board directs the Company to: (i) use shore-to-ship electricity for vessels while they are moored, whenever feasible, (ii) evaluate the feasibility of supplying shore-to-ship electricity to near-shore vessels to minimize or eliminate the need for onboard engines to generate power from fossil fuels, and (iii) submit reports indicating its ability to use shore-to-ship operations 30 days prior to construction, 180 days after construction commencement, and 90 days after construction completion.

The Siting Board finds a slight advantage to the Lee River Route given its shorter length relative to the Taunton River Route and, hence, lower vessel emissions. With the mitigation actions proposed by the Company, the Siting Board finds that vessel emissions impacts have been minimized.

(3) Vessel Refueling

The record shows that smaller vessels would refuel in port, while larger installation vessels may require offshore refueling. The record shows that SCW would follow all federal, state, and local regulations pertaining to chemical and oil transfer, disposal, and accidental releases. The Siting Board finds a slight advantage to the Lee River Route given its shorter length relative to the Taunton River Route, resulting in lower duration of construction vessel operations, and, less vessel refueling. The Siting Board finds that the Company has minimized risk during vessel refueling operations based on its proposed mitigation strategies.

(F) Accidental Spills and Emergency Response

The Company prepared an ERP to avoid and mitigate the risk and impact of accidental releases of oil and other hazardous materials on the water column, benthic habitats, and shorelines. The Company's contractors are required to comply with all applicable regulations for the prevention and control of accidental spills, conduct all activities in a manner that would prevent a release to the environment, and be responsible for implementing oil spill prevention and response procedures for all equipment. The record also shows that vessels, barges and equipment are required to arrive free of leaks; all hoses and other oil or hydraulic components inspected for wear and leaks; and that spill control materials would be located on-site. Project vessels would follow USCG requirements regarding bilge and ballast water and comply with regulatory requirements related to the prevention and control of discharges and accidental spills.

The Siting Board directs the Company to include in its final ERP the following emergency conditions, including: discovery of unanticipated contamination or structures potentially impacting waterways, spills of oil or hazardous materials, damaged offshore and onshore Project components impacting Massachusetts waters or coastal areas, and medical or fire emergencies. At

a minimum the plan shall include the following elements: (i) response actions that will be taken in the event of on-site or off-site spills or releases of oil or hazardous materials or other emergency conditions above; (ii) names and telephone numbers of local, state, and federal agencies/officials to be contacted in the event of an emergency, including a spill of oil or hazardous materials, and the requirement to notify town representatives within two hours of any off-site spill or spill that may migrate off-site or other emergency conditions above; (iii) evacuation procedures for local residences and businesses in case of fire or major vapor release; the procedures shall include, at a minimum, emergency notification procedures and an evacuation receiving area; (iv) fire prevention and firefighting measures that shall include, at a minimum, procedures, and equipment to be employed for response to fires in the work area that may occur in equipment; (v) an event preparedness contingency plan to address potential natural or operational events that may occur at the Converter Station. The final ERP shall be submitted to the Siting Board 30 days prior to construction and updated at least annually thereafter.

The Siting Board finds a slight advantage to the Lee River Route given its shorter length relative to the Taunton River Route, and the corresponding lower duration of construction vessel operations. With these mitigation actions, the Siting Board finds that the Company has taken appropriate measures to minimize the potential occurrence and impact of spillage of oil, and other substances.

(G) Magnetic Fields (Marine and Landfall)

The record shows that Offshore Export Cables would emit MF. In order to estimate the amount of MF from the cables and at the Landfall site, the Company modeled three configurations of Offshore Export Cables, including the typical installation case, as well as two atypical, worst-case installation scenarios. The two atypical installation cases would result in MF levels appreciably higher than the Earth's geomagnetic field within short distances from the cables. Comparatively, the record shows that the typical transmission scenario would emit magnetic field at low levels falling within the range of the Earth's geomagnetic field. The record shows that there are no regulatory thresholds or guidelines for allowable MF levels in marine environments for

either transmission line. The record shows that MF would be mitigated due to the cables being buried and bundled.

While cable burial may provide good protection from MF, it is understood that (1) storms (i.e., hurricanes and nor'easters) may change the depth of burial, and (2) up to 15 percent of cables may be laid on the seafloor and require secondary protection. Accordingly, the Siting Board directs the Company to provide a post-construction monitoring plan for the Offshore Export Cables in Massachusetts state waters. The monitoring plan should ensure that the Offshore Export Cables continue to meet target cable burial depths after major storm events (hurricanes and Nor'easters). The Board directs the Company to consult with the Massachusetts DMF regarding specific monitoring locations, and timing of monitoring activities.

The Siting Board directs the Company to conduct testing of magnetic fields from the Onshore Cables and Grid Interconnection and the Converter Station, which shall be done (i) prior to construction commencement to establish a baseline, (ii) 90 days from the OGF being fully developed and capable of delivering 1,200 MW of energy, and (iii) one year from the OGF being fully developed and capable of delivering approximately 1,200 MW of energy. The Siting Board directs the Company to conduct testing of magnetic fields from the Offshore Export Cables within one year of the Project being fully installed and operational. The Company shall file the results of the testing with the Siting Board. See Sections VI.C.3 (Onshore Cables and Grid Interconnection) and VI.D.2 (Converter Station).

The Siting Board finds no clear difference between the two candidate routes from a marine MF perspective. The Siting Board finds that with these mitigations actions impacts from MF from the export cables in the marine environment have been minimized.

ii. Additional Landfall Impacts Analysis and Findings

(A) Noise

To be compliant with local and state noise requirements, the Company must comply with the following construction and operationally based noise control requirements:

- Somerset Noise Control Bylaw:

Town of Somerset Municipal Noise Ordinance Summary (Exh. EFSB-CM-9):

NOISE ORDINANCE	ALLOWED CONSTRUCTION HOURS, WEEKDAYS	ALLOWED CONSTRUCTION HOURS, WEEKENDS	EXCEPTIONS/DECIBEL LIMITS
Town of Somerset Noise Control Bylaw, Article 34 – ATM 5/17/2021	7 a.m. – 10 p.m.	Construction/maintenance power equipment. Devices and equipment engaged in home construction (including site preparation and restoration), roof installation, building restoration, and- activities and/or demolition shall be permitted for use only between the hours of 7:00 a.m. and 10:00 p.m., on weekdays and the hours of 8:00 am and 10:00 pm on weekends or legal holidays, or as otherwise allowed by a permit issued by the Somerset Board of Health for such activity	Construction-related activity as specified in Section 3A, on days for which "Danger" or "Extreme Danger" heat conditions are forecast by the National Weather Service, may begin before 7:00 a.m., but not before 5:30 a.m.

https://www.townofsomerset.org/sites/g/files/vyhlif3821/f/uploads/noise_control_bylaw_atm_5.17.21.pdf

- MassDEP Air Quality Noise Regulation (310 CMR 7.10)

The record shows that the operation of HDD equipment, primarily the drilling rig, generators, and pumps, could produce higher sound levels than other anticipated construction activities. The record shows that certain construction-related activities would need to be continuous efforts that occur throughout the day and night, including HDD drilling, which could require two to four months of mostly continuous drilling. The Company contends that continuous HDD activity during the up to four-month drilling period facilitates faster completion of the drilling and therefore shorter duration of the HDD impacts on residents near Brayton Point.

The Lee River Route and the Taunton River Route would produce similar maximum estimated noise levels at the nearest residences with the use of critical grade silencers and other mitigation strategies. Specifically, the audible noise produced by the HDD construction at the Lee River Route landfall location would be 58 dBA or less at the nearest residences in Swansea and less than 50 dBA at the nearest residences in Somerset. To address these construction-related noise sources, the Company would comply with the Somerset Noise Control Bylaw and MassDEP's Air Quality Noise Regulation, 310 CMR 7.10. Operational noise in offshore state waters and at landfall are anticipated to be minimal.

The Company has committed to preparing a Noise Evaluation and Mitigation Plan, which shall include information and data supporting SCW's assessment that it complies with the relevant regulations and includes mitigation measures utilized to maintain compliance (Company Brief at 117). SCW will work with the Somerset Board of Health to demonstrate compliance with the Somerset Noise Control Bylaw and seek any temporary waivers that may be required (Company Brief at 117).

With the exception of continuous operations such as HDD, the Company committed to reducing the amount of construction conducted outside its typical construction hours and to develop construction hours in coordination with the Town of Somerset. The Company will also maintain an active construction schedule webpage to inform abutters, residents and other stakeholders of construction locations, dates, activities, and traffic control measures.

The Siting Board directs the Company to develop a Noise Evaluation and Mitigation Plan as part of its CMP, which shall comply with the applicable standards of the MassDEP Noise Regulation at 310 CMR 7.10 and the Town of Somerset Noise Control Bylaw, during pre-construction and construction, including during HDD activities, and operation of the Project. The Company shall provide the Town and the Board with its Noise Evaluation and Mitigation Plan prior to commencing construction activities. The Noise Evaluation and Mitigation Plan must include, at a minimum, the following elements: (i) information and data in support of the Company's assessment that the terms of the above-referenced MassDEP Noise Regulation and Somerset Noise Control Bylaw will be met and maintained, remedies and response actions for reported noise violations or complaints, as well as any other information that the Somerset Board of Health may reasonably require to ensure compliance with the applicable standards; (ii) the Somerset Board of Health may conduct such inspections and measurements as are necessary to ensure the accuracy of any report submitted to ascertain compliance with the MassDEP Noise Regulation and the Somerset Noise Control Bylaw (these may include on-site inspections by a noise or sound expert during specified periods of construction); and (iii) mitigation measures to be utilized to maintain compliance with the site-specific noise monitoring action levels. These may include pathway controls (e.g., perimeter fencing, noise attenuation blankets) and noise control

devices such as mufflers, shrouds, and alternate tooling, to be reviewed in consultation with the Town's Board of Health, or its designee.

The Siting Board directs the Company to limit construction hours for the onshore and landfall portions of the Project to 7:00 a.m. to 7:00 p.m. on weekdays and 9:00 a.m. to 7:00 p.m. on Saturdays, with no construction on Sundays or legal state or federal holidays unless operationally necessary for continuous (i.e., HDD) operations or an emergency. Work requiring longer continuous duration than normal construction hours allow, such as HDD operations, shall, with 48 hours advance notice to the Towns of Somerset and Swansea and City of Fall River and posting on the Company's website except in case of emergency circumstances, be exempted from this requirement. Should the Company need to extend construction work beyond those hours and days, with the exception of emergency circumstances on a given day that necessitate extended hours, the Siting Board directs the Company to seek prior written permission from the Town of Somerset before commencing work and to provide the Siting Board with a copy of such permission. If the Company and municipal officials are not able to agree on whether such extended construction hours or days should occur, the Company may request prior authorization from the Siting Board and shall provide the Towns of Somerset and Swansea and City of Fall River with a copy of any such request and authorization.

Because the two candidate landfall routes would produce similar maximum estimated noise levels, including at the nearest residences, the Siting Board finds the routes equivalent from a noise perspective. With these mitigation actions, the Siting Board finds that the Company has minimized and mitigated Project construction noise impacts.

(B) Wetlands

The record shows that regardless of landfall candidate route chosen, HDD would be employed to avoid impacts to coastal resource areas such as Barrier Beach, Coastal Beach, Bank, and Dune, as well as mitigate for impacts to Land Under the Ocean. The Lee River Route and Taunton River Route would require the installation of onshore infrastructure (i.e., TJBs with manholes) at the respective landfall sites where the Offshore Export Cables would transition to Onshore Cables. SCW proposes to locate infrastructure in upland areas a significant distance from

the current mean higher high-water line. The record shows that the Taunton River Route landfall site would temporarily disturb 0.4 acres of LSCSF. However, the record shows that by installing the TJB and duct bank underground, the Project would not displace flood volume nor interfere with the LSCSF performance standards. For the Lee River Route, the record shows that the recently modified HDD landfall location moves the onshore HDD construction area and associated TJBs outside the boundaries of the LSCSF, and moves the onshore HDD construction area outside of the boundaries of historic tidelands jurisdiction, reducing the impacts within the 200-foot Riverfront Area (RA) to 0.3 acres.

The Siting Board finds the Lee River Route landfall to be superior to the Taunton River Route landfall inasmuch as it does not impact LSCSF permanently or temporarily. The Siting Board finds that the use of HDD construction methods for onshoring the submarine export cables results in minimizing and mitigating impacts to wetlands, Riverfront Area, LSCSF, and shoreline features.

(C) Public Access

During cable installation, the record shows that it would require a temporary, short-term restriction on access to the waterfront within the immediate construction work areas and HDD path for safety reasons. The record shows that there are no long-term impacts to immediate waterfront areas, public access, local property owners, or vessel-related activities along the waterfront area, particularly for the Lee River Route, as the Lee River has few recreational uses. The record shows that the Taunton River Route, which traverses through the mouth of the Taunton River, is a heavily trafficked waterway, and passes by Brayton Point Beach and a walking area adjacent to residences.

The Lee River Route exhibits substantially less water-dependent public use and activity than does the Taunton River Route and is therefore superior. The Siting Board finds that the Company would minimize impacts to public access at the Project site by limiting access only during construction.

(D) Visual/Light

During HDD operations there would be two primary sources of visual lighting impacts: (1) from vessels offshore engaged in the HDD activities; and (2) from any lighting set up to support the HDD activity onshore. During facility operations there would be no permanent visual impacts at either landfall site, as all transmission facilities would be located underground. The Company would use BMPs to mitigate lighting impacts on neighboring residents from its landfall construction activities. The record shows that task lighting during construction would be used only as needed, and construction lighting would be equipped with light shields to prevent light from encroaching into adjacent areas. The record also shows that lighting of offshore vessels and navigation lighting would comply with USCG requirements.

With respect to landfall lighting and visual impacts, the Siting Board finds the two routes equivalent. With these actions, the Siting Board finds that the Company has minimized and mitigated lighting and visual impacts.

e. Conclusion on Offshore Export Cable and Landfall Environmental Impacts

While some degree of impacts is unavoidable during construction, the Company has provided a comprehensive analysis of such impacts, avoided or minimized them where possible, and made significant commitments to protection and preservation of the coastal and marine environment. The Company has also identified and collaborated with stakeholders who depend on the marine environment in the area of the OECC for recreational or business activities and worked to minimize disruptions or adverse impacts to these critical uses. The record demonstrates that the Company has addressed public concerns about seafloor impacts, marine biological resources and habitats including whales, marine archaeological and historical resources, and vessel traffic and refueling issues from marine construction activities and developed plans to appropriately mitigate these impacts.

We note that the Siting Board is one of many local, state, and federal agencies that have jurisdictional responsibilities over the Project's offshore and landfall components. The Siting Board has found the Lee River Route to be superior in the vast majority of topics discussed with

regard to the Offshore Export Cables and landfall. The following section contains the evaluation of the onshore portion of the Lee River Route and Taunton River Route.

D. Onshore Impacts

1. Onshore Cable and Grid Interconnection Impacts

a. Onshore Cable and Grid Interconnection Construction

From landfall, the Onshore Cables would run approximately 0.6 miles along the Lee River Route (for the Company's Preferred Route), and 0.4 miles along the Taunton River Route (for the Noticed Alternative Route) to the Converter Station (Exh. SW-1, at 1-8, 3-5, 3-6). The Onshore Cables would enter the Converter Station site from either the west or from the southeast corner; the 0.2-mile Grid Interconnection would exit the Converter Station site from the southeast corner connecting to the National Grid substation POI, and the regional transmission system (Exh. SW-1, at 1-10; 3-11). Onshore Cable equipment and construction are the same for both routes, and construction for GI same is the same as the Onshore Cables.

SCW estimated that Onshore Cable and related equipment construction will require approximately 36 months with the Grid Interconnection occurring within that approximate timeframe (Exh. SW-11, at 1-19). SCW stated that typical construction hours would be 7:00 a.m. to 7:00 p.m. on weekdays and 9:00 a.m. to 7:00 p.m. on Saturdays and legal holidays, in compliance with the Town of Somerset ordinance (Exh. EFSB-CM-9, at 1). The Company will coordinate with the Town of Somerset to establish construction schedule, hours, and logistics, as well as seek approval when work would occur outside of these hours (Exh. EFSB-CM-9, at 2). In certain locations, the Company may propose night work to allow construction in areas with onsite traffic congestion or other ongoing construction projects (Exhs. EFSB-CM-9, at 2; SW-6, at 13-18). The Company asserts that some construction-related activities would need to be continuous efforts that occur throughout the day and night. SCW indicated that it will comply with industry standard means and methods typical for underground transmission infrastructure projects (Exh. SW-6, at 13-2). Construction of the Onshore Cables consists of construction of a duct bank system from the TJB to the Converter Station (Exh. SW-6, at 13-10). The Company

maintains that equipment used would be typical for any high-voltage open-cut trench installation, including excavators, front-end loaders, dump trucks, concrete trucks, skid steers, flat bed trailers, shoring systems, padding machines, compaction equipment and trench boxes (Exh. SW-6, at 13-10). Typical equipment used for cable installation includes a winch, cable reel cart, box trucks, splicing and terminating tools, and other miscellaneous tools (Exhs. SW-1, at 5-55; SW-6, at 13-10).

The Project includes installation of conduits that can accommodate two HVDC export power cables and associated communications cabling in a single trench. (Exh. SW-1, at 5-54), and sized to include the Noticed Variation for future use (Exh. SW-1, at 1-1). The dedicated communications cable may be installed within the same bore as a power cable, likely within a separate conduit (Exh. SW-6, at 13-9).

The Company would install the Onshore Cables via open-cut trenching to accommodate a buried concrete duct bank and associated splice vaults (Exh. SW-1, at 1-17). The Company noted that underground conduits may be installed by directly burying without concrete encasement, where suitable (Exh. SW-6, at 13-10). General civil construction and site work would include site preparation, clearing and grading, excavation of cable trenches, duct banks and splice vaults, and restoration activities (Exhs. SW-1, at 5-54 to 5-56, SW-6, at 1-13). Electrical installation activities would include cable installation, and cable splicing/jointing (Exhs. SW-1, at 5-54 to 5-56, SW-6, at 1-13). The Company would join fiber optic communications cables inside communications handholes, with their own access covers, installed adjacent to the splice vaults (Exhs. SW-1, at 5-54; SW-6, at 1-14).

The Company estimated that duct bank construction is expected to progress at a rate of 50 to 100 feet per day, with the rate of progress depending on a variety of factors, including the density of existing underground utilities (Exhs. SW-1, at 5-55; SW-6 at 1-14). Trench excavation would be approximately 5.0 to 6.0 feet wide with the use of trench boxes to shore up the excavation and provide for worker safety (Exh. SW-6, at 1-14). The Company maintained that the target excavation depth would be approximately 7.0 feet (2.1 meters) deep but could be deeper depending on survey results and potential utility crossings (Exh. SW-6, at 1-14). At each location requiring the splicing of the Onshore Cables, the Company would install two splice vaults and two

communications handholes to accommodate the Noticed Variation (Exhs. SW-1, at 5-54; SW-6, at 1-14). The approximate spacing of the splice vaults would be every 0.2 to 0.4 miles (Exh. SW-6, at 1-14).

According to the Company, the Grid Interconnection onshore transmission lines would transmit the converted power from the HVDC Converter Station to the POI at the existing National Grid Brayton Point 345 kV substation (Exh. SW-1, at 4-12). These lines would have a nominal voltage of 345 kV HVAC with a length of 0.2 miles and would be buried at a depth of cover (below ground surface to top of duct bank) of 3 feet (Target depth) and a burial range of 2.0 to 15.0 feet (Exh. SW-1, at 1-8). The construction methodologies for the HVAC transmission lines would be substantially similar to the methodologies utilized for the Onshore Cables to the HVDC converter station (Company Brief at 188). The general sequence of construction activities for the Onshore Cables are listed in Table 11 below.

Table 11. Typical Construction Sequencing of Onshore Cables and Grid Interconnection.

Construction Activity	Construction Summary
Civil Construction/Site Work	
Site Preparation	Site preparation involves the 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 work 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 Best Management Practices. These controls will be maintained until the site is restored and stabilized. Portions of the work 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 the concrete to be poured and set between each duct without allowing the formation of any air pockets or voids. Once the concrete has been poured, it will be allowed to set up to a specific strength before the trench is backfilled. This operation will be repeated until all conduit and concrete has been installed to the specified jointing locations (e.g., manholes, termination structures). At the completion of the installation, all conduits will be proofed and mandreled[a] to verify continuity of the raceway for cable installation.
Restoration Activities	Once the duct bank has been installed, restoration as required by the governing authority 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 has been 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.

Source: Exh. SW-6, at 1-13.

The Company further maintained that all design, construction, and operation activities would be in accordance with applicable government and industry standards such as the

Massachusetts Code for the Installation and Maintenance of Electric Transmission Lines (220 CMR §§125.00 *et seq*.) and the National Electrical Safety Code (Exh. SW-1, at 5-61).

b. Onshore Cable and Grid Interconnection Environmental Impacts

i. Air Quality

The Company asserts that during construction activities, air quality in the Somerset area would not be significantly affected (Exh. SW-6, at 12-11 Project impacts associated with onshore construction include construction vehicle emissions, construction equipment emissions, and the generation of fugitive dust during construction (Exh. SW-6, at 13-11). Air emissions during the construction phase of the proposed Project would be mostly influenced by fuel combustion from engines and auxiliary equipment (Exh. SW-6, at 13-11). The Company represented that construction-related emissions would be temporary impacts and localized to areas directly adjacent to active construction (Exh. SW-6, at 12-11, 13-11). According to the Company, the primary sources of onshore air emissions would be stationary construction equipment including cranes, on-road and off-road transport vehicles, and generators (Exh. SW-6, at 12-11). Fugitive dust particle emissions would be proportional to the size of the construction area and level of construction activities (Exh. SW-6, at 13-12). However, the Company is encouraged to adopt measures to reduce air quality impacts from construction vehicles, and provide commitments to utilize vehicles with effective emission controls for all on-site construction in an effort to minimize construction vehicle emissions (Exh. SW-10, at 33).

During construction, SCW would mitigate air emissions by complying with the Massachusetts Anti-Idling Law (to limit vehicle idling times) and the MassDEP Diesel Retrofit Program (Exh. SW-6, at 12-9, 12-11). SCW would also undertake construction in accordance with the applicable sections of the MassDEP Air Pollution Control Regulations, 310 CMR 7.00, including the use of ultra-low sulfur diesel fuel use for diesel-powered equipment (Exh. SW-6, at 13-11, 13-17). SCW would also implement construction BMPs to suppress fugitive dust emissions, by spreading wood mulch or straw, using water trucks to spray soil and covering soil stockpiles (Exh. SW-6, at 12-11; 13-11 to 13-12). After construction is completed, the Company would stabilize and revegetate soils and repave asphalt (Exh. SW-6, at 13-12).

ii. Noise

In its Construction Noise Report and Operational Noise Report, SCW analyzed noise from the construction of the transmission facilities at Brayton Point to ensure that installation and operations comply with the applicable noise ordinances (RR-EFSB-5 at 1; Exh. SOM-8(1)). According to SCW, noise impacts from construction activities depend on the construction equipment used for each phase of construction and the specific construction activity (RR-EFSB-5(1) at 12). The Company stated that the construction of the Converter Station and the Onshore Cables along the Lee River Route would be approximately 1,200 feet from the closest residence (Exh. RR-EFSB-5, at 1). If the alternative Taunton River Route is chosen, then the distance from onshore construction to the nearest residence would decrease to approximately 1,000 feet, thereby increasing the estimated sound levels at the nearest residences for that Route by an estimated 1.5 dBA (Exh. RR-EFSB-5(1), at 8).

Specific activity, equipment, and sound levels are outlined in the Construction Noise Report, with construction noise levels ranging from 70 dBA to 98 dBA at 50 feet from the construction activity for a single piece of equipment (RR-EFSB-5(1) at 12 to 13). The estimated combined sound levels of the activities would be 86 dBA to 98 dBA (RR-EFSB-5(1) at 12 to 13).

To address these construction-related noise sources, the Company stated that it would comply with the Somerset Noise Control Bylaw and the MassDEP Noise Regulation at 310 CMR 7.10 (1), and BMPs to mitigate noise (RR-EFSB-5, at 1; RR-EFSB-5(1), at 9-12; Company Brief at 116; Town Brief at 4).

SCW would employ measures to reduce construction noise, including temporary noise barriers, muffling enclosures, and equipment silencers (RR-EFSB-5(1), at 14). SCW would comply with Somerset Noise Bylaw and would use BMPs to mitigate noise (RR-EFSB-5(1), at 14, 21; Exh. SOM-8). SCW would reduce the amount of construction conducted outside its typical construction hours and would develop construction hours in accordance with the Somerset noise ordinance (Exh. SW-6, at 15-22). In certain locations, the Company may propose night work to allow construction in areas with other ongoing construction projects (Exh. SW-6, at 13-18). SCW would also maintain an active construction schedule webpage to inform abutters, residents and

other stakeholders of construction locations, dates, activities, and traffic control measures (Exh. SW-11, at 7-4).

iii. Traffic

The construction labor force will be coming from various locations throughout Rhode Island and Massachusetts (Exh. SW-6, Attachment E, at 5). All major public roadways (e.g., I-195, SR 6, CR 103) leading to the Project's access Road, Brayton Point Rd., are expected to be available for use (Exh. SW-6, Attachment E, at 5). The daily volume of vehicles will likely be divided amongst these various roadways until they reach Brayton Point Rd, at which point all vehicles would need to travel this roadway to reach the site (Exh. SW-6, Attachment E, at 5).

According to SCW, the Project would not require a MassDOT access permit, however, SCW expects to consult with MassDOT to confirm that assessment (Exh. EFSB-T-3, at 1). SCW prepared a Traffic Analysis Report to evaluate potential construction-period traffic impacts (Exh. SW-6, Att. E). The Traffic Analysis Report presented likely construction-related routes, estimated duration of construction activities, and estimated number of vehicle trips for equipment, deliveries and workers associated with construction activity (Exh. SW-6, Att. E). The Traffic Analysis Report estimated an additional 60 vehicles per day traveling to the Brayton Point site during construction, relative to the current 800 vehicles per day traveling on Brayton Point Road (Exhs. SW-11, at 7-5, and SW-6, Att. E, at 6). The Company contends that the Project's estimated increase in vehicle trips (7.5 percent) would have a minor impact on the local traffic (Exh. SW-11, at 7-5; RR-EFSB-40). Once the Project is operational, and with an unmanned Converter Station, personnel would be on-site for periodic inspections, maintenance, and repairs (Exh. SW-11, at 6-2). Therefore, the Company represented that there would not be a discernible impact to traffic once the Project is operational (Exh. SW-11, at 6-2).

SCW would use various methods of public outreach prior to and during construction to keep abutters, residents, and other stakeholders and officials updated on Project construction schedules and other traffic management information (Exh. SW-11, at 7-5). SCW represented that it would develop and implement a Traffic Management Plan ("TMP") (or Traffic Control Plan) in cooperation with the Town of Somerset to minimize disruptions to the community in the vicinity

of construction and installation activities affecting traffic on Brayton Point Road, especially along the Onshore Cable route (Exh. SW-11, Table 8-1, at 8-10 to 8-11). SCW will also coordinate traffic management measures with the Town, the Brayton Point landowner and tenants, and the MassDOT as applicable (Exh. SW-11, at 7-5). SCW also intends to work with the Somerset Police Department and other emergency response departments to develop traffic plans for each phase of construction as part of its Construction Community Outreach Plan (Exhs. SW-1, at 1-21; SW-11, at 7-5; SW-6, at 13-18). The Company will finalize the TMP prior to construction but after the Company has more clearly defined its construction activities and associated traffic impacts (Exh. EFSB-T-9, at 1). The Company also noted that it would coordinate delivery of an estimated 830 over-sized loads, steel members, and concrete with the Town, Police Department, and MassDOT (Exhs. SW1, at 5-12; EFSB-T-7, at 1). SCW would maintain pedestrian and motorist safety, arrange police details, maintain access for residents and businesses, secure onsite storage to reduce offsite trips, coordinate construction schedule and site access with Brayton Point tenants and landowners, and maintain environmental monitor(s) to ensure compliance with the TMP (Exh. SW-11, at 7-5).

iv. Lighting

SCW stated that it would take steps and use BMPs to mitigate lighting impacts on neighboring residents from its Onshore Cables construction activities including, and when possible, through shielding lights (Exh. SW-11, at 7-8). Further, the Company noted that task lighting during construction and maintenance activities would be used only as needed (Exh. SW-11, at 7-8). During operation, the Company indicated that there would be no permanent visual impacts along the Onshore Cables route, as all transmission facilities would be located underground (Exh. SW-1, at 5-15).

v. Hazardous Waste

SCW stated that it designed and sited the Project facilities, including both transmission routes, to avoid MassDEP-regulated areas such as activity and use limitation ("AUL") areas and solid waste landfill cells (Exh. SW-11, at 9-4). Specifically, the Project's onshore facilities would

not be within proximity to the Former Generator Area AUL identified by Release Tracking Numbers ("RTNs") 4-158, 4-13687, and 4-18750 (Exh. SW-11, at 9-4). However, the Company stated that many of the planned construction activities would require excavation and construction in proximity to the Cell 1A AUL Area identified by RTN 4-0013169 (Exh. SW-11, at 9-4). Accordingly, the Company represented that it plans to develop a Soil Management Plan, although a Remediation Plan and Core Well Sampling Plan are not applicable (Exh. SW-11, at 9-4). The Company indicated it plans to discuss the management of potentially contaminated material with MassDEP but does not anticipate needing to undertake any remediation activities (Exhs. SW-11, at 9-4). A Phase II Environmental Site Assessment ("ESA") found no new reportable conditions based on soil and groundwater testing and analysis (RR-EFSB-32(2), at 8; Company Brief at 182).

The Company represented that any Utility-related Abatement Measure ("URAM") Plans prepared by SCW would address construction-related excavated/disturbed contaminant material (Exh. SW-11, at 9-5). The Company anticipates managing its construction-related excavated and disturbed contaminated material pursuant to the applicable provisions of the Massachusetts Contingency Plan ("MCP"), 310 CMR 40.0045(5), the Solid Waste Regulations, and BMPs pursuant to 310 CMR 40.0460 (Exh. SW-11, at 9-5). SCW indicated that it would retain a Licensed Site Professional as necessitated by conditions encountered along the Project alignment to determine if notification to the MassDEP is required pursuant to the Massachusetts Contingency Plan (MCP)1 and the Chapter 21E regulations MCP and the Chapter 21E regulations and, if need be, to render appropriate opinions for managing regulated materials under solid waste regulations or under a URAM (Exh. EFSB-CM-23).

SCW represented that it has made multiple commitments to address the concerns expressed by the Town of Somerset, including a commitment to share with the Town a copy of the Project's CMP, which will address concerns regarding existing hazardous materials at Brayton Point, including the management of excavated soils and dust (Exhs. SOM-10(S1); EFSB-W-20; RR-EFSB-36). The Company maintains that the CMP would account for technical, environmental, regulatory (e.g., permit requirements) and stakeholder considerations, and would be updated regularly as the Project progresses (Exhs. SOM-10(S1); EFSB-W-20; RR-EFSB-36).

vi. Erosion and Sedimentation

SCW prepared a set of Erosion and Sediment Control Measures, and Construction Best Management Practices, to protect abutting properties, public ways, and drainage infrastructure from the Project's construction-related impacts, land disturbance, and construction activities, including both candidate transmission routes (Exh. SW-6, Att. J). The Company's contractor would be responsible for installing, monitoring, repairing, and replacing proper erosion and sediment controls and for other construction BMPs (Exh. SW-6, at Att. J, J-1). SCW contends that it would minimize and mitigate impacts to erosion and sediment from Onshore Cable construction, using, the following mitigation measures:

- Installation of proper erosion and sediment control devices such as straw bales, siltation fencing, straw/chip wattles and filtration socks along the down-gradient side of construction activities (Exh. SW-6, at Att. J, J-1);

- Where wetland resource areas or other sensitive sites occur immediately adjacent to or downgradient from the work, placement of sediment perimeter controls (e.g., straw wattles, compost filter socks, excelsior sediment logs, straw bales, reinforced silt fence, etc.) between the resource area and work zone prior to commencement of work (Exh. SW-11, at 4-13);

- Maintain, replace, supplement, and modify, as needed, erosion and sediment controls, devices and practices throughout the life of the Project construction to minimize soil erosion and to prevent sediment from being transported to other areas (Exh. SW-11, at 4-13);

- Maintain undisturbed vegetated buffers between the work areas and wetland resource areas, wherever possible (Exh. SW-11, at 4-13);

- Place temporary erosion and sediment controls along the down-slope edge of unpaved access roads wherever wetland resource areas are closer than 50 feet to the edge of the road or adjacent to slopes exceeding a grade of 3:1, or as directed by the SCW environmental compliance monitor (Exh. SW-11, at 4-14);

- Restore areas inside the limits of disturbance to their original or better condition (Exh. SW-11, at 4-14);

- Upon completion of construction, temporarily stabilize disturbed or exposed soils with mulch, blankets or similar temporary erosion and sediment control practices while

vegetation becomes re-established, or the disturbed area is restored (Exh. SW-11, at 4-14); and

- Prevent soil erosion while seed is germinating, or areas are restored and stabilized through implementation of erosion and sediment control measures (Exh. SW-11, at 4-14).

vii. Onshore Cables and Grid Interconnection Magnetic Fields

(A) Background

The Commonwealth of Massachusetts has not adopted standards for electric and magnetic fields from HVDC transmission lines or other sources. There are also no US federal standards limiting general public or occupational exposure to EMFs from HVDC transmission lines. 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 are exposed to the earth's DC geomagnetic field, which is not known to adversely interact with biological processes or directly affect human health (Exh. SW-2, Att. K, Magnetic Field Analysis Cover Letter at 2).

Further, there are no U.S. federal standards limiting general public or occupational exposure to DC MFs from HVDC transmission lines (Exh. EFSB-MF-2, at 2). As summarized in Table 12, international health and safety organizations have established health-based exposure guidelines for DC MFs applicable to both the general public and occupational populations based on preventing transient sensory effects including vertigo and nausea (Exh. EFSB-MF-2, at 2 to 3). These health-based exposure guidelines for DC MFs are in general significantly higher than health-based exposure guidelines for 60 Hz AC MFs (Exh. EFSB-MF-2, at 3). In particular, ICNIRP has established a general public exposure guideline of 4,000,000 mG for steady MFs, which is 2,000 times higher than the corresponding ICNIRP guideline of 2,000 mG for allowable public exposure to 60 Hz AC MFs (Exh. EFSB-MF-2, at 3). The International Committee on Electromagnetic Safety ("ICES") within the Institute of Electrical and Electronics Engineers ("IEEE") completed an updated review of the scientific and medical research literature in 2019, retaining its safety guidelines for general public exposure to steady (DC) MFs of 1,180,000 mG

and 3,530,000 mG for head and trunk exposure and limb exposure, respectively (Exh. EFSB-MF-2, at 3).

Table 12. Direct Current MF Guidelines Established by International Health and Safety Organizations.

Organization	MF Guideline
General Public	
International Commission on Non-Ionizing Radiation Protection (ICNIRP) (exposure to any part of the body)	4,000,000 mG[a]
Institute of Electrical and Electronics Engineers (IEEE) Standard C95.6	1,180,000 mG[b] 3,530,000 mG[c]
Occupational	
International Commission on Non-Ionizing Radiation Protection (ICNIRP)	20,000,000 mG[d] 80,000,000 mG[e]
American Conference of Governmental and Industrial Hygienists (ACGIH) Threshold Limit Values (TLVs)	20,000,000 mG[f] 200,000,000 mG[g] 5,000 mG[h]

Notes:
DC = Direct Current; MF = Magnetic Field; kV/m = Kilovolts Per Meter; mG = Milligauss.
(a) Applies to exposures to any part of the body (ICNIRP, 2009 221-6378).
(b) Applies to head and of trunk exposure (IEEE, 2019 221-6379).
(c) Applies to exposure of limbs (IEEE, 2019 221-6379).
(d) Applies to head and of trunk exposure (ICNIRP, 2009 221-6378).
(e) Applies to exposure of limbs (ICNIRP, 2009 221-6378).
(f) ACGIH TLV for general workplace whole body exposure (ACGIH, 2023 223-3065).
(g) ACGIH TLV for general workplace limb exposure (ACGIH, 2023 223-3065).
(h) ACGIH TLV for workers with implanted ferromagnetic or electronic medical devices (ACGIH, 2023 223-3065).

Source: Exh. SOM-13, at 3.

In 2020, the World Health Organization ("WHO") concluded that "[magnetic field] exposures below the limits recommended in the International Commission on Non-Ionizing Radiation Protection ("ICNIRP") international guidelines do not appear to have any known consequence on health" (Exh. SW-2, Att. K, Cover Letter at 3).[48] When reviewing magnetic fields in past proceedings, the Siting Board, in recognition of public concern about magnetic fields and in

48 Among the cited advisory limits referenced by the Company is a power-frequency magnetic field limit of 2,000 milligauss ("mG") for alternating current and 4,000,000 mG for direct current from ICNIRP (Exh. SW-2, Att. K, Cover Letter at 3-4). See also https://www.icnirp.org/cms/upload/publications/ICNIRPLFgdl.pdf.

keeping with WHO guidance, has encouraged use of low-cost measures that would minimize magnetic fields along transmission ROWs. Park City Wind at 120; Andrew-Dewar at 88; Sudbury-Hudson at 154; Salem Cables at 88.

Historically, the last HVDC proposal before the Board was associated with the 1984 Hydro-Quebec Phase Two facilities. Hydro-Quebec, EFSB 84-24A (1984). HVDC EMF health and safety issues were raised at that time as well. Subject matter experts testified that operation of the [HVDC] facilities would present no unreasonable danger to human, animal, or plant health, and unlikely that the proposed facilities would be found to present such a danger in the future. Hydro-Quebec at 106.

The U.S. has no federal standards limiting either residential or occupational exposure to 60 Hz AC MFs (Exh. SW-2, Att. K, Cover Letter at 3). Table 13 shows guidelines established by international health and safety organizations that are designed to be protective against adverse health effects. The limit values should not be viewed as demarcation lines between safe and dangerous levels of MFs, but rather, levels that assure safety with an adequate margin to allow for uncertainties in the science (Exh. SW-2, Att. K, Cover Letter at 3). As part of its International EMF Project, the World Health Organization (WHO) conducted comprehensive reviews of EMF health-effects research and existing standards and guidelines. The WHO website for the International EMF Project (WHO, 2022) notes, "[T]he main conclusion from the WHO reviews is that EMF exposures below the limits recommended in the ICNIRP international guidelines do not appear to have any known consequence on health" (Exh. SW-2, Att. K, Cover Letter at 3).

Table 13: 60 Hz AC MF Guidelines Established by International Health and Safety Organizations.

Organization	MF Guideline
American Conference of Governmental and Industrial Hygienists (ACGIH) (occupational)	10,000 mG[(a)] 1,000 mG[(b)]
International Commission on Non-Ionizing Radiation Protection (ICNIRP) (general public, continuous exposure)	**2,000 mG**
International Commission on Non-Ionizing Radiation Protection (ICNIRP) (occupational)	10,000 mG
Institute of Electrical and Electronics Engineers (IEEE) Standard C95.6 (general public, continuous exposure)	9,040 mG

(Exh. SW-2, Att. K, Cover Letter at 4).

(B) Onshore Cables (HVDC) Magnetic Fields

Onshore transmission HVDC export cable routing for the Project would begin at landfall. These underground onshore cables would run approximately 0.6 miles long along the Lee River Route, and 0.4 miles long along the Taunton River Route to the Converter Station (Exh. SW-1, at 1-8, 3-5, 3-6). SCW modeled MF under three representative Onshore Cables duct bank configurations (Exhs. SW-1, at 5-25; SOM-13, at 1). These onshore HVDC configurations modeled for MF include:

- Case 5: HVDC onshore, single circuit duct bank, 3.2 feet burial depth. This Model Case captures a typical configuration for an underground, concrete-encased duct bank that can accommodate two HVDC power cables and one dedicated communications cable;

- Case 6: HVDC onshore, double circuit duct bank, 3.3 feet burial depth. This Model Case captures SCW's Noticed Variation. Model Case 6 represents a typical configuration for an underground, concrete-encased duct bank that can accommodate four power cables and associated communication and ancillary cables in a single trench; and

- Case 7: HVDC onshore, alternate double circuit duct bank, 3.4 feet burial depth. This Model Case captures an alternate configuration for SCW's Noticed Variation. Model Case 7 represents an alternate configuration for an underground, concrete-encased duct bank that can accommodate four power cables and associated communication and ancillary cables in a single trench (Exh. SW-2, Att. K, Magnetic Field Analysis Report at 4 to 5).

According to SCW, underground placement of the onshore transmission cables is a key design component for mitigating aboveground MF levels because underground phase conductors can be placed relatively close to each other in underground duct banks, contributing to greater self-cancellation of MFs as compared to overhead circuits (Exh. EFSB-MF-7, at 1). The Company factored MF mitigation into the identification of minimum burial depths of approximately three feet for the underground duct banks for the HVDC transmission circuits (Exh. EFSB-MF-7, at 1). Additionally, the Company contends that positioning the conductors relatively close to each other in underground duct banks contributes to greater mutual cancellation of MFs compared to overhead circuits (Exh. EFSB-MF-7, at 1).

The Company modeled peak MF levels for these three cases at one meter above the ground surface, resulting in MFs ranging from 252 to 433 mG (Exhs. SW-1, at 5-25; SOM-13, at 1), as

indicated in Table 14 below. According to the Company, these MF values are far below health-based exposure guidelines for direct current MFs (Exhs. SW-1, at 5-25; SOM-13, at 1). For each duct bank configuration, the Company maintains that MF levels drop off very rapidly with increasing lateral distance from the cables, for example, decreasing to a range from 18.9 mG to 30.5 mG at 25 feet (7.6 meters) from the duct bank centerlines (Exh. SW-1, at 5-25).

Table 14. Magnetic Field Study Results for HVDC Onshore Cables.

Case		Magnetic Field [a] (milligauss [b])			
		Max	10 ft	25 ft	50 ft
5	HVDC onshore, single circuit duct bank, 3.2 ft burial depth. [c]	433	140	30.5	8.0
6	HVDC onshore, double circuit duct bank, 3.3 ft burial depth. [c]	252 (181) [d]	101 (37.4)	20.6 (3.9)	5.2 (0.53)
7	HVDC onshore, alternate double circuit duct bank, 3.4 ft burial depth. [c]	259 (188) [d]	95.8 (34.9)	18.9 (3.5)	4.7 (0.47)
8	HVAC onshore, single circuit duct bank (2 cables per phase), 3.3 ft burial depth. [c]	66.7 [e]	13.9	1.5	0.20

[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 a height of 1 meter above the ground surface in accordance with industry standard practice.
[d] The double circuit duct bank configurations correspond to the Noticed Variation. Although the Noticed Variation does not include a request for approval of additional export cables at this time, for informational purposes only, results are also presented in parenthesis for an indicative future scenario with a second 1200 MW circuit installed. The reduction in MFs associated with the future scenario is due to field cancelling effects introduced by the second circuit.
[e] Field values for the AC case are root-mean-square (rms).

Source: Exh. SW-1, at 5-26.

(C) Grid Interconnection (HVAC) Magnetic Fields

The Company modeled maximum alternating current MF level of 66.7 mG directly above the Grid Interconnection duct bank (Exh. SW-1, at 5-26). The MF levels dropped off rapidly with lateral distance from the cables to 1.5 mG at distances of 25 feet (7.6 meters) from the duct bank centerline (Exh. SW-1, at 5-26). The Company represented that the modeled MFs are well below the ICNIRP health-based guideline of 2,000 mG for allowable public exposure to alternative current MF (Exhs. SW-1, at 5-26; SOM-13, at 3). The Company considered MF mitigation in the selection of conductor phasing for the two circuits (Exh. EFSB-MF-7, at 1). Further, the Company

would install ground continuity conductors ("GCCs") in the underground duct banks to partially cancel the HVAC conductor MFs (Exh. EFSB-MF-7, at 1).

The Company contends that MF at the property line of the Brayton Point LLC property would be minimal and well below any applicable limits (Company Brief at 20 to 21; Exhs. SW-1, at 5-25 to 5-26; SOM-13, at 1).

viii. Natural Resources

This section pertains to both the Lee River and Taunton River Routes, and the Grid Interconnection.

(A) Water Quality, Drainage, and Water Supply Protection

SCW stated that the Onshore Cables routes do not include construction activities within MassDEP Zone I and II areas, wellhead protection areas, Freshwater Recharge Areas, or Potential Public Water Supplies, and no portion of either the candidate routes passes through any of these areas (Exhs. SW-6, at 6- 9; RR-EFSB-31). As noted in the Phase II Environmental Site Assessment prepared by GZA GeoEnvironmental, groundwater appears to flow to the west/southwest across the northern portion of the Brayton Point site, in the direction of the Lee River (RR-EFSB-32(2) at 6). The Company indicated that it would design construction activities to avoid potential impacts to local water resource areas pursuant to requirements of the Project's NPDES Construction General Permit and implement BMPs to protect water resources (Exh. SW-6, at 6-8 to 6-9).

According to the Company, all potentially impacted soils, groundwater, or surface water encountered during construction activities would be managed in accordance with applicable local, state, and federal regulations, except where certain local zoning bylaws are exempted (Exh. SW-11, at 4-13). SCW would use erosion and sedimentation controls during construction to minimize potential impacts to water resources (Exh. SW-6, at 6-8). SCW would also include spill response in its ERP as part of the Project's overall Safety Management System (Exh. SW-6, at 6-9). The Company explained that the Safety Management System encompasses all future construction and operational activities, and that this system would be fully functional prior to

commencement of construction (Exh. SW-1, at 4-32). The Company would implement onshore construction in compliance with the Massachusetts Stormwater Standards, Massachusetts Stormwater Handbook (Exhs. SW-11, at 4-9, 4-13, 9-18, 9-24; RR-EFSB-21; RR-EFSB-21(1)). SCW stated that it would avoid unnecessary disturbance of site soils wherever possible and limit removal of, and damage to, vegetation wherever possible (Exh. SW-11, at 4-13).

(B) Wetlands

SCW stated that temporary impacts would occur from Project construction within jurisdictional wetlands and Chapter 91 Waterways areas, including LSCSF and historically filled tidelands (Exhs. SW-6, at 6-3 to 6-4; SW-11, at 1-20 to 1-21). SCW noted that it would restore areas of disturbance to their original or better condition after construction (Exh. SW-11, at 4-14). A 2021 Company-sponsored wetland delineation at Brayton Point identified no potentially jurisdictional inland Bordering Vegetated Wetlands or open water resource areas within the Project footprint on the Brayton Point site (Exh. SW-6, at 6- 15).

The Company would install the Onshore Cables and related components underground within and beneath approximately 3.3 acres; and the Converter Station facilities would occupy ten acres aboveground, including roadway layouts, paved parking lots, existing access roads, and the National Grid transmission ROW (Exh. SW-6, at 3-3). SCW does not anticipate that the installation of the underground utilities would result in long-term impacts to wetland resource areas (Exh. SW-6, at 6-15).

(C) Open Space, Conservation and Recreational Lands

According to the Company, neither the Lee River Route nor the Taunton River Route would traverse open space or conservation and recreational lands, and, therefore, there would be no impacts to such lands (Exh. SW-1, at 5-14). The Taunton River Route would, however, pass within a buffer zone to conservation land, the Brayton Point Wildlife Management Area (and a portion of the buffer zone of Brayton Point Beach), but would not result in any loss of Article 97 lands (Exh. SW-1, at 5-14).

(D) Rare Species

SCW stated that neither the Lee River Route nor the Taunton River Route would traverse mapped Priority or Estimated Habitat of rare species (Exh. SW-1, at 4-32, 5-6). NHESP issued a letter identifying species in the Project Area on April 28, 2022 (NHESP Tracking No. 19- 38917) and determined that the Project site within Massachusetts is not located in mapped Priority or Estimated Habitat (Exh. SW-11, at 5-1).

c. Positions of the Parties

i. Town of Somerset

As discussed above (see: VI.C.3.c.i), the Town of Somerset states that it is generally supports the Project (Town Brief at 1). However, the Town requests that the Siting Board approve the Project subject to conditions, which address a range of integrated environmental, public health, marine, and upland impact issues (Town Brief at 2).

ii. Company Response

As discussed above (see VI.C.3.c.ii), SCW asserts that it has made numerous commitments regarding minimizing environmental impacts (Company Reply Brief at 4). According to the Company, many of those commitments it referenced in its Brief are the same as those proposed by the Town in its Brief (Company Reply Brief at 4). Where there are divergences between the Town's conditions and the Company's commitments, the Company asserts that it is confident that those divergences could be resolved in a mutually acceptable agreement (Company Reply Brief at 4).

d. Analysis and Findings on Onshore Cable and Grid Interconnection Environmental Impacts

i. Air Quality

Air quality during the onshore construction phase of the Project is influenced by fuel combustion from engines and airborne dust generation during construction activities, but these

emissions would be temporary and localized to areas adjacent and downwind to active construction and exposed dirt. The record shows that the Company will conduct construction activities in accordance with the MassDEP Air Pollution Control Regulations and mitigate air emissions by requiring compliance with the Massachusetts Anti-Idling Law to limit vehicle idling times and complying with the MassDEP Diesel Retrofit Program. Additionally, diesel-powered equipment must use ultra-low sulfur diesel fuel during construction.

The record shows that the Company plans to develop an Air Quality Management Plan as part of its CMP which establishes protocols for monitoring dust levels (correlated to PM_{10} and $PM_{2.5}$), starting adjacent to the work area and progressing outward to the perimeter of the site, and downwind areas. This Plan will include corrective actions (e.g., wetting stockpiles, wetting haul roads, perimeter spraying, covering exposed soils, discontinuing work) that will be implemented if measured levels of PM_{10} and $PM_{2.5}$ suggest mitigation is required under agreed monitoring protocols and action levels. Following construction, SCW plans to stabilize and revegetate soils, and repave asphalt areas. The Siting Board directs the Company to develop an Air Quality Management Plan in consultation with the Town's designated consultant for review and comment, and to cooperate in good faith to address and attempt to resolve concerns noted by the Town's consultant. The Siting Board expects the Company to respond in a timely manner to reasonable conditions and recommendations of the Town's consultants, and that a procedure be established for resolution of any disputes. The Siting Board also directs the Company to coordinate with other Brayton Point tenants and landowners and the Town of Somerset and Swansea as it relates to the construction schedules and site access, to minimize construction-related impacts (traffic, air quality, noise, etc.) for the neighboring land uses.

The Siting Board directs the Company to consider potential opportunities for use of, or conversion to, electric vehicles and equipment for construction activities and submit reports indicating ability to use electric vehicles during the following time intervals: 30 days prior to construction; 180 days after construction commencement; and 90 days after construction completion.

Because the two candidate landfall routes are predicted to produce similar air quality impacts, the Siting Board finds the two routes comparable from an onshore construction air quality

perspective. With these mitigation actions, the Siting Board finds that the Company has minimized and mitigated onshore Project construction air quality impacts.

ii. Noise

The record shows that construction of the onshore underground cable system along the Lee River Route would be approximately 1,200 feet from the closest residence. The record further shows that onshore construction would produce a maximum sound level of 70 dBA for combined noise sources at 1,200 feet. For the Taunton River Route, the record shows that the distance from the overall construction to the nearest residence is approximately 1,000 feet, with a corresponding increase in the estimated sound levels (approximately 1.5 dBA) at the nearest residences relative to the nearest Lee River Route residences.

The Company proposes to minimize construction noise in compliance with the Somerset Noise Control By-Law and MassDEP's Air Quality Noise Regulation by maintaining construction hours as practicable, using critical grade silencer equipment and enclosures, using new equipment, turning off equipment when not in use, moving noisy equipment away from noise-sensitive receptors, and using temporary barriers or buffering distances as practicable. The Company would also maintain an active construction schedule webpage to inform abutters, residents, and other stakeholders of construction locations, dates, activities, and traffic control measures. The Project is not expected to produce noise associated with Onshore Cables and the Grid Interconnection during operations. Further, in section VI.C.3.d.ii.A above, the Siting Board required the Company to develop a Noise Evaluation and Mitigation Plan as part of its CMP and comply with certain construction hours.

Given that the Lee River Route has a slightly reduced construction-based noise impact on the closest residences in comparison to the Taunton River Route, the Siting Board finds that the Lee River Route is preferred from an onshore noise perspective. Given the implementation of these mitigation measures, the Company has minimized Onshore Cables construction noise impacts.

iii. Traffic

The record shows that road access to Brayton Point (and onshore portions of the Project) is by Brayton Point Road. The record further shows that the Project would not require a MassDOT access permit, however, it expects to consult with MassDOT to confirm that assessment. The record also shows an additional 60 vehicles per day traveling to the Brayton Point site due to Project construction. The estimated increase would have a minor impact on the local traffic.

The record shows that the Company plans to use various methods of public outreach prior to and during construction to keep abutters, residents, and other stakeholders and officials updated on Project construction schedules and other traffic management information. SCW will implement a TMP in cooperation with the Town of Somerset to minimize disruptions to the community in the vicinity of construction and installation activities. The record further shows that SCW would coordinate traffic management measures with the Town, Brayton Point landowners and tenants, and MassDOT. The Company will finalize the TMP prior to construction but after the Company has more clearly defined its construction activities and associated traffic. The record also shows SCW would coordinate the delivery of over-sized loads, steel members, and concrete with the Town of Somerset DPW, Police Department, and MassDOT, as necessary. Once construction begins, the Company indicates that it would maintain a construction schedule webpage to alert abutters, residents, and other stakeholders of construction locations, dates, activities, and traffic control measures.

Given the proposed coordination of the Company with state and municipal officials regarding traffic, and that both proposed Onshore Cable routes are located on Brayton Point, the Board finds that the Onshore Cable routes are comparable with respect to traffic management, and the Grid Interconnection is in the same location regardless of route chosen. With the traffic mitigation actions described in the record, the Siting Board finds that the Company has minimized and mitigated Project traffic for the Onshore Cables and Grid Interconnection.

iv. Lighting

The record shows that SCW will use BMPs to mitigate lighting impacts on neighboring residents from its Onshore Cables construction activities including, and when possible, through

shielding lights. Further, the Company would only use task lighting during construction and maintenance activities as needed. The record shows that there would be no permanent visual impacts along the Onshore Cables and Grid Interconnection routes since the Company would locate transmission facilities underground. The Siting Board finds that the routes are equivalent with respect to Onshore Cables lighting. With these mitigation actions, the Siting Board finds that the Company has minimized and mitigated Project lighting impacts associated with Onshore Cables.

v. Hazardous Waste

The record shows that the Project facilities avoid MassDEP-regulated areas such as AUL areas and solid waste landfill cells, although planned construction activities would be in proximity to a landfill cell. The Company plans to develop a Soil Management Plan and URAM Plans, as necessary, to manage construction-related excavated or disturbed contaminated material pursuant to the applicable provisions of the MCP, solid waste regulations, and BMPs. Further, the record shows no new reportable conditions were detected in soil and groundwater testing and analysis.

The record shows that SCW plans to retain an LSP as needed for managing regulated hazardous materials. SCW is developing a CMP to address the Town's concerns regarding existing hazardous materials at Brayton Point, and the management of excavated soil and dust, among other concerns. In section VI.C.3.d.i.(F) above, the Siting Board required the Company to include in its draft ERP elements that addressed sub-surface contamination or structures. The Board also expects the Company to work with the Town's retained experts of hazardous waste management.

The Board finds that the Onshore Cables routes are comparable with respect to hazardous waste given the mitigation actions proposed and the potential to encounter hazardous waste at either Onshore Cables routes during construction at this brownfield site. With these mitigation actions, the Siting Board finds that the Company has minimized and mitigated onshore Project hazardous waste impacts.

vi. Erosion and Sedimentation

The record shows that SCW will prepare Erosion and Sediment Control Measures and Construction Best Management Practices, containing the Company's plans to protect abutting properties, public ways, and drainage infrastructure from the Project's construction-related impacts, land disturbance, and construction activities. The Company's contractor would be responsible for installing, monitoring, repairing, and replacing proper erosion and sediment controls and other construction BMPs. The Siting Board finds the Onshore Routes equivalent regarding erosion and sedimentation impacts. With the proposed mitigation actions, the Siting Board finds that the Company has minimized and mitigated Project erosion and sedimentation impacts.

vii. Onshore Cables and Grid Interconnection Magnetic Fields

The record shows that the HVDC Onshore Cables and the HVAC Grid Interconnection would emit MF once operating. The Company modeled potential MF levels for these underground cables. For the Onshore Cables, the record shows that for three representative HVDC onshore duct bank configurations modeled for MF, peak direct current MF levels ranged from 252 to 433 mG approximately three feet above the ground surface, which is far below health-based exposure guidelines for direct current MFs. For each duct bank configuration, the record also shows that MF levels drop off very rapidly with increasing lateral distance from the duct bank centerlines.

The Grid Interconnection transmission lines will be buried underground within concrete duct banks. A peak 60 Hz AC MF level of 66.7 mG was obtained at a height of approximately three feet directly above the duct bank. MF levels drop off very rapidly with lateral distance from the cables, with MF levels of 13.9 mG and 1.5 mG at distances of 10 feet and 25 feet, respectively, from the duct bank centerline. The modeled MFs for the onshore 345 kV HVAC cables, including those directly above the underground duct bank, are all well below the ICNIRP health-based guideline of 2,000 mG for allowable public exposure to 60 Hz AC magnetic fields. As stated above, the Siting Board requires the Company to conduct testing of magnetic fields from the Onshore Cables and Grid Interconnection, which shall be done (i) prior to construction

commencement to establish a baseline, (ii) 90 days from the OGF being fully developed and capable of delivering 1,200 MW of energy, and (iii) one year from the OGF being fully developed and capable of delivering approximately 1,200 MW of energy. The Company shall file the results of the testing with the Siting Board.

The Siting Board finds the Lee River Route and the Taunton River Routes equivalent with respect to onshore MF impacts. With these mitigation actions, the Siting Board finds that the Company has minimized and mitigated onshore MF impacts. The Siting Board also finds that with the low MF tens of feet from the Grid Interconnection Lines, and the positioning of the Grid Interconnection lines over 1000 feet away from residences, the impacts of MF are minimized.

viii. Natural Resource Impacts

(A) Water Quality, Drainage, and Water Supply Protection

The record shows that the onshore route does not include work within MassDEP Zone I and II areas, wellhead protection areas, Freshwater Recharge Areas, or Potential Public Water Supplies. The Company maintained that it designed construction activities to avoid potential impacts to local groundwater and surface water resources. The record shows that SCW would use BMPs to protect water resources. SCW notes that it would use erosion and sedimentation controls during construction to minimize potential impacts to water resources and include spill response in its ERP as part of the Project's overall Safety Management System. The record shows that the Company would implement onshore construction activities in compliance with the Massachusetts Stormwater Standards, Massachusetts Stormwater Handbook, NPDES General Construction Permit, and the SWPPP. The record shows that the Project would avoid unnecessary disturbance of site soils and limit removal of, and damage to, vegetation wherever possible. The Company represents that all potentially impacted soils, groundwater, or surface water encountered during construction activities would be managed in accordance with applicable local, state, and federal regulations including MassDEP regulations.

The Siting Board finds the Lee River and Taunton River Routes equivalent with respect to these resource impacts. With these mitigation actions, the Siting Board finds that the Company has minimized and mitigated water quality, drainage, and water supply protection impacts.

(B) Wetlands

The record shows that the Company anticipates that temporary impacts would occur within jurisdictional wetlands and Chapter 91 Waterways areas including LSCSF for both routes, historically filled tidelands, and approximately 0.3 acres of historically degraded, previously developed Riverfront Area. The Company would install the onshore transmission system and all related components underground within approximately 3.3 acres. The work conducted in these areas may cause temporary disturbances within some wetlands resource areas subject to regulation under the Massachusetts WPA. However, the installation of the underground utilities would not result in long-term impacts to these resource areas and these areas would be stabilized and restored post-construction.

The record shows that the Taunton River onshore HDD construction area encroaches slightly upon LSCSF and would result in approximately 0.005 acres (236 square feet) of temporary impact to LSCSF. For both routes, the record shows that there are no above-ground structures constructed within LSCSF and, therefore, no permanent impacts to storm drainage prevention or flood control. The Company plans to develop an NPDES Construction General Permit and SWPPP to avoid and minimize impacts on nearby wetland and water resource areas from construction activities.

The record shows that Project activities that occur within the 200-foot RA of the Lee River are largely exempt from the RA performance standards under the WPA regulations due to a Chapter 91 Exemption. The portion of the Project that extends into the RA and is not exempt from the RA provisions would be addressed by the Company in accordance with the applicable performance standards during a wetlands review by the Somerset Conservation Commission.

The Siting Board finds that the Lee River Route wetland impacts, while temporary in nature, are higher than the temporary wetland impacts to the Taunton River Route. With the mitigation actions described above, the Siting Board finds that the Company has minimized and mitigated Project onshore wetlands impacts.

(C) Sensitive Open Space, Conservation and Recreational Lands

The record shows that neither the Lee River Route nor the Taunton River Route would traverse open space or conservation and recreational lands. Therefore, SCW asserts that there would be no impacts to such lands. The Taunton River Route would, however, pass within a buffer zone to conservation land, the Brayton Point Wildlife Management Area (and a portion of the buffer zone of Brayton Point Beach), but would not result in any loss of Article 97 lands. The Siting Board finds that although open space, conservation, and recreational lands are not directly impacted by either route, the proximity of the Taunton River Route to these resources makes the Lee River Route superior for this impact consideration, and impacts are minimized.

(D) Rare Species

The record shows that neither the Lee River Route nor the Taunton River Route would traverse mapped Priority or Estimated Habitat of rare species. NHESP issued a letter identifying species in the Project Area on April 28, 2022, and determined that the Project site within Massachusetts is not located in mapped Priority or Estimated Habitat. Accordingly, the Siting Board finds that rare species, Priority or Estimated Habitat are not impacted by the Project, and the two routes are therefore equivalent on this impact and impacts minimized.

e. Conclusion on Onshore Cable and Grid Interconnection Onshore Environmental Impacts

While some degree of impacts is unavoidable during Onshore Cable and Grid Interconnection construction, the Company provided a comprehensive analysis of impacts, avoided or minimized them where possible, and made significant commitments to protection and preservation of the onshore environment. The record demonstrates that the Company has addressed public concerns regarding a range of Onshore Cables and Grid Interconnection issues, including noise, air quality (dust from construction), magnetic fields, and hazardous waste exposure resulting from construction activities and developed plans to appropriately mitigate these impacts. From an onshore environmental impacts perspective, the Lee River Route is superior

overall, and given that the Grid Interconnection is in the same location for either route, the environmental impacts are the same regardless of the Onshore Cables route chosen.

2. Converter Station Impacts

a. Construction

The Company noted that the proposed site for the Converter Station and its surrounding area (8-10 acres) would be large enough to accommodate storage, parking, access and egress, and stormwater management elements (Exh. SW-1, at 1-9 to 1-10). The maximum footprint of the converter station yard will be approximately 7.5 acres (Exh. SW-1, at 1-10). The Converter Station will be sited on the north-central portion of the former power plant, which has been renamed the Brayton Point Commerce Center by the property owners, Brayton Point LLC (Exh. SW-6, at 13-2 to 13-3). The Converter Station is an electrical substation designed to convert the HVDC power from the export cables to HVAC power to enable grid interconnection to the existing transmission infrastructure (Exh. SW-1, at 1-4). SCW estimated that the Converter Station construction and commissioning will require approximately 41 months (Exh. SW-11, at 1-19). SCW stated that typical construction hours would be 7:00 a.m. to 7:00 p.m. on weekdays and 9:00 a.m. to 7:00 p.m. on Saturdays and legal holidays, as per the Town of Somerset construction noise restrictions (Exh. EFSB-CM-9, at 1). The Company will coordinate with Somerset to establish construction schedules, hours, and logistics, as well as seek approval when work would need to occur outside of these hours (Exh. EFSB-CM-9, at 2). In certain locations, the Company may propose night work to allow construction in areas with onsite traffic congestion or other construction projects occurring simultaneously (Exhs. EFSB-CM-9, at 2; SW-6, at 13-18).

SCW maintained that construction of the Converter Station would involve the following sequence:

- Site preparation, including field surveying; installation of soil erosion and sediment controls; grading; import of engineered fill; export of material deemed unsuitable for providing structural support; and installation of crushed stone tracking pads at the site entrance (Exh. SW-1, at 5-57);

- Yard construction, including establishing yard elevation(s); removing any excess shallow rock or bedrock; installation of new ground grid apron; spreading clean, processed gravel to improve grounding and drainage; installation of security fence; construction of stormwater management system; connection of new water line; installation of new tight tank for wastewater; paving new entrances, installation of access ways and parking areas (Exh. SW-1, at 5-57 to 5-58);

- Converter Station building and yard equipment installation, including: drilling and installing concrete foundations and slabs to support the buildings and heavier load; erecting steel Converter Station building, control building and storage building; construction of overhead buswork; installation of transformers and other major components and equipment; connection of electrical components in Converter Station building and yard; construction of noise barriers at edges of the site, where necessary, to meet regulatory requirements; installation of water tank; and erecting cooling tower(s) (Exhs. SW-1, at 5-58, SW-6, at 1-43); and

- Final restoration, including site stabilization and revegetation; removal and disposal of construction-generated debris; final cleanup and stabilization of stormwater management system; final paving; and testing and commissioning (Exh. SW-1, at 5-58).

b. Environmental Impacts of the Converter Station

i. Air Quality

As with construction of the Onshore Cables, SCW stated that it would complete construction in accordance with applicable sections of the MassDEP Air Pollution Control Regulations at 310 CMR 7.00 (Exhs. SW-1, at 5-24; EFSB-A-4, at 1). Although there would be construction-related emissions of regulated pollutants during Converter Station construction, and an emergency diesel generator used incidentally during periodic maintenance and emergencies, SCW represented that there are no significant long-term impacts on air quality anticipated with the operation of the Converter Station (Exh. SW-6, at 12-12).

The Company states that the Project will meet the standards for the gas-insulated equipment (Exh. SW-6, at 12-11). Equipment will be represented by the manufacturer to have less than a 0.1 percent maximum annual leak rate of sulfur hexafluoride ("SF_6"), and the Company will follow manufacturer-recommended maintenance procedures and best industry practices to avoid leakage of SF_6 (Exh. SW-6, at 12-11). The Company acknowledges the regulatory requirement to report any cause for not meeting the 1.0 percent maximum annual leak rate or record of adding

SF_6; and should future maintenance activities require the removal of any gas insulated equipment containing SF_6, the Company would follow the standards established in the regulations, as they relate to operations, maintenance, and decommissioning (Exh. SW-6, at 12-11).

According to the Company, the construction contractor would be required to implement air quality and dust control measures on-site throughout the construction period, including:

- Install stabilized construction entrances and exits (i.e., stone aprons or tracking pads) at road access points to reduce tracking of soil onto public roadways or adjacent properties;
- Dust control measures outlined in the Massachusetts Erosion and Sediment Control Guidelines for Urban and Suburban Areas for soil stockpile management;
- The Project's NPDES Construction General Permit which would specify erosion and sedimentation control measures to avoid and mitigate impacts outside the immediate construction limit of disturbance;
- Dust control methods including limiting the amount of bare soil exposed at one time through watering, surface roughening, wind barriers and covers to suppress dust generation during construction;
- All on-site personnel would take measures to limit vehicle idling times in compliance with the state's anti-idling laws, to the extent feasible

(Exh. SOM-10, at 4-5).

ii. Noise

SCW indicated that the transformers, cooling fans, and reactors would be the highest operational noise producing equipment at the Converter Station (Exh. EFSB-NO-6, at 1). Converter Station equipment noise levels are provided in Table 15 below. The Company stated that the backup diesel generator would operate only during periodic maintenance activities or emergency conditions (Exh. EFSB-NO-6).

To address both construction and operational-related noise sources, the Company stated that it would comply with the Somerset Noise Control Bylaw and the MassDEP Air Quality Noise

Regulations at 310 CMR 7.10 (1),[49] and BMPs to mitigate noise (RR-EFSB-5, at 1; RR-EFSB-5(1), at 9-12; Company Brief at 116; Town Brief at 4). Further, the Somerset Noise Control Bylaw also requires that the Project not exceed 55 dB at residential property boundaries at night (Exhs. SOM-8, at 2; SOM-8(1)). The Company updated the Operational Noise Report to clarify that the Project will comply with the 55 dB threshold for residential property boundaries (Exh. SOM-8, at 2). SCW maintained that it would operate the Converter Station to comply with all applicable state and Town noise limits (Exhs. SOM-8(1); EFSB-Z-17).

Table 15. Converter Station Equipment Operational Noise Levels.

TABLE 5: GENERAL EQUIPMENT DATA[1]	
PIECE OF EQUIPMENT	DATA
HVDC-VSC Power Transformers, single-phase Maximum Sound Pressure Level	104 dB(A) (each)
Auxiliary Power Transformer Maximum Sound Pressure Level	75 dB(A)
Air Core Reactors (AC and DC) Maximum Sound Pressure Level	85 dB(A) (each)
Dry Cooling Fan Towers Maximum Sound Pressure Level	100 dB(A)
Diesel Generator Maximum Sound Pressure Level	75 dB(A)
Valve Hall and HVAC Equipment Maximum Sound Pressure Level	80 dB(A)

[1]Data provided for reference only. The equipment manufacturer will be responsible for final equipment design and station layout to achieve the sound level requirements.

Source: Exh. EFSB-NO-6, at 1.

SCW modeled the Converter Station's operational noise relative to both state and local regulations (Exhs. SOM-8; SOM-8(1)). For the eastern property line along Brayton Point Road, the Company expects the audible noise produced by the Converter Station would be 41 dBA or less (Exhs. SOM-8, at 2; SOM-8(1)). In the industrial zone of Brayton Point, the Company represented that it anticipates the noise produced by the Converter Station would be 60 dBA or less, which is below the noise level deemed reasonable by the Town of Somerset (70 dBA) (Exh. SOM-8(1), at 15). Additionally, SCW noted that the operation of the Converter Station would not

[49] MassDEP Air Quality Regulations at 310 CMR 7.10, subsections (1) and (2), pertain to the use of sound-emitting equipment to reduce unnecessary noise.

increase noise by more than 10 dBA above ambient levels at any inhabited buildings near the property (Exh. SOM-8, at 2), ranging from 5 to 9 dBA above ambient depending on sampling location (Exh. SOM-8(1), at 14). dBA. This is below the noise level deemed reasonable by the Town of Somerset for property zoned as Residential (55 dBA) between 10:00 pm to 7:00 am (Exh. SOM-8, at 2). These values also meet the MassDEP requirement to be no more than 10 dBA greater than ambient noise levels at any inhabited buildings near the property for sound produced by the facility during its 24-hour operation (Exh. SOM-8, at 2).

SCW asserts that the equipment and the layout of the buildings and yard would meet applicable noise regulations and standards, but that sound barriers would be used if necessary to meet these requirements and mitigate noise impacts (Exh. SOM-8, at 2).

SCW represented that it would mitigate construction noise (i.e., noise caused by construction actions and equipment used to build the Converter Station) by:

- Requiring operation of all construction equipment such that construction-related noise levels comply with applicable sections of the MassDEP Air Quality Noise Regulation at 310 CMR 7.10;
- Requiring well-maintained equipment with functioning mufflers;
- Requiring muffling enclosures on continuously operating equipment such as air compressors and welding generators;
- Using a low-noise generator to reduce noise impacts for cable pulling and splicing;
- Requiring strict compliance with the Massachusetts Anti-Idling Law to prevent equipment from idling and producing unnecessary noise while not in productive use; and
- Mitigating the impact of noisy equipment on sensitive locations by using shielding or buffering distance to the extent practicable

(Exh. SOM-8, at 3).

iii. Hazardous Waste

As with the Onshore Cables and Grid Interconnection, the Company stated that it anticipates managing its construction-related excavated/disturbed contaminated material pursuant

to the applicable provisions of the MCP, the Solid Waste Regulations, and BMPs drawing from industry practices accepted by MassDEP in URAM Plans from other infrastructure construction projects in developed and/or industrial areas filed pursuant to 310 CMR 40.0460 (Exh. EFSB-S-5, at 2). According to SCW, any URAM plans the Company prepares would address construction-related concerns regarding excavated or disturbed contaminant material (Exh. EFSB-S-5, at 2).

The Company noted that the AUL Cell 1A area would partially border the Converter Station to the west (Exh. EFSB-S-5, at 2). The Company stated that it intends to site, design, and construct the Converter Station to avoid impacting the AUL (Exh. EFSB-S-5, at 2). The Company added that it would design the Project stormwater management system to avoid direct point discharge towards or into the border of the AUL (Exh. EFSB-S-5, at 2). The Company also indicated that SCW's construction contractor would take measures to avoid encroachment into or impacts to the AUL (Exh. EFSB-S-5, at 2).

iv. Visual and Lighting

According to the Company, most of the major Converter Station equipment would be outdoors (RR-EFSB-39)[50] and approximately 0.2 miles from the National Grid substation POI (Exh. SW-1, at 5-26). A visual analysis of key observation points ("KOPs") by the Company showed that the onshore Project features would be visible from four KOPs within the immediate vicinity (within 0.5 and 1.5 miles) (Exh. SW-6, at 13-13). Other KOPs that were mapped within the viewshed would not have visibility of the Brayton Point onshore Project area features because those locations were either enclosed within existing vegetation, screened by buildings or other structures, or set low in the topography (Exh. SW-6, at 13-13). The Company added that visibility of the onshore facility would be further screened during spring, summer, and fall when foliage is present (Exh. SW-6, at 13-13).

---

[50] In response to Siting Board staff questions regarding housing the equipment indoors, the Company represented that the incremental cost of doing so would increase Project costs by approximately $50-70 million over the current design (RR-EFSB-39).

According to the Company, the Converter Station would require use of security and worker safety lighting during the operational life of the Project (Exh. SW-6, at 13-13).[51] This lighting would cause a change in ambient lighting within the immediate vicinity of the Converter Station (Exh. SW-6, at 13-13). The Company stated that the outdoor light fixtures would typically be light-emitting diode ("LED") holophane-type fixtures equipped with light shields to prevent light from encroaching into adjacent areas (Exh. SW-6, at 13-13). SCW noted that the lights would be illuminated on dusk-to-dawn sensors and motion-sensing switches (Exh. EFSB V-4, at 1). The Company represented that it would use task lighting for maintenance activities only as needed (Exh. SW-6, at 13-14). The Company also indicated that it would switch on most lights for emergency situations only and would not use them on a regular basis (Exh. EFSB V-4, at 1). SCW noted that there are no night sky lighting standards articulated in Town of Somerset bylaws or ordinances; nevertheless, the Company would coordinate with the Town regarding the lighting scheme for the Converter Station (Exhs. EFSB-V-4, at 1; SW-6, at 13-13).

v. Stormwater Management and Water Supply

Construction of the Converter Station would increase the impervious area by 1.5 acres relative to existing conditions (Exh. SW-6, at 6-13). SCW stated that the areas of impervious surfaces within the Converter Station yard would include buildings and concrete foundations (Exh. SW-6, at 6-13). Much of the switchyard would receive a surface treatment of stone and riprap, and crushed stone yard-surfacing, which is not considered impervious (Exh. SW-6, at 6-13). As with the Onshore Cables, the Company will design and build the Converter Station and the stormwater management system in compliance with the Massachusetts Stormwater Handbook, Stormwater Standards, the Project's NPDES Construction General Permit, and SWPPP (Exh. SW-6, at 6-13; SW-14, at 5-11; RR-EFSB-21; RR-EFSB-21(1)).

---

51 The record shows that typically a few lights are illuminated for security reasons on dusk-to-dawn sensors and a few motion-sensing switches, depending on the application needed for the site, but that the majority of lights would be switched on for emergency situations only (Exh. SW-6, at 13-14).

The stormwater management system will collect runoff within the Converter Station and discharge to the existing, privately owned stormwater system on Brayton Point, which is separate from the Town of Somerset municipal system (Exhs. SW-6, at 6-13; SW-14, at 5-11). The Company indicated that the site owner, Brayton Point LLC, has submitted to the Somerset Conservation Commission its NOI for the onsite stormwater system (Exh. SW-14, at 5-11). As described above, SCW anticipates applying for and obtaining a NPDES Construction General Permit for Stormwater Discharges from Construction Activities; the Company will also apply for a NPDES Multi-Sector General Permit to address stormwater runoff that may come into contact with industrial activities at the Brayton Point site (Exh. SW-14, at 5-11).

During detailed design of the Project, SCW will determine which stormwater management BMPs are required within the Converter Station site (Exh. SW-6, at 6-13). The Company indicated that the Project would employ low-impact development measures which may include preserving existing undeveloped space, rainwater harvesting systems, the use of open country drainage swales, installation of underground water quality sand filter systems, and stormwater management basins and filters (Exh. SW-6 at 6-13 to 6-14).

The Company maintained that the Converter Station site at this industrial site does not include work within MassDEP Zone I and II areas, wellhead protection areas, Freshwater Recharge Areas, or Potential Public Water Supplies (Exh. SW-6, at 6-9). The Company noted that it would design construction activities to avoid potential impacts to local groundwater and surface water resources and implement requirements of the NPDES Construction General Permit, and BMPs to protect water resources (Exh. SW-6, at 6-9).

vi. Onshore Spill Prevention and Countermeasures

SCW will prepare a Spill Prevention, Control, and Countermeasures ("SPCC") Plan in accordance with the rules and regulations established under NPDES (Exhs. SW-1, at 5-7; EFSB-W-12, at 1). The SPCC Plan will cover all aspects of Project construction and operations that could potentially result in the release of pollutants (Exh. EFSB-W-12, at 1). The Company will submit the plan to MassDEP and the EPA as part of the Project's SWPPP for construction of the onshore facilities at Brayton Point (Exh. EFSB-W-12, at 1). Additionally, the Company would

establish procedures for refueling construction equipment during consultations with MassDEP (Exh. SW-1, at 5-7).

SCW would develop the SPCC Plan for the quantities of dielectric fluid stored at its Converter Station during operation pursuant to 40 C.F.R. Part 112 of the federal Clean Water Act (Exh. EFSB-W-12, at 1). Table 16 provides a representative inventory of Converter Station equipment expected to contain dielectric fluid, fuel, oils, and other fluids that would be stored in primary storage containment with secondary containment measures as required and practicable (Exh. EFSB-W-15, at 1). According to SCW, it will size secondary containment to house the volume of fuel, oil and other fluids plus an additional safety margin to compensate for rainwater (Exh. EFSB-W-15, at 1). The Company explained that the SPCC Plan will describe dielectric fluid stored at the Converter Station during operation pursuant to 40 C.F.R. Part 112 of the federal Clean Water Act (Exh. EFSB-W-12).[52] The Company will stage spill containment kits and spill control accessories at the Converter Station in the event of any inadvertent spills or leaks, including absorbent pads, temporary berms, absorbent socks, drip pans, drain covers/plugs, appropriate neutralizers, and over pack containers (Exh. SW-1, at 5-7). SCW would train operators in the use and deployment of spill control equipment (Exh. SW-1, at 5-7).

The SPCC Plan will address the quantities of dielectric fluid stored at the Converter Station during its operation and cover all aspects of Project construction and operations that could potentially result in the release of a contaminants (Exh. EFSB-W-12, at 1). The Company will train operators on the use and deployment of such spill prevention equipment (Exh. SW-6, at 9-6).

---

52 40 C.F.R. § 112.8(c)(2) requires the following for secondary oil and hazardous materials containment: facilities must construct all bulk storage container installations to provide a secondary means of containment for the entire capacity of the largest single container and sufficient freeboard to contain precipitation. EPA guidance for "sufficient freeboard" for certain tank systems storing or treating hazardous waste is that amount necessary to contain precipitation from a 25-year, 24-hour storm event, allowing flexibility for varying climatic conditions (67 FR 47117, July 17, 2002).

Table 16. Bulk Liquid Storage at the Converter Station.

Equipment Type	Quantity	Volume per Unit (gal)	Total Volume (gal)
Main transformer	4	15,000	60,000
Auxiliary transformer	2	2,000	4,000
Station service transformer	2	600	1,200
Valve cooling (uses a deionized water and glycol mix)	1	700	700
Capacitor bank, 20 Mva (if required)	1	90	90

Source: Exh. EFSB-W-15, at 1.

vii. Magnetic Fields

Magnetic fields at the Converter Station are directly linked to the Converter Station's primary function: conversion of the HVDC power from the export cables to HVAC power to enable grid interconnection to the existing transmission infrastructure (Exh. SW-1, at 1-4). Consequently, the magnitude of and types of magnetic fields (AC and DC) at the Converter Station reflect the electric currents in cables flowing into and out of this station (Exh. SW-1, at 5-25 to 5-26). See also magnetic fields discussion for Onshore Cables and Grid Interconnection (Section VI.D.1.b.vii(B)).

viii. Chapter 91 and Wetlands

SCW contends that the Converter Station footprint is not located within Chapter 91 and wetlands resource areas jurisdiction (Exh. SW-1, at 5-3). The Company neither observed nor identified potentially jurisdictional vegetated wetlands or open water areas within the Converter Station footprint on Brayton Point (Exh. SW-1, at 5-3).

SCW stated that the upland Project area would traverse neither mapped Priority nor Estimated Habitat of rare species (Exh. SW-1, at 4-32, 4-36, 5-6). SCW would continue to determine avoidance, minimization, and mitigation measures for terrestrial historical and archaeological resources within the Project area in continued consultation with the Tribes, BOEM, and MHC through the Section 106 process and otherwise (Exh. SW-14, at 8-12).

ix. Traffic

The Company will finalize the TMP prior to construction but after the Company has more clearly defined its construction activities and associated traffic (Exh. EFSB-T-9, at 1).

SCW estimated that on-site daily construction traffic would require less than half an acre of space to accommodate parking (Exh. EFSB-T-15, at 1). The Company noted that the Converter Station parcel would allow adequate space to accommodate the contractor parking area on the construction site (Exh. EFSB-T-15, at 1). The Company will work with Brayton Point LLC to accommodate contractor parking on site; and encourage construction workers to carpool (Exh. EFSB-T-15, at 1). Post construction, the Company stated that it would not staff the Converter Station facilities, thereby minimizing additional traffic, with occasional visits of a two-person crew (Exh. EFSB-T-10, at 1).

x. Safety and Security

As above, SCW will design, build, and maintain the Project in a manner that protects health and safety through adherence to all applicable federal, state, and local laws and regulations (Exh. SW-1, at 5-61). The Company further maintained that all design, construction, and operation activities would be in accordance with applicable government and industry standards such as the Massachusetts Code for the Installation and Maintenance of Electric Transmission Lines (220 CMR §§125.00 *et seq*.) and the National Electrical Safety Code (Exh. SW-1, at 5-61). The Company will design facilities in accordance with sound engineering practices using established design codes and guides published by, among others, the Department, the Institute of Electrical and Electronic Engineers, the American Society of Civil Engineers, the American Concrete Institute, and the American National Standards Institute (Exh. SW-1, at 5-61). The Company asserts that it would require contractors to comply with all Dig Safe regulations and protocols (Exh. SW-1, at 5-61).

Further, the Company maintained that following construction of the facilities, it would clearly mark all transmission structures and Converter Station facilities with warning signs to alert the public to potential hazards (Exh. SW-1, at 5-61). The Company stated that it will assemble its

CMP and complete its ERP as part of the Project's overall Safety Management System closer to the start of the construction phase to incorporate and reflect current site conditions and the latest engineering design plans (Exh. EFSB-W-20, at 1).

The Brayton Point Commerce Center is privately owned industrial land and access is restricted for security and safety purposes (Exh. SW-6, at 13-17). The Company would enclose the new facilities within security fencing and take measures to ensure safety and restrict access to the Converter Station to authorized personnel, in accordance with all applicable regulatory and industry requirements (Exh. SW-1, at 1-10, 5-57). Further, the Company would coordinate with the other property owners, tenants, and easement holders at the Brayton Point site, including Brayton Point LLC, National Grid, Prysmian, and Enbridge, and with the Town of Somerset regarding additional safety and security measures (Exh. SW-6, at 15-30). The Converter Station would require use of security and worker safety lighting during the operational life of the Project (Exh. SW-6, at 13-13). The Company noted that there are typically a few lights illuminated for security purposes on dusk-to-dawn sensors as well as a few on motion-sensing switches, depending on the application needed for the site (Exh. SW-6, at 13-14).

The Company maintains that it would take all appropriate measures to ensure safety and restrict access to the Converter Station to authorized personnel, in accordance with all applicable regulatory and industry requirements (Company Brief at 19). The Company stated that it intends to use security lighting, security fencing, warning signage, and other security measures, as necessary and appropriate at the Converter Station, during the operational life of the proposed Project (Company Brief at 189).

xi. Sea Level Rise

Brayton Point is a flat brownfields site on a peninsula of land surrounded by Mount Hope Bay to the south, the Lee River to the west, the Taunton River to the east, and Interstate Route 195 to the north (Exh. SW-1, at 3-3). The Project is identified as having a high exposure rating based on the Project's location for the following climate parameters: sea level rise/storm surge, extreme precipitation (urban/riverine flooding), and extreme heat (Exh. SW-6, at 12-3). Based on the 45-year useful life identified for the Project and the criticality of the onshore Project components,

the ResilientMass Action Team ("RMAT") Climate Resilience Design Standards Tool ("RMAT Tool") recommends a planning horizon of 2070 and a return period associated with a 200-year (0.5 percent chance) storm event when designing the onshore components of the Project related to sea level rise, and a 50-year (2.0 percent) storm event for the onshore Project components for extreme precipitation (Exh. SW-6, at 12-3).

(A) Description of the RMAT Tool

The RMAT Tool prompts users to input project information. Based on these user inputs and the project location, the Tool determines a preliminary climate exposure rating for the overall project, by climate hazard: sea level rise and storm surge, extreme precipitation (urban and riverine), and extreme heat. This rating, combined with the consequence of impact of that asset failing (determined by user responses to a series of questions), informs a preliminary climate risk screening for each asset, by climate hazard.[53]

The RMAT Tool's climate exposure output provides a preliminary assessment of whether the project site and subsequent assets are at risk of exposure to impacts of natural hazard events and/or future impacts of climate change for each of the climate parameters, calculating one of the following exposure outputs for each climate parameter: Not Exposed, Low Exposure, Moderate Exposure, or High Exposure. Preliminary Climate Exposure Scoring is calculated based on GIS-spatial analysis of the project location.[54]

---

53 See https://resilient.mass.gov/rmat_home/designstandards/.

54 A high-risk score does not necessarily indicate a "risky" project. For example, a coastal flood barrier may receive a high-risk score, but that is based on the exposure of the project and impact if that asset fails. Users of RMAT Tool outputs are reminded to consider if the modeled project can incorporate assets that mitigate climate risks or if they should consider relocating their assets to a less exposed location. See also: https://eea-nescaum-dataservices-assets-prd.s3.amazonaws.com/cms/GUIDELINES/V1.2_SECTION_3.pdf#page=7.

The RMAT Tool leverages the Massachusetts Coast Flood Risk Model ("MC-FRM") in its flooding assessment modeling.[55] The MC-FRM is an accurate representation of flooding risk because it is:

- a dynamic model that includes the critical processes associated with storm induced flooding (winds, waves, wave-setup, storm surge, wave run-up and overtopping, etc.);
- calibrated to historical storm events that impacted Massachusetts with observed high water data and measurements;
- high enough resolution to capture flood pathways in complex urban topographies;
- a model that includes both hurricanes and nor'easters under changing climate conditions; and
- able to capture the net effect of varying storm types, magnitudes, and frequencies.[62]

(B) Application of the RMAT Tool to the Project

Future sea level projections are provided for the Massachusetts coastline at established tide gauge stations with long-term records and at Newport, Rhode Island, the nearest reporting station to the Project's landfall at Brayton Point (SW-1, at 5-48). Using the RMAT Tool, the expected sea level rise from the closest recording station, at Newport, Rhode Island, is projected to rise by 2.4 feet above mean higher high water in 2050 and 4.2 feet in 2070 (Exh. SW-1, at 5-48).

---

55 See: https://www.woodsholegroup.com/innovation/massachusetts-coast-flood-risk-model/.

Table 17: Newport, Rhode Island Location Information.

Newport, RI

The value highlighted in green is the projected value corresponding to the decade and scenario currently selected on the map. For more information about these sea level rise projections, please review the metadata documentation.

Relative mean sea level (feet NAVD88) for Newport, RI

Scenario	2020	2030	2040	2050	2060	2070	2080	2090	2100
Intermediate	0.4	0.7	1	1.4	1.9	2.4	2.9	3.5	4
Intermediate High	0.6	0.9	1.3	1.8	2.3	2.9	3.6	4.4	5.1
High	0.8	1.3	1.8	2.4	3.2	4.2	5.2	6.5	7.7
Extreme	0.9	1.5	2.2	3.1	4.2	5.5	6.9	8.5	10.3

Source: Exh. SW-1, at 5-48.

SCW stated that the Lee River Route onshore remains above inundation levels with a projected 4.0-foot sea level rise (Exhs. SW-1, at 5-8; EFSB-W-3, at 1). A short segment of the Lee River Route at the landfall location would be below inundation levels with a projected 6.0-foot sea level rise (Exh. SW-1, at 5-8) in the 2070s under an extreme exposure scenario, or sometime during the 2080s in a "High" exposure scenario pursuant to Table 17 RMAT modeling results, using Newport, RI sea level rise projections as the closest station to the Converter Station and a model for Brayton Point (Exh. SW-1, at 5-48). Additionally, under modeled overland storm flowage, a small portion of the Lee River Route landfall would experience overland flows under Category 1 or larger hurricane conditions at current sea level conditions, with the entire Brayton Point area inundated in a Category 4 or higher hurricane (Exh. SW-1, at 5-8). With sea level rise, the Company expects overland flow associated with hurricanes to worsen (i.e., push farther inland) (Exh. SW-1, at 5-8).

The Taunton River Route also remains above inundation levels with a projected 4.0-foot sea level rise, and additionally would remain above inundation levels with a projected 6.0-foot sea level rise (Exh. SW-1, at 5-8). SCW estimates that the Taunton River Route may experience overland flow under a Category 3 or higher hurricane under existing sea level conditions (Exh. SW-1, at 5-8). Therefore, the Company estimates that inundation for the Taunton River Route is slightly less likely than for the Lee River Route (Exh. SW-1, at 5-8).

Further, the RIM (surface) elevation of the Converter Station, as currently designed, ranges from 33.95 feet to 34.45 feet; and the INVERT (bottom of pipe) elevation at the Converter Station

ranges from 28.65 feet to 30.5 feet relative to North American Vertical Datum ("NAVD88") elevations (Exh. SW-2, Attachment B, Drawing C1-1). In fact, the HVDC Converter Station site is located well outside of potential inundation zones associated with hurricanes (Exh. SW-1, at 5-8). However, while the Converter Station elevation ranges are above projected sea level rise in the 2070s and 2080s (per Table 17 above), Brayton Point would still be subject to inundation from hurricanes (Exh. SW-1, at 5-8). Sea level rise and overland flow associated with hurricanes would be expected to worsen (i.e., pushing farther inland) and lower lying areas may experience overland flow with lesser storm intensity (Exh. SW-1, at 5-8). The Company stated that onshore and offshore export cables and the TJBs will be designed to withstand being submerged and operated in salt water (Exh. SW-6, at 12-3). The HVDC converter station will be designed to tolerate high and widely fluctuating air temperatures, among other measures, as discussed further below (Exh. SW-6, at 12-3).

c. Positions of the Parties

i. Town of Somerset

As discussed above (see Section VI.C.3.c.i), the Town of Somerset states that it is generally supports the Project (Town Brief at 1); however, the Town requests that the Siting Board approve the Project subject to conditions, which address a range of integrated environmental and public health marine and upland impact issues (Town Brief at 2).

ii. Company Response

As discussed above (see Section VI.C.3.c.ii), SCW asserts that it has made numerous commitments regarding minimizing environmental impacts (Company Reply Brief at 4). According to the Company, many of those commitments stated by SCW in its Brief are the same as those proposed by the Town in its Brief (Company Reply Brief at 4). Where there are divergences between the Town's conditions and the Company's commitments, the Company asserts that it is confident that those divergences could be resolved in a mutually acceptable agreement (Company Reply Brief at 4).

d. Analysis and Findings on Converter Station Environmental Impacts

i. Air Quality

As with Onshore Cables construction, air quality impacts would include construction vehicle emissions, construction equipment emissions, the generation of fugitive dust during construction, with temporary and minor impacts to ambient air quality localized to areas adjacent to active construction. Operation of the Converter Station would involve the use of SF_6. The Company will comply with applicable sections of the MassDEP Air Pollution Control Regulations. Although there would be construction-related emissions of regulated pollutants during Converter Station construction, there would be no significant long-term impacts on air quality anticipated with the operation of the Converter Station. The record shows that the construction contractor will implement air quality and dust control measures on site throughout the construction period, including stabilized construction entrances and exits, dust control measures, erosion and sedimentation control measures, and limiting engine idling. However, the Company is encouraged to adopt measures to reduce air quality impacts from construction vehicles, and to provide commitments to utilize emission controls for all on-site construction vehicles in an effort to minimize construction vehicle emissions (Exh. SW-10, at 33).

In section VI.D.1.d.i above, the Siting Board required the Company to develop and provide an Air Quality Management Plan and work with abutters to minimize cumulative construction related impacts. With these actions, the Siting Board finds that the Company would minimize and mitigate Project air quality impacts.

ii. Noise

The record shows that the Company will comply with local ordinances, restricting the Project to no more than 55 dBA at residential property boundaries at night, and MassDEP's Air Quality Noise Regulation requirements pertaining to operational sound. For the eastern property line along Brayton Point Road (worst case noise scenario for proximal residences), the record shows that the audible noise produced by the Converter Station is expected to be 41 dBA or less.

The record also shows that the noise produced by the Converter Station is expected to be below the noise level allowable by the Town noise bylaw for property zoned as Industrial (70 dBA), and diminish with distance from the Converter Station site. Finally, the Company's noise modeling indicates that operation of the Converter Station would not increase noise by more than 10 dBA above ambient levels at any inhabited buildings near the property, ranging from 5 to 9 dBA above ambient depending on sampling location.

The Town of Somerset argues that to address noise concerns, the Siting Board could impose conditions on hours of operation and/or noise mitigation measures for activities which must run constantly, and order compliance with the Noise Bylaw. The record shows that the Company will mitigate both construction and operationally based noise by operating equipment within the MassDEP Noise Policy and the Somerset Town Bylaw; keeping equipment well maintained with mufflers; enclosing continuously operating equipment; using a low noise generator for cable pulling and splicing; and shielding or moving noisy equipment away from sensitive locations. The Company would further use sound barriers if necessary to meet applicable noise requirements and limit hours of construction operations for most construction activities.

In section VI.C.3.d.ii.A above, the Board required the Company develop the Noise Evaluation and Mitigation Plan as part of its CMP and to comply with certain construction hours. With the noise mitigation action described herein, the Siting Board finds that the Company has minimized and mitigated Converter Station construction and operations noise.

iii. Hazardous Waste

The record show that the Converter Station is partially bounded to the west by AUL Cell 1A area; the Company intends to site, design, and construct the Converter Station to avoid impacting the AUL. The record further shows that URAM plans the Company prepares would address construction-related concerns regarding excavated or disturbed contaminant material, and that construction-related excavated or disturbed contaminated material would be managed pursuant to the applicable provisions of the MCP, 310 CMR 40.0045(5).

The Town of Somerset argues that the Company should comply with applicable permit requirements; manage oil and hazardous materials under the Massachusetts Contingency Plan; and

have an ERP to addresses *inter alia* unexpected conditions including but not limited to: discovery of unanticipated sub-surface contamination or structures (e.g., buried drums, underground storage tanks, piping), spills of oil or hazardous materials; and medical or fire emergencies; and evacuation procedures for local residences and businesses in case of fire or major vapor release. In section VI.C.3.d.i.(F) above, the Siting Board required the Company to include in its ERP elements that address hazardous waste.

With these mitigation actions, the Siting Board finds that the Company has minimized and mitigated onshore Project hazardous waste impacts.

iv. Visual and Lighting

The record shows that the Converter Station is proximal to the National Grid substation (within a quarter of a mile), visible from four KOPs within the immediate vicinity (within 0.5 and 1.5 miles), and is an existing industrial viewshed. The record shows that there are no night sky lighting standards articulated in the existing Town of Somerset bylaws or ordinances; nevertheless, the Company plans to coordinate with the Town of Somerset regarding the lighting scheme for the Converter Station.

The Converter Station would require use of security lighting and fencing during the operational life of the Project, which also contributes to safety for any workers required to visit the site. The record shows that typically a few lights are illuminated for security reasons on dusk-to-dawn sensors and a few motion-sensing switches, depending on the application needed for the site, but that the majority of lights would be switched on for emergency situations only. The record shows that this security and worker safety lighting would cause a change in ambient lighting within the immediate vicinity of the Converter Station. To mitigate glare, the Company would rotate outdoor light shields to the optimal position and use task lighting for maintenance activities only as needed.

With these actions, the Siting Board finds that the Company has minimized and mitigated Converter Station visual and lighting impacts.

v. Stormwater Management and Water Supply

The Company will design and construct a stormwater management system to collect runoff within the Converter Station, in compliance with the Massachusetts Stormwater Handbook, Stormwater Standards, the NPDES Construction General Permit and the SWPPP. The record shows that the Project's stormwater management system would discharge to the existing, privately owned stormwater system on Brayton Point, which is separate from the Town of Somerset municipal system. The record further shows that much of the Converter Station switchyard would receive a surface treatment of stone and riprap, and crushed stone yard-surfacing, which would not constitute additional impervious surface.

Brayton Point LLC submitted to the Somerset Conservation Commission its NOI for the Brayton Point stormwater site work, which includes stormwater management BMPs sized with anticipation of further redevelopment of the site in accordance with the Massachusetts Stormwater Handbook.

With regards to water supply, the record shows that the Converter Station site does not include work within MassDEP Zone I and II areas, wellhead protection areas, Freshwater Recharge Areas, or Potential Public Water Supplies. The Company will design construction activities to avoid potential impacts to local groundwater and surface water resources and implement requirements of the Project's NPDES Construction General Permit, and BMPs to protect water resources.

Given a lack of MassDEP Zone I and II areas, wellhead protection areas, Freshwater Recharge Areas, or Potential Public Water Supplies, and the Company's construction strategies regarding water resources, the Siting Board finds that the Company has minimized and mitigated Project water supply impacts. Additionally, the Siting Board finds that with the implementation of mitigation, the Company would minimize and mitigate Project stormwater impacts.

vi. Onshore Spill Prevention and Countermeasures

The Company will develop an SPCC Plan in accordance with the rules and regulations established under NPDES and submit the plan to MassDEP and EPA as part of the Project's SWPPP for construction of the onshore facilities at Brayton Point. The record shows that the

SPCC Plan and spill response in its ERP are part of the Project's overall Safety Management System. The SPCC Plan will address the quantities of dielectric fluid stored at the Converter Station during its operation and cover all aspects of Project construction and operations that could potentially result in the release of a contaminants. The Company will also stage spill containment kits and spill control accessories at the Converter Station, including absorbent pads, temporary berms, absorbent socks, drip pans, drain covers/plugs, appropriate neutralizers, and over pack containers for use in the event of spills or leaks. The Company will train operators on the use and deployment of such spill prevention equipment. In section VI.C.3.d.i.(F) above, the Siting Board required the Company to include in its ERP elements that address spill response.

The record shows that the Company will inventory and contain fuel, oils, and other fluids stored in onshore facilities in primary storage containment with secondary containment measures and devices where required. The Company committed to sizing secondary containment to house the volume of fuel, oil, and other fluids plus an additional safety margin to compensate for rainwater. Specifically, the Company will comply with 40 CFR Part 112 of the federal Clean Water Act, which requires that secondary oil and hazardous materials secondary containment have sufficient capacity for the primary containment, plus precipitation related to a 25-year, 24-hour storm event.

Given state and federal coordination and review of the developing SPCC Plan, staging of on-site spill response equipment, and training regarding use of this equipment, and the Company's bulk liquid inventorying and containment plans, the Siting Board finds that with the mitigation measures described herein the Company has adequately addressed onshore spill prevention and countermeasures strategies.

vii. Magnetic Fields

The record shows that MF is associated with both the Onshore Cables entering, and Grid Interconnection line leaving, the Converter Station. As stated above, the Siting Board requires the Company to conduct testing of magnetic fields from the Converter Station, which shall be done (i) prior to construction commencement to establish a baseline, (ii) 90 days from the OGF being fully developed and capable of delivering 1,200 MW of energy, and (iii) one year from the OGF being

fully developed and capable of delivering approximately 1,200 MW of energy. The Company shall file the results of the testing with the Siting Board.

viii. Chapter 91 and Wetlands

The record shows that the Converter Station is not located within land under Chapter 91 jurisdiction. The record also shows that there are no WPA-jurisdictional vegetated wetlands or open water within the Project Converter Station footprint on Brayton Point. Accordingly, the Siting Board finds that Chapter 91 and wetland resources impacts are minimized for the Converter Station.

ix. Traffic

As described for the Onshore Cables construction, construction and operation of the Project facilities, including the Converter Station, would not generate a significant impact on traffic flow and safety in the MassDOT State Highway Layout that abuts the Brayton Point property, and there is adequate on-site parking for both construction and facility operations. Therefore, the Siting Board finds that the Company has minimized potential impacts from onshore traffic and parking management.

x. Safety and Security

The Company will design, build, and maintain the Project in a manner that protects health and safety through adherence to applicable federal, state, and local laws and regulations. The record further shows that all design, construction, and operation activities would be in accordance with applicable government and industry standards. The record shows that the Company's Safety Management System would be implemented and fully functional before construction activities begin. The Company will also clearly mark with warning signs all transmission structures and Converter Station facilities following construction of the facilities to alert the public to potential hazards.

Given the Company's proposed strategies to facilitate onsite safety through adherence to pertinent health and safety laws and regulations and standards, development and timely implementation of a comprehensive Safety Management System, security measures, and emergency response planning, the Siting Board finds that the Company has minimized Converter Station safety impacts.

xi. Sea Level Rise

The RMAT Tool shows that modeled sea level rise for the landfall and onshore Project assets such as the Converter Station should be designed with a horizon of at least the year 2070 given the 45-year useful lifespan of the Project. The record also shows that the Lee River Route remains above inundation levels with projected 4.0-foot sea level rise, but a short segment of the landfall location would be below inundation levels with a 6.0-foot modeled sea level rise. The record shows the Taunton River Route remains above inundation levels with a projected 4.0-foot sea level rise and 6.0-foot sea level rise.

The record shows that inundation associated with hurricanes for the Taunton River Route is slightly less than the inundation expected for the Lee River Route under existing sea level conditions. Based on modeling of overland storm flowage, a short segment of the Lee River Route at the landfall location would be below inundation levels with a projected 6.0-foot sea level rise in the 2070s under an extreme exposure scenario, or sometime during the 2080s in a "High" exposure scenario. The Taunton River Route may experience overland flow under a Category 3 or larger hurricane under existing sea level conditions. The Brayton Point POI would be completely inundated in Category 4 or larger hurricanes. Nevertheless, the Onshore Cables are designed to operate even when submerged and therefore would be resilient, reliable, and impervious to coastal flooding and sea level rise.

The record shows that the Company has taken steps to help ensure Project climate change adaptation and resiliency through the design of the Project. Specifically, the Company has sited the onshore HVDC Converter Station outside of areas identified as vulnerable to sea level rise and coastal flooding. The record shows that the site of the proposed HVDC Converter Station is located outside of the boundaries of a projected 4.0 feet sea level rise, and the proposed HVDC

Converter Station site is located outside of mapped flood zones. The record shows that the onshore and offshore export cables and the TJBs will be designed to withstand being submerged and operated in salt water. The record shows that the HVDC Converter Station would be designed to tolerate high and widely fluctuating air temperatures, among other measures.

The Siting Board directs the Company to report to the EFSB every five years with updates on the latest projections on sea-level rise and flooding risk and propose any necessary further mitigation measures to address such risks. The Board will consider whether to direct the applicant to implement additional mitigation measures at such time.

The Siting Board finds that with the above mitigation measures, the Converter Station, and onshore portions of the Project would effectively minimize and mitigate impacts from sea level rise.

e. Conclusion on Converter Station Environmental Impacts

The Company has evaluated the environmental impacts from construction, operation, and maintenance of its proposed Converter Station for the Project. While some degree of impacts is unavoidable during construction, the Company has provided a comprehensive analysis of such impacts, and avoided or minimized them, where possible, and made significant commitments to protection and preservation of the onshore environment. The record demonstrates that the Company has adequately addressed public concerns about water supply protection, air quality, noise control, hazardous waste management, onshore spill prevention and countermeasures, visual and lighting control, stormwater management, MF, Chapter 91 and wetlands, traffic, safety, and compatibility of the Project with adjacent land uses, and developed plans to appropriately mitigate these impacts

E. Cost

The Company stated the Lee River Route has key factors that reduce its overall cost, including co-location with existing commercial activities and co-location within the National Grid ROW (Exh. SW-1, at 4-36 to 4-37). Specifically, SCW represented that the Lee River Route would not impact any public roadways or Brayton Point site access, which would lower

construction costs (Exh. SW-1, at 4-36). In contrast, the Taunton River Route would cross the existing National Grid ROW to reach the Converter Station site, which would require additional coordination and costs with respect to easements and construction (Exh. SW-1, at 4-37). Finally, according to the Company, there would be no difference in operating costs anticipated between the two route options (Exh. EFSB-C-1). The overall cost of the Taunton River Route is 10.6 percent higher than the cost of the Lee River Route; however, the Taunton River Route's cost is only 8.1 percent higher than the Lee River Route's overall cost when factoring in the Noticed Variation aspect of the Project (Exh. SW-1, Attachment G).

The Siting Board finds that the Lee River Route is slightly preferred over the Taunton River Route due to its lower cost. This cost finding is also complementary with the environmental characteristics of the Lee River Route, found above, demonstrating a route both environmentally and economically superior to the other identified options.

F. Reliability

As part of its route analysis, SCW examined the reliability of the Lee River Route and the Taunton River Route (Exh. SW-1, at 4-37). The Company maintained that there are no real reliability differences between the two routes (Exh. SW-1, at 4-37). However, for the offshore portions of the routes, there are a few factors that make the Lee River Route more reliable (Exh. SW-1, at 4-37). Specifically, the Taunton River Route presented higher risks to the integrity of a buried submarine cable due to the crossing of a dredged shipping channel and dredged turning basin, neither of which the Lee River Route traverses (Exh. SW-1, at 4-37). Additionally, the Company maintained that the Taunton River Route would cross a greater area of mapped shallow gas accumulation than the Lee Rive landfall route, potentially concealing additional buried geohazards and posing additional risk to cable performance and long-term integrity (Exh. SW-1, at 4-37). The Company asserts that reducing the Offshore Export Cables' integrity risk or exposure to other third-party impact is critical to maintaining the reliability of the Offshore Export Cables and by extension the reliability of the Project (Exh. SW-1, at 4-37). Therefore, while the onshore reliability of the two routes is not significantly different, the Siting Board finds that the offshore component of the Lee River Route is more reliable than the Taunton River Route.

G. Conclusions

The Siting Board finds that the Lee River Route – including its Noticed Variation – is superior to the Taunton River Route (and Noticed Variation) with respect to providing a reliable energy supply for the Commonwealth, with a minimum impact on the environment, at the lowest possible cost, and allowing for future expansion of Project electricity in an environmentally sound and cost-effective manner. The Siting Board finds that the Company provided sufficient information to allow the Board to determine whether the Project has achieved a proper balance among cost, reliability, and environmental impacts. The Siting Board finds that with the implementation of the specified conditions and mitigation presented above, and compliance with all local, state, and federal requirements, the environmental impacts of the Project along the Lee River Route, Converter Station, and Grid Interconnection would be minimized.

VII. CONSISTENCY WITH THE POLICIES OF THE COMMONWEALTH

A. Standard of Review

G.L. c. 164, § 69J requires the Siting Board to determine whether plans for construction of the applicant's new facilities are consistent with current health, environmental protection, and resource use and development policies as adopted by the Commonwealth. GCEP at 206; Park City Wind at 158; Sudbury-Hudson at 183-184.

B. Company's Position[56]

1. Health Policies

The Company contends that reliable electric service is recognized by the Commonwealth as being essential to human health, quoting from the Electric Utility Restructuring Act of 1997

---

[56] The Town did not take a position on the Project's consistency with the policies of the Commonwealth in its Brief.

("Restructuring Act"): "electricity service is essential to the ***health*** and well-being of all residents of the Commonwealth . . . reliable electric service is of utmost importance to the safety, ***health***, and welfare of the Commonwealth's citizens and economy…" (Company Brief at 209-210, citing c. 164 of the Acts of 1997 § 1(h) (emphasis supplied)). The Company also cites to West Roxbury-Needham at 74, in which the Board stated that reliable electric service is essential to the ***health*** of citizens of the Commonwealth; therefore, an improvement in reliability will result in ***health*** benefits (emphasis supplied).

The Project will support reliable electric service, the Company asserts, by providing 1,200 MW of clean renewable energy to the New England regional transmission system at a POI near load centers (Company Brief at 210). Furthermore, the Company represents, the reliable electric service to be provided by the Project will enhance the region's energy security during the winter months when most needed on the future grid (Company Brief at 210, citing Exhs. SW-1 at 1-14; EFSB-CPC-1 at 2; EFSB-N-1(S1)(1) at 9; EFSB-N-4(S1)(1) at 6-8). The Company emphasizes the need for additional energy generation during the winter months by stating that the New England states and the Federal Energy Regulatory Commission ("FERC") have increased their focus on the need for energy security in the region given issues with natural gas pipeline constraints and dependence on natural gas, especially in the winter months (Company Brief at 210 n.33).[57]

The reduction in air pollutant emissions, the Company represents, will also positively affect the health of Commonwealth residents (Company Brief at 210). According to the Company, among the air pollutants that will be reduced are CO_2, NOx, and SO_2, which are all harmful to human health (Company Brief at 210). Specifically, the Company states, the Project is anticipated to avoid 2.3 million tons per year ("tpy") of CO_2, 945 tpy of NOx, and 1,235 tpy of SO_2 (Company Brief at 210, citing Exhs. SW-1 at 1-14, Table 1-3; SW-6 at 5-7).

The Company cites to Siting Board precedent to support its assertion that the Board may consider whether the Project will meet standards set by other federal and state laws and industry

---

[57] The Company represents that these concerns are expressed in FERC Docket No. AD22-9-000 (Company Brief at 210 n.33).

standards that promote public health (Company Brief at 212, citing Sudbury Hudson at 109, Vineyard Wind at 127). The Company represents that all design, construction, and operation activities will be conducted in accordance with applicable regulations and industry standards (Company Brief at 212, citing 220 CMR 125 et seq.; Exh. EFSB-CM-26). Furthermore, the Company represents that the Project "will be designed" in accordance with the codes and guides issued by the Department and various professional engineering organizations (Company Brief at 212, 213, citing Exhs. EFSB-RS-15 at 1; EFSB-S-5 at 1-3; EFSB-S-4 at 1-3; EFSB-CM-16 at 1-2). Once the Project is operational, the Company states, it will be subject to regulation by FERC, the North American Electric Reliability Corporation, the Northeast Power Coordinating Council and ISO-NE (Company Brief at 213). The Company maintains that regulation by these entities will ensure that the health and safety of the public are protected (Company Brief at 213).

2. Environmental Protection Policies

a. Climate Change Policies

The Company relies on the Project's promise to deliver 1,200 MW of wind-generated energy to support its position that its construction would be consistent with policies of the Commonwealth (Company Brief at 208, 213, 222). These policies include, the Company represents, the An Act Relative to Green Communities (c. 169 of the Acts of 2008); the GWSA; An Act to Promote Energy Diversity (c. 188 of the Acts of 2016); An Act to Advance Clean Energy (c. 227 of the Acts of 2018); the Roadmap Act; the 2022 Offshore Wind Act[58]; the 2050 CECP; the 2050 Decarbonization Roadmap; and the Net Zero Policy (Company Brief at 208, 222, citing Exh. EFSB-CPC-2). The Company maintains that the Project is key to the successful achievement of the strong Massachusetts policies promoting renewable, clean energy and mitigating the impacts of climate change through GHG reductions (Company Brief at 209, citing Exhs. EFSB-CPC-1; EFSB-CPC-2; EFSB-N-3; EFSB-N-1(S2)(1) at 5-10; EFSB N-1(S1)(1) at 9, 16). In particular, the Company emphasizes the Project's consistency with the 2022 Offshore

---

[58] See Offshore Wind Act, Chapter 179 of the Acts of 2022.

Wind Act which, the Company represents, codifies the Commonwealth's goal to procure 5,600 MW of offshore wind by 2027 (Company Brief at 222, citing Offshore Wind Act at §§ 4-19 and 60-62).

The Company contends that when the Project is completed, it will displace energy generated by fossil fuel facilities, resulting in the elimination of over two million metric tons of GHG emissions annually (Company Brief at 209). The Company claims that this achievement would be equivalent to removing five million cars from the road (Company Brief at 215, citing Exh. SW-1, at 6-9).

The reduction of GHG emissions will help combat climate change, the Company states, and is therefore consistent with the GWSA, the Roadmap Act, and the Net Zero Policy (Company Brief at 214). The Company also quotes from the 2050 CECP which, the Company asserts, declared that offshore wind "will be a cornerstone of the Massachusetts energy supply in the next decades . . . enabling the Commonwealth to meet its decarbonized energy demand while sustaining economic growth" (Company Brief at 214, citing 2050 CECP at 7).

The Company represents that its adherence to the MEPA process demonstrates the Project's consistency with the Commonwealth's environmental policies (Company Brief at 215, 216). The Company filed an ENF, a DEIR, FEIR, and SFEIR for the Project with MEPA, and the Secretary has issued certificates on each of these documents (Company Brief at 215; Exh. SW-15).[59] In addition to MEPA approval, the Project will also obtain all applicable environmental approvals, licenses, and permits (Company Brief at 216, citing Exh. SW-1, at 6-3).

b. Ocean Management Plan

The Company asserts that the Project will comply with the provisions of the Massachusetts Ocean Management Plan ("OMP") (Company Brief at 219). The Company represents that the OECC does not fall within any OMP Prohibited Area (i.e., the Cape Cod Ocean Sanctuary) (Company Brief at 219, citing Exhs. SW-6, at 52; SW-10). According to the Company, all

---

[59] The Secretary issued a certificate on the SFEIR on December 15, 2023 (Exh. SW-15).

licenses, permits, and leases must be consistent with the OMP to the maximum extent practicable (Company Brief at 219).[60] SCW asserts that its approach is consistent with that requirement (Company Brief at 219, citing Exhs. SW-1 at 6-14 to 6-16; SW-6 at § 5).

The OMP establishes siting and performance standards to protect SSU Resources and areas in which WDU is concentrated (Company Brief at 219, citing Exhs. SW-1, at 4-27; SW-6, at 5-2). According to the Company, cable projects, such as the one under consideration here, must comply with the performance standards for, inter alia, North Atlantic right whale habitat, hard/complex seafloor, and eelgrass (Company Brief at 219-220, citing Exh. SW-6, at 5-3). The OMP and its regulations permit activities in SSU Resource areas, the Company maintains, when there are no less damaging practicable alternatives, all practicable measures have been taken to avoid damaging SSU Resources, such as mitigation measures, and the public benefits associated with the proposed activity outweigh the public detriments to the SSU Resource (Company Brief at 220).

The Company states that the Project will comply with these requirements (Company Brief at 220, 221). According to the Company, the OECC will avoid impacts to the North American right whale habitat and mapped eelgrass beds (Company Brief at 220, citing Exh. SW-6, at 5-3, 8-7, 8-11, and Att. C). In addition, the Company maintains, the OECC will lie in muddy and sandy seafloor and will generally avoid hard or complex seafloor (Company Brief at 220, 221, citing Exhs. SW-11 at 1-13, 9-13, SW-6, at 5-2, 5-3). Consequently, the Company concludes, the "proposed offshore [O]ECC is the least environmentally damaging practicable alternative for the Project" (Company Brief at 220, citing Exhs. SW-1, at § 4.6; SW-6, at 5-2).

c. Environmental Justice Policy

The Company's Petition to Construct, discovery responses, evidentiary hearing testimony, record request responses, and briefs, along with MEPA reviews that included ENF, DEIR, FEIR, and SFEIR filings and certificates, provided extensive information regarding Environmental Justice ("EJ") aspects of the Project. EJ-related information provided by the Company included:

---

60 See Exhibit SW-1, at 6-14.

(1) statutory, regulatory, and policy requirements; (2) a demographic analysis of EJ populations in proximity to the Project; (3) the Company's public involvement/outreach to EJ populations; (4) EJ-related Project design objectives and actions; (5) assessment of existing EJ-related environmental and public health indicators in the Project area; (6) the Project's anticipated impacts to nearby EJ populations; (7) the Company's proposed environmental impact avoidance, minimization, and mitigation related to EJ populations; (8) environmental, energy, and socioeconomic benefits of the Project generally, and to area EJ populations; and (9) the distribution of the Project's energy and environmental benefits and burdens, pursuant to EJ-related statutory, regulatory, and policy requirements. See, e.g., Exhs. SW-1, at 5-41 – 5-49, 6-10 – 6-13; SW-2; SW-6; SW-7; SW-9; SW-10; SW-11; SW-12; SW-14; SW-15.

i. Statutory, Regulatory, and Policy EJ Requirements

The Company cited the Roadmap Act as the basis of several EJ-related state agency regulations and protocols (Exh. SW-1, at 5-26 – 5-27). The Company indicated that the Project "is and will be consistent" with both the EJ directives of the Roadmap Act and the state agency regulations and protocols that interpret the various EJ requirements in the Roadmap Act (Exh. SW-1, at 5-26 – 5-27, 6-10; Company Brief at 216). The Roadmap Act amended the MEPA process in Massachusetts by directing that an EIR shall be required for any project that is likely to

cause damage to the environment and is located within one mile of an EJ population (Exh. SW-1, at 6-12).[61,62]

The Roadmap Act identifies "environmental justice principles" and directs Massachusetts agencies[63] to consider these principles in their policy-making decisions (Exh. SW-1, at 6-12). The Company cited the EJ principles as "those that support protection from environmental pollution and the ability to live in and enjoy a clean and healthy environment, regardless of race, color, income, class, handicap, gender identity, sexual orientation, national origin, ethnicity or ancestry, religious belief or English language proficiency, including: (i) the meaningful involvement of all

---

61 The 2021 Roadmap Act provides the following definition: "Environmental justice population," means a neighborhood that meets one or more of the following criteria: (i) the annual median household income is not more than 65 per cent of the statewide annual median household income; (ii) minorities comprise 40 percent or more of the population; (iii) 25 percent or more of households lack English language proficiency; or (iv) minorities comprise 25 percent or more of the population and the annual median household income of the municipality in which the neighborhood is located does not exceed 150 percent of the statewide annual median household income; provided, however, that for a neighborhood that does not meet said criteria, but a geographic portion of that neighborhood meets at least one criterion, the secretary may designate that geographic portion as an EJ upon the petition of at least 10 residents of the geographic portion of that neighborhood meeting any such criteria; provided further, that the secretary may determine that a neighborhood, including any geographic portion thereof, shall not be designated an EJ population upon finding that: (A) the annual median household income of that neighborhood is greater than 125 percent of the statewide median household income; (B) a majority of persons age 25 and older in that neighborhood have a college education; (C) the neighborhood does not bear an unfair burden of environmental pollution; and (D) the neighborhood has more than limited access to natural resources, including open spaces and water resources, playgrounds and other constructed outdoor recreational facilities and venues. St. 2021, c. 8, § 56.

62 For projects that impact air quality (by exceeding a MEPA air threshold), an EIR is required if the project is likely to cause damage to the environment and is located within five miles of an EJ population (Exh. SW-1, at 6-12, n.25). These one-mile and five-mile distances from project boundaries are called the Designated Geographic Area ("DGA") for EJ review (Exh. SW-1, at 6-12).

63 The Siting Board has previously recognized its general obligations under the Roadmap Act to apply the EJ principles in its decisions when such projects are proximate to EJ populations. See, East Eagle Certificate at 159.

people with respect to the development, implementation and enforcement of environmental laws, regulations and policies, including climate change policies; and (ii) the equitable distribution of energy and environmental benefits and environmental burdens" (Exh. SW-1, at 6-12).

Pursuant to the Roadmap Act, the MEPA Office released new regulations and two protocols regarding new MEPA review procedures to evaluate project impacts on EJ populations: (1) the Public Involvement Protocol for Environmental Justice Populations ("EJ Public Involvement Protocol"); and (2) the Interim Protocol for Analysis of Project Impacts on Environmental Justice populations ("EJ Analysis Protocol") (together, "EJ Protocols") (Exh. SW-1, at 6-10, n.18). The Company noted that the EJ regulations took effect on December 24, 2021, and the EJ Protocols took effect on January 1, 2022 (Exh. SW-1, at 6-10, n.18).[64] Under the new regulations and protocols, all projects with a DGA encompassing one or more EJ populations must take steps to enhance public involvement opportunities for EJ populations and must submit an analysis of impacts to such EJ populations in an EIR (Exh. SW-1, at 3-2).

The EJ Public Involvement Protocol requires that projects that affect an EJ population within a one-mile radius (or a five-mile radius for projects that are likely to cause damage to air quality), must submit an EJ Screening Form, which applicants must use to provide applicable EJ populations with advance notice of the filing of an ENF, and comply with additional public outreach and communication efforts such as notification to CBOs and public involvement through meaningful outreach and engagement (Exh. SW-1, at 6-10, n.18). The EJ Public Involvement Protocol also includes translation and interpretation requirements when census tracts, in whole or part, are within the relevant DGA for a project (as shown in the EEA EJ Map Viewer) and have populations where at least five percent of the census tract population identify as speaking a particular language other than English, and not speaking English "very well" (Exh. SW-1, at 6-13, and 6-13, n.27, citing EJ Public Involvement Protocol).

---

64 The Company filed its ENF with MEPA on August 24, 2022 (Exh. SW-7, at 1) and its Petitions with the Siting Board on May 27, 2022 (Exhs. SW-3; SW-4; SW-5). Therefore, these regulations and protocols are applicable to the Project.

The Company noted that the EJ Analysis Protocol provides guidance for analysis of project impacts, including disproportionate adverse effects and potential climate change impacts, on EJ populations (Exh. SW-1, at 6-10, n.18). The EJ Analysis Protocol requires applicants to identify all EJ populations within one mile and five miles of the Project (Exh. SW-1, at 5-29). The Company stated that identification of the likely effects on EJ populations within five miles of the Project is necessary only if the Project exceeds the MEPA air threshold and/or the Project will generate 150 or more average daily trips of diesel vehicle traffic over a duration of one year or more; otherwise, a one-mile distance would apply (Exh. SW-1, at 5-28).

The Company also noted the Commonwealth's EJ Policy, originally published in 2002 by the predecessor to the current EEA, and updated in 2014, 2017, and most recently, in 2021 (Exh. SW-1, at 6-10). The Company stated that the 2021 EJ Policy takes into account new directives and definitions from the Roadmap Act, such as a new definition of "environmental justice population" and increased protections for EJ populations under the MEPA EIR process described above (Exh. SW-1, at 6-10 - 6-11). The Company noted that the 2021 EJ Policy requires the Siting Board to apply enhanced public participation and analysis (under EJ Policy Requirement #20) for certain projects that are proposed near EJ populations (Exh. SW-1, at 6-11).[65] The Company observed that the MEPA EJ Public Involvement Protocol "expands on, but does not supersede the requirements of the [2021] EJ Policy" (Exh. SW-1, at 5-27). The Company stated that even though the majority of the proposed Project is located outside the one-mile DGA and does not exceed the MEPA review thresholds for Enhanced Public Participation and Enhanced Analysis of Impacts and Mitigation (and thus these MEPA requirements do not apply to the Project), SCW "conservatively included an analysis consistent with the MEPA Public Involvement Protocol for Environmental Justice Populations (effective January 1, 2022) and the MEPA Interim

---

65 The Company maintains that the requirements for enhanced public participation and enhanced analysis of impacts and mitigation under Provision #20 of the EJ Policy do not apply to the Project because the Project does not exceed any ENF or EIR thresholds for air, solid and hazardous waste, or wastewater and sewage sludge treatment and disposal (Exh. SW-1, at 6-11 to 6-12).

Protocol for Analysis of Project Impacts on Environmental Justice Populations (effective January 1, 2022)" (Company Brief at 205, citing Exhs. SW-6 Section 3; SW-11 at 2-1).

ii. Identification of EJ Populations

Consistent with the MEPA EJ Public Involvement Protocol, SCW identified and described the EJ Populations within a one-mile radius of the Project site (including both the Preferred Route and Noticed Alternative Route) using the EEA EJ Map Viewer.[66] See Exhs. SW-6 at 3-2 - 3-14; SW-1 at 5-36, Table 5-9). The Company determined that the Project site is not located within an EJ population but is within one mile of 14 Census Block Groups with EJ populations, 13 of which are in the City of Fall River, and one in the Town of Swansea (Exh. SW-1, at 5-32). The Company identified no EJ populations in Somerset, where onshore construction activities will occur for the Project in Massachusetts (Exh. SW-14, at 3-3). These 14 census blocks groups with EJ populations, all within Bristol County, represent a population of approximately 15,990 residents. Six of the Census Block Groups were designated for income alone; four for minority and income; two for minority and English isolation; one for income and English isolation; and one for minority, income and English isolation (Exh. SW-1, at 3-3). Based on a November 2022 update to the EEA EJ Map Viewer, the Company stated in its DEIR that the Town of Swansea no longer contained

---

66 The Company stated that the one-mile radius of the Project site boundary is the EJ DGA for the Project because the Project does not: (1) meet or exceed MEPA review thresholds at 301 CMR 11.03(8)(a) and (b) (air permit thresholds); or (2) generate 150 or more new average daily trips of diesel vehicle traffic over a duration of one year or more (Exh. SW-9, at 41).

any Census Block Groups that met the EJ population criteria (Exh. SW-10, at 13, n.13).[67,68] Based on the identified EJ populations within the one-mile DGA, the Company determined that only Spanish was spoken by five percent or more of the population of any affected Census Tract that also identified as speaking English "less than very well" (Exh. SW-12, at 10).

The Company plans to use the New Bedford Marine Commerce Terminal ("NBMCT") as a staging point for construction and O&M activities and has executed a lease option with the MassCEC for use of the NBMCT (Exhs. SW-11, Att. C at 1; SW-14, at 3-6). In the FEIR Certificate, the Secretary noted that the locations of these activities in New Bedford suggest that vessels will not be routinely operating near Fall River (Exh. SW-12, at 13). However, the FEIR Certificate also noted that the Company did not address how the staging, construction, and O&M activities in New Bedford might affect EJ populations in New Bedford (Exh. SW-12, at 13). In response, the Company's SFEIR provided information on EJ populations within one mile of the NBMCT, comprising 22 different EJ Census Block Groups characterized as: minority (4); minority and income (13); minority, income and Limited English Proficiency (5) (Exhs. SW-15,

---

67 Despite the November 2022 EJ Map Viewer update noted by the Company, the DEIR continued to list Swansea's Block Group 3, Census Tract 6451.01 (which is within the one-mile DGA) as a defined EJ population based on the income criterion (Exh. SW-6, at 3-5, Table 3-1). Table 3-1 continued to show 14 EJ populations in total as being within the one-mile DGA of the Project. However, the SFEIR Certificate describes the 14 EJ Populations as being located only in Fall River, which appears consistent with the map presented in the FEIR filing (Exhs. SW-15, at 11; SW-11, Att. A, Figure 2-1.). Therefore, it appears that the Swansea Block Group 3, Census Tract 6451.01, was not considered an EJ population as of the SFEIR Certificate.

68 The Company's SFEIR filing to MEPA deviated from the prior MEPA filings by focusing on the EJ populations within one mile of the Project, but without reference to the Noticed Alternative Route (Exh. SW-14, at 3-2 – 3-3, Att. A. Figure 1-1). Using this revised approach, the Company stated that only three EJ Census Block Groups were within the one-mile DGA of the Project using the Preferred Route only (Exh. SW-14, at 3-2 to 3-3, Att. A. Figure 1-1). This shift in definition of the Project, to exclude the Noticed Alternative Route for purposes of EJ analysis, does not appear to have been adopted by MEPA, which maintained the earlier identification of 14 EJ populations in Fall River (Exh. SW-15, at 8).

at 3-7; Att. A, Figure 1-4).[69] The Company also noted that other port facilities in Massachusetts could also be used for the Project, including those in Fall River and Salem (Exh. SW-14, at 3-7). The SFEIR Certificate noted the Company's estimate of between zero and 15 vessels using the NBMCT daily, and/or ports in the nearby area, during different construction phases of the Project (Exh. SW-15, at 13). The SFEIR Certificate acknowledged the absence of estimated air emissions from the Company relating to its use of the NBMCT as reflective of "the early stage of permitting for this project" (Exh. SW-15, at 14).

iii. Public Involvement and Outreach

SCW stated that it has conducted, and will continue to implement, a stakeholder engagement plan with outreach and communication mechanisms to share information and gather input from external stakeholders, including EJ populations (Exh. SW-1, at 5-49). SCW provided advance notice to regional and statewide CBOs 45 days prior to filing the ENF, as required by the EJ Public Involvement Protocol (Exh. SW-6, at 3-16). The Company also represented that it has had ongoing consultations with the MEPA office and the EEA EJ Director (Company Brief at 218, citing Exh. EFSB-EJ-7). In addition, the Company hosted five virtual open houses for local communities to provide the public with opportunities to interact with the Project's subject matter experts and to ask questions and share concerns (Company Brief at 218, citing Exhs. SW-6

---

69 While providing the requested EJ information regarding use of the NBMCT, the Company noted that "the emissions anticipated, including vessel emissions, number of vessels and duration of docking activity anticipated, as well as the expected number and duration of vessel routes that will extend near shore in and around New Bedford are the responsibility of the owner/operator of the existing port facilities and would reasonably be expected to be included in the planning and permitting of existing or future facilities by the owner and/or operator of the port facility" (Exh. SW-14, at 3-6 to 3-7). The Company noted that the NBMCT is the nation's first purpose-built port facility designed to support the construction, assembly, and deployment of offshore wind projects (Exh. SW-14, at 3-7). It observed that the NBMCT is located within an extensive industrial waterfront on New Bedford Harbor and the improvements made at the existing terminal received separate review under MEPA (Exh. SW-14, at 3-7). The Company stated that EEA assumed the lead NBMCT permitting role, working with MassDEP and MassCEC, and included a review of potential impacts to EJ Populations (Exh. SW-14, at 3-7).

at 3-16; EFSB-EJ-4 at 2; EFSB-G-23 at 2). The Company also engaged the public by holding office hour events, drop-in sessions, and participating in the Somerset SouthCoast Open Air Market (Company Brief at 218, citing Exhs. SW-6 at 3-17; EFSB-G-23 at 2). As suggested by the MEPA Office, the Company identified and committed to partner with the Coalition of Social Justice, a Fall River CBO on Project mitigation, and to do the same with a similar CBO for the New Bedford area (Exh. SW-14, at 3-3).

Other components of SCW's ongoing stakeholder engagement plan include:

- Schedule public meetings or hearings at locations and times convenient for neighborhood stakeholders, and in consideration of public transportation availability, and/or through Zoom or other similar web-based service.

- Make public notices, ENFs, EIRs, and other key public engagement documents and documents related to the Project review available in both English and any other language spoken by a significant number of the affected EJ population. These technical materials should be in plain language to ensure the community understands the potential impacts of the Project and can provide meaningful input.

- Provide interpretation services at public meetings as appropriate (if a particular language is spoken by more than 10 percent of residents in that census tract) and upon request.

- Door-to-door education efforts through the use of flyers or other canvassing methods.

- Provide appropriate information about the Project review procedure.

- Hold pre-application meetings with the local community.

- Use non-English and/or community-specific media outlets to publicize the Project, including local public broadcasting stations, specialized newspapers, community newspapers and social media channels.

- Establish one or more local information repositories that are convenient and accessible for the impacted community, as well as provide availability of information online.

- Gather community-specific local media contacts (based on the culture of the community).

- Utilize collaborative approaches to problem-solving, including public deliberation and consensus-building where appropriate, to address public concerns.

- Provide timely notices to neighborhoods potentially impacted by a decision, and clear guidance on applicable grievance/appeal procedures.

- Provide information and assistance to EJ populations regarding grant applications and environmental, energy, or climate change regulations to assist them with compliance and sustainability.

(Exh. SW-1, at 5-49).

iv. Existing Conditions and Potential Sources of Pollution

The MEPA Analysis Protocol requires a proponent to identify existing unfair or inequitable environmental burdens and related and public health consequences to EJ Populations. Pursuant to 301 CMR 11.05(4), and the MEPA EJ Public Involvement Protocol, the Company's ENF filing included the required EJ Screening Form to identify "any municipality or census tract" meeting the definition of "vulnerable health EJ criteria" based on the Massachusetts Department of Public Health ("DPH") EJ Tool.[70] The Vulnerable Health EJ Criteria include:

- Heart Attack Hospitalization: 5-year average age-adjusted rates of hospitalization for myocardial infarction (heart attack) that is equal to or greater than 110 percent of the state rate.

- Childhood Lead Exposure: 5-year average prevalence of elevated childhood blood lead levels that are equal to or greater than 110 percent of the state prevalence.

- Low Birth Weight: 5-year average low birth weight rate among full-term births that is equal to or greater than 110 percent of the state rate.

---

70 The vulnerable health EJ criteria are defined by both DPH and MEPA as health indicators in census tracts or municipalities that exceed 110 percent of the average Massachusetts rate for each such indicator (Exh. SW-9, Att. D, item 4). The DPH EJ Tool can be found at: https://matracking.ehs.state.ma.us/Environmental-Data/ej-vulnerable-health/environmental-justice.html (Exh. SW-9, Att. D, item 4).

- Childhood Asthma Emergency Department Visits: 5-year average rate of emergency department visits for childhood asthma that is equal to or greater than 110 percent of the state rate.

(Exh. SW-9, Att. D).

The Company's ENF filing contained a baseline assessment of any existing "unfair or inequitable" environmental burden and related public health consequences impacting EJ populations, in accordance with 301 CMR 11.07(6)(n)1 and the EJ Analysis Protocol (Exh. SW-9, Att. D). According to the ENF, the data surveyed show some indication of an existing "unfair or inequitable" burden impacting the identified EJ populations (Exh. SW-7, at 12). Specifically, the ENF noted that the DPH EJ Tool identified the City of Fall River as exhibiting all four "vulnerable health EJ criteria" and the Town of Swansea as exhibiting one criterion (heart attack) (Exh. SW-7, at 12).[71,72]

The ENF Certificate noted that Fall River had rates of Blood Lead Level Prevalence and Low Birth Weight that were above 110 percent of statewide rates; these public health parameters are available at the census tract level, but the ENF did not identify the census tracts within the one-mile DGA associated with any of these parameters (Exh. SW-7, at 13). Therefore, the ENF Certificate directed the Company to provide additional analysis of impacts on EJ populations consistent with the EJ Analysis Protocol, including fully analyzing the data available in the DPH tool at the census tract level, and surveying sources of potential pollution that exist within the identified EJ populations (Exh. SW-7, at 13). The ENF Certificate also directed the Company to survey the indicators available through the EPA EJ Screen tool, and report on any indicators that are elevated at the 80th percentile or higher of statewide average in any of the EJ populations within the DGA (Exh. SW-7, at 13).

---

71 Somerset's rate of heart attacks is above 110 percent of the state average rate. However, Somerset does not contain EJ populations, and therefore, does not have "vulnerable health EJ criteria" as defined by the DPH EJ Tool (Exh. SW-9, Attachment D, item 4, n.1)

72 The Company noted that health data in the DPH EJ Tool is from 2009-2017, when the Brayton Point Power Station was in operation (Exh. SW-11, at 2-7). Decommissioned in 2017, it was the largest coal-fired generating station in New England (Exh. SW-11, at 2-7).

In response to the ENF Certificate, the Company provided the following information:

Vulnerable Health EJ Criteria	Census Tracts	Municipality
Elevated Blood Lead Prevalence	6402, 6403, 6404, 6405, 6409.1, 6410, 6411.01, 6420	Fall River
Low Birth Weight	6402, 6403, 6404, 6405, 6409.1, 6410, 6411.01, 6420	Fall River
	6451.01	Swansea

(Exh. SW-10, at 13).

With regard to environmental indicators in EPA's EJ Screen that are elevated at or above the 80th percentile of the Massachusetts statewide average, the Company provided the following data in its DEIR filing:

EPA EJ Screen Indicator	Census Tracts	Municipality
Particulate Matter 2.5	6409.01, 6411.01, 6410, 6420	Fall River
Ozone	6402, 6403, 6404, 6405, 6409.1, 6410, 6411.01, 6420	Fall River
Diesel Particulate Matter	6409.01	Fall River
Air Toxics Cancer Risk	6409.01	Fall River
Air Toxics Respiratory Hazard Index	6409.01, 6410, 6411.01, 6420	Fall River
Traffic Proximity	6409.01, 6410, 6411.01, 6420	Fall River
Superfund Proximity	6403, 6404, 6409.01, 6410, 6420	Fall River
Risk Management Plan Facility Proximity	6404, 6403, 6409.01, 6410, 6420	Fall River
Hazardous Waste Proximity	6409.01	Fall River
Underground Storage Tanks	6402, 6403, 6404, 6405, 6409.1 6410, 6411.01, 6420	Fall River
Wastewater Discharges	6409.01, 6410, 6420	Fall River

(Exh. SW-10, at 13).

In its FEIR filing, the Company provided a description of the NAAQS in the Project area (Exh. SW-11, at 2-5 to 2-6).[73] In accordance with the Clean Air Act, and based on air quality

[73] The Clean Air Act requires the U.S. EPA to set NAAQS for six common air pollutants known as criteria air pollutants. These pollutants are regulated by the U.S. EPA to protect

monitoring, all areas within Massachusetts are designated with respect to the NAAQS as either in attainment, nonattainment, maintenance, or unclassifiable (Exh. SW-11, at 2-5 to 2-6). An area with air quality better than the NAAQS is designated as attainment; an area with air quality worse than the NAAQS is designated as nonattainment; and an area that is in transition from nonattainment to attainment is designated as attainment/maintenance (Exh. SW-11, at 2-5 to 2-6). The Company reported that Bristol County is in attainment for all NAAQS (Exh. SW-11, at 2-6).[74]

In compliance with the MEPA Public Involvement Protocol, the Company used DPH's EJ Tool to identify potential sources of pollution within the one-mile DGA of the Brayton Point site (Exh. SW-6, at 3-11). These potential sources include the following facilities, with the majority of these located within the City of Fall River:

- Major Air and Waste Facilities -- three facilities with air operation permits; four large quantity generators; and six large quantity toxic users
- Classified 21E sites – two sites
- Tier II toxics use reporting facilities -three site
- MassDEP sites with Activity and Use Limitations (AUL) – ten sites
- Municipal wastewater treatment plants – two sites
- Inventoried underground storage tanks (USTs) – three sites
- U.S. EPA facility categorized as a toxic release inventory site – one site

---

public health, the environment, and the quality of life from the detrimental effects of air pollution. NAAQS include the following six pollutants: carbon monoxide (CO); lead (Pb); nitrogen dioxide (NO_2); ozone (O_3); sulfur oxides (SOx); and PM pollution (including particulate matter smaller than or equal to 10 microns in diameter (PM_{10}) and particulate matter smaller than or equal to 2.5 microns in diameter ($PM_{2.5}$) (Exh. SW-11, at 2-5).

74 Bristol County (which includes Somerset, Fall River, and Swansea) is an attainment area for all NAAQS criteria pollutants except for the eight-hour (1997 Revoked) and one-hour (1979 Revoked) ozone standards (Exh. SW-11, at 2-6). The two pollutants that contribute to the violation of the ozone NAAQS from mobile sources are VOCs and NO_X. Despite being revoked ozone standards, some areas have continuing implementation obligations under these standards due to previous nonattainment designations (Exh. SW-11, at 2-6).

(Exh. SW-6, at 3-11).

v. Project Impacts to EJ Populations

During MEPA review, the Secretary focused her EJ comments on the potential air emissions during construction activities (both onshore vehicles and offshore vessels used during construction), and the impact of the potential air emissions on EJ populations. The ENF Certificate directed the Company to "analyze all identified environmental impacts of the Project and assess whether they are likely to materially exacerbate existing environmental burdens identified for EJ populations. In particular, the DEIR should identify the nature and duration of construction period activities at each location where work activities are anticipated and identify the number and duration of trips associated with diesel-powered trucks, construction equipment, and marine vessels needed for construction activity" (Exh. SW-7, at 13).[75]

During the MEPA review process, the Company provided evolving emissions data relating to construction vehicles and vessels. In the DEIR review process, the Company provided MEPA with "Indicative Air Quality Emissions Associated with Construction Vehicles and Vessels" based on an April 7, 2023, submission to U.S. EPA as part of the SCW's OCS Air Permit Application (Exh. SW-10, at 15). The methodology SCW used in the OCS Air Permit Application assumed that all construction would occur within one year, although that is not expected (Exh. SW-10, at 15).

---

75 The ENF Certificate noted that the Company "should quantify the emissions and associated air quality impacts of construction vehicles and marine vessels, using the methodology set forth in MassDEP's Guidelines for Performing Mesoscale Analysis of Indirect Sources or other similar methodologies, and should include VOCs GHG, NO_x, $PM_{2.5}$ and Diesel Particulate Matter (DPM) in the analysis" (Exh. SW-7, at 13).

Table 18: **Project Indicative Air Emissions from Construction Vehicles and Vessels**

		Emissions											
		NOX	VOC	CO	PM10	PM2.5	SO2	CO2	CH4	N2O	Pb	HAPs[1]	CO2e
Estimated Brayton Point non-OCS Emissions	ton/yr	944.61	38.03	169.54	190.02	31.52	19.84	73,360	0.77	3.21	0.00	2.01	74,229
	kg/day	2,347.8	94.5	421.4	472.3	78.4	49.3	182,333	1.91	7.98	0.01	4.98	184,492
Estimated Brayton Point Onshore Emissions	ton/yr	15.40	4.61	83.01	427.88	427.88	0.18	18,575	-	-	-	-	18,575
	kg/day	38.3	11.5	206.3	1,063.5	1,063.5	0.44	46,168	-	-	-	-	46,168

Source: Exh. SW-10, at 15, citing SCW Outer Continental Shelf Air Permit Application to EPA (March 2023).

In its subsequent FEIR filing, SCW clarified and significantly reduced its construction-related air emissions estimates, particularly those for vessels. SCW explained that the prior vessel emissions estimates included 33 miles of the OECC route between New Bedford and the OGF lease area, and that the majority of emissions generated in this segment are sufficiently far from the coastline and are not expected to result in a disproportionate adverse effect on the Fall River community (Exh. SW-11, Att. C at 1).[76] In addition, SCW noted that the emissions estimation method used in the DEIR was based on the "very conservative" BOEM Offshore Wind Energy Facilities Emission Estimating Tool, and yielded results that are significantly higher than expected actual emissions (Exh. SW-11, Att. C at 1). Instead of using the BOEM approach, the Company's FEIR used EPA's Port Emissions Inventory Guidance: Methodologies for Estimating Port-Related and Good Movement Mobile Source Emissions, 2022 (USEPA, 2022) (Exh. SW-11, Att. C at 2). The resulting vessel emissions associated with cable laying activity in Massachusetts waters (i.e., in proximity to Fall River) assumed that vessels will be operating 24 hours per day for the maximum predicted time set forth in the indicative construction (Exh. SW-11, Att. C at 2, 3). The Company also made additional adjustments for particulate matter based on the most recent

---

76 The offshore emissions relate to the following types of vessels: (1) anchor handline tugs; (2) cable transport & lay vehicles; (3) crew transfer vessels; (4) multi-purpose support vessels; and (5) guard vessels (Exh SW-11, Att. C at 3). These vessel emissions do not include those from HDD operations near the landfall, which the Company stated will not be occurring within one mile of the EJ populations in Fall River (Exh. SW-15, at 13). Based on a "more refined" construction schedule, the Company estimated that the vessel construction emissions within the one-mile DGA of Fall River would occur over a period of four weeks: less than one week for the pre-lay grapnel run, one-to-two weeks for cable lay and burial, and less than one week for cable pull-in (Exh. SW-11, Att. C at 3).

construction schedule assumptions, and the estimated acreage for the planned Converter Station and cable installation (Exh. SW-11, Att. C at 1-2). The resulting emissions are shown below.

Table 19: FEIR Revised Summary of Construction-Related Project Emissions Near Fall River.

Activity	Emissions, per vessel (tons/year)							
	NOx	VOC	CO	PM10	PM2.5	SO2	CO2	GHG (as CO2e)
Vessels	77.66	2.89	14.05	2.43	2.34	0.67	6,930	7,010
Construction	12.10	2.45	42.87	65.23	64.90	0.10	10,949	10,949
Total	**89.76**	**5.33**	**56.92**	**67.66**	**67.25**	**0.76**	**17,879**	**17,959**

Source: Exh. SW-12, at 12, Table 4.

The Company made further reductions to the estimated air emissions for the Project in the SFEIR filing (shown below in Table 20), by refining the vessel emissions to include only cable laying activities in Massachusetts waters (Exh. SW-15, at 12, Table 4). Further, the SFEIR Certificate noted an additional reduction suggested by the Company to pro-rate the vessel reflecting the fact that only 0.78 miles of the approximately the 2.11 miles of the offshore cable located in Massachusetts waters are within one mile of the EJ populations in Fall River (Exh. SW-15, at 13). This pro-ration to 37 percent of the estimated vessel emissions initially submitted in the SFEIR would, for example, reduce the NOx vessel emissions from 59.12 tpy (shown below in Table 20) to 21.8 tpy (Exh. SW-15, at 13), and a similar amount for the other vessel air emissions. Siting Board staff have used the 37 percent pro-ration adjustment to yield a final construction emission estimate in Table 21 below.

Table 20: SFEIR Revised Summary of Project Emissions within Massachusetts Waters.

Activity	Emissions (tons/year)							
	NOx	VOC	CO	PM10	PM2.5	SO2	CO2	GHG (as CO2e)
Vessels	59.12	2.01	11.75	2.06	2.00	0.05	5,665	5,730
Construction	12.10	2.45	42.87	65.23	64.90	0.10	10,949	10,949
Total	**71.22**	**4.45**	**54.63**	**67.29**	**66.90**	**0.15**	**16,614**	**16,679**

Source: Exh. SW-15, at 12, Table 4.

Table 21: Pro-Rated Summary of Project Emissions within One Mile of Fall River EJ Populations (Staff Revision Based on SFEIR Certificate).

	Emissions (tpy)							
Activity	NOx	VOC	CO	PM_{10}	$PM_{2.5}$	SO_2	CO_2	GHG (as $C0_2e$)
Vessels	21.87	0.74	4.35	0.76	0.74	0.02	2,096	2,120
Construction	12.10	2.45	42.87	65.23	64.90	0.10	10,949	10,949
Total	**33.97**	**3.19**	**47.22**	**65.99**	**65.64**	**0.12**	**13,045**	**13,069**

Source: Exh. SW-15, at 12, Table 4 (EFSB staff pro-rated vessel emissions at 37 percent based on SFEIR Certificate)

The Company also estimated Project-related emissions that may occur within Fall River from increased vehicle and truck traffic coming to and from Brayton Point (Exh. SW-11, Att. C at 2). The Company estimated potential vehicle emissions within Fall River using EPA's Motor Vehicle Emission Simulator ("MOVES"), and assumed that all construction traffic travels through Fall River along Interstate 195 (Exh. SW-11, Att. C at 2). In particular, NOx emissions are less than one tpy for both the construction and O&M phases, and the Company does not expect that increased vehicle traffic as a result of the Project would have a significant impact on Fall River air quality (Exh. SW-11, Att. C at 2).

Table 22: On-Road Project Emissions within Fall River.

	Emissions (tons/year)						
Phase	NOX	CO	SO2	PM10	PM2.5	CO2	GHG (as CO2e)
Construction	0.03	0.05	1.19E-04	6.76E-04	6.18E-04	15.12	15.16
O&M	1.31E-02	2.26E-02	1.28E-04	3.57E-04	3.28E-04	15.35	15.41

Source: Exh. SW-11, Att. C at 2.

The Company acknowledged that it performed no air quality dispersion modeling or mesoscale analysis for the Project outside of the OCS permit area but noted that "it can again be reasonably inferred that emissions from the Project will not result in a disproportionate adverse effect or increased climate change effects on the Fall River EJ community" (Exh. SW-11, Att. C at 3; Company Brief at 206). The Company supported this assessment by noting that the

closest cable-laying vessel activity would occur 0.49 miles offshore from the Fall River EJ populations and would therefore result in the significant emissions dispersion that reduces impacts in Fall River (Exh. SW-15, at 13).

Although the FEIR Certificate directed the Company to quantify the emissions that are anticipated to occur near New Bedford (and its EJ populations), and to provide a breakdown of such vessel and truck emissions, the Company did not provide this information in its SFEIR filing (Exh. SW-14, at 3-1 to 3-6). The Company indicated that it does not consider port support facilities (such as New Bedford) as part of the Project subject to MEPA review (Exh. SW-14, at 3-5).[77] The Company asserts that such support facilities have been or will be developed by the landowner or facility operator as separate projects with their own local, state, or federal permitting and environmental review processes (including MEPA) appropriate for that facility (Exh. SW-14, at 3-5 to 3-6). The Company noted that it expects to make use of the NBMCT pursuant to contractual arrangements with the owners and/or operators consistent with the requirements of those third parties and standard industry practices (Exh. SW-14, at 3-5 to 3-6). The Company focused its consideration of EJ impacts regarding its use of the NBMCT on potential upgrades the NBMCT to accommodate ship-to-shore connections[78] for larger vessels (Exh. SW-15, at 13-14).

Finally, regarding the overall impacts of Project on EJ populations, the Company stated that the Project would result in a potential reduction in, or no further impacts to, the Vulnerable Health EJ Criteria (Exh. SW-11, at 2-7). It addressed each indicator as follows:

- **Lead and lead poisoning**: Massachusetts has the fourth oldest housing stock in the country and lead-based paints are likely present in 71 percent of housing. The Project will not involve the use of lead-based paint or affect the availability of new housing stock (Exh. SW-11, at 2-7).

---

77 The Company asserted that this interpretation is consistent with the New England Wind Connector 2 Project (EEA # 16611), which received a DEIR Certificate by the EEA Secretary on October 10, 2023 (Exh. SW-14, at 3-5).

78 Ship-to-shore connections involve supplying power from the power grid to moored vessels used in construction or other operational activities (including periods when idling) that would otherwise operate diesel engines, with local emissions, to produce needed power (Exhs. SW 13, at 3-15; SW-12, at 13).

- **Low birth weight:** There are numerous environmental factors associated with low birth weight including exposure to lead, solvents, pesticides, and polycyclic aromatic hydrocarbons. The Project will reduce polycyclic aromatic hydrocarbons, which are typically found in fossil fuels, by providing a new source of clean, renewable energy to the South Coast region (Exh. SW-11, at 2-7).
- **Asthma**: The Project will result in a reduction in emission factors through the delivery of clean energy to the region, thereby reducing asthma triggers (Exh. SW-11, at 2-7).
- **Heart attack rate** (resulting from air pollutants): Particulate matter will be controlled through industry standards and BMPs for suppressing airborne dust generated during construction, such as spreading wood mulch or straw and using water trucks to spray soil to keep it moist, using coverings and temporary seeding to reduce wind-blown dust. After construction is completed, soil disturbances will be stabilized and re-vegetated, and other areas will be repaved to eliminate and/or reduce the release of particulate matter (Exh. SW-11, at 2-7).

The Company stated that the Project's clean renewable energy will improve the environment by displacing electricity generated by fossil fuel facilities for years, improving air, water, and soil quality, and human health (Exh. SW-14, at 3-4). The Company calculated that the Project will result in avoided emissions of 2.36 million tpy of carbon dioxide equivalent (CO_2e), 945 tpy of nitrogen oxides (NO_x) and 1,235 tpy of sulfur dioxide (SO_2) (Exh. SW-6, Table 5-1, at 5-7). The Company stated that by decreasing the demand for fossil fuels, and reducing the associated pollutants that harm public health, degrade environmental quality, and contribute to climate change impacts, the energy provided by the Project will improve the overall quality of life for residents in the Somerset community and EJ populations in the Fall River community (Exhs. SW-14, at 3-4).

The Company concluded in the SFEIR that although "some vulnerabilities were identified based on the enhanced EJ analysis [presented in MEPA], the Project will not pose a hazard to human health, water resources, or air quality" (Exh. SW-14, at 3-5). The Company added that "[t]he Project's only impacts to nearby communities will be temporary construction-related impacts that will be avoided and minimized through construction-period best management practices…" (Exh. SW-14, at 3-5). The Company argued that "[n]one of these temporary construction-related impacts will materially exacerbate any existing burden on EJ Populations"

(Exh. SW-14, at 3-5). The Company further noted that by advancing the Preferred Route for the Project, it avoided most of the EJ populations, except for three EJ Census Block Groups in Fall River (Exh. SW-14, at 3-5).

vi. Socioeconomic Impacts of the Project on EJ Populations

The Company detailed how the Project's redevelopment/revitalization of a former existing industrial site will affect socioeconomic impacts to the surrounding communities and EJ populations, including the creation of jobs, continued maintenance on the existing facility, and converting an existing industrial site to new uses as a renewable energy hub (Exh. SW-1, at 5-28). In the Company's view, the Project will advance the transition to a just and equitable clean energy future by creating jobs that pay prevailing wages, and by delivering such energy at a low cost to families and businesses (Exh. SW-1, at 5-27). SCW intends to support workers in the transition to a clean energy future through 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 clean energy economy (Exh. SW-1, at 5-27).

The Company provided a detailed analysis of the Project's economic development and job creation potential, assuming a full 2,400 MW buildout of the SCW offshore Lease Area (Exh. SW-1, at 5-42). The Company indicated that skilled and unskilled labor are required for all phases of the Project and associated OGF, which will directly and indirectly create and induce an estimated 26,940 years of full-time-equivalent jobs over the Project's lifetime (including decommissioning) in Massachusetts, and an additional 890 jobs in O&M in the region (Exh. SW-1, at 5-42). SCW committed[79] to encourage the hiring of personnel from the Project region to fill the required positions and stated that it will execute a commitment to make at least 75 percent

[79] The Company did not specify the proportion of these jobs among direct employees of SCW, within contracted firms, or through external employment opportunities "induced" by the Project (Exh. SW-1, at 5-28, 5-42, 5-43).

of O&M jobs local[80] (Exh. SW-1, at 5-43). The Company also committed to invest nearly $120 million over 20 years on workforce training and education, supply chain development, applied research, ports and infrastructure improvements, and support for low-income electric consumers (Exh. SW-9, Att. D, item 6). Under the terms of an agreement with the MassCEC, the Company has made a financial commitment for initiatives including $5 million in workforce development that could benefit EJ populations and an additional $5 million towards low-income strategic electrification (Exh. SW-1, at 1-15).

With respect to EJ populations in the Project area, the Company indicated that there will be opportunities for residents of EJ populations to fill job openings in all phases of the Project (Exh. SW-1, at 5-42 to 5-43). For example, SCW is working together to sponsor and provide local Native American communities with cost-free training and all certifications required to work as PSOs, with the first program cohort trained in June 2022 (Exh. SW-1, at 5-42 to 5-43). The Company employs PSOs on all geophysical survey vessels, who are responsible for keeping watch over a monitoring zone around the vessel to identify protected species including marine mammals and sea turtles, and to initiate measures to avoid negative impacts (Exh. SW-1, at 5-43). The Company will also need PSOs to monitor construction activities (Exh. SW-1, at 5-43). Additionally, as described above, to engage the EJ populations, SCW will maintain a stakeholder engagement plan with outreach and communications mechanisms to share information and gather input from external stakeholders including regional workforce training providers (Exh. SW-1, at 5-43).

The Company stated that the jobs created by the proposed Project and OGF will increase the number of new job opportunities in the area as well as the regional job market (Exh. SW-1, at 5-44). The Company anticipated that the increase in jobs will occur mostly during construction and decommissioning activities (Exh. SW-1, at 5-44). While Project-related jobs will cease after

---

80 The Company did not provide a precise or consistent description of the expected geography of the job-creation benefits associated with the Project, referring to the location of such jobs as "local," in "surrounding communities," "in the Project region," "in Massachusetts," and "in Massachusetts and elsewhere in the region, including Rhode Island" (Exh. SW-1, at 5-28, 5-42, 5-43).

decommissioning, the Company stated that the proposed Project will contribute to the development of technical and professional expertise within the local and regional workforce throughout the estimated 30-year lifetime of the Project and OGF (Exh. SW-1, at 5-42, 5-44).[81] The Company stated that this workforce can contribute to the rapidly growing offshore wind industry in the Massachusetts and Rhode Island area (Exh. SW-1, at 5-44).

vii. Mitigation Measures for EJ Populations

The Company proposed the following EJ-related mitigation measures for inclusion in Section 61 findings required by each agency that will issue permits for the Project (Exh. SW-15, at 22-23):

- Maintain a stakeholder engagement plan with outreach and communications mechanisms to share information and gather input from external stakeholders, including EJ populations;
- Commit to local hiring for at least 75 percent of O&M jobs;
- Establish a contractor and supplier webpage, in twelve different languages, to increase accessibility and to foster a local workforce;
- 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;
- Develop and implement a TMP to minimize traffic disruptions to the community in the vicinity of construction and installation activities, especially along the underground transmission route;
- Coordinate with other Brayton Point tenants and landowners and the Town of Somerset as it relates to the construction schedules and site access, in an effort to minimize cumulative construction-related impacts (traffic, air quality, noise, etc.) for

---

81 In contrast, the Company described its commitment to invest nearly $120 million on economic development investments that will support workforce training and education, supply chain development, applied research, ports and infrastructure improvements, and support for low-income customers as occurring over a 20-year period (Exh. SW-9, Att. D at 51). The prior PPAs between SCW and the Massachusetts EDCs, whose termination was approved by the Department in September 2023, had a 20-year term. D.P.U. 20-16/20-17/20-18, at 52.

the neighboring land uses, including EJ populations;

- Maintain a construction schedule webpage to alert abutters, residents, EJ populations, and other stakeholders of construction locations, dates, activities, and traffic control measures;
- Develop and implement a CMP including specific plans for controlling and minimizing on-site dust, particulate matter, including $PM_{2.5}$, diesel fumes, noxious fumes and odors, vibrations, light and/or all other air, water or soil contaminants;
- Use available ship-to-shore technology to the extent the technology can be integrated and is cost efficient to the vessels utilized for staging activities;
- Consult with MassCEC about potential upgrades to the NBMCT to accommodate ship-to-shore connections for larger vessels and to working in good faith with its vessel providers to enable its use for the Project;
- Consider the use of electric vehicles and equipment, and alternative fueled vessels, in its selection criteria for contractors for cable installation and construction of the HVDC Converter Station at Brayton Point; and
- Ensure that noise from the Project's Converter Station comply with the Town's 55 dBA threshold for residential property boundaries, and the state's requirement for no more than 10 dBA greater than ambient noise levels at any inhabited buildings near the property for sound produced by the facility during its 24-hour operation.

3. Resource Use and Development Policies

The Company represented that the Massachusetts Climate Chief recently issued a report strongly encouraging the development of clean energy infrastructure, including offshore wind, in response to climate change (Company Brief at 221, citing Exh. EFSB-N-4(S3)). Furthermore, the Company stated that a Technical Report of the Massachusetts 2050 Decarbonization Roadmap Study notes that one of the main pathways for the Commonwealth to reach the Net Zero Requirement is through offshore wind (Company Brief at 221, citing Energy Pathways to Deep Decarbonization: A Technical Report of the Massachusetts 2050 Decarbonization Roadmap Study at 5).[82] The Company stated that this report looks to "offshore wind... [to be] the backbone of decarbonized electricity generation in Massachusetts," and sets a goal of "installation of [a]

[82] This report is available at https://www.mass.gov/doc/energy-pathways-for-deep-decarbonization-report/download.

minimum of 15 gigawatts (GW) of offshore wind…in Massachusetts waters by 2050" (Company Brief at 57).

The Company also represented that the Project is consistent with EEA's 2007 Smart Growth/Smart Energy Policy (Company Brief at 221). This policy, the Company asserts, sets out Sustainable Development Principles, including: (1) the promotion of clean energy; (2) encouragement of the use of existing sites, structures, and infrastructure; and (3) environmental protection and the wise use of natural resources (Company Brief at 221, 222, citing Vineyard Wind at 130). The Company stated that the Project would produce clean energy, be located in an existing brownfield site, and protect the environment by having a net positive impact on GHG reduction and climate change (Company Brief at 222, citing Exhs. EFSB-CPC-1 at 3, SW-1 at § 5.4).

C. Analysis and Findings

1. Health Policies

The SJC has affirmed the importance of reliable electric service in promoting the health of Commonwealth residents: "reliable electric service is of utmost importance to the safety, ***health***, and welfare of the commonwealth's citizens and economy." Town of Sudbury at 748, citing St. 1997, c. 164, § 1 (a) (emphasis added). The Court also states: "If government and industry fail to properly plan and act to timely address our energy needs, enormous suffering can result." Town of Sudbury at 748; see also, Needham-West Roxbury at 74 ("Reliable electricity service is essential to the health of citizens of the Commonwealth; therefore, an improvement in reliability will result in health benefits").

In Park City Wind, the Project consisted primarily of a transmission connection between offshore wind generators and the grid. Park City Wind at 1 to 3. The benefits of the Project are similar to the benefits we found in Park City Wind. Specifically, we find that:

- The potential provision of 1,200 MW to the grid from the Project would enhance the reliability and diversity of the energy mix in Massachusetts and in the ISO-NE area (Exh. SW-1, at 1-14). See, Park City Wind at 162.

- This additional energy would be a valuable contribution to reliability during the winter months when the natural gas system could be constrained and, therefore, less reliable (Exhs. SW-1, at 1-14; EFSB-CPC-1, at 2). See, Park City Wind at 162.

- The influx of the energy to be generated by the Project to the Southeastern Massachusetts and Rhode Island Load Zone ("SEMA-RI") would improve the reliability of its energy supply (Exh. SW-1, at 1-14). This is important for two reasons. First, this load zone has experienced the retirement of large fossil fuel and nuclear generation facilities over the past ten years (Exh. SW-1, at 1-14). Second, ISO-NE has identified several thousand megawatts of additional fossil fuel generation that is at risk of retirement in the near future (Exh. SW-1, at 1-14).

Furthermore, in section VI.G above, the Siting Board found that with the implementation of the specified conditions and mitigation presented above, and compliance with all local, state, and federal requirements, the environmental impacts of the Project would be minimized. In that same section, the Siting Board finds that the Project, including Noticed Variation, along the Lee River Route would achieve an appropriate balance among conflicting environmental concerns as well as among environmental impacts, reliability, and cost.

In addition, in section VI.D.2.C.XI we have found above that all design, construction, and operation activities for the Project will comply with applicable government and industry standards, including the National Electrical Safety Code and the Occupational Safety and Health Administration ("OSHA") regulations. The OSHA standards have been put in place to protect the health and safety of the workers who will construct the Project in the Commonwealth. Crooker v. OSHA, 537 F.3d 79 (1st Cir. 2008).

Accordingly, subject to the specified mitigation and conditions set forth in this Decision, the Siting Board finds that the Company's plans for construction of the Project are consistent with current health policies of the Commonwealth.

2. Environmental Protection Policies

a. Climate Change Policies

The Project would deliver to the Commonwealth and the region approximately 1,200 MW of renewable clean wind energy. The Siting Board finds that the delivery of such energy would

further the Commonwealth's offshore wind energy goals embodied in Section 83C of the Green Communities Act (c. 169 of the Acts of 2008), as amended by An Act to Promote Energy Diversity (c. 188 of the Acts of 2016). The Siting Board also finds that the delivery of wind energy on such a scale is also consistent with the 2050 Roadmap, published in December 2020.[83] The 2050 Roadmap states that to meet the Net Zero by 2050 goals, the region will need to dramatically expand its clean and renewable electricity supply. 2050 Roadmap at 56. To that end, the 2050 Roadmap notes the sizable impact that offshore wind will have in achieving this goal; and it explicitly mentions the Project in the context of offshore wind projects already in the pipeline. 2050 Roadmap at 58.

The GWSA, enacted in 2008, is a comprehensive statutory framework to address climate change. Park City Wind at 164; Needham-West Roxbury at 75, citing GWSA, St. 2008, c. 298. The GWSA mandated that the Commonwealth reduce its GHG emissions by 10 to 25 percent below 1990 levels by 2020, and by at least 80 percent below 1990 levels by 2050. Park City Wind at 164; Needham-West Roxbury at 75; Vineyard Wind at 128.[84] The GWSA also requires the Commonwealth's administrative agencies, which would include the Siting Board, to consider reasonably foreseeable climate change impacts, including additional GHG emissions, and effects, such as predicted sea level rise when considering and issuing permits. GWSA, St. 2008, c. 298, § 7; see also, Park City Wind at 164; Needham-West Roxbury at 75; Vineyard Wind at 129. The GWSA has been updated to increase and accelerate the Commonwealth's GHG emissions reduction targets. Park City Wind at 165, citing the Energy Diversity Act (Chapter 188 of the Acts of 2016), and the Clean Energy Act (Chapter 227 of the Acts of 2018).

---

83 This document can be found at https://www.mass.gov/doc/ma-2050-decarbonization-roadmap/download.

84 The limits referred to are set forth in the GWSA, St. 2008, c. 298, § 6, which was codified as G.L. c. 21N, § 3(b). These limits remained in effect until June 24, 2021. G.L. c. 21N, § 3. The limits set forth in section 3(b) of the GWSA were later changed by the Climate Roadmap Act, St. 2021, c. 8, § 8, which became effective on June 24, 2021. G.L. c. 21N, § 3. Needham-West Roxbury was decided in 2018, and Vineyard Wind was decided in 2019, both before the Climate Roadmap Act became effective. Therefore, the citations in these decisions to G.L. c. 21N, § 3, refer to section 3 before it was amended.

The Roadmap Act has further strengthened the Commonwealth's commitment to reducing GHG emissions. Park City Wind at 165. As a result of the Roadmap Act, statewide GHG emissions must be at least 50 percent below 1990 levels by 2030, at least 75 percent below 1990 levels by 2040, and at least net zero by 2050. Park City Wind at 165.[85] The Roadmap Act expands the Commonwealth's commitment to produce offshore wind under Section 83C of the Green Communities Act from 1,600 MW to 4,000 MW (St. 2021, c. 8, § 91); Park City Wind at 165.

On June 30, 2022, the Secretary issued the Clean Energy and Climate Plan for 2025 and 2030 ("2025-2030 CECP") as required by the Roadmap Act, updating key strategies the Commonwealth will use to reach the statutorily required 50 percent reduction in GHG emissions below 1990 levels. As noted in the 2025-2030 CECP, electricity demand in the Commonwealth is projected to increase significantly by 2050 due to the widespread electrification of building and transportation services. "Thus, the emissions intensity of electricity generation must continue to decrease even while total generation increases. *The Commonwealth anticipates offshore wind will be the primary source of electricity for its decarbonized energy system*, all of which would need to be interconnected to land in Massachusetts or other parts of the New England grid" (2025-2030 CECP at 62 (emphasis supplied)).[86]

The Company has presented an analysis showing that the energy produced by the Project would significantly reduce GHG emissions. Such a reduction would provide multiple environmental benefits and would be consistent with statutes and environmental policies cited

---

85 Further information is available at https://www.mass.gov/info-details/massachusetts-clean-energy-and-climate-plan-for-2025-and-2030.

86 On December 30, 2020, the Secretary issued the "Massachusetts 2050 Decarbonization Roadmap" ("2050 Roadmap") https://www.mass.gov/doc/ma-2050-decarbonization-roadmap/download. Based on its analysis of a range of potential pathways, the 2050 Roadmap finds that the most cost-effective, low-risk pathways to net zero GHG emissions share core elements, including a balanced clean energy portfolio anchored by significant offshore wind resources, more interstate transmission, widespread electrification of transportation, building heat and hot water, and cost-effective replacement of equipment, infrastructure, and systems that use fossil fuels (2050 Roadmap at 21-26).

above. The Siting Board therefore finds that construction and operation of the Project would be consistent with these multiple environmental protection policies encouraging offshore wind projects and resultant GHG emissions reductions.

Regarding state and local permitting, the Company committed to obtain all applicable environmental approvals, licenses, and permits, including MEPA review. Furthermore, SCW filed a combined application for a MassDEP Chapter 91 license and State Water Quality Certification on December 20, 2023, and received a draft Chapter 91 license on September 10, 2024 (Exh. EFSB-N-4(S5) and (S5)(3)). Additionally, as part of its anticipated waterways license, the Project will pay a Tidelands Occupation Fee to the Commonwealth. The Project will also secure all appropriate wetlands approvals from local conservation commissions and all appropriate road opening permits or grants of location from affected municipalities. The Project will send applications for review from, or notices of project to, twelve separate federal agencies, ten Commonwealth agencies, and four local agencies. In addition, the Project is also subject to review by Rhode Island agencies.

b. Ocean Management Plan

The OMP was developed pursuant to the Oceans Act, St. 2008, c. 114. Park City Wind at 163; Vineyard Wind at 128. The OMP identifies and maps important components of the Commonwealth's estuarine and marine ecosystems, such as SSU Areas and key areas of WDU. Park City Wind at 163; Vineyard Wind at 128. The OMP also contains siting and management standards designed to protect the mapped resources. Park City Wind at 163; Vineyard Wind at 128.[87]

In the Certificate issued on the FEIR, the Secretary found that the Project is not within the Massachusetts Ocean Management Planning Area and is therefore not required to meet the standards of review under the OMP or to pay an ocean development mitigation fee. Furthermore,

---

[87] The OMP is incorporated into the Massachusetts CZM Plan (Exh. SW-1, at 6-14). In addition to the Siting Board's review, the Project will also undergo a federal consistency review by the Massachusetts Office of CZM (Exhs. SW-1, at 6-6).

in section VI.C.3.b.F the Siting Board reviewed the record and concluded that the Project is not located in a Massachusetts WDU area as identified by the Massachusetts OMP. For all these reasons, we find that the OMP does not apply to this Project.

c. Environmental Justice

The Project, one of the first Siting Board adjudications to also involve MEPA's EJ review process pursuant to the Roadmap Act, illustrates the complexities and multiple layers of EJ provisions that can apply to energy projects. As the Company correctly noted, the Project did not exceed the 2021 EEA EJ Policy review thresholds applicable to MEPA or Siting Board matters that would have required enhanced outreach or enhanced analysis. However, the Project was obligated to follow MEPA's Roadmap Act EJ Regulations and related EJ Protocols, as it was filed with MEPA after the effective date of each. It should be noted that the Secretary determined that MEPA's EJ Regulations and Protocols are applicable to the Project, even though the Project's offshore and onshore footprint is only adjacent to EJ populations (i.e., within the one-mile DGA), but not located in any EJ Census Block Group areas.

The Siting Board must answer two essential questions regarding its findings in this decision: (1) with respect to Section 61 findings, whether the Project's impacts to EJ populations have been adequately evaluated and whether these impacts have been adequately avoided, minimized or mitigated; and (2) based on the EJ Principles as defined in the Roadmap Act, whether the Project demonstrate an equitable distribution of energy and environmental benefits and environmental burdens.

As a general matter, the Siting Board is not subject to MEPA including its requirement to identify Section 61 Findings. The Siting Board's statutory provisions state that "neither said department, the board, nor any other person, in taking any action pursuant to sections 69I to 69J¼, inclusive, shall be subject to any of the provisions of sections 61 to 62H, inclusive, of chapter 30." G.L. c. 164, § 69I; 980 CMR 5.00. In such instances, the Siting Board is not required to make Section 61 mitigation findings that are typically required for Massachusetts state permitting agencies for projects undergoing MEPA EIR review. However, when Department adjudicatory matters (such as those involving § 72 or c. 40A, § 3) are consolidated with the Siting Board's

jurisdictional matters, the Siting Board's longstanding practice has been to follow MEPA requirements and make Section 61 findings in its decisions. Therefore, the Siting Board must make Section 61 Findings consistent with the record developed in the MEPA review.

The Siting Board has previously acknowledged its obligations in applying EJ Principles established in the Roadmap Act, which are not contingent on the MEPA review status of a project. NSTAR Electric Company d/b/a Eversource Energy, EFSB 22-01, at 159 (2022) ("East Eagle Certificate") affirmed, Conservation Law Foundation v. Energy Facilities Siting Board, No. SJC-13521 (Massachusetts Supreme Judicial Court, September 11, 2024). The Roadmap Act includes the definition of EJ Principles as, "the meaningful involvement of all people with respect to the development, implementation and enforcement of environmental laws, regulations and policies, including climate change policies; and the equitable distribution of energy and environmental benefits and environmental burdens." G.L. c. 30, § 62; Roadmap Act, Section 56. The Roadmap Act amended Section 62 of Chapter 30 to define environmental benefits as "the access to clean natural resources, including air, water resources, open space, constructed playgrounds and other outdoor recreational facilities and venues, clean renewable energy sources, environmental enforcement, training and funding disbursed or administered by the executive office of energy and environmental affairs." The Roadmap Act requires EEA agencies (including departments, divisions, boards, and offices) to consider EJ principles in making "any policy, determination or taking any other action related to a project review, or in undertaking any project pursuant to [G.L. c. 30] sections 61 through 62J, inclusive, and related regulations that is likely to affect environmental justice populations." Roadmap Act, Section 60, creating new G.L. c. 30, § 62K.

The record shows that the Company has endeavored to comply with the requirements of the MEPA EJ regulations, protocols, and directives over the course of the various MEPA certificate review processes, and the Siting Board's review. In particular, the Company:

- Identified the characteristics of the EJ populations within a one-mile DGA of the Project;
- Used the EEA EJ Map Viewer to identify languages spoken by at least five percent of the population in affected Census Tracts, who report they do not speak English "very well";

- Provided advance notification of the ENF filing to CBOs, and conducted extensive outreach, using various means and methods, to engage with the EJ populations in accessible and effective ways;
- Provided a baseline assessment of "unfair and inequitable environmental burdens and related health consequences" using the DPH EJ Tool;
- Provided additional information using the US EPA EJ Screen Tool to identify indicators at or above the 80th percentile within the DGA;
- Identified the environmental impacts of the Project and assessed whether they are likely to materially exacerbate existing environmental burdens;
- Evaluated the presence of other potential significant sources of environmental pollution within the DGA; and
- Provided recommended Section 61 mitigation measures regarding EJ populations.

Turning to the Project itself, as discussed above, the Project would entail the conversion of a brownfield industrial site that for decades hosted New England's largest and highest-emitting coal-fired generating facility. The Project would connect a new clean energy facility to the electric grid that promises to address multiple state policy priorities. These would include: increased generation and use of clean, renewable energy; decarbonization of the electricity supply (and the economy); reduction of air pollutants by displacement of fossil fuels used for generating electricity; a boost in the clean energy economy of Massachusetts through creation of new jobs, training and workforce development opportunities; economic benefits to host communities, businesses, and EJ populations; and remediation and redevelopment of a brownfield site with a long history of environmental burdens on Somerset and surrounding communities.

The Project would be located near, but not in EJ Populations. The one-mile DGA for the Project includes EJ Populations in Fall River.[88] MEPA also required the Company to provide information on EJ Populations in New Bedford, recognizing that vessels associated with construction of the Project would use New Bedford port facilities. The Company argues that any emissions associated with vessels in New Bedford would be addressed by the New Bedford facilities' owners. The Siting Board notes that while the Project is not located in New Bedford,

---

88 Due to revised Census data, the EJ populations initially identified in Swansea, were reclassified in 2022, and are no longer designated as EJ populations.

and the New Bedford EJ Populations are not within the one-mile DGA associated with the Project, vessel-related construction and operational activity of the Project would occur in the New Bedford area and its EJ populations. The record does not provide a detailed analysis of the local air emissions impacts from such activity in the New Bedford area. However, the Company has proposed a number of measures that would reduce vessel-related emissions Project wide, such as use of ultra low-sulfur fuels, and the possible use of ship-to-shore power for vessels while moored. The Company has also committed to partner with a New-Bedford CBO as part of its ongoing and future community engagement efforts with EJ populations and other residents.

Given the significant EJ populations in the vicinity of the NBMCT, and the Project's intended use of the NBMCT and possibly other New Bedford port facilities, the Siting Board directs the Company to provide updated information 90 days prior to commencing construction regarding all measures to be taken by the Company to avoid, minimize, and mitigate environmental impacts relating to its use of the NBMCT. In addition, the Siting Board directs the Company to provide the details of its community engagement plan and program with the selected New Bedford CBO partner, and other key New Bedford stakeholders.

The EJ Populations in Fall River exhibit several vulnerable EJ health indicators; and MEPA analysis focused on impacts to these populations from the Project, especially from construction-related air emissions from vehicles and vessels. The Company argues that its Project would not materially exacerbate existing health conditions in Fall River. The MEPA review process examined environmental impacts relevant to the Fall River EJ populations relating to both construction and operation phases, such as air emissions, fugitive dust, noise, traffic, water quality, parking, and combined impacts with other nearby projects (such as the proposed Prysmian cable manufacturing facility at Brayton Point). These issues, and others, are routinely considered in Siting Board Section 69J adjudications, and are addressed in detail in this decision, with findings that such impacts have been minimized.

It is evident that the most significant EJ-related environmental impacts examined by the MEPA Office for the Project involve construction-related air emissions from cable-laying vessels, onshore construction equipment, and vehicles and trucks travelling to and from the construction

site in Brayton Point.[89] After multiple iterations during the MEPA process, the Company's SFEIR provided a more precise assessment of the construction-phase vessel air emissions within the one-mile DGA encompassing the identified Fall River EJ populations. While the construction-related emissions estimates declined substantially over the course of MEPA's reviews (e.g., NOx emissions dropped from 960 tpy in the DEIR Certificate to 33.9 tpy in the SFEIR Certificate), the final levels of estimated air emissions did not fully resolve the MEPA Office's concerns about potential air impacts to the Fall River EJ populations, as noted in the SFEIR Certificate.

The Company's analysis of health significance to the Fall River EJ population of construction-related air pollutants appeared to be somewhat conclusory: it dismissed the potential significance of such impacts, noting the minimum half-mile distance of construction vessels from the Fall River shoreline and the expected dispersion of such of pollutants, thereby diminishing any impacts to the Fall River EJ populations. The Company also noted the large reduction in air emissions the Project is expected to yield once it is operational, resulting from avoided fossil generation emissions elsewhere on the grid. Given the significant annual emissions reductions estimated for the Project (e.g., 945 tpy for NO_x) this perspective has intuitive merit. However, the Siting Board also notes that the estimated construction-related air emissions are both location- and time-specific, and still may have adverse contemporaneous impacts on EJ populations. Even if the emissions are expected to be fully offset in the future, as the record indicates for the Project, there may be interim health effects to consider. For this reason, the Siting Board encourages future applicants to provide air modeling or other forms of analysis to better assess whether construction-related and operational emissions, together with existing and anticipated future emissions sources from other facilities in the airshed, may adversely impact EJ populations and others.[90]

---

89 The Project does not require a MassDEP air permit, as its operational emissions will be below applicable thresholds, given that it does not involve the use of fossil fuels to generate electricity.

90 In accordance with the Roadmap Act, on March 29, 2024 MassDEP promulgated amendments to 310 CMR 7.00 Air Pollution Control that require an applicant to conduct a cumulative impact analysis ("CIA") as part of a Comprehensive Plan Application ("CPA") for a facility located in or near EJ populations. Due to its minimal operational phase air

Importantly, the record does provide reasonable assurances that the environmental impacts of the Project would be unlikely to materially exacerbate any of the Vulnerable Health EJ Criteria (heart attack hospitalization, childhood lead exposure, low birth weight, and childhood asthma) that the MassDPH Public Health EJ Tool shows are currently above the 110 percent state-average level in the Fall River EJ populations. For example, the Project will not involve the use of lead-based paint, lead pipes, or affect lead exposure from the older housing stock in Massachusetts, in which lead paints were prevalent in the past and remain a health risk. Regarding low birth weight (shown to be associated with environmental factors such as exposure to lead, solvents, pesticides, and polycyclic aromatic hydrocarbons), the Project is expected to reduce the generation of polycyclic aromatic hydrocarbons by its displacement of fossil fuels used to generate electricity. Similarly for asthma and heart attack rates, the overall reduction in air pollutants resulting from the Project's displacement of fossil fuels for power generation, buildings and transportation (through electrification of end uses with clean power), is expected to prevent adverse impacts to these currently elevated health indicators. The air pollution mitigation measures the Company has committed to take for construction and operations (such as controlling airborne dust with BMPs, use of ultra-low sulfur diesel fuel, low NOx engines, and possible shore-to-ship power when vessels are moored, and other measures) will help to further minimize air emissions, and their related health indicators. As noted above in section VI, the Siting Board directs the Company to control airborne dust with BMPs, use ultra-low sulfur diesel fuel for vessels and construction vehicles, use low NOx engines, and shore-to-ship power options as practicable.

Although not required to do so by the MEPA EJ Protocols, or Siting Board precedent, the Company provided substantial information regarding the socioeconomic impacts of the Project (and OGF) during pre-construction, construction, and operational phases. The multi-billion dollar scale of the Project (and OGF), coupled with the specific commitments SCW has made to advance the economic interests of EJ populations, are relevant considerations regarding EJ impacts in the

---

emissions, the Project is not required to obtain a CPA from MassDEP. The air emission thresholds specified by MassDEP that require a facility to obtain a CPA are based solely on operational emissions, and not construction-period emissions (310 CMR 7.00).

affected communities. As noted above, of the original 14 Census Block Groups that were identified as being within the one-mile DGA of the Project (including the Noticed Alternative Route), 12 were defined as EJ populations, in whole or part, due to their median incomes being below 65 percent of the statewide median household income level. SCW did not examine the degree to which the socioeconomic impacts of the Project might affect the income levels of these Census Block Groups (and possibly contribute to a change of their future EJ population designation). However, the record demonstrates the substantial overall economic impacts of the Project, and the Company's focus on targeting economic opportunities and benefits to EJ populations in the Project area, will result in some positive socioeconomic impacts for the Project's EJ populations.[91]

The Siting Board directs the Company to file updated information 90 days prior to commencement of construction and 90 days following construction completion that includes: a description of the expected or actual geographic areas of the employees and subcontracted workers associated with the Project; the Company's contributions to a trained workforce; the Company's progress towards fulfilling its commitment that at least 75 percent of operations and maintenance jobs will be hired from within the South Coast community; and the extent to which the Project's employees and subcontractors reside within an EJ population relevant to the Project area.

With respect to whether the Project's impacts have been adequately evaluated and avoided, minimized, or mitigated, the record in this proceeding (including the lengthy EJ review in the MEPA process) has considered a range of issues and impacts relevant to the EJ populations near the Project area. The longstanding review process of the Siting Board, which requires avoiding,

---

91 Of note, MassDEP's CIA regulations identify socioeconomic indicators as an important factor in consideration of EJ issues (310 CMR 7.02(14)(c)(4) Table 1). MassDEP's Guidance for Conducting Cumulative Impact Analysis for Air Quality Plan Applications, which accompanied the issuance of the CIA amendments to 310 CMR 7.00 (March 28, 2024), notes the linkages between several health indicators (e.g., Chronic Obstructive Pulmonary Disease, Coronary Heart Disease, Elevated Blood Lead Levels, and Pediatric Asthma) and socioeconomic conditions (e.g., income levels) of the EJ population. See, *Guidance for Conducting Cumulative Impact Analysis for Air Quality Plan Applications* at 23-25.

minimizing and mitigating adverse environmental impacts to communities and their populations, is complementary to this EJ objective. The record has identified relevant environmental impacts to EJ population, as well as numerous means of avoiding, minimizing and mitigating these impacts. The Siting Board directs the Company to observe and follow all of the EJ-related Section 61 findings contained in the SFEIR Certificate (Exh. SW-15, at 22-23).

There are certain refinements, such as air modeling for air emissions impacts on EJ Populations, and a more-comprehensive analysis of potential cumulative impacts, which surfaced as areas of interest during the MEPA review process, but were not undertaken by the Company. However, the record provides adequate assurance that these types of impacts are more than counterbalanced, over time, by significant air emissions reductions and other benefits from the Project (and OGF). With SCW's proposed Section 61 mitigation findings, and the additional findings and conditions adopted in this decision, the Siting Board finds that the Project's EJ-related impacts have been adequately characterized, avoided, minimized, and mitigated. Given the above, we also find that the Project would not impose a disproportionate adverse impact on the Project's EJ populations.

With respect to the EJ principles, the Siting Board finds that the Project would further several important state energy, environmental, and economic policy objectives and result in direct and indirect energy and environmental benefits and, overall, reduce environmental burdens impacting the EJ population in the Project area. While the Company acknowledges that some limited environmental impacts during the construction period would occur (such as air emissions and noise), these impacts are largely temporary, minimized, and mitigated by the conditions of this decision, benefitting both EJ and non-EJ populations. Similarly, we find that these temporary and mitigated impacts are outweighed by immediate and long-term energy and environmental benefits described above that the Project (and OGF) will produce. As noted above, these benefits include (1) substantial levels of avoided air emissions from fossil fuels otherwise used to generate electric power in the region and decarbonization (of both generation and electrification of end uses with clean energy); (2) continued revitalization, restoration, and improvement of Brayton Point – a former coal-fired power plant that is now a brownfield site; and (3) positive socioeconomic effects relating to substantial numbers of new jobs, economic development opportunities, and clean

energy training programs for EJ populations (and others) in the Project area and the South Coast region more broadly.

In view of the above, the Siting Board finds that the Project would achieve an equitable distribution of energy and environmental benefits and environmental burdens and is consistent with the requirements of the EJ Principles articulated in the Roadmap Act. See Conservation Law Foundation v. Energy Facilities Siting Board, No. SJC-13521 (Massachusetts Supreme Judicial Court, September 11, 2024).

3. Resource Use and Development Policies

The Siting Board finds that the Project is also consistent with the EEA's 2007 Smart Growth/Smart Energy policy. See Park City Wind at 168; Vineyard Wind at 130, 131. This policy established the Commonwealth's Sustainable Development Principles. Park City Wind at 168. These principles include: (1) supporting the revitalization of city centers and neighborhoods by promoting development that is compact, conserves land, protects historic resources and integrates uses; (2) encouraging remediation and reuse of existing sites, structures and infrastructure rather than new construction in undeveloped areas; (3) protecting environmentally sensitive lands, natural resources, critical habitats, wetlands and water resources and cultural and historic landscapes; (4) increasing job and business opportunities; (5) promoting clean energy; and (6) implementing regional solutions (Exh. SW-1, at 6-28. 6-29). The onshore portion of the Project would be located exclusively within private, previously disturbed land, thus minimizing clearing necessary to accommodate the proposed infrastructure. The Project has also been designed to mitigate impacts to sensitive lands through the use of HDD to avoid sensitive coastal resources (i.e., Barrier Beach, Coastal Beach, Bank, and Dune, as well as mitigate for impacts to Land Under the Ocean), and locating onshore infrastructure in upland areas a significant distance from the current mean higher high-water line (Exh. SW-1, §§ 4, 5). Furthermore, the delivery of approximately 1,200 MW of renewable clean energy to the regional grid would create job and business opportunities. We find, therefore, that the Project would be consistent with and would advance the Commonwealth's policies regarding resource use and development.

VIII. ANALYSIS UNDER G.L. C. 40A, § 3 – INDIVIDUAL ZONING EXEMPTIONS

A. Standard of Review

G. L. c. 40A, § 3, provides, in relevant part, that:

> Land or structures used, or to be used by a public service corporation may be exempted in particular respects from the operation of a zoning ordinance or Bylaw if, upon petition of the corporation, the [Department] shall, after notice given pursuant to section eleven and public hearing in the town or city, determine the exemptions required and find that the present or proposed use of the land or structure is reasonably necessary for the convenience or welfare of the public.

Thus, a petitioner seeking exemption from a local zoning Bylaw under G.L. c. 40A, § 3, must meet three criteria.[92] First, the petitioner must qualify as a public service corporation ("PSC"). Save the Bay, Inc. v. Department of Public Utilities, 366 Mass. 667 (1975) ("Save the Bay"). Second, the petitioner must demonstrate that its present or proposed use of the land or structure is reasonably necessary for the convenience or welfare of the public. Park City Wind at 169; Vineyard Wind at 132; NRG Canal 3 Development LLC, EFSB 15-06/D.P.U. 15-180, at 140-141 (2017) ("NRG Canal"). Finally, the petitioner must establish that it requires exemption from the zoning ordinance or bylaw. Park City Wind at 169; Mid Cape Reliability Project at 98; Vineyard Wind at 132.

Additionally, the Siting Board favors the resolution of local issues on a local level whenever possible, to reduce concern regarding any intrusion on home rule. The Siting Board finds that the most effective approach for doing so is for a petitioner to consult with local officials

---

92 G.L. c. 40A, § 3 applies to the Department. The Department refers zoning exemption petitions to the Siting Board for hearing and decision pursuant to G.L. c. 25, § 4. In accordance with G.L. c. 164, § 69H, when deciding matters under a Department statute, the Siting Board applies Department and Board standards "in a consistent manner." Thus, the Siting Board and the Department implement G.L. c. 40A, § 3, using consistent standards of review, and this Decision cites to both Siting Board decisions and Department orders interpreting G.L. c. 40A, § 3. On July 5, 2022, the Chair of the Department referred the SCW Zoning Petition to the Siting Board for review and decision pursuant to G.L. c. 25, § 4.

regarding its project before seeking zoning exemptions pursuant to G.L. c. 40A, § 3. Park City Wind at 169-170; Vineyard Wind at 132; Russell Biomass LLC and Western Massachusetts Electric Company, EFSB 07-4/D.P.U. 07-35/07-36, at 61-62 (2009) ("Russell Biomass II"). Thus, the Siting Board encourages petitioners to consult with local officials and, in some circumstances, to apply for local zoning permits prior to seeking zoning exemptions from the Department under G.L. c. 40A, § 3. Park City Wind at 170; Vineyard Wind at 132; Russell Biomass II at 68.

B. Public Service Corporation

1. Standard of Review

In determining whether a petitioner qualifies as a PSC for the purposes of G.L. c. 40A, § 3, the Massachusetts SJC has stated:

> [A]mong the pertinent considerations are whether the corporation is organized pursuant to an appropriate franchise from the State to provide for a necessity or convenience to the general public which could not be furnished through the ordinary channels of private business; whether the corporation is subject to the requisite degree of governmental control and regulation; and the nature of the public benefit to be derived from the service provided.

Save the Bay, 366 Mass. at 680; Park City Wind at 170; Sudbury-Hudson at 194; see also Berkshire Power Development, Inc., D.P.U. 96-104, at 26-36 (1997) ("Berkshire Power").[93]

---

[93] The Department interprets this list not as a test, but rather, as guidance to ensure that the intent of G.L. c. 40A, § 3, will be realized, i.e., that a present or proposed use of land or structure that is determined by the Department to be "reasonably necessary for the convenience or welfare of the public" not be foreclosed due to local opposition. Berkshire Power at 30; Save the Bay, 366 Mass. at 685-686; Town of Truro, 365 Mass. at 410 (1974); Exelon West Medway at 135 n.117; New England Power Company d/b/a National Grid, D.P.U 15-44/15-45. at 5-6 (2016) ("MVRP"). The Department has interpreted the "pertinent considerations" as a "flexible set of criteria which allow the Department to respond to changes in the environment in which the industries it regulates operate and still provide for the public welfare." Berkshire Power at 30; MVRP at 6; see also Dispatch Communications of New England d/b/a Nextel Communications, Inc., D.P.U./D.T.E. 95-59B/95-80/95-112/96-113, at 6 (1998). The Department has determined

2. Company's Position

The Company asserts that it is a public service corporation for purposes of the zoning statute (Company Brief at 228). SCW assessed the factors under the Save the Bay precedent. The first of the "pertinent considerations" that the Company addresses is whether the corporation is organized pursuant to an "appropriate franchise" from the State to provide for a necessity or convenience to the general public which could not be furnished through the ordinary channels of private business (Company Brief at 227). The Company states that "[t]he Department has determined that it is not necessary for a petitioner to demonstrate the existence of an appropriate franchise in order to establish [PSC] status" (Company Brief at 227; Vineyard Wind at 133; Berkshire Power at 31) (internal quotation marks omitted). The Company asserts that Department and Siting Board precedent have instead held that any corporation that "owns generating assets in Massachusetts, and makes those assets available to serve the New England market, is a public service corporation" (Company Brief at 227-228, citing Vineyard Wind at 135-136; NRG Canal at 142-143; Exelon West Medway, LLC & Exelon West Medway II, LLC, EFSB 15-01/D.P.U. 15-25, at 136 (Exelon West Medway) (quoting USGen New England, Inc., D.T.E. 03-83, at 15 n.9 (2004) ("USGen); Russell Biomass LLC, D.T.E./D.P.U. 06-60, at 15 (2008) ("Russell Biomass I").

In addressing the "nature of the public benefit" consideration, the Company asserts that the Project will bring generation output from a commercial-scale offshore wind energy facility to the New England bulk power grid, where it will serve the needs of the region's energy consumers (Company Brief at 227-228) (internal punctuation omitted). Bringing offshore wind-generated energy to the grid is necessary, the Company argues, to comply with climate change related mandates (Company Brief at 228, citing Exhs. EFSB-N-1(S1)(1); EFSB-N-4(S3)(1)).

---

that it is not necessary for a petitioner to demonstrate the existence of "an appropriate franchise" in order to establish PSC status. Berkshire Power at 31; MVRP at 6; NSTAR Electric Company, D.P.U. 15-02, at 4-5 (2015).

The Company contends that under Vineyard Wind precedent, the Siting Board does not need to decide whether a non-utility transmission company would qualify as a PSC. Rather, the Company asserts, "the Siting Board should find here, as it did in Vineyard Wind, that although" the OGF will be located in federal waters, the "other major components of the Facility will have a physical presence within Massachusetts" (Company Brief at 228). Consequently, the Company states, SCW has demonstrated an appropriate nexus with Massachusetts to be considered a public service corporation in Massachusetts" (Company Brief at 228). Therefore, the Company concludes, the Siting Board should find that SCW qualifies as a public service corporation (Company Brief at 228, citing Vineyard Wind at 135).

In its brief, the Town does not address the issue of whether the Company constitutes a PSC.

3. Analysis and Findings on Public Service Corporation

Recent precedent has established that a non-generator entity that furnishes energy services to the New England electric grid, such as the Company, may qualify as a PSC. Park City Wind at 172-174; Vineyard Wind at 134-136; Medway Grid LLC, D.P.U. 22-18/22-19, at 28-32 (2023); Cranberry Point Energy Storage LLC, D.P.U. 22-59, at 38 (2023). The projects considered in both Park City Wind and Vineyard Wind were similar to the Project in the present case. All three projects consist of onshore and offshore transmission lines that would connect an offshore wind energy generation facility to the grid in Massachusetts (Exh. SW-3, at 1 and n.1&2). Park City Wind at 1, 2; Vineyard Wind at 2. In the two prior proceedings, the Siting Board viewed the transmission facilities that comprised the relevant Projects as but "one component" of a larger entity. Park City Wind at 172; Vineyard Wind at 135. That larger entity, the Siting Board found, "both generates and transmits electricity." Park City Wind at 172, citing Vineyard Wind at 135. Therefore, in both prior proceedings, the Siting Board considered the projects "as a generator for purposes of determining whether the Company qualifies as a PSC." Park City Wind at 172; Vineyard Wind at 135. Following precedent, the Siting Board also views the Project in the present proceeding as part of a larger entity that generates and transmits electricity. Therefore, we consider the Project, like the ones in Park City Wind and Vineyard Wind, as a generator for purposes of determining whether the Company qualifies as a PSC.

Furthermore, this larger entity of which the Project is a part owns assets of significant value located in Massachusetts; and the Project's interconnection to the grid will also be in Massachusetts. In this way, the Company resembles the petitioners in both Park City Wind and Vineyard Wind. Park City Wind at 1, 3, 173; Vineyard Wind at 3, Figure 1. In addition, the Company, like the petitioners in Park City Wind and Vineyard Wind, is a limited liability company incorporated in Delaware and registered to do business in Massachusetts (Exh. SW-4, at 3). See Park City Wind at 173: Vineyard Wind at 133-134. Therefore, we find that the Company has established a legal and physical nexus with the Commonwealth.

The nature of the public benefits of the Project are similar to the nature of the public benefits of the projects considered in Park City Wind and Vineyard Wind. All three projects will deliver renewable energy to the New England grid (Exh. SW-1, at 6-9). Park City Wind at 176; Vineyard Wind at 127. In doing so, the Project, like the Projects in Park City Wind and Vineyard Wind, will help the Commonwealth reach its GHG emissions reduction targets. Park City Wind at 25, 26, 29, 149, 160, 166, 171, and 176; Vineyard Wind at 129, 137, 138.

SCW satisfies all the pertinent considerations enumerated in Save the Bay. In addition, the Company also qualifies as a PSC under the standard enumerated in NRG Canal, Exelon West Medway, and USGen: i.e., it is an entity with an appropriate nexus to the Commonwealth that uses its assets to generate electricity for the New England market. For these reasons, the Siting Board finds that the Company qualifies as a PSC for purposes of the zoning exemption statute.

C. Public Convenience and Welfare

1. Standard of Review

In determining whether the present or proposed use is reasonably necessary for the public convenience or welfare, the Department must balance the interests of the general public against the local interest. Save the Bay, 366 Mass. at 680; Town of Truro v. Department of Public Utilities, 365 Mass. 407, 409 (1974) ("Town of Truro"). Specifically, the Department is empowered and required to undertake "a broad and balanced consideration of all aspects of the general public interest and welfare and not merely [make an] examination of the local and individual interests which might be affected." New York Central Railroad v. Department of Public Utilities,

347 Mass. 586, 592 (1964) ("NY Central Railroad"). When reviewing a petition for a zoning exemption under G.L. c. 40A, § 3, the Department is empowered and required to consider the public effects of the requested exemption in Massachusetts as a whole and upon the territory served by the applicant. Save the Bay at 685; NY Central Railroad at 592.

Therefore, when making a determination as to whether a petitioner's present or proposed use is reasonably necessary for the public convenience or welfare, the Department examines: (1) the need for, or public benefits of, the present or proposed use; (2) the present or proposed use and any alternatives or alternative sites identified;[94] and (3) the environmental impacts or any other impacts of the present or proposed use. The Department then balances the interests of the general public against the local interest and determines whether the present or proposed use of the land or structures is reasonably necessary for the convenience or welfare of the public. Park City Wind at 174-175; Mid Cape Reliability Project at 100-101; Vineyard Wind at 136-137.

2. Company's Position

The Company asserts that the Project is reasonably necessary for the convenience or welfare of the public (Company Brief at 229-233). The Company maintains that the "primary purpose of the . . . Project is to enable delivery of the energy from an estimated 1,200 MW of capacity from . . . [the OGF] to the New England regional electric grid and thereby provide the Commonwealth of Massachusetts with renewable clean energy" (Company Brief at 230, citing Exhs. SW-1, at 1-3, 2-1 to 2-11; EFSB-N-1(S1)(1); EFSB-N-1(S2); EFSB-N-1(S2)(1); EFSB-N-2; EFSB-N-4). Siting Board precedent, the Company asserts, supports the proposition that where transmission facilities are necessary to connect proposed generating facilities to the grid, that

---

94 With respect to the particular site chosen by a petitioner, G.L. c. 40A, § 3 does not require the petitioner to demonstrate that its primary site is the best possible alternative, nor does the statute require the Department to consider and reject every possible alternative site presented. Rather, the availability of alternative sites, the efforts necessary to secure them, and the relative advantages and disadvantages of those sites are matters of fact bearing solely upon the main issue of whether the primary site is reasonably necessary for the convenience or welfare of the public. Martarano v. Department of Public Utilities, 401 Mass. 257, 265 (1987); NY Central Railroad at 591.

necessity supports a finding of need pursuant to G.L. c. 40A, §3 (Company Brief at 230, citing Russell Biomass II; Cape Wind Associates, LLC, EFSB 02-2A/D.T.E. 02-53, at 21-24 (2008) ("Cape Wind 2008 Decision"). The existing infrastructure is inadequate to connect the OGF to the electric grid in New England (Company Brief at 230, citing Exh. SW-1, at 2-6). The Project would remedy this situation by providing a reliable means to transmit the electricity generated by the OGF to the New England grid (Company Brief at 230).

Furthermore, the Company also represents that electricity produced by the OGF is likely to be available to the regional energy supply (Company Brief at 231, citing Exhs. SW-1, at 2-6 to 2-11; EFSB-N-4(S1) at 5 to 10; EFSB-G-10(S3)(1) at 18; EFSB-N-4(S1)(1) at 8 to 10; EFSB-N-4(S1)(2)). The Company bases this representation on indicators of project progress, development commitments, and public policy requirements (Company Brief at 231, citing Exhs. SW-1, at 2-6 to 2-11; EFSB-N-4(S1) at 5-10; EFSB-G-10(S3)(1) at 18; EFSB-N-4(S1)(1) at 10; EFSB-N-4(S1)(2)).

The Company argues that construction of the OGF is being developed in response to the need established by statutory and policy directives, including Section 83C of the Green Communities Act, as amended by An Act to Promote Energy Diversity, as well as An Act to Advance Clean Energy, the GWSA, and the Roadmap Act (Company Brief at 231, citing Exhs. SW-1 at 6-3; EFSB-CPC-1 at 1 to 3; EFSB-CPC-2). In addition, the Company argues that construction of the Project would result in significant environmental, economic and reliability public benefits (Company Brief at 231, citing Exhs. EFSB-N-4(S1)(1); SW-1 at 1-14, 6-3; EFSB-CPC-1 at 1 to 3; EFSB-CPC-2).

The Town did not address the public convenience and welfare issue.

3. Analysis and Findings on Public Convenience and Welfare

In determining whether the proposed use is reasonably necessary for the public convenience and welfare, there are three issues to be addressed: (1) the need for, or public benefits of, the present or proposed use; (2) the present or proposed use and any alternatives or alternative sites identified; and (3) the environmental impacts or other impacts of the present or proposed use.

a. The Need for, or Public Benefits of, the Proposed Use

The benefits of the Project are almost identical to the benefits the Siting Board found as the bases for approving the projects proposed in Park City Wind and Vineyard Wind. All three projects consist of transmission facilities that would connect offshore energy generation facilities to the grid in Massachusetts (Exhs. SW-1, at 1-2, 1-3; SW-3, at 1 to 4, 6). Park City Wind at 1, 2; Vineyard Wind at 1, 2. The Siting Board finds in the present case, as we found in Park City Wind and Vineyard Wind, that such a connection would help reduce regional GHG emissions and would also reduce regional reliance on fossil fuels in favor of wind energy. See Park City Wind at 176; Vineyard Wind at 138-139. Furthermore, the Siting Board finds, as we did in both Park City Wind and Vineyard Wind, that the Project's benefits would be critical to meeting the Commonwealth's statutory and regulatory policy objectives. See Park City Wind at 176; Vineyard Wind at 138-139. In addition, the Siting Board has found that the Project is needed. The Siting Board finds that the Project would provide significant public benefits and that it is needed for the region.

b. The Proposed Use and Any Alternatives or Alternative Sites Identified

The Siting Board reviewed the Company's project alternatives analysis and route selection process in Sections IV and V. The Board found that on balance the Project is superior to other alternatives evaluated with respect to cost, environmental impacts, meeting the identified need. See, Section IV.C, supra. In addition, the Board found that the Company demonstrated that it: (1) developed and applied a reasonable set of criteria for identifying and evaluating alternative routes in a manner that ensures that it has not overlooked or eliminated any routes that are clearly superior to the proposed project; and (2) identified a range of practical transmission line routes with some measure of geographic diversity. See, Section V.C, supra. This finding is almost identical to the findings we made in Park City Wind and Vineyard Wind, highlighting another similarity among the three projects. See Park City Wind at 177; Vineyard Wind at 138.

c. Environmental Impacts or Other Impacts of the Proposed Use.

The Siting Board assessed the Project's environmental impacts in Section VI.G above, and found that the Project achieved a proper balance among cost, reliability, and environmental impacts.

d. Conclusion on Public Convenience and Necessity

Based on the findings made herein, the Siting Board finds that the advantages of the Project to the public greatly outweigh any disadvantages or impacts. Therefore, the Siting Board finds that the Project is reasonably necessary for the public convenience or welfare.

D. Individual Exemptions Required

1. Standard of Review

In determining whether an exemption from a particular provision of a zoning bylaw is required for purposes of G.L. c. 40A, § 3, the Department determines whether the exemption is necessary to allow construction or operation of the petitioner's project. Park City Wind at 177; Beverly-Salem at 116; Vineyard Wind at 139. The Petitioner bears the burden to identify the individual zoning provisions applicable to the project and to establish on the record that exemption from each of those provisions is required:

> The Company is both in a better position to identify its needs, and has the responsibility to fully plead its own case . . . The Department fully expects that, henceforth, all public service corporations seeking exemptions under [G.L.] c. 40A, § 3 will identify fully and in a timely manner all exemptions that are necessary for the corporation to proceed with its proposed activities, so that the Department is provided ample opportunity to investigate the need for the required exemptions.

Park City Wind at 178; Mid Cape Reliability Project at 102-103; New York Cellular Geographic Service Area, Inc., D.P.U. 94-44, at 18 (1995).

2. "Prohibitive" vs "Permissive" Uses in the Somerset Zoning Bylaw

The Company requests exemptions from use provisions of the Somerset Zoning Bylaws, as the Company's proposed use is not expressly authorized by the Bylaws (Exh. SW-4, at 22, 25-36). The Company asserts that the Somerset Zoning Bylaw is of the type described as "prohibitive" rather than "permissive" (Company Brief at 239, citing Tanner v. Board of Appeals of Boxford, 61 Mass. App. Ct. 647, 648 (2004) ("Tanner") see also Exh. EFSB-Z-9). In this form of Bylaw, the Company represents, the default presumption is that a use is prohibited unless it is expressly authorized in the zoning district(s) in which it would be located (Exh. EFSB-Z-9, citing Beale v. Planning Board of Rockland, 423 Mass. 690, 693 (1996) and Town of Harvard v. Maxant, 360 Mass. 432, 436 (1971)).

Section 4.1.3 of the Somerset Zoning Bylaw prohibits two types of uses: (1) any use under which it is denoted by the word "No" in the Table of Use Regulations; or (2) any use not specifically listed in the Table of Use Regulations (Exh. EFSB-Z-9; SW-4, exh. B at 10). Somerset Zoning Bylaw section 7.7(e) expressly prohibits the granting of a use variance (Exhs. SW-4, at 33, 35, 36; SW-4, exh. B at 49).

In support of this proposition, the Company represents that Section 4.1.3 of the Somerset Zoning Bylaw states that "[n]o building, structure or land in any district may be used, erected or designed to be used, in whole or in part, for any use under which it is denoted by the word 'No' in the Table or for any use not specifically listed in the Table except as hereinafter provided" (Exh. EFSB-Z-9; see also, Exh. SW-4, exh. B at 10). The "Table" referred to is the "Table of Use Regulation" set forth in section 4.2 of the bylaw (Exhs. EFSB-Z-9; SW-4, exh. B at 10 to 16).

The Town does not address the Company's argument regarding the prohibitive nature of the Somerset Zoning Bylaw in its post-hearing brief.

The Company's view that the Somerset Zoning Bylaw is "prohibitive" is, however, somewhat tempered by Somerset Zoning Bylaw section 4.1.4, which "allows special permits to be granted for any additional use which is substantially similar to one or more of the uses specifically authorized and not more detrimental to the neighborhood" (Exhs. SW 4, at 35; SW 4, exh. B at 10). The issuance of special permits is governed by section 4.1.2, which states:

> A use listed in Section 4.2 [Table of Use Regulation] is permitted in any district under which it is denoted by the word "Yes". If denoted in the Table [of use regulations] by the letters "SP", the use may be permitted in the district only if the Board of Appeals, or such other special permit granting authority as this Bylaw may provide, so determines and grants a special permit"

(Exh. SW-4, exh. B at 10).

In view of above, the Siting Board concludes that the Somerset Zoning Bylaw is of the prohibitive rather than the permissive type with one exception: some specifically identified uses listed in the Table of Use Regulations may be expanded upon through the special permit process. The Siting Board finds that the prohibitive aspects of the Somerset Zoning Bylaw necessitate relief to allow the Project to be built and operated, without undue risk of adverse interpretations under the Somerset Zoning Bylaw. This relief will enable the Project to serve its intended and necessary purposes.

3. Description of Requested Exemptions, Parties' Positions, and Analysis and Findings

SCW seeks multiple individual zoning exemptions from the Somerset Zoning Bylaw (Exh. SW-4, at 25-36). The exemptions requested are grouped below according to the physical portion of the Project to which they relate: (1) the proposed Converter Station; and (2) the Onshore Cables and Grid Interconnection.

Tables 23, 24, and 25, below summarize: (1) each of the specific provisions of the Somerset Zoning Bylaw from which the Company seeks an exemption; (2) the relief available (if any) under the respective bylaw provisions; and (3) the Company's argument as to why it cannot comply with the identified zoning provision and/or why available zoning relief is inadequate.

In its brief, the Town disagrees with SCW's contention that it is entitled to individual zoning exemptions under the circumstances of this case (Town Brief at 2). The Town does not, however, set forth any arguments against the grant of any specific zoning exemption request (Town Brief, passim). Rather, the Town "focuses this Brief on proposed conditions which might satisfy the Town's concerns with respect to Project impacts, and which, if stipulated, may result in

the Town's willingness to withdraw its opposition" (Town Brief at 2). We address these requested conditions, and the Company's responses to them, in Section VIII.D.4, below.

a. Converter Station (Company Argument, Town's Objection, Company Reply)

In the Zoning Petition, the Company requests relief from the following provisions to construct the Converter Station (Exh. SW-4, at 33, 34):

Table 23. Zoning Exemptions Sought by SCW for the Converter Station

Zoning Bylaw Provision & Description	**Zoning Relief Available**	**SCW Rationale for Seeking Zoning Exemption**
Use Regulations §§ 4.2 and 4.1.4	None available	Section 7.7(e) expressly prohibits the granting of use variances. The SCW Converter Station is located in the Industrial District and Section 4.2 (Table of Use Regulation) does not expressly allow converter stations in connection with a large-scale wind generating facility. Section 4.1.4 allows special permits to be granted for any additional use which is substantially similar to one or more of the uses specifically authorized and not more detrimental to the neighborhood. The Somerset Zoning Bylaw is ambiguous as to whether the Project's proposed use is eligible for a special permit under this Section because the interpretation of the Section is subjective and discretionary. Therefore, an exemption from the prohibition in Sections 4.2 and 4.1.4 is per se required.
Setbacks §5.2	Dimensional Variance	To the extent the SCW Converter Station will not comply with the minimum setback requirements, relief will be required. The legal standard for obtaining a variance is difficult to meet. Variances are a disfavored form of relief and, even if granted, are subject to appeal.
Planned Development § 6.10	Site Plan Approval	The Project cannot meet all requirements for Site Plan Approval in connection with its planned development. SCW must have the discretion to design the Project and site layout in a manner consistent with established industry standards. Site Plan Approval is discretionary, and even if granted, is subject to appeal.
Off-Street Parking and	None available/	This Section does not expressly include converter stations in connection with a large-scale wind generating facility as

Zoning Bylaw Provision & Description	Zoning Relief Available	SCW Rationale for Seeking Zoning Exemption
Loading Space Requirements § 6.7	Variance	a class of allowed use. The appropriate class of allowed use will be determined by the Building Inspector, who has discretion to impose parking requirements inconsistent with the proposed SCW Converter Station. A variance (with respect to dimensional requirements) may be required. The legal standard for obtaining a variance is difficult to meet. Variances are a disfavored form of relief and, even if granted, are subject to appeal.
Noise § 6.9	None available	Section 6.9 of the Somerset Zoning Bylaw prohibits "sound-producing equipment […] operated in any building or on any lot so as to produce noise or sound which is normally perceptible without instruments beyond the bounds of the lot on which it is located." To the extent the SCW Converter Station could be found not to comply with this requirement, an exemption from the prohibition in Section 6.9 is per se required.

Source: Exh. SW-4, at 33, 34: Company Brief 252-254.

i. Use Regulations §§ 4.2 and 4.1.4.

(A) Company Position

The Company represents that the proposed Converter Station would be located in the Industrial District (Exh. SW-4, at 33; Company Brief at 238-239). A converter station is not a specifically allowed use in said district pursuant to section 4.2 of the Somerset Zoning Bylaw, the Table of Use Regulation (Exh. SW-4, at 33 and exh. B at 11 to 16; Company Brief at 239). Allowed uses for the Industrial District do include, however, "Telephone exchange, transformer station or electric substation" (Exh. SW-4, Exh. B at 15; Company Brief at 239).

In its brief, the Company concedes that the intended use, an HVDC converter station, might be deemed to fall within the terms of the allowed use for a transformer station or electrical substation (Company Brief at 239). But "transformer station" and "electrical substation," the Company asserts, are not defined in Section 2.0 "Definitions" of the Somerset Zoning Bylaw, and therefore one cannot be certain that the Somerset Zoning Board would interpret the bylaw in this manner (Company Brief at 239). Furthermore, these terms are not commonly found in the legal

context or in dictionaries (Company Brief at 239, citing exh. EFSB-Z-3). This uncertainty regarding the exact meaning of the relevant terms, the Company argues, creates a risk that the Somerset Zoning Bylaw could be construed to forbid the construction of the SCW Converter Station in the Industrial District (Company Brief at 239). Consequently, the Company argues, the Somerset ZBA could deny the Company permission to construct the Converter Station (Company Brief at 239). Even if permission were granted, states the Company, a resident could appeal a zoning determination in favor of constructing the Converter Station (Company Brief at 239). Such an appeal, the Company contends, could delay the Project and impose undue expenses on SCW (Company Brief at 239). Such a delay could adversely affect the timely and efficient construction and operation of the Project (Company Brief at 239, citing Exh. EFSB-Z-3).

Furthermore, as mentioned above, SCW states that the Somerset Zoning Bylaw is "prohibitive" rather than "permissive" (Company Brief at 239). The Company asserts that its proposed use of the relevant property, an HVDC converter station in connection with a large-scale wind generating facility, is not listed as a permitted use in the zoning bylaw (Company Brief at 240). Therefore, this proposed use must be considered prohibited (Company Brief at 240). Furthermore, the Somerset Zoning Bylaw expressly prohibits the granting of use variances (Company Brief at 240, citing section 7.7(e) of said bylaw).

In addition, the Company states that the zoning bylaw "is ambiguous as to whether or not the Project's proposed use [Converter Station] is eligible for a special permit under [section 4.1.4] because the interpretation of the Section is subjective and discretionary" (Company Brief at 240). Section 4.1.4 of the Somerset Zoning Bylaw states that any additional use which is substantially similar to one or more of the uses specifically authorized and not more detrimental to the neighborhood may be allowed, if a permit therefore is issued in accordance with the provisions of Section 7.5 of this Bylaw (Exh. SW-4, exh. B at 10). Finally, the Company draws parallels between the present situation and that faced by the Siting Board in Beverly-Salem (Company Brief at 240, citing Beverly-Salem at 125), and in NSTAR Elec. Co., EFSB 15-03/D.P.U. 15-64/15-65, at 82 (2017) ("Mystic-Woburn"), where the Siting Board granted zoning exemptions under similar facts (Company Brief at 240-241). For all of these reasons, the Company requests exemptions from Sections 4.2 and 4.1.4 of the Somerset Zoning Bylaw.

(B) Analysis and Finding

The zoning bylaw in the present case is "prohibitive" rather than the "permissive" type. Tanner at 648. Consequently, it is likely that the Somerset ZBA could prohibit the Converter Station from being constructed in the Industrial zoning district because that use is not specifically allowed in that district by the zoning bylaw. Furthermore, section 7.7(e) of the zoning bylaw explicitly prohibits the granting of a use variance. Therefore, that option is not available to the Company.

Regarding special permits, the most likely interpretation of the bylaw is that such permits may be granted only for a use that is listed in the Table of Use Regulation, section 4.2, and even then only if "SP" appears next to that use in said table (Exh. SW-4, exh. B at 10). Section 4.1.4 allows the zoning authority to grant special permits in accordance with section 7.5 of the zoning bylaw. This section states that, "a special permit . . . shall not waive, vary, or relax any other provisions of this Bylaw applicable thereto" (Exh. SW-4, exh. B at 35). The term "HVDC converter station" does not appear in the zoning bylaw section 4.2, Table of Use Regulation. Therefore, it is likely that the Somerset ZBA could conclude that it does not have the authority to issue a special permit for the Converter Station.

Furthermore, we note that telecommunications facilities without a tower are allowed uses as of right in the Industrial district, but telecommunication facilities with a tower are allowed only with a special permit (Exh. SW-4, exh. B at 12, 15). This distinction may reflect a concern on the Town's part about the effects of non-ionizing radiation on residents. See, section VI.D.2.c.vii, infra. If that is the case, then the Somerset ZBA would have additional reason for prohibiting the construction of the Converter Station in the Industrial District.

For all these reasons, the Siting Board finds that exemptions from Somerset zoning bylaw sections 4.2 and 4.1.4 are required.

ii. Minimum Yard Setbacks – Dimensional Variances

(A) Company Position

Section 5.2 of the Somerset Zoning Bylaw prescribes setback requirements for nonresidential buildings in the Industrial District (Company Brief at 241-243). SCW contends that the zoning bylaw requires a minimum front yard setback for any nonresidential building of at least 50 feet, a minimum side yard setback for any nonresidential building of at least 25 feet, and a minimum rear yard setback for any nonresidential building of at least 25 feet (Company Brief at 241). The Company also asserts that based on the current status of plan design, it expects the Converter Station to comply with these requirements (Company Brief at 241). Nevertheless, the Company represents, it may become necessary to change the current plan design (Company Brief at 241).

If that were to happen, SCW maintains, it would need a dimensional variance to construct the Converter Station at the place designated for it (Company Brief at 241). The Company represents that the allowance of such a variance is governed by Somerset Zoning Bylaw Section 7.7 (Company Brief at 241). The Company states that to grant such a variance, the Somerset Zoning Board of Appeals must make the findings required under the Variance Standard of Review (Company Brief at 241). Furthermore, SCW asserts that variances are generally difficult to obtain and, even when granted, are susceptible to appeal (Company Brief at 241-242, citing NSTAR Elec. Co., D.P.U. 13-64, at 31 (2014); NSTAR Elec. Co., D.P.U. 11-80, at 40-42 (2012); NRG Canal at 149-50; NSTAR Elec. Co., EFSB 14-2/D.P.U. 14-73/14-74, at 95 (2017) ("Walpole-Holbrook").

The Company quotes from two SJC decisions to support two related propositions: first, that variances are a "disfavored" form of relief (Company Brief at 242, citing Cornell v. Board of Appeals of Dracut, 453 Mass. 888, 895 (2009)); and second, that variances are to be "sparingly granted" (Company Brief at 242, citing Lussier v. Zoning Board of Appeals of Peabody, 447 Mass. 531, 534 (2006)). SCW then cites to a statute for the proposition that the grant of a variance may be appealed (Company Brief at 242, citing c. 40A, § 17). See also Walpole-Holbrook at 97.

The Company concludes that because of the legal uncertainty in obtaining variances and the potential for adverse interpretations, delay, burden, and undue expense associated with the

process, SCW requests an exemption from the minimum setbacks in Section 5.2 of the Somerset Zoning Bylaw (Company Brief at 242). The Company represents that the Siting Board has justified granting exemptions from similar dimensional requirements on the basis that such requirements have the potential to cause delay and uncertainty (Company Brief at 242-243, citing Mid-Cape Reliability Project at 108-109).

(B) Analysis and Findings

There is a significant possibility that the Company could be required to obtain a variance from the dimensional requirements of section 5.2 of the Somerset Zoning Bylaw to construct the Converter Station. Variances are difficult to obtain. When evaluating a request for a variance, the ZBA must apply the variance standard of review found at section 7.7 of the bylaws, which provides that a variance may only be authorized "for reasons of ***demonstrable and substantial hardship*** to the petitioner or appellant" (Exh. SW-4, exh. B at 49) (emphasis added). The standard also requires many specific findings that the ZBA would not be likely to make regarding the Converter Station property, including that there are special circumstances relating to the soil conditions, shape, or topography of the land or structures for which the variance is sought, especially affecting such land or structures but not affecting generally the zoning district in which it is located (Exh. SW-4, exh. B at 49).

Therefore, the Siting Board finds that it would be highly unlikely that the Company could obtain such a variance and, even if the ZBA were to grant Company such a variance, it might be reversed on appeal. Consequently, the Siting Board finds that a zoning exemption from section 5.2 of the Somerset Zoning Bylaw is required and grants the zoning exemption.

iii. Site Plan Approval § 6.10

(A) Company Position

The Company represents that the Converter Station would constitute a "planned development" pursuant to the Somerset Zoning Bylaw (Company Brief at 243). SCW also asserts that section 6.10 of the zoning bylaw contains detailed requirements for planned developments

(Company Brief at 243-245). The Company states, for example, that the Somerset Zoning Bylaw prescribes a minimum number of shade trees that must be planted in any planned development (Company Brief at 243). Furthermore, the Company represents, the bylaw provisions explicitly disallow any waiver of any requirement set forth therein (Company Brief at 244). According to the Company, the Project cannot meet all such requirements (Company Brief at 244). Rather, the Company represents, SCW needs the flexibility to design the Converter Station in a manner consistent with established industry standards (Company Brief at 244).

(B) Analysis and Findings

The Converter Station would likely be considered a "planned development" under the terms of the zoning bylaw. Consequently, the Converter Station would likely be subject to the provisions of zoning bylaw section 6.10, to which it would not conform. Consequently, the Siting Board finds that an exemption from section 6.10 of the Somerset Zoning Bylaw is required.

iv. Dimensional Variance – Parking and Loading Requirements § 6.7

(A) Company Position

The Company represents that the Table of Off-Street Parking and Loading Requirements is set forth in Section 6.7 of the Somerset Zoning Bylaw (Company Brief at 246). An HVDC converter station, according to the Company, is not listed "as a class of allowed use" in that table (Company Brief at 246). Therefore, the Company asserts, it is not clear how many parking and loading spaces the zoning bylaw would require for the Converter Station (Company Brief at 246). According to SCW, the preliminary plans "notionally depict fourteen (14) dedicated spaces for vehicle parking" (Company Brief at 246). Section 6.7.2 of the bylaw, the Company represents, requires that all open off-street parking spaces "shall be graded and drained, to the extent necessary to avoid nuisance," and the Company asserts that the standard is "entirely discretionary" (Company Brief at 246). Furthermore, the Company asserts, there is no zoning Bylaw standard that defines what constitutes a "nuisance" (Company Brief at 246). If SCW were unable to comply with whatever parking and loading requirements the zoning bylaw might impose, then the

only type of relief that could authorize the proposed number of spaces would be a variance (Company Brief at 246). The Company asserts that the variance standard of review is discretionary and subjective (Company Brief at 246-247). Furthermore, the Company represents, variances are generally difficult to maintain and, even if granted, are susceptible to appeal (Company Brief at 247).

(B) Analysis and Findings

As mentioned above, the applicable zoning bylaw is of the prohibitive type. The proposed use, an HVDC converter station, is not an allowed use in the Table of Off-Street Loading and Parking requirements. Therefore, the ZBA might reasonably conclude that the Converter Station is prohibited from providing parking spaces. Such a finding by the ZBA might make it impossible to build an HVDC converter station in accordance with industry standards.

It is not clear how many parking and loading spaces the zoning bylaw would require for the Converter Station. Furthermore, the zoning bylaw requirement that all open off-street parking spaces "shall be graded and drained, to the extent necessary to avoid nuisance" invests the Somerset ZBA with a great deal of discretion. Consequently, there is a significant possibility that SCW might not be able comply with whatever parking requirements the ZBA might impose. Variances are generally difficult to maintain and, even if granted, are susceptible to appeal. Given the delay and uncertainty involved in obtaining variances, it is not an option for the Company as a practical matter.

For all these reasons, the Siting Board concludes that an exemption from Section 6.7 of the Somerset Zoning Bylaw is required and grants said exemption.

v. Noise – Section 6.9

(A) Company Position

The Company represents that Section 6.9 of the Somerset Zoning Bylaw prohibits "sound-producing equipment . . . operated in any building or on any lot so as to produce noise or sound which is normally perceptible without instruments beyond the bounds of the lot on which it is

located" (Company Brief at 247). SCW represents that its Converter Station will emit audible noise levels that "subjectively" may be perceptible without instruments beyond the site (Company Brief at 247, citing Exhs. EFSB-Z-1, EFSB-NO-8, SOM-2, SOM-7, SOM-8). The Company represents that it will implement appropriate noise mitigation measures and will "reasonably" work with the Town to establish same [i.e., to establish noise mitigation measures] (Company Brief at 247-248, citing Exhs. EFSB-Z-1; EFSB-NO-8; SOM-2; SOM-7; SOM-8).

The Company is not seeking a permanent and blanket exemption from all noise restrictions. The Company argues that if the Siting Board grants this exemption, the Town would not be precluded from acting through its Board of Health to exercise its enforcement and nuisance abatement authority as established by the Somerset Noise Bylaw (Company Brief at 248). Furthermore, the Company promises to comply with the MassDEP Noise Policy during the operational phase of the Project (Company Brief at 248). The Company represents that the MassDEP Noise Policy does not have quantitative noise level limits for temporary construction (Company Brief at 248, citing Exhs. EFSB-CM-31, RR-EFSB-24).

(B) Analysis and Findings

In similar circumstances, the Siting Board granted Vineyard Wind an exemption from a bylaw that prohibited from all zoning districts any use that would be "injurious, noxious, or offensive by reason of . . . noise . . . or other cause." Vineyard Wind at 142. In justifying this exemption, the Siting Board stated that "the record shows that this provision contains no objective standards, nor does it limit the discretion of the Building Commissioner, leaving open the possibility – however remote – of the Company being unable to construct and operate the Substation in Barnstable absent a zoning variance." Vineyard Wind at 143.

The Siting Board finds that an exemption from the section 6.9 of the Somerset Zoning Bylaw is necessary due to the "subjective and discretionary standard" employed by that section. Such a subjective standard for the noise bylaw would be likely to create uncertainty, which would likely create delay and unnecessary expenses. Furthermore, as we said in Vineyard Wind, the grant of this exemption does not affect in any way any other environmental, health, or safety-related authority the Town may have under other statutory or regulatory provisions of local, state,

or federal law. Vineyard Wind at 144 n.138. In addition, the Siting Board notes that this decision imposes significant limitations on the Company to mitigate construction and operational noise. See Section VI.D.2.b.ii, above.

b. Onshore Cables and Grid Interconnection

The Company requests relief from the following provisions to construct the Onshore Cables (Exh. SW-4, at 35-36):

Table 24. Zoning Exemptions Sought by SCW for the Onshore Cables

Zoning Bylaw Provision & Description	Zoning Relief Available	SCW Rationale for Seeking Zoning Exemption
Use Regulations §§ 4.2 and 4.1.4	None available	The Lee River Route and Taunton River Routes are located in the Industrial District and Section 4.2 (Table of Use Regulation) does not expressly allow public utility uses in connection with a large-scale wind generating facility. Section 7.7(e) expressly prohibits the granting of use variances. Section 4.1.4 allows special permits to be granted for any additional use which is substantially similar to one or more of the uses specifically authorized and not more detrimental to the neighborhood. The Somerset Zoning Bylaw is ambiguous as to whether the Project's proposed use is eligible for a special permit under this Section because the interpretation of the Section is subjective and discretionary. Therefore, an exemption from the prohibition in Sections 4.2 and 4.1.4 is per se required.
Floodplain Overlay Districts § 9.3	None available	Section 9.3 expressly prohibits manmade alterations of sand dunes within Zones V and VE which would increase potential flood damage. To the extent the Lee River Route and Taunton River Route could be found not to comply with these requirements, an exemption from the prohibition in Section 9.3 is per se required.

Table 25. Zoning Exemptions Sought by SCW for the Grid Interconnection.

Zoning Bylaw Provision & Description	Zoning Relief Available	SCW Rationale for Seeking Zoning Exemption
§§ 4.2 and 4.1.4	None Available	Section 7.7(e) expressly prohibits the granting of use variances. The underground transmission lines are located in the Industrial District and Section 4.2 (Table of Use Regulation) does not expressly allow public utility uses in connection with a large-scale wind generating facility. Section 4.1.4 allows special permits to be granted for any additional use which is substantially similar to one or more of the uses specifically authorized and not more detrimental to the neighborhood. The Somerset Zoning Bylaw is ambiguous as to whether the Project's proposed use is eligible for a special permit under this Section because the interpretation of the Section is subjective and discretionary. Therefore, an exemption from the prohibition in Sections 4.2 and 4.1.4 is per se required.

i. Use Regulations, Sections 4.2 and 4.1.4

(A) Company Position

The Company asserts that both the Lee River Route and the Taunton River Route for the Onshore Cables from landfall to the Converter Station would cross the Industrial District, as does the Grid Interconnection (Company Brief at 249, citing Exh. SW-4, at 25, 31). Furthermore, SCW also represents that public utility uses are not expressly allowed in the Industrial District (Company Brief at 249, citing Exh. SW-4, at 25, 31). The Company argues that the applicability of the zoning bylaw to the Onshore Cables is "ambiguous," and that the zoning bylaw is ambiguous regarding whether the Onshore Cables would be able to obtain a special permit (Company Brief at 249). Furthermore, the Company represents that Somerset Zoning Bylaw Section 7.7(e) prohibits the grant of use variances (Company Brief at 249). Therefore, the Company concludes, to construct the Onshore Cables to the SCW Converter Station, an exemption from the prohibition in Sections 4.2 and 4.1.4 is per se required for the Onshore Cables and the Grid Interconnection (Company Brief at 249-250).

(B) Analysis and Findings

The Siting Board addressed a closely analogous issue in Section VIII.D.3.a.i above, which considered the requested exemptions from sections 4.2 and 4.1.4 of the zoning bylaw to the Converter Station. The Somerset Zoning Bylaw is of the "prohibitive" rather than "permissive" type and, therefore, the Somerset ZBA would be likely to strictly construe the language of a zoning bylaw. A special permit may be granted only for a use that is listed in the Table of Use Regulation, section 4.2, and even then only if "SP" appears next to that use in said table. Section 7.7(e) of the zoning bylaw explicitly prohibits the granting of use variances.

There is no "public utility use" in the Table of Use Regulations (Exh. SW-4, exh. B at 11-16). Therefore, the Company may not place the Onshore Cables or Grid Interconnection in the Industrial District as of right or by special permit. Furthermore, it may not obtain a variance. Therefore, the Siting Board finds that an exemption from sections 4.2 and 4.1.4 is required for the Onshore Cables and the Grid Interconnection and grants said exemption.

ii. Floodplain Overlay Districts. Section 9.3.

(A) Company's Position

The Company asserts that there is ambiguity regarding whether the Lee River Route and the Taunton River Route for the Onshore Cables would lie in the Floodplain Overlay District (Company Brief at 250). The Company refers to Section 9.3.2(b) of the Somerset Zoning Bylaw which addresses the "coastal high hazard areas" located within the Floodplain District, which the Bylaw describes these areas as "extremely hazardous due to high velocity waters from tidal surges and hurricane wave wash," and designates them at "Zone V" (Exh. SW-4, exh. B at 60). To protect these areas, the Somerset Zoning Bylaw requires that all new construction be sited landward of the reach of the mean high tide and it prohibits any man-made alteration of sand dunes within Zone V (Exh. SW-4, exh. B at 60).

In its brief, the Company describes the zoning bylaw requirements as subjective and its standard of review as discretionary which creates "uncertainty (Company Brief at 250). The

Company further argues that this uncertainty creates the potential for adverse interpretations, delay, burden, and undue expense (Company Brief at 250). Furthermore, this uncertainty, the Company represents, creates a situation in which the Building Inspector could find that construction of the Lee River Route creates the risk of damage within Zone V caused by floods (Company Brief at 250). If the Building Inspector were to make such a finding, the Company would be prohibited from constructing the Lee River Route (Company Brief at 250). Therefore, the Company asserts, it requires an exemption from Section 9.3 of the Somerset Zoning Bylaw (Company Brief at 250).

(B) Analysis and Findings

There is a significant element of subjectivity in the provisions of section 9.3 and that provision does, as the Company asserts, invest Town officials with a great deal of discretion. Consequently, there is a distinct possibility that Town officials could interpret section 9.3 of the Somerset Zoning Bylaw in a way that could prevent the Onshore Cables from being located along the Lee River Route. This, in turn, would prevent the Project from being constructed. Therefore, the Siting Board finds that an exemption from Section 9.3 of the Somerset Zoning Bylaw is required for the Onshore Cables and grants such exemption.

4. Consultation with Municipality and Requested Conditions

a. Good Faith Consultation

The Company represents that it has been actively engaged in a good faith effort to consult with officials in Somerset regarding the Project (Company Brief at 260). The record shows that Company representatives met with the Town Administrator and/or Building Inspector on the following dates: February 16, 2022; November 2, 2022; January 11, 2023; and April 6, 2023 (Exhs. SOM-2; EFSB-Z-1). On August 3, 2022, representatives of SCW presented a Project update at the Somerset Select Board meeting and took questions from the public (Exh. SOM-2). On April 20, 2023 and May 4, 2022, the Company hosted open house opportunities for Somerset

residents (one virtual, one in-person) to present a Project update and take questions (Exh. EFSB-Z-1).

In addition, the parties negotiated actively to reach an HCA. The Town and the Company filed joint motions to extend the deadline for submitting briefs on September 27, 2023, October 12, 2023, and November 2, 2023. In each joint motion, the parties represented that they were actively engaged in negotiating an HCA (September 27, 2023, Joint Motion at 1; October 12, 2023, Joint Motion at 2, 3; November 2, 2023, Joint Motion at 2, 3). On November 17, 2023, Town Counsel filed a last request for a short extension of time in which to file a brief. In this motion, counsel represented the following:

> Both the Town and the Petitioner have worked very hard on these [HCA] negotiations in good faith and have spent substantial time trying to reach final terms, including in-person meetings in both Fall River and Boston, several videoconferences, countless follow-up conference calls and individual telephone calls, and exchanges of draft agreements, replies and counter-replies.
>
> November 17, 2023, Motion of Town of Somerset for Additional Two Day Extension to File Post Hearing Briefs at 2.

Although the parties never filed an HCA with the Siting Board, we nevertheless view the long and intensive negotiations on such an agreement as evidence of the Company's efforts. Based on the foregoing, the Siting Board finds that the Company made a good faith effort to consult with the Town of Somerset regarding the Company's request for zoning relief under G.L. c. 40A, § 3, and that the Company's communications have been consistent with the spirit and intent of Russell Biomass II. See Park City Wind at 207.

The Siting Board directs the Company to file an update in 30 days of the Final Decision on the status of the HCA negotiations with the Town of Somerset. In addition, the Siting Board directs the Company to file a copy of the executed Host Community Agreement if and when it is executed between the Company and the Town.

b. Town Requested Conditions

In its brief, the Town noted that it "respectfully disagrees with SouthCoast Wind's contention that it is entitled to individual zoning exemptions under the circumstances of this case,

based on governing caselaw and the evidence presented on the issue during the administrative hearing conducted by the Siting Board" (Town Brief at 2). However, the Town used its brief to list proposed conditions which the Town states might satisfy the Town's concerns with respect to Project impacts and which, if stipulated, may result in the Town's willingness to withdraw its opposition (Town Brief at 2). In its Reply Brief, the Company represents that most of the conditions requested by the Town have been addressed in the Company's initial brief and in commitments made during this proceeding (Company Reply Brief at 3). Listed below are the conditions requested by the Town and the Company's responses to these requests. In those cases in which the Company raises an objection to part of a request, both the disputed section of the request and the objection are set forth in italics and bolded. The table reveals that there is substantial alignment between the requests made by the Town and the commitments acceptable to the Company, with two significant exceptions: (1) agreement on a funding mechanism by which the Town would seek reimbursement from SCW for consultants that the Town would like to retain to assist with ongoing oversight of design, construction and post-construction monitoring; and (2) hours of construction activity.

With respect to the funding of consultants to assist the Town, the Company expresses willingness to do so, but only in the context of establishing an overall mutually acceptable agreement between the Town and the Company (e.g., an HCA) (Company Reply Brief at 5). With respect to construction hours, the Town is seeking to limit those hours to Monday-Friday 7 a.m. to 5:30 p.m. and exclude work on state or federal holidays (Town Brief at 5). In contrast, the Company proposed that "typical construction hours, which are understood to be 7:00 a.m. to 7:00 p.m. on weekdays and 9:00 a.m. to 7:00 p.m. on Saturdays and legal holidays" (Exh. EFSB-CM-9, at 1). SCW further notes that the Town of Somerset Noise Control Bylaw indicates that longer construction hours are acceptable, specifically 7:00 a.m. to 10:00 p.m. on weekdays and 8:00 a.m. to 10:00 p.m. on weekends or legal holidays (Exh. EFSB-CM-9, at 1).

Table 26. Town of Somerset Proposed Conditions and Company Responses.[95]

No.	**Somerset's Proposed Condition**	**Company Response**
1	SCW will cooperate in good faith to address and resolve concerns noted by the Town's consultant. To support the Town's evaluation of the Project, ***SCW shall reimburse the Town for fees reasonably incurred by its consultant in the performance of the work specified herein***, in a manner consistent with the procedures specified in G.L. c. 44, Sec. 53G (Town Brief at 2, 3). The consultant will be responsible for providing the Town with opinions and oversight related to the on-land and near-shore components of SCW's Project that may impact Town residents, including but not limited to: reasonableness of SCW's construction planning; effectiveness of SCW's construction controls (e.g., dust, noise, traffic, vehicle emissions, stormwater, etc.); SCW's compliance with applicable permit requirements; SCW's management of oil and hazardous materials ("OHM") under the Massachusetts Contingency Plan ("MCP") and the adequacy of assessment of vibrational impacts of HDD and heavy machinery on ash pits and AUL coverings (Town Brief at 2, 3).	SCW committed to the condition and addressed it, ***except for the reimbursement mechanism*** (Company Brief at 115-116). Any compensation for a Town consultant would have to be addressed in a mutually acceptable agreement between the Company and the Town in which the cost recovery maximum limit and applicable time period would be covered (Company Reply Brief at 5).
2	SCW has completed a Phase II Environmental Site Assessment of the soils, ash, and other materials that will be excavated or disturbed during construction of the Project, and this assessment has been made publicly available. SCW will provide the results of any further assessment or analyses of site contamination issues to the Town's designated consultant for its review and	SCW committed to this condition (Company Brief at 182-183; RR-EFSB-32; Company Reply Brief at 5).

95 Bolded language indicates areas where the parties disagree.

No.	**Somerset's Proposed Condition**	**Company Response**
	comment and shall cooperate in good faith to address and resolve concerns noted by the Town's consultant (Town Brief at 3).	
3	SCW will prepare a Construction Management Plan (CMP) that includes, at a minimum, the following elements: (a.) A Stormwater Management Plan. The stormwater management plan shall comply with and explain how SouthCoast Wind will comply with applicable guidance and requirements, such as the National Pollution Discharge Elimination System Construction General Permit, conditions of the Town's Municipal Separate Storm Sewer System Permit, the Massachusetts Wetlands Protection Act, Massachusetts Stormwater Management Handbook, and the local Stormwater Management Somerset Bylaw and Regulations. Particular attention will be paid to the mobilization of ash or contaminated material during construction (Town Brief at 3). (b) Work and Waste Handling Plan ("WWHP"), also referred to as a Soil Management Plan. The WWHP shall include procedures for handling all waste generated including soil, fill, ash, and other solid wastes, used plastic liner, personal protective equipment, construction wastewater, abandoned piping, construction, and demolition debris, etc. Soil/ash or other materials excavated and transported off-site will be disposed in a licensed landfill or other properly permitted facility and not transported back and forth from the site (Town Brief at 3).	(a) SCW committed to this condition and the inclusion of a Stormwater Management Plan as part of its Construction Management Plan and has addressed it (Company Brief at 115-116; 126-128; 190-192; Company Reply Brief at 5, 6). (b) SCW committed that a Work and Waste Handling Plan will be part of its CMP (Company Brief at 116, 121-124; Company Reply Brief at 6).

No.	**Somerset's Proposed Condition**	**Company Response**
	(c) An Air Quality Management Plan which establishes protocols for monitoring dust levels (correlated to PM_{10} and $PM_{2.5}$), starting adjacent to the work area and progressing outward to the perimeter of the site, and downwind areas (Town Brief at 3).	(c) SCW committed that an Air Quality Management Plan will be part of its CMP and has addressed the matter (Company Brief at 116; 118-120; 151-152; 156; 167-168; 179-180; 189; Company Reply Brief at 6).
	(i) The Plan will include corrective actions (e.g., wetting stockpiles, wetting haul roads, perimeter spraying, covering exposed soils, discontinuing work) that will be implemented if measured levels of PM_{10} and $PM_{2.5}$ suggest mitigation is required under agreed monitoring protocols and action levels; (ii) SCW will provide the Air Quality Management Plan to the Town's consultant for review, comment, and approval and the Parties agree to cooperate in good faith to address and resolve concerns noted by the Town's consultant; (iii) ***SCW will fund the consultant*** (Town Brief at 3, 4).	(i and ii) SCW stated that these will be in its Air Quality Management Plan and has addressed the matter (Company Brief at 116; 118-120; 151-152; 156; 167- 168; 179-180; 189; Company Reply Brief at 7). (iii) ***Any compensation for a Town consultant would have to be addressed in a mutually acceptable agreement between the Company and the Town in which the cost recovery maximum limit and applicable time period would be covered*** (Company Reply Brief at 5).
	(d) A Noise Evaluation and Mitigation Plan which shall comply with the applicable standards of the MassDEP Noise Policy dated February 1, 1990, and the Town of Somerset Noise Control Bylaw dated May 17, 2021, during pre-construction and construction, including during HDD activities, and operation of the Project. The Noise Evaluation and Mitigation Plan will include, at a minimum, the following elements (Town Brief at 4):	(d) SCW committed that this plan will be part of its CMP and has addressed it (Company Brief at 116-118; 165-167; 177-179; 190. Company Reply Brief at 7).
	(i) Information and data in support of SCW's assessment that the terms of the above referenced MassDEP Noise Policy and Somerset Noise Control Bylaw will be met and maintained, remedies and agreed	(i) SCW committed to this condition as part of its Noise Evaluation and Mitigation Plan and has addressed the matter (Company Brief at 117; Company Reply Brief at 7).

No.	**Somerset's Proposed Condition**	**Company Response**
	response actions for reported noise violations or complaints, as well as any other information which the Somerset Board of Health may reasonably require to ensure compliance with the applicable standards (Town Brief at 4).	
	(ii) The Board of Health may conduct such inspections and measurements as are necessary to ensure the accuracy of any report submitted to ascertain compliance with the Noise Policy and the Bylaw. These may include on-site inspections by a noise or sound expert during specified periods of construction (Town Brief at 4).	(ii) SCW committed to this condition, which will be in its Noise Evaluation and Mitigation Plan, and has addressed it (Company Brief at 117, 238; Company Reply Brief at 7).
	(iii) Mitigation measures to be utilized to maintain compliance with the site-specific noise monitoring action levels. These may include pathway controls (e.g., perimeter fencing, noise attenuation blankets, etc.) and noise control devices such as mufflers, shrouds, and alternate tooling, to be approved by the Town's Board of Health, or its designee (Town Brief at 4).	(iii) SCW committed to this condition, which will be in its Noise Evaluation and Mitigation Plan, and has addressed it (Company Brief at 117; Company Reply Brief at 7.
	(e) The Traffic Control Plan will include the following minimum elements: (1) Time of day/day of week restrictions. (2) Speed limits. (3) Acceptable routes. (4) Plan for queuing of trucks. (5) Requirements and procedures to eliminate unnecessary vehicle idling. (6) Emissions compliance. (7) Response actions to be taken in the event of an emergency or accident. (8) A requirement that truck drivers comply with the traffic control plan. (9) A written list of protocols to be distributed to drivers and dispatchers (Town Brief at 4-5).	(e) SCW stated that these elements will be in its Traffic Control Plan and has addressed the matter (Company Brief at 120-121, 175-177; Company Reply Brief at 8).
	(f) SCW has prepared an Emergency Response Plan (Attachment H to SCW's	(f) SCW has committed that this Emergency Response Plan will be part of its CMP and

No.	**Somerset's Proposed Condition**	**Company Response**
	Draft Environmental Impact Report) which covers, among other things, construction contingencies and the reporting of on-Site or off-Site spills to regulatory authorities. SCW will modify this plan to ensure that it addresses the elements listed by the Town below as well as unexpected conditions including but not limited to: discovery of unanticipated sub-surface contamination or structures (e.g., buried drums, underground storage tanks, piping), spills of oil or hazardous materials, and medical or fire emergencies. At a minimum the plan shall include the following elements: (1) Response actions that will be taken in the event of on-Site or off-Site spills or releases of oil or hazardous materials; (2) Names and telephone numbers of local, state, and federal agencies/officials to be contacted in the event of a spill of oil or hazardous materials and the requirement to notify Town representatives within two hours of any off-site spill or spill that may migrate off-site; (3) Evacuation procedures for local residences and businesses in case of fire or major vapor release. The procedures shall include, at a minimum, emergency notification procedures and an evacuation receiving area. (4) Fire prevention and firefighting measures that shall include, at a minimum, procedures, and equipment to be employed for response to fires in the work area that may occur in equipment (Town Brief at 5).	has addressed the matter (Company Brief at 116; 124-125; 145-146; 183-184; 192-193; Company Reply Brief at 8). Furthermore, these elements are contained in SCW's Emergency Response Plan (Att. H to SCW's DEIR (Exh. SW-6)) (Company Brief at 116; 124-125; 145-146; 183-184; 192-193; Company Reply Brief at 9).
4	SCW will provide the Town's designated consultant with a draft of the CMP for review and comment. The Town's consultant will have at least 10 business days to review the draft CMP and provide comments, and the Parties agree to cooperate in good faith to address and resolve concerns noted by the Town's	SCW committed to provide Town's consultant a draft CMP (Company Brief at 21; 115-116; 119; 164; 212-213). The Company agreed to cooperate in good faith (and has not previously agreed to the 10-business day timeframe, but finds that timeframe acceptable for the initial review of the draft CMP (Company Reply Brief at 9).

No.	**Somerset's Proposed Condition**	**Company Response**
	consultant. A similar process will be followed as the CMP is updated during pre-construction activities or in response to changes during construction. ***SCW shall reimburse the Town for fees reasonably incurred by its consultant in the performance of the work specified herein***, in a manner consistent with the procedures specified in G.L. c. 44, Sec. 53G (Town Brief at 3, 5).	***Any compensation for a Town consultant would have to be addressed in a mutually acceptable agreement between the Company and the Town in which the cost recovery maximum limit and applicable time period would be covered (Company Reply Brief at 5).***
5	***Hours of construction shall be limited to Monday-Friday 7 a.m. to 5:30 p.m. and shall not include State or Federal holidays*** (Town Brief at 5). (a) To minimize longer duration impacts, the parties may agree to temporary relief from the hours of construction on express mutually agreed terms and conditions, and with advance notice to area residents and procedures for reporting and resolving complaints and nuisance conditions which might arise. (b) During construction activity hours, SCW will allow the Town's consultant, who the Town will identify to SCW in advance, to access the site at any time without prior notice. The Town consultant will identify himself or herself to SCW's satisfaction prior to being allowed to enter the property. The Town's consultant will comply with all health and safety requirements on site. The Town's consultant will perform approximately one site inspection per week but will vary depending on work that is underway. The site inspections will evaluate compliance with an Order of Conditions under the Wetlands Protection Act including but not limited to sediment and erosion controls, compliance with stormwater permitting, adherence to the CMP, appropriate dust	***The Company committed to develop construction work hours in accordance with the Somerset Noise Control Bylaw and municipal regulated construction hours***; but notes that there may be instances where SCW will need a temporary waiver of a Town requirement. This matter was addressed (Company Brief at 116-117; 165-166; Company Reply Brief at 9). (a and b) Although this condition was not specifically addressed in the Company Brief, the Company does not object to it as stated, provided that such site access complies with the restricted access and safety requirements of the owner of Brayton Point (Company Reply Brief at 10).

No.	**Somerset's Proposed Condition**	**Company Response**
	and noise management and mitigation, truck queueing and routing, etc. SouthCoast Wind shall not be liable for any injuries suffered by any Town consultant while at the Project site, unless such injuries result from the negligence or willful misconduct of SCW or contractors under its control or authority (Town Brief at 5, 6).	
6	SCW will file its stormwater system design with the applicable local permitting authorities and will design and build the stormwater system to comply with applicable state and local requirements (Town Brief at 6).	SCW committed to file its stormwater system design and addressed this condition (Company Brief at 126-128; Company Reply Brief at 10).
7	The Town's consultant will make periodic written reports to the Town and will meet with Town boards in public meetings to explain site progress and update the community on the efficacy of the protective measures being implemented by SCW. The Town shall provide SCW with copies of the reports sufficiently in advance of any public Town meetings to enable SCW to respond to the reports (Town Brief at 6).	This condition was not discussed in the Company's initial brief, but the Company finds this condition acceptable, provided that the Town gives the Company at least one week to review and comment on the report before it is made public (Company Reply Brief at 10).
8	The Town will hire a Licensed Site Professional (LSP) to review Massachusetts Contingency Plan (MCP) response actions undertaken as part of the proposed Project. This includes a review of analytical and field data, as well as field observations. In the event MCP response actions are required during implementation of the Project, the Town's LSP will be provided with draft MCP submittals and will have at least one (1) week to review the MCP submittals and provide comments (except 72-hour or shorter notifications required under the MCP). SCW will respond to the Town's LSP's comments in	The specifics of LSP procedures were not discussed in the Company Brief but generally the Company agreed to use its own LSP (Company Brief at 124; 183; 211). The Company does not object to the Town hiring its own LSP, ***but any compensation for cost recovery for a Town LSP would have to be addressed in a mutually acceptable agreement in which the total cost recovery maximum limit and applicable time period would be covered*** (Company Reply Brief at 10, 11).

No.	**Somerset's Proposed Condition**	**Company Response**
	writing at least two days before submitting the MCP submittal, and the Parties agree to cooperate in good faith to address and resolve concerns noted by the Town's LSP. ***SCW will reimburse the Town for fees and costs associated with the LSP evaluations, in a manner which is consistent with the procedures specified in G.L. c. 44, Sec. 53G*** (Town Brief at 6).	
9	SCW will consider the use of electric vehicles, machinery and equipment, and alternative fueled vessels, in its selection criteria for contractors for all construction activities in accordance with best practices and technologies reasonably available at the time of bidding (Town Brief at 6-7).	SCW has committed to the condition and addressed it (Company Brief at 120; Company Reply Brief at 11).
10	SCW will comply with reasonable setback and parking requirements in accordance with industry best practices, safety, and security concerns, and in consultation with the Town's Building Inspector or designee (Town Brief at 7).	SCW commits to coordinate and seek input from the Town regarding setback and parking requirements to the extent practicable and discussed this (Company Brief at 247). SCW notes that one of its requests for zoning exemptions applies to parking and setback requirements (Company Reply Brief at 11).
11	SCW will coordinate offshore construction activities to avoid unreasonable or unnecessary interference with recreational activities (Town Brief at 7).	SCW agrees with the condition and has addressed it (Company Brief at 147-150; 154-155; Company Reply Brief at 11).
12	SCW will establish a Community Involvement Program to meet on a quarterly basis three (3) months prior to construction and continue through the first six (6) months of operations. Thereafter, SCW will coordinate with the Town on the need to extend the Community Involvement Program further (Town Brief at 7).	Although a Community Involvement Plan is not specifically addressed in the Company Brief, the Company has consistently engaged with the affected communities and will continue to do so. The Company agrees to this condition and plans to work closely with the affected communities as it develops the Project (Company Reply Brief at 11).
13	SCW and its contractors and subcontractors shall comply with all applicable federal, state, and local laws,	SCW agrees with this condition and thinks it reasonable that compliance with the above conditions should exempt the Company from

No.	**Somerset's Proposed Condition**	**Company Response**
	regulations, and ordinances, except that SCW shall not be subject to the requirement for planned development review under the Town's Zoning Bylaw (Town Brief at 7).	the requirement for planned development review under the Town's Zoning Bylaw, as stated by the Town (Company Reply Brief at 11).

E. Conclusion on Request for Individual Zoning Exemptions

The Siting Board found above that: (1) the Company is a PSC; (2) the proposed use is reasonably necessary for the public convenience or welfare; and (3) certain specifically named zoning exemptions, set forth above, are required within the meaning of G.L. c. 40A, § 3 for construction and operation of the Converter Station, the Grid Interconnection, and the Onshore Cables. Additionally, the Siting Board found that the Company engaged in good faith consultation with the Town of Somerset and has achieved a considerable degree of alignment with the Town on conditions requested by the Town.

With respect to the Converter Station, the Siting Board grants all of the Company's requested individual exemptions. Specifically, the Siting Board grants the Company's request for exemptions from the following sections of the Somerset Zoning Bylaw as they may be applicable to the Converter Station: the use restrictions in sections 4.2 and 4.1.4; the setback requirements in section 5.2; the site plan approval requirements in section 6.10; the parking requirements in section 6.7; and the noise prohibitions and limitations in section 6.9.

With respect to the Grid Interconnection, the Siting Board grants all of the Company's requested individual exemptions. Specifically, the Siting Board grants the Company's request for exemptions from the following sections of the Somerset Zoning Bylaw as they may be applicable to the Grid Interconnection: the use restrictions in sections 4.2 and 4.1.4.

With respect to the Onshore Cable, the Siting Board grants all of the Company's requested individual exemptions. Specifically, the Siting Board grants the Company's request for exemptions from the following sections of the Somerset Zoning Bylaw as they may be applicable to the Onshore Cable: the use restrictions in sections 4.2 and 4.1.4 and the restrictions found in

section 9.3 regarding alterations of real property, including sand dunes, in the Floodplain Overlay District.

The zoning relief is subject to the conditions requested by the Town of Somerset and agreed to by the Company, as set forth above, with some specific modifications and parameters imposed by the Siting Board. The Company is directed to comply with the commitments it has made in response to the Town's request for conditions, as described by the Siting Board in Table 26, and as amended in this Decision. Furthermore, in the event of a disagreement regarding compliance with this condition, the Siting Board expects the parties to endeavor in good faith to resolve any such disagreement.

Specifically, the Siting Board directs the Company to comply with the requests for reimbursement made by the Town of Somerset as set forth in section VIII.D.4.a and Table 26. Said reimbursement is to be made in the manner described below. To be entitled to such reimbursement, the Town must first obtain a written proposal for the scope of work and an estimate of the cost of said work from each such consultant. The Town must then forward that estimate to the Company. The Company may request any information from the Town and its consultants necessary to make an informed decision regarding whether the proposed scopes of work and the proposed costs are reasonable; and the Town and its consultants must comply with such requests. The Company and the Town are directed to negotiate with each other in good faith regarding the appropriate scope of work for each consultant and the appropriate payment to each consultant. If the Company and the Town cannot agree on these issues, then they are directed to submit their disputes, in writing, to the Presiding Officer. The Presiding Officer may, but is not required to, call an evidentiary hearing on any contested issues and may also require oral argument or the submission of briefs by counsel for said parties. The decision of the Presiding Officer, made in consultation with the director, assistant director, and general counsel of the Siting Board, on such disputes shall be final.

In making its requests for reimbursement for the costs of hiring consultants, the Town relies on the provisions of G.L. c. 44, Sec. 53G. Town Brief at 2, 3, 5, 6. That statute, however, does not come within the scope of the Siting Board's jurisdiction. See, G.L. c. 164, §§ 69H to 69Q. Therefore, we cannot rely upon it to impose a condition of approval.

Additionally, Department Orders have also required petitioning companies to fund the cost of a consultant(s) for the municipality in which the Project will be located. See, e.g., Medway Grid LLC, D.P.U. 22-18/22-19, at 146 (2023); Cranberry Point Energy Storage, LLC, D.P.U. 22-59, at 136 (2023). Therefore, we conclude that the Siting Board has the authority to require the Company to reimburse the Town for the cost of hiring consultants with the restrictions and in the manner specified above and directs the Company to reimburse the Town accordingly.

With respect to the divergence between the Town and Company regarding allowed work hours, this issue is addressed in Section VI.D.1.d.ii above, using the Town's requested work hours as the baseline condition. However, as the Siting Board has done in many prior decisions, we have included mechanisms to address special circumstances that may arise during construction, including exigent circumstances, that may require the need for flexibility. In such circumstances, as often directed by the Siting Board for such conditions, the initial review of such requests will be subject to review and approval by Town officials. Final authority to resolve any disputes that may arise is reserved by the Siting Board. See NSTAR Electric Company d/b/a Eversource Energy, EFSB 17-02/D.P.U. 17-82/17-83, at 129 (2019); NSTAR Electric Company d/b/a Eversource Energy, EFSB 16-02/D.P.U. 16-77, at 59 (2018); NSTAR Electric Company d/b/a Eversource Energy, EFSB 15-03/D.P.U. 15-64/15-65, at 63 (2017).

IX. COMPREHENSIVE ZONING EXEMPTION

A. Standard of Review

SCW requests a comprehensive exemption from the Somerset Zoning Bylaw (Exh. SW-4, at 1, 36 - 41). The Siting Board grants such requests "on a case-by-case basis where the applicant demonstrates that issuance of a comprehensive exemption could avoid substantial public harm by serving to prevent a delay in the construction and operation of the proposed use." Park City Wind at 208; Beverly-Salem at 126-127; Vineyard Wind at 109-110.

To make a determination regarding substantial public harm, the Department and the Siting Board have articulated relevant factors, including, but not limited to, whether: (1) the proposed project contributes to a reliable energy supply for the Commonwealth; (2) the project is time-sensitive; (3) the project involves multiple municipalities that could have conflicting zoning

provisions that might hinder the uniform development of a large project spanning these communities; (4) the proponent of the project has actively engaged the communities and responsible officials to discuss the applicability of local zoning provisions to the project and any local concerns; and (5) the affected communities do not oppose the issuance of the comprehensive exemption. Park City Wind at 208; Mid Cape Reliability Project at 109-110; Vineyard Wind at 153.

B. Company's Position

The Company maintains that it needs both a comprehensive zoning exemption and the individual zoning exemptions for the Project (Company Brief at 258). While the individual zoning exemptions address specific provisions of the current zoning bylaw, the Company argues, a comprehensive zoning exemption will address any *future* zoning enactment that has the potential to jeopardize the Project (Company Brief at 258, emphasis in original).

Furthermore, the Company argues that the Project satisfies the standards for granting a comprehensive zoning exemption (Company Brief at 259). The Project will contribute to reliability, the Company asserts, by: (1) adding 1,200 MW of capacity to the regional grid; and (2) increasing energy security through the delivery of energy generated by a major renewable resource that would have a high-capacity factor in the winter, when energy may be most needed (Company Brief at 259). In addition, the Company argues, the Project is a response to a need that is analogous to reliability: the need for clean energy in response to statutory and public policy requirements of the Commonwealth (Company Brief at 259).

The Company also argues that the Project is time-sensitive (Company Brief at 259). The Company represents that it has carefully planned the Project using permitting and construction schedules that currently minimize delay wherever possible (Company Brief at 260). Therefore, the Company argues, delays that could be minor for other projects could be more significant in the present case (Company Brief at 260). Indeed, the Company asserts that a delay might result in the Project not being developed to completion and therefore the benefits of the Project being lost (Company Brief at 260).

The Company concedes that the Project is not subject to the zoning regulations of multiple municipalities (Company Brief at 260). Nevertheless, the Company argues, the Project is an analogous position: it is subject to reviews by multiple entities (Company Brief at 260). Specifically, the Company asserts, the Project includes components located within the jurisdiction of Rhode Island, Massachusetts-jurisdictional offshore waters, and federal waters (Company Brief at 260). Therefore, the Company represents, the Project is subject to an extensive set of overlapping and independent regulatory reviews and appeals that must be synchronized with all applicable zoning requirements (Company Brief at 260). The Company points out that the Siting Board has previously granted comprehensive zoning exemptions for projects with components located in one municipality (Company Brief at 260, citing Vineyard Wind at 156, and Vineyard Wind 1 LLC, D.P.U. 21-08, at 17 (2021)).

Regarding the last numbered element in the standard of review, whether the affected communities oppose the issuance of the comprehensive exemption, the Company admits that the Town has objected to the zoning exemptions, but the Company states that the Town does not oppose the Project itself (Company Brief at 261, citing Exhs. TOS-1 at 1; SW-SOM-4). The Company represents that it has been actively engaged in a good faith effort to consult with officials in Somerset regarding the Project (Company Brief at 260). SCW also maintains that its communications have been consistent with the spirit and intent of Russell Biomass II (Company Brief at 261, citing Exhs. EFSB-Z-16; SOM-2). Furthermore, the Company represents that it has engaged in substantial outreach with business groups and residents in Somerset as well (Company Brief at 261, citing Exhs. EFSB-G-23 and RR-EFSB-35). The Company also states that the Siting Board has previously granted comprehensive zoning exemptions for projects where a company engaged in good faith consultations with municipal officials, notwithstanding opposition to such an exemption expressed by the city or town (Company Brief at 26, citing Sudbury-Hudson at 217).

The Company also states that the comprehensive exemption should be issued due to the significant public benefits the Project will provide and the harm that would result from unnecessarily delaying those benefits (Company Brief at 261-262). Regarding the potential for harm, the Company asserts that without the grant of a comprehensive zoning exemption, there is nothing to prevent local boards, building inspectors, or parties with interests adverse to SCW from

interpreting zoning bylaw provisions in a way adverse to the Project (Company Brief at 262). The grant of a comprehensive zoning exemption, the Company states, would avoid the delays that would result if a particular provision, originally interpreted as not applicable, is later interpreted to be applicable or if new zoning provisions are adopted prior to construction (Company Brief at 262). Furthermore, the Company notes that "design changes…may occur during this proceeding" and that such changes may also be needed as a result of "field conditions encountered during construction (Company Brief at 263).

The Town did not address the Company's request for a comprehensive zoning exemption in its brief although the brief does "respectfully" disagree with the Company on the issue of individual zoning exemptions (Town Brief at 2).

C. Analysis and Findings on Comprehensive Zoning Exemption

In sections III.D.2, IV.C, VI.D.2.e, VII, and VIII.C.3, the Siting Board found that the Project would produce multiple benefits.

Regarding the required consultation with the affected municipality, the Siting Board found above that the Company made a good faith effort to consult with the Town of Somerset regarding the Company's request for zoning relief under G.L. c. 40A, § 3, and that the Company's communications have been consistent with the spirit and intent of Russell Biomass II. The Company's reply to the requests made by Somerset in its brief confirms the Company's good faith and its significant attempts to accommodate the Town. As set forth above, the Company has agreed to almost all of the conditions that the Town seeks to impose.

The Company has fully and persuasively described the risks the Project faces if a comprehensive zoning exemption is not granted. Those risks are substantial and the potential for delay would be detrimental to attainment of the Commonwealth's energy and environmental goals. Consequently, the Siting Board finds that the potential for zoning impediments that could result in Project construction delays could result in substantial public harm.

Based on the record in this case, the Siting Board finds that a grant of a comprehensive zoning exemption for the Project is both necessary and appropriate. Therefore, the Siting Board

hereby grants the Company a comprehensive zoning exemption from the Somerset Zoning Bylaw for the construction and operation of the Project.

X. ANALYSIS UNDER G.L. C. 164, § 72

A. Standard of Review

General Laws, c. 164, § 72 requires, in relevant part, that an electric company seeking approval to construct a transmission line must file with the Department a petition for:

> authority to construct and use … a line for the transmission of electricity for distribution in some definite area or for supplying electricity to itself or to another electric Company or to a municipal lighting plant for distribution and sale … and shall represent that such line will or does serve the public convenience and is consistent with the public interest …. The [D]epartment, after notice and a public hearing in one or more of the towns affected, may determine that said line is necessary for the purpose alleged, and will serve the public convenience and is consistent with the public interest.[96]

The Department, in making a determination under G.L. c. 164, § 72, considers all aspects of the public interest. Boston Edison Company v. Town of Sudbury, 356 Mass. 406, 419 (1969). Among other things, Section 72 permits the Department to prescribe reasonable conditions for the protection of the public safety. Id. at 419-420.

In evaluating petitions filed under G.L. c. 164, § 72, the Department examines: (1) the need for, or public benefits of, the present or proposed use; (2) the environmental impacts or any other impacts of the present or proposed use; and (3) the present or proposed use and any alternatives identified. GCEP at 220; Park City Wind at 211; Mid Cape Reliability Project at 112. The Department then balances the interests of the general public against the local interests and determines whether the line is necessary for the purpose alleged and will serve the public convenience and is consistent with the public interest. Save the Bay, Inc. v. Department of Public

---

[96] Pursuant to G.L. c. 164, § 72, the electric company must file with its petition a general description of the transmission line, a map or plan showing its general location, an estimate showing in reasonable detail the cost of the line, and such additional maps and information as the Department requires.

Utilities, 266 Mass. 667, 680 (1975); Town of Truro v. Department of Public Utilities, 365 Mass. 407 (1974); GCEP at 220; Park City Wind at 211.

B. Analysis and Findings

As described above in Sections III through VI, the Siting Board examined: (1) the need for, or public benefits of, the proposed Project; (2) the environmental impacts of the proposed Project; and (3) any identified alternatives. With implementation of the specified mitigation measures to which the Company has committed, and the conditions set forth by the Siting Board in Section XII, below, the Siting Board finds pursuant to G.L. c. 164, § 72, that the proposed Project is necessary for the purpose alleged, would serve the public convenience, and is consistent with the public interest. Thus, the Siting Board approves the Section 72 Petition.

XI. SECTION 61 FINDINGS

MEPA provides that "[a]ny determination made by an agency of the [C]ommonwealth shall include a finding describing the environmental impact, if any, of the Project and a finding that all feasible measures have been taken to avoid or minimize said impact" ("Section 61 Findings"). G.L. c. 30, § 61. Pursuant to 301 CMR 11.01(4), Section 61 Findings are necessary when an EIR is submitted to the Secretary of EEA and Section 61 Findings should be based on such EIR. Where an EIR is not required, Section 61 Findings are not necessary. 301 CMR 11.01(4).

The record shows that the Company filed an ENF for the Project with MEPA in August 2022 (Exh. SW-9); the Secretary issued a Certificate on the ENF in October 2022 (Exh. SW-7); the Company filed a DEIR in February 2023 (Exh. SW-6); the Secretary issued a Certificate on the DEIR in May 2023 (Exh. SW-10); the Company filed a FEIR in July 2023 (Exh. SW-11); the Secretary issued a Certificate on the FEIR in September 2023 (Exh. SW-12); the Company filed a SFEIR in October 2023 (Exh. SW-14); and the Secretary issued a Certificate on the SFEIR in

December 2023 (Exh. SW-15). Therefore, a finding under G.L. c. 30, § 61 is necessary in this proceeding.[97]

The Secretary's Certificate on the SFEIR determined that the Supplemental FEIR adequately and properly complied with MEPA and its implementing regulations (Exh. SW-15, at 1). The record contains, and the Siting Board has reviewed, the MEPA documents submitted by the Company, including the ENF, DEIR, FEIR and SFEIR for the Project, as well as the Secretary's Certificates and comments filed by the public and by other reviewing agencies regarding these documents. Additionally, as set forth in section VI, above, the Siting Board has conducted a comprehensive analysis of the potential environmental impacts of the Project, including GHG impacts.[98]

With respect to the impact of the Project on EJ populations within the DGA of the Project, as described in Section VII.C.2.C, the Siting Board has evaluated the information developed during the MEPA review process, and in the record in this proceeding. The Company proposed a number of conditions in its MEPA filings, see section VII.B.2.c.vii, which were adopted in the Secretary's MEPA Certificates, including the SFEIR Certificate (Exh.SW-15, at 22-23). By enumerating those conditions in this Decision, the Siting Board directs the Company to comply with them to mitigate impacts to EJ populations. As noted in VII.C.2.c. above, the Siting Board

---

97 The Siting Board generally is not required to make a G.L. c. 30, § 61, finding in a G.L. c. 164, § 69J proceeding, as the Siting Board is exempt by statute from MEPA. G.L. c. 164, § 69I. However, the Board must comply with MEPA with respect to review of the Company's Section 72 Petition and Zoning Petition, both of which were filed under statutory provisions implemented by the Department, and the Department is not exempt from MEPA. Accordingly, in reviewing the Company's Section 72 Petition and Zoning Petition in this case, the Siting Board has conducted the review and made the findings required by MEPA.

98 With respect to GHG impacts, the Siting Board recognizes that the Commonwealth's policies relating to GHG emissions, including G.L. c. 30, § 61 and the MEPA Greenhouse Gas Emission Policy and Protocol ("GHG Policy") apply to the Project. The Secretary's Certificate on the SFEIR states: "The project will generate clean renewable energy that will reduce GHG emissions from the electric grid by approximately 2 million metric tons annually" (Exh. SW-15, at 9). Therefore, we find that all feasible measures have been taken to avoid or minimize GHG impacts.

expects the Company to observe and follow all EJ-related Section 61 findings contained in the SFEIR Certificate (Exh. SW-15, at 22-23).

As stated in Section VI.D.2, the Siting Board found that the Converter Station and the Lee River Route remains above inundation levels with projected 4.0-foot sea level rise, but a short segment of the landfall location would be below inundation levels with a 6.0-foot modeled sea level rise. The Converter Station is designed to tolerate high and widely fluctuating air temperatures and it is located outside of the boundaries of projected 4.0 feet sea level rise, and is located outside of mapped flood zones. The Siting Board also found that onshore and offshore export cables and the TJBs will be designed to withstand being submerged and operated in salt water. With those findings and the requirement for the Company to report back to the Siting Board every five years with updates on the sea level rise and propose any further mitigation, the Siting Board has met requirements to consider the Section 61 sea level rise implications of the Project.

As specifically required by MEPA, the Siting Board has: reviewed the SFEIR for the Project; evaluated and determined the impact of the Project on the natural environment; and specified in detail in this Decision measures to be taken by the Company to avoid damage to the environment or, to the extent damage to the environment cannot be avoided, to minimize and mitigate damage to the environment to the maximum extent practicable. The Secretary has determined that the SFEIR for the Project adequately and properly complies with MEPA (Exh. SW-15, at 1)

Accordingly, the Siting Board finds that all feasible measures have been taken to avoid or minimize the environmental impacts of the proposed Project. G.L. c. 30, § 61.

XII. DECISION

The Siting Board's enabling statute directs the Siting Board to implement the energy policies contained in G.L. c. 164, §§ 69H to 69Q to provide a reliable energy supply for the Commonwealth with a minimum impact on the environment at the lowest possible cost. G.L. c. 164, § 69H. An applicant must obtain Siting Board approval under G.L. c. 164, § 69J prior to construction of a proposed energy facility.

In Section III, above, the Siting Board finds that, subject to a condition set forth in that section, SCW has demonstrated that there is a need for additional transmission resources to interconnect its SCW OGF to the regional transmission grid. Additionally, the Siting Board finds that the Company has established that it is appropriate for it to build the Noticed Variation along with other Project components.

In Section IV, above, the Siting Board finds that, on balance, the Project is superior to the other alternatives evaluated with respect to cost, environmental impact, meeting the identified need, and providing a reliable energy supply for the Commonwealth with minimum impact on the environment at the lowest possible cost.

In Section V, above, the Siting Board finds that the Company has: (1) developed and applied a reasonable set of criteria for identifying and evaluating alternative routes in a manner that ensures that it has not overlooked or eliminated any routes that are clearly superior to the proposed project; and (2) identified at least two transmission line routes with some measure of geographic diversity. The Siting Board finds that the Company has demonstrated that it examined a reasonable range of practical siting alternatives while seeking to minimize cost and environmental impacts.

In Section VI, above, the Siting Board finds that the Lee River Route – including its Noticed Variation – is superior to the Taunton River Route (and Noticed Variation) with respect to providing a reliable energy supply for the Commonwealth, with a minimum impact on the environment, at the lowest possible cost, and allowing for future expansion of Project electricity in an environmentally sound and cost-effective manner.

In addition, the Siting Board finds that the Company provided sufficient information to allow the Board to determine whether the Project has achieved a proper balance among cost, reliability, and environmental impacts.

In addition, the Siting Board finds that with the implementation of the specified conditions and mitigation presented above, and compliance with all local, state, and federal requirements, the environmental impacts of the Project along the Lee River Route, Converter Station, and Grid Interconnection would be minimized.

In Section VII, above, the Siting Board finds that subject to the specified mitigation and conditions set forth in this Decision, the Company's plans for construction of the Project are consistent with current health policies of the Commonwealth.

In addition, the Siting Board finds that construction and operation of the Project would be consistent with the multiple environmental protection policies encouraging offshore wind projects and resultant GHG emissions reductions.

In addition, Siting Board finds that the Project would achieve an equitable distribution of energy and environmental benefits and environmental burdens and is consistent with the requirements of the EJ Principles articulated in the Roadmap Act.

In addition, the Siting Board finds that the Project would be consistent with and would advance the Commonwealth's policies regarding resource use and development.

In Section VIII, above, the Siting Board finds that: (1) the Company is a PSC; (2) the proposed use is reasonably necessary for the public convenience or welfare; and (3) certain specifically named zoning exemptions, set forth above, are required within the meaning of G.L. c. 40A, § 3 for construction and operation of the Converter Station, the Grid Interconnection, and the Onshore Cables. In addition, the Siting Board finds that the Company engaged in good faith consultation with the Town of Somerset and has made achieved a considerable degree of alignment with the Town on conditions requested by the Town. Accordingly, the Siting Board GRANTS the Company's Zoning Petition to the extent that it seeks individual exemptions from the Somerset Zoning Bylaw.

In Section IX, above, the Siting Board finds that a grant of a comprehensive zoning exemption for the Project is both necessary and appropriate. Accordingly, the Siting Board GRANTS a comprehensive zoning exemption for the Project.

In Section X, above, the Siting Board finds pursuant to G.L. c. 164, § 72, that the proposed Project is necessary for the purpose alleged, would serve the public convenience, and is consistent with the public interest.

Accordingly, the Siting Board APPROVES pursuant to G.L. c. 164, §§ 69J, 72, the Company's Petition to construct the Project using the Lee River Route (with its Noticed Variation), as described herein, subject to the following Conditions A through R.

A. The Siting Board directs the Company to comply with all applicable federal, state, and local laws, regulations, and ordinances from which the Company has not received an exemption. The Company shall be responsible for ensuring such compliance by its contractors, subcontractors, or other agents.

B. The Siting Board directs the Company, within 90 days of Project completion, to submit a report to the Siting Board documenting compliance with all conditions contained in this Decision, noting any outstanding conditions yet to be satisfied and the expected date and status of compliance.

C. The Siting Board directs the Company to submit to the Siting Board, prior to commencing construction of the Project, a copy of the BOEM ROD approving the Company's proposed OGF. The Company may not commence construction of the proposed transmission Project, with the exception of procuring equipment and services, until it has complied with this condition. The Siting Board will review requests for flexibility in the application of this condition on a case-by-case basis.

D. The Siting Board directs the Company to continue consultations with the Massachusetts DMF on planned inshore fisheries monitoring efforts, including post-construction monitoring, and to report annually on post-construction monitoring efforts to Massachusetts DMF and the Siting Board for the duration of such monitoring activity, as required by the SouthCoast Wind Inshore Fisheries Monitoring Plan.

E. The Siting Board directs the company to: (i) use shore-to-ship electricity for vessels while they are moored, whenever feasible, and (ii) evaluate the feasibility of supplying shore-to-ship electricity to near-shore vessels to minimize or eliminate the need for onboard engines to generate power from fossil fuels, and (iii) submit reports indicating its ability to use shore-to-ship operations 30 days prior to construction, 180 days after construction commencement, and 90 days after construction completion.

F. The Siting Board directs the Company to include in its final ERP the following emergency conditions, including: discovery of unanticipated contamination or structures potentially impacting waterways, spills of oil or hazardous materials, damaged offshore and onshore Project components impacting Massachusetts waters or coastal areas, and medical or fire emergencies. At a minimum the plan shall include the following elements: (i) response actions that will be taken in the event of on-site or off-site spills or releases of oil or hazardous materials or other emergency conditions above; (ii) names and telephone numbers of local, state, and federal agencies/officials to be contacted in the event of an emergency, including a spill of oil or hazardous materials, and the requirement to notify town representatives within two hours of any off-site spill or spill that may migrate off-

site, or other emergency conditions above; (iii) evacuation procedures for local residences and businesses in case of fire or major vapor release; the procedures shall include, at a minimum, emergency notification procedures and an evacuation receiving area; (iv) fire prevention and firefighting measures that shall include, at a minimum, procedures, and equipment to be employed for response to fires in the work area that may occur in equipment; (v) an event preparedness contingency plan to address potential natural or operational events that may occur at the Converter Station. The final ERP shall be submitted to the Siting Board 30 days prior to construction and updated at least annually thereafter.

G. The Siting Board directs the Company to develop a Noise Evaluation and Mitigation Plan as part of its CMP, which shall comply with the applicable standards of the MassDEP Noise Regulation at 310 CMR 7.10 and the Town of Somerset Noise Control Bylaw, during pre-construction and construction, including during HDD activities, and operation of the Project. The Company shall provide the Town and the Board with its Noise Evaluation and Mitigation Plan prior to commencing construction activities. The Noise Evaluation and Mitigation Plan must include, at a minimum, the following elements: (i) information and data in support of the Company's assessment that the terms of the above-referenced MassDEP Noise Regulation and Somerset Noise Control Bylaw will be met and maintained, remedies and response actions for reported noise violations or complaints, as well as any other information that the Somerset Board of Health may reasonably require to ensure compliance with the applicable standards; (ii) the Somerset Board of Health may conduct such inspections and measurements as are necessary to ensure the accuracy of any report submitted to ascertain compliance with the MassDEP Noise Regulation and the Somerset Noise Control Bylaw (these may include on-site inspections by a noise or sound expert during specified periods of construction); and (iii) mitigation measures to be utilized to maintain compliance with the site-specific noise monitoring action levels. These may include pathway controls (e.g., perimeter fencing, noise attenuation blankets) and noise control devices such as mufflers, shrouds, and alternate tooling, to be reviewed in consultation with the Town's Board of Health, or its designee.

H. The Siting Board directs the Company to limit construction hours for the onshore and landfall portions of the Project to 7:00 a.m. to 7:00 p.m. on weekdays and 9:00 a.m. to 7:00 p.m. on Saturdays, with no construction on Sundays or legal state or federal holidays unless operationally necessary for continuous (i.e., HDD) operations or an emergency. Work requiring longer continuous duration than normal construction hours allow, such as HDD operations, shall, with 48 hours advance notice to the Towns of Somerset and Swansea and City of Fall River and posting on the Company's website except in case of emergency circumstances, be

exempted from this requirement. Should the Company need to extend construction work beyond those hours and days, with the exception of emergency circumstances on a given day that necessitate extended hours, the Siting Board directs the Company to seek prior written permission from the Town of Somerset before commencing work and to provide the Siting Board with a copy of such permission. If the Company and municipal officials are not able to agree on whether such extended construction hours or days should occur, the Company may request prior authorization from the Siting Board and shall provide the Towns of Somerset and Swansea and City of Fall River with a copy of any such request and authorization.

I. The Siting Board directs the Company to develop an Air Quality Management Plan in consultation with the Town's designated consultant for review and comment, and to cooperate in good faith to address and attempt to resolve concerns noted by the Town's consultant. The Siting Board expects the Company to respond in a timely manner to reasonable conditions and recommendations of the Town's consultants, and that a procedure be established for resolution of any disputes. The Siting Board also directs the Company to coordinate with other Brayton Point tenants and landowners and the Town of Somerset and Swansea as it relates to the construction schedules and site access, to minimize construction-related impacts (traffic, air quality, noise, etc.) for the neighboring land uses.

J. The Siting Board directs the Company to consider potential opportunities for use of, or conversion to, electric vehicles and equipment for construction activities and submit reports indicating ability to use electric vehicles during the following time intervals: 30 days prior to construction; 180 days after construction commencement; and 90 days after construction completion.

K. The Siting Board directs the Company to provide a post-construction monitoring plan for the Offshore Export Cables in Massachusetts state waters. The monitoring plan should ensure that the Offshore Export Cables continue to meet target cable burial depths after major storm events (hurricanes and Nor'easters). The Board directs the Company to consult with the Massachusetts DMF regarding specific monitoring locations, and timing of monitoring activities.

L. The Siting Board directs the Company to conduct testing of magnetic fields from the Onshore Cables and Grid Interconnection and the Converter Station, which shall be done (i) prior to construction commencement to establish a baseline, (ii) 90 days from the OGF being fully developed and capable of delivering 1,200 MW of energy, and (iii) one year from the OGF being fully developed and capable of delivering approximately 1,200 MW of energy. The Siting Board directs the Company to conduct testing of magnetic fields from the Offshore Export Cables

within one year of the Project being fully installed and operational. The Company shall file the results of the testing with the Siting Board.

M. The Siting Board directs the Company to report to the EFSB every five years with updates on the latest projections on sea-level rise and flooding risk and propose any necessary further mitigation measures to address such risks. The Board will consider whether to direct the applicant to implement additional mitigation measures at such time.

N. The zoning relief is subject to the conditions requested by the Town of Somerset and agreed to by the Company, as set forth above, with some specific modifications and parameters imposed by the Siting Board. The Company is directed to comply with the commitments it has made in response to the Town's request for conditions, as described by the Siting Board in Table 26, and as amended in this Decision. Furthermore, in the event of a disagreement regarding compliance with this condition, the Siting Board expects the parties to endeavor in good faith to resolve any such disagreement.

O. The Siting Board directs the Company to comply with the requests for reimbursement made by the Town of Somerset as set forth in section VIII.D.4.a and Table 26. Said reimbursement is to be made in the manner described below. To be entitled to such reimbursement, the Town must first obtain a written proposal for the scope of work and an estimate of the cost of said work from each such consultant. The Town must then forward that estimate to the Company. The Company may request any information from the Town and its consultants necessary to make an informed decision regarding whether the proposed scopes of work and the proposed costs are reasonable; and the Town and its consultants must comply with such requests. The Company and the Town are directed to negotiate with each other in good faith regarding the appropriate scope of work for each consultant and the appropriate payment to each consultant. If the Company and the Town cannot agree on these issues, then they are directed to submit their disputes, in writing, to the Presiding Officer. The Presiding Officer may, but is not required to, call an evidentiary hearing on any contested issues and may also require oral argument or the submission of briefs by counsel for said parties. The decision of the Presiding Officer, made in consultation with the director, assistant director, and general counsel of the Siting Board, on such disputes shall be final.

P. The Siting Board directs the Company to file an update in 30 days of the Final Decision on the status of the HCA negotiations with the Town of Somerset. In addition, the Siting Board directs the Company to file a copy of the executed Host

Community Agreement if and when it is executed between the Company and the Town.

Q. The Siting Board directs the Company to provide updated information 90 days prior to commencing construction regarding all measures to be taken by the Company to avoid, minimize, and mitigate environmental impacts relating to its use of the NBMCT. In addition, the Siting Board directs the Company to provide the details of its community engagement plan and program with the selected New Bedford CBO partner, and other key New Bedford stakeholders.

R. The Siting Board directs the Company to file updated information 90 days prior to commencement of construction and 90 days following construction completion that includes: a description of the expected or actual geographic areas of the employees and subcontracted workers associated with the Project; the Company's contributions to a trained workforce; the Company's progress towards fulfilling its commitment that at least 75 percent of operations and maintenance jobs will be hired from within the South Coast community; and the extent to which the Project's employees and subcontractors reside within an EJ population relevant to the Project area.

Because issues addressed in this Decision relative to this facility are subject to change over time, construction of the proposed generating facility must be commenced within three years of the date of the decision.

In addition, the Siting Board notes that the findings in this Decision are based upon the record in this case. A project proponent has an absolute obligation to construct and operate its facility in conformance with all aspects of its proposal as presented to the Siting Board. Therefore, the Siting Board requires SCW, or its successors in interest, to notify the Siting Board of any changes other than minor variations to the proposal so that the Siting Board may decide whether to inquire further into a particular issue. SCW or its successors in interest are obligated to provide the Siting Board with sufficient information on changes to the proposed project to enable the Siting Board to make these determinations.

Robert J. Shea

Robert J. Shea, Esq.
Presiding Officer

Dated this 4th day of October, 2024

APPROVED by a vote of the Energy Facilities Siting Board at its meeting on October 1, 2024, by the members present and voting. Voting for the Tentative Decision, as amended: Rebecca L. Tepper, Secretary of Energy and Environmental Affairs and Chair, EFSB; James M. Van Nostrand, Chair, Department of Public Utilities; Staci Rubin, Commissioner of the Department of Public Utilities; Ben Dobbs, designee for the Commissioner of the Department of Energy Resources; Bonnie Heiple, Commissioner, Department of Environmental Protection; Jonathan Cosco, General Counsel and designee for the Secretary of the Executive Office of Economic Development; Joseph C. Bonfiglio, Public Member; and Greg Watson, Public Member.

Rebecca L. Tepper, Chair
Energy Facilities Siting Board

Dated this 4th day of October, 2024

Appeal as to matters of law from any final decision, order or ruling of the Siting Board may be taken to the Supreme Judicial Court by an aggrieved party in interest by the filing of a written petition praying that the order of the Siting Board be modified or set aside in whole or in part. Such petition for appeal shall be filed with the Siting Board within twenty days after the date of service of the decision, order or ruling of the Siting Board, or within such further time as the Siting Board may allow upon request filed prior to the expiration of the twenty days after the date of service of said decision, order or ruling. Within ten days after such petition has been filed, the appealing party shall enter the appeal in the Supreme Judicial Court sitting in Suffolk County by filing a copy thereof with the clerk of said court. Massachusetts General Laws, Chapter 25, Sec. 5; Chapter 164, Sec. 69P.