



The Commonwealth of Massachusetts
Executive Office of Energy and Environmental Affairs
 100 Cambridge Street, Suite 900
 Boston, MA 02114

Maura T. Healey
 GOVERNOR

Kimberley Driscoll
 LIEUTENANT GOVERNOR

Rebecca L. Tepper
 SECRETARY

Tel: (617) 626-1000
 Fax: (617) 626-1081
<http://www.mass.gov/eea>

October 10, 2023

CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS
 ON THE
 DRAFT ENVIRONMENTAL IMPACT REPORT

PROJECT NAME : New England Wind 2 Connector
 PROJECT MUNICIPALITY : Barnstable, Edgartown, Mashpee and Nantucket
 PROJECT WATERSHED : Cape and Islands
 EEA NUMBER : 16611
 PROJECT PROPONENT : Commonwealth Wind, LLC
 DATE NOTICED IN MONITOR : July 26, 2023

Pursuant to the Massachusetts Environmental Policy Act (MEPA; M.G.L. c. 30, ss. 61-62L) and Section 11.08 of the MEPA regulations (301 CMR 11.00), I have reviewed the Draft Environmental Impact Report (DEIR) and hereby determine that it **adequately and properly** complies with MEPA and its implementing regulations. The Proponent may prepare and submit for review a Final Environmental Impact Report (FEIR).

The project is a component of a 1,232-megawatt (MW) wind energy generating facility known as Commonwealth Wind (CW) to be constructed approximately 20 miles south of Martha's Vineyard. The generating facility will occupy an approximately 54,857 to 74,873 acre of Lease Area OCS-A 0534. Lease Area OCS-A 0534 originally constituted the southern part of the larger Lease Area OCS-A 0501, which was awarded through a competitive lease sale conducted by the federal Bureau of Ocean Energy Management (BOEM). A second wind farm project with a generating capacity of approximately 800 MW is proposed in Lease Area OCS-A 0534 by Park City Wind LLC. The Park City Wind (PCW) includes transmission infrastructure known as New England Wind 1 Connector (NEW1C), which completed MEPA in January 2022 (EEA# 16231). The PWC and CW projects are being reviewed by BOEM as Phases 1 and 2, respectively, of a larger project, known as the New England Wind project

which covers the entire Lease Area OCS-A 0534.¹ A third generating facility is proposed by Vineyard Wind 1 LLC in the remaining Lease Area OCS-A 501; components of the transmission infrastructure associated with the Vineyard Wind (VW) project, known as the Vineyard Wind Connector (VWC) completed MEPA review in 2019 (EEA #15787). As described below, an offshore cable route corridor established for the VWC project has been generally adopted by the NEW1C and New England 2 Connector (NEW2C) projects, which are the project names used for purposes of state permitting within the Commonwealth. All three projects are being undertaken by affiliates of Avangrid Renewables, which has full ownership of Lease Area OCS-A 0534 and holds an option to gain operational control over VW once it reaches commercial operation.²

The CW project was originally developed in response to a solicitation for a 1,600 MW of offshore wind energy generation overseen by the Massachusetts Department of Energy Resources (DOER) and private Electric Distribution Companies (EDCs).³ The solicitation was issued to help ensure diversified sources of electricity and meet required greenhouse gas (GHG) reductions in accordance with Section 83C of Chapter 169 of the Acts of 2008, as amended by Chapter 188 of the Acts of 2016 (An Act to Promote Energy Diversity), Chapter 8 of the Acts of 2021 (An Act Creating a Next Generation Roadmap for Massachusetts Climate Policy), Chapter 24 of the Acts of 2021 (An Act Making Appropriations for the Fiscal Year 2022) and Chapter 179 of the Acts of 2022 (An Act Driving Clean Energy and Offshore Wind). The CW project, one of two winning bids submitted in response to the solicitation, was proposed to provide approximately 1,200 MW under long-term contracts with the EDCs and potentially 32 MW to be contracted separately with municipal light providers (MLPs) or other users in Massachusetts. According to the Proponent, the CW project will result in avoided emissions of 2.35 million tons per year (tpy) of carbon dioxide (CO₂e), 1,255 tpy of nitrogen oxides (NO_x) and 66 tpy of sulfur dioxide (SO₂). The DEIR indicated that the Proponent has petitioned to terminate Power Purchase Agreements (PPAs) executed with electric distribution companies (EDCs) pursuant to the procurement identified above; however, the Proponent intends to respond to an upcoming solicitation with the same project proposed in the DEIR.⁴

Major elements of the CW project include a wind turbine array with 64 to 88 wind turbine generators (WTG) spaced approximately 1.15 miles apart; up to three offshore electrical service platforms (ESPs); inter-array cable connections between WTGs and ESPs; offshore export cables; onshore export cables; and an onshore substation. The offshore export cables will follow an approximately 47.2-mile long route from the WTG array to the landfall site at Dowses Beach in Barnstable. Project components within the Commonwealth are limited to the NEW2C.

¹ <https://www.boem.gov/renewable-energy/state-activities/new-england-wind-formerly-vineyard-wind-south#:~:text=In%20October%202021%2C%20the%20project,project%20changed%20to%20Commonwealth%20Wind.>

² <https://www.vineyardwind.com/press-releases/2021/9/21/avangrid-renewables-and-copenhagen-infrastructure-partnersannounce-strategic-transaction-to-advance-offshore-wind-development>

³ The remaining approximately 400 MW in this solicitation was awarded to the Mayflower Wind Project (EEA# 16507 and 16596). Recent filings indicated that the 400 MW awarded in the solicitation would connect through Brayon Point via the SouthCoast Wind 1 Project (EEA #16596).

⁴ Public reports confirm that the petition, as well as a parallel petition by SouthCoast Wind 1 Project, were subsequently granted by the Department of Public Utilities. See <https://commonwealthmagazine.org/energy/dpu-approves-termination-of-offshore-wind-contract/> (last accessed 10/10/23) and <https://commonwealthmagazine.org/energy/dpu-approves-termination-of-southcoast-wind-contract/#:~:text=The%20agreement%20approved%20by%20the.no%20longer%20workable%20given%20rising> (last accessed 10/10/23).

Project Description

Project components include three 275-kilovolt (kV) offshore export cables, each of which will be up to 23 miles long, an approximately 6.7-mile long underground concrete duct bank within which the onshore export cables be placed, and a new electrical substation.

Offshore Export Cable

Each offshore export cable will include a three-core 275-kV high voltage alternating current (HVAC) cable bundled with one or more fiber optic cables. The offshore export cables will be installed within an Offshore Export Cable Corridor (OECC) which extends from the proposed wind farm location approximately 20 miles south of Martha's Vineyard, through Muskeget Channel and Nantucket Sound, to Dowses Beach. Except for the northernmost 1.5 miles (488 acres) of the OECC between Centerville Harbor and Dowses Beach, the OECC was identified based on marine surveys evaluated through the review and permitting of the VWC and NEW1C projects, which will also be located within the OECC. A supplemental offshore cable route, the Western Muskeget Variant, may be used within which one or two of the cables may be placed if conditions within the Muskeget Channel section of the OECC do not allow for placement of all three offshore export cables associated with the NEW2C project (in addition to the total of four cables proposed for the VWC and NEW1C projects). The OECC ranges in width from 3,100 ft to 5,500 ft, with a typical width of 3,500 ft. The three cables will be installed approximately 164 ft to 328 ft apart from one another and from any cables associated with the VWC and NEW1C cables. The cables will be buried approximately five to eight feet (1.5 to 2.5 meters) below the seafloor using a trenching tool or, if necessary, by dredging a deeper trench to ensure adequate burial depth. Where burial is not possible due to subsurface conditions, the cables will be laid on the ocean floor and covered with armoring. According to the DEIR, cable installation typically proceeds at speeds of 230 to 656 feet per hour and will occur 24 hours per day. It is anticipated that the three cables will be installed over an 18-month period.

Landfall

The three offshore export cables will be transitioned from the offshore environment to landfall at Dowses Beach through underground conduits installed using Horizontal Directional Drilling (HDD). The seaward end of the conduits will be located approximately 0.5 miles offshore. The landward end of each of the three conduits will be located within a separate underground vault (transition joint bays) measuring approximately 11 ft wide by 62 ft long and up to 8.5 ft tall buried 2 to 4 ft below the Dowses Beach parking lot. The three conductors in each cable (a total of nine conductors in the three cables) will be separated and installed in separate 8-inch conduits within a buried concrete duct bank with 12 sleeves; 9 of the sleeves will be used to hold conduits containing the power cables and 3 sleeves will contain empty conduits to be held in reserve. The duct bank will also contain 12 two-inch diameter conduits embedded in the concrete in which communications and monitoring cables will be placed. Except as described below, the 8-inch and 2-inch conduits will be arranged in 4 rows of 3 within the concrete duct bank. The section of the duct bank crossing the narrow causeway between East Bay and Phinney's Cove will contain 15 8-inch conduits arranged in one row which will be constructed as a separate structure supported at either end and spanning the existing box culvert under the driveway. Nine of the conduits will be used for the conductors, 3 will be empty and held in reserve, 2 will be used to accommodate the 12 2-inch communications and monitoring cables and one will be left empty and

available for the Town's use in the future. No construction activities will take place from Memorial Day to Labor Day unless authorized by the Town.

Onshore Route

The underground duct bank carrying the conductors will follow an approximately 6.7-mile long route from the Dowses Beach parking lot to the site of a proposed substation off Oak Street in West Barnstable. The proposed onshore route follows the Dowses Beach parking lot and driveway to East Bay Road, then proceeds 0.2 miles south on East Bay Road, 0.9 miles northwest on Wianno Avenue, 1.1 miles north on Main Street, 1.9 miles north on Osterville-West Barnstable Road, 0.9 miles northeast on Old Falmouth Road, 0.2 miles east on Old Stage Road, 1.0 miles northeast on Oak Street and 0.2 miles west on Service Road. The final 0.1-mile section of duct bank between Service Road and the proposed substation will be installed below Route 6 using two microtunnels, which are constructed using a boring machine to avoid surface excavation on the highway. Two microtunnels will be used to carry the transmission cables to spread out the thermal loads of the cables. Each microtunnel will be constructed by first excavating two jacking shafts north of Route 6 and two receiving shafts south of the highway. A boring machine is then lowered into a jack shaft and drills a tunnel below Route 6 to a receiving shaft, after which conduits are installed to hold the transmission cables. The DEIR also identified an alternate route (the "Noticed Alternative" or "Old Mill Road Alternative") and a route variation involving a section of Main Street east of Wianno Avenue and west of East Bay Road ("Main Street Variation").

Substation and Interconnection

The proposed substation will be constructed on an approximately 29-acre site (expanded from 15 acres as of the ENF filing, as discussed below) comprised of eight parcels located north of Route 6, south of an existing Eversource transmission right-of-way (ROW) #342 and west of Oak Street. The substation will include equipment that will step up the 275-kV voltage of the proposed onshore export cables to 345-kV. The power will be conveyed from the proposed substation to the existing West Barnstable Substation in an approximately 0.4-mile long concrete duct bank containing conduits with three 345-kV circuits. A portion of the duct bank will cross through two parcels of land which are owned by the Town and protected under Article 97 of the Amendments to the Constitution of the Commonwealth (Article 97). The duct bank will then be installed within an approximately 1,000 ft long section of Oak Street to the West Barnstable Substation. An existing unpaved road providing access to a fire tower operated by the Department of Conservation and Recreation (DCR) will be widened from 11 ft to 20 ft and covered in gravel to accommodate construction-period activities and to provide access to the substation for its maintenance and operation. The West Barnstable Substation will be modified and expanded by Eversource with additional equipment to allow the interconnection. The modifications will increase the size of the West Barnstable Substation by approximately 1.5 acres. The electricity will then be delivered to the grid.

Project Site

The OECC extends from the southern portion of Nantucket Sound between Martha's Vineyard and Nantucket, enters an area in Nantucket Sound that is outside of state waters, then reenters state waters south of Barnstable. All sections of the cable route in state waters lie within the Cape and Islands Ocean Sanctuary (CIOS) and the Massachusetts Ocean Management Plan (OMP) planning area.

The substation is proposed on a forested 29-acre site off Oak Street on land owned by the Proponent. The site is bordered to the south by Route 6 and DCR's West Barnstable Fire Tower, to the west by undeveloped land, to the east by undeveloped land and to the north by the Town's Spruce Pond Conservation Area. The eastern section of the substation site includes a single-family home, which will be demolished. Eversource's ROW #342 is located within the Spruce Pond Conservation Area. The substation site is zoned for residential use and located within an Aquifer Protection Overlay District. Oak Street is approximately 0.25 miles east of the site. The West Barnstable Substation is bordered to the south by Route 6, to the east by undeveloped land, to the north by the Oak Street Substation and to the west by undeveloped land and Oak Street.

Massachusetts is a globally significant nesting, feeding, staging and overwintering area for numerous migratory birds. The state's natural resources support almost 40 percent of the Atlantic coast breeding population of Piping Plover and approximately 50 percent of the North American Roseate Tern population, as well as significant nesting colonies of Common and Least terns. State-listed species of terns forage in waters surrounding Massachusetts, including areas in or near the OECC and proposed wind farm location outside of state waters. According to the Natural Heritage and Endangered Species Program (NHESP), the project will be located within areas of Priority and Estimated Habitat for rare species. The offshore cable route passes through habitat of Roseate Tern (*Sterna dougallii*)⁵, Common Tern (*Sterna hirundo*), Least Tern (*Sternula antillarum*) and Piping Plover (*Charadrius melodus*).⁶ Thanh landfall site at Dowses Beach is mapped as Priority Habitat for Piping Plover and Least Tern and the Noticed Alternative onshore cable route passes through Priority Habitat for the Water Willow Stem Borer moth (*Papaipema sulphurata*). Northern Right Whale (*Eubalaena glacialis*), Humpback Whale (*Megaptera novaeangliae*), marine birds such as Long-tailed Duck, Northern Gannet, Razorbill, Wilson's Storm Petrel, fulmars, loons, scoters, and shearwaters, and Loggerhead (*Caretta caretta*) and Leatherback (*Dermochelys coriacea*) sea turtles have been observed throughout Nantucket Sound.

The Massachusetts Division of Marine Fisheries (DMF) has indicated that Nantucket Sound, through which the OECC passes, includes areas of commercial and recreational fishing and habitat for a variety of invertebrate and finfish species, including channeled whelk (*Busycotypus canaliculatus*), knobbed whelk (*Busycon carica*), longfin squid (*Doryteuthis pealeii*), summer flounder (*Paralichthys dentatus*), windowpane flounder (*Scophthalmus aquosus*), scup (*Stenotomus chrysops*), surf clam (*Spisula solidissima*), sea scallop (*Argopecten irradians*), quahog (*Mercenaria mercenaria*), horseshoe crabs (*Limulus polyphemus*), and blue mussel (*Mytilus edulis*). Blue mussel and kelp (*Saccharina latissima*) aquaculture operations are also located within Horseshoe Shoals (a subtidal area of Nantucket Sound). Waters offshore of Dowses Beach and east of Edgartown contain mapped eelgrass (*Zostera marina*) habitat.

As shown on the Federal Emergency Management Agency's (FEMA) National Flood Hazard Layer, Dowses Beach, including the parking lot and driveway, are located in a coastal flood zone with a velocity hazard (VE zone) with a base flood elevation (BFE) of 15 ft NAVD 88. Sections of East Bay Road adjacent to Dowses Beach and at the intersection of East Bay Road and Main Street are located within a zone with a 1% annual chance of flooding (AE Zone) with a BFE of 12 ft NAVD 88 and a section of Bumps River Road is within an AE Zone with a BFE of 10 ft NAVD 88.

⁵ Species also federally protected pursuant to the U.S. Endangered Species Act (ESA, 50 CFR 17.11).

⁶ Ibid.

The Massachusetts Board of Underwater Archaeological Resources (BUAR) has identified Nantucket Sound as an area of high sensitivity that is rich in submerged ancient Native American cultural resources and shipwrecks. The onshore export cable will pass by and through historical and archaeological resources and areas included in the Massachusetts Historical Commission (MHC) Inventory of Historic and Archaeological Assets of the Commonwealth (Inventory) and State and National Registers of Historic Places.

According to preliminary mapping of Environmental Justice (EJ) populations available when the ENF was filed in October 2022, the project originally was not located within an Environmental Justice (EJ) Designated Geographic Area (DGA) as defined in 301 CMR 11.02 because there were no EJ populations within one mile of the project site. Under updated mapping issued on November 12, 2022 and made effective January 4, 2023, the eastern portion of the West Barnstable Substation is located within one mile of an EJ population designated as Minority and Income. The Proponent voluntarily adopted this revised mapping for purposes of MEPA review, and provided information in the DEIR to comply with MEPA EJ protocols made effective on January 1, 2022. Based on the updated mapping, project components are within five miles of Additional EJ populations in Barnstable, Yarmouth and Mashpee designated as Minority; Income; Minority and Income; Minority and English Isolation; and Minority, Income and English Isolation. As discussed below, port facilities and future operations and maintenance (O&M) areas that will support project implementation are located within one mile of EJ populations in Salem and other potential locations of port facilities (identified below) that may be used to support the project.

Environmental Impacts and Mitigation

Potential environmental impacts of onshore components of the project include alteration of 16.4 acres of land (13.6 acres at proposed substation, 1.3 acres to provide access to the proposed substation and construction of interconnection cables, and 1.5 acres at the existing West Barnstable Substation); creation of 2.8 acres of impervious area; and alteration of Barrier Beach, Coastal Dune, Land Subject to Coastal Storm Flowage (LSCSF), Riverfront Area and Bordering Land Subject to Flooding (BLSF). Potential environmental impacts of offshore components within Commonwealth waters include alteration of over 170 acres of Land Under the Ocean (LUO), and dredging of up to 131,100 cubic yards (cy) of sediment in connection with installation of the offshore export cables. Both onshore and offshore components of the project will be located in rare species habitat and in areas containing cultural, historic and archaeological resources. The FEIR should include a table showing updated area estimates of all impacts.

The project will generate clean renewable energy that will minimize GHG emissions. Measures to avoid, minimize, and mitigate environmental impacts identified in the DEIR include selecting a route that minimizes impacts to sensitive habitats, using offshore cable installation methods with temporary impacts within a narrow footprint, using HDD to avoid impacts to wetland resource areas and rare species habitat at the landfall site, microtunneling under Route 6 to minimize impacts to roadways, construction of stormwater management system consistent with the Massachusetts Stormwater Management Standards (SMS) at the proposed substation and implementation of a Spill Prevention, Control, and Countermeasures (SPCC) Plan. The project is also making commitments to fisheries and avian species mitigation measures.

Changes Since the Filing of the ENF

The DEIR identified the following changes to the project since the ENF was filed:

1. The Proponent acquired 5 additional parcels adjacent to the substation site proposed in the ENF, which has resulted in an increase in the size of the site from 15 acres (3 parcels) to 29 acres (8 parcels). One of the recently acquired parcels contains a single-family residence, which will be demolished. The substation will be constructed on four of the parcels. According to the DEIR, the additional land area will allow the design of the substation to be optimized. The revised design eliminates the need for retaining walls along an internal site drive providing access to the proposed stormwater infiltration basin and other structures in the northeast portion of the site, will reduce the duration of substation construction and minimize potential visual impacts. As a result of this change, the area of land alteration associated with the proposed substation has increased from 12.4 acres to 13.6 acres, including 13.3 acres of tree clearing, and new impervious area has increased from 1.2 acres to 2.8 acres.
2. The Proponent has identified a Preferred Route between the proposed substation and interconnection point at the West Barnstable Substation. As described above, the Preferred Route follows an existing fire tower access road and Oak Street.
3. As detailed below, modeling of coastal erosion at Dowses Beach indicated that the southernmost transition joint bay at the Dowses Beach landfall site could experience up to 2 ft of erosion under 2050 modeled storm conditions; as a result, the transition bay will be constructed at a depth of four feet, rather than two feet, as originally proposed. The modeling also indicated that portions of the causeway could experience erosion of up to 8.9 feet and be subject to high storm forces under 2050 storm conditions. Because the proposed duct bank has been designed to cross over the culvert, it cannot be buried deeper underground (though it will be inserted underneath the pavement of the causeway) to minimize erosion effects. The duct bank has been redesigned with additional protections, including a structural concrete slab just above the duct bank and permanent sheet piles on the sides of the duct bank. These changes were described in supplemental information dated August 4, 2023 which the Proponent distributed shortly after filing the DEIR.

Jurisdiction and Permitting

The project is undergoing MEPA review and is subject to preparation of a mandatory EIR pursuant to 301 CMR 11.03(3)(a)(1)(b) and 301 CMR 11.03(7)(a)(4) because it requires Agency Actions and will result in the alteration of ten or more acres of any other wetlands (LUO) and involves construction of electric transmission lines with a capacity of 230 or more kV, provided the transmission lines are five or more miles in length along new, unused or abandoned ROW. It also exceeds ENF thresholds at 301 CMR 11.03(1)(b)(3) (conversion of land held for natural resources purposes in accordance with Article 97 of the Amendments to the Constitution of the Commonwealth to any purpose not in accordance with Article 97); 301 CMR 11.03(1)(b)(5) (release of an interest in land held for conservation, preservation or agricultural or watershed preservation purposes; conversion of land held for natural resources purposes in accordance with Article 97 of the Amendments to the Constitution of the Commonwealth to any purpose not in accordance with Article 97); 301 CMR 11.03(3)(b)(3) (dredging of 10,000 or more cy of material) and 301 CMR 11.03(7)(b)(4) (construction of electric

transmission lines with a capacity of 69 or more kV that are over one mile in length). The project may meet or exceed additional ENF review thresholds at 301 CMR 11.03(2)(b)(2) (disturbance of greater than two acres of designated priority habitat that results in a take of a state-listed rare species) and 301 CMR 11.03(3)(b)(1)(a) (alteration of coastal dune, barrier beach or coastal bank).

The project will require a Section 401 Water Quality Certification (WQC) and a Chapter 91 (c. 91) License from the Massachusetts Department of Environmental Protection (MassDEP); approval under MGL Chapter 164 Section 69J from the Energy Facility Siting Board (EFSB); approval under MGL Chapter 164 Section 72 and a Chapter 40A Section 3 Zoning Exemption from the Department of Public Utilities (DPU); an Access Permit from the Massachusetts Department of Transportation (MassDOT); a Field Investigation Permit from MHC; a Special Use Permit from BUAR; and Federal Consistency Review by the Massachusetts Office of Coastal Zone Management (CZM). It may require a Conservation and Management Permit (CMP) from NHESP. The Project is subject to reviews under the OMP, Ocean Sanctuaries Act and the MEPA Greenhouse Gas (GHG) Emissions Policy (the Policy), and requires Article 97 legislation.

The project requires Orders of Conditions from conservation commissions in Barnstable, Edgartown, Yarmouth, Nantucket and Mashpee (and in the case of an appeal, Superseding Orders of Conditions MassDEP). It requires Development of Regional Impact (DRI) review from the Cape Cod Commission (CCC) and Martha's Vineyard Commission (MVC). In the DEIR, the Proponent indicated its intention to enter into a Host Community Agreement (HCA) with the Town of Barnstable; however, the Town Council revoked the authority for the Town Manager to negotiate an HCA at its October 5, 2023 meeting.

The project must undergo environmental assessments as part of approval of lease terms from BOEM,⁷ and requires an Individual Permit from the Army Corps of Engineers (ACOE) under Section 404 of the Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act (Section 10); a Letter of Authorization or Incidental Harassment Authorization from the National Marine Fisheries Service (NMFS); Private Aids to Navigation authorization from the U.S. Coast Guard (USCG); a No Hazard Determination from the Federal Aviation Administration (FAA); consultation with MHC in accordance with Section 106 of the National Historic Preservation Act (NHPA) of 1966 and M.G.L. Chapter 9, Sections 26-27C; and a National Pollutant Discharge Elimination System (NPDES) Construction General Permit and Outer Continental Shelf Air Permit from the U.S. Environmental Protection Agency (EPA).

Because the Proponent is not seeking Financial Assistance, MEPA jurisdiction extends to those aspects of the project that are within the subject matter of required or potentially required Permits or within the area subject to a Land Transfer that are likely, directly or indirectly, to cause Damage to the Environment. The subject matter of the EFSB/DPU approvals, OMP review and the c. 91 License are sufficiently broad such that MEPA jurisdiction is functionally equivalent to full scope jurisdiction and

⁷ During its review, BOEM must comply with its obligations under the National Environmental Policy Act (NEPA), the NHPA, the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA), the Migratory Bird Treaty Act (MBTA), the Clean Air Act (CAA), and the Endangered Species Act (ESA). BOEM will coordinate/consult with other Federal agencies including NMFS, United States Fish and Wildlife Service (USFW), EPA, and USGC). BOEM will also coordinate with the State pursuant to the Coastal Zone Management Act (CZMA).

extends to all aspects of the project that are likely, directly or indirectly, to cause Damage to the Environment.

Review of the DEIR

The DEIR was generally responsive to the Scope included in the ENF Certificate. It included a detailed description and plans of existing conditions along the cable route and proposed structures. It described potential environmental impacts, identified mitigation measures, including construction-period impacts and mitigation measures. The DEIR reviewed alternatives for routing, siting, design and construction of project components within the Commonwealth. The DEIR provided technical appendices with a coastal erosion model, a report on historical shoreline change at Dowses Beach, stormwater management report for the substation site, a report summarizing modeled electric and magnetic fields (EMF) associated with the onshore and offshore cables, a draft Piping Plover and Least Tern Protection Plan, a Fisheries Communication Plan and natural resource inventories of locations where project activities will occur on land. During the review period, the Proponent supplemented the DEIR with additional information regarding the design of structures at the landfall site and the conduit crossing of the East Bay causeway. The DEIR provided an update on the local, state and federal review and permitting processes. The Scope included in the ENF Certificate required the DEIR to provide information about project components outside state waters to fully disclose the impacts of the project and facilitate CZM's Federal Consistency review. While the DEIR included limited background information, CZM has recommended that a fuller description of project activities related to the wind farm be included in the FEIR.

I acknowledge the many thoughtful and detailed comments received from the Town of Barnstable; Cape Cod Commission; area residents and organizations, including the Association to Preserve Cape Cod and Save Greater Dowses Beach; and state legislators including Senator Julian Cyr, Cape and Islands District; Senator Su Moran, Plymouth and Barnstable District; Representative Sarah Peake, 4th Barnstable District; Representative Kip Diggs, 2nd Barnstable District; Representative David Vieira, 3rd Barnstable District; Representative Dylan Fernandes, Barnstable, Dukes and Nantucket District; and Representative Chris Flanagan, 1st Barnstable District. This public input should continue to inform the design and details of the project, and a comprehensive response to comments must be submitted as part of the FEIR.

Alternatives Analysis

In the ENF, the Proponent reviewed the data and analysis upon which the preferred offshore cable route through the OECC was identified as the route with the fewest impacts to marine resources, including Special, Sensitive and Unique resources described in the Ocean Management Plan. The DEIR include information and analyses in support of the selection of the Preferred Alternative. It reviewed the feasibility of shared transmission and coordination with other offshore wind projects. The DEIR reviewed alternative sites for the interconnection, summarized previous analyses of offshore routes that resulted in the selection of the OECC as a transmission corridor, and reviewed alternative landfall sites and substation locations.

The DEIR included an evaluation of the feasibility of a shared transmission design whereby the transmission cables would be groups with transmission lines for one or more other offshore wind

project, which potentially would minimize impacts by avoiding the need for each offshore windfarm to install separate transmission cables between the generating facility and landfall location. According to the DEIR, a shared transmission system is not feasible because interconnections to the grid are limited to 1,200 MW from a single source. Because the NEW2C project will generate 1,200 MW, any other projects using the shared transmission infrastructure would have to interconnect at a different location. In addition, if a fault were to occur in the shared transmission system, it may affect all projects using the infrastructure.

Interconnection Location Alternatives

According to the DEIR, potential interconnection facilities are substations that can accommodate 1,200 MW of power to be produced by the project to avoid the need for multiple onshore substations and cable routes. The Proponent evaluated suitable interconnection points in southeastern Massachusetts and nearby sites in Rhode Island, which included Kent County Substation in Rhode Island, Brayton Point in Somerset, Canal Substation in Sandwich, Pilgrim Substation in Plymouth and the West Barnstable Substation. Except for the Canal Substation, all of the substations currently have adequate capacity to accommodate power generated by the project. The Canal Power Plant operates only during extended periods of cold weather, during which time the substation would not have the capacity for additional power for the project. The owner of the Canal Power Plant recently proposed that offshore wind projects be allowed to use the substation when the power plant is not operating, during which time power generated by the project would not be available to the electrical grid. The substation would have adequate capacity for the project when the Canal Power Plant is retired; however, according to the DEIR, an interconnection at the Canal Substation may not be available to the Proponent in the near future. In addition, the Canal Substation would require a much longer offshore transmission route that would include a section through the Cape Cod Canal. Installing the cable through the canal would be challenging due to the need for maintaining the canal for navigational purposes, which includes periodic dredging. According to the DEIR, the routes between the offshore generating facility and the Kent County and Pilgrim Stations would be well over 100 miles, which exceeds the feasible length of transmission route identified by the Proponent. In addition, neither of the sites would be located within the OECC already established for the VWC and NEW1C routes. The Brayton Point Substation would require a 75-mile long offshore transmission route (approximately 21 miles longer than the Preferred Alternative) which would require crossing of numerous cables and pipeline. The existing substation has capacity to accept 1,600 MW; however, the Mayflower Wind (SouthCoast Wind 1) Project (EEA# 16596) has filed a petition with the EFSB that includes a 1,200 MW interconnection at the substation; thus, the 1200 MW proposed by this project could not be accommodated at this location if SouthCoast Wind 1 were approved to connect. The Preferred Alternative includes an interconnection at the West Barnstable Substation, which will have capacity for the project's power with modifications and upgrades to the facility and to certain nearby 345-kV transmission lines. The route to the substation is the shortest of all of the alternatives and would allow the use of the OECC.

I acknowledge that some commenters continue to urge the Proponent to explore additional interconnection alternatives that would avoid use of a Barnstable for a third interconnection following the VWC and NEW1C projects. While I find that the DEIR has provided sufficient justification to carry the Preferred Alternative to the FEIR, the Proponent should provide a complete response to these comments, including an explanation of any differences between the preferred routes and alternatives set forth in the DEIR as compared to the BOEM filings. As noted below, the Proponent should also

continue to study the interconnection alternatives to cross the causeway into Dowses Beach, including by potentially exploring ways to increase the capacity that could be connected through other locations in Barnstable previously reviewed.

Landfall Alternatives

The DEIR evaluated potential landfall locations with respect to the following suitability criteria:

- Sufficient land area to accommodate construction staging and activities
- Access to a public roadway with sufficient width to accommodate the duct bank carrying the transmission cables
- Water depths of 10 to 20 feet within 3,000 feet of the shoreline
- A buffer area between the site and residential uses
- Potential to avoid and minimize environmental impacts
- Length of routes between the landfall site and the West Barnstable Substation

The DEIR reviewed 51 potential landfall locations along the south coast of Cape Cod and the east coast of Buzzards Bay. According to the DEIR, the Proponent considered making landfall at more than one location, but determined that one site would minimize impacts compared to an alternative that would have a second offshore route where the common route would diverge to the different landfall sites, and installation of onshore conduits along separate routes. Forty-four sites were disqualified because they lacked adequate space for construction activities, had conflicts with surrounding onshore or offshore uses (including landfalls for the VWC and NEWIC projects), would have potential environmental impacts, or were located too far away for a feasible onshore route to the substation. The following seven potential landfall locations were analyzed in more detail:

- Loop Beach
- Cotuit Landing
- Prince's Cove
- East Bay Boat Ramp
- McCarthy's Landing
- Wianno Avenue
- Dowses Beach

All of the sites except for Dowses Beach were eliminated from consideration due to inadequate space for construction activities or the excessive length of HDD that would be required. Existing environmental resources, and proposed activities and impacts at Dowses Beach are described below. The proposed landfall appears to avoid direct impacts to wetlands and rare species habitat; however, the Town and other commenters have expressed concern about the level and duration of construction impacts at the beach and along the onshore transmission route, particularly the portion through Osterville Village. CZM and MassDEP have requested additional information about potential indirect impacts to wetland resource areas associated with the proposed conduit across the causeway and is not clear whether the proposed structures at the landfall site can be adequately protected under projected future storm conditions. It would appear that these impacts could be lessened if the project involved two cables rather than three. As noted above, the Proponent believes that directing one or more of the three cables to different landing sites would increase impacts and, in the case of Craigville Beach, structures

already proposed for the NEW1C do not leave enough space available for structures (such as cables, transition joint bays and conduits) from a different project. However, Craigville Beach and its parking lot are larger than Dowses Beach and may better accommodate the three cables of the NEW2C project, whereas the concerns about the landfall at Dowses Beach may be addressed if the two-cable NEW1C were to land there. The FEIR should evaluate an alternative in which the proposed landing sites for NEW1C and NEW2C were switched.

Substation

The DEIR reviewed alternative substation locations which met the suitability criteria listed below, which are necessary to accommodate a facility of a suitable size and configuration.

- Commercially available property of at least 10 acres in size
- Within proximity to the West Barnstable Substation, which is the interconnection point to the electrical grid
- Within proximity to the landfall site
- Suitable topography
- Accessible from public roadways
- Suitable environmental characteristics

The DEIR compared the proposed substation site west of Oak Street to three alternative locations, including 9.2 acres of MassDOT-owned land off Shootflying Hill Road; four parcels with a combined area of 18.5 acres on Old Falmouth Road; and two parcels totaling 24 acres on Osterville-West Barnstable Road/Falmouth Road (Route 28). As described in the DEIR, none of the three alternative sites contain wetlands, rare species habitat or open spaces protected under Article 97; however, they are located within the Barnstable Groundwater Protection Overlay District, which is contiguous with Zone II wellhead protection areas. In addition, the MassDOT site is less than 10 acres and not all of the parcels at the other two sites were available for acquisition by the Proponent. The proposed site of the substation does not contain wetlands or rare species habitat, and is located outside of any Zone II protection areas; however, the interconnection cables will pass under land protected under Article 97. Environmental impacts associated with construction and operation of the proposed substation at the site off Oak Street are described below. As discussed below, alternatives to avoid or minimize land and Article 97 impacts associated with substation construction should continue to be explored.

Environmental Justice

As noted above, updated mapping of EJ populations in November 2022 shows that the West Barnstable Substation, interconnection cables and the eastern portion of the site of the proposed substation is within one mile of an EJ population designated as Minority and Income located in the Hyannis section of Barnstable. Within the census tract containing the above EJ population, Portuguese and Portuguese Creole are identified as the languages spoken by 5% or more of residents who also identify as not speaking English very well. The DEIR provided information and analysis as required by the MEPA Public Involvement Protocol for Environmental Justice Populations (the “MEPA EJ Public Involvement Protocol”) and the MEPA Interim Protocol for Analysis of project Impacts on Environmental Justice Populations (the “MEPA Interim Protocol for Analysis of EJ Impacts”) based on the updated mapping.

Public Engagement

The DEIR reviewed the Proponent's public engagement efforts. Prior to filing the ENF and DEIR, the Proponent distributed project fact sheets and notices of the availability of the ENF and DEIR to an "EJ Reference List" provided by the MEPA Office and consisting of Community Based Organizations (CBOs) and tribes/indigenous organizations. The fact sheets included a QR code to access version translated into Brazilian Portuguese and Spanish, and are posted on the Proponent's website. According to the DEIR, the Proponent hosts monthly hybrid and virtual community open house events in Barnstable, and throughout the Cape and Islands region and regularly hosts informational events which are advertised widely. Since the filing of the DEIR, the Proponent coordinated with a local CBO, Health Ministry, to hold an informational meeting at the Health Ministry facility located in Hyannis on July 28, 2023.⁸ Health Ministry offers a variety of health programs and English as a Second Language (ESL) classes with a focus on recent immigrants from Brazil.⁹ The event was publicized through ads on WJFD, a local Brazilian radio station, and flyers translated into Brazilian Portuguese. The Proponent has consulted with federally recognized tribes, including the Mashpee Wampanoag Tribe and Wampanoag Tribe of Gay Head (Aquinnah), and other tribal organizations prior to conducting ground disturbing work such as geotechnical surveys and through the federal Section 106 consultation process.

Baseline Health Assessment

The DEIR included a baseline assessment of any existing "unfair or inequitable Environmental Burden and related public health consequences" impacting the identified EJ population in accordance with 301 CMR 11.07(6)(n)(1) and the MEPA Interim Protocol for Analysis of EJ Impacts. The baseline assessment included a review of the data provided by the Department of Public Health (DPH) EJ Tool applicable to the DGA regarding "vulnerable health EJ criteria"; this term is defined in the DPH EJ Tool to include any one of four environmentally related health indicators that are measured to be 110% above statewide rates based on a five-year rolling average. According to the DEIR, the data surveyed indicate that the Town of Barnstable exceeds 110% of the statewide rate of Childhood Asthma Emergency Department Visits and the census tract within which the identified EJ population is located meets the vulnerable health EJ criteria for Low Birth Weight.

According to the DEIR, the following sources of potential pollution exist within the DGA, based on data available in the DPH EJ Tool:

- Major air and waste facilities: 10
- M.G.L. c. 21E sites: 1
- Tier II toxics use reporting facilities: 29
- Underground storage tanks (USTs): 9
- Road infrastructure: Routes 6, 28 and 132
- MBTA Bus and Rapid Transit: Hyannis branch
- Regional transit agencies: Bus routes operated by the Cape Cod Regional Transit Authority

⁸ Health Ministry is located in a census tract with an EJ population designated as Minority and Income which abuts the EJ population within the DGA. Both EJ populations are located in Hyannis.

⁹www.kinlingrover.com/blog/a-look-at-the-brand-new-health-ministry-in-hyannis accessed via link on Health Ministry website <https://healthministryusa.org/home-1>

- Energy generation and supply: electric transmission lines

According to the output report from the MA Resilience Design Tool included in the DEIR, project components within the DGA have a high exposure to urban flooding due to extreme precipitation and extreme heat. The EJ population within the DGA is likely also exposed to these climate risks. The project includes the addition of 2.8 acres of impervious area and tree clearing; however, approximately half of the site will remain forested the site and, according to the DEIR, the facility is not anticipated to have a material effect on temperatures in the surrounding area. As detailed below, the substation will be designed with stormwater management systems with the capacity to retain large storm events on-site.

Although not required by the MEPA Interim Protocol for Analysis of EJ Impacts, the DEIR surveyed environmental indicators tracked through the U.S. EPA's "EJ Screen," which compares the indicators by U.S. census block to MA statewide averages. The indicators reflect air quality, traffic proximity, presence of hazardous waste or materials and discharge of wastewater. According to the DEIR, the values for the identified EJ census block group are below state averages for all indicators, except for ozone; however the ozone concentration of 39.6 ppb is well below the National Ambient Air Quality Standard of 70 ppb.

Port Facilities

According to the DEIR, the Proponent will use port facilities to support construction and long-term operation and maintenance of the project. Activities at port facilities may include construction staging; offloading/loading of components; storage of components; component fabrication and assembly; transport of crews, components and equipment to offshore construction sites; refueling; and restocking of supplies. Potential sites of port facilities include the New Bedford Marine Commerce Terminal, other locations New Bedford Harbor, Vineyard Haven, and Salem Harbor; all of these sites are located in or within a mile of EJ populations. According to the DEIR, the Proponent will use port facilities in accordance with the permitted uses of those facilities. Impacts of the Proponent's port facilities will be typical of industrial activities in ports and may include traffic, air emissions from vessels and vehicles, noise, construction of structures along the shoreline and dredging. The development of a port facility by Crowley Wind Services to support construction of offshore wind farms, including the CW project, was recently reviewed by MEPA (Salem Wind Port, EEA# 16618). The Expanded Environmental Notification Form (EENF) and Single EIR filed for that project documented impacts associated with operation of the facility, including vessel emissions, noise, water quality and traffic, and proposed measures to minimize these impacts. The proponent of the Salem Wind Port has committed to use tugboats capable of using ship-to-shore power and provide infrastructure to facilitate future ship-to-shore power for all other vessels involved in transporting components to and from the site. The FEIR should review potential mitigation measures to minimize operational impacts of the Proponent's other potential port facilities.

Project Impacts

While the above indicators show some indication of an existing "unfair or inequitable" burden impacting the identified EJ populations, the DEIR asserted that the project will not have disproportionate adverse effects on EJ populations. According to a visibility assessment of the proposed substation included in the DEIR, it will be generally screened by vegetation and will not be visible in the

EJ population within the DGA. The DEIR did not directly evaluate noise impacts of the proposed substation; however, the results of noise analysis indicate that increases in noise over ambient levels will be 0 to 7 dBA at modeled residential sites within approximately 1,500 ft (0.3 miles) of the site; the EJ population is a mile or more away from the proposed substation site. As described below, the substation will be constructed with a stormwater management system that complies with the SMS and has additional capacity to store and infiltrate precipitation under future climate conditions. The Proponent will implement mitigation measures to minimize noise, traffic, air quality and water quality impacts during the construction period. The project will improve air quality and reduce GHG emissions by providing electricity to the grid from renewable energy sources.

Ocean Management Plan

The project is subject to review under the OMP, which maps important ecological resources that are key components of the state's estuarine and marine ecosystems— defined as “special, sensitive or unique resources” (SSU)—and identifies key areas of water-dependent uses including commercial and recreational fishing and navigation. The relevant SSUs for cable projects identified in the OMP include: 1) intertidal flats; 2) core habitat for North Atlantic Right Whale; 3) core habitat for Fin Whale; 4) core habitat for Humpback Whale; 5) eelgrass; and 6) areas of hard/complex seafloor; of these SSUs, only eelgrass and hard/complex seafloor are located within the OECC. The project is also located within areas of commercial and recreational fishing and navigation in Nantucket Sound that were mapped in the OMP.

OECC Benthic Conditions

According to the DEIR, surveys of benthic conditions in the OECC were previously conducted in 2017 – 2020 in connection with the VWC and NEW1C projects and included over 3,407 nautical miles of geophysical trackline data using a multibeam echosounder, side scan sonar, magnetometer, and sub bottom profiler, 192 vibracores, 134 cone penetrometer tests (CPT)¹⁰, 163 benthic grab samples with still photographs and 119 underwater video transects. Conditions along the Western Muskeget Variant route were similarly surveyed. The DEIR provided a series of benthic habitat maps of the OECC showing locations of video transects, vibracores and grab samples; delineations of hard/complex seafloor and habitat associated with biogenic structures; representative photos of benthic conditions; symbols representing habitat types based on interpretation of video transects; and bathymetry. The habitat types were classified using both the Auster classification method, which was originally provided for the surveys, and the Coastal and Marine Ecological Classification Standard (CMECS), which is now required for federal permitting.

Based on the Proponent's surveys, hard/complex benthic conditions present along sections of the proposed cable route include coarse material, such as gravel, boulders and cobble, in the southern part of the OECC in the Muskeget Channel area; morphologically rugged seafloor conditions characterized by high variability in bathymetric aspect and gradient, such as sand waves, which are located throughout the OECC in state waters; and eelgrass, located south of the landfall site. According to the DEIR, installation of the offshore export cables will impact approximately 2 acres of hard seafloor conditions and up to 5.9 acres of complex seafloor habitat. These SSU impact estimates are based on trenching with

¹⁰ A cone penetration test involves the insertion of a metal rod with a cone at its tip to a depth of three meters to measure sediment properties that will help determine the suitability of the sediment for cable burial to assess submerged paleofeatures.

a jet plow or mechanical plow, and do not include potential impacts from placement of anchors on the seafloor, anchor line sweep and armoring for cable protection. Dredging using a TSHD will impact an additional area of up to 33 acres of sand waves (up to 131,100 cy of sediment).

OMP Siting Standards

The siting standards of the OMP and its implementing regulations (301 CMR 28.00) presume that a project alternative located outside mapped SSU resources is a less environmentally damaging practicable alternative than a project located within a mapped SSU resource. The OMP management standards require a demonstration that the project has undertaken all practicable measures to avoid damage to SSUs; and a demonstration that the public benefits of the project outweigh the public detriments to the SSU resource. The DEIR included an analysis of the project's conformance to the OMP management standards. The project will avoid and minimize impacts to SSUs largely by selecting the least environmentally damaging practicable cable route as determined through extensive marine surveys. As detailed above, the general route of the OECC minimizes impacts because it is the most direct route between the location of the proposed offshore wind farm and the onshore interconnection point. The proposed cable route avoids four of the six SSUs identified in the OMP for cable projects, but cannot avoid eelgrass and hard/complex seafloor. In addition, it is anticipated that the cable route will avoid eelgrass beds documented in the northern section of the OECC. According to the DEIR, the surveys have demonstrated that it is not possible to avoid areas of hard/complex seafloor, which in some locations span the full width of the OECC. The project will take all practicable measures to avoid damage to SSU resources by using a jet plow or mechanical plow to install the cables to the extent practicable; minimizing the use of armoring by burying the cables to the necessary depth where possible and avoiding cable crossings; avoiding anchor impacts to eelgrass and hard/complex seafloor; and conducting post-construction monitoring. According to the DEIR, impacts to navigation and fishing will be temporary and will be limited to safety zones specified by the U.S. Coast Guard in the immediate vicinity of construction vessels as they move along the cable route. As described below, the Proponent will implement a Fisheries Communication Plan to coordinate its activities with commercial fishermen, and intends to provide mitigation for impacts to the commercial fishing industry, as described below. Public benefits to be provided by the project include avoiding emissions of 2.35 million tons per year of CO_{2e}, 1,255 tpy of NO_x and 666 tpy of SO₂ emissions over the lifetime of the project. The DEIR asserted that the Proponent will enter into an HCA with the Town of Barnstable that will directly benefit the community, including by reducing the expense of the Town's sewer extension program by coordinating work schedules in common areas. As noted above, the Town has indicated that it will not enter into negotiations for an HCA at this time. The FEIR should provide an update on the status of the HCA and any potential community benefits the project will provide to the Town.

Ocean Development Mitigation Fee

The Oceans Act authorized an Ocean Development Mitigation Fee to be assessed for offshore development projects as compensation to the Commonwealth for impacts to ocean resources and the broad public interests and rights in the lands, waters and resources of the OMP areas. Based on the anticipated cable footprint of 8.3 acres (for all three cables combined), placement of 9.8 acre of cable protection, and dredging of 91,500 cy of sediment to adequately bury the cable in sand waves, the DEIR proposed a base ocean development mitigation fee of \$300,000, which is at the upper end of the Class II fee (\$85,000-\$300,000) established in the OMP. The impacts used to calculate the base fee were the

lowest estimates in the range of impacts estimates provide in the DEIR. Should the actual impacts exceed those estimates, the fee would increase by \$10,000 for each acre of cable protection required above the 9.8 acres of armoring proposed in the DEIR and by \$500 for every 1,000 cy of sand wave dredging required above the 91,500 cy of dredging.

The ocean development mitigation fee schedule provides guidance on how the fee should be determined based upon project footprint and the spatial/temporal extent of effects on marine resources and water-dependent uses, including those that are “negligible and limited in duration” as well as those that are “re-occurring or continuous in duration” as part of a project’s footprint. According to CZM, the ocean development mitigation fee should be based on all impacts of the project, including direct trenching, berms, and sediment drape due to sediment fluidization, instrument skids, sand wave dredging, anchor setting for construction vessels, and the placement of long-term cable protection. Not all of these impacts were used to develop the proposed base fee; the FEIR should include estimates of the impacts not quantified in the DEIR. However, according to CZM, the calculation of the base fee and additional impact fee rates proposed in the DEIR appear appropriate at this time.

Wetlands and Water Quality

The DEIR provided detailed descriptions of wetland resource areas within the footprint of project activities, which include LUO associated with installation of the offshore export cables, and coastal beach, coastal bank and LSCSF associated with the Dowses Beach landfall site.

Offshore Export Cable Installation

According to the DEIR, the detailed benthic data collected from marine surveys were used to select cable routes and cable installation methods that will minimize impacts to SSUS and will enhance the potential for micro-siting during cable installation to avoid and minimize impacts to SSUs. Installation of the offshore export cables will cause direct impacts to LUO through dredging of sand waves; burial of the cable using a plow; vessel groundings, anchors and spud legs; and cable protection. According to the DEIR, the installation of the three offshore export cables may impact up to 205.8 acres of LUO, depending on the amount of cable protection that must be placed and on whether any cables are installed along the Western Muskeget Variant route. Impacts from each source and for each routing scenario are summarized in Table 1 (Table 5-1 in the DEIR). The impact estimates assume a 13.1-ft wide cable trench disturbance zone (3.3 ft for the cable trench and 9.8 ft for plow skids/tracks); the use of a nine-anchor spread where each anchor impacts 323 sf; two spud legs with a combined impact of 108 sf; use of a 492-ft by 164-ft vessel for computing a total of three groundings; and, a total of 8.2 miles of 30-ft wide cable protection for the three cables.

According to the DEIR, the offshore export cables will be primarily installed using jetting techniques, including jet trenching and jet plowing, or a mechanical plow. Both techniques receive cable deployed from a turntable aboard a construction vessel at the surface. The trenching tools may be either pulled by the construction vessel or mounted on a seabed tractor or sled. Jet trenching devices simultaneously lay the cable on the seafloor and bury it by directing pressurized seawater at seafloor sediments to fluidize sediment so that the cable can sink into the trench (approximately 1.3 to 3.3 ft wide) by its own weight. Sediment suspended by the jetting techniques is anticipated to be localized in the area around the trench. A mechanical plow uses a cutting tool potentially assisted by a water jet to

dig an approximately 3.3-ft wide trench into which the cable is fed. The trench would typically be backfilled by slumping of sediment at the edges of the trench. A mechanical plow would generate less suspended sediment than a jet plow.

Table 1 Summary of Estimated OECC Impacts within State Waters (acres)

Activity	Duration of Impact (Temporary / Permanent)	Scenario 1 3 Cables in OECC	Scenario 2 2 Cables in the OECC and 1 Cable in Western Muskeget Variant	Scenario 3 1 Cable the OECC and 2 Cables in Western Muskeget Variant
Dredging Prior to Cable Installation (area of impact)	Temporary	27	30	33
Offshore Export Cable Installation (within OECC)	Temporary	110	107	104
Use of Jack-up and/or Anchored Vessels and Vessel Grounding	Temporary	27	27	26
Cable Protection (within OECC)	Permanent	9.8 - 29.4	10.9 - 32.5	12.0 - 35.6
Nearshore Grounding	Temporary	7.2	7.2	7.2

The DEIR identified specialty cable installation techniques that could be used in areas where adequate cable burial may not be achievable by the use of the tools described above. Potential construction techniques under these conditions include the use of a mechanical trench with cutting teeth or blades to cut a trench in the seafloor; a more robust plow capable of pushing aside boulders and cutting a trench before a subsequent standard plow pass installs the cable; a pre-plow pass with a jet plow or mechanical plow to loosen the sediment before a subsequent plow pass installs the cable; a diver or remotely operated vehicle (ROV) could use jets to create a trench in areas where other tools are unable to operate; a specialized shallow water cable installation vehicle; or a pre-trenching where the cable is laid subsequent to the digging of a trench. According to the DEIR, specialty cable installation techniques will be used in limited areas and generally have similar impacts to jetting tools or mechanical plow. Another option would involve the use of a controlled flow excavation jetting tool, which uses several passes of a down pipe with jets positioned over the cable alignment to fluidize sediment and allow the cable to settle into place may also be used. According to the DEIR, this technique would cause sediment to be cast to either side of the trench, resulting in a wider area of disturbance than a jet plow or mechanical plow; for this reason, a controlled flow excavation jetting tool would only be used to where the cable route passes over small sand waves where burial cannot be achieved by jet plow or mechanical plow, to bury splice joints or in instances where deeper cable burial is necessary to avoid the need for armoring. In addition, boulders along the cable route may be repositioned using a grab tool suspended from a crane onboard a vessel or by using a plow-like tool pulled along the cable route which pushes boulders aside; as requested by DMF, the FEIR should provide additional details on the relocation of boulders and the associated impacts to benthic habitat.

Cable Protection

If a section of cable cannot be buried to an adequate depth, it will be covered with armoring to protect it from being damaged by anchor strikes, fishing gear or other impacts. The DEIR identified potential armoring material that could be used for cable protection, including concrete mattresses, rocks,

gabion rock bags or half-shell pipes. According to the DEIR, armoring for cable protection functions as an artificial reef that provides hard-bottom habitat for colonization of the seafloor. The ecological value of an artificial reef can depend on the variety of substrate, the presence of holes and crevices with different dimensions that provide shelter, and surface orientation and complexity of the material, which may encourage successful settlement. According to the DEIR, armoring that includes shells, gravel, cobbles, boulders would most closely resemble the hard-bottom habitat present along the cable route and provide high ecological value while protecting the cable. The DEIR estimated that rock armoring would cover a 30-ft wide area over the cable to provide adequate protection due to sides slopes of the rock mound. Gabion rock bags are metal cages filled with rocks of a variety of sizes; according to the DEIR, gabion rock bags could also have high ecological value, especially if shells were incorporated. Concrete mattresses are widely used for cable protection and provide a hard substrate for epifaunal attachment, but do not have the surface complexity that provides shelters and may become covered in sand over time. The DEIR estimated that concrete mattresses would cover only a 10-ft wide area over the cable. Half-shell pipes have the most limited ecological value of all of the armoring options due to their lack of holes and crevices, smooth texture and low relief. According to the DEIR, half-shells do not ensure damage from fishing gear or anchors and would only be used at cable crossings, which are not anticipated for this project, or to protect cable that must be laid on the surface of the seabed. The DEIR did not commit to a particular cable protection method; as shown in Table 1, a range of potential impacts to LUO caused by armoring was provided to reflect the potential use of a minimum width of 10 ft of hard cover (concrete mattresses or gabions) or a maximum 30-ft wide impact associated with rock armoring.

According to the DEIR, the use of cable protection will be prioritized in areas where anchor strikes are most likely due to high vessel traffic. The DEIR included a summary of a risk assessment which determined the minimum level of burial needed to protect cables in areas where there is a non-negligible risk of anchor strikes. The areas at risk from anchor strikes were determined based on existing vessel traffic patterns as identified via Automatic Information System data. The target burial depth throughout the cable route will be 5 to 8 ft. If this depth is not met where there is a risk of anchor strikes, cable protection will be used. However, in areas where anchor strikes are not a risk, a burial depth of 3.3 ft will be adequate and no cable protection will be applied. As detailed below, the FEIR should include additional information about the location and extent of areas at risk of anchor strikes.

In areas where mobile sand waves are present on the ocean floor, burial of the cables to a depth greater than 5 ft is necessary to prevent exposure of the sales as sand waves shift over time. Either a trailing suction hopper dredge (TSHD) or jetting by controlled flow excavation will be used to dredge a trench with 3:1 (horizontal:vertical) slopes and a bottom width of 50 ft to adequately bury the cables. Dredged sand will be deposited within the OECC in areas with similar sandy benthic conditions. As shown in Table 1, up to 33 acres of dredging may be necessary; according to the DEIR, the volume of dredged material will range from 91,500 cy to 131,100 cy.

Sediment Transport

Project activities, particularly sand wave dredging and cable burial, will cause bottom sediments to become suspended in the water column, which could impact water quality and affect benthic organisms and habitat features when the sediment plume settles on the seafloor. The DEIR summarized the results of sediment transport modelling previously provided in a report attached to the ENF. The

report described Total Suspended Solids (TSS) concentrations in the water column and deposition of suspended sediments associated with TSHD dredging and dredged material disposal, and cable installation by plows, jets and a controlled flow excavation tool. According to the DEIR, disposal of sediment dredged using TSHD will increase turbidity throughout the water column because the material will be released at the surface. The model predicted that a plume with TSS concentrations above ambient levels will extend for up to 10 miles from TSHD locations and persist for up to six hours; in addition, deposition of over 100 millimeters (mm) of sediment would occur on the seafloor in the area where dredged material is released. Sediment plumes modelled for the cable installation methods (jetting techniques or plow) were limited to approximately 20 ft of the water column. Above-ambient levels of TSS were not expected beyond a distance of 1.3 miles from the cable installation site and would fully dissipate in less than four hours. Modeling of cable installation activities predicts that seafloor sediment deposition greater than one mm in thickness should not extend beyond 330 ft of the cable route. According to the DEIR, it is anticipated that turbidity monitoring will be required in the WQC.

Cumulative Impacts

The DEIR included a table listing impacts of the VWC, NEW1C and NEW2C projects in state waters, which is reproduced in Table 2 below.

Table 2. Summary of impacts in state waters of VWC (combined values for 2 cables), NEW1C (combined values for 2 cables), NEW2C Option 1 with combined values for scenario with 3 cables in OECC, NEW2C Option 2 with combined values for 2 cables in OECC and 1 cable in Western Muskeget and NEW2C Option 3 with combined values for 1 cable in OECC and 2 cables in Western Muskeget.

Impact type	VWC	NEW1C	NEW2C Option 1	NEW2C Option 2	NEW2C Option 3
Approx. cable length (miles)	45.2	46	69	66.7	64.4
Sand wave dredging volume (cy)	85,000	110,000	91,500	124,900	131,000
Trenching (acres)	54	74	110	107	104
Anchoring (acres)	2.3	12.7	27	27	27
Cable protection (acres)	9	7.2 – 21.5	9.8 – 29.4	10.9 – 32.5	12.0 – 35.6

According to the Proponent, the impacts of each project, alone and cumulatively, are generally relatively minor and temporary (with the exception of cable protection). The Proponent does not believe it is feasible to coordinate construction activities in a manner that would minimize impacts due to their different stages of design, permitting and, in the case of VWC, construction. According to the DEIR, trenching impacts cannot be reduced by combining more than cable in a trench; it is important that cables be separated so that they do not damage one another, meet heat dissipation requirements and provide adequate space for maintenance and repair of individual cables. In addition, trenching tools are designed to install one cable at a time. As noted above, this project is designed to make use of the OECC corridor already established for VW1 and NEW1C and thereby minimize the impacts associated with new ocean routing for cable installation.

Benthic Habitat Monitoring

The DEIR included a draft Benthic Habitat Monitoring Plan (BHMP) intended to measure potential impacts and the recovery of benthic habitat affected by project activities. The BHMP will use a before-after-control-impact (BACI) gradient sampling design that includes sampling and analysis of six defined benthic habitat zones. Within each habitat zone, the BHMP proposes to collect benthic grab samples within the impact area of the NEW1C cable, at varying distances from the impact zone (165 feet, 330 feet, and 490 feet), and at three control stations located approximately 0.62 miles (one kilometer) away from the outermost transect sample as well as video surveys along the impact and control monitoring transect. As proposed in the DEIR, the BHMP would collect samples along and adjacent to the easternmost of the NEW1C cables, which will be located to the east of the NEW2C cables (and west of the VWC cables) in 2026 (preconstruction), 2027 or 2028 (Year 1), 2029 or 2030 (Year 3), and possibly 2031 or 2032 (Year 5). The Proponent intends to monitor impacts from both sets of cables (NEW1C and NEW2C) under one monitoring program, using only the sampling data collected along and adjacent to the NEW1C cable. However, in the FEIR for the NEW1C project, the Proponent's preferred approach for assessment of post-construction benthic conditions was to monitor along the NEW2C cable, rather than the NEW1C cable, corridor in 2024 (preconstruction) and later in 2027, 2029, and 2031 (years 1, 3, and 5 after the NEW2C cables are placed). While there may be complications associated with monitoring in the vicinity of two other cable laying projects, the Proponent should develop plans to collect samples and monitor conditions along both the NEW1C and NEW2C routes.

According to CZM, the BHMP proposed in the DEIR adopts a traditional approach for monitoring benthic impacts, but lacks key components, such as a plan to integrate the various analyses (i.e., video-based epifaunal community, infauna species diversity and abundance, community structure, sediment grain size, and sediment dispersion) into a decision/response framework; this would allow for identification of significant changes in the benthic habitat assessments which would lead to either additional study or some form of mitigation. An alternative framework could be based on a Weight of Evidence (WOE) evaluation across all metrics, which has *a priori* actions associated with the various combinations of impact/no impact detected; according to CZM, this approach was used successfully in previous linear asset construction projects in Massachusetts.

Prior to filing the FEIR, the Proponent should consult with CZM and other state agencies to develop an appropriate monitoring plan for the NEW2C project. In addition to CZM's recommendations listed above, FEIR should evaluate suggested additions and revisions to the monitoring plan identified by DMF in its comment letter.

Onshore Export Cable Installation

Wetland resource areas at Dowses Beach and the section of the onshore cable route on East Bay Road include LUO, Barrier Beach, Coastal Beach, Coastal Dune, Coastal Bank, Salt Marsh and LSCSF. The DEIR asserted that the parking lot at Dowses Beach is on the Barrier Beach, but does no longer functions as a Coastal Dune because it is paved. According to MassDEP and CZM, the functions of the dune have been modified due to the pavement, but it continues to be subject to deposition of windblown or wave-deposited sand and can erode during coastal storm events. Therefore, the delineation of wetland resource areas should be updated in the FEIR. Impacts to wetland resource areas associated with landfill

activities (HDD, cable installation and construction of transition joint bays) are shown in Table 2; the area of impacted Coastal Dune is included within the Barrier Beach category.

Table 3. Summary of Impacts to Wetland Resource Areas at the Landfall Site (total square feet, 3 cables)

Resource Area	HDD Operations	Transition Joint Bay/Connecting Duct Bank	Cable Pull-in
Land Under the Ocean	300	0	1,500
Salt Marsh	0	0	0
Coastal Beach	0	0	0
Coastal Dune	0	0	0
Barrier Beach and LSCSF	1,200	8,720	4,800
Coastal Bank	0	0	0

Horizontal Directional Drilling

The DEIR provided a detailed description of the HDD operations associated with transitioning the offshore export cables onto land, identified potential impacts to wetland resource areas and described mitigation measures. The use of HDD will avoid direct impacts to Coastal Beach and Coastal Dune at Dowses Beach. Three HDD entry pits will be excavated in the Dowses Beach parking lot, which is part of the barrier beach system and located within LSCSF. According to the DEIR, the impacts associated with these activities will be temporary and will not impact the barrier beach or the coastal floodplain. The DEIR described measures that would be implemented by the construction contractor to minimize any releases of drilling fluid that may occur during HDD operations, including monitoring of drilling fluid pressure, volume and flow rate that could reflect uncontrolled seepage into the environment. If a release of drilling fluid is detected, operators of the HDD rig will stop pumping drilling fluid through the system, identify areas where seepage has occurred, implement a release mitigation plan and notify MassDEP of the release. According to the DEIR, common corrective actions that are undertaken to address a release of drilling fluid include drilling a hole closer to the exist or entry point to reestablish drilling fluid returns; modifying drilling pressures and/or pumping rates to account for unanticipated or changing soil formation; pumping drilling fluid admixtures into the hole at the location of the seepage to solidify the soil; and suspending drilling operations until the hole is reestablished. According to the DEIR, the drilling fluid will be composed of bentonite clay or mud, which is an inert, non-toxic natural material that will pose minimal threat to water quality or ecological resources and will not infiltrate into sediments due to its viscous property. Drilling fluid returned from the drilling hole will be recycled to remove cuttings (excavated soil) and reused. Upon completion of HDD operations, the drilling fluid and cuttings will be disposed of at an appropriate disposal site. HDD operations will be regulated by MassDEP in the WQC. As requested by MassDEP, the FEIR should include a comprehensive HDD Contingency Plan, which upon its approval, will be incorporated into the WQC. The FEIR should review how the cable installation using HDD will meet the performance standards in the WQC and Wetlands regulations.

Onshore Cable Route

Wetland impacts associated with trenching required for installation of the duct bank along the Preferred and Noticed Alternative Routes are shown in Table 3.¹¹ The impacts include cable installation impacts from the start of onshore cable trenching at the southern end of the Dowses Beach parking lot to the proposed substation. In addition, the Noticed Alternative Route includes two crossings of culverted perennial streams and both routes have multiple crossings of culverted drainage features; however, the project will have no direct impacts to those wetlands because the conduit will be installed over the culverts in each case.

Table 4. Wetland impacts associated with onshore cable routes.

Resource Area	Preferred Route		Noticed Alternative	
	Linear feet	Square feet	Linear feet	Square feet
Barrier Beach	58	336	58	493
LSCSF	2,440	20,740	4,240	36,040
Riverfront Area	0	0	1,315	11,178
BLSF	2,040	17,340	4,870	41,395

Impacts to Barrier Beach and LSCSF associated with the Preferred Route will be caused by installation of the conduit in the Dowses Beach parking lot, across the causeway and the driveway and section of East Bay Road west of the causeway. The Noticed Alternative Route would have the impacts to the same Barrier Beach and LSCSF near Dowses Beach, as well as additional impacts to LSCSF on East Bay Road near Main Street and impacts to BLSF and Riverfront Area on short sections of Old Mill Road and Bumps River Road.

As noted above, except for the crossing of the causeway at Dowses Beach, the cables would be installed along the onshore route in a concrete conduit with 12 8-inch diameter sleeves (four rows of three) for the transmission cables and 12 2-inch diameter sleeves embedded in the concrete to be used for communication sand monitoring cables; the causeway crossing would include a conduit with 15 sleeves arranged horizontally. According to the DEIR, the impacts listed in Table 3 include impacts associated with the crossing of the causeway. However, the design of the crossing was revised after the DEIR was submitted to strengthen the ability of the structure to withstand storm waves. While the reinforced concrete and buried sheetpilings added in the revised design do not appear to extend beyond the footprint of the structure proposed in the DEIR, the FEIR should confirm the impacts associated with this conduit, as well as the revised design of the southernmost transition joint bay, and review potential indirect impacts to adjacent resource areas, including Salt Marsh.

The DEIR reviewed an alternative conduit crossing of the causeway using microtunneling. This technique would require excavation of a 41-ft diameter shaft at the southern end of the Dowses Beach parking lot and a 26-ft diameter shaft in the open space located on the west side of the causeway, north of the Dowses Beach driveway and east of East Bay Road. A boring machine would then create a tunnel under East Bay in which a conduit with transmission cables would be placed. This alternative would have greater temporary impacts to LSCSF and require more clearing of vegetation than the proposed

¹¹ The area of impact was calculated by multiplying the length of impact in linear feet, which was provided in Table 5-5 of the DEIR, by 8.5 feet, the approximate width of the excavation for the duct bank.

conduit crossing of the causeway, but would have the advantage of avoiding potential impacts to adjacent resources areas, including indirect impacts from erosion along its edges during storm events. According to the DEIR, the microtunnel is not feasible because it would require a staging area of 14,000 sf, which would eliminate public access to Dowses Beach during the 8-month construction period for the microtunnel. According to MassDEP and CZM, the microtunnel alternative would not only avoid potential impacts to coastal wetlands, but would be a more resilient design than the proposed conduit over the causeway. As detailed below, the Proponent should review alternative designs of a microtunnel that minimize impacts to public access, such as siting the shaft in an alternate location within the parking lot that would not block access to Dowses Beach, and more resilient design of the causeway crossing at a lower elevation. To the extent engineering or site constraints make microtunneling infeasible, such constraints should be explained in the FEIR. The FEIR should also discuss whether reducing the number of cables that must be connected through the causeway—for instance, by switching the landfall locations for NEW1C and NEW2C—could further minimize coastal erosion effects associated with the causeway. In response to public comments, the FEIR should discuss the disruptions to recreational resources that would be associated with other options for causeway access.

Drinking Water Supplies

According to the DEIR, approximately 3.7 miles of the preferred onshore cable route, including sections to be installed within Main Street, Osterville-West Barnstable Road, and Old Falmouth Road, will cross through Zone II Wellhead Protection Zones; in addition, cables installed within Main Street will pass through two Zone I Wellhead Protection Zones, each of which has a radius of 400 feet around a drinking water well located within the mapped Zone II areas. Zone II Wellhead Protection Areas define the area which contributes recharge to a public drinking water supply well, and are determined through hydrogeological modeling and groundwater pumping tests approved by MassDEP. The Town's Groundwater Protection Overlay District coincides with the mapped Zone II boundaries. According to the DEIR, the preferred route also passes through a recharge area identified in the Cape Cod Commission's (CCC) Regional Policy Plan and adjacent to three Potential Public Water Supply Areas (PPWSA) mapped by the CCC. The Noticed Alternative passes through 1.9 miles of Zone I and Zone II areas, through the same recharge area as the Preferred Route, through one PPWSA and adjacent to two PPWSAs. I note that while the onshore transmission cables will be installed within existing roadways, the Proponent should consult with the MassDEP Drinking Water Program to determine whether there are any requirements for installation of the cable within the section of Main Street passing through the Zone I areas.

The project will not add impervious area within Zone I or Zone II protection areas or any of the other water supply areas designated by the CCC or the Town. According to the DEIR, the project will not impact drinking water supplies because project components will be made of inert materials such as concrete, PVC, and solid dielectric cables that will contain no fluids and will not result in any direct discharges to groundwater. Construction period mitigation measures to minimize potential water quality impacts include avoiding refueling within Zone I or Zone II areas, and implementation of a Stormwater Pollution Prevention Plan (SWPPP including the use of sedimentation and erosion controls, and implementation of an SPCC) to ensure hazardous materials (such as oils, greases, fuels, and equipment fluids) are stored properly and that contingency plans are in place for immediate response actions in the event of a release. Neither the proposed substation nor existing West Barnstable Substation are located within a Zone I or Zone II. However, the proposed substation will include volume (110%) containment

systems for major substation components that use dielectric fluid for cooling (i.e., the main transformers, iron core reactors, and equipment containing dielectric fluid associated with the STATCOMS, as applicable) which can store any leaked fluids until they can be properly disposed of off-site. In addition, these containment systems will include additional capacity to contain a 30-inch Probable Maximum Precipitation (PMP) rain event.

The DEIR included an analysis of the potential for HDD operations at Dowses Beach to impact the Cape Cod Aquifer which underlies all of Cape Cod, including Dowses Beach. As noted above, the drilling fluid proposed to be used is made of bentonite, which is an inert, natural clay that material that thickens or hardens when spilled and unable to infiltrate through soil or sediments. Dowses Beach is not within a Zone I or Zone II of any public water supply well and therefore does not contribute recharge to those wells. According to a fact sheet about groundwater resources on Cape Cod prepared by the U.S. Geological Survey (USGS), groundwater on Cape Cod generally flows from onshore to offshore; therefore, groundwater below Dowses Beach is expected to flow toward the ocean rather than toward drinking water supply wells.¹²

Chapter 91 / Waterways

Sections of the export cables in, under or over the flowed tidelands of Nantucket Sound, as well as associated dredging for installation of the cables, will be subject to licensing under c. 91 and the Waterways Regulations. In its comment letter on the ENF, MassDEP, determined that the project appears to be a water-dependent industrial use pursuant to 310 CMR 9.12(2)(b)(10) because it is an infrastructure facility that will be used to deliver electricity to the public from an offshore facility located outside the Commonwealth.

The DEIR included a review of the project's consistency with the relevant standards of the Waterways Regulations. The project will not interfere with the public rights to access tidelands or navigate (310 CMR 9.35) because cable installation activities in Nantucket Sound will be in a limited area at any given time and navigation around safety zones determined in coordination with the U.S. Coast Guard (USCG). The project will employ a Marine Coordinator who will manage construction activities and serve as a liaison to port authorities, law enforcement agencies, port operators and the Massachusetts Steamship Authority and other ferry operators. The Proponent will distribute Notices to mariners to notify recreational and commercial vessels of project activities in offshore waters. As discussed below, the Proponent has developed a Fisheries Communication Plan that includes outreach to fishermen potential affected by construction activities. The cable will be sufficiently buried beneath the seafloor so it will not pose a hazard to navigation. The Proponent will be required to pay a Tidelands Occupation Fee as a condition of its c. 91 License. The fee is based on the area of permanent structures in tidelands and will be determined after construction is completed.

Marine Resources

The DEIR reviewed the distribution of vulnerable marine resources, including sessile organisms and life stages, and marine habitat conditions along the proposed offshore cable route, assessed the impacts of the cable and cable installation methods on commercial and recreational fishing activities,

¹² UGS fact sheet available at <https://pubs.usgs.gov/publication/fs20143067>.

and identified proposed mitigation measures. It provided an analysis of the project's impacts to commercial and recreational fishing activity, the predicted economic exposure to Massachusetts fishermen from the construction, operation, and decommissioning of the cables within the OECC in Massachusetts waters and proposed a financial mitigation package to compensate commercial fishing operators for lost revenue.

Marine Habitat

The Proponent has conducted geophysical and environmental surveys to characterize benthic conditions and populations of marine organisms in the OECC. According to the DEIR, most of the OECC includes low-complexity benthic habitat, with coarser substrates such as pebbles, cobbles and boulders, which provide important habitat for juveniles of some fish species, found primarily in Muskeget Channel. Biological surveys of the OECC included benthic grab samples collected in 2017 to 2020 and video transects conducted in 2020 which provided observations of infauna (organisms living in the sediment), epifauna (organisms attached to hard surfaces on the seafloor), fish and shellfish. According to the DEIR, the most common and abundant organisms detected in samples include sea urchins, anemones, crabs, sea stars, whelks, sea scallops, and a number of fish species. Based on sampling conducted by DMF, longfin squid is widespread in the OECC and whelk, and blue mussels are present but less common.

Potential impacts to habitat and marine organisms will be caused by installation of the cable using a plow; relocation of boulders within the route of the cable, anchoring of cable installation vessels; dredging of sand waves; the use of cable protection, if required; boulder relocation; vessel grounding and the use of jack-up vessels for cable splicing. In addition, suspended sediments from cable installation activities may temporarily displace mobile marine organisms, which would move away from sediment plumes, and benthic habitat and sessile organisms may be impacted by resettling of fine-grained sediment. As described below/above, the DEIR includes a Draft Benthic Habitat Monitoring Plan to evaluate post-construction conditions along the cable route and evaluate impacts caused by cable laying activities. According to the DEIR, the Proponent has not yet identified a TOY restriction for cable installation activities and will consult with regulatory agencies regarding relevant TOY restrictions to protect marine fisheries resources. According to DMF, the addition of hard cover to armor the cable where necessary will impact benthic habitat because it will replace the natural benthic sediment characteristics.

Commercial Fishing

The OMP identifies mapped areas of commercial and recreational fishing and navigation in Nantucket Sound that could be affected by the project. According to the DEIR, fishing vessels will not be precluded from operating in or transiting through the OECC during the construction of operation/maintenance (O&M) periods, except for temporary safety buffer zones of approximately 500 meters (1.2 square miles) that will be established around construction or maintenance vessels. According to the DEIR, a TOY restriction for commercial fishing may not be needed because during the 13.5-month cable installation period, as only the buffer zone around construction vessels will be restricted at any one time. However, DMF recommends that project non-HDD offshore cable installation should be avoided from April to June in high-effort squid fishing areas along the entire length of the OECC to minimize impacts to the commercial squid fishery. As detailed below, the FEIR should review the

feasibility of a TOY and identify potential alternative measures to minimize impacts to commercial fishing during the construction period.

The DEIR included an analysis of the predicted economic exposure of Massachusetts fishermen from the construction and operation of the OECC in Massachusetts waters. The Proponent prepared the analysis for both the NEW1C and NEW2C projects and presented it in the Construction and Operations Plan (COP) filed with BOEM. Using fishing revenue data prepared by the National Oceanographic and Atmospheric Administration (NOAA) National Marine Fisheries Service (NMFS; also known as NOAA Fisheries), the Proponent determined that annual fishing revenue along the OECC is estimated to be \$209,331 (\$2,505 per square kilometer). To determine economic exposure in the OECC during the cable construction period, the Proponent multiplied the annual fishing revenue per square kilometer (\$2,505) by the area in which fishing would be precluded by cable installation activity (1.2 miles or 3.14 square kilometers) by the duration of the construction period (13.5 months or 1.125 years). Based on this formula, the Proponent concluded that the economic exposure due to cable installation is approximately \$8,849. For a scenario in which the Western Muskeget Variant were used for two of the cables and the third cable installed within the OECC, economic exposure would be \$8,893. To account for seasonal variability in commercial fishing landings and revenue, the Proponent estimated economic exposure based on the monthly average fishing revenue per square kilometer from the nine months with highest revenue; calculated this way, economic exposure would be \$9,919. According to the DEIR, the actual economic impact of the project will be lower because fishing effort diverted from the OECC to other areas during cable installation would continue to generate at least some of the fishing revenues lost in the construction area and because gear loss will be minimized by burying the cables under the seafloor along most of the route. The analysis does not appear to account for indirect economic impacts to commercial fishermen; an updated economic exposure analysis which addresses upstream and downstream impacts should be included in the FEIR.

The DEIR included a Fisheries Communication Plan (FCP) which details procedures by which the Proponent will inform the commercial fishing industry of project activities. The FCP includes holding regularly scheduled meetings with fisheries representatives and other stakeholders; issuance of Notices to Mariners through the U.S. Coast Guard; alerting commercial and recreational vessels of the location and duration of project activities in real time using the WATERFRONT app; providing copies of electronic charts depicting areas of project activities; and updating the project website on a regular basis.

Rare Species

According to NHESP, onshore and offshore project components are proposed within areas of Priority Habitat and Estimated Habitat for state-listed rare species, including nesting habitat for Piping Plover and Least Tern at Dowses Beach and important migratory and foraging habitat for Roseate Tern, Common Tern and Least Tern in the offshore areas where the proposed transmission cables will be installed. In addition, a section of the Noticed Alternative onshore transmission cable route in Bumps River Road passes through mapped habitat for the Water Willow Stem Borer; according to NHESP, that portion of the work may be exempt from review in accordance with 321 CMR 10.14(10) because it is within an existing roadway.

To minimize direct impacts to rare species and habitat at Dowses Beach, all construction and staging activities will occur entirely within paved areas, where nesting does not take place, and HDD will be used to install the cables under nesting habitat on the dunes and beach. The DEIR included a draft Piping Plover and Least Tern Protection Plan (Protection Plan) which was developed by the Proponent based on Piping Plover Protection Plans approved by NHESP for the VWC and NEW1C projects. Key measures included in the Protection Plan are a TOY prohibiting construction activities at Dowses Beach during the May 1 – August 31 nesting season to ensure that birds are not deterred from nesting due to construction noise; a pre-construction mobilization survey of the beach and dune areas adjacent to the parking lot to determine whether any nesting birds are present; and implementation of a monitoring plan to monitor birds that may be present while work is occurring within the permitted timeframe (between September 1 and April 30).

According to NHESP, the review of the Vineyard Wind and New England Wind (Park City Wind and Commonwealth Wind) project conducted by the Bureau of Ocean Energy Management (BOEM) under the National Environmental Policy Act (NEPA) established that the construction and operation of offshore wind turbine generators (WTGs) will result in direct mortality of Common Tern. As described in the DEIR, the Proponent has committed to implement a conservation program (“Coastal Bird Conservation Program”) to research and address the impacts of offshore wind development on coastal waterbird populations. The program will include research, conservation, and habitat restoration measures for avian populations that nest, forage, or migrate through offshore wind project areas, but will not be limited to “the boundaries of any particular offshore wind development footprint.” Conservation measures should be developed that mitigate unavoidable mortality to avian species of concern, such as ongoing tern colony and plover monitoring and management, and the restoration and enhancement of critical nesting habitats. The Proponent should continue to coordinate with NHESP and other state agencies to develop the specifics of the conservation program including partners, funding, timing, and project locations. According to the DEIR, the Proponent will commit to the Coastal Bird Conservation Program in the upcoming 2023 Massachusetts solicitation for offshore wind. Additional information regarding the conservation program should be described in the FEIR. According to CZM, the development of the coastal waterbird conservation program will also be reviewed as part of its ongoing federal consistency review process.

Substation and Interconnection

The DEIR provided updated designs of the proposed substation and interconnection at the West Barnstable Substation. As noted above, the Proponent has acquired additional properties abutting the proposed substation site identified in the ENF and the site has increased from 15 acres to 29 acres; however, project activities will be limited to 4 of the 8 parcels comprising the site. According to the DEIR, construction of the substation will alter approximately 13.6 acres of land, including associated access road, stormwater management structures, site grading and demolition of existing structures, and will clear 13.3 acres of trees. The revised site design has minimized the amount of alteration needed by eliminating the need for retaining walls of significant height around the perimeter of the substation and the road providing access to the proposed stormwater basin in the northeastern part of the site.

The expanded site is not located within Zone I or Zone II Wellhead Protection Areas, but it is located over the Cape Cod Aquifer.¹³ According to the DEIR, the substation will be designed to minimize potential releases of any materials that could contaminate the aquifer. None of the proposed transmission cables will contain any fluid. The substation design includes accommodations to provide on-site containment of 110 percent of the dielectric fluid contained in substation components; additional containment capacity will be incorporated into the final design of the substation to capture any releases of fluid during an extreme precipitation event. The Proponent will develop and implement a construction-period Spill Prevention, Control and Countermeasures Plan (SPCC) to minimize the potential for a release of fuel or other contaminants that could impact water quality. The site will include a stormwater management system designed to meet the requirements of the Massachusetts Stormwater Management Standards (SMS), including Best Management Practices (BMP) such as deep sump catch basins, dry wells for infiltration of roof runoff, perforated drains to collect surface runoff, underground infiltration systems, and proprietary water quality units to remove TSS from stormwater prior to its discharge to the infiltration systems.

Article 97 and Conservation Land

The project will require easements for the use of two parcels of land subject to Article 97, including Dowses Beach landfall site and a parcel of land adjacent to the proposed substation. The Dowses Beach parcel is owned by the Town and includes the parking lot and surrounding land area, the causeway, and land north and south of the driveway west of the causeway. As described above, proposed structures and activities on the Dowses Beach parcel are associated with the landfall using HDD, the transition joint bays, and start of the onshore cable route. The parcel adjacent to the proposed substation, known as the Kuhn Property, is owned by the Town and managed by the Conservation Commission. It is wooded and is crossed by a dirt road providing access between Oak Street and DCR's fire tower located south of the proposed substation site. According to the DEIR, all project components on these parcels will be buried, except for the ground-level manhole covers over the three transition joint bays in the Dowses Beach parking lot, and will have no permanent impacts on the use of the parcels upon completion of construction. DCR holds non-exclusive access rights over the access road on the Kuhn property. According to DCR, owners of the underlying parcels and their successors and assigns have the right to use the property for all purposes not inconsistent with DCR's rights. According to DCR, it is expected that the Proponent will seek written confirmation from DCR that the proposed use is not inconsistent with DCR's rights; the FEIR should provide the necessary information for DCR to make this determination.

A change in use or disposition of Article 97 land requires a 2/3 vote of the legislature and compliance with the Public Land Protection Act (PLPA; M.G.L. chapter 3 section 5A) and EEA Article 97 Policy. The DEIR reviewed how the project will comply with the procedures of the PLPA and the partially overlapping requirements of the EEA Article 97 Policy. The PLPA requires that proponents seeking to use land protected under Article provide public notification of the proposed use, an alternatives analysis, and identification and dedication of replacement land to Article 97 purposes (which may be waived or modified by the EEA Secretary under certain circumstances or provision of funding may be authorized in lieu of replacement land). The PLPA requires that the petition to file

¹³ Separate upgrades will be required of the Eversource West Barnstable Substation, which is undergoing separate review by the EFSB. A Notice of Project Change for EEA #16118 has also been filed with MEPA to disclose the impacts associated with the Eversource substation upgrade.

Article 97 legislation must include documentation of public notification; an alternatives analysis; a description of the replacement land (if not waived); a copy of the land appraisals, if necessary; a copy of the waiver or modification issued by the Secretary, if applicable; and, if applicable, a copy of the findings made by the EEA Secretary regarding funding in lieu of replacement land.

The EEA Article 97 Policy requires an analysis of the six criteria identified in the Article 97 Policy for determining when “exceptional circumstances” exist such that a disposition of Article 97 land may be appropriate:

- The Proponent of the disposition must conduct an analysis of alternatives, commensurate with the type and size of the proposed disposition, that achieve the purpose of the disposition without the use of Article 97 land, such as the use of other land available within the appropriate market area;
- The disposition of the subject parcel and its proposed use may not destroy or threaten a unique or significant resource (e.g., significant habitat, rare or unusual terrain, or areas of significant public recreation);
- Real estate of equal or greater value, and of significantly greater resource value is granted to the disposing agency;
- The minimum necessary area of Article 97 should be included in the disposition and the existing resources continue to be protected to the maximum extent possible;
- The disposition serves an Article 97 purpose or another public purpose without detracting from the mission, plans, policies and mandates of EEA and its appropriate department or division; and,
- The disposition is not contrary to the express wishes of the person(s) who donated or sold the parcel or interests to the Commonwealth.

According to the DEIR, the Proponent is providing public notice of the Article 97 land disposition through the MEPA process, through which an analysis of alternatives, described above, has been provided. The Proponent asserts that the alternatives analysis has demonstrated, as required by the PLPA, “that all options to avoid or minimize impacts on Article 97 disposition or change in use have been explored and no feasible or substantially equivalent exists” because the proposed route will minimize environmental impacts and interference with the public’s use of Article 97 land will be minimal due to the limited area and largely underground usage of project components. The project will not destroy or threaten unique or significant resources because it will be largely confined to previously disturbed areas and have no permanent impacts to surface conditions, and the disposition will be limited to the minimum area necessary for the proposed underground structures. According to the DEIR, the project will promote important public benefits by providing renewable energy to the electricity grid, which will reduce GHG emissions by replacing electricity produced by fossil fuels. The DEIR stated that the Proponent is unaware of any express wishes of the person(s) who donated or sold the lands to the Town which are contrary to the project. According to the DEIR, the Proponent has not identified replacement land and has not yet determined whether replacement land and/or finding will be offered in exchange for the land disposition. Prior to filing the FEIR, the Proponent should consult with the Land Division with EEA (at plpa@mass.gov) to discuss mitigation options and finalize mitigation commitments for the Article 97 dispositions required for the project. As the DEIR filing does not satisfy the notice requirements under the PLPA, the Proponent should also provide the required notification through the EEA Land Team, including by providing the alternatives analysis presented in the DEIR.

The Proponent should provide an update on this consultation in the FEIR and, if any waivers or modifications of the replacement land requirements are sought, provide justification for such waivers or modifications and any provisional approvals granted through the EEA Land Division.

Electric and Magnetic Fields (EMF)

The DEIR included an analysis of electric and magnetic fields (EMF) produced by the transmission cables and potential impacts on human health and marine life. According to the DEIR, EMFs associated with alternating current (AC) power transmission are at an extremely low frequency and are a low energy form of non-ionizing electromagnetic radiation which cannot break molecular bonds, damage cells, DNA or tissues, and incapable of heating cells and tissues. The DEIR asserted that burying cables is a form of mitigation because underground transmission cables do not produce an aboveground electric field due to shielding by duct banks and earth and cable conductors can be placed closer together underground than overhead, which increases the degree of self-cancellation of magnetic fields.

The analysis focused on the effects of magnetic fields because electric fields produced by the voltage on the transmission cables will be contained by the metallic sheathing and/or steel armoring of the cables; magnetic fields are not completely shielded by either metallic sheathing or steel armoring. According to the DEIR, the International Commission on Non-Ionizing Radiation Protection (ICNIRP) has established a guideline for allowable public exposure to magnetic fields of 2,000 milligauss (mG). The DEIR provided modeling results for magnetic fields along the HDD paths at the landfall site and at a height of 3.3 feet above the ground level where cable conduits are buried under streets or within underground vaults. The maximum magnetic field was modeled as 253.6 mG directly above cables within the splice vaults; however, the magnetic field decreases to 121.9 mG at a lateral distance of 10 feet from the vault and to 29.1 mG at a lateral distance of 25 feet.

According to the DEIR, there are no regulatory standards for allowable EMF levels from high voltage alternating current (HVAC) or high voltage or direct current (HVDC) transmission cables in marine environments. The DEIR asserted that the 60 Hz AC EMF values are at frequencies higher than the 10 Hz electric field frequencies to which electrosensitive marine species such as sharks and rays respond. The DEIR cited a study of the effect of EMF on fish conducted at the Block Island Wind Farm and an analysis prepared by the U.S. Department of Energy, both of which concluded that there was no evidence of negative effects on marine life associated with EMFs from AC submarine cables.

Cultural Resources

According to the DEIR, a Marine Archaeological Resources Assessment (MARA) of the State waters portion of the NEW2 OECC was completed utilizing high-resolution geophysical and geotechnical survey data acquired by the Proponent within the OECC. Research conducted as part of the MARA included a review of historical documents, previous research reports, state inventory files, shipwreck inventories, secondary sources, and historical map analysis, utilizing materials from a variety of sources, including BUAR's archives. The purpose of the MARA is to identify submerged cultural resources or potential submerged cultural resources that may be affected by project activities.

According to the DEIR, marine archaeological resources in the survey area include two shipwrecks in the Western Muskeget Variant route, and preserved submerged ancient landforms (SALs), such as ancient stream channels, lakes, ponds, and estuarine landscape features, that have the potential to contain archaeological materials. The SALs have been identified within a small percentage of the OECC within State waters that are scattered throughout the OECC and it may not be possible to avoid all of these features; however, the shipwrecks will be avoided with the implementation of avoidance buffers, if any cables are installed within the Western Muskeget Variant route. The DEIR indicated that no pre-Contact Native American materials have been recovered. As recommended by the Board of Underwater Archaeological Resources (BUAR), the FEIR should clarify the level of investigation that has been conducted to identify pre-Contact Native American materials and document how pre-Contact period underwater archaeological sites might be identified or how their potential presence will be addressed. The FEIR should confirm the scope of the investigation, provide a plan for ongoing consultation with BUAR and provide the additional information requested by BUAR in CZM's comment letter.

According to the DEIR, no archaeological sites listed or eligible for listing in the State and/or National Registers of Historic Places are located in areas where project activities are proposed. Because the cable will be installed within previously-disturbed roadways, it is unlikely that unrecorded, intact archaeological deposits will be encountered below or immediately adjacent to the onshore transmission cable routes. However, both the Preferred Route and Noticed Alternative Route pass through areas and adjacent to sites listed in the National Register of Historic Places. According to the DEIR, no sites will be disturbed, impacts through these areas will be temporary and project components will have no impact on archaeological resources.

Climate Change

Adaptation and Resiliency

The DEIR included updated output reports from the MA Climate Resilience Design Standards Tool prepared by the Resilient Massachusetts Action Team (RMAT) (the "MA Resilience Design Tool"),¹⁴ to assess the climate risks of the project components, including the landfall, preferred onshore cable route, proposed substation and interconnection, and the Noticed Alternative Route. All project components were evaluated based on the 30-year useful life of the project and the Proponent's assessment of their criticality.

The output reports provide the following results based on the location of each component:

- Project components at the landfall location at Dowses Beach have "High" exposure ratings for sea level rise/storm surge, urban flooding due to extreme precipitation, and extreme heat.
- The Preferred Route for the onshore transmission cables has "High" exposure ratings for sea level rise/storm surge, urban flooding due to extreme precipitation, and extreme heat and "Moderate" exposure ratings for riverine flooding due to extreme precipitation.
- The proposed substation and grid interconnection have "High" exposure ratings for urban flooding due to extreme precipitation and for extreme heat.

¹⁴ www.resilientma.org/rmat_home/designstandards

- The Noticed Alternative Route has “High” exposure ratings for sea level rise/storm surge, urban flooding and riverine flooding due to extreme precipitation, and extreme heat.

For all structures, the Tool recommends a planning horizon of 2050 and planning for the 90th percentile with respect to extreme heat (which indicates an increase in extremely hot days as compared to a historical baseline). For the landfall, Preferred Alternative cable route and Notice Alternative route, the Tool recommends a return period associated with a 25-year (4% chance) storm event (24-hour precipitation depth of 7.3 inches and a return period associated with a 100-year (1% chance) storm event when designing the project for sea level rise/storm surge; the projected wave action water elevation for the design storms ranged from 15.8 and 15.9 ft NAVD 88 for the onshore cable routes and 17 ft NAVD 88 for the landfall. For the substation and interconnection, the Tool recommends a return period associated with a 50-year (2% chance) storm event (24-hour precipitation depth of 8.2 inches) when designing the project for urban and/or riverine flooding due to extreme precipitation.

The DEIR included an analysis of coastal erosion under modeled storm events in 2030, 2050, and 2070, which did not rely on CZM’s Shoreline Change maps. For each of the future years evaluated, the analysis modeled storm flow, wave propagation, sediment transport and the change in topography and bathymetry at Dowses Beach for the 50-year, 100-year and 200-year storm events and a scenario where a 50-year storm is followed by a 100-year storm event. The model incorporated topography and bathymetry based on LIDAR data, site-specific sediment characteristics, and future sea levels and storm conditions projected by the Massachusetts Coast Flood Risk Model (MC-FRM). The model estimated erosion at three transects across Dowses Beach coinciding with the locations of the three proposed transition joint bays and a transect running through the parking lot and across the causeway. For the modeled years 2050 and 2070, the back-to-back storm scenario was shown to cause the most significant erosion at Dowses Beach. The FEIR should clarify the level of erosion at specific locations in the modeled scenarios, and identify which scenarios will be used to design project components at Dowses Beach.

The coastal erosion analysis identified erosion of up to 3-4 ft would occur in the parking lot at Dowses Beach and almost 9 ft of erosion along parts of the causeway under modeled 2050 conditions. The transition joint bays in the parking lot were originally designed so that the top of the joint bays would be buried two feet below the parking lot surface. The coastal erosion analysis determined that the area where the two northern transition joint bays will be located may erode by up to one foot; these two joint bays will not be exposed by erosion, but they will be designed to accommodate the hydraulic pressure from flooding under the modeled conditions. The modeling indicated that 3.6 ft to 8.9 ft of erosion may occur at the southern end of the parking lot and at the eastern end of the causeway. Duct banks installed within the parking lot north of the southernmost transition joint bay will be buried 3.5 ft below the surface, which is deep enough to avoid exposure of the structures under the modeled storm event; however, the southernmost transition joint bay would be subject to approximately 3.6 ft of erosion. In the supplemental information submitted after the DEIR was filed, the Proponent committed to lowering the proposed southernmost transition joint bay by an additional 2 ft so that it is buried 4 ft below the ground surface.

According to the DEIR, the storm modeling also indicated that up to 8.9 feet of erosion could occur at the eastern end of the causeway, where the proposed conduit crossing the causeway is proposed. The duct bank in its 3 by 4 configuration (3 conduits wide by 4 conduits high) is designed to be buried 7

ft below the ground surface in the eastern and western parts of the causeway where erosion is modeled to be less than 7 ft, and are therefore expected to remain buried after most projected storm events. The conduit will transition from the 3 by 4 configuration to a 12 by 1 configuration so that it can span the causeway between the existing culvert and the road surface. The supplemental information provided by the Proponent included a revised design of the 12 by 1 conduit which included a structural concrete slab and buried steel sheet piles on the sides of the duct bank to provide additional stabilization during the most severe storm events that could cause greater than 7 ft of erosion and exert high wave forces.

According to CZM, the coastal erosion model was not calibrated for the site and was based on caveats that indicate there is a level of uncertainty associated with the predicted erosion rates. The FEIR should include a revised analysis that quantifies uncertainty and, if necessary, provides an updated design of proposed structures based on revised estimates of erosion. The FEIR should include a revised design memo that addresses erosion at Dowses Beach under 2070 conditions and identifies resiliency design features. As noted above, the FEIR should include an analysis of any potential impacts to adjacent resource areas associated with the proposed design of the conduit across the causeway. The FEIR should review alternative microtunnel designs to install the duct bank across the causeway and assess the resiliency of the alternative designs compared to the duct bank crossing proposed in the DEIR. The FEIR should evaluate whether a reduction in the number of cable crossings across the causeway could be contemplated, for instance, by placing more cables at the NEW1C landfall location or by switching the landfall locations of the NEW1C and NEW2C projects, and whether this would facilitate a more resilient design.

Greenhouse Gas (GHG) Emissions

The project will generate electricity from renewable sources that will avoid emissions of 2.35 million tpy of CO_{2e}, or 70.36 million tons of CO_{2e} over the project's operating period. The project reviewed potential GHG emissions from the use of sulfur hexafluoride (SF₆) as an insulating agent in the substation equipment. According to the DEIR, the substation equipment will be designed to be gas-tight and sealed for the life of the equipment. The Proponent will use substation equipment manufactured to have a maximum SF₆ leakage rate of no more than 0.5%, maintain the facility using pressure monitoring and other measures to minimize leakage, and properly contain and disposed of SF₆ gas contain in any equipment to be replaced.

SCOPE

General

The FEIR should follow Section 11.07 of the MEPA regulations for outline and content, in addition to providing the information included in this Scope. The Scope should be understood and responded to in the context of the analysis of the DEIR above. The FEIR should clearly demonstrate that the Proponent has sought to avoid, minimize and mitigate Damage to the Environment to the maximum extent feasible. The FEIR should identify measures the Proponent will adopt to further reduce the impacts of the project since the filing of the DEIR, or, if certain measures are infeasible, the FEIR should discuss why these measures will not be adopted.

The FEIR should address, in a detailed and comprehensive manner, issues raised in comment letters submitted by CZM, MassDEP, NHESP and DMF, which are incorporated by reference herein. In general, information and analyses provided in response to these comment letters should be incorporated into the main body of the FEIR and not provided solely in the Response to Comments section of the FEIR. The Proponent should consult with CZM, DMF, NHESP and MassDEP for detailed guidance on the information and analyses that should be provided in the FEIR.

Project Description and Permitting

The FEIR should describe any changes to the project since the filing of the DEIR. It should include updated site plans for existing and proposed conditions. Conceptual plans should be provided at a legible scale and clearly identify all major project components, wetland resource areas, rare species habitat, tidelands, Article 97 land and information required in the OMP and the Scope below. The FEIR should include plans and a detailed description of existing conditions and updated site plans for existing and post-development conditions at a legible scale. The FEIR should provide plans detailing conditions within the OECC and expanded OECC; offshore and onshore cable routes; detailed description of offshore and onshore cable installation methods and associated impacts and proposed mitigation measures; design of the substation and interconnection to the transmission system; and stormwater management measures. The FEIR should include a table showing updated area estimates of all impacts.

I note the concerns of the Town of Barnstable regarding impacts to public access at Dowses Beach, structures within water supply protection areas and impacts to residents from construction of the onshore cable. As noted above, the Town has suspended negotiations with the Proponent on the HCA. The FEIR should report on the status of the HCA and describe any changes to the project or mitigation measures associated with any agreements with the Town. The FEIR should also review the concerns expressed in the Town's comment letter regarding construction impacts, potential constraints under roadways should they be occupied by the proposed cable conduit, and challenges in coordinating project construction with the Town's phasing of its sewer extension projects. I encourage the Proponent to file the FEIR after negotiations with the Town have resumed so that the FEIR reflects all proposed mitigation measures to be adopted by the project.

The FEIR should include a list of all state, federal and local approvals required, review relevant requirements and provide an update on the status of review and permitting processes. It should include a discussion of the project's consistency with those standards. Pursuant to the Coastal Zone Management Act (CZMA), CZM's federal consistency authority extends to activities that have reasonably foreseeable effects on any coastal use or resources resulting from a federal agency activity or federal license or permit activity. Renewable energy leases and related authorizations by BOEM are listed federal actions of the state's approved Coastal Management Program. CZM's federal consistency review will be completed through the federal BOEM renewable energy program and National Environmental Policy Act (NEPA) filings; however, as requested by CZM, the FEIR should describe activities in federal waters to the extent practicable as well as potential effects on state resources and uses to allow for a more complete assessment of the entire project through this MEPA process; this information was required to be provided in the DEIR and should now be included in the FEIR. It should include a description of existing conditions and plans for existing and post-development conditions for all project elements, including the WTGs, ESPs, submarine cable, onshore cable, HDD, and land-based facilities. It should clearly describe selected methods of cable installation and the route segments where each method

will be used. The FEIR should include a project schedule, describe construction sequencing and describe project phasing.

The FEIR should provide a comprehensive response to comments on the DEIR that specifically addresses each issue raised in the comment letter; references to other responses, or to a chapter or section of the FEIR, alone are not adequate and should only be used, with reference to specific page numbers, to support a direct response. The FEIR should include a Draft Section 61 Findings and Mitigation chapter that provides a detailed and comprehensive list of all mitigation measures, including construction-period mitigation and decommissioning, identified in the DEIR and FEIR. In its comment letter, the Town expressed its preference for decommissioning to include removal, rather than abandonment, of duct banks under Town streets; the FEIR should review potential short-term and long-term impacts associated with abandonment or removal of duct banks and all other structures, including the proposed substation.

Alternatives Analysis

The FEIR should include an evaluation of the feasibility of switching the NEW1C and NEW2C landfall sites so that the two NEW1C cables make landfall at Dowses Beach and the three NEW2C cables make landfall at Craigville Beach. The larger size of Craigville Beach and its parking lot would appear to be better suited to accommodating the three cables proposed for the NEW2C project. In addition, the onshore route leading north from Craigville Beach appears to be less congested than the onshore route between Dowses Beach and the proposed substation. The analysis of feasibility should not be limited to the difficulties involved in redesigning both projects and should provide a full analysis of the impacts of each alternative. The FEIR should evaluate the impacts, such as the length of closure, if any, of Dowses Beach and impacts to wetland resource areas, of a microtunnel under the causeway at Dowses Beach involving only two cables compared to the impacts of the three-cable crossing proposed in the DEIR. As a cable conduit installed at Dowses Beach using a microtunnel would appear to minimize erosion and other impacts under projected future storm conditions, the FEIR should analyze whether a two-cable landing at Dowses Beach is more feasible than the three-cable landing proposed in the DEIR.

Environmental Justice

The Proponent should continue targeted efforts to engage residents and community groups in EJ populations. The FEIR should report on the Proponent's public engagement efforts since the DEIR was filed. It should review potential mitigation measures to minimize operational impacts of port facilities on EJ populations. The FEIR should estimate the percentage of vessel traffic that will make use of the other port facilities listed above, and indicate how anticipated vessel volumes compare to the numbers provided in the filings for the Salem Wind Port project (EEA #16618). To the extent vessel traffic associated with this project will be comparable to or exceed the numbers presented in EEA #16618 at locations other than Salem, the Proponent should consider mitigation measures in consultation with the port facility operator.

Ocean Management Plan

The FEIR confirm the location of eelgrass offshore of Dowses Beach and describe how impacts to eelgrass will be avoided. The FEIR Should include estimates of all areas of disturbance associated

with direct trenching, berms, and sediment drape due to boulder relocation, sediment fluidization, instrument skids, sand wave dredging, anchor setting for construction vessels, and the placement of long-term cable protection that could factor into the determination of the amount of the ocean development fee. However, as noted by CZM, based on the information currently provided, the analysis of impacts, and considering the public benefits associated with the NEW2C project, the calculation of the base fee and additional impact fee rates proposed in the DEIR appear appropriate at this time. The FEIR should provide an updated list of the project's public benefits, including any additional benefits the Proponent has agreed to provide to the Town.

Wetlands and Water Quality

The FEIR should include an updated delineation of wetland resource areas at Dowses Beach which shows the extent of the coastal dune. It should provide a plan showing the proposed conduit crossing of the causeway with adjacent wetland resource areas, including Salt Marsh, and show any areas that may be impacted during the construction period or by any reflected waves or erosion caused by the conduit structure. The FEIR should review alternatives to the proposed conduit that minimize potential impacts to wetland resource areas, including a microtunnel or other trenchless techniques, and bury structures sufficiently so that they remain buried under modeled levels of erosion in projected storm events. It should evaluate alternative locations for microtunnel shafts and staging areas that would minimize or avoid closure of Dowses Beach to the public. The FEIR should evaluate any differences in the feasibility of the alternatives under a scenario where only two cables are landed at Dowses Beach. The FEIR should include an HDD Contingency Plan which identifies methods for monitoring HDD operations to detect releases of drilling fluid, minimize the volume of drilling fluid released, and restore any impacted areas. The FEIR should review how the cable installation using HDD will meet the performance standards in the WQC and Wetlands regulations.

The FEIR should include a revised BHMP that proposes monitoring of both the NEW1C and NEW2C cables separately to account for differences in benthic conditions along the routes, and factors which may affect the installation of the cables, such as methods employed by contractors and weather conditions. It should review impacts on benthic habitat associated with relocation of boulders within the path of the offshore transmission cables. The Proponent should incorporate the recommended changes in statistical design and sampling recommended by CZM and DMF into the BHMP, such as a WOE evaluation framework, or explain why the recommended changes are not feasible. The Proponent should consult with CZM, DMF and MassDEP regarding the BHMP prior to filing the FEIR.

The FEIR should include a plan for geophysical surveys of the three export cables immediately after construction to document and ensure cable location and burial depth. The surveys should include bathymetric analyses that depict the change in seafloor height after construction as compared to preconstruction. The as-built surveys should serve as the basis of discussions with State agencies on mitigating any impacts on depth and near-term changes in seafloor topography. To assist in the MassDEP Chapter 91 licensing, the Proponent should describe a plan in the FEIR to assess and ensure cable burial depth at regular intervals and after significant storm events so that other water-dependent uses are not threatened or impeded by any exposed cable segment. As requested by CZM, the FEIR should include a descriptions and maps of high-risk areas for anchor strikes that will be used to determine the need for placement of post-construction cable protection.

In its comment letter, the Town requested that no proposed structures be located within a Zone I water supply protection area. The Proponent should consult with MassDEP Drinking Water Program staff in the Southeast Regional Office to discuss any requirements or information needed relative to placement of the cable in roadways passing through Zone I areas. The FEIR should include any information and analyses requested by MassDEP, review requirements for permitting structures within a Zone I, and identify mitigation measures to minimize potential impacts to public water supplies.

Rare Species and Marine Fisheries

The FEIR should address comments provided by CZM and DMF regarding measures to avoid or minimize interference with commercial fishing activity, compensate fishermen for lost revenue and fishing gear and revisions to the Fisheries Communication Plan. The FEIR should review the feasibility of implementing a TOY from April to June in areas of high effort squid fishing or, if a TOY cannot be fully adhered to, identify measures it will take to minimize conflict between cable installation and fishing during this period, including close coordination of activities with fishermen.

The FEIR should provide an updated fisheries economic exposure analysis which includes appropriate multipliers for downstream and upstream impacts. The Proponent should consult with CZM and DMF prior to filing the FEIR to discuss the scope of the analysis. The FEIR should describe a protocol for compensating fishermen for lost gear resulting from entanglement with cable protection. As recommended by CZM and DMF, the FEIR should review describe how areas where cable protection was placed can be mapped and their locations provided to commercial fishermen.

The FEIR should confirm the Proponent's intention to implement a Coastal Bird Conservation Program and that a commitment to do so was included in the response to the 2023 solicitation for offshore wind. It should provide an updated description and additional details of the measures included in the Coastal Bird Conservation Program and a plan for its implementation. I encourage the Proponent to consult with CZM and NHESP prior to filing the FEIR.

Article 97 and Conservation Land

The FEIR should confirm the area of easements required at Dowses Beach and the Kuhn Property and describe use of the areas during construction and future maintenance and operation of the project. Prior to filing the FEIR, the Proponent should consult with the EEA Land Team regarding proper notification of the proposed land transfers required by the PLPA and to identify mitigation for the use of Article 97-protected open space. The FEIR should identify any modifications or waivers of the PLPA land replacement requirements sought by the Proponent and provide a rationale for why they are necessary. The FEIR should provide additional information on the Project's use of the fire tower access road an analysis of its consistency with DCR's rights to use the road.

Cultural Resources

The FEIR should provide the information requested by BUAR in its comment letter, including an update on the marine archaeological survey permitting, confirmation of the scope of the investigations, and procedures for mitigating unavoidable impacts to marine archaeological resources. It should provide an update on the results of any consultation with MHC.

Climate Change

The FEIR should provide an updated analysis of the design of proposed structures at Dowses Beach under 2050 and 2070 conditions. As recommended by CZM, the analysis should include a calculation of the uncertainty associated with the erosion estimates. Based on the updated erosion analysis, the FEIR should review any additional changes that may be needed to the design of proposed structures at Dowses Beach or explain why the Proponent believes that none are needed. The FEIR should include a comparison of the resiliency of alternative microtunnel options required above and the proposed duct bank crossing of the causeway, and evaluate the alternatives for a two cable (NEW1C) option. The FEIR should describe any disruptions to recreational access that may be presented by any of the options studied.

Mitigation and Draft Section 61 Findings

The FEIR should provide a separate chapter summarizing proposed mitigation measures including draft Section 61 Findings for each anticipated State Agency Action and mitigation measures related to construction roadways and recreational areas requested by the Town. It should contain clear commitments to implement these mitigation measures, estimate the individual costs of each proposed measure, identify the parties responsible for implementation, and include a schedule for implementation. As noted above, this chapter should provide a comprehensive and detailed list of all proposed mitigation measures.

Response to Comments

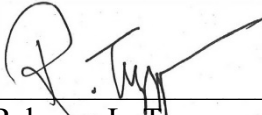
The FEIR should contain a copy of this Certificate and a copy of each comment letter received. To ensure that the issues raised by commenters are addressed, the DEIR should include direct responses to comments to the extent that they are within MEPA jurisdiction. This directive is not intended to, and shall not be construed to, enlarge the scope of the DEIR beyond what has been expressly identified in this Certificate. The Proponent may use either an indexed response to comments format, or a direct narrative response.

Circulation

The Proponent should circulate the FEIR to those parties who commented on the ENF and/or DEIR, to any State and municipal agencies from which the Proponent will seek permits or approvals, and to any parties specified in section 11.16 of the MEPA regulations. The Proponent may circulate copies of the FEIR to commenters in a digital format (e.g., CD-ROM, USB drive) or post to an online website. However, the Proponent should make available a reasonable number of hard copies to accommodate those without convenient access to a computer to be distributed upon request on a first-come, first-served basis. The Proponent should send correspondence accompanying the digital copy or identifying the web address of the online version of the DEIR indicating that hard copies are available upon request, noting relevant comment deadlines, and appropriate addresses for submission of comments. The FEIR submitted to the MEPA office should include a digital copy of the complete document. A copy of the FEIR should be made available for review in the Barnstable, Osterville, Edgartown, Mashpee and Nantucket public libraries.

October 10, 2023

Date



Rebecca L. Tepper

Comments received:

08/14/2023 Maria and Greg Gerdy
 08/25/2023 New Bedford Port Authority
 08/29/2023 Steve Waller
 08/30/2023 Association to Preserve Cape Cod
 08/31/2023 Maria and Greg Gerdy (2)
 09/05/2023 Maria and Greg Gerdy
 09/09/2023 Maria and Greg Gerdy
 09/26/2023 Maria and Greg Gerdy
 09/26/2023 Michael Jacobs
 09/26/2023 Roberta Elizabeth Mauch
 09/28/2023 Cape Cod Technology Council
 09/28/2023 Joseph J. Conway and Patricia A. Conway
 09/28/2023 Maria and Greg Gerdy
 09/28/2023 Susanne Conley, Save Greater Dowses Beach
 09/29/2023 Division of Marine Fisheries (DMF)
 09/29/2023 Natural Heritage and Endangered Species Program (NHESP)
 09/30/2023 Jane E. Hattemer-Stringer
 10/01/2023 Maria and Greg Gerdy (2)
 10/02/2023 Barnstable Clean Water Action
 10/03/2023 Cape Cod Climate Change Collaborative
 10/03/2023 Cape Cod Commission
 10/03/2023 Claire O'Connor
 10/03/2023 Massachusetts Office of Coastal Zone Management (CZM)
 10/03/2023 Department of Conservation and Recreation (DCR)
 10/03/2023 Massachusetts Department of Environmental Protection (MassDEP)/Southeast
 Regional Office (SERO)
 10/03/2023 Senator Julian Cyr, Cape and Islands District
 Senator Su Moran, Plymouth and Barnstable District
 Representative Sarah Peake, 4th Barnstable District
 Representative Kip Diggs, 2nd Barnstable District
 Representative David Vieira, 3rd Barnstable District
 Representative Dylan Fernandes, Barnstable, Dukes and Nantucket District
 Representative Chris Flanagan, 1st Barnstable District
 10/03/2023 Maureen E. Murphy
 10/03/2023 Town of Barnstable

10/03/2023 William MacLean

10/06/2023 Maria and Greg Gerdy

RLT/AJS/ajs

To: Mr. Alexander Strysky
MEPA
Fr: Maria and Greg Gerdy
14 August 2023

Re: New England Wind 2 Connector, DEIR, EEA #16611 - Public Comment 01

Intro: We strongly support renewable energy, done in a clean, green and environmentally responsible way.

Part I. Summary of Actions Requested:

We request that the developer address the following concerns. The request details are in Part II.

1) Zoning and the West Barnstable Substation: The DEIR must include a Fire/Explosion Emergency Response Plan, including a Worst Case Scenario.

2) EPA Sole Source Aquifer review for the Town of Barnstable: The DEIR must incorporate an EPA Sole Source Aquifer Review - that will serve as a baseline.

3) Horizontal Directional Drilling (HDD): The DEIR must include a Risk Management Plan and a Risk Response Plan for HDD, including a Worst Case Scenario.

The DEIR must include an Abandonment Management and Response Plan, including a Worst Case Scenario.

The DEIR must elaborate on Decommissioning, including a Worst Case Scenario.

The DEIR must address the serious public interest and environmental concern that HDD is not subject to regulatory oversight in the Commonwealth of Massachusetts.

4) Transmission: The DEIR must elaborate on and clarify the “environmental grounds” for rejecting Shared Transmission.

The DEIR must reconsider the Canal Substation transmission alternative.

5) No Build Alternative: The DEIR must provide information on the environmental benefits and advantages of the “No Build” alternative.

Background: Commonwealth Wind / New England Wind 2 Connector is a hypothetical project. It does not have money to fund the project and the foreign-owned developer defaulted on their contract, paying a modest \$48.9 million fine to the utilities to get out of the contract. The Rhode Island Siting Board officials paused SouthCoast Wind for lack of financial funding for the project, stating that wasting valuable public officials’ time and limited public resources on a hypothetical project was irresponsible. Unlike Rhode Island officials, the Town of Barnstable officials continue to cling to the hypothetical Commonwealth Wind (CW) project, as though everything is still normally proceeding as planned. Rescinding the host agreement, facing reality and cutting the town’s losses, while seriously considering other more environmentally-friendly and cheaper renewable sources of energy is the logical and responsible approach.

In January 2023, the Edgartown Conservation Commission **denied** the developer’s request for an electrical cable landing for Park City Wind (PCW) citing the developer’s lack of transparency. The developer sued the Edgartown Conservation Commission. PCW will be developed along with CW as it is reported that this is the most financially feasible for the developer. PCW is also

a hypothetical project. It does not have any money for the project and there is no publicly reported contract with Connecticut. The developer continues with permitting for both CW and PCW despite both being hypothetical projects. There is no guarantee that the developer will win the two projects during the rebidding process in 2024.

The Town of Barnstable officials very quickly signed the Commonwealth Wind Host Agreement without a formal and official public comment period: there was no online public announcement in the Town of Barnstable website. Nor were there any public announcements, notices, bulletins, flyers, etc. set up around town or in public venues such as the Osterville Village Library to let the citizens know about the project. There were no postal mailings - seeking public comment on the project - mailed to the citizens.

Part II.

1. Zoning and the West Barnstable Substation

A) We request that a **Fire/Explosion Emergency Response Plan**, with a Worst Case Scenario, be included and discussed in the DEIR. In case of an industrial-size substation explosion and/or fire, what is the emergency response? Will there be warning sirens and/or phone alerts to notify the nearby residents? Who will be responsible for responding to this explosion and/or fire emergency? Does the developer take financial responsibility and contract for the appropriate emergency personnel/equipment? Or is the emergency responsibility fully and only borne by the Town of Barnstable? Is the Town of Barnstable Fire Department fully manned and properly equipped to handle a massive substation fire that can cause grave environmental damage and public safety dangers to the numerous nearby homes in West Barnstable? Is the Town of Barnstable ready to dispatch emergency personnel with proper equipment should a large substation explosion occur?

Substation explosions and/or fires can be difficult to control so a fully delineated Fire/Explosion Emergency Response and Rescue Plan must be part of the DEIR. This necessary Plan will protect lives and contain the unimaginable damage to the West Barnstable environment. Should severe transformer oil leaks contaminate the ecologically-fragile Aquifer Protected Overlay District upon which the industrial-size substation will be built, the Commonwealth Wind LLC must be required to finance an escrow account (say \$250 million) set aside for environmental cleanup. The escrow account held in trust is a fair requirement given the irreplaceable natural resources being destroyed and sacrificed in exchange for siting a gargantuan substation in such an environmentally-sensitive location within a zoned residential neighborhood. This financial arrangement protects the Barnstable citizens from shouldering the heavy environmental cleanup costs of a substation that they firmly oppose in their neighborhood.

The adverse environmental impacts of situating an industrial-size substation custom-built only for the CW/NE 2 Connector project are numerous. West Barnstable is described in the Town of Barnstable Local Comprehensive Plan as follows: “This district is meant to retain a **small-scale** mixed-use **village** character, with single-family homes, **small-scale** retail, and offices.” The West Barnstable residents have a reasonable expectation that when they invested their hard-earned life savings to buy a house in a zoned residential neighborhood, that the Town of

Barnstable officials would honor, respect and adhere to the Town's codified zoning regulations. Instead, the Town officials have arbitrarily decided, with very little public comment, input and support, to lift zoning requirements for the project. Much strong opposition to the project exists to this day.

The Town officials have accepted the developer's request for a "Comprehensive Zoning Exemption from the Massachusetts Department of Public Utilities (DPU)...for the entirety of the Project including the onshore export cable and the substation." To add insult to injury, the Town officials have agreed to publicly support this outrageous request. It is incomprehensible to the Barnstable citizens that the Town officials agreed to waive the Town's zoning regulations and with that waiver, the Town's power of proper zoning oversight of the project. The fox is in charge of the henhouse.

Here are some adverse environmental concerns:

The chosen Shootflying Hill Rd location for the huge industrial-size substation is within the West Barnstable **zoned residential district**, with nearby homes of many families with young children as well as the elderly. It is located in an ecologically-sensitive **aquifer overlay protected district** that can be seriously contaminated by substation transformer oil leaks and pose a grave water pollution threat. The threat of emissions of **greenhouse gases** (SF6 is the most toxic and transformers are prone to leaking) from the substation would result in a hazardous public health and safety environment, hastening climate change. All types of egregious industrial pollution - air, water, noise and light - would be introduced to a zoned residential neighborhood.

The Environment plays a large role in mental health, a public concern that affects more and more people, including the Barnstable citizens. Careful consideration of the **adverse mental health impacts** to the nearby residents living next door to an industrial-size substation is relevant. The unhealthy and unsafe human environment to be created by the substation should be reason enough to stop the substation construction and keep it well away from West Barnstable. Home is an oasis; a chosen environment to relax, regroup and recharge from life's stresses. The substation's overpowering and unhealthy presence would make this a near impossibility for the nearby residents. Renewable energy is important but more so is the importance of the human quality of life, to live in a safe environment.

Locating the substation well AWAY from West Barnstable's children, elderly and homeowners is the right environmental thing to do.

The Shootflying Hill Rd location is formally identified as a "Potential Public Water Supply Area" for the stressed-out Sole Source Aquifer and the threat of water contamination from the substation must be seriously considered. Acres of forested land filled with hundreds of mature trees will be clear cut to make way for the unnecessary substation, further increasing the **deforestation** of our Town of Barnstable and hastening the impacts of climate change. Mature trees growing along the miles-long electrical cable route from Dowses Beach, passing Osterville residential neighborhoods, to West Barnstable will be cut down if the trees and bushes are in the way.

There will be a public safety issue because eighty (80) foot tall lightning protection masts/rods will be installed at the substation. How many of these lightning rods will be installed? These tall lightning rods will serve as **fire safety obstacles** to unobstructed fire detection at the nearby West Barnstable Fire Observation Tower. The extremely tall lightning rods will cast shadows, cause light-and-dark distortions, visually altering and/or obstructing the necessary 360 degree view from the Fire Observation Tower. The presence of fog will compound the lightning rods' visual distortions. All in all, the project's major adverse impacts - environmental, quality-of-life, public health and safety, economic - are staggering.

2. EPA Sole Source Aquifer review for the Town of Barnstable

We have to remember that without safe drinking water, Cape Cod will become essentially uninhabitable. The serious environmental threat to the Cape Cod Sole Source Aquifer is a central concern in this project.

We request that an EPA review of the Sole Source Aquifer for the Town of Barnstable be conducted. We would like the help of MassDEP and / or MEPA with this request. The results and findings of the new EPA Sole Source Aquifer review must be used as a baseline and be an integral part of the DEIR. The EPA has never done a Sole Source Aquifer review for the Town of Barnstable, to our knowledge.

Given that generous federal subsidies to the developer are involved, this meets the federal requirement that the project must be federally funded to qualify for a Sole Source Aquifer review by the EPA. And that should the project be inconsistent with the EPA findings, federal funding will be withheld from the project.

3. Horizontal Directional Drilling (HDD)

A) We request that the DEIR have a Risk Management Plan and a Risk Response Plan for HDD, with a Worst Case Scenario. Risk identification, "as an initial step of risk management, is to understand what is at risk within the context of the project's objectives and to generate a **comprehensive inventory of risks** based on the threats and events that might prevent, degrade, delay or enhance the achievement of the objectives. Included should be "different risk identification methods used to identify and investigate four risk categories of **drilling fluid, soil, equipment and pipe.**" There should be a comprehensive checklist of a "response strategy plan" that will help the project manager/s "avoid any failure during pipeline construction by HDD method." Importantly, the identified risks need to be "analyzed and evaluated to develop" a Risk Response Plan.

The DEIR must further elaborate on the HDD method and how HDD will be used in ecologically fragile Dowses Beach. The DEIR's Attachment M for HDD and Aquifer Memo narrowly focused on whether the "sediments underlying Dowses Beach" were a "contributing part" of the Cape Cod Aquifer. The analysis missed the point.

The greatest environmental concern that must be addressed is the real threat of contamination of the Sole Source Aquifer by invasive HDD method. Using problem-prone HDD for the landing of

three (3) huge EMF-emitting electrical cables proposed for Dowses Beach is too risky for the entire estuarine area. Dowses Beach cannot support an industrial-size project of CW's gargantuan magnitude. The Dowses Beach parking lot and narrow Causeway are located in an extremely ecologically-sensitive area. Historically, highly vulnerable Dowses Beach is periodically exposed to serious floods and strong hurricanes. With the sea level rising, erosion and climate change, these three additional factors further complicate electrical cable landing at Dowses Beach. It is a **most undesirable, inhospitable and dangerous choice** for one cable landing, much less the three (3) proposed by the developer. There is a real public health and safety threat that the underground EMF-emitting electrical cables could be dangerously threatened during a severe flood and/or hurricane, exposing deadly extra high voltage (EHV) electrical cables in a family-centered beach.

A tiny barrier beach such as Dowses is the worst environmental location for a massive multi-year industrial project complete with air/light/noise pollution-heavy construction and huge fossil-fuel machinery. It is particularly concerning that this fragile barrier beach will endure HDD construction, with a nonstop 24-hour construction phase. Let us remember that residents-only Dowses Beach is within a zoned single-family residential neighborhood, within an **Aquifer Protection Overlay District**. Further, Dowses Beach is within a zoned **Resource Protection Overlay District**.

B) We request that the DEIR have an Abandonment Management and Response Plan, including Worst Case Scenario, with formal input from experienced and licensed HDD specialists. The DEIR optimistically presents HDD and neglects to consider any potential threat of failure except in vague terms. Abandonment Management and Response planning is crucial in the face of possible catastrophic HDD failure. Remember the Titanic. Comprehensive and clearly stated steps must be laid out in case of emergency that is an unanticipated, accidental and/or irreversible HDD failure. The Abandonment Management and Response Plan must address, among others, how any fugitive Inadvertent Returns will be successfully contained and prevented from contamination of the Cape Cod Sole Source Aquifer, the groundwater, the ecologically-sensitive waters of Phinney's Bay, East Bay, Centerville River and Bumps River.

The DEIR states: "HDD is a well-known and commonly used technique for this type of project, and with proper construction management, the risk of drilling fluid release is very low." There are only seven (7) offshore wind turbines operational in the United States so there is a non-existent American track record of success with HDD. Compound this lack of HDD track record with an ecologically-sensitive area and the threat of HDD harming estuarine Dowses Beach is grave. What if there is an insurmountable problem and HDD fails? And must be abandoned? The DEIR must consider this real possibility of abandonment.

Using outside contractors - as is the case with this contractor-heavy project - adds a layer of undesirable complexity. This factor could make it potentially difficult to have an Emergency Response Team ready for an unforeseen accident or a catastrophic emergency involving HDD. For instance, in an unsuccessful HDD attempt at the Dowses Beach Causeway due to a sudden collapse of the fragile embankment, what is the emergency response protocol in place? What is the hierarchical order of response? Who has the leadership role during the emergency and will the subcontractors heed the orders of this person?

C) We request that the DEIR elaborate on the Decommissioning process, including Worst Case Scenario, with formal input from experienced and licensed HDD specialists. Commonwealth Wind is an LLC. What are the financial responsibilities of the Commonwealth Wind LLC 25-30 years from now, if it is still in business? There will be unknown environmental concerns associated with decommissioning underground electrical cables, proper disposal of decommissioned materials, cleanup of the area, resurfacing, etc. An escrow account (say \$500 million accounting for inflation) can be put in a trust and set aside for future onshore decommissioning. This way, the future financial burden of the adverse environmental impacts resulting from onshore decommissioning will not be borne solely by the Barnstable citizens.

D) We request that the DEIR address the serious concern that HDD is not subject to any Commonwealth of Massachusetts codified regulatory oversight: a neutral and experienced HDD specialist must act as the Project Monitor and must be present at all times during the HDD process. Proper oversight of the unregulated HDD process by the HDD Project Monitor must be a non-negotiable project requirement because the public health and safety stakes are very high: this involves Cape Cod's Sole Source Aquifer and the Dowses Beach estuarine environment.

N.B. We reached out to The Town of Barnstable engineers, and they are not experienced in HDD.

Unlike other states, the Commonwealth of Massachusetts does NOT have any codified regulatory requirements to the oversight of HDD. This in itself is concerning, but to use a drilling technique unregulated by the Commonwealth is doubly so when it is within an ecologically-sensitive area where the waters of Phinney's Bay, East Bay and the Centerville River meet. Such is the case in the Dowses Beach estuarine area, widely recognized and beloved as a Cape Cod Natural Treasure.

Within the two bays and the river, rich aquatic diversity is evident. These waters are spawning ground for fin fishes such as striped bass and bluefish; a propagation habitat for oysters and other shellfish; and a thriving benthic organism marine area.

Dr. David Cash, the EPA Regional Administrator, has stated that "**Cape Cod's Sole Source Aquifer is a public health resource that must be protected.**" As the Sole Source Aquifer, this is the ONE and ONLY source of drinking water in all of Cape Cod. The EPA further states: "there are NO alternative drinking water sources for more than 220,000 year-round Cape Cod residents."

The Sole Source Aquifer has six lenses, of which the Sagamore Lens is the largest and closest to the Dowses Beach Causeway area where the unregulated HDD project is proposed. The Sagamore Lens is highly stressed by PFAs and other adverse sources of water pollution. Mix in the lack of state-codified regulatory requirements for oversight of HDD and that is another potential nightmare of an environmental cleanup for the EPA.

"HDD represents a potential risk to groundwater as well as to surface water and sensitive ecological receptors. The current science regarding impacts from HDD indicates fugitive

drilling mud and fluids, referred to as ‘**Inadvertent Returns (IR)**’ can include contaminants or otherwise become a source of pollution in groundwater, surface water/sediments, and/or ecologically sensitive areas. HDD may also facilitate translocation and/or cross-contamination of contaminants in otherwise separate subsurface **aquifers**, especially when performed proximal to contaminated sites.

As a result of the significant negative impacts resulting from IRs and unsuccessful HDDs that have been documented in surveys of HDD projects and the potential for future risks to groundwater, surface water, and ecological areas associated with using this technology, management of HDDs throughout the process of planning, construction, installation and decommissioning should be considered to prevent potential impacts and minimize risk...any regulations of HDD could be patterned after those codified to govern conventional well installation, given the potential threats posed by HDDs, with input from experienced HDD contractors. As a result of the potential for environmental impact posed by HDD, areas for management for HDD... include pre-drill planning, entry and exit hole management, and abandonment planning.” [1]

The Commonwealth of Massachusetts has “Private Well Guidelines,” yet none for HDD.

Caveat Emptor. “Largely due to the rapid increase in HDD construction, the **skill and experience of many HDD contractors are questionable**. Many contractors are **new to the field** and have **limited experience**.”

An ounce of prevention is worth a pound of cure. Prevention is preferable to a years-long billion dollar environmental cleanup.

The Sole Source Aquifer of Cape Cod must be protected at all costs.

HDD is the wrong method.

Dowses Beach is the wrong location for the cable landing.

4. Transmission

A) We request that the DEIR clarify and elaborate on the “environmental grounds” for rejecting Shared Transmission. The DEIR’s lack of details is unacceptable. Shared Transmission is widely regarded as superior to a generator lead line.

A custom-built industrial-size substation in West Barnstable is the least environmentally-friendly and least ecologically-sound approach to transmission. It is the very antithesis of responsible town planning and sound environmental policy.

B) We request that the DEIR further discuss and elaborate on the transmission alternative of the existing Canal Substation located in Sandwich. The DEIR does not explore the feasibility and viability of the Canal Substation. This alternative presents several advantages and significant benefits. It is ideally located and close to the offshore wind lease area. It moves farther away

from the Critical Habitat of the North Atlantic Right Whale, critically endangered and down to 340 at the latest count. It is more environmentally-friendly because it uses existing infrastructure and is already connected to “the bulk power grid by two 345-kV lines which run north to the Carver and Pilgrim substations as well as three 115-kV lines running south to Bourne.” The delay associated with CW’s lack of an existing contract and funding resources would provide a great opportunity for the developer to explore feasibility planning with the owner of the Canal Plant. Giving new existential purpose - transmission of renewable energy - to the Canal Substation is a very ecologically-wise move.

Shared Transmission vs. Generator Lead Line: The DEIR states that “a generator lead line is superior to a shared transmission alternative based on **cost**, reliability, and environmental grounds.” The easiest, cheapest and fastest way for the developer is not necessarily the best nor most environmentally responsible way. Shared Transmission encourages **Environmental Stewardship** because it “reduces the number of transmission cables required offshore, the number of beach landings, and other inland impacts.” Environmental Stewardship is an essentially important component in the responsible development of renewable energy sources.

The DEIR states: “any delay or other issue that affects **timing**, cost, or design of shared transmission infrastructure could significantly impact the **timing**, cost, or design of an offshore wind project and vice versa.” If timing is a real concern, then the recent default on the CW contract with the utilities complicated matters. The developer paid a \$48.9 million fine to get out of its contract. Defaulting on the contract not only affected the timing of the project but also added an unknown variable, specifically whether the developer would win in the 2024 rebidding process. The DEIR states that “to the extent that shared transmission infrastructure is likely to increase complexity and development timelines for offshore wind deployment, it would **delay** and potentially frustrate the region’s efforts to reduce greenhouse gas emissions in line with state-mandated targets, leading to greater environmental impacts.” Maybe so but choosing to default on the CW contract also significantly impacted the development timeline and caused a **delay** of the project, which now is both uncertain and in hypothetical status.

Nothing ventured, nothing gained. Coordination, collaboration, integration and joint planning will make Shared Transmission work. Specifically, this means coordination and joint planning “between state regulators, developers, utilities” and regional transmission organization (RTOs) and independent system operators (ISOs). Transmission cost sharing can be discussed among all stakeholders. “A well-planned, open access approach [will] minimize reliability issues, environmental disturbances, and local community impacts.”

Shared Transmission is more cost-effective and more reliable. Shared transmission is significantly much more environmentally-friendly and has less impact on the marine environment. It is not imperative that the project’s generator lead lines have to land on the ecologically-sensitive coastal community of Osterville or specifically on estuarine Dowses Beach. There are existing and available transmission alternatives mentioned in the DEIR, including the nearby Canal Substation in Sandwich. Generator lead lines with a single developer are considered first generation, outdated and nearly obsolete for transmission.

Canal Substation: The DEIR states that CW does not have queue rights to connect at Canal Substation. The response to this is “take the initiative and get on queue.” Once the developer gets on queue, then it is now a matter of timing. The developer defaulted and does not have a contract. Neither does the developer have any money to fund the project. When the DEIR states that “identifying new interconnection points outside of the existing West Barnstable Substation would push the Project to well past the target for the Commonwealth’s climate goals” is a refusal to look at reality. CW is now a hypothetical project and is in NO actual position to realistically address the Commonwealth’s climate goals.

The DEIR does not mention whether there is a wait list for queue rights. If there is a wait list, how many are on the wait list? It is common practice to get on a transmission queue list because those applicants ahead of the developer could pivot, change plans and not use the Canal Substation. Effectively moving the developer up the queue. This has become a common practice of offshore wind developers to sign up for several different queue lists, to maximize their chances of winning a transmission spot.

5. NEW 2 Connector - No Build Alternative

We request that the DEIR provide information as to the environmental benefits and advantages of the “No Build” alternative. There are many environmental benefits but NONE were discussed nor included in the DEIR. In the interest of fairness, openness and full transparency, these environmental benefits must be included in the DEIR.

Here are compelling environmental benefits to the “No Build” alternative:

- No unnecessary substation will pose a water contamination threat to West Barnstable’s “**Potential Public Water Supply Area,**” which has now been formally identified (and acknowledged in the DEIR) as one of the very few locations able to supply public water to the Sole Source Aquifer. The Cape Cod population has grown and with it the greater need for more drinking water. The Sole Source Aquifer is stressed to provide enough water to more people needing it. Not using and sacrificing West Barnstable’s “Potential Public Water Supply Area” as the substation location is sound environmental policy. This is a very strong environmental argument to keep the ecologically-harmful substation away from West Barnstable. Especially since there are several more environmentally-friendly and viable transmission alternatives existing outside of West Barnstable; which the DEIR acknowledges. Using the West Barnstable location for the substation is the cheapest, easiest and fastest way. And BAD, BAD, BAD for the environment.

- No industrial-size substation to impact the peaceful zoned residential environment in West Barnstable. No substation means that the mental health and human quality-of-life of innocent families and the elderly living in West Barnstable will be preserved. As well as the preservation of the economic value of the real estate investment made in their family homes.

- No harm from NEW 2 Connector wind turbines unable to survive category 2 or 3 hurricanes. BOEM Director Liz Klein stonewalled US Congressman Chris Smith of New Jersey when questioned about safety concerns on hurricane survivability of wind turbines.

- No NEW 2 Connector cables contributing to a hazardous spaghetti-like cable disarray in Nantucket Sound and warming up the ocean water (hastening climate change and threatening aquatic biodiversity)

- No NEW 2 Connector cables disturbing the NOAA-designated Critical Habitat of the critically-endangered North Atlantic Right Whale (NARW); NARW are present in Massachusetts waters. On 13 May 2022, Dr. Sean Hayes of NOAA wrote to BOEM to express his scientific concerns of offshore wind development in this ecologically-sensitive marine habitat and his scientific judgment must be heeded by the developer. Underscoring Dr. Hayes' concerns, BOEM has commissioned a study on the population-level effects of offshore wind development on NARW, due 30 September 2023.

- No skyscraper-height offshore wind turbines to create aviation dangers for low flying aircraft in Cape Cod, Nantucket and Martha's Vineyard

- No Aviation and Coast Guard radar interference from NEW 2 Connector turbines, that could pose safety and/or search and rescue problems

- No Build for Commonwealth Wind means that Solar PV can be more seriously considered by the Town of Barnstable officials as a viable renewable energy source. Mr. Thomas Lynch, the previous Town Manager, was prescient. Among others, he saw the potential of landfills: a solar array now reuses the closed landfill and gives new life to an otherwise overlooked resource. Numerous roofs, both municipal owned and privately owned are available for solar panels, now with lead-free models. Solar arrays and solar canopies are also practical solutions for renewable energy sources. An advantage of Solar over wind turbines is that the former is more easily recycled. The Commonwealth of Massachusetts was recently cited in a study as ideal for solar energy generation. Cape Cod came out as extremely well-situated for solar energy production. We have reached out to the current Town Manager about Solar PV but have not received a response.

- No fossil-fuel vessels used by NEW 2 Connector to add marine traffic and clog up Nantucket Sound, and/or contribute to water pollution through fossil fuel spills

- No harmful EMF-emitting electrical cables under Dowses Beach and the Dowses Beach Causeway

- No air pollution, no noise pollution, no light pollution from the project's heavy machinery, construction trucks, support vehicles, etc.

- No risk of oil spills during refueling of construction vehicles at Dowses Beach. Oil spills can contaminate the ecologically-sensitive Aquifer Protection Overlay District and Resource Protection Overlay District of the Dowses Beach area.

- No deprivation of easy access to the accessible pier at Dowses Beach

- No disturbances to the invaluable horseshoe crab population and habitat (medically necessary for their blue blood)
- No unregulated HDD will pose a pollution / contamination threat to Cape Cod's Sole Source Aquifer, wetlands, Phinney's Bay, East Bay and Centerville River
- No huge industrial-size substation in West Barnstable that is within a zoned residential area with many houses and within an ecologically-sensitive Aquifer Protected Overlay District
- No digging up of roads (for the electrical cables) along Osterville residential neighborhoods, Main Street business district, all the way up to West Barnstable; thereby protecting the economic viability of the local businesses on Main Street
- No traffic from noisy construction work (with huge heavy machinery) that will span three years, from Sept to May (with nonstop 24-hr work planned for HDD phase)
- No deadly risk of exploding transformers underneath our Dowses Beach Parking lot
- No harm to our precious and irreplaceable estuarine environment in Dowses Beach
- No harm to the piping plover and least tern and endangered turtles population
- No harm to the benthic environment
- No threat of HDD "inadvertent returns" contamination of our precious Sole Source Aquifer and beautiful waters of our bays and rivers
- No harming of the commercial fishermen's livelihoods
- No deforestation in West Barnstable. Many forested acres with hundreds of mature trees will be spared from being cut down for an unnecessary substation. No clearcutting of hundreds of mature trees for the West Barnstable substation will mean the preservation of the wildlife habitat.
- No mature trees and bushes will be cut down along the electrical cable path, starting from Osterville's residential neighborhoods all the way up to West Barnstable's neighborhoods; preserving the beautiful tree-lined natural environment

Thank you.

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NEW BEDFORD PORT AUTHORITY

123 MacArthur Drive TEL (508) 961-3000
New Bedford, MA 02740
WWW.PORTOFNEWBEDFORD.ORG

August 25, 2023

Secretary of Energy and Environmental Affairs, Rebecca Tepper
Executive Office of Energy and Environmental Affairs (EEA)
Attn: MEPA Office
Jennifer Hughes EEA No. 16611
100 Cambridge Street, Suite 900
Boston MA 02114

RE: New England Wind 2 Connector Draft Environmental Report EEA #16611

Dear Secretary Tepper:

The New Bedford Port Authority ("NBPA") hereby submits these comments in response to Commonwealth Wind, LLC, a wholly owned subsidiary of AVANGRID, Inc., Draft Environmental Impact Report (DEIR) for the New England Wind 2 Connector.

The NBPA submitted comments in February 2023 on New England Wind DEIS Docket No. BOEM-2022-0070 (*see Addendum #1*). Although the Draft Environmental Impact Report includes extensive information on many topics that are critical in any offshore wind development, these comments reflect our two biggest issues here in the Port of New Bedford.

Fisheries Mitigation

The NBPA commends New England Wind proposal to work with the UMASS Dartmouth School for Marine Science and Technology on a comprehensive fisheries monitoring plan for pre-construction, construction and post-construction fisheries studies within the lease area (*7.1.4 Fisheries Mitigation*) which includes a holistic assessment of the key fisheries resources in the Lease Area and an assessment of the potential impact of offshore wind energy development with the use of one or more control areas. We strongly encourage New England Wind and the Commonwealth to commit to utilizing information gathered from any research and monitoring to respond to any unanticipated impacts of the Project on commercial fisheries.

Additionally, it is highly recommended that New England Wind allocate funds beyond what is laid out in (7-10) to support environmental initiatives, assist affected fishermen, and further bolster local communities where actual offshore wind development activities affect the fishing industry.

The up or downstream effects to shoreside businesses and the potential devaluation of these businesses that are in the fishing ports themselves are currently difficult to quantify. This, coupled with ex-vessel landings, will be a major potential lost revenue that although complicated, must be defined appropriately. Financial support for initiatives to assist fishermen and local communities should be based on the locations of actual landings on a port-by-port, community-by-community basis regardless of state boundaries.

As the most valuable fishing port in the nation and the hub for countless onshore businesses and families who rely on the industry, we believe that it is vital that the actual impact of the development of offshore wind on the economy and people of Massachusetts be established using the best available data, methods and information to truly measure the impact of this project on our fishing industry and those that support it.

Operations and Maintenance Facilities

In identifying potential port facilities, the DEIS (1.3.4.2) has outlined the New Bedford Marine Commerce Terminal and possible other areas in the Port of New Bedford.

We encourage New England Wind to extensively review all the sites in New Bedford for a location for construction, assembly, and fabrication, as well as future O&M activities. Multiple sites in the Port are well positioned geographically and provide extensive shoreside support and are located in EJ communities.

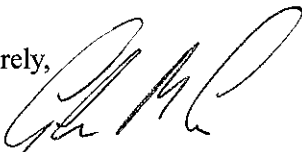
“Other Areas in New Bedford Harbor: Other possible port facilities have been identified by MassCEC as potentially viable offshore wind ports, if upgrades are made by the owner/lessor. The one-mile (1.6-km) radial study area has been extended northward along the Harbor to map EJ populations in this overall area. These populations include a minority, income, and English isolation EJ population just north of Route I-195 on the western side of the harbor in New Bedford with a few groups in the income and minority categories on the eastern side of the area, as shown on Figure 3-2.”

The New Bedford Foss Marine Terminal is a private venture that will add another base of operations and terminal logistics facility to support offshore wind projects off Massachusetts and the northeastern coast seaboard. The 30-acre site is undergoing redevelopment this year and will provide storage and laydown yards for equipment and materials, berth facilities for tug and barge operations, and host crew transfer vessel (CTV) and service operation vessel (SOV) support services. It will create new office space for project teams and a marine coordination center for technicians involved in offshore wind projects. Furthermore, a third site being developed is the Shoreline Marine Terminal which will support the operations of the emerging offshore wind industry. Both sites are ideal locations for O&M activities.

In summary, at the New Bedford Port Authority it is our mission to promote, facilitate, and defend the goals and needs of our fishing community. We also support the development of offshore wind on our coast and have already played a big part in current and future projects, as evidenced by the port hosting the first purpose-built offshore wind terminal in the northeast and the staging and construction of the first offshore wind development. The emergence of this new industry has the potential to create thousands of local jobs, promote port infrastructure, and go a long way in realizing the Commonwealth and the Nation’s climate and renewable energy goals. We have been commenting on environmental reviews not only for this project, but the many projects that are currently in the pipeline. Throughout, we continually stress that it is imperative to have a process where all voices are heard so that we shall have the most responsible development of this new industry and minimizing adverse impacts to commercial fishing.

We appreciate the opportunity to provide comments on the Draft Environmental Impact Report for New England Wind and look forward to the continued working relationship we have developed with federal and state agencies as well with offshore wind developers to ensure that all affected industries and communities continue to grow and thrive as we undertake this ambitious environmental and economic effort.

Sincerely,



Gordon M. Carr
Executive Director
New Bedford Port Authority

ADDENDUM #1

February 21, 2023

VIA ELECTRONIC SUBMISSION

Program Chief, Office of Renewable Energy Programs
Bureau of Ocean Energy Management
45600 Woodland Road
Sterling, VA 20166

RE: New England Wind DEIS Docket No. BOEM-2022-0070

The New Bedford Port Authority ("NBPA ") hereby submits these comments in response to the Bureau of Ocean Energy Management's ("BOEM") Request for comments relating to Draft Environmental Impact Statement for the New England Wind Project.

The aggressive timeline for offshore wind development in the Atlantic poses challenges for multiple industries and multiple jurisdictions. It is imperative that BOEM takes a holistic approach to the combined development of projects. Uniformity is critical when reviewing and ruling on construction and operations plans (COP) on any individual development project.

The proposed Project described in the COP and this Draft EIS would be at least 2,036 megawatts in scale (and up to 2,600 megawatts) approximately 20 miles from the southwest corner of Martha's Vineyard and approximately 24 miles from Nantucket at its closest point, within the area of Renewable Energy Lease Number OCS-A 0534 (Lease Area).

In considering a reasonable range of alternatives for this project, The NBPA continues to promote the responsible development of offshore wind and therefore a "No Action Alternative (ES.4.1 Alternative A)" is not a practicable substitute if the goal is to achieve the ambitious climate goals laid out by the federal and state governments.

On the other hand, as the most profitable fishing port in the country representing an industry that employs over 7,000 people, we strongly support alternatives that minimizes habitat impact. In this case, we prefer **ES.4.3 Alternative C - Habitat Impact Minimization Alternative** that would minimize impacts on complex fisheries habitats.

In reviewing the proposed mitigation measures in (Appendix H), we support New England Wind's proposal to collect pre-construction fisheries data in cooperation with University of Massachusetts Dartmouth School of Marine Science and Technology and strive to streamline and standardize available data across all offshore efforts. We recommend that this collaboration take place during the construction and post-construction phase of the project as well. New England Wind will be committing up to \$2.5 million to support fisheries research and education as part of a new initiative launched by the University of Connecticut to improve the understanding of potential environmental impacts from offshore wind. We advocate that a similar investment be made to the University of Massachusetts Dartmouth School of Marine Science and Technology, which has been on the front lines of offshore wind research and has decades of experience researching and analyzing fisheries in the Northeast. To have a cooperative research model be successful, many federal, state and local entities must be involved, as well as our fishermen who

stewards of a sustainable fishery for decades.

Additionally, New England Wind will allocate up to \$7.5 million in funds to support environmental initiatives, assist Connecticut fishermen, and further bolster local communities in Connecticut where offshore wind development activities are taking place. While this financial commitment is notable, it illustrates one of our biggest concerns related to the mitigation discussion, which is that the effects of offshore wind on the fishing industry are not geographic in nature. The up or downstream effects to shoreside businesses and the potential devaluation of these businesses are in the fishing ports themselves. This, coupled with ex-vessel landings, will be a major potential lost revenue that although complicated, must be defined appropriately.

Financial support for initiatives to assist fishermen and local communities should be based on the locations of actual landings on a port-by-port, community-by-community basis regardless of state boundaries.

As the most valuable fishing port in the nation and the hub for countless onshore businesses and families who rely on the industry, we believe that it is vital that the actual impact of the development of offshore wind on the economy and people of Massachusetts be established using the best available data, methods and information to truly measure the impact of this project on our fishing industry and those that support it.

The current lack of fisheries mitigation and compensation measures on the industry as whole is somewhat troubling, but we will expect New England Wind to fully comply with any new guidelines and guidance that BOEM is currently finalizing as noted in Appendix H to the DEIS. While we appreciate the inclusion of the reference to BOEM's draft mitigation Guidance, as we have noted in the past, a five (5) year period for lost fishing income during operation is not sufficient to address the losses that will be suffered by fishermen and the associated shoreside businesses. We strongly encourage BOEM to require mitigation for lost revenue much longer into the 30-year lifespan of the project.

Furthermore, we appreciate the applicant's plans to employ a Marine Operations Liaison Officer, who will be responsible for safe marine operations in coordination with maritime partners and stakeholders (e.g., the USCG, U.S. Navy, port authorities, state and local law enforcement, marine patrol, commercial operators, etc.). We encourage other developers to follow suit and we will expect multi-project coordination in these efforts. Likewise, it is encouraging that the applicant will implement a local hiring plan to maximize its direct hiring of residents of southeastern Massachusetts and Connecticut in coordination with unions, training facilities, and schools.

In identifying potential port facilities *Table 2.1-4: Possible Ports Used during Phase 1 Construction, Operations, and Decommissioning*, New England Wind failed to recognize New Bedford's second terminal dedicated to offshore wind. The New Bedford Foss Marine Terminal is a private venture that will add another base of operations and terminal logistics facility to support offshore wind projects off Massachusetts and the northeastern coast seaboard. The 30-acre site will undergo redevelopment this year and will provide storage and laydown yards for equipment and materials, berth facilities for tug and barge operations, and host crew transfer vessel (CTV) and service operation vessel (SOV) support services. It will create new office space for project teams and a marine coordination center for technicians involved in offshore wind projects.

We encourage BOEM and New England Wind to extensively review both this site, as well as the New Bedford Marine Commerce Terminal and other current and future facilities within the Port of New Bedford, for a location for construction, assembly, and fabrication, as well as future O&M activities. Both sites are well positioned geographically and provide extensive shoreside support.

In summary, at the New Bedford Port Authority it is our mission to promote, facilitate, and defend the goals and needs of our fishing community. We also support the development of offshore wind on our coast and have already played a big part in current and future projects, as evidenced by the port hosting the first purpose-built offshore wind terminal in the northeast and the staging and construction of the first offshore wind development. The emergence of this new industry has the potential to create thousands of local jobs, promote port infrastructure, and go a long way in realizing the Commonwealth and the Nation's climate and renewable energy goals. We have been commenting on the environmental review not only for this project, but the many projects that are currently in the pipeline. Throughout, we continually stress that it is imperative to have a process where all voices are heard so that we shall have the most responsible development of this new industry and minimizing adverse impacts to commercial fishing.

We appreciate to opportunity to provide comments on the EIS for New England Wind and look forward to the continued working relationship we have developed with BOEM and the offshore wind industry to ensure that all affected industries and communities continue to grow and thrive as we undertake this ambitious environmental and economic effort.

Sincerely,



Gordon M. Carr
Executive Director
New Bedford Port Authority

Cc: Senator Elizaeth Warren
Senator Edward Markey
Congressman William Keating
Mayor Jon Mitchell, City of New Bedford

From: [Steve Waller](#)
To: [Strysky, Alexander \(EEA\)](#)
Subject: New England Wind 2 Connector EEA# (16611)
Date: Tuesday, August 29, 2023 9:54:33 PM

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Dear Mr Strysky,

I strongly support the offshore wind projects. I live in Centerville, where the first cable has come ashore. The beach was not disturbed, and the parking lot at Covell's Beach is now much improved.

I have attended multiple community meetings on the topic, and found the information helpful and the employees very knowledgeable. They listen to hysterical citizens with kindness and gentleness.

The best way to save our beaches, including Dowses Beach in Osterville, is to build renewable energy and reduce the threats of climate change. This project helps us achieve that goal. I urge you to approve it.

Steve Waller, Centerville



August 30, 2023

Andrew Gottlieb
Executive Director

Secretary Rebecca Tepper
Executive Office of Energy and Environmental Affairs
MEPA Office

BOARD OF DIRECTORS

Steven Koppel
President

Attention: Alexander Strycky, MEPA Analyst
100 Cambridge Street, Suite 900

Elysse Magnotto-Cleary
Vice President

Boston, MA 02114

Taryn Wilson
Treasurer

**RE: New England Wind 2 Connector Draft Environmental Impact Report,
EEA #16611**

Jack Looney
Clerk

Dear Secretary Tepper:

Bob Ciolek

The Association to Preserve Cape Cod (APCC) has reviewed the Draft Environmental Impact Report (DEIR) for the New England Wind 2 Connector offshore wind development project and submits the following written comments.

Tom Cohn

John Cumbler

Jamie Demas

Founded in 1968, APCC is the leading nonprofit environmental advocacy and education organization for the Cape Cod region, working for the adoption of laws, policies and programs that protect, preserve and restore Cape Cod's natural resources.

Joshua Goldberg

Meredith Harris

DeeDee Holt

Offshore wind development is one of the most critically important sources for large-scale renewable energy production in the Northeastern U.S. It is imperative that we replace our dependence on fossil fuels with clean energy to meet Massachusetts' ambitious 2050 net zero goals. APCC enthusiastically supports the environmentally responsible development of offshore wind for this purpose.

Pat Hughes

Molly Karlson

Eliza McClennen

Stephen Mealy

Wendy Northcross

The New England Wind 2 Connector—the portion of the Commonwealth Wind project under Massachusetts regulatory jurisdiction—is the largest renewable energy project proposed in the New England region thus far and will contribute greatly to the effort to achieve Massachusetts' commitment to offshore wind energy production. According to the DEIR, the project will produce 1,200 MW of clean energy, enabling the reduction of approximately 2.35 million tons per year (tpy) of greenhouse gas emissions. This is the equivalent of removing approximately 460,000

Kris Ramsay

Dottie Smith

Charles Sumner

gasoline-burning cars from the road. Nitrogen oxides emissions will be displaced by approximately 1,255 tpy and sulfur oxides (SOx) by approximately 666 tpy. All of the above are significant project benefits.

The New England Wind 2 DEIR provided useful information on the many issue areas related to the project, as well as providing more details on the project applicant's proposals for avoiding, minimizing and mitigating potential environmental impacts.

Offshore Export Cable Corridor

According to the DEIR, the offshore cable routing for the project is approximately 96 percent the same as the routing for the New England Wind 1 Connector and the Vineyard Wind Connector, with only a 488-acre area divergence that accesses the proposed Dowses Beach landfall site. Due to the extensive study conducted in the review of the previous two projects, it is to be expected that the New England Wind 2 offshore cable installation in state waters will have a very minimal and temporary impact on environmental resources.

Dowses Beach Landfall Site

Based on the detailed information provided in this project's DEIR as well as the similar plans submitted for the Vineyard Wind and New England Wind 1 projects, APCC is satisfied that the proposed horizontal directional drilling method at the Dowses Beach landfall site will effectively avoid impacts to coastal resources, coastal dune, and coastal beach. Construction disruption to the beach parking lot will be temporary and will not affect environmental resources.

East Bay Road Crossing

From Dowses Beach, the onshore underground cable will cross the East Bay Road culvert that separates East Bay from Phinneys Bay. The project applicant's preferred method for crossing is to install a buried concrete duct bank within the pavement of the causeway above the existing culvert that would be supported by concrete footings placed on either side of the culvert. The proposed method to cross the causeway appears to avoid any interference with the function of the existing box culvert; however, it is unclear to APCC whether there have been any discussions by the town of Barnstable about potential future plans to replace the existing box culvert with a larger culvert to improve tidal flow, and if so, how it may impact the onshore cable span crossing the causeway.

Onshore Transmission Cable Route

As described in the DEIR and in the previous Environmental Notification Form (ENF) filing, both the preferred and the noticed alternative onshore transmission cable routes are located entirely within public roadway layouts or within the Dowses Beach parking lot and are not



expected to impact environmental resources along the cable route. No impacts are anticipated at points where the cable route crosses perennial streams or other wetlands, due to the configuration of the underground cables within the footprint of the roadway layout.

The DEIR reaffirms the project applicant's commitment to working with the town of Barnstable on possible coordination of the underground cable construction with the town's installation of sewer lines along the route. As is the case with Vineyard Wind and New England Wind 1, such coordination would enable the town to take advantage of the wind project's onshore cable construction work on roadways, which would save the town millions of dollars in municipal sewer construction costs and speed up the delivery of much-needed wastewater infrastructure to this area of Barnstable.

APCC is aware there are individuals who have voiced opposition to the disruption that the cable construction would cause along Main Street in Osterville. However, APCC must point out that the town's planned installation of sewer lines on Main Street, which is vital in addressing the very serious water quality problems in this area of town, would still result in the same construction disruptions regardless of the New England Wind 2 project. APCC therefore strongly supports cooperative efforts between the project applicant and the town to coordinate their respective projects, and we urge the two parties to finalize their discussions and take advantage of the opportunity it provides.

Substation

The proposed project substation site is located within the Barnstable Aquifer Protection Overlay District and is adjacent to Article 97 protected open space. The project applicant has presented a revised substation design in the DEIR that includes the acquisition of additional property, which increases the size of the site from the original 15 acres to approximately 29 acres. The substation will still provide a 110 percent spill containment system to capture any potential spills from substation equipment, as originally described in the ENF.

The project applicant is also proposing to increase the 110 percent containment to accommodate a simultaneous Probable Maximum Precipitation event of up to 30 inches of rainfall in a 24-hour period. The proposed stormwater management system for the substation includes the utilization of low impact development strategies to capture, treat, and recharge stormwater runoff. The system also includes a "drain system that routes individual containment areas through an oil-absorbing inhibition device to an oil/water separator before draining to the infiltration basin." APCC supports the inclusion of these extra measures to ensure that groundwater resources are sufficiently protected.

Construction of the substation will require significant clearing of the site, which is currently



mostly forested. To mitigate the land clearing, Cape Cod Commission Development of Regional Impact (DRI) review requires a specified acreage of land to be set aside and permanently protected as open space either through direct acquisition of land or a monetary contribution by the project applicant. APCC encourages the project applicant to work with the town of Barnstable and the Barnstable Land Trust to identify land of appropriate acreage and natural resource value to satisfy the DRI open space requirement.

Grid Interconnection Routes

A Preferred grid interconnection route (Fire Tower Access Road to Oak Street) that connects the project's substation with the existing Eversource substation on Oak Street, along with a Noticed Alternative grid interconnection route (Eversource ROW #342), have been identified in the DEIR. The DEIR also identifies a variant to the Preferred grid interconnection route (Variant 1). The Preferred route calls for burying the grid interconnection cables within the existing Fire Tower access road off Oak Street, which, according to the DEIR, must be resurfaced and widened from its current 11 feet to 20 feet to accommodate the cable installation and ongoing operation of the substation. This access road is located within Article 97 land, and widening the road would require the removal of trees along its route.

As stated in our written comments in the ENF, APCC encourages a grid interconnection route that avoids impacts to Article 97 lands. Altering Article 97 lands would require approval of the Massachusetts Legislature and would be subject to the Public Lands Preservation Act, which requires replacement of impacted Article 97 lands with land of equal or greater size and conservation value. APCC hopes the project applicant will work with the town of Barnstable and Eversource to identify alternatives that prevent Article 97 land impacts. If this proves to be impossible, APCC urges the project applicant to explore ways to reduce the proposed road widening and tree clearing, and to minimize temporary and permanent impacts to lands held in the public trust.

Protection of Bird Species, Marine and Coastal Bird Habitat, and Bat Species

Dowse's Beach has been identified as habitat for piping plover and least tern, both state-listed rare species. To protect these species, the project applicant has consulted with the Massachusetts Natural Heritage and Endangered Species Program (NHESP) and plans to adopt protective measures similar to those adopted for the cable landing sites for the Vineyard Wind and New England Wind 1 projects. The project applicant has included a draft Piping Plover and Least Tern Protection Plan in the DEIR that is based on consultations with NHESP and that appears to avoid project impacts to these bird species.

Based on consultation with federal and state agencies, the project applicant is finalizing a Draft Bird and Bat Monitoring Framework for the New England Wind project, which includes the New

England Wind 2 Connector component. The DEIR states that the project applicant has committed to developing an avian conservation program “to fund research, habitat conservation, and/or restoration for coastal bird species, including state-listed bird species” with the intention being “to implement a conservation program which will help to better understand and address direct and indirect effects of offshore wind development on coastal bird species in Massachusetts.” APCC commends the project applicant for its programs to protect bird and bat species and prevent significant impacts from occurring.

Protection of Marine Mammals and Marine Turtles

The DEIR has also provided more information on the project’s consultations with federal and state agencies to develop programs designed to protect marine mammals and marine turtles. Initiatives include mitigation measures to reduce noise risks to marine mammals from construction and installation, O&M, and decommissioning; environmental training for project personnel; vessel strike avoidance practices; the use of protected species observers and passive acoustic monitoring technology; pile-driving seasonal restrictions, soft-start procedures, and shutdown procedures in the lease area in federal waters; and noise reduction technology. Although refinement of the project’s mitigation and monitoring programs is ongoing, APCC is satisfied that the project will result in no significant impacts to marine mammal and turtle species in state or federal waters, based on similar programs adopted for Vineyard Wind and New England Wind 1.

Conclusion

If approved and built, the New England Wind 2 offshore wind project will make a significant contribution to the Commonwealth’s goal of achieving net zero emissions by 2050. APCC encourages the project applicant to continue working with federal, state, regional and local regulators to refine mitigation strategies, finalize project details and resolve the remaining outstanding issue areas that will allow the project to move forward.

Sincerely,



Andrew Gottlieb
Executive Director

From: [Greg Gerdy](#)
To: [Strysky, Alexander \(EEA\)](#)
Cc: [Engler, Lisa Berry \(EEA\)](#); [Knisel, Julia \(EEA\)](#); [Greg Gerdy](#)
Subject: New England Wind 2 Connector DEIR - Public Comment 03
Date: Thursday, August 31, 2023 4:54:21 PM

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Dear Mr. Strysky,

A. CZM calculations are based on very limited data: We wish to relay our serious concerns re: the Coastal Zone Management (CZM) calculations for accretion and erosion as they pertain to estuarine Dowses Beach. There are serious limitations on which the CZM calculations for accretion and erosion are based. These calculations give the unsuspecting public viewer a reasonable belief that the accretion/erosion calculations are based on complete data gathering. They are not. They are *incomplete and oversimplified*.

We point out that putting a +/- in the calculation can come across as a disingenuous form of seemingly *false validation* of the limited and incomplete CZM data.

Several important parameters were not taken into consideration in the calculations, specifically for estuarine Dowses Beach. These limitations and/or missing parameters include exclusion of hard structures (two stone jetties, fishing pier), no vertical differences, 2D aerial photography, no accounting for beach nourishment, no factoring of the proximity of the dynamic inlet. There are missing storm / hurricane aftermath 2D orthophotographs. Further, measurements within an estuarine area are complicated.

B. Dowses Beach is eroding: Based on the short-term rates found in the new CZM viewer, Dowses Beach is primarily *eroding and/or has had no statistical change*.

According to CZM, the 2013-2014 LiDAR data were collected in November and December. The 2018 LiDAR data were collected in May to September.

We were informed that “aerial photographs, orthophotographs, and LiDAR data have been collected by federal agencies during different months over the years. Data collection periods depend on when they can secure funding and equipment.”

Additionally, we were informed that “Rate calculations don’t account for seasonal fluctuations or changes in the volume of sand above or below the high water line. Also, projections of future sea levels are *not* factored because the rates of change reflect measurements of shoreline positions in the past.”

We confirmed that CZM calculations do not factor in the presence of hard structures, such as jetties. According to CZM, “the south jetty at Dowses Beach was built in 1948.”

C. Erosion is shown as Accretion: What caused us great concern was the fact that despite the *erosion* that has been occurring in the 2013-2014 and 2018 periods (according to LiDAR data), the CZM calculations, for instance, for transects ST BAR 0605 and ST BAR 0606 showed accretion. Transect ST BAR 0609 showed a calculation of 1 ± 0.5 , a value that seemed statistically insignificant.

How could an area that was eroding be presented as accreting?

CZM responded: “Even though the 2013-2014 and 2018 shorelines are slightly more landward than the 2009 shoreline at those transects, large amounts of accretion from 1978 to 2009 influence the linear regression analysis. We label transects with ‘no statistical change,’ when the error exceeds the rate.”

Considering the many missing parameters and/or very limited data gathering from 1978 to 2009 for Dowses Beach, how could CZM justify such a big statistical leap - from actual and real erosion to perceived accretion?

D. Practical and Business applications: We expressed our serious doubts regarding the oversimplified accretion and erosion calculations for Dowses Beach to CZM.

It is possible that certain business developers had initially relied on CZM data to the detriment of estuarine Dowses Beach, its marine flora and fauna, and ecologically-sensitive surroundings. Dowses Beach could have been erroneously seen as a stable beach when in fact, it is eroding. As well as to the detriment of the Barnstable citizens who regard estuarine Dowses Beach as a fragile Cape Cod Natural Treasure that must be preserved and not be opened to any industrial development such as offshore wind.

We share the following email to CZM and screenshots of the three aforementioned transects.

Thank you.
Maria and Greg Gerdy

Begin forwarded message:

From: Greg Gerdy <greg.gerdy@yahoo.com>
Date: August 31, 2023 at 12:14:11 PM EDT
To: lisa.engler@mass.gov
Cc: julia.knisel@mass.gov, Greg Gerdy <greg.gerdy@yahoo.com>
Subject: Limitations: CZM new viewer - Dowses Beach

Dear Ms. Engler,

Hope this finds you well.

FYI - please see email to Julia Knisel below. We have attached screenshots for your convenience.

We are asking for your help with the CZM viewers - both versions. There are serious limitations on which the CZM calculations for erosion and accretion are based. These calculations can give the unsuspecting public viewer a belief that the accretion/erosion projections are based on complete data gathering.

But we now realize that there are important parameters that are not taken into consideration. These missing parameters would then make the accretion/erosion calculation be simplistically based on a very limited set of data. And may sometimes not correspond with reality.

Certainly, it makes us believe that some practical / business decisions were initially influenced by the CZM data provided.

Please advise.

Thank you.
Maria and Greg Gerdy

Begin forwarded message:

From: Greg Gerdy <greg.gerdy@yahoo.com>
Date: August 31, 2023 at 9:48:18 AM EDT
To: julia.knisel@mass.gov
Cc: Greg Gerdy <greg.gerdy@yahoo.com>
Subject: Fwd: CZM new viewer - Dowses Beach

Good morning Ms. Knisel,

Thank you for your very helpful and detailed clarifications. It is good to know how and when the data are gathered as these provide a better understanding of the CZM information.

From our perspective, it now appears that there are important parameters that are left off that would make us doubt the accuracy of the Dowses Beach calculations presented.

It would be a public service to clarify the limitations of the CZM data.

There is incomplete information about beach nourishment from 1978; we looked at the Barnstable Dredge site and found that the dredge process started in 1996, with any subsequent work dependent on available funding. No detail given on Dowses Beach - e.g. if beach nourishment were done, it wouldn't provide the quantity of sand that could skew the CZM data. So the lack of information on vertical differences is an accuracy concern.

Also, if a storm had occurred and eroded a big section of coastline, but no storm aftermath orthophotographs were taken then this would skew the data too? Plus the dynamic inlet's proximity to Dowses Beach? The long term rate (from 1800s) would also be questionable because of the addition of hard structures (the stone jetty in 1948 and the undated addition of the accessible fishing pier.) In short, there are lots of missing data that would make us question the accuracy.

Caveat Emptor: We believe that there should be an added and prominent notice to the public about the CZM viewer: how the data gathered have severe limitations. When we first used the original viewer, we naively thought that here was scientific, well-measured, accurate data on erosion and accretion. In this case erosion and accretion re: Dowses Beach.

The data on Dowses Beach suffers from a seeming *oversimplification* of the erosion/accretion calculation - Dowses Beach is an estuarine barrier beach bookended by two stone jetties, has proximity to a very dynamic inlet, has a hard structure appended to the south jetty via an accessible fishing pier. With the lack of vertical measurement available; lack of accurate beach nourishment data (frequency, quantity); incomplete "aftermath of all storm" orthophotographs (in 2D). We do not know the construction date of the other stone jetty addition. Based on our research, we also found that measurements within an estuarine area are complicated.

For instance, if there were no Hurricane Bob aftermath 2D orthophotographs taken in 1991, no Hurricane Sandy aftermath 2D orthophotographs taken in

2012, etc. then we question the accuracy of the calculations. Compounded by the lack of data for vertical differences.

Placing a +/- in the calculation is not truly helpful to the public and can come across as a form of seemingly *false validation* of limited and incomplete data.

We appreciate the work CZM is doing.

But with this appreciation also comes some concern.

There are practical / business applications that would be impacted by the Dowses Beach CZM calculations. There are offshore wind project developers that may have considered the CZM data to make initial business decisions.

For instance, would the offshore wind business decision - to use the barrier spit known as Dowses Beach as the landing for three large Extra High Voltage (EHV) electrical cables - been made if the beach were eroding? Unlikely. The high risk of EHV electrical cables being exposed would matter. Would the business / engineering decision been made to install three large, electrical, underground vaults in the parking lot if Dowses Beach were eroding? Unlikely. These are just two instances of how CZM data can potentially skew and allegedly influence business/engineering decisions.

These industrial projects can adversely impact the fragile coastline of Cape Cod. The data presented in the Dowses Beach / CZM calculations make it so much harder for the Barnstable citizens to convince the offshore wind developer to stay away from estuarine and fragile Dowses Beach.

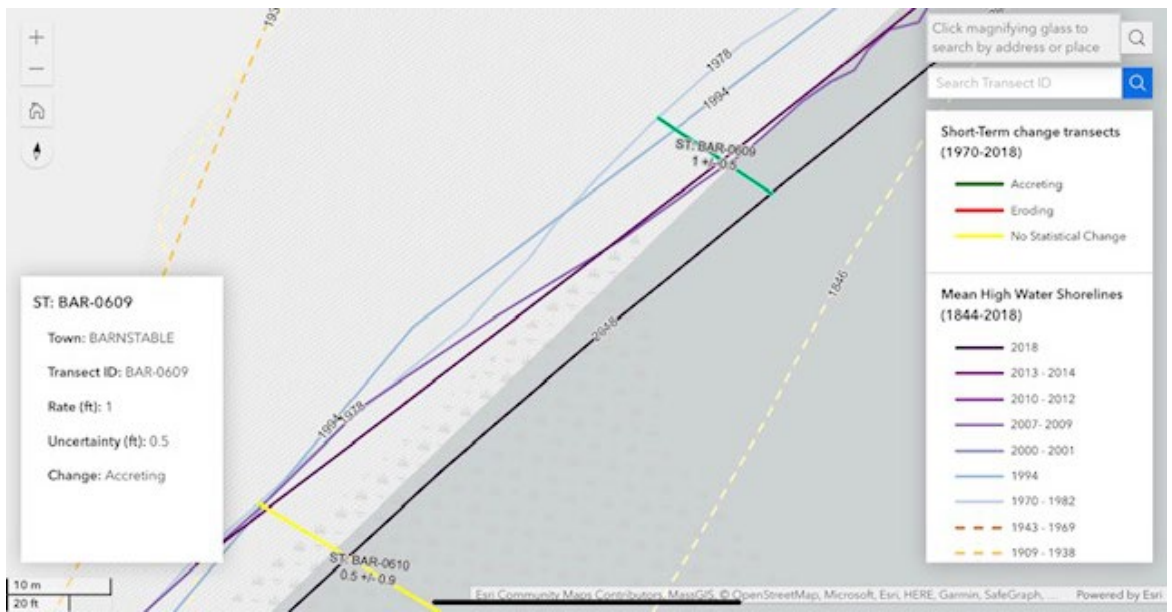
We see Craigville Beach down from Dowses Beach as another possible concern. There are likely others in the Commonwealth of Massachusetts that would be negatively impacted.

It would be a public service to clarify the severe limitations of the CZM data. The public deserves it.

Thank you.
Maria and Greg Gerdy

These are the screenshots for the aforementioned transects for Dowses Beach, Cape Cod.





From: [Greg Gerdy](#)
To: [Strysky, Alexander \(EEA\)](#)
Cc: [Engler, Lisa Berry \(EEA\)](#); [Knisel, Julia \(EEA\)](#); [Greg Gerdy](#)
Subject: New England Wind 2 Connector DEIR - Public Comment 03a
Date: Thursday, August 31, 2023 8:22:00 PM

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Dear Mr. Strysky,

A. Outdated CZM data - Please note that the NEW2 Connector DEIR submitted *outdated* CZM data for the Long-Term (1800s-2014) and Short-term Shoreline Change Rate (1970-2014) for Dowses Beach. This means that any analysis in the DEIR is also outdated and must be revised for MEPA review.

We request that the DEIR be updated to show and incorporate more current data for the Short-Term Shoreline Change Rate, as well as the Long-Term Shoreline Change Rate.

B. New CZM data show erosion at Dowses Beach -The DEIR must show NEW analysis for the short-term change rate incorporating latest 2013-2014 and 2018 change rates. These rates show **erosion at Dowses Beach**.

Seeking MEPA review of the DEIR while using outdated data is unacceptable.

The DEIR is dated 14 July 2023. There is no reason that the DEIR is continuing to rely on outdated CZM data when the new data are already available for **2018**.

Given that there are new CZM viewer data for 2018, this significant data exclusion in the DEIR is concerning.

Again, basing the DEIR on outdated data is unacceptable for MEPA review.

The 2013-2014 and 2018 short-term CZM rates show *erosion* for Dowses Beach.

This is a material and relevant fact.

This very important fact of an eroding barrier beach shows that the three EHV cable landfall should NOT ever be made on estuarine and fragile Dowses Beach.

It would be extremely risky and environmentally harmful to have three (3) large EHV electrical cables installed through the HDD method, which is too invasive for the fragile and eroding, estuarine, barrier beach.

Buried EHV cables would risk exposure not only from hurricanes and storms but also from the eroding beach and sea level rise. The same goes for the three underground electrical vaults in the parking lot. With sea level rise, hurricanes and beach erosion, those electrical vaults could become massive electrocution problems for Barnstable citizens, both children and adults.

As we have noted before, HDD as a geotechnical engineering process is unregulated by the

Commonwealth of Massachusetts. The developer proposing the project on Dowses Beach has no track record with offshore wind farms.

It is not environmentally responsible to experiment with a geotechnical engineering project much less experiment on an eroding, estuarine, barrier beach such as Dowses Beach.

We say “protect Dowses Beach and leave it alone.”

C. No cable landing on an eroding Dowses Beach - The cable landing of three huge EHV cables on the beach and the installation of three huge underground electrical vaults in the parking lot would severely impact the already fragile estuarine environment.

D. The Dowse mansion was lifted off its foundation and swept away to East Bay - The Dowse mansion used to occupy the location of the current bathhouse at Dowses Beach. The hurricane of 1944 destroyed the large house. Much flooding resulted. Subsequently, the Town of Barnstable renovated the Dowse property and turned it into a bathing beach for the Barnstable citizens. The deed shows 31 May 1946 for this transaction.

Please refer to our email Public Comment 03 for accompanying details; which we just sent before this.

Thank you.
Maria and Greg Gerdy

N.B. Attachment A Figure 10-4 and Figure 10-5 show the outdated CZM data in the DEIR.

From: [Greg Gerdy](#)
To: [Strysky, Alexander \(EEA\)](#)
Cc: [Greg Gerdy](#)
Subject: New England Wind 2 Connector - EEA#16611 - Public Comment 02
Date: Tuesday, September 5, 2023 10:19:30 AM
Attachments: [WHOI-R-85-001-Goud-M.R.-and-D.G.-Aubr.pdf](#)

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To: Mr. Alexander Strysky
MEPA
Fr: Maria and Greg Gerdy
1 September 2023

Re: New England Wind 2 Connector - DEIR / Public Comment 02

Intro:

In "A Geologist's View of Cape Cod," Arthur N. Strahler states:
"Through its whole extent, Cape Cod consists almost entirely of sand, gravel, silt, clay, and boulders, with no solid bedrock whatsoever showing anywhere or even to be found at depths of many feet below the surface."

The waterfront Dowse Mansion, where the current Dowses Beach bathhouse is located, was destroyed in the Great Atlantic Hurricane of 1944. Strong winds were clocked at over 100 mph in the vicinity. A destructive 12-foot tidal surge flooded the barrier beach and surroundings. The Great Atlantic Hurricane of 1944 came a mere 6 years after the 1938 New England Hurricane - a Category 3 hurricane but other reports state that it was really a Category 4 hurricane.

The Dowse Mansion was *lifted off its foundation and strong floodwaters swept it away to East Bay.*

Dowses Beach is rated by FEMA as VE (special flood hazard zone) and is subjected to periodic nor'easters, hurricanes and blizzards of varying strengths and fury due to its prime location in the Atlantic Ocean.

Dowses Beach is *eroding* - according to CZM 2013-2014 and 2018 short-term shoreline rate.

Among memorable extreme weather events are Hurricane Sandy in 2012; the Blizzard of 2005 with 27-foot swells and buried Hyannis in 31 inches of snow; the 1997 April Fool's Blizzard; Hurricane Bob in 1991, "lashing the Cape and Islands with sustained winds of 75 to 100 mph with gusts up to 125 and a storm surge of six to nine feet;" the Blizzard of 1978 which washed away the famed Outermost House of Harry Beston and strong wind gusts, unofficially clocked at over 100 mph, flooded the coast; the December 1969 Nor'easter brought severe flooding and wind gusts of almost 100 mph; and the back to back hurricanes of Edna and Carol in 1954.

In addition to the massive flooding of Dowses Beach and destruction of the Dowse Mansion during the Great Atlantic Hurricane of 1944, over 60 feet of shoreline eroded from nearby Wianno Beach as a result of the hurricane.

Dowses Beach is the wrong place for the wrong project. The massive, multi-year industrial New England Wind 2 Connector (New2 Connector) project must find another more suitable location for its proposed three Extra High Voltage (EHV) electrical cable landing.

Please note that at this time, NEW2 Connector aka Commonwealth Wind, is a hypothetical project, as it does not have money to fund the project and it paid a \$48 million fine to get out of its contract with the utilities. Many Barnstable citizens consider it frustrating, as well as a waste of public resources, public funds and public officials' time, to make hypothetical public comments to a hypothetical DEIR for the hypothetical NEW2 Connector project.

We have petitioned the Town of Barnstable officials to reconsider the wisdom of the project for the Town of Barnstable and to *rescind* its Host Agreement, currently on pause. The Host Agreement was signed without the public participation of many Barnstable citizens via an official public comment period. We consider this lack of an official public comment period as an undemocratic act that deprived the Barnstable citizens to voice their serious concerns and, indeed, their strong opposition to the project.

We support renewable energy, including Solar PV.

Part A.

We request that the following subjects in the DEIR be addressed. Details to the requests are in Part B.

1. The DEIR should include an augmented DHI report.
2. The DEIR should include an augmented RPS report.
3. The DEIR should address the concerns posed under the Supplement section.

Part B.

1. DHI: Long Term Landfall Site Erosion Modeling - The oversimplified and limited DHI report is *equivocal* in that it states that Dowses Beach is "dynamically stable." "Dynamically stable" is an oxymoron.

The DEIR should expand its limited and oversimplified analysis of the long term erosion for Dowses Beach. For quality control and quality assurance, the DEIR should include aerial photographs and orthophotographs in addition to the satellite images and LiDAR data used in the DHI report. At least one on-site visit to Dowses Beach by qualified DHI professionals should be scheduled to validate - on the ground - the trustworthiness of all the data analyzed. If there is no familiarity with Dowses Beach, nuances and other important elements could be missed, miscalculated and/or misinterpreted.

The DEIR should expand its analysis to a longer time period instead of the short 20-year period chosen. The DEIR should use more images - greater than the very few 7 images - in the DHI report to show a more realistic and longer-term historical view of the erosion at Dowses Beach.

We noted that the Danish firm DHI relied solely on satellite images and LiDAR data. It did not specify whether the LiDAR data were 2D or 3D. There was no mention of an actual, in-person, DHI visit to the Dowses Beach site. It limited the analysis to only seven (7) satellite images: 2002, 2010, 2012, 2016, 2018, 2020 and 2023. We noted the absence of the use of orthophotographs for the analysis. There was no mention of aerial photographs used for quality assurance / quality control.

Although satellite images and LiDAR data are useful and convenient, especially for an analysis that, we assume, was done from DHI's European location - Denmark, there are also several disadvantages.

"Satellite images are only as good as their resolution. The smaller the pixel size, the sharper the image. But even high-resolution images need to be *validated on the ground to ensure the trustworthiness of the interpretation.*"

Since there was no mention of any actual DHI site visit to Dowses Beach, the data used were not “validated on the ground” to ensure that the image interpretation was trustworthy and accurate. A 2023 image was part of the DHI analysis.

We noted the relatively fuzzy, poor resolution of the images used in the report. There were no images shown other than on relatively fair weather days. If only fair weather days are analyzed, how accurate would *any* conclusion be? As well, the chosen long-term rate was fairly short: 2002 - 2023, using a very limited number of only 7 images.

We noted that only one extreme weather event was addressed, Hurricane Sandy, and it was oversimplified and not thorough. There should be at least two other extreme weather events to compare the results. We suggest Hurricane Bob as one. As well as using helpful aerial photography and orthophotographs for quality control and quality assurance.

We did not see Important data for vertical differences mentioned. If this datapoint wasn't considered, then how could the analysis be considered accurate? Even if the Dowses Beach shoreline appears unchanged, but the sand erosion has worsened and thinned out, then what seemingly appears as a stable beach is, in reality, an *eroding* beach. We found the Massachusetts CZM website helpful for insights on erosion and accretion.

It wasn't clear what “shoreline variability” method was used (Figure 4-3) and that was not helpful for our understanding, creating a *knowledge gap*. There are common cases cited by USGS wherein the shoreline and the land are misrepresented - among others, by misreading and misinterpreting the LiDAR data; or by the relative inexperience of the reader; or by the reader's unfamiliarity with the terrain.

Although there was a brief discussion of the Hurricane Sandy episode, given that it was based only on, and limited to, LiDAR data, there was little quality control and quality assurance that the report - glaringly unsupported by aerial photography, orthophotographs and limited data on vertical differences - was thorough. Also, we read that NAVD 88 is “non-geocentric” by 2.2 meters. Biased and tilted. Reportedly, passive markers have either been knocked out of alignment, removed, etc. Then why was NAVD 88 used instead of the new model?

Neither did we see any mention of factors such as beach nourishment. It would have been helpful to use orthophotographs and aerial photos in the *storm aftermath* of Hurricane Sandy, but the DHI report was oversimplified and limited, and did not have these. Another missing element was not factoring the hard structures at Dowses Beach. We read about hindcasting and ask why this method was not used to supplement the report.

We noted that the report's chosen time frame ignored certain destructive and extreme weather events including the blizzards in 2005 and 2006. The 2008 Atlantic Hurricane season was considered one of the “most destructive” Atlantic hurricane season since 2005. For instance, during the Great Cape Cod Snowstorm of 2008, offshore buoys registered “winds up to 69 mph with 29.2 foot waves.” This oceanic storm brought heavy wet snow, dangerous roads due to snow drifts and school closings. We were struck by the seeming “coincidence” that the DHI report stated that “an image from 2008 was discarded due to quality/ bias issues.” Given the sheer number of available images, wouldn't it have been easy enough to get another 2008 image? We wonder about the “bias” issue: could it be that there was too much Dowses Beach erosion in 2008?

The USGS created a “LiDAR Error Dictionary” to address “commonly encountered errors associated with Light Detection and Ranging (LiDAR) datasets submitted to the USGS data validation unit for ingestion into the National Map.” The existence of this USGS dictionary should be a clue as to how tricky and difficult it can be to interpret LiDAR data. The dictionary cites many examples of LiDAR interpretation errors. Compounding this is the innate difficulty of analyzing coastal, estuarine and marine environments, including estuarine Dowses Beach; with the added complexity of the nearby and very dynamic inlet.

“Dynamically stable” is an oxymoron. The report used this oxymoronic phrase to describe Dowses beach several times in the report. If Dowses Beach is stable, then just say so. By putting a word to qualify “stable,” as in “dynamically stable,” it comes across as disingenuousness. As though DHI could not categorically conclude that Dowses Beach was stable. Again, the DHI report was *equivocal*.

We fail to see how Dowses Beach is judged as “very well suited as a cable landfall area,” according to the DHI conclusion.

The poor resolution of the images, the limited time period, the very limited number of images used, the lack of supporting aerial photography and orthophotographs, no vertical differences data, no beach nourishment data, no factoring of dynamic inlet, no on-site visit to validate the trustworthiness of the data interpretations all lead to our own conclusion that the DHI report is too limited and incomplete for any conclusion to be reached.

The proposed NEW2 Connector project deserves a more thorough and detailed analysis. This is too complicated, too disruptive and too large of an industrial project - and the DHI report is too simplified and too limited to be used as one of the deciding factors on which to base a major decision of a cable landing. Certainly, the use of a mere 7 images - to make a major conclusion supporting three EHV cable landings - would be severely inadequate to support the industrialization of a fragile, estuarine barrier beach.

Did the limited and simplified DHI report convincingly conclude that Dowses Beach is a stable beach?

No, it didn't.

The best that DHI could come up with is that Dowses Beach is the oxymoronic “dynamically stable.”

2. RPS: Modeling of Episodic Coastal Storm Erosion -

The DEIR must contain modeling scenarios that include hard structures, currently existing (jetty, fishing pier, culvert) and proposed additions (underground electrical vaults, culvert electrical cables.) We are unsure how to classify the parking lot pavement but this should also be considered in the modeling.

The DEIR must add another numerical model to provide a thorough modeling study. We have come across studies using *both* XBeach and Delft3D, with helpful results.

The DEIR must include higher erosion levels and water level. Are we correct that erosion levels were modeled only to a max 8.9 feet and water level for a max of 14.6 feet? With sea level rise, aren't these arbitrary maximum numbers for erosion levels and water level too conservative? After all, what are being tested are extreme events.

According to RPS, “No pre- and post-event profiles were made available to *calibrate the numerical model with.*” The report stated that “While there is no public photographic evidence or recorded quantitative data revealing the extent of Hurricane Sandy's damages at the Dowses Beach area, LiDAR from 2011 and 2013 / 2014 show little to no net change in the beach system over the three year period...”

We comment on two things here: in our research, we came across “hind casting,” and ask why there was no attempt to use this modeling method in the claimed absence of Hurricane Sandy public photos and “recorded quantitative data.”

Second, the rather quick conclusion that there was “little to no net change” is questionable at best. As mentioned earlier, there is a USGS LiDAR Error Dictionary. LiDAR interpretation is subject to misinterpretation and miscalculation. Without supporting evidence of aerial photography and orthophotographs, there really aren't any sources for quality control and quality assurance for RPS' interpretation, is that true? The missing factors of vertical differences data, beach nourishment data and the lack of a past Dowses Beach on-site, on the ground validation to ensure the trustworthiness of the RPS interpretation are problematic.

It was not clear whether the LiDAR data used for Hurricane Sandy interpretation were in 2D or 3D. USGS provided examples of common errors when collecting and interpreting LiDAR coastline / marine data. Coastlines, estuaries and marine environments are tricky. Many who are unfamiliar with them have misinterpreted the data, according to USGS. How familiar were the RPS staff with estuarine Dowses Beach? The very dynamic inlet near Dowses Beach complicates the

interpretation.

The added complexity that factors fragile Dowses Beach as an *estuarine area* should give us pause that the LiDAR data interpretation on Hurricane Sandy and its aftermath are absolutely accurate, without other necessary supporting materials for quality control and quality assurance. We also noted that the LiDAR images were not high-resolution and were a bit fuzzy?

RPS did “not consider any cable or other structure.” Also, “all surfaces (including sand, pavement, dune vegetation, etc.) were modeled as erodible and erosion control measures (riprap) were not included given the model’s resolution.”

The aforementioned was a major *knowledge gap* in the DEIR. It did not make sense to us why the modeling scenarios for 2030, 2050 and 2070 did not include any that had electrical cables and hard structures. Without those elements, the modeling scenarios done for the DEIR seemed to be done in a vacuum, without proper context.

The DEIR must include more modeling scenarios - using both XBeach *and* Delft3D - which factor in the three massive underground electrical vaults in the parking lot; the electrical infrastructure additions on the Causeway duct bank / culvert; jetty; and fishing pier. The presence of the dynamic inlet near the stone jetty and fishing pier should also be factored in. Sea level rise factor is assumed. RPS mentions “potential bed scouring due to the structures themselves.” This factor should be taken into consideration as well.

Just like in the RPS report, the XBeach and Delft3D scenarios should be for 2030, 2050 and 2070, each showing 50-year, 100-year and 200-year events. With 2050 showing 50-year and 100-year events back-to-back.

3. DEIR Supplement

The DEIR Supplement of 4 August 2023 stated: “We note that the modeled storm scenarios are extreme and would damage the coastline in many parts of Cape Cod and in Barnstable in particular, not just Dowses Beach. The modeled damage would be caused regardless of the project.”

This statement is neither here nor there. It comes across as insensitive and clueless.

The modeling scenarios were not to show whether the Cape Cod coastline would be damaged per se. What was being asked of the modeling scenarios was what adverse impacts of the extreme weather events would be on fragile, estuarine Dowses Beach to determine its suitability for a huge, industrial, EHV three-cable landing, and the accompanying industrial, electrical infrastructure added to the parking lot underground and the Causeway duct bank / culvert separating Phinney’s Bay from East Bay.

Since no modeling scenarios were made that included the electrical cables and any structures, there are no DEIR data to consult, and this glaring lack of modeling scenario data constitutes serious *knowledge gaps*. These knowledge gaps must be addressed by the developer.

Among questions to be addressed are whether:

- the underground electrical vaults in the parking would rise up and become exposed;
- the buried electrical cables in Dowses Beach would become exposed;
- the electrical infrastructure in the Causeway duct bank / culvert would be damaged;
- the electrical supply will be compromised and whether the electrical infrastructure can be repaired or be rendered useless;
- the parking lot of Dowses Beach will become a vast *electrocution field* with exposed electrical vaults that could harm innocent children and unsuspecting adults;
- the Causeway would be rendered impassable and result in essentially closing off public access to Dowses Beach for months, if not years, until repairs are completed;
- the underground electrical vaults would explode and cause electrical fires;
- the *absence of bedrock* would make it complicated to secure the electrical infrastructure proposed for Dowses Beach during extreme weather events;
- there would be continued and repeated exposure of the electrical infrastructure during extreme flooding and severe weather events;
- there would be continued and repeated repair of the electrical infrastructure during extreme weather events, resulting in limited public access to Dowses Beach, if any access is even possible.

Lastly, we ask *who* will pay for the storm damages? Will the developer be required by the Town of Barnstable officials to donate to an escrow account (e.g. \$500 million to account for inflation) to help pay for the damages? Or will the utility company pay for the damages, with an infinite surcharge added to the electricity bills of the Barnstable citizens?

Thank you.

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THEORETICAL AND OBSERVATIONAL ESTIMATES OF NEARSHORE BEDLOAD TRANSPORT RATES

M.R. GOUD and D.G. AUBREY

Woods Hole Oceanographic Institution, Woods Hole, MA 02543 (U.S.A.)

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ABSTRACT

Goud, M.R. and Aubrey, D.G., 1985. Theoretical and observational estimates of near-shore bedload transport rates. *Mar. Geol.*, 64: 91–111.

Sediment transport rates in a shallow (<3 m) nearshore region are estimated using theoretical models and using bedform migration rates measured from vertical aerial photographs covering a 10-yr interval. Aerial photographs of the study area in Nantucket Sound, Massachusetts, showed low-amplitude (tens of centimeters), long wave- and crest-length (tens to hundreds of meters), shore-normal sand waves in distinct geometrical patterns. The waves migrated an average of 10–20 m yr⁻¹ over a 10-yr period; the migration distances and bedform dimensions were used to calculate an average volume transport rate for the area. This rate was compared to bedload transport rates calculated using a Meyer-Peter and Müller model and a Bagnold model; field observations of steady currents and directional waves provided data for the calculations. Theoretical rates based solely on asymmetrical tidal currents are as much as an order of magnitude smaller than the observed rates, but inclusion of storm wave effects in the theoretical predictions brings them into better agreement with observations. This suggests that even in tidally dominated, protected regions with low background wave energy, infrequent storm wave events significantly modify sand transport rates and patterns.

INTRODUCTION

Studying the transport of sediment in the nearshore and shelf environment raises problems of both theoretical and practical interest. In practice, problems of contaminant dispersal, coastal erosion and seafloor stability require an understanding of sediment transport processes and this need has generally been met through empirical studies. Theoretical advances in the study of interactions between a movable bed and a fluid flow, however, have provided new and effective tools for modeling sediment transport processes in natural environments (e.g., Smith, 1977; Grant and Madsen, 1979). Aspects of these theoretical approaches can be combined with field observations and empirical transport formulas to improve the understanding of sediment transport processes in the natural environment.

Direct measurement of marine sediment transport is difficult and investigators have used a variety of techniques: dyed sand (e.g., Komar and Inman, 1970), radioactive tracers (e.g., Heathershaw, 1981) and bedform migration,

monitored with bathymetric profiles (Aubrey, 1979) or stake fields (e.g., Salsman et al., 1966). The difficulty of monitoring the small changes in these transport indicators limits these studies to short time durations and small areal extent. Transport rates evaluated in these types of studies are time-averaged measures of the response of the bed to the flow and can be generalized only in so far as the flow conditions during the period of study can be assumed to be typical of a longer time duration and a larger area.

Transport estimates can also be made with a more dynamically oriented approach: measure the physical forcing mechanisms (i.e., waves and currents) in the marine environment, employ fluid dynamical theory to convert these records into bottom shear stress estimates and use empirical models to calculate sediment transport rates. This method overcomes some of the problems of direct measurement, since the estimates are derived from the area's flow field and seafloor configuration. The flow field can be easily measured over relatively long periods (months or years) or extrapolated from long-term weather records; the seafloor configuration can be characterized using samples, bathymetric profiles, photographs or direct observations. However, uncertainties in calculating boundary shear stress based on point velocity measurements in the water column and lack of field corroboration for flume-derived sediment transport formulas make this approach unreliable in practice, even in steady-flow environments where the bed configuration is constant. Introduction of surface gravity waves and a movable bed makes sediment transport calculations even more suspect. The empirical transport formulas themselves were derived from steady-flow flume experiments and have undergone only limited testing in the field.

The uncertainties in the calculations are obvious when the method is applied. Gadd et al. (1978) compared three bedload transport formulas (disregarding suspended load) in a tidally dominated region and found an order of magnitude difference in the predicted transport rates. Heathershaw (1981) compared predicted transport with sand movement measured using radioactive tracers; the predicted direction of transport coincided with the observed, but with a large variation between estimates of transport rates. The variations between the theoretical estimates in these results emphasize the necessity for field experiments to constrain the theoretical approach.

This study compares sediment transport predictions based on current-meter records and bedload formulas with transport calculated from sand-wave migration distances. Use of aerial photographs to measure sand-wave movement makes possible an unusually long time scale since photographic coverage spanned ten years. High-frequency surface gravity waves are shown to be important for sediment transport, even in a shallow, tidally dominated nearshore region.

STUDY AREA

Sediment transport was examined on a shallow platform (<3 m in depth) extending one kilometer offshore from Popponeset Beach on Cape Cod, Mass. (Fig.1). The platform is located in Nantucket Sound between Cape Cod and nearby islands. The bathymetry of the Sound is a complex configuration of shoals and channels, which complicates tidal flow patterns and, with the sheltering effect of the islands, protects the study area from open ocean swell.

The area of interest, referred to here as Popponeset Platform, is wedge-shaped, extending for 5 km along the shoreline from Succoneset Point northeast to Meadow Point (Fig.1). Its seaward limit is defined by a steep slope towards a channel which reaches depths of 11 m. The channel is less than 3 km wide, shoaling rapidly to a linear ridge (Succoneset Shoal). A set of nearly shore-normal sand waves, easily distinguished on aerial photographs (Fig.2), cover the platform. Wavelengths and crestlengths are on the order of tens to hundreds of meters, and soundings showed the waves range from 30 to 60 cm in height, with gently sloping, near-flat stoss slopes and relatively steep lee slopes (Fig.3).

Photographs taken in successive years clearly show the sand waves migrating slowly toward the southwest (Fig.4); the pattern of southwest migration is also evident over time periods up to three decades (Fig.5). Tidal flows on the platform generally parallel the shoreline and non-storm wave energy is insignificant. Because of this, little on-offshore sediment exchange takes place.

METHODS

A detailed net of sounding lines was run to determine the general bathymetry of the region (Fig.6) and the dimensions of the sand waves. Bathymetry was acquired using a 200 kHz Raytheon DE719C precision echo sounder, corrected for tides as measured at the time of the surveys. Navigation was performed with a Del Norte Trisponder microwave navigation system with three shore-based transponders providing ranges to the vessel. Precision is within 5 m (root-mean-square error).

Distances of migration of the sand waves, measured from high precision, map quality vertical aerial photographs, average 10–20 m yr⁻¹ over the period 1971–1981. Series of photographs at a scale of 1:18,000 were taken on four separate dates between August 1981 and October 1982 as a part of this study. Migration distances from 0 to 30 m are visible over that year (Fig.4). A set of photos taken in 1971, archived at the U.S. Department of Agriculture, provided data for longer term migration rate measurements (Fig.5). Forty-three sets of aerial photos have been taken of this area between 1938 and the present (Aubrey and Gaines, 1982) and platform sand wave patterns are visible on most of them. However, variable migration rates, differences in photo scales and poor photo quality before 1970 make

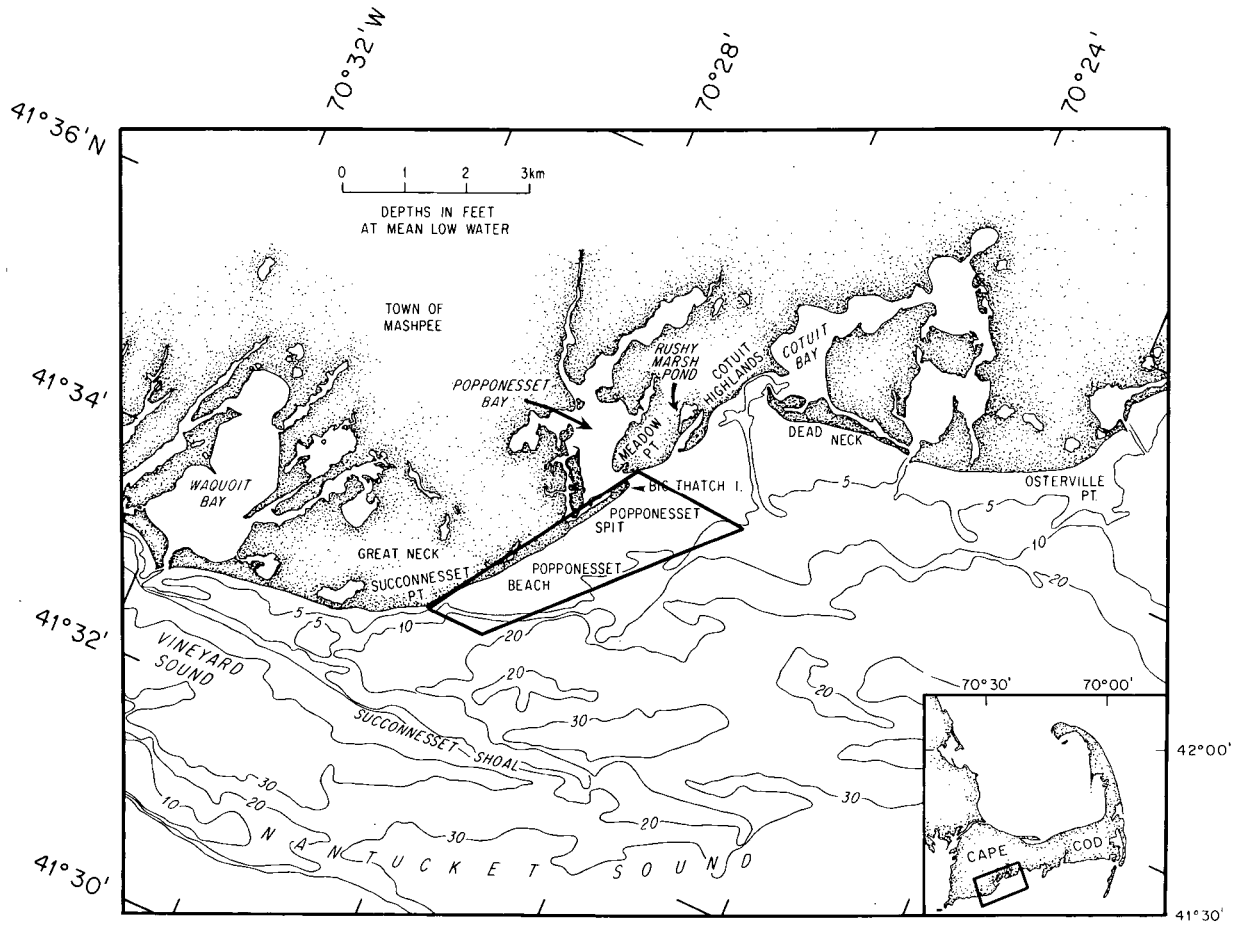


Fig.1. The Popponeset barrier beach setting, Cape Cod, Mass. Popponeset Platform is enclosed in box.

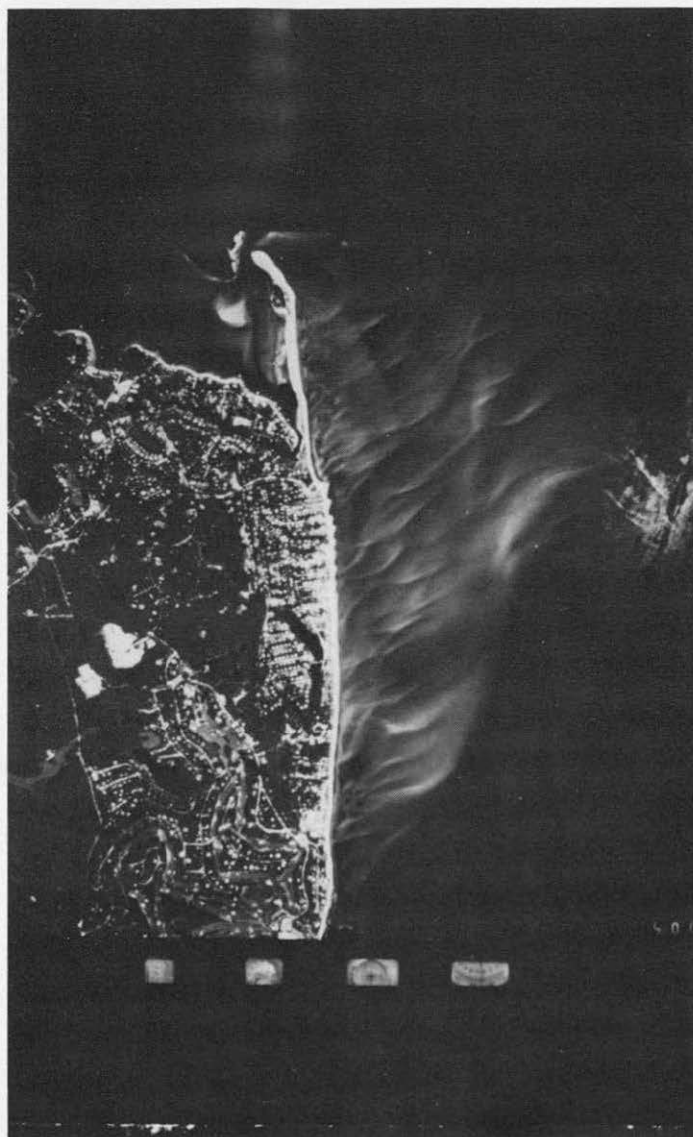


Fig.2. Aerial photograph of study area, showing sand waves on Popponneset Platform. Photo taken 19 August 1981.

correlation of individual sand waves impossible beyond the ten-year interval 1971–1981, limiting the study to that period.

Grain-size characteristics used in the sediment transport formulas are determined from 27 surface sediment samples from the platform (Fig.7). Samples were collected using a hand-operated grab sampler and analyzed for grain-size distribution using an electronic settling tube (Schlee, 1966). All samples were fine-to-coarse, abiotic sand with negligible silt- or clay-sized

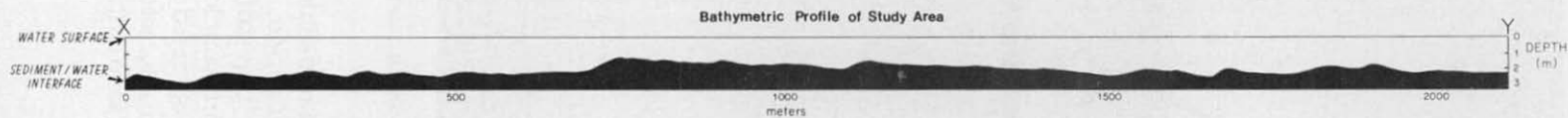


Fig.3. Bathymetric profile of Popponeset Platform. Location shown in Fig.4.



Fig. 4. Sand-wave migration patterns on Popponeset Platform for the period 1981–1982. Location of profile in Fig. 3 is shown.

components and little or no gravel. Median grain sizes (Fig. 7), calculated using graphic moments techniques (Inman, 1952), ranged from 26 to 67 μm . Eigenfunction analysis of the grain-size classes of all 27 samples gave a mean grain size for the platform of 35 μm , and this value was used in transport calculations (for details of the eigenfunction analysis, see Aubrey and Goud, 1983). The low volume of silt and clay and lack of biological activity allowed an assumption of cohesionless transport. Sediment grain density is assumed to be 2.65 g cm^{-3} .

Two current meter deployments were made in the study area during the fall of 1982. A Neil Brown two-axis acoustic current meter, sampling at a 10-s interval, was located on the platform—from 22 October through 9 November (Fig. 7). Water depth was approximately 2.5 m with the sensor 1.5 m above the bottom. The second set of current measurements was part of a wave gage deployment in 6.5 m of water in the channel (Fig. 7) from 2 November through 30 November, 1982. The instrument was a Sea Data 635-12 wave gage, which consists of a two-axis electromagnetic current sensor located 1.98 m above the bottom and a precise quartz oscillator

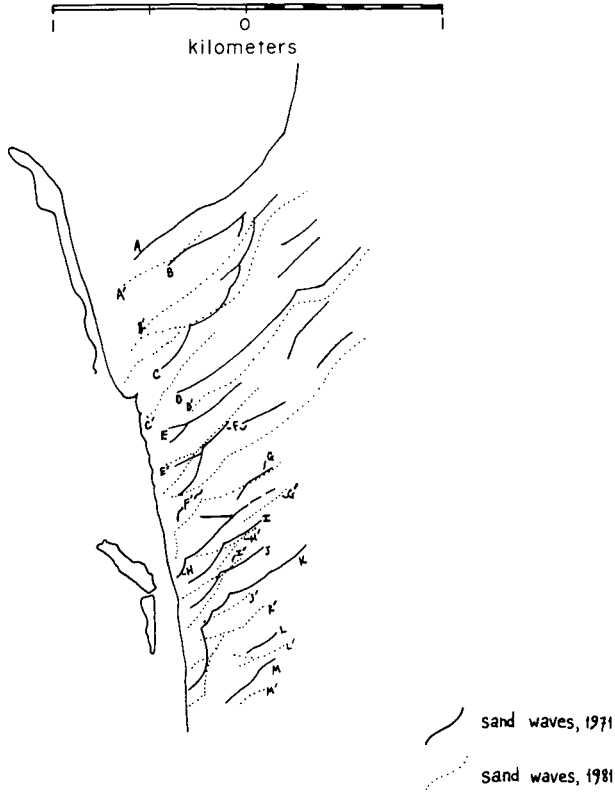


Fig. 5. Sand-wave migration patterns on Popponeset Platform for the period 1971–1981.

pressure sensor, internally recording. The instrument sampled flows continually at 30-min intervals, with burst sampling every four hours at a 1-s rate for 2064 s.

Both records showed a strongly rectilinear, semi-diurnal tidal flow parallel to the coast. Channel flow direction was 45° TN (clockwise from true north) on flood tide and 225° TN on ebb. A rotary component spectral analysis (Gonella, 1972) of the platform tidal data gave an ellipse orientation of 217° TN for all tidal components and practically no shore-normal flow. Flows in the channel were generally faster than on the platform: there the root-mean-square amplitude of the tidal flows was approximately 41 cm s^{-1} . On the platform the rms amplitude was 34 cm s^{-1} and flow velocities reached 40 cm s^{-1} less than 2% of the time (Fig. 8). Net tidal asymmetries to the southwest were observed in both records; asymmetries in speed and duration of the flows are responsible for net sediment transport.

Wave energy was low during the month of deployment, with an average sea surface variance $\langle \eta^2 \rangle$ of only 61 cm^2 , calculated from measurements of the free surface from mean sea level (η) due to surface gravity waves. Variance is related to the total wave energy per unit area (E) by the equation:

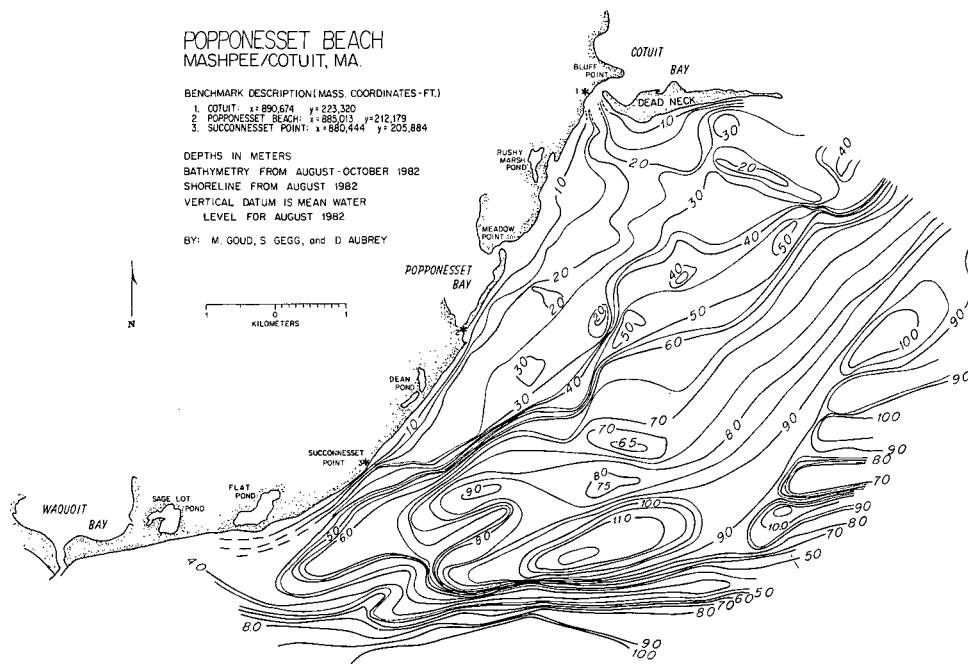


Fig.6. Detailed bathymetric map of the Popponneset Beach region.

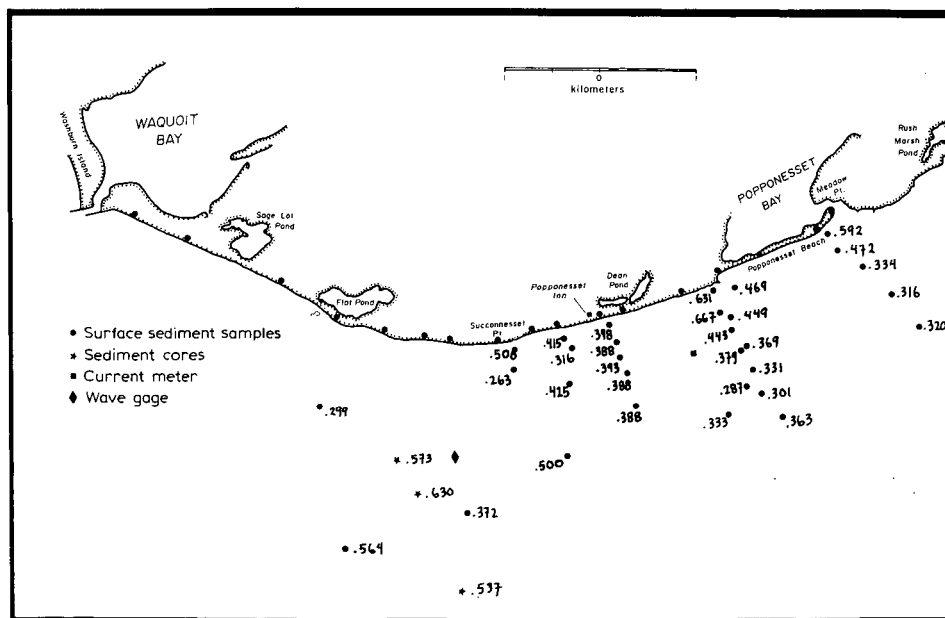


Fig.7. Locations and median grain size of surface sediment samples and locations of instruments deployed (grain size in mm).

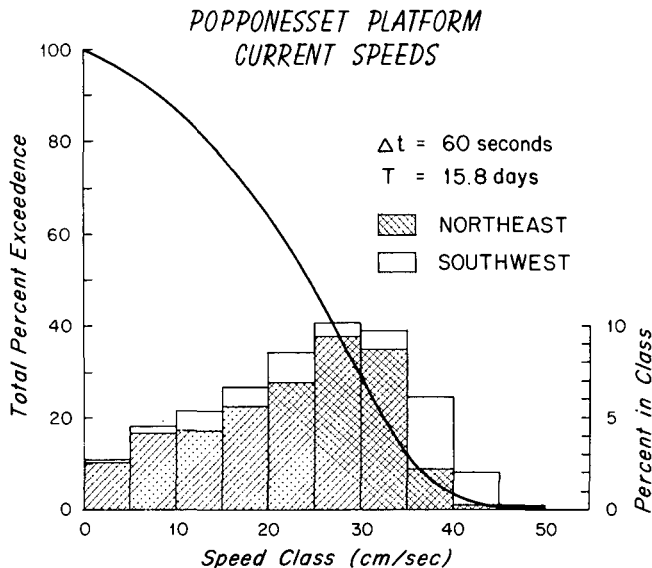


Fig.8. Histogram of tidal currents during current meter deployment on Popponesset Platform. Percent in speed class in a particular direction is indicated by upper limit of appropriate pattern. T = record length; Δt = period over which 10-s samples were averaged.

$$E = \rho g \langle \eta^2 \rangle$$

where ρ is the density of water and g is gravitational acceleration. Another representation of wave energy, significant wave height ($H_{1/3}$), is the mean height of the highest one third of the waves and is close to the wave height one would estimate visually. It is approximated as:

$$H_{1/3} = 4 \sqrt{\langle \eta^2 \rangle}$$

For the period of the study, mean significant wave height was only 24 cm and the mean peak period was between three and four seconds. Waves in this range will have a non-linear reaction with the tidal current to enhance boundary shear stress (Grant and Madsen, 1979) and thus increase sediment transport. These small waves, however, add only minimally to the total bottom stress: the enhanced shear velocity (u_*) is at most 15% greater than that calculated from the current alone. This falls within the range of uncertainty due to other factors (e.g., boundary roughness, skin friction/total shear-stress ratio, critical shear stress, all discussed in more detail below), so the process will be linearized to assume quasi-steady flow due to tidal currents.

Comparisons of wave and wind activity, based on hourly meteorological observations at nearby Otis Air Force Base during October and November, showed surface waves responding directly to local winds (Fig.9). Both wave energy and direction were directly correlated with winds, indicating that wave climate for this area can be estimated from local weather records,

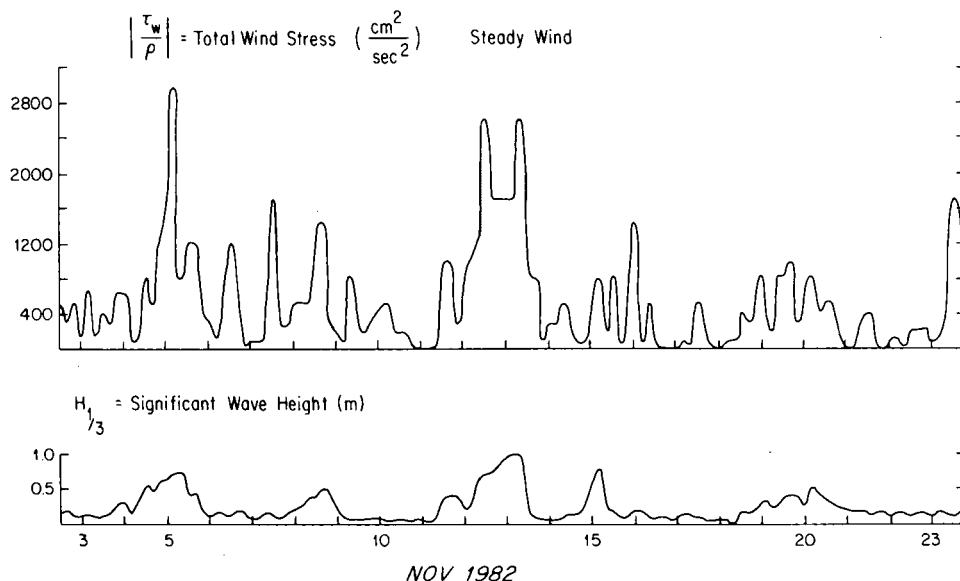


Fig.9. Time series of significant wave height ($H_{1/3}$) and wind stress during wave gage deployment.

without consideration of open ocean swell. This observation is important for long-term estimates of sediment transport.

Maximum windspeeds during November, 1982, were about 10 m s^{-1} , generating waves with a significant height of about 1.0 m in the channel and a period of four seconds (over the fetch of Nantucket Sound). Based on shallow-water wave models, a 12.5 m s^{-1} wind would generate 1.3 m waves with a maximum period of five seconds; 1.0 m surface gravity waves would be generated on Popponeset Platform by extended periods of 7.5 m s^{-1} winds. Waves of that magnitude would affect sediment transport on the platform by greatly increasing the bottom shear stress.

RESULTS AND DISCUSSION

Volume sediment transport rates were calculated using three different methods. Net volume transport was calculated based on sand-wave migration distances; two sets of bedload transport volumes were calculated based on the platform current measurements, one using a modified Meyer-Peter and Müller (1948) equation, the other with a modified Bagnold (1963) formula. Comparison of these estimates tests the assumption that the volume of sediment transported in the sand wave can be approximated by the bedload transport estimates. This equivalence has been verified by a history of observation of bedform migration as a vehicle for bedload transport of sediment, dating from Gilbert's (1914) careful observations of sediment movement in streams and flumes. Bedforms as transport mechanisms have

been studied widely since then in both the laboratory (e.g., Simons and Richardson, 1961) and the field (e.g., McCave, 1971; Bokuniewicz et al., 1977). Since neither bedform migration nor the bedload transport equations include suspended load, both are minimum estimates of total sediment transport.

While the term *sand wave* is sometimes used to describe any periodic irregularity in a granular material from scales of centimeters to hundreds of meters (Yalin, 1972), its use here is limited to large scale bedforms which do not respond to short-period (i.e., tidal cycle) variations in the sediment flux. Smaller scale (cm) bedforms which form in response to flows only slightly greater than threshold for sediment motion will be referred to as *ripples*; they are superimposed on the large sand waves and are assumed to cover the platform. This usage is consistent with the literature for environments comparable to Popponeset Platform.

SAND-WAVE VOLUME TRANSPORT

Calculation of long-term sediment transport rates based on migration of the Popponeset sand waves required an estimate of the volume of sand within a wave. The sand-wave volume was modeled two ways. A minimum volume was calculated using the assumption that the sand movement is concentrated in the immediate vicinity of the wave crest, forming in cross section an isolated, asymmetric triangle which migrates across the flat platform (analogous in appearance to a solitary wave). A reference sand-wave volume $V_{0(\min)}$ (= volume per meter of crest length per wave length) was calculated, based on a detailed survey of a single, representative sand wave. The area under the wave, from the trough of the wave on its downstream side to where the wave appeared flat on its stoss slope, was measured in each profile. Integration of those areas yielded the total volume of the sand wave; division by the crest length gave $V_{0(\min)}$, which can be multiplied by observed crest length to estimate individual sand wave volume. This bulk volume was multiplied by 0.6 to account for porosity (Yalin, 1972). This method accounted for irregularity of wave shapes, gradual disappearance of the waves at their ends and the need to relate measured migration distances of wave crests to sand volumes. $V_{0(\min)}$ was calculated as $15.2 \text{ m}^3 \text{ m}^{-1} \lambda^{-1}$.

For a maximum estimate, a 15 cm thick layer of "active sand" is assumed to exist across the interval between wave crests, with a porosity factor of 0.6, so that $V_{0(\max)} = V_{0(\min)} + (0.6) (0.15) \lambda$. This estimate accounts for mobility of the bottom layer: sand is being transported across the entire platform, not simply in the crestal area of large-scale sand waves. Ripples serve as transport mechanisms and are ubiquitous over the platform. The low steepness (wave height/wave length) of the sand waves made the sand-wave shape indistinguishable from the local topography only a few meters from the crest, making it impossible to integrate the sand wave volume across the entire wavelength and necessitating this "active layer" approximation. The 15-cm layer agrees well with the maximum depth of sediment

burial determined by Heathershaw (1981) in a similar environment, based on radioactive tracers. Also the total volume calculated using the $V_{0(\max)}$ for a 100-m wave is close to a volume determined using the area under an idealized sand wave of triangular profile, 50 cm in height with a length of 100 m, dimensions typical of sand waves on Popponeset Platform.

Ten-year sediment transport rates were calculated for sand waves A through M (Figs.4 and 5). Maximum and minimum transport rates (m^3 per m of platform width per year) were calculated using the formulas:

$$I_{r(\min)} = \frac{V_{0(\min)} D}{\lambda}$$

and:

$$I_{r(\max)} = \frac{(V_{0(\min)} + 0.09 \lambda) D}{\lambda}$$

where D = average annual migration distance and λ = wavelength. These normalized rates varied from sand wave to sand wave because of differences in migration distances and wavelengths. Minimum estimates ranged from 0.4 to 2.3 $\text{m}^3 \text{m}^{-1} \text{yr}^{-1}$ and maximum estimates from 1.0 to 3.3 $\text{m}^3 \text{m}^{-1} \text{yr}^{-1}$. Mean values were 1.24 and 2.3 $\text{m}^3 \text{m}^{-1} \text{yr}^{-1}$, respectively, with uncertainty of approximately 0.5 $\text{m}^3 \text{m}^{-1} \text{yr}^{-1}$.

Since these values are normalized by the wavelength, they represent the average volume rate of sand transport past a line on the platform. For example, for a point opposite Popponeset Spit where the platform is about 1 km wide, the transport estimates fall in the range:

$$1240 \text{ m}^3 \text{ yr}^{-1} < V < 2300 \text{ m}^3 \text{ yr}^{-1}$$

PREDICTED SEDIMENT TRANSPORT BASED ON FLOW FIELDS

Application of laboratory-derived, empirical sediment transport formulas to a field situation requires a set of assumptions about the physics of the interactions of the seabed with the flow. We relate our point velocity measurements to bed shear stress using either the Karman-Prandtl logarithmic velocity profile or a drag coefficient. The Shields curve is used to define a threshold shear stress for initiation of motion. The bedload equations used in this study were formulated in laboratory flows generating shear stresses only slightly stronger than necessary for initiation of sediment motion, so they are not appropriate for situations involving suspended transport.

The volume of sediment in suspension can be determined by comparing the shear velocity (u_*) with the fall velocity of the sediment grains (w), in the form:

$$P_s = \frac{w}{\kappa u_*}$$

For values of $P_s > 2$, suspended load is negligible (Smith, 1977); using the

maximum tidal current in the Popponeset area of about 40 cm s^{-1} and the fall velocity of the median grain size, a value of $P_s = 4.64$ is obtained. The bedload criterion is therefore met.

The Shields curve is the most reliable criterion available for initiation of motion on a flat bed, although some investigators have suggested that it underpredicts the threshold velocity in rippled bed environments (Dyer, 1980). The logarithmic velocity profile and drag coefficient relate the current velocity to shear stress on a flat or rippled surface, but they do not account for the effects of large scale features found in natural environments, such as the Popponeset Platform sand waves. An analysis of flow over a wavy bottom (Smith, 1977) to determine the sand waves' effects on the flow, however, showed that these small amplitude waves had a negligible effect on the flow at 150 cm from the bottom where these measurements were made, justifying the rippled flat bed assumption.

Meyer-Peter and Müller model

The Meyer-Peter and Müller (M-PM) bedload formula is a simple, purely empirical method for estimating sediment transport, developed using extensive flume data (Meyer-Peter and Müller, 1948). It is based on the assumption that bedload volume transport is related to boundary shear stress beyond the value necessary for initiation of sediment motion, as expressed in the difference in Shields Parameter values $\psi - \psi_c$. The method has been tested in more recent laboratory studies (Wilson, 1966; Fernandez Luque and Van Beck, 1976) and found to be quite accurate.

To estimate sediment transport rate from flow measurements using this method, the current velocity is converted to a boundary shear stress using the Karman-Prandtl logarithmic velocity profile:

$$\frac{u}{u_*} = \frac{1}{\kappa} \ln \frac{z}{z_0}$$

where u is the velocity measured a distance z from the bottom; κ is von Karman's constant, equal to 0.4; z_0 is a measure of the boundary roughness; and u_* is the shear velocity, equal to $\sqrt{\tau_0/\rho}$; τ_0 is boundary shear stress; ρ is fluid density. The primary roughness elements upon which the value of z_0 depends were assumed to be ripples whose parameters were defined by the median grain size (d) according to Yalin (1972), so that $\lambda_r = \text{ripple length} = 1000 d$ and $H = \text{ripple height} = 0.1 \lambda_r$. These dimensions were used to determine the Nikuradse equivalent sand-grain roughness, k_b , and thence the roughness length z_0 . In rough turbulent flow, the condition at Popponeset during sand transport, z_0 equals $k_b/30$. For a flat bed, the equivalent sand-grain roughness equals the sand-grain diameter, but for a rippled bed it is greater and for current-formed ripples can be defined (Glenn, 1983):

$$k_b = 30 H (H/\lambda)$$

For a mean grain size of 35 μm and a rippled bed:

$$z_0 = 0.35 \text{ cm}$$

A boundary shear stress can be calculated from each velocity measurement using these formulas. This shear represents the total stress acting on the flow and can be parameterized into a skin friction component and a form drag component according to a drag partitioning scheme (Engelund, 1966). The skin friction, which is responsible for bedload transport, is generated by the interaction of the fluid with the sand grains in the bed. In this case, drag partitioning shows skin friction representing 60% of the total shear stress felt by the flow; Meyer-Peter and Müller (1948) found skin friction over a rippled bed to be 50% of the total. The rest of the shear stress is due to pressure gradients generated by flow over the ripples.

A modified Shields diagram (Madsen and Grant, 1976) was used to determine the critical shear velocity for initiation of grain motion. The critical Shields parameter ψ [$= \tau_0 / (s-1)\rho g d$] is 3.6×10^{-2} , which translates to a critical shear velocity of 1.41 cm s^{-1} . We assume here that the median grain size for the platform adequately represents the bed.

Each velocity measurement was used to calculate a Shields parameter value. If the calculated Shields parameter was greater than the critical value, volume sediment transport was calculated using the modified M-PM bedload equation:

$$q_{sb} = 8 \left[d \sqrt{\left(\frac{\rho_s}{\rho} - 1 \right) \rho g d} \right] (\psi - \psi_c)^{3/2}$$

This equation can account for partitioning of the total shear stress, but has been changed from the original M-PM to explicitly include the Shields parameter (Wilson, 1966).

To calculate transport rates, the 17-day velocity record was averaged over 640-s intervals and each velocity used to produce a transport estimate. The positive (northeast) and negative (southwest) values were summed separately to provide gross directional transport values, then added together to estimate net transport rates for the period of current meter deployment. Because tidal flows are generally predictable, to first order the 17-day record can be assumed to reflect conditions throughout the year. On this assumption, yearly transport rates were extrapolated from the 17-day transport values (Table I).

The MP-M estimates are strongly dependent on two parameters which may vary with unsteadiness in the flow and irregularities in bedforms: the skin friction/total bed shear stress ratio and the z_0 value. The skin friction percentage calculated using the Engelund method (60%) and the z_0 value derived from equilibrium bedforms in a steady flow over a uniform sand (0.35 cm) are maximum estimates. The effects of varying these parameters are shown in Table I; the MP-M calculations are particularly sensitive to variations in the skin friction percentage. Even the highest estimates, how-

TABLE I

Calculated sediment transport rates on Popponeset Platform ($\text{m}^3 \text{ m}^{-1} \text{ yr}^{-1}$)

	Net positive to S.W.	Gross transport rates		
		to NE	to SW	Total
Sandwave volume, minimum	1.24	n.a.	n.a.	n.a.
Sandwave volume, maximum	2.29	n.a.	n.a.	n.a.
Meyer-Peter, Müller (current only)	0.71	0.36	1.07	1.43
% skin friction = 0.5	0.38	0.10	0.48	0.58
% skin friction = 0.4	0.13	0.01	0.14	0.15
$z_0 = 0.17$	0.32	0.07	0.39	0.46
Meyer-Peter, Müller [current/ wave ($\psi_{cr} = 0$)]	1.01	1.22	2.24	3.43
Bagnold (current only) $\beta = 4.5 \times 10^4$	0.13	0.07	0.20	0.27
$\beta = 7.2 \times 10^4$	0.21	0.11	0.32	0.43

Meyer-Peter, Müller calculations have the following parameter values, with exceptions as noted: $z_0 = 0.35$ cm; skin friction/total bed shear = 0.6; $\psi_{cr} = 0.035$. Bagnold calculations have a critical velocity $u_{cr} = 21.0$ cm s^{-1} for current only.

ever, are substantially smaller than the minimum volume transport predictions based on sand wave migration. This suggests that currents alone are not responsible for the observed transport, and the effects of storm waves on total transport should be incorporated. This can be accomplished in a general way using long-term wind records with the current measurements.

Since background (non-storm) wave energy is low, daily wave activity has little or no effect on the boundary shear stress. A sustained wind of greater than 15 knots (7.5 m s^{-1}), however, increases local significant wave heights to 1.0 m or more, with periods of more than four seconds. Applying the Grant and Madsen (1979) model for boundary shear stress due to combined wave and current activity shows waves of this size increase the shear stress above the critical value for all values of current velocity. Under the assumption that current measurements represent the driving force for sediment transport even during storms, with waves having only the effect of increasing bed shear stress to make sediment available for transport, storm-generated transport can be estimated.

Calculations using the M-PM formula were repeated with the critical Shields parameter set to zero, assuming wave shear stress is sufficient to initiate sediment motion. A physical limitation to this approach is its neglect of the non-linear effects of wave/current interaction (Grant and Madsen, 1979), a problem which is compounded when the M-PM equation is linearized by simply dropping the critical Shields parameter. The estimates, therefore, can be viewed only as first-order approximations of the effects of waves on sediment transport. Likewise, values of z_0 and skin friction/total shear change as bedforms are washed out by increased wave stress, but for the purpose of this rough comparison they will be left constant. National weather service records show wind velocities greater than 7.5 m s^{-1} approxi-

mately 22% of the time, so transport rate estimates are based on combined wave/current shear stresses 22% of the year, with tidal currents alone determining the remainder.

These predicted rates fall much closer to the transport rates calculated from sand wave migration (Table I). These wave/current estimates give a rough indication of the effects of wave action on boundary shear stress and sediment transport, demonstrating that excess transport calculated by sand wave migration can be explained partly by storm wave action. The calculations reflect several simplifying assumptions: that effects of changes in bed roughness due to increased shear stress are negligible; that transport rates based on laboratory-developed bedload models for unidirectional flow are representative of wave-dominated conditions in the field; that the M-PM equation can be linearized as described above; and that currents during storms are well-represented by our 17-day record, rather than depending on storm setup. While the closer agreement with observed rates demonstrates the potential importance of storm waves even in this sheltered, tidally dominated environment, specific transport values are only estimates.

Bagnold model

The Bagnold model rests on the assumption that the volume of bedload transport is proportional to the stream power per unit area of the bed lost due to friction between the fluid and the bed (Bagnold, 1963). The power per unit area can be expressed in terms of the boundary shear velocity cubed (Inman et al., 1966), which can be related to current velocity to calculate transport estimates from current meter data. Other studies (Gadd et al., 1978; Heathershaw, 1981) have applied the Bagnold sediment transport equation to nearshore current measurements; Heathershaw (1981) also compared predictions with transport rates based on tracer dispersion. The Bagnold formula was modified by Gadd et al. (1978) to incorporate a threshold shear stress. Using flume data from Guy et al. (1966), they express the original Bagnold equation in terms of the velocity one meter above the bed, U_{100} , and a critical current velocity U_{cr} :

$$q_{sb} = \frac{\beta}{\rho_s} (U_{100} - U_{cr})^3$$

The empirical coefficient of proportionality β , determined from the flume data, incorporates the drag coefficient $C_{d100} = 3.1 \times 10^{-3}$. Values of β ranged from 7.22×10^{-5} to $1.73 \times 10^{-5} \text{ g cm}^{-4} \text{ s}^2$ for d_{50} equal to 190 and 450 μm , respectively, with a mean value of $4.48 \times 10^{-5} \text{ g cm}^{-4} \text{ s}^2$. The mean and larger values were used in our calculations.

The logarithmic velocity profile was used to determine U_{100} from measurements at $z = 150 \text{ cm}$, with the critical U_{100} obtained from the Shields diagram. The critical velocity obtained in this manner is 21 cm s^{-1} , based on the median grain size for the platform.

Gross and net transport rates were calculated in the same manner used for the MP-M method. The values determined from the 640-s average current velocities (Table I) are substantially lower than the M-PM rates, but within the same order of magnitude and in the same direction. Variation of the skin friction/total shear ratio in the M-PM calculations can bring them into near agreement.

CONCLUSIONS

This study has several implications for the study of sediment transport in the nearshore environment. First, results provide a rough corroboration of laboratory-derived sediment transport formulas for field situations on time scales of years to decades. Measured and theoretical estimates determined in this study are the same order of magnitude and in the same direction. Given the uncertainties and assumptions, this agreement is encouraging. The rough agreement between the Meyer-Peter and Müller and Bagnold calculations for unidirectional, steady flow strengthens this argument since both Heathershaw (1981) and Gadd et al. (1978) found the Bagnold formula to be the most accurate for prediction of bedload transport. Partitioning of the total boundary shear stress into skin friction and form drag components was critical to the M-PM estimates, however, and the assumptions made in partitioning are rather uncertain. The variability introduced by changing the skin friction/form drag ratio emphasizes the need for a reliable method for measuring or calculating the shear stress on a rippled bed. The Meyer-Peter and Müller equation is useful for examining the effects of variation of different parameters on transport estimates since it makes the calculation more responsive to a particular flow. As flow conditions can be more accurately measured and their interactions with the seafloor better understood, this method should become more widely used.

Secondly, the study demonstrates the importance of wave action in any nearshore environment. Wave energy is generally very low on this sheltered, shallow platform; but infrequent, high-energy storms are critical to modeling net transport of sediment, even in a tidally dominated region of this sort.

Finally, this study has demonstrated the utility of long-term photographic coverage of shallow, nearshore regions flooded by large bedforms. Bedform migration rates, under suitable water conditions and depths, can be documented better from these photographs than from repeated bathymetric profiling or tracer studies.

Theory and measurement techniques must undergo numerous changes and advances before accurate sediment transport predictions can be confidently made from measurements of waves, currents and grain size. The agreement between theory and measurements of net transport demonstrated in this study, however, is an encouraging measure of the convergence of field and lab techniques over time scales of interest to scientists and engineers.

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APPENDIX

Key to symbols

- C_{d100} = drag coefficient relating current velocity at $z = 100$ cm to boundary shear stress
 d = mean sand-grain size (cm)
 D = average annual sand-wave migration distance (m)
 E = total wave energy per unit area (dyne cm^{-2})
 g = gravitational acceleration
 H = ripple height (cm)
 $H_{1/3}$ = significant wave height (cm)
 I_r = volume sediment transport rates ($\text{m}^3 \text{m}^{-1} \text{yr}^{-1}$)
 k_b = Nikuradse equivalent sand-grain roughness (cm)
 q_{sb} = bedload transport rates of sediment ($\text{cm}^3 \text{m}^{-1} \text{yr}^{-1}$)
 s = relative density of the sediment particle ρ_s/ρ
 u = measured current velocity (cm s^{-1})
 u_* = shear velocity = τ_0/ρ (cm s^{-1})
 U_{100} = current velocity 100 cm above the bed (cm s^{-1})
 U_{cr} = critical U_{100} for initiation of sediment motion
 V = volume rate of sediment transport ($\text{m}^3 \text{yr}^{-1}$)
 V_0 = reference sand-wave volume ($\text{m}^3 \text{m}^{-1} \lambda^{-1}$)
 w = sediment grain fall velocity (cm s^{-1})
 z = distance above seafloor (cm)
 z_0 = boundary roughness length (cm)
 $\langle \eta^2 \rangle$ = wave-energy variance (cm^2)
 β = coefficient of proportionality in Bagnold formula ($\text{g cm}^{-2} \text{s}^2$)
 η = displacement of the free surface from mean sea level, due to surface waves (m)
 κ = Von Karman's constant
 λ = wavelength of sand wave (m)
 λ_r = ripple length (cm)
 ρ = fluid density (g cm^{-3})
 ρ_s = sediment density (g cm^{-3})
 τ_0 = boundary shear stress (dyne cm^{-2})
 ψ = Shields parameter = $\tau_0/[(s-1)\rho g d]$

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From: [Greg Gerdy](#)
To: [Strycky, Alexander \(EEA\)](#)
Cc: [Greg Gerdy](#)
Subject: NEW2 Connector - Public Comment 04
Date: Saturday, September 9, 2023 9:14:15 AM

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To: Mr. Alexander Strycky
MEPA
Fr: Maria and Greg Gerdy
9 September 2023

Re: West Barnstable Substation, Potential Source of Drinking Water and EPA sole source aquifer review

Question: We would like to know the agency that has jurisdiction over the West Barnstable Aquifer Protected Overlay District, in relation to the “Potential Source of Drinking Water.”

During the Barnstable Conservation Commission (BCC) meeting on Park City Wind last week, one of the BCC members stated that the BCC does *not* have jurisdiction over the aforementioned area. We were surprised to hear him state that it is either the EPA or the Commonwealth of Massachusetts that has jurisdiction over that area.

As such, the BCC could not address any of the Barnstable citizens’ serious environmental concerns re: construction of the proposed West Barnstable Substation on Shootflying Hill Road.

Since the proposed West Barnstable Substation will include the NEW2 Connector, we think this matter is highly relevant.

We oppose using this “Potential Source of Drinking Water” area for the proposed Substation.

Using one of the very *last* identified potential sources of drinking water - that will further stress the Sole Source Aquifer of Cape Cod - is unacceptable and would be *environmentally irresponsible, depriving the Barnstable citizens of essential drinking water in the near future.*

We again request that the EPA conduct a Sole Source Aquifer review of the Cape Cod Sole Source Aquifer - for the Town of Barnstable.

To our knowledge, no sole source aquifer review for the Town of Barnstable has ever been conducted by the EPA. A sole source aquifer review would be extremely helpful and would be environmentally prudent.

This EPA review would be timely and appropriate in light of the potential devastation / contamination that a proposed, unnecessary and industrial size substation would wreak on an ecologically fragile aquifer protected overlay district. That is also one of the very last potential sources of drinking water that has been identified.

Please see our reference below to the Weston & Sampson study commissioned by the Town of Barnstable for the Barnstable- Hyannis Water System.

Thank you.

References

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<https://www.westonandsampson.com/new-source-investigation-study/>

From: [Greg Gerdy](#)
To: [Stryker, Alexander \(EFA\)](#)
Cc: [Greg Gerdy](#)
Subject: Recycling and Contamination - NEW2 Connector Public Comment
Date: Tuesday, September 26, 2023 10:53:35 AM

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To: Mr. Alexander Stryker
MEPA
Fr: Maria and Greg Gerdy
26 September 2023

Re: Public Comment
New England Wind 2 Connector (aka Commonwealth Wind)

Recycling - Where do offshore wind (OSW) turbines and their associated components go to die?

We are concerned that the hypothetical Commonwealth Wind project has a relatively short, usable lifespan of 25-30 years to produce electricity but the project's adverse environmental impacts will be significantly longer.

Fast forward to 30 years from today when hundreds of Commonwealth Wind's old, massive and almost indestructible wind turbine blades, along with its *onshore* electrical components in Dowses Beach, will litter many acres of our stressed-out earth.

Landfills would overflow with these hard-to-recycle components. This adverse environmental impact is *forever*. Is this the world we want to leave for future children and generations? How can MEPA help?

Contamination and Destruction - Why is the rare and precious West Barnstable location at Shootflying Hill Road being *sacrificed* for an unnecessary and environmentally destructive substation?

There are very few existing Town of Barnstable "Potential Sources of Drinking Water" and the proposed West Barnstable substation location is one of them. This same location is also a zoned residential area with many existing homes.

We, along with many Barnstable citizens, are very concerned that the Town of Barnstable officials are willing to sacrifice this irreplaceable, valuable, potential water resource to an *unnecessary* substation.

In an earlier public comment, we noted the viable, well-located and already *existing* transmission alternative of the Canal Substation in Sandwich. There is also the South Coast variant. There is the Shared Transmission option.

We address the Town of Barnstable officials' financial concerns that if the Commonwealth Wind landing is not made on estuarine Dowses Beach, then the Town would miss out on the opportunity to get a paltry \$16 million in 25 years from the OSW developer.

Why destroy several acres of forested land, cutting down hundreds of mature trees, in the name of addressing climate change? It's irony to the nth degree.

Does it truly address climate change if dwindling acres of Cape Cod forest are senselessly cut down to build a massive and unnecessary substation? NO, it does not.

Weston & Sampson study - Why would the Town of Barnstable officials want to *risk the contamination of a potential source of Drinking Water*?

Having spent limited public funds for a *pricey* Weston & Sampson study for the Barnstable-Hyannis Water System, the Town of Barnstable officials now seemingly choose to *ignore* the study results.

It defies belief that although this specific West Barnstable location was *found to be highly rated and very promising* by the study, the Town officials have allegedly agreed to the OSW developer's demand to develop it for their proposed business venture.

Will these same Town of Barnstable officials stand aside and allow an unnecessary substation to not only destroy the valuable, forested West Barnstable land but also potentially *contaminate* it? Is this not an alleged prime example of bad governance?

N.B. After much public outcry, the Commonwealth Wind Host Agreement, which was quickly signed by the Town of Barnstable officials - without any official public comment period - is now on hold. We have earlier asked the Town Manager to do the Right Thing and *Rescind* it. It was considered a poorly made decision by many Barnstable citizens.

MEPA - We ask MEPA to intervene and require that the West Barnstable land on Shootflying Hill Road remain as is and to be properly protected as it should be:

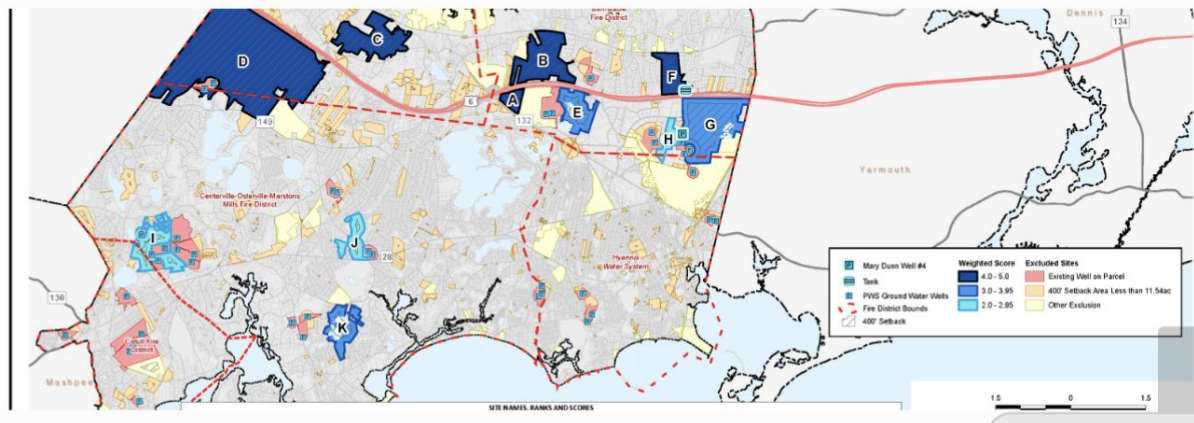
*An Aquifer Protection Overlay District and
A Potential Source of Drinking Water.*

Thank you.

References

New Source Investigation Study

Posted on June 1, 2022 by Weston & Sampson (B)



<https://www.westonandsampson.com/new-source-investigation-study/>

<https://fasproject.com/2021/09/07/as-barnstable-hunts-for-new-sources-of-public-drinking-water-pfas-contamination-rears-its-ugly-head/>

From: [Mike Jacobs](#)
To: [Strycky, Alexander \(EEA\)](#)
Subject: New England Wind 2 Connector – EEA No. 16611
Date: Tuesday, September 26, 2023 10:21:23 AM

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Mr. Alex Strycky, Environmental Analyst
Massachusetts Environmental Policy Act Office, 100 Cambridge Street
Boston, MA 02114

RE: New England Wind 2 Connector – Barnstable, Edgartown, Mashpee, and Nantucket (EEA No. 16611)

Dear Mr. Strycky,

Thank you for the opportunity to comment on the New England Wind 2 Connector, as captioned above. This letter supports the quick and positive review of both Commonwealth Wind, and the necessary cable connection reaching Barnstable, New England Wind 2 Connector.

New England Wind 2 Connector has many similarities to Avangrid's first two projects (Vineyard Wind 1 Connector and New England Wind 1 Connector) approved by the Commonwealth, including cables traversing a similar shared corridor below the seabed, using the same installation methods, and making landfall and connecting to the electric grid in Barnstable.

The Commonwealth of Massachusetts continues to lead the nation in economic and environmental development through offshore wind. Avangrid's Commonwealth Wind project will continue this leadership by bringing more than 1,200 Megawatts (MW) of renewable offshore wind energy to the New England electric grid and increasing the reliability and diversity of the New England energy supply. Every megawatthour produced by the Commonwealth Wind project and carried over the proposed cable permanently displaces the importation, combustion and pollution from natural gas and oil for electricity generation. The project will cut greenhouse gas emissions by over 2.35 million US tons per year, the equivalent of taking over 460,000 cars off the road.

Avangrid's application, track record and commitments demonstrate the necessary due diligence in their environmental safety plans for landing the New England Wind 2 Connector under Dowses Beach in Barnstable, MA. Construction work will be kept to only paved areas of the beach's public parking lot with no construction taking place along the public beach shoreline, in the dunes, in the marsh, or other environmental ecosystems. The method of Horizontal Directional Drilling under the beach to avoid impacts to valuable coastal resources is proven; the same method was used during construction for the Vineyard Wind 1 Connector project just a few miles east of Dowses Beach.

I urge the expeditious review and approval of New England Wind 2 Connector.

Respectfully,

-signed-

Michael Jacobs
Chilmark, MA

<!--[if !supportAnnotations]-->
<!--[endif]-->



alexander.strysky@mass.gov

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View Comment

Comment Details			
EEA #/MEPA ID 16611	First Name Roberta Elizabeth	Address Line 1 80 Greenwood Ave	Organization Resident
Comments Submit Date 9-26-2023	Last Name Mauch	Address Line 2 --	Affiliation Description Individual
Certificate Action Date 10-3-2023	Phone --	State MASSACHUSETTS	Status Opened
Reviewer Strysky, Alexander	Email robertamauch@comcast.net	Zip Code 02601	

Comment Title or Subject

Topic: Centerville River

Comments

Rebecca L Tepper
Chief Energy & Environment Bureau
Massachusetts Attorney General
[617-727-2200](tel:617-727-2200)(tel:617-727-2200)

Dear Atty Rebecca

Many of us Barnstable residents are deeply concerned with Avangrid's intention of burying a high voltage power cable beneath our Centerville River at Craigville Beach and the danger and negative impact to our beautiful seaside village.
Each summer, many children gather at this little bridge to enjoy this spot. This spot is quintessential Cape Cod.
We are deeply concerned with Avangrid's intention to bury this cable at this fragile location. Quite a number of residents have recently signed a petition requesting a public in-person meeting at the Barnstable High School to express our concerns and objections to this proceeding. The safety of our children as well as the environmental health of our Centerville River at Craigville would be unduly jeopardized by burying a high voltage cable at such a critically fragile location.
It is a shocking and careless request, in my opinion especially since there are more feasible less intrusive options available. PLEASE DO NOT LET THEM PLACE THEIR CABLE BENEATH THE CENTERVILLE RIVER.

I have never written your office before and want to besure that our concerns are heard.
Please stop this.
Please respond.

Thank you.

Roberta Elizabeth Mauch
[80 Greenwood Ave](geo:0,0?q=80 Greenwood Ave Hyannis MA 02601)(geo:0,0?q=80 Greenwood Ave Hyannis MA 02601)
[Hyannis, MA 02601](geo:0,0?q=80 Greenwood Ave Hyannis MA 02601)(geo:0,0?q=80 Greenwood Ave Hyannis MA 02601)
[508-680-2778](tel:508-680-2778)(tel:508-680-2778)
Robertamauch@comcast.net(mailto:Robertamauch@comcast.net)

- Attachments**
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2002



September 28, 2023

Alexander Strysky
MEPA Analyst
Executive Office of Energy and Environmental Affairs

Re: *Draft Environmental Impact Report*
EEA Number 16611

Dear Mr. Strysky,

I am writing to submit comments on behalf of the Cape Cod Technology Council, Inc. ("CCTC") on Draft Environmental Impact Report ("DEIR") submitted for New England Wind Connector 2, currently under consideration by the Executive Office of Energy and Environmental Affairs ("EEA"). Founded in 1996, the CCTC is a membership based non-profit organization whose mission is to promote technology, education and economic development on Cape Cod, the Islands, and Southeastern Massachusetts. Our membership includes local Cape, Islands, and Southeastern Massachusetts businesses, technology innovators, educational organizations, government entities, working professionals, and community leaders.

The CCTC supports the development of innovative solutions to meet the anticipated energy needs of the Commonwealth of Massachusetts. One of the most promising of these solutions is wind energy. The New England Wind Connector 2 has the potential to meet these needs while advancing the state of wind energy technology.

In light of the long-term energy and climate benefits offered by off-shore wind projects such as New England Wind Project, the CCTC trusts that the EEA will carefully review and appropriately act on the DEIR.

The CCTC appreciates your consideration of our views. Please contact us if you have any questions.

Respectfully,

Dale Shadbegian

Dale Shadbegian, *President*

September 28, 2023

RE: EEA #16611 New England Wind 2 Connector, Barnstable

Alex Strycky
MEPA office
100 Cambridge Street
Boston, MA

Dear Alex,

My wife and I are writing to you to express our strong opposition of the Commonwealth Wind project landing and laying of High Voltage electric cables under Dowes Beach, threatening the surrounding fragile Eco systems and its bays and through the street of Osterville Village as well as passing through service Zones I and Zone II of our wellhead protection areas and over Cape Cod's sole source of drinking water, our Sagamore lens Aqifer.

We are forty five year residents of the town of Barnstable and the village of Osterville. I am an Obstetrician and Gynecologist at Cape Cod Hospital where I have served as department chief, Chief of staff of over 400 Doctors and served on the Board of Trustees of Cape Cod HealthCare.

My wife and I are deeply concerned with the detrimental effects of the electromagnetic fields produced by these cables and which will be placed extremely close to the surface.

Already these cables have risen to the surface and been damaged in other projects such as nearby Block Island.

Horizontal drilling is not deep beneath the surface and it is only done for short segments of the cable course. Most of the cable is laid in a shallow trench which is easily disrupted by currents, wind, and storms. Already cement blocks have been placed in the Vineyard Wind project to hold the cables down beneath the seabed.

There is proof that electromagnetic fields produced by these untested cables have been linked to childhood leukemia and brain cancer.

Will you bring your grandchildren to play at Craigville and Dowes beach?

These cables are being produced for the first time in New Bedford and have never been tested for their integrity. In fact there are very few proven studies anywhere on the H.V. cables.

We do not wish to be an experiment. You may be a proponent of obsolete wind mills but the devil is in the details and the details have not been worked out.

Our second great concern is with the effects on Cape Cod's most sacred resource our drinking water , 100% sourced from Cape Cod alone.

The Aquifer extends under the seabed along our southern shore. What if it has any intrusion by sea water. We will be doomed. There is no Osmotic Water Plant on the horizon.

The course of these cables is planned over our aquifer which is an outrage. There are studies on heat effects of the cables both under the seabed and over the aquifers. Again I ask you do you have in the field actual studies of these cables in proximity to our drinking water. I will site you a study from the Geophysical Journal International. Vol 206. Issue2, 2016 which records the temperature of these cables to 170 degrees F. " such temperature changes in the surrounding sediment may cause significant impacts and displacements of living organisms, and potential for geochemical changes within the sediments." " with the thermal temperature increases evolutionary, physiological, and behavioral responses will be impacted and their geographical distribution." " The temperature changes could cause changes in pore water and solid phase geochemistry including degradation of solid organic matter, recrystallization and dehydration of clay minerals, mobilization of potentially toxic metals and precipitation of calcium carbonate."

Water in the Aquifer contain acceptable levels of bacteria. When water warms the water warms the bacteria counts will rise and render our water undrinkable. This is an incredible danger that must be avoided. We do not want to be a commercial energy companies experiment.

The disruption of business, fire safety, ambulances and police in our small village will be enormous and last for years. The disruptions in Hyannis and Centerville by the Covell Beach landing is proof of these concerns.

Where is the evidence based studies proving the safety of this project.? Again, the devil is in the details. No studies have been presented only hearsay.

The impact on our fragile ecological treasure will be great and never recover. Cape Cod is not an Industrial site.

Cape Cod is one of Massachusetts Diamonds. It must be protected and preserved for our future generations. Doves Beach or anywhere on the Cape and Islands should not be used for the convenience of Avengrid. It should not be sacrificed to attain a quota on clean energy production. This is poor technology in the wrong place.

My wife and I ask that you diligently review this project for proven data based evidence for the health and safety issues. We ask that you review the multiple issues of environmental impacts both on nature and the citizens of the Village of Osterville. This project should not be allowed to be permitted.

Sincerely,

Joseph J. Conway, M.D.
Patricia A. Conway R. N.
920 Main Street
Bldg 1, unit 3
Osterville, MA 02655

Jconway50@aol.com

tac1949@gmail.com

508-420-0887

From: [Greg Gerdy](#)
To: [Strysky, Alexander \(EEA\)](#)
Cc: [Greg Gerdy](#)
Subject: New England Wind Connector 2 - Public Comment
Date: Thursday, September 28, 2023 11:09:47 AM

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To: Mr. Alexander Strysky
Fr: Maria and Greg Gerdy
28 September 2023

Public Comment: New England Wind 2 Connector

Shutdown - As we understand it, the “shutdown” rule to stop work if a whale is close by has an existing and unaddressed *loophole that allows pile driving to continue under certain circumstances - even if a whale is nearby.*

It stands to reason that this existing loophole makes the “shutdown” rule iffy at best. This glaring loophole is fatal for any whale unfortunate enough to get in the way of the “unstoppable” pile driving activity.

NOAA has lost its way and much of its credibility when it comes to protecting the marine mammals, especially the North Atlantic Right Whale, from offshore wind activity. Although NOAA claims that 40% of whale fatalities is due to vessel strikes and entanglement in fishing gear, what about the other 60% - deaths that are unaccounted for?

Protected Species Observer - We wish to point out that having protected species observers is merely a *feel good* NOAA guideline. It is essentially ineffective to protect the whale. Protected species observers vary in terms of their actual field experience. The number of well-experienced observers is low. This low supply of protected species observers is a real problem. There is also a great demand for them at this time. What happens when / if the OSW project is short-staffed? It could mean that the same protected species observer would work longer than their allotted, normal, regular shift. This would result in a fatigued and sleepy observer. How effective would a tired and sleepy observer be? Not very.

We ask: What happens when night falls, or during foggy days and foggy nights? How would the protected species observer see beyond the darkness and the fog? These are real world situations that are not sufficiently addressed by the DEIR. Human eyesight can only do so much. Using binoculars assumes that there is some daylight or a clear day ahead. Binoculars are useless in the dark or in extreme fog. Compounded by unfavorable weather conditions, murky waters and human limitations, this “protected species observer” rule is a travesty.

Passive Acoustic Monitoring - Does the DEIR refer to the passive acoustic buoys / monitors that come from WHOI ? If so, we think that these are very expensive *toys posing as new technology* that do nothing for whale protection. This is the experimental acoustic monitoring type that we will discuss.

A major Design Flaw is that an acoustic buoy assumes that the whale will vocalize. So when a rather quiet, non-vocalizing whale is nearby then it will stay undetected by the acoustic buoy.

NARW - it's our understanding that the critically endangered North Atlantic Right Whale (NARW) has been found to be *not as prone* to vocalization as other types of whales.

Relevant as well, as we understand it, is the dependence of the passive acoustic monitoring buoy on the staff listening in and monitoring the acoustic activity. How well trained and experienced are the staff? How many well-trained and experienced staff are actually available to listen in to these passive buoys throughout a 24-hour period or throughout a prolonged offshore wind construction period? We venture to guess: not too many.

A quality control and quality assurance factor: what is the quality of the acoustics? Clear or staticky?

How far reaching is the acoustic buoy's ability to detect whale vocal activity?

Isn't pile driving noisy? And goes on for a continuously long time? How can the staff, even if highly trained, readily distinguish any whale vocalization with all the loud noise coming from the pile driving?

Likewise, wouldn't even the most well-trained staff experience *sensory fatigue* - from the listening and monitoring activity - during the noisy pile driving?

Isn't there also a flawed assumption that the whale vocalization will be *long* enough to be detected accurately?

Coincidentally, the very same NOAA-designated critical habitat of the critically endangered NARW is also the BOEM-chosen area for offshore wind activity. This is the sad fate of the nearly extinct NARW today.

We reached out a few times to WHOI's designer about how the passive acoustic monitoring buoys actually help the NARW. No surprise that there was no response.

The public is not fooled. These experimental, untested and expensive toys are NOT about protecting marine mammals nor saving the nearly extinct NARW. It's a feel good toy and not much more, we think.

Microtunneling is new to North America - Caveat Emptor: in their website, the developer's engineering contractor refers to microtunneling as "The Next Big Thing." The article was dated 16 October 2021. It mentions that microtunneling "came to North America from Japan and Europe in the 1980's." However, the geotechnical engineering method took "decades to catch on" in North America.

If microtunneling is described as the "Next Big Thing" as recently as 2021, shouldn't this give us pause? Wouldn't this mean that there is an experimental whiff to using this relatively new - to North America - method in the Town of Barnstable?

The contractor's website acknowledges that "all trenchless projects pose design challenges." Further, a cautionary statement that "Working underground, *even with the best pre-project*

reports and studies, always brings with it a sense of the unknown.”

Logically, it follows that if microtunneling is relatively new here, then there would be relatively fewer American personnel well-trained and well-experienced in this trenchless method.

Our research showed that microtunneling has seen “*very limited application to energy pipelines.*” This finding seriously compounds that the method is also relatively new here.

Sinkholes - Will the Barnstable citizens now have to worry about the threat of sinkholes created from using experimental microtunneling?

It is concerning enough that the developer has no existing track record with operational offshore wind installations. But to pair this inexperience with an experimental trenchless method called microtunneling to be used in the Town of Barnstable is a potential nightmare in the making. Add in the fairly inexperienced personnel who will be working on the trenchless project and the recipe for a potential disaster is almost complete.

Failed microtunneling project - There is a real life project in Toronto, Canada where workers are reportedly still trying to free a microtunneling boring machine that was stuck *a year ago*. Coincidentally, the developer’s contractor is headquartered in Canada.

Could the relative newness of microtunneling in Canada combined with the relative inexperience of the workers with the microtunneling method have directly contributed to this failed project?

We do not want this to happen to the Town of Barnstable.

Experimentation with microtunneling in the Town of Barnstable is highly risky and should be avoided at all costs.

MEPA - We ask MEPA to require additional information in the DEIR on this proposed trenchless method called microtunneling.

As well we ask for a necessary peer-review regarding the proposed microtunneling project. The peer review must be performed by another reputable, geotechnical engineering firm experienced in microtunneling.

It must be made available to:

- a) MEPA for further environmental review and to
- b) the Barnstable citizens during a public comment period.

Thank you.

References

<https://www.stantec.com/en/ideas/topic/water/microtunneling-the-next-big-thing.html>

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<https://www.structuremag.org/wp-content/uploads/2021/11/282112-C-ConstructionIssues-Ng.pdf>

<https://www.cp24.com/news/city-spending-9m-to-rescue-micro-tunneling-boring-machine-stuck-underground-near-humber-river-1.6299311>

TO: Mr. Alexander Strysky,
Massachusetts Environmental Protection Act Office

FROM: Susanne H. Conley,
Save Greater Dowses Beach

DATE: September 28, 2023

RE: Public Response to New England Wind 2 Connector
EEA No. 16611 Draft Environmental Impact Report (DEIR)

Introduction

I write on behalf of the *ad hoc* citizens group Save Greater Dowses Beach (SGDB) to offer public response to the Draft Environmental Impact Report (DEIR) submitted by Avangrid Renewables for the project named NE Wind 2 Connector. As MEPA is aware, our association opposes the plan to land electrical transmission lines from a future ocean wind farm on the Nantucket Sound beach located in and owned by the Town of Barnstable and historically referred to as Dowses Beach. We find that the DEIR represents an incomplete and self-serving assessment of the environmental impact of the proposed project to the estuarine area involved, as well as to the residential villages along the “preferred” and “noticed alternative” duct bank routes. Our group has generated and documented significant public opposition to the proponent’s proposed cable landings based on four major objections to this aspect of the Commonwealth Wind project: 1) The area is a valuable and vulnerable estuarine environment; 2) the area includes a vibrant and fragile wildlife habitat; 3) the electrical infrastructure proposed for this recreational area poses possible dangers to human health and safety; and 4) the proponent’s plan is needlessly disruptive and detrimental to residents’ daily life, sense of well-being, and the value placed on the human environment. We are also concerned with related impacts to local neighborhoods, villages, and businesses as a result of the proponent’s chosen landing site. SGDB reiterates our position that we do not oppose the development of offshore wind but do object to transmission plans determined by developers based on considerations of profit and ease with little regard to the harmful impacts to the onshore environment.

SGDB offers comments on many of the statements submitted in the DEIR. For cross-referencing purposes, our responses correspond to only those sections of the DEIR that pertain to our concerns and objections. Bolded headings in parentheses are the proponent’s section titles in the DEIR.

(1.3.2. Massachusetts Offshore Wind Legislation and Procurement of Commonwealth Wind Under Section 83C.)

The proponent successfully procured contracts with Massachusetts utilities under the 83C-III solicitation and then defaulted on these contracts. We believe the developer was a major contributor to the failure of the 83C-III requisition. Their stated intention to “move forward” with permitting and project development calls into question the very legitimacy of the 83C-IV RFP process, as Avangrid’s attempt to outpace all other bidders creates what we believe is 1) a fundamentally unfair process under the state’s procurement protocols, and 2) evidence of the proponent’s disregard for any new environmental and other considerations inherent in the fourth round’s RFP. Under these circumstances, we ask that MEPA suspend further action on the proponent’s docket.

(1.4.3 Landfall Site)

SGDB maintains that the proposed landfall site is entirely inappropriate and urges the Massachusetts Environmental Policy Act Office to concur that the greater Dowses Beach parcel is too environmentally sensitive for the installation of electrical grid infrastructure of this magnitude. Our reasons for this position are many and will be addressed in subsequent sections of this public response.

In this section of the DEIR, the proponent emphasizes the use of the Dowses Beach parking lot for the installation of electrical grid infrastructure as appropriate. This facility was never intended to serve as a staging area for a massive utility project. The Town created the lot to facilitate public access, and it is used year-round by pedestrians, bicyclists, and motorists and enhances the parcel's use according to the purpose for which it was acquired. The Dowses parcel was purchased in 1946 by Barnstable for the "purpose of a bathing beach" and this language restricts the alternate use of Dowses Beach proposed by Avangrid – a restriction made clear in the language of Article 97 of the Massachusetts Constitution.

The proponent's assurance that the "installation," also known as construction, will only happen in the summer months ignores the fact that Barnstable is home to many full-time residents who make use of the greater Dowses parcel for fishing, swimming, recreation, and access to the waterfront throughout the year. Also of concern is the wording in this section that construction in summer months would possibly happen if "otherwise permitted by the relevant agencies." This veiled language should not be allowed to stand – the agencies to which the company would turn to commandeer the beach and put it out of commission for public use for an extended period should be named. This statement also conveys a theme the proponent has developed since engaging the community – that in their minds the project will go forward with or without the approval of Barnstable's residents and elected officials.

Finally, given the anticipated three seasons of construction at Dowses, we are skeptical regarding the proponent's promise to consult with NHESP so that the "project will not result in a Take." Given the massive amount of noise, excavation, dirt, dewatering, large equipment traffic, and general disruption this three-year long project would generate, we find this claim to be very questionable. We note that at present the Town of Barnstable has even been prohibited by NHESP from raking the beach during spring months when endangered species are present; Avangrid's proposed project would dwarf any impact caused by the Town's regular beach maintenance. Any person who witnessed the smaller project at Covell's Beach in Barnstable where two offshore cables were installed could not imagine a scenario in which species such as the Piping Plover and Roseate Tern escape harm at the Dowses Beach site, which is a very different coastal environment and rich wildlife habitat.

(1.4.5 Substation)

SGDB formed in September 2022 to oppose the cable landings at Dowses Beach but have come to understand that the proposed landing site has negative environmental consequences beyond that parcel. This includes the proposed construction of a substation at the terminus of the duct bank. We note here two overarching environmental considerations. First, according to the Cape Cod Commission, the Town of Barnstable has only 15% to 20% of open space remaining. The proponent's plan would needlessly remove 29 acres of dwindling land resource for the purpose of "stepping up" high voltage transmission lines that should be sited at an already industrialized site in the first place. We note that the proponent informed the Energy Facilities Siting Board of their plan to increase the footprint of the proposed substation from 16 to 29 acres on May 12, 2023, but failed to inform the residents of the village of West Barnstable of this change of plans at a community meeting three days later, citing instead the lower number. This is an

example of the proponent’s ongoing efforts to cultivate public sentiment in a way that often evades or obscures the truth.

Second, to build large electrical grid infrastructure on 29 acres would be contrary to the Cape Cod Commission’s open space objectives, especially OS-1, which seeks to “protect lands suitable for future water supply sites.” As it is, the proposed substation would be located on land designated as a wellhead protection zone. Such an installation would preclude any future chance of utilizing this area to provide adequate drinking water for the people of Barnstable should the need arise. Additionally, a large area of the proposed site would become impermeable, interfering with, or reducing, the natural run-off and percolation of rainwater, the only means of replenishment for the sole aquifer.

(1.8.1.6 Town of Barnstable and Host Community Agreement (HCA))

SGDB has been assured by Barnstable’s Town Manager that no discussions with the proponent are ongoing. The proponent’s statement that it “hopes to continue discussions with the Town as the project design develops” is therefore inaccurate. The proponent currently has no standing because of its default on the Power Purchase Agreements signed in spring 2022 – not because the project is underdeveloped. SGDB hopes to prevent any future HCA for the so-called Commonwealth Wind project, as to do so would go against the strong opposition of so many in the community to the project.

(1.8.2 Stakeholder Coordination)

Naturally, the proponent wishes to convey to MEPA an impression of stakeholder coordination. Avangrid offers its exhaustive list of consultations, special interest memberships, and community outreach activities as proof of its efforts to “ensure that local communities understand, welcome, and benefit from the Project.” Nowhere in this rosy take on “stakeholder coordination” does the proponent acknowledge the widespread opposition to the plan to install electrical infrastructure in a fragile estuarine environment and throughout the Town. The “open houses” Avangrid touts are often attended by large groups of local residents who express their anger and frustration with this company’s plan for the devastating disruption of a small seaside community and its refusal to consider other, more reasonable and available options for the transmission of ocean-based wind power. We assert that the long list of meetings with the various stakeholder associations referenced in the DEIR should not be understood by MEPA as acquiescence to Avangrid’s plans.

(1.8.3 Abutter Outreach)

Likewise, “abutter outreach” should not be taken to mean that abutters understand or welcome the project. To the contrary, SGDB’s experience in talking with abutters is universal opposition. SGDB is left to wonder how “neighborhood-level conversations have resulted in important local insights that improve the Project.” SGDB will certainly prevail upon Avangrid to explain this comment at their next “open house” in our community.

(1.91 Energy Reliability)

A May 2020 report by the Brattle Group disputes Avangrid’s claim that their proposed transmission scheme will benefit Barnstable County. On the contrary, industry experts who authored the report warn that Avangrid’s proposed transmission plan would create a less stable electrical grid. The report sites

overloaded electrical lines and an overloaded substation that would not only affect the village of West Barnstable in the Town of Barnstable but many other areas on and off-Cape as well. While SGDB claims no expertise in the complicated industry of electricity generation and transmission, our reading tells us that the proponent's reliance on a single "Grid Interconnection Study" with ISO New England, insistence on the use of distance-limiting HVAC cabling, and failure to consider more grid adjacent existing infrastructure for landing offshore cables, is backward thinking and potentially damaging to regional energy reliability as well as to the local environment.

(1.93 Environmental Benefits)

The proponent's claim that their offshore wind farm will lead to environmental benefits by way of adding to the reduction of air emissions has never been in dispute. On the contrary, SGDB has expressed publicly many times that our opposition is not about the development of offshore energy. This developer's claim of the high ground is undercut by their plan to land offshore cables in an environmentally sensitive estuarine area that deserves the protection that modern coastal zone management principles dictate. Causing potential damage to local environments is not an acceptable way to benefit the global environment – certainly not when better and smarter alternatives exist.

(1.9.3.2 Accelerated Water Quality Improvements)

This is another questionable claim by the proponent, and one the proponent has used in community outreach settings and radio advertising to convince Barnstable residents that the Town's Comprehensive Wastewater Management Plan (CWMP) depends on their cooperation and financial support. The Town of Barnstable, as is the case with most Cape Cod towns, struggles with the contamination of a shallow, rainwater-fed aquifer and the nitrogen pollution of freshwater bodies and tidelands from runoff. Accordingly, the Town's engineers and environmental experts, in collaboration with state officials, adopted a 30-year plan to implement the CWMP. The estimated cost of the project is \$1.4 billion. Avangrid, in frequently run commercials on local radio stations, claims it is helping the Town to "accelerate" the project and contributing "hundreds of millions of dollars" to its completion. In truth, the Town will probably be required to accelerate the timeline of the project to satisfy new Massachusetts Department of Environmental Protection wastewater regulations. Furthermore, a spreadsheet Avangrid made available to SGDB upon request indicates the actual amount the company claims it would contribute to the project totals \$217 million. This analysis counts money from two projects, including the one considered here, that have yet to be approved by the Town or by state and federal regulatory agencies. Additionally, SGDB's own financial analysis indicates that, even if all three projects were constructed as planned, the amount of the proponent's contribution, parceled out over 25 years would, in today's dollars, be considerably smaller than their exaggerated claim and no more than 1-1.5% of the total cost of the CWMP. SGDB objects to the presence of these claims in the DEIR and asks MEPA to discount them as your office evaluates the proponent's commitment to the environment.

(2.1.3 Offshore Cable Corridor (OECC))

Here the proponent claims that a "landfall in Barnstable is needed to minimize onshore and offshore routing." SGDB then asks why Avangrid described in detail a noticed alternative landing site they called the "South Coast Variant" in the Construction and Operations Plan filed with the federal Bureau of Ocean Energy Management in June 2022. This was not an option ever shared, to our association's knowledge, with Massachusetts state officials. We also ask, if the Barnstable site alone is "needed," why Avangrid

first initiated discussions with the Town of Yarmouth, Barnstable's neighbor to the east, about landing offshore cables in that town via a route through Lewis Bay. Finally, we ask why all noticed alternatives Avangrid lists in the Environmental Notification Form filed with MEPA and the DEIR were exclusively in the Town of Barnstable and why no consideration was given to a state beach in Mashpee, to the previously mentioned South Coast Variant, to existing decommissioned or partially decommissioned power plants, to already industrialized lands on the south coast of New England, or to the more advanced and less environmentally damaging "planned approach" to ocean energy transmission. We also dispute that the desired landing site was chosen to avoid "eelgrass habitat." SGDB notes that eelgrass beds have been mapped in the Dowses Beach area, and complex habitat noticed on maps provided by Avangrid to BOEM, but not apparently to MEPA. The sole truthful statement SGDB discerns in this section is that the cable routes were chosen to "reduce transmission losses and costs" – in other words, to enhance the company's bottom line.

(2.3 Offshore to Onshore Transmission)

As noted above, one of SGDB's main concerns is the potential danger posed to recreational users of the Dowses Beach parcel should Avangrid construct electrical infrastructure of this magnitude throughout the area. The three proposed splicing vaults (called transition joint bays in the DEIR), are very large (61'x10'x8'); each will convert an offshore cable into three separate cables that together carry 400 megawatts of electricity. To our knowledge, nowhere in the United States has this amount of electrical power been installed in a coastal zone recreational facility. Our research also tells us that such underground electrical vaults fail, sometimes catastrophically, and do so most frequently at splicing joints. At two separate public "open house" meetings, representatives of Avangrid were asked if they could guarantee that such failure, including fire and explosion, would not occur in one of these vaults. The first time this question was posed, the answer was that the company "would never endanger our employees." The second time, the answer was "of course not." We note that Dowses Beach is accessed by the public via a single, narrow means of egress (a paved causeway). While the possibility of catastrophic failure is, admittedly, not high, it is not zero. This makes the proponent's plan insupportable from a human health and safety perspective.

Furthermore, the Dowses Beach parking lot, and the causeway, are completely inundated with tidal overflow two, and sometimes three times per year. In fact, the parcel was purchased by the Town of Barnstable following an estimated ten-foot storm surge in 1944 that wiped the parcel clean of a large residential property. Our group has asked Avangrid how inundation would affect the spliced cables and was told that the cables are "made to be submerged." We contend that the offshore cables are more vulnerable to failure once spliced and converted to be onshore conduits. Also of concern is the need to install a sump in the vaults as indicated by the submitted drawings and ask that, should the splicing vaults need dewatering, how and where would this water be directed. SGDB's overarching concern is that the Dowses parcel is an irresponsible and inappropriate location to land offshore electrical cables that would carry 1,200 MW of electricity at maximum load.

(2.3.2 Preferred Route (Main Street))

The proponent has, in documents previously submitted as part of this MEPA process, declared that certain landing sites were considered and rejected because cable would have to leave the shoreline and be routed through local business districts and narrow streets. We therefore find insupportable the fact that Avangrid's "preferred route" for the New England Wind 2 Connector cables proceeds right through the

vibrant business district of Osterville Village, where over 50 shops and professional offices and services are present. Those who would be affected by prolonged construction of an underground electrical vault in the narrow streets of the village center have been told that loss of income will be mitigated by the company. We note that these promises have been made and vaguely addressed by the proponent in relation to their second project, Park City Wind, in the village of Centerville with no concrete commitments forthcoming. While that village's business district is also of value, the Osterville center is much larger and has long been an important year-round destination for locals, vacationers and tourists, with its wide variety of high end and more modest retail offerings. Osterville's Main Street provides many individuals, including those considered members of Environmental Justice populations, with opportunities and employment and is a rich center of commerce that once disrupted by the proponent's plans may never regain vitality. This is an unconscionable invasion of the human environment that MEPA should question. Specifically, the village center of Osterville exists within five miles of an environmental justice population. The proponent should answer to the damage to local employment that their plan would create given MEPA's stated EJ commitment.

(2.3.3 Noticed Alternative Route (Old Mill Road))

The proponent's noticed alternative route avoids the village of Osterville's business district but proceeds along a route that is rural in character, traversed by narrow country roads, abutted by wetlands, and that is an important habitat for different species of reptiles (turtles), birds, and mammalian woodland species. An abundance of wildlife is observed any time of the year, including deer, coyote, smaller mammals, and flocks of wild turkey. This area, known by Town of Barnstable officials as the "Osterville Woods," is just as inappropriate as a target for the proponent's invasive construction plans as is the commercial village center. SGDB asks that MEPA require a thorough, independent documentation of the flora and fauna along the Noticed Alternative route and an assessment of the proposed construction's impact on the ecology, species, and habitat there.

(2.3.5 East Bay Crossing)

SGDB is of the opinion, based on our understanding of the wildlife habitat present, that no crossing of East Bay, whether via the narrow causeway or by micro tunnel beneath the seafloor, is environmentally safe, and by no means prudent. On the contrary, such a crossing is avoidable should the proponent identify a more appropriate landing site for offshore cables.

(2.3.5.1 Causeway Duct Bank Installation)

The causeway is the sole means of access to the recreational area known locally as Dowses beach. The structure replaced a wooden walkway that was destroyed in the 1944 hurricane. It is bordered on both sides by two saltwater bays, the much larger being East Bay, the smaller being known as Phinney's bay. East Bay features a large saltmarsh area along its border with a portion of the barrier spit's dune system. Phinney's Bay includes a section of marshland between the bay proper and an area of dune on the eastern end of the barrier beach. In 2005, a box culvert was installed in the causeway by the town to improve tidal flow between the bays, and locals witness the early springtime movement of bonefish, turtles, and crabs beneath the culvert during spawning season. This is an environment rich in many forms of life, including almost countless bird species (some endangered or of concern), shellfish, reptiles, and mammals. The magnitude of construction proposed in the DEIR would undoubtedly and unnecessarily disrupt this fragile environment.

The causeway is completely inundated and unpassable during periods of high tide that coincide with large coastal storms, a fact that SGDB has documented in photographs during public presentations. Avangrid is aware of these significant flooding events but claims the company would “watch the weather” during construction, an unsatisfactory answer to the possibility that construction activities would make the causeway structure less resistant to tidal scour and storm surge. SGDB contends, not unreasonably, that deep trenching of the causeway proper could endanger its structural integrity, especially during inundation events.

Moreover, the proponent wants to perform construction on a part of the structure, the causeway’s existing box culvert, that is unsuitable for additional engineering. A 2019 state inspection of the box culvert as part of the state’s Small Bridge Inspection Program noted “random locations in the roof joints” of the culvert that “display evidence of leakage,” a “wide gap between sections 1 and 2” of the bridge, and “active leakage between sections 3 and 4.” Minor spalling was also seen, as well as obvious tidal scour and displacement of rip rap. Nevertheless, the culvert was given a rating of 7, or “good” – and inspectors determined that the causeway and culvert remained safe for light traffic. However, the idea that the proponent would, if allowed, add a concrete and metal duct structure on top of the culvert roof nearly ten years after that assessment using heavy construction equipment and materials is a matter of great concern. At two places, the 4x3 duct array would transition to a 16’ wide 12x1 configuration, with 1’ pile caps on each side of the duct bank in order to cross the culvert. SGDB asks how this plan could be allowed given the requirement to limit construction and associated activities to within a space 10’ feet from the edge of a paved roadway that traverses a wetland area. We believe that this new engineering over a crossing not designed support it could possibly lead to failure of the culvert, or even sections of the causeway, a consequence that would be environmentally ruinous.

The proponent has promised local residents that their proposed construction would not interfere with use of the beach area and handicapped accessible fishing pier. On the contrary, should the trenching of the only means of egress on and off the beach occur, there would be no non-construction access for a period of eight weeks. SGDB does not accept any such interruption of access to an Article 97-protected recreational area to begin with, especially one providing rare handicapped access to the waterfront, and doubt that the proposed construction would be accomplished in eight weeks.

(2.3.5.2 Microtunnel under East Bay)

In SGDB’s view, this option is as unacceptable as is a plan to deep ditch the causeway. The proponent is well aware that this option is considerably more onerous to abutters and the local community given a proposal that speaks of tree removal, transformation of a shaded picnic area that is an important part of the Dowses recreational parcel, and the blocking off of access to portions of East Bay Road, an historical residential area that, contrary to the developer’s impression, is not entirely de-populated during the so-called “off-season.”

An important feature of East Bay is the mouth of the Centerville River, which drains the Centerville watershed, as it is named in a 2006 Massachusetts study of this estuarine environment (updated in 2018). A major source of flow into the river is Lake Wequaquet, which is one of the largest and most compromised freshwater lakes on Cape Cod. The system also drains Scudder Bay, Bumps River, and various smaller streams and ponds. The entire watershed suffers from nitrogen overload, a problem that speaks to the importance of East Bay in terms of attenuation of pollution caused by runoff, septic systems

and groundwater release. Decades of indiscriminate human land use has certainly resulted in a sediment base throughout the estuarine environment that is better left undisturbed. A less appropriate benthic location for heavy construction cannot be imagined. SGDB asks MEPA to require an independent evaluation of the East Bay environment to include review of all historic environmental studies of the embayment, its sediment, the saltmarsh, and habitat.

Finally, both of the undersea East Bay crossing methods Avangrid proposes in section 2.3.5.3 would make the greater Dowses area off limits to residents for a period of 8 months or more – again, restricting access to a municipal recreational area with historic, recreational, and handicapped accessible usage that is protected under Article 97 of the Massachusetts Constitution.

(2.7 Article 97 and Open Space, Conservation, and Recreational Lands)

Article 97, an amendment to the Constitution of the Commonwealth of Massachusetts, preserves the use of public lands for the purpose for which such lands were acquired. Specifically, the wording of Article 97 stipulates that any use other than that for which the land was acquired, if owned by a municipality, is not allowed unless the governing body of the town or city, in this case the Town of Barnstable's Town Council, votes by a 2/3 majority to request that the legislature remove the Article 97 protections (following approval of the Secretary of Energy and Environmental Affairs). The proponent consistently, in public commentary and in the DEIR, misrepresents the steps that must be taken to remove Article 97 protections for the Dowses Beach parcel, ignoring the Town of Barnstable's role in the process. We contend that the proponent's efforts to diminish the importance of Article 97 is a reaction to widespread public opposition to the use of the greater Dowses Beach recreational area for offshore cable landings as well as growing public awareness of Article 97's purpose. For the record, the Dowses Beach parcel was acquired by the Town in 1946, after a unanimous vote of the then Town Meeting, for the sum of \$36,000 "for the purpose of a bathing beach" (language included on the quitclaim deed). This purpose is not compatible in any way with the construction of high voltage, large scale electrical infrastructure, especially as this construction is not planned for the benefit of the Barnstable community.

(2.71 Parcel 163-013 (Landfall Site))

The proponent always fails to describe the estuarine nature of the site itself. Our association contends that this is a conscious attempt to minimize the environmental importance of this coastal zone parcel. Furthermore, we dispute the conclusion that the burying of infrastructure avoids "permanent impact on use of the parking lot or causeway." First, catastrophic failure of one or more of the underground electrical vaults would certainly result in a permanent impact. Second, we are not convinced that ditching the causeway and inserting a new structure on top of the culvert between the bays is either wise or safe. Neither, we feel, is "micro tunneling" under East Bay, especially as the proponent provides no proof that the sediments in this body of water contain no toxins that would harm the ecological balance of this estuary, or that necessary future access to the cable tunnel would not interfere with boating and fishing interests. Third, use of the parking lot, if the project is allowed to proceed, will lead to prioritization of post-construction service and repair of the proponent's equipment at any time of the year, whether during the summer months or not. This would forever change public perceptions of and enjoyment of the beach.

(2.7.3 Substation Access and Grid Interconnection)

SGDB asks that MEPA carefully consider the wisdom of the proponent’s plan to insert a very large substation on land sandwiched between conservation-designated, Article 97-protected parcels to the north, east, and west of the proposed substation. The proponent states that 1.8 acres of constitutionally protected land will be “disturbed.” Again, the onshore landing site leads to environmental consequences further inland, which is why SGDB believes MEPA should insist on a fuller consideration of cable landing sites that do not result in unwanted and unnecessarily negative impacts to residential and rural property.

(2.7.4 Comparison of Impacts and Mitigation Measures)

SGDB strenuously objects to the proponent’s contention that the project would have “little to no permanent impact on appearance or use” of the greater Dowses Beach parcel. On the contrary, what would be left behind on this barrier spit is electrical grid infrastructure unprecedented in size in a coastal zone recreational environment that would likely need frequent maintenance and service. As noted above, all proposals to cross East Bay with offshore to onshore cables, whether along the causeway or under the sea, risk structural failure and/or environmental consequences.

Additionally, SGDB questions why the proponent admits to its plan to cross a parcel protected by Article 97 for the substation but that this crossing “should not require legislative approval.” We ask MEPA to require Avangrid to explain why they feel this to be the case.

(2.7.5 Compliance with Public Land Protection Act and EEA Article 97 Policy)

The proponent’s description of its compliance with the Public Land Protection Act is, by definition, self-serving, and dismissive of the role of the Massachusetts Constitution in protecting public lands. While municipal dispositions are “expected to comply with the Executive Office of Energy and Environmental Affairs (EEA)” policy statement, that statement itself is subordinate to the Constitution. SGDB respects the authority of the Secretary of EEA, but compliance begins and ends with the ironclad constitutional protection afforded by Article 97, which is not fungible even given changes in administrative goals, objectives, and priorities. The Massachusetts courts have been clear in this regard. We refer to *Smith v. City of Westfield*, 478 Mass 49 (2017), by which the Massachusetts Supreme Judicial court broadened the scope of Article 97 with respect to the protection of municipally owned recreational lands. Within the Barnstable community, the proponent has tacitly and overtly promoted the idea that their project is a “done deal,” which is simply not the case and is dismissive of local, state, and federal permitting processes.

(3.4.1 Management Standards for Special, Sensitive or Unique Habitats)

The proponent’s contention is that “it is not possible to completely avoid” special, sensitive, or unique habitats, and then goes on to say that only hard/complex seafloor within the Offshore Export Cable Corridor (OECC) is such a habitat. On the contrary, eelgrass beds are mapped by various studies in the immediate offshore area south of Dowses Beach. Most notably, these areas are documented to be present in benthic study maps submitted to the federal government’s Bureau of Ocean Energy Management in the proponent’s 2022 Construction and Operation Plan. The fact that MEPA has not been provided with the same maps in either the ENF or the DEIR does not mean that these areas no longer exist. SGDB asks that MEPA investigate this discrepancy via an independent study.

(3.4.2 Eelgrass)

The proponent claims that they have not identified any eelgrass in the “Primary OECC or Western Muskeget Variant.” However, Avangrid is silent on the presence of eelgrass habitat in the immediate offshore area of the proposed landfall site. SGDG asks that MEPA resolve this knowledge gap via an independent study of the benthic environment at the west end of Dowses Beach and to the east of the channel that empties East Bay. The proposed construction at the chosen landfall site for this project involves offshore barges, jet plowing, anchoring, drilling, jacking, sediment dispersion etc. that should be prohibited in this coastal zone. The state’s previously cited estuarine study recommended that East Bay be designated for eelgrass bed restoration – an initiative that would be hindered by further degradation of offshore eelgrass beds by Avangrid’s proposed three-year construction project.

(3.5 Chapter 91 Regulatory Compliance)

The purposes of Chapter 91, “Waterways Regulations,” usefully listed in the DEIR by the proponent in this section, all mitigate firmly against the use of New England Wind 2 Connector’s chosen landfall site. SGDB has documented overwhelming public opposition to the project by persons living near the Dowses Beach parcel and our association claims the right to “natural, scenic, historic, and esthetic qualities” of this tidelands environment. Additionally, SGDB emphasizes Chapter 91’s general purpose to “protect public health, safety, and general welfare.” Not only has SGDB publicly expressed significant concerns related to human health and safety about the proposed project in a recreational area, this proposal has already affected the sense of well-being among members of the local and greater community.

Of special interest to SGDB is Chapter 91’s commitment to “revitalize unproductive property along urban waterfronts.” The proponent rightfully claims such benefits with respect to the use of urban waterfront in Massachusetts to stage the movement of construction materials to the Outer Continental Shelf (OCS) lease area where the Commonwealth Wind turbines would be constructed. However, they have, from the project inception, refused to consider such a commitment with onshore transmission. In fact, by only preparing one “Grid Interconnection Study” for the project with ISO-New England, the company seems to have made decisions on this project that preclude support of this particular purpose under Chapter 91.

Avangrid easily dismisses restriction to the waterfront as “temporary.” SGDB asks MEPA to thoroughly question plans to allow access during construction, especially as these relate to the parcel’s handicapped accessible fishing pier. These plans were presented at a recent Avangrid “open house,” and describe the set-aside of a very long and narrow 4’ wide passage through the parking lot that would be daunting and most likely impossible to use by mobility-impaired individuals and certainly for those who use wheelchairs. Any hindrance of the public’s rights to access the waterfront and the pier facility especially, as outlined under Chapter 91, is unacceptable. This is especially true as plans relate to handicap access. SGDB asks MEPA to recommend a full analysis of the proponent’s access plans by the Massachusetts Office on Disability, as well as a detailed Chapter 91 compliance study.

(3.5.1 Water Dependency)

The proponent states the obvious in asserting that its chosen landfall site is “water dependent.” However, SGDB believes that Avangrid also provides a skewed interpretation of Massachusetts regulations under 310 CMR9.12(2)(e), which establishes the presumption of water dependency for “ancillary” wind power

facilities. We believe the CMR statement is not meant in any way to imply that a landing site that “requires direct access” to tidelands endorses such a facility’s installation in any tideland. This regulation does not supersede Chapter 91’s general purposes. SGDB contends that the proponent’s insistence on the use of the Dowses Beach parcel in Barnstable actually is contrary to the environmental and human population protections afforded by Chapter 91.

(3.5.2 Compliance with Chapter 91 Standards)

Again, the proponent admits to “temporary restrictions” (lasting for a period of three years) as a consequence of their project. These include restrictions to 1) free passage over and through water, 2) public access to a public common landing, and 3) interference with fishing and on-foot passage, all of which is fundamentally contrary to Chapter 91 provisions. Because the proponent has insisted on planning construction in a highly protected coastal zone environment, these are Chapter 91 violations of the company’s own making and unacceptable to SGDB and its many supporters in the Town of Barnstable. SGDB believes that the NE Wind 2 Connector project is in direct violation of Chapter 91, especially as no form of compensation to the public is possible “commensurate with the extent of interference caused” given the length of proposed construction added to the life expectancy of the project itself.

Finally, East Bay is the location of a public boat launch and mooring field, yet Avangrid states in this section of the DEIR that the project “does not involve a recreational boating facility.” SGDB claims no expertise in the interpretation of this standard but asks that the proponent explain the basis for the claim that 310 CMR 9.38 (Use Standards for Recreational Boating Facilities) does not apply.

(3.9 Cape Cod Commission Regional Policy Plan)

The proponent provides historical information about the Cape Cod Commission’s Regional Policy Plan. Avangrid claims perfect project “consistency” but provides little to no empirical data and evidence that their plans are commensurate with the various and most recent commission plans.

(3.9.1 Natural Systems)

SGDB questions the statement that the proposed project will have “no permanent impacts to designated open space.” The most obvious objection to this claim is the plan to build a substation at the terminus of the onshore cable on 29 acres of land that will require the clear cutting of 16 of those acres. At the Dowses Beach parcel, the proponent plans to transform a longtime shaded picnic grounds at the intersection of the causeway and East Bay Road.

More questionable if the proponent’s vague assertion that over 6 miles of underground, high voltage duct bank will “have no permanent effects on the use of lands through which they pass.” This language avoids the more accurate description that these so-called “lands” are narrow streets, residential neighborhoods, scenic roadways, and the Osterville business district (the “preferred” route). SGDB questions the wisdom of such infrastructure throughout so much of the town, especially given the unprecedented nature of the proposed installation.

(4.3 Interconnection Points)

The proponent cites three parameters for its selection of the Dowses Beach parcel as its landing site for offshore cables – the first of these being a place that could accommodate 1,200 MW of electrical power, the second being the location of cables already in place at Covell’s Beach, and the third being the location of the OECC. All three justifications conveniently serve to discount any landing site but Barnstable and in particular Dowses. With respect to locations suitable to receive such a large amount of power, any interconnection point along the southern coast of New England would require upgrades to the grid. For example, JERA Corporation’s Canal 1 and Canal 2 plants, which were purchased by JERA specifically to make interconnection with offshore wind, would need upgrades that would be no less than those planned for a 29-acre wooded tract in Barnstable, and such is the case with the “South Coast Variant” option Avangrid proposed to the federal government. Likewise, choice of other coastal substations, outside of West Barnstable, is rejected based on distance. The proponent’s own decision to use HVAC vs. HVDC offshore cabling limits their options much more than access to existing substations, industrial zones, or power plants.

SGDB has said many times publicly that one grid interconnection study for a project the size of Commonwealth Wind (in terms of dollars and electrical generation) is not only imprudent but unusually short-sighted. That, however, is the shortcut taken by the proponent, for reasons that SGDB can only guess. Avangrid claims that the state’s timeline for delivering the project’s power precludes re-thinking interconnection. This ignores the reality that their own default in the 83C-III solicitation has resulted in the need for a new round of bidding with deadlines extended beyond the state’s original target for acquiring ocean wind energy to reach climate goals. Also, all who follow the nascent offshore wind industry in the United States are aware that permitting, financing, and supply chain realities may very well push the deliverable date for many projects even further into the future. SGDB asks MEPA to have the proponent explain its reason for not commissioning a second or even third interconnection study to begin with and further, to provide MEPA with at least one true and feasible option for interconnection in an already industrialized or less populated location on the New England coastline.

We recognize how much has gone into mapping the OECC and the West Muskeget variant. We also perceive that this investment has been a self-limiting aspect of the proponent’s plans to deliver energy from its lease area on the OCS. We note the proponent’s rejection of the “planned approach” to interconnection, but SGDB maintains that this solution, which would probably require an increase in the Commonwealth’s involvement with transmission planning, is not as far out of reach as the proponent claims. Coastal environments like those found in Barnstable should not be forced into accepting multiple injections of high voltage, unprecedented levels of electricity into environmentally sensitive areas like greater Dowses Beach. Better solutions, like those established in the more mature European offshore wind industry could be adopted with improved and more patient state planning. SGDB asks MEPA to support this recommendation as an alternative to leaving major decisions about interconnection up to developers – including for the proposed NE Wind 2 Connector project.

(4.4 Landfall Sites)

Again, landfall sites were considered based on the proponent’s decision to use HVAC transmission cables, with environmental considerations relegated by expediency and cost. In this section of the DEIR, Avangrid describes the ideal landing site, as Dowses Beach and only Dowses Beach, out of “50 possible

landfall sites.” Of the 51 locations listed, 18 were “disqualified,” 22 deemed “less preferable,” 9 “potentially promising.” This is the first time SGDB has encountered this assessment taxonomy but note that our association has already publicly commented on Avangrid’s flawed rationale for selecting the Dowses parcel as a landing site.

The reasons for rejecting so many possibilities are informative. In a number of cases, the company’s inexplicable rejection of transmission routed to the Canal power station is cited. We question why the proponent is so averse to the use of existing power infrastructure, which could be upgraded with a commensurate level of investment the proponent envisions for the West Barnstable substation (as well as the anticipated upgrades Eversource must make to its facility). SGDB favors reuse of an installation that is grid-proximate and that could be given a new, greener life in service to the New England grid. To explore the proponent’s stated objections to the use of alternate sites further, we note the following disqualifying or not preferred existing conditions as they are listed in the DEIR:

- The site is a recreational area.
- The proposal would conflict with moorings and boating interests.
- Cables would be routed through narrow streets.
- Cables would be routed through densely settled residential areas.
- There would be a bridge crossing.
- The site is environmentally sensitive.
- The site features an estuarine habitat.
- There would be possible impact to rare species.
- The onshore route would be lengthy.

All the above, as noted throughout SGDB’s public response to the DEIR, characterize Dowses Beach. Therefore, we find this analysis of possible landfall sites disingenuous and ask MEPA to reject its premise and conclusions as insufficient.

The proponent concludes as well that only the Eversource substation in West Barnstable would serve as a suitable grid interconnection site, therefore resulting in the elimination of all coastal towns considered suitable as “hosts” other than Barnstable. As was the case with Avangrid’s Environmental Notification Form, nine Barnstable shoreline locations are described, with eight being described as inadequate for reasons including:

- Conflicts with boating interests.
- Presence of an estuarine environment.
- The necessity to clear trees.
- Impacts to shellfish.
- The presence of eelgrass.
- The designated use of two named alternatives for offshore cable landings already.

Not surprisingly, despite featuring some of the same characteristics and issues, Dowses beach meets all of the proponent’s stated requirements for the NE Wind Connector 2 project. A close reading of all nine descriptions reveals an emphasis on the shorter length of under street cabling to the proposed West Barnstable substation, which speaks to the developer’s bottom line and ease of construction – again resulting in their cost savings being prioritized. SGDB is especially concerned with the statement that the

company would have the “ability to avoid environmentally sensitive areas.” This is a tacit recognition that the entire Dowses parcel is an environmentally sensitive area as the terminus of a major watershed and comprised of a barrier spit, dune system, marshland, double embayment, and wildlife habitat. SGDB contends that none of the nine Barnstable sites are suitable for the magnitude of construction Avangrid proposes. Rather, the proponent, pleased with the ease with which Barnstable agreed to the use of the Covell’s Beach property for the “Vineyard Wind” cable landings, fixed on the Town’s remaining Nantucket Sound beaches for further projects. To Avangrid, the attraction of Dowses, of course, is a generously-sized parking lot – which was built not as a future construction site but to accommodate the many Barnstable and Cape Cod residents who gravitate to this unique waterfront site throughout the year. SGDB insists that the protection this parcel enjoys under Article 97 must be maintained and does not accept a pre-ordained analysis that the location is the only one on the southern New England coast suitable to land 1,200 MW of power from a future wind farm.

(4.51 Preferred Route (Main Street)) (Originally Candidate/Alternative Route T6)

As noted previously, SGDB has come to realize that the proposed landing at Dowses Beach has impacts throughout the Town of Barnstable, but specifically in the villages of Osterville, Marston’s Mills, and West Barnstable. The “preferred route” is certainly not preferred by majority of residents with whom SGDB has spoken.

First, SGDB finds unacceptable repeated intrusion into the required 100-foot buffer zone protecting a number of mapped wetlands, beginning with those adjacent to the causeway, but encountering such areas as well along the 6.7 miles of the proposed duct bank installation. Second, the proponent dismisses possible impacts on rare species habitat at the Dowses causeway and claims exemption from review for its project under 321 CMR 10.14(B)(10)) because the duct bank would be installed “beneath or within” ten feet of road pavement. SGDB believes that the proponent has misinterpreted the language of this statute, which requires that “all associated [utility] work is within ten feet *“from the edge”* of existing paved roads (statutory language is in italics). The Dowses Beach causeway is 21 feet wide and features wetlands on both sides of the roadway. Given that the proponent’s schematics show the proposed duct bank to be centered on this roadway and having a width of 8’2,” and given that the width of the required trench (i.e. associated work) would certainly add to the trench’s width by approximately 3’, SGDB does not see how such work could be contained within the distance mandated by the Massachusetts Endangered Species Act (MESA). Other issues with the preferred route will be addressed in section 5 of this response.

Additionally, SGDB objects to construction of this magnitude in any land designated as Land Subject to Coastal Storm Flowage (LSCSF) for reasons cited above and because of the numerous underground electrical vaults in the causeway and every half mile along the entire proposed route. We believe that installation of high voltage infrastructure in an area so frequently flooded because of its low-lying aspect is, from the outset, nothing less than reckless. Avangrid assures us that moisture and seepage of water causing equipment failure is not a worry but cannot guarantee that such failure would not happen. Our reading of catastrophic failure of underground electrical vaults tells us that moisture and water intrusion is one of the main reasons for “smokers,” fire, or explosion. The amount of electricity proposed for an underground system by Avangrid far exceeds the lowest level of transmission deemed to be high voltage. The company told residents that these cables are meant to be underwater, so there would be no problem. We do not accept that premise. SGDB notes that offshore cables need frequent repair precisely because of breakage, shorting and failure of the fiber optic component. The onshore cables, once spliced, simply do

not have the same construction as the offshore lead lines – indeed they are by their very nature more susceptible to failure. The proponent admits this in its public discussions of the need for future service and repair.

The proponent’s supplement to the DEIR, submitted on August 4, 2023, does nothing to alleviate these concerns. Relying on the modeled impact of a hypothetical 200-year storm event in the year 2050, the proponent has adjusted certain components of its engineering plan to try and avoid exposure of its equipment under modeled conditions. Based on the shared findings, SGDB believes the results of a 200-year storm would make this infrastructure inaccessible (under over 14’ of water), probably at a time when the restoration of electrical power would be critically important to the region’s recovery. More importantly, given the admission in the proponent’s Attachment Q (DEIR Vol. II; RPS Group for Epsilon), that coastal beach, the dune system and the causeway would experience significant erosion or even total destruction during the modeled 2050 event, we question why the proponent sees Dowses as an appropriate landfall site given this possibility. At any rate, the proponent’s characterization of the Dowses barrier spit as an “accreting beach” is certainly up for debate given the company’s own modeled assessment. SGDB advises a careful reading of Attachment Q.

(4.5.2 Noticed Alternative Route (Old Mill Road)) (Originally Candidate/Alternative Route T6)

Here, SGDB’s objections to routing cables through this natural environment are the same for the “preferred route.” This route would also involve construction involving designated wetlands, rare or endangered species habitat, and LSCSF. (All other candidate/alternative routes designated in the DEIR are variations on the preferred and noticed alternative routes and will not be addressed in this public response as none lead to avoidance of the environmentally sensitive lands mentioned above).

(4.5.8 Conclusion on Onshore Transmission Routes)

SGDB rejects any statement by the proponent that they have “objectively” assessed these routes. Had this been the case, the extent of environmentally sensitive areas to be impacted would have precluded either option. In this section of the DEIR, however, our main objection is to the proponent’s continued insistence on claiming that its construction will “accelerate water quality improvements in Osterville.” The Town Manager publicly refuted this claim at a meeting of the Osterville Village Association, saying that the town’s Comprehensive Wastewater Management Plan and Avangrid’s proposed cable landing at Dowses beach were two “completely separate projects.” Any idea that landing cables at Dowses will have benefits for the sewer project is untrue. This includes the claim that the roadways will only be opened once instead of twice, which has certainly not been the experience with the Vineyard Wind project. SGDB believes MEPA should insist that such claims are unproven, irrelevant, and misleading and should no longer be allowed throughout the environmental review process.

(4.6 Substation Sites)

Except for one single family home, the 29 acres acquired by Avangrid consist of wooded open space, a land resource that is increasingly rare in Barnstable. As the largest town on Cape Cod, both in terms of population and geographic size, this proposed land use is contrary to the environmental protection promised by the Cape Cod Commission, which has the stated goal of reducing forest cover loss and preventing development that impacts “surface and groundwater.” Given the proposed substation’s location

on or in proximity to a wellhead protection zone, the proposed site should be rejected without question given its potential environmental impacts.

(5.2.1 Coastal Resource Areas Present at Landfall Site)

For over a year, SGDB has listed the following coastal resources at the proposed landfall site: an estuarine environment, a watershed terminus, a barrier beach, a complex dune system, designated wetlands, a double embayment, coastal bank, wildlife habitat, an endangered species habitat, a bathing beach, a public access causeway, a picnic area, a handicapped accessible fishing pier, a mooring field, a boat launch, privately owned boat docks, and a boat channel. Thus, SGDB's description of and understanding of this town-owned parcel is much more comprehensive than that typically used by the proponent, which, in pursuing its corporate interests, tends always to minimize the complexity, fragility, and human use of this environment, which is truly unique in the Town of Barnstable.

(5.2.1.2 Barrier Beach)

The overarching importance of a barrier beach, according to the National Oceanic and Atmospheric Administration, is its capacity to protect "coastal communities and ecosystems from extreme weather." The proponent asks to turn the paved parking lot on Dowses into a stripped, muddy, excavated site on and off for a period of three years between Labor Day and Memorial Day. SGDB cannot imagine how this plan would contribute to the protection of the embayment, the wildlife and plant life that live there, as well as the abutting community during the kind of extreme fall, winter, and spring coastal storms frequently experienced in this area. Those who visited the Vineyard Wind construction site know how potentially de-stabilizing such a project would be at Dowses should a hurricane like the one experienced in 1944 materialize during construction.

(5.2.1.3. Coastal Beach)

The proponent has argued that cables under the sand on the coastal beach would not come up because Dowses Beach is an "accreting beach." This demonstrates Avangrid's lack of true knowledge of the area. In 1971, 30,000 cubic yards of dredged material needed to be added to the west end of Dowses beach due to serious erosion issues. In the summer of 2021, beachgoers observed severe erosion of this end of the beach. This resulted in an approximately 2' drop from the upper shelf of the beach to the shoreline that was difficult to navigate, especially for older residents. This is the same proposed location of one of the three cables the proponent wants to install under the sand and is also, because of its proximity to the beach house, a favorite seating location for families with young children. Any eroded area would put residents in closer proximity to high voltage buried cables and their associated magnetic fields. To ask this of the public is unreasonable, especially as it relates to small children. (Note: an older Osterville resident asked a project engineer if it would be safe for him to rest on the sand given his pacemaker. The answer: "There are new types of pacemakers").

The buried cables would not be able to be secured at depth on the barrier beach by any of the methods described by the proponent for cables installed in land under the sea (concrete mattresses, concrete half-shell pipes, gabion bags, boulders). SGDB representatives asked the proponent if the cables could resurface on the beach and was told that if this occurred the company "would come and re-bury them." This is not reassuring to the residents who use this beach. High voltage cables that eventually resurface would do so gradually, meaning that exposure to magnetic fields would occur unbeknownst to beachgoers

before the surfacing of the cables would be recognized. Construction on the beach, which the proponent has vowed would never happen, would certainly be needed in such a scenario. SGDB recognizes that this possibility also, regrettably, applies to the proponent's two other projects, one completed and one proposed, in Barnstable, but our association has formed with the sole purpose to protect this resident beach from becoming the third offshore cable landing site in the Town of Barnstable.

(5.2.1.4 Coastal Dune)

SGDB is not sure why the proponent contends that the parking lot “does not provide storm damage prevention or flood control,” except perhaps to diminish its defined inclusion in the “coastal dune” category. We are sure, however, as noted above, that the proposed massive construction project that would take place over three years would lead to uncontrollable movement of the parking lot's subsurface – and create conditions that would require constant de-watering even in calm weather. As it exists, the parking lot appears to provide stability to the true dune that exists to its east, collecting flood waters during tidal coastal storms and therefore minimizing storm water flow into the saltmarsh. Locals are used to and frequently document the complete inundation of both the causeway and the western end of the parking lot during such events. Again, the impact of inundation on an area experiencing large-scale construction is unknown in this environment, but we note that in its previous project, a great deal of pavement was removed for the installation of underground splicing vaults. The resulting de-watering of saturated sand and mud was done in a way that appeared careless of the neighborhood environment to local observers.

(5.2.1.6 Salt Marsh)

SGDB feels that the expanse of salt marsh present in both East Bay and Phinney's Bay is too extensive to allow this project to proceed as planned, and that any threat to this habitat is unacceptable. Salt meadow cordgrass, present on the margins of the embayment, serves to reduce pollution, stabilize the coastline, contribute valuable organic nutrients to the ecosystem, and provide important source of food and shelter for taxa ranging from ducks and sparrows to small mammals and shellfish. As noted above, given the low elevation of the greater Dowses area, our association asserts that a large-scale, three year-long construction in such close proximity to a marshland is inappropriate and inadvisable.

(5.2.1.7 Land Subject to Coastal Storm Flowage)

Here we question why the proponent asserts that “all activities required for the offshore to onshore transition are located within” land subject to coastal storm flowage, implying that land not so subjected would be somehow inappropriate. SGDB asks that MEPA require clarification of this statement.

(5.2.5 Construction Mitigation Proposed at the Landfall Site)

The proponent characterizes the paved parking lot as coastal dune in DEIR section 5.2.1.4 yet asserts that the use of Horizontal Directional Drilling (HDD) cable conduit construction will “avoid any direct disturbance to the Coastal Dune. Table 5.4 now lists proposed disturbance to the paved parking lot as barrier beach, which leads to a claim that the use of HDD will avoid any direct disturbance to the coastal dune. The scenario of cable resurface on the coastal beach is addressed above.

SGDB is greatly concerned about the stated need for 24-hour dewatering. Members of the public witnessed what appeared to be such drainage from the Vineyard Wind worksite that was directed onto a

public roadway and local property with no 24-hour human supervision. The proponent admits that “overland flow” is possible, and that such flow could potentially impact wetlands adjacent to the main construction site. Given the importance of salt meadow cordgrass to the health of the embayment, we are much less sanguine about this possibility. In fact, the proponent offers no specific description of impacts to wetlands in the DEIR, only statements that impacts will be temporary. SGDB asks MEPA to note this lack of acknowledgement of what are certainly explicit risks to the environment and ask that the proponent quantify anticipated takes, and to be specific regarding the possible degradation of plant and animal habitat. It is simply not enough to claim limited impacts despite mitigation – the proponent should be made to at least acknowledge and name the presence of endangered and rare species that would be negatively affected.

(5.3.3 Comparison of Wetlands Impacts/Mitigation Measures Along Onshore Routes)

The same objections named above apply to all wetlands listed by the proponent on either their preferred or noticed alternative routes. Especially worrisome, though, is the proponent’s admission that dewatering would need to occur during open trenching of the causeway, for we ask how it would be possible to prevent flowage into either bay despite the presence of “staked hay bales” and waddles, especially during regular high-water tides and less common but well-documented coastal floods over the causeway.

Finally, SGDB notes that in this section of the DEIR, the proponent claims that trenching of the causeway will not need to be as deep as the excavation needed for the proposed underground electrical vaults in the parking lot. Elevations shown in the proponent’s Volume II of the DEIR indicate that the bottom of the vaults would be between 8 and 9’ below grade, and the bottom of the duct bank would be 8’ below grade on the causeway where the configuration of spliced cables would be in a 4x3 array. We ask that the proponent confirm these details and explain their statement. SGDB is more concerned with the depth of construction than we are with the depth below grade to the top of these structures, especially as we have concerns with respect to the groundwater, the structural safety of the causeway, and the stated need for dewatering during construction.

(5.3.4 Alternative to Causeway: East Bay Microtunnel)

The microtunnel under East Bay alternative to open ditching on the causeway would increase the extent of land disturbance, be conducted in an environmentally sensitive embayment, and restrict public access to the Dowses Beach area for an unacceptably long period of time. Additionally, the proponent would not be able to restore this area to pre-existing conditions. This stated option is another example of why the greater Dowses area was inappropriately chosen as a landfall site for the Commonwealth Wind project’s offshore cables.

5.4 Compliance with Performance Standards under the Massachusetts Wetlands Protection Act (WPA)

The proponent claims status as a “minor project” as defined under the Massachusetts Wetlands Protection Act. SGDB understands that enabling law allows for this but finds the idea that a \$4 billion dollar infrastructure project is considered “minor” difficult to understand. This claim rests on language written prior to proposals to route high voltage electrical lines underground within 100’ of wetlands. We find it shameful that Avangrid would dismiss its responsibility to environmental due diligence by declaring its project to qualify as “minor,” knowing full well it is anything but. NE Wind 2 Connector would carry the

equivalent of the electrical output of 2.5 times that of the former Pilgrim Nuclear power plant and would do so near groundwater resources and wildlife habitat in Barnstable's wetlands. No study has been done on how the animal life present in the noticed wetlands would be impacted by the proposed construction or the decades-long presence of strong magnetic fields emanating from an underground duct bank. We have in previous federal and state filings expressed our group's worry about impacts to Cape Cod's sole aquifer, and specifically the so-named "Sagamore Lens," by the proposed project. This is a groundwater system that can be as shallow below grade as 8' within the Town of Barnstable. Our association has faced public ridicule for expressing this concern but stand by our observation of the shallowness of the aquifer's transition zone. Underground electrical vaults would be installed every half-mile on the duct bank route, from the proposed landing site to the proposed substation, increasing the chance of environmental harm in areas that should be protected by every state agency with jurisdiction, including the Department of Environmental Protection. SGDB plans to formally request in the near future that NE Wind 2 Connector be disqualified from status as a "minor" project.

(5.4.1 Limited Project Status)

The proponent similarly intends to apply for "Limited Project Status" for the sole purpose of avoiding wetland performance standards designed to protect habitat sites of rare and endangered species. SGDB condemns such an environmentally irresponsible approach, even while recognizing it is another mechanism by which the proponent would escape culpability for the possible impacts of its proposed project on the environment.

(5.4.3 Land Containing Shellfish; 5.4.4 Salt Marsh; 5.4.5 Coastal Bank; 5.4.6 Barrier Beach; 5.4.7 Coastal Dune; 5.4.9 Riverfront Area; 5.4.10 Bordering Land Subject to Flooding)

SGDB believes that any developer proposing a construction project as massive as NE Wind 2 Connector should be held to the most stringent performance standards enforced by state agencies. All the different environments listed above in section 5 of the DEIR deserve serious consideration in terms of protection by local and state permitting authorities. Rules and regulations in place to ensure care of these environments should be seriously and thoroughly addressed by any entity, public or private, seeking to construct a project as large and as unprecedented as that represented here. SGDB does not claim expertise about the environmental science that guides such care – we have only our conviction that these lands and the people who live here deserve more protection than the proponent feels the need to provide. Given the lack of concrete and detailed description and analysis of these various protected environments and habitats, SGDB finds unsatisfactory statements in section 5 that a plan is under development, that the impact of construction activities will be minimized, that no impact is anticipated, or that the developer simply claims exemption from the state's environmental performance standards. SGDB asks that MEPA require independent assessment of the possible threat to each of the landforms listed in section 5 of the DEIR. This should include a comprehensive environmental study of flora and fauna present in each of these land categories, extent of previous impacts if any, detailed description of the proponent's mitigation plans, and precise measurements of the proposed construction's intrusion into buffer zones along the entire length of the project.

(6.0 Water Quality and Navigation)

To begin, SGDB questions the proponent's statement on page 6-1 of Volume I that the company is "working with the Town of Barnstable to coordinate with the Town's plans to install sewer infrastructure."

The Town has repeatedly told our association that no such coordination is ongoing given the proponent's lack of a contract with the Commonwealth's electrical service utilities due to its default on its 83C-III agreements.

(6.1.1. Transmission Routes)

SGDB requests that Figure 6.1, Volume II of the DEIR receive careful attention by MEPA. Both the proponent's preferred and noticed alternative routes include construction in extensive acreage mapped by the Town of Barnstable and the Cape Cod Commission for groundwater protection. Furthermore, both routes end on land designated as a Wellhead Protection Area, where the proponent plans for an "impermeable" structure covering 16 of the 29 acres the company purchased for a new substation. The proponent commissioned a study of groundwater under the Dowses Beach area to determine if this part of the aquifer interacts with wells in the village center area of Osterville. While the hydrological study concluded that such waters do not provide or mingle with drinking water, no description of boundaries within this part of the aquifer is described, making this determination appear incomplete. The wisdom of drilling, ditching, construction, and dewatering over a shallow transition zone must be addressed. SGDB asks MEPA for further investigation on this point.

(6.1.1.1 Preferred Route)

Beginning with Main Street in Osterville, the proposed deep ditching to install a duct bank would happen entirely within the following designated areas of groundwater protection: Wellhead Protection Area, Zone 1; Wellhead Protection Area, Zone 2; Barnstable Wellhead Protection Overlay District; Barnstable Groundwater Protection Overlay District; Potential Public Water Supply area; Freshwater Recharge Area. The proponent has chosen an onshore "preferred route" that unnecessarily jeopardizes a basic requirement, and right, of Barnstable residents to a safe, and protected source of drinking water. This is the consequence of Avangrid's choice of a landing site on Cape Cod, thereby engaging the unique geological features of the peninsula. Replenishment of the aquifer, the only source that provides water to Cape Cod residents, is accomplished solely by rainwater, and any interruption of the natural flow of runoff risks disturbance of an established natural system. Zone I and Zone II Wellhead Protection areas are present in 3.7 miles of the proposed location of a duct bank. We find the insertion of an unprecedented amount of high voltage electricity into this environment to be reckless, unnecessary, and avoidable.

(6.1.1.2 Noticed Alternative Route)

This route would include 1.7 miles of duct bank construction in Zone I and Zone II Wellhead Protection Areas, as well as a Potential Public Water Supply Area designated by the Cape Cod Commission.

(6.1.3 Proposed Substation Site)

The proponent notes that its mitigation of pollution caused by the accidental released of dielectric fluid would be contained by a specialized concrete basin. SGDB contends that the presence of dielectric fluid in a wellhead protection zone and freshwater recharge area is too environmentally risky to be allowed. SGDB's objections to the use of the parcels include clear-cutting, loss of open space, interference with the process of replenishment, but most importantly, construction that would preclude valuable land from being used to source drinking water should the need arise.

(7.0 Fisheries, Rare Species, Avian, and Marine Resources)

Most of section 7 of the DEIR concerns the offshore habitat, concentrating almost exclusively on sea life present on the OCS and the in the OECC. Little acknowledgement is given to the thriving ecosystem and abundance of life observed at the Dowses parcel. SGDB is concerned with the possible negative impact of the proposed project on the many taxa that make the nearshore home precisely because the area is a thriving, though vulnerable estuarine environment. We have already stated our concerns about heavy construction, dangers to groundwater from ditching and dewatering, and possible damage to the causeway structure that would forever change the embayment. Large numbers of many forms of sea life and avian species are easily observed at any time of year in the beach area, channel, bays and on land. No one, including the proponent, can state with certainty that an intrusive three-year construction project and the introduction of very high voltage infrastructure into this environment will not inflict lasting damage on this habitat. SGDB believes that lead lines from future wind farms should not be landed on Nantucket Sound bathing beaches at all – and certainly not in coastal zone estuaries. However, in the case of the greater Dowses Beach parcel, the presence of a large wildlife habitat especially mitigates against this ill-conceived plan.

In SGDB's response to the proponent's Environmental Notification Form submitted to MEPA, our association described in great detail the presence and number of avian species that are both native and transitory, including some that are endangered or "of concern" by NHESP. We see no need to repeat this information here – only to note the dismissive lack of response to these concerns by the proponent. We find no good reason why this thriving habitat should be endangered by a quest for corporate profit, especially given the unconvincing rationale Avangrid employed to settle on Dowses Beach as the only suitable landing site for its offshore cables on the entire southern New England coast.

(8.0 Electric and Magnetic Field Analysis)

SGDB maintains that the scientific literature on the effects of electromagnetic fields on human health from proximity to high voltage infrastructure remains inconclusive. The issue is not as easily dismissed as the proponent would indicate. Agencies and organizations as diverse as the National Institutes of Health, the National Institute of Environmental Health Sciences, and the World Health Organization (WHO) state that consensus from studies undertaken between 1970 and the present regarding EMF effects on human health is elusive. The proponent has stated publicly at two "open houses" that humans encounter EMFs when using handheld hair dryers. We find such a comparison absurd and dismissive of legitimate concerns considering the magnitude of electrical power transmission under consideration.

WHO distinguishes the effects on humans between those that are "health related" and those that are "biological." In the first instance, the most concerning risk is an increase in the incidence of childhood leukemia, which underscores our primary objection to high voltage infrastructure embedded in a recreational area, especially one that attracts large numbers of children. We repeat our earlier understanding that high voltage cables buried under the beach could theoretically migrate to the surface of the sand and do so gradually. Under such a circumstance, the proximity of resident beachgoers to the cables would be unknown for a period of time. As noted above, even Avangrid representatives implicitly conceded a possible effect on an individual's lifesaving pacemaker given the proximity to under the sand and undersea cables. We also note that if the proponent's three 400 MW cables are buried 5' to 8' below the seafloor, and the modeled distance magnetic field diminishment of 95% is plus or minus 25,' theoretically a beachgoer could be standing chest deep in the water and be well within an emission

circumference that is significantly above the 95% threshold. Biological effects, again according to WHO, include “heating of body tissues,” and “circulating currents within the body,” – neither of these scenarios are reassuring to members of the public. Science has no clear understanding of how EMF affects human biology at the cellular level. WHO admits that further studies are needed. Until more is known, projects such as this should not be sited in recreational and residential areas.

WHO recommends the following: “Consultation with local authorities and the public in siting new power lines [because] siting decisions are often required to take into account aesthetic and public sensitivities.” We agree wholeheartedly. Residents’ concerns about exposure to EMFs from high voltage transmission lines alone is a legitimate reason to avoid building such infrastructure in a cherished recreational area and through residential neighborhoods and business districts. Our association can already document instances where worry about the proponent’s plans has generated general and deep anxiety, especially among some whose residences would abut either of the proposed transmission routes. Residents have expressed to us on many occasions their worries about the health of themselves and their families, the safety of Dowses Beach, the possibility of diminished property values, and potential damage to the local economy should Avangrid complete its project as planned.

The *ad hoc* citizens’ group Save Greater Dowses Beach thanks MEPA for the opportunity to provide public response to Avangrid’s Draft Environmental Impact Report. Our hope is that our objections, concerns, and worry for the Dowses Beach area and the Town of Barnstable are understood for what they are – a strong reaction against plans for an unprecedented utility works project that we believe should have been conceived differently from the start. The Town of Barnstable has one, perhaps two, other offshore wind cable landing projects that together would provide the New England electrical grid with 1,600 MW of power. Should the Dowses project proceed, one Massachusetts town would have a total of 2,800 MW of electrical power flowing under its streets. This is an excessive concentration of electricity that should be sited and routed through more appropriate interconnection points along the New England coast or via the OCS-based “planned approach.” Our first concern was and remains the deleterious impact of the proponent’s plan on the natural and human environment. Dowses Beach, a cherished recreational area within the Town of Barnstable, deserves the protection afforded not only by modern coastal zone management principles, but by the Massachusetts constitution as well.



The Commonwealth of Massachusetts

Division of Marine Fisheries

(617) 626-1520 | www.mass.gov/marinefisheries



MAURA T. HEALEY
Governor

KIMBERLEY DRISCOLL
Lt. Governor

REBECCA L. TEPPER
Secretary

THOMAS K. O'SHEA
Commissioner

DANIEL J. MCKIERNAN
Director

September 29, 2023

Secretary Rebecca Tepper
Attn: MEPA Office
Alexander Strycky, EEA No. 16611
Executive Office of Energy and Environmental Affairs
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Tepper:

The Massachusetts Division of Marine Fisheries (DMF) has reviewed the Draft Environmental Impact Report (DEIR) by Commonwealth Wind LLC for the New England Wind 2 Connector (EEA# 16611). The proposed cable routes would link energy generated by the Commonwealth Wind offshore wind array and associated cables in federal waters to the onshore Barnstable Switching Station through an underground landfall site at Dowses Beach. This letter provides our critique of the DEIR and our recommendations for improvements.

The commonwealth wind lease area is 74,872 acres and will include up to 88 wind turbine generator (WTG) units that will be configured in a grid layout with 1.15 mile spacing and consist of either monopile, jacket, or bottom-frame (piled or gravity pad) foundations. Three Electronic Service Platforms (ESPs) are expected to be established within federal waters. Radial strings of inter-array cables will be connected from WTGs to shared ESPs.

Three offshore export cables (275-kV HVAC) will be within one cable route within the shared Offshore Export Cable Corridor (OECC). The cable corridors would run 23 miles within state waters. The proposed cable route will primarily follow the established OECC associated with the Vineyard Wind 1 and New England Wind 1 Connector Projects, which travels along the eastern side of Muskeget Channel to Dowses Beach (landfall site). The OECC will pass through state waters in the offshore areas of Edgartown, Nantucket, Barnstable, and Mashpee. Export cables for Commonwealth Wind will be separated by a distance of 164-328 feet from NE Wind 1 Connector's two offshore cables and Vineyard Wind Connector's two offshore cables. The target burial depth is 5-8 feet. Cable protection is anticipated for areas where burial is not feasible and hard structures such as rock, gabion rock bags, concrete mattresses, or half-shell pipes may be used. The OECC ranges in width from 3,100 to 5,500 feet along the portions within Massachusetts state waters with a typical width of 3,500 feet. Estimated dredge volumes across the three scenarios proposed in state waters range from 120,000 – 171,400 cubic yards. Offshore cable installation would be accomplished by employing trailing suction hopper dredging (THSD)

1

or controlled flow excavation. If TSHD is used, dredge material would be transported and deposited elsewhere within the surveyed area containing sand waves.

As outlined previously in our Environmental Notification Form (ENF) comments, the primary fishery resources of concern in Nantucket Sound vulnerable to cable laying and electromagnetic fields (EMF) include, but are not limited to, shellfish, longfin squid (*Doryteuthis pealeii*) and squid eggs, knobbed whelk (*Busycon carica*) and channeled whelk (*Busycotypus canaliculatus*), and flatfish. Both commercial and recreational fisheries are active throughout the OECC area. Protected marine species of concern in the OECC area that are vulnerable to cable construction associated activities include, but are not limited to, leatherback (*Dermochelys coriacea*) sea turtles. In addition, North Atlantic (*Eubalaena glacialis*) right whales have been documented seasonally in waters south of the islands in the area south of Muskeget Channel.

DMF previously reviewed the ENF for this project and submitted a comment letter on November 28, 2022 including recommendations for consideration in developing the DEIR. THE DEIR includes a copy of our comment letter with responses to our individual comments (DMF 01 through 17). Most of the responses to our previous comments have been addressed in the DEIR. However, there are some outstanding comments that require further attention.

- MA DMF is satisfied with Proponent’s responses to DMF comments 01-9, 11-17.
- The response to DMF comment 10 (Anticipated areas requiring covering should be described in greater detail, both in terms of the spatial distribution and existing habitat characteristics) states, “...*Areas requiring cable protection, if any, will be the only locations where post-installation conditions at the seafloor may permanently differ from existing conditions.*”. However, further clarification is needed in the FEIR regarding the criteria the Proponent plans to use to determine seafloor areas that may be permanently changed by the export cable. DMF also recommends that a map and shapefiles that displays the anticipated sections requiring secondary cable protection along the OECC be included in the FEIR to determine potential impacts to fishing activities and DMF fishery-independent surveys. DMF also recommends providing a detailed timeline and duration of cable installation and secondary cable protection/armoring efforts in the FEIR to assist with DMF planning the annual spring and fall trawl surveys.

Fish and Fisheries Resources

- The current draft of the fisheries communication plan does contain plans to have meetings with fisheries groups to provide information on timing and methods of construction (installation and repair). However, there is a lack of detail mentioned in the fisheries communication plan on disseminating information on relocation of boulders or hard substrate in the route of the OECC following cable-laying. Such information can assist fishermen with avoiding locations that may adversely impact mobile gear. There is a lack of detail (e.g. timing, scale, and when to safely resume fishing) about how shifting buffer zones around active cable laying areas will be communicated to fishermen. We acknowledge that the DEIR communication plan involves Notices to Mariners to help increase awareness, but more detail is needed in terms of specific information that will be available in these Notices to Mariners.

- DMF continues to request that two-way communication occurs between fisherman groups (commercial and recreational) on offshore wind development and its impacts on fisheries. MA DMF looks forward to the continuation of various communication platforms for fisherman.
- DMF requests that further detail on boulder relocation be discussed. Current information about the distance moved and arrangement of relocated boulders associated with cable burial is requested for both export and inter-array cables. Depending on the layout of relocated boulders, certain types of fishing activity may be reduced and subsequently impact fishing revenues. DMF also recommends that Proponent outline a boulder relocation and communication plan in the FEIR.
- The DEIR states on page 254 (7-7) “During O&M of the offshore wind energy generation facility and the NE Wind 2 Connector, cable protection may have some impacts on the limited amount of bottom fishing that takes place along the OECC. However, there is no reason to expect that will result in enough fishing effort shifting away from the OECC to cause fishing congestion in other areas.”. DMF recommends that vessel congestion be monitored during the operational phase given that there could be potential losses in revenue across multiple commercial fisheries groups from overcrowding [1]. Commercial fishermen have expressed safety concerns about fishing over any electrical cable (inter-array or export cable) and have indicated that many fishing vessels (primarily mobile-gear fishers) will avoid cable areas post-construction and therefore, vessel congestion may be a possibility.
- In Table 5-2, the estimated impact of preliminary cable alignments through hard bottom or complex bottom within state waters across all three scenarios is presented. In the FEIR, DMF requests that maps (shapefiles and geotiffs) be provided displaying potential areas for secondary cable protection for all scenarios to understand the potential implications to mobile gear fisheries accessibility.
- In Table 7-2, DMF recommends the Proponent consider providing real-time vessel updates (operation and construction) and communication channels through the WATERFRONT app (<https://ithacacleanenergy.com/waterfront/>). This app was developed for increasing two-way communication channels between the Proponent and commercial/recreational fishing industry.
- In section 7.1.4, we appreciate that the Proponent continues to provide portable digital media with electronic charts depicting locations of project-related work to provide fishermen with accurate information on work within the offshore project area. Fishing representatives have expressed interest in receiving coordinates through LORAN media in addition to lat/long coordinates. DMF recommends that LORAN data be available for fishermen.
- Cable laying activities can result in direct impact to squid eggs and also interfere with the squid fishery. April-June is a period with high activity for most fisheries resources in Nantucket Sound, including squid. The squid fishing season within MA state waters is open from April 23- June 10. To avoid conflicts with the fishery, DMF recommends the Proponent

avoid non-HDD cable installation from April-June in high effort squid fishing areas along the entire length of the OECC (state and federal waters) to the greatest extent practicable. If the Proponent is unable to avoid cable installation during this time period, the Proponent shall notify DMF, and explain why avoidance is not possible. DMF recommends that the Proponent develop a cable installation avoidance plan (flow-chart) in the FEIR that outlines the process of all moving parts of how the Proponent would actively try to avoid the TOY period and potential pathways that could allow cable installation activities to occur within the TOY window. DMF also recommends that the Proponent should demonstrate how they will coordinate with the fleet to minimize conflict in the flow chart. DMF met with the Proponent on August 31, 2023 to discuss the sequencing challenges (supply chain and equipment availability) that conflict with the squid TOY. While these issues may arise, the Proponent should still make the best efforts to avoid this time period to limit impacts to squid resources and the fishery.

- In both the sea turtle and marine mammal sections (7.4-7.5), the Proponent mentions, “As safe and practicable, the Proponent will adhere to NOAA guidelines for vessel strike avoidance during all Project activities including vessel speed restrictions and separation distances that are applicable at the time of construction.” The DEIR lacks sufficient detail on the mitigation measures proposed and requires further details for adequate review. DMF recommends the Proponent explicitly state which NOAA guidelines for monitoring and vessel strike avoidance (e.g. surveillance requirements, actual speed of vessel restrictions, specific vessel routing protocols, minimum distance between vessel and mammals/sea turtles sighted, etc.) they plan to adhere to for sea turtles and marine mammals in the FEIR.
- In both the sea turtle and marine mammal sections (7.4-7.5), the Proponent mentions, “Additional monitoring and mitigation measures that may be employed include: (1) the use of protected species observers (PSOs) and Passive Acoustic Monitoring (PAM) technology (state and federal waters); (2) the establishment of clearance and shutdown zones (federal waters); (3) pile-driving seasonal restrictions, soft-start procedures, and shutdown procedures in the Lease Area in federal waters; and (4) the use of noise reduction technology (federal waters).” DMF recommends that the Proponent employ all the additional monitoring and mitigation measures proposed above and outline which measures, if any, are preferred for sea turtles and marine mammals. DMF also recommends that the Proponent provide additional explanation and detail on how they plan to implement each of the additional monitoring and mitigation measures for marine mammals/sea turtles in the FEIR.

Appendix L Benthic Habitat Monitoring Plan

- DMF recommends that alternatives to parametric linear regression approaches also be mentioned for pre and post construction analysis on benthic community characteristics if assumptions of linear regression approaches, such as ANOVA, are violated (e.g., variance constant, normality, outliers). Even generalized linear models assume that the error distribution of the data conforms to a parametric distribution.
- As currently written, it is unclear whether samples will be treated independently or pooled within each habitat zone. DMF requests clarification on how sample transects will

be treated at different distances from the impact site being treated within each habitat zone.

- DMF recommends that oversampling (>2 transects per habitat zone) be conducted within habitat zone during the first year and then conduct another power analysis from data collected during the first year to determine if sample size is sufficient to detect change. Oversampling during the first year is also a survey guideline in the Responsible Offshore Science Alliance's Offshore Wind Project Monitoring guidelines.
- In the current draft benthic monitoring plan, it is unclear if the Proponent and other developers in the area have coordinated to determine control sites and potential overlap concerns among projects (e.g. sampling from one project coinciding with monitoring activities of another). DMF recommends the Proponent outline coordination plans among developers that have export cables within the same OECC where sampling occurs to minimize potential sources of bias or secondary/cumulative impacts within the vicinity of the OECC.
- DMF requests further clarification and justification as to why random sampling as opposed to stratified random sampling (e.g. random sampling based on distance strata from OECC) was considered within each habitat zone. Also, further detail is required regarding how the Proponent determined the number of samples for each habitat zone given that each zone varies in size. Two transects for the largest zone (zone 1 in Figure 2.0-1) seems inadequate for representation of that zone given its size.
- DMF recommends clarification on the frequency of sampling across seasons within each year. If no seasonal sampling plan exists, we recommend the Proponent sample across at least two seasons annually to account for within-year temporal variability.
- Surficial sediment will be assessed using multiple monitoring techniques, however infaunal organism collection only occurs with grab samples and may be compromised (under-reported) above certain grain sizes based on limitations of the grab equipment proposed by the Proponent (e.g. Van Veen, Day, or Ponar). In particular, areas identified in the plan containing complex seafloor (e.g., SCV-D, OECC-5) or coarser sediments (e.g., SCV-A, SCV-C, OECC-2) could be implicated by this grab-grain size bias. DMF recommends that a separate sampling method that adequately samples infauna in larger grain sizes be implemented (e.g. Smith-McIntyre) or at the minimum, calibrate the grab sample to alternative infauna sampling techniques that are not biased by grain size.
- Within the current plan, the Proponent states that control sites will be ~1km East of the closest export cable. However, it is currently ambiguous if the Proponent also plans to identify control sites based not only on distance alone, but also based on similar habitat characteristics of the transects/zone. DMF also recommends that control samples should

be collected in areas with similar habitat characteristics to ensure that comparisons among control and impact sites are relevant.

Thank you for the opportunity to review the proposed monitoring design. If you have any questions about these comments, please contact Justin Bopp (Justin.j.bopp@mass.gov; 978-619-0019).

Sincerely,



Daniel J. Mckiernan

Director

Cc: Corinne Snowdon, Epsilon Associates
Barnstable Conservation Commission, Mashpee Conservation Commission, Edgartown Conservation Commission, Yarmouth Conservation Commission
Sue Tuxbury, NOAA
David Wong, David Hill, MA DEP
Todd Callaghan, Lisa Berry Engler, Hollie Emery, MA CZM
John Logan, Christian Petitpas, Tracy Pugh, Mark Rousseau, Erin Burke, Amanda Davis, Malik Neron, Kara Falvey, Melanie Griffin, Kelly Whitmore, Steve Wilcox, MA DMF

DM/JB/sd

References

1. Methratta, E. T., A. Hawkins, B. R. Hooker, A. Lipsky, and J. A. Hare. 2020. Offshore wind development in the Northeast US Shelf Large Marine Ecosystem: ecological, human, and fishery management dimensions. *Oceanography* 33:16–27.



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DIVISION OF
FISHERIES & WILDLIFE

1 Rabbit Hill Road, Westborough, MA 01581
p: (508) 389-6300 | f: (508) 389-7890
MASS.GOV/MASSWILDLIFE

September 29, 2023

Rebecca Tepper, Secretary
Executive Office of Energy and Environmental Affairs
Attention: MEPA Office
Alex Strysky, EEA No. 16611
100 Cambridge Street
Boston, Massachusetts 02114

Project Name: New England Wind 2 Connector
Proponent: Commonwealth Wind LLC (AVANGRID, Inc.)
Location: Offshore export cables (from a proposed 1,232 MW wind generation facility within Federal waters) through Massachusetts waters northerly through Nantucket Sound to Dowses Beach, Barnstable (Preferred Route). Onshore routes (Main Street and Old Mill Road Alternatives) from Dowses Beach to a proposed substation off Oak Street, Barnstable.

Project Description: Utility- Transmission Cables
Document Reviewed: Draft Environmental Impact Report
EEA File Number: 16611
NHESP Tracking No.: 23-8429 (formerly 17-37398)

Dear Secretary Tepper,

The Natural Heritage & Endangered Species Program of the Massachusetts Division of Fisheries & Wildlife (the Division) reviewed the July 2023 Draft Environmental Impact Report (DEIR) and Supplement (dated 4 August 2023) for the proposed New England Wind 2 (NEW2) Connector associated with the Commonwealth Wind Project (1,200MW offshore within Lease Area OCS-A 0534) and would like to offer the following comments.

The Commonwealth Wind/NEW2 offshore and onshore components, as currently proposed, will occur within areas of Priority Habitat and Estimated Habitat for state-listed species. The Preferred Route offshore will occur within key migratory and foraging habitat for the state-listed terns listed below. The Preferred Route onshore at Dowses Beach will occur within nesting habitat for Piping Plover and Least Tern. Additionally, the Old Mill Road Alternative will occur within Priority Habitat for Water Willow Stem Borer.

Scientific Name	Common Name	Taxonomic Group	State Status
<i>Sterna dougallii</i>	Roseate Tern	Vertebrate - Bird	Endangered*
<i>Sterna hirundo</i>	Common Tern	Vertebrate - Bird	Special Concern
<i>Sternula antillarum</i>	Least Tern	Vertebrate - Bird	Special Concern
<i>Charadrius melodus</i>	Piping Plover	Vertebrate - Bird	Threatened*
<i>Papaipema sulphurata</i>	Water-willow Stem Borer	Invertebrate - Moth	Threatened

*Species also protected pursuant to the U.S. Endangered Species Act (ESA, 50 CFR 17.11).

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State-listed species and their habitats are protected pursuant to the Massachusetts Endangered Species Act (M.G.L. c. 131A) and its implementing regulations (MESA, 321 CMR 10.00). State-listed species habitats are also protected pursuant to the rare wetland wildlife provisions of the Massachusetts Wetlands Protection Act and its implementing regulations (WPA, 310 CMR 10.00).

This project will require a direct filing with the Division for compliance with the MESA and the rare species provisions of the WPA. The MESA is administered by the Division and prohibits the Take of state-listed species, which is defined as “in reference to animals...harm...kill...disrupt the nesting, breeding, feeding or migratory activity...and in reference to plants...collect, pick, kill, transplant, cut or process...Disruption of nesting, breeding, feeding, or migratory activity may result from, but is not limited to, the modification, degradation, or destruction of Habitat” of state-listed species (321 CMR 10.02).

Background

Massachusetts is a globally significant nesting, feeding, staging and overwintering area for numerous migratory birds, from common waterfowl to ESA- and MESA-listed bird species. A large proportion of the North American Roseate Tern (ESA- & MESA-Endangered) population and Atlantic Coast Piping Plover population (ESA- & MESA-Threatened) are reliant upon Massachusetts for reproduction. As such, Massachusetts’s responsibility for state- and federally-listed coastal waterbirds is disproportionately high. To that end, the Division has expended considerable resources and funds to protect and manage these birds and restore their nesting habitats.

As a result of management efforts occurring since the 1980s, Massachusetts supports over 900 pairs of Piping Plover ($\pm 40\%$ of the Atlantic Coast breeding population). The Commonwealth also supports approximately 50% (about 3,000 pairs) of the North American Roseate Tern population on three islands actively managed by the Division since the 1990s (previously managed by other organizations since the 1960s). In addition, the Division manages significant nesting colonies of Common and Least terns. The post-breeding tern aggregation (“staging”) beaches of Cape Cod, Martha’s Vineyard, and Nantucket are used during July – September. These staging sites are regionally and continentally important migratory preparation areas where adults care for fledged young until they become proficient at feeding themselves and birds put on body mass for their over-sea journey to wintering areas in South America.

While renewable energy sources, including offshore wind, are necessary to achieve the Commonwealth’s renewable energy requirements, the generation of wind energy will have inevitable unintended and unavoidable impacts, particularly upon avian species. Thus, the wind energy planning, review and permitting processes must thoroughly and comprehensively assess impacts and risks to imperiled birds – this is particularly critical for imperiled bird populations with existing stressors, including, small population sizes, low reproduction or recruitment rates, and compounding factors related to climate change.

Onshore Components

Dowses Beach in Barnstable provides important nesting habitat for the Piping Plover and Least Tern. As proposed, the cable landfall location is sited at Dowses Beach. The Proponent has sited all work within the paved parking surface and will utilize HDD to bring the cable under Dowses Beach. The use of HDD will prevent direct alteration to nesting habitat. Additionally, the Proponent has developed a draft Piping

Plover and Least Tern Protection Plan (PP<TP) and has identified that construction activities will not be performed at Dowses Beach after May 1 (Section 7.2).

The conduit installation within the causeway from Dowses Beach is adjacent to mapped Priority Habitat. At Bumps River Road (Old Mill Road Alternative), the conduit is located within Priority Habitat for state-listed species. The Division notes that the provisions specified in 321 CMR 10.14(10) may be applicable for the Noticed Alternative at Bumps River Road.

Based on the information contained within the DEIR and in advance of a formal filing pursuant to the MESA, the Division anticipates this project may require conditions for the protection of state-listed species. Protection measures may include the measures specified in the PP<TP and are not limited to a time of year restriction to prevent disturbance to state-listed species during the nesting period. The Division anticipates that state-listed species concerns associated with the onshore components of the cable landing and installation can be addressed during the MESA review process (321 CMR 10.18).

Offshore Components

The Proponent provides an overview of the Vineyard Wind Project and New England Wind Projects (Park City Wind and Commonwealth Wind) utilizing the same Offshore Export Cable Corridor (OECC). Together these projects anticipate 2,800 MW of offshore wind development located (Vineyard Wind, 800 MW; Park City Wind, 800 MW; Commonwealth Wind, 1,200 MW) within federal waters. The Bureau of Ocean Energy Management (BOEM) National Environmental Policy Act (NEPA) process established that the construction and operation of offshore Wind Turbine Generators (WTGs) will result in direct mortality of Common Tern, a MESA-listed avian species. Therefore, the operation of New England Wind's WTGs within federal waters will result in avian mortality, and cumulative impacts to MESA-listed species can be reasonably expected.

The Division's comments on the ENF recommended that Proponent consult with the Division to develop a plan to avoid, minimize and mitigate impacts to avian species. The Division also recommended the Proponent integrate suitable conservation measures that mitigate the unavoidable mortality and cumulative impacts to affected imperiled avian species associated with the related offshore wind development projects.

The Proponent in Section 7.2 of the DEIR, identifies key components of the Draft Bird and Bat Monitoring Framework. This draft framework includes adaptive management, a component that may inform future supplemental avian avoidance and minimization measures. Additionally, the Proponent provides an overview of the Coastal Bird Conservation Program (Section 7.3.1) and has committed to maintaining this as part of the 2023 Massachusetts solicitation for offshore wind. The Coastal Bird Conservation Program is anticipated to provide tangible conservation commitments that provide meaningful and measurable benefits to address impacts to imperiled avian species associated with offshore wind development.

Conclusion

The Proponent should continue to consult with the Division regarding the Draft Bird and Bat Monitoring Framework. The Division recommends the FEIR contain additional information regarding the Coastal Bird Conservation Program. As previously identified, conservation measures may include, but are not limited to, support for ongoing tern colony and plover monitoring and management and the restoration and enhancement of critical nesting habitats. These actions would provide meaningful and measurable

benefits to Common and Roseate Terns and because terns typically nest in mixed species colonies, would also benefit other avian species.

Given the Division's responsibility to protect and manage imperiled avian resources, every effort should be made to avoid and minimize risks, as well as monitor and mitigate unavoidable Project impacts to the Commonwealth's wildlife resources. Through such efforts, we can ensure that offshore wind projects not only contribute to meeting critical renewable energy needs, but also help to ensure healthy populations of coastal waterbirds, including vulnerable MESA and ESA-listed species, for the benefit of our citizens.

The Division will not render a final decision until the MEPA review process and associated public and agency comment period is completed, and until all required MESA filing materials are submitted by the Proponent to the Division. As our MESA review is not complete, no alteration to the soil, surface, or vegetation and no work associated with the proposed project shall occur until the Division has made a final determination.

If you have any questions about this letter, please contact Amy Hoenig, Senior Endangered Species Review Biologist, at (508) 389-6364 or Amy.Hoenig@mass.gov. We appreciate the opportunity to comment on this project.

Sincerely,



Everose Schlüter, Ph.D.
Deputy Director

cc: Commonwealth Wind LLC
Marc Bergeron, Epsilon Associates, Inc.
Barnstable Board of Selectmen
Barnstable Conservation Commission
Barnstable Planning Department
DEP Southeast Regional Office, MEPA
Lisa Engler, CZM

From: [Jane Hattemer-Stringer](#)
To: [Strycky, Alexander \(EEA\)](#)
Subject: New England Wind 2 Connector and EEAH (16611)
Date: Saturday, September 30, 2023 6:00:24 PM

CAUTION: This email originated from a sender outside of the Commonwealth of Massachusetts mail system. Do not click on links or open attachments unless you recognize the sender and know the content is safe.

Alexander Strycky,

I am writing in favor of this wind farm connector that will be landing at Dowse's Beach in Osterville MA. I am a resident of Osterville Village and have watched the progress of Avangrid's process in making the wind farm a reality. The following is my letter of support:

As I sat in the line of cars waiting to go down Craigville Beach Rd, (2 years ago?) sure I was frustrated. The town was laying new sewer pipes at the same time Avangrid was laying the cable for the wind farm. Yeah, yeah, in the meantime, we're putting up with detours, road closings, etc. But those inconvenient months are long forgotten now. Now I drive down the newly paved smooth Craigville Beach Rd, park in the sweet new parking lot at Covell's while the new sewer lines take wastes down to the sewage treatment plant instead of leaching into the lovely waters of Craigville. This company said they were going to do this. And that they were going to do it from October to April, stop for the summer months , then come back again for the fall and winter...and that's what they did. Now they want to disrupt the roads in Osterville and Dowse's Beach parking lot, in the same way, the same time periods. I say, yes, please do. For the temporary inconvenience, it's well worth it.

Am I in favor of speeding up the sewerage of Osterville to help save our Three Bays Estuary from pounds of nitrogen leaching into it? Yes. In favor of a company helping to pay for it at the same time? Yes. Do I want, truly want, to reduce greenhouse emissions? Decrease reliance on fossil fuels? Yes, yes.

To see Barnstable step up to the challenge of climate change, I'm real proud of that. I love Dowse's Beach as many people do. Burying a cable under its parking lot and dunes isn't going to take away anything from Dowse's Beach. The alternative is to do nothing. Or to expect some other town to take the responsibility. That's what got us in this climate crisis. We have to stop this insanity.

Jane Hattemer-Stringer

From: [Greg Gerdy](#)
To: [Strycky, Alexander \(EEA\)](#)
Cc: [Greg Gerdy](#)
Subject: New England Wind 2 Connector DEIR EEA#16611 - Public Comment
Date: Sunday, October 1, 2023 6:15:39 PM

CAUTION: This email originated from a sender outside of the Commonwealth of Massachusetts mail system. Do not click on links or open attachments unless you recognize the sender and know the content is safe.

Dear Mr. Strycky,

We submit this email as a public comment for New England Wind 2 Connector.

Thank you.

Respectfully,

Maria and Greg Gerdy

Begin forwarded message:

From: Greg Gerdy <greg.gerdy@yahoo.com>
Date: October 1, 2023 at 6:09:57 PM EDT
To: Darcy Karle <darcy.karle@town.barnstable.ma.us>, Mark Ells <Mark.Ells@town.barnstable.ma.us>
Cc: starrbarnstable@gmail.com, ersteinhilber@gmail.com, precinct3ludtke@gmail.com, precinct4nja@gmail.com, nearyprecinct6@gmail.com, precinct7@comcast.net, jeffreymendes8@gmail.com, tracyshaughnessy@yahoo.com, Matthew Levesque <matthewlevesque02648@gmail.com>, precinct11@gmail.com, paulabarnstable@gmail.com, jenlcullum@yahoo.com, tomfplee@gmail.com, edwin.hoopess@town.barnstable.ma.us, kimberly.cavanaugh@town.barnstable.ma.us, Greg Gerdy <greg.gerdy@yahoo.com>
Subject: **The Town of Barnstable is “NOT for SALE”**

Dear Ms. Karle and Mr. Ells,

This includes an update showing the very high cost - in the millions of dollars - of performing an emergency repair of *one* sinkhole caused by microtunneling.

Please keep in mind the paltry \$16 million over 25 years from the proposed offshore wind project, which will average \$640,000 per year for the Town of Barnstable (“Town”).

Experimental Microtunneling - If the Town of Barnstable Manager and his

officials decide to use our fragile natural resources, such as the Centerville River and existing roadways, such as Route 6 for *experimental* microtunneling, it is time to consider a “Reality Check” of Sinkholes and their very High Costs of repair, while simultaneously presenting a public health and safety hazard to the locals and visitors.

We have attached an official report dated 16 February 2023 from Toronto’s Chief Engineer et al. In the “Financial Impact Summary,” various *emergency* repair elements were listed with associated costs. These ranged from (in Canadian Dollar)

\$4,784,447 +
\$1,824,494 +
\$2,546,569
= \$9,155,511

A brief description of the Sinkhole problem - “As the work progressed, the Contractor encountered a significant increase in groundwater infiltration into the recovery tunnel at the face of the micro-tunneling boring machine, which caused increased ground movement around the machine, resulting in a *sinkhole* in the work zone.”

Brief Description of the High Repair Costs - “The Contractor provided a quotation for this additional scope of work in the amount of \$1,559,076... An additional 15% contingency of \$233,862, to allow for any additional unforeseen conditions, for a total funding of \$1,792,938... (\$1,824,494 net of HST recoveries) was included...

... due to these unforeseen groundwater conditions and overruns to the daily values due to the extended duration of the work... WSP Canada Group Limited recommended the inclusion of additional contingency funds... in the amount of \$2,502,525 excluding HST (\$2,546,569 net of HST recoveries), to allow for the expected overruns to address and further manage and control additional excessive groundwater that may be encountered during the remaining work.”

There goes the Town’s \$640,000 per year as the first sinkhole eats it up?

We ask: Who will pay for any future sinkholes from the experimental microtunneling?

Caveat Emptor - With the Town Manager’s alleged rush to sign a Host Agreement for the hypothetical Park City Wind project as well as the hypothetical Commonwealth Wind project, many aspects - financial, geotechnical engineering and environmental - have been seemingly overlooked.

As well, sacrificing and potentially harming many Town assets of protected Article 97 land, *rare* Potential Sources of Drinking Water, virgin forested land, estuarine Dowses Beach, well-loved Craigville Beach, wildlife refuge, Main Street local businesses in both Centerville and Osterville, marine habitats in East Bay, Phinney’s Bay and Centerville River, the peace and safety of zoned residential neighborhoods up and down Centerville, Osterville and West Barnstable and the list goes on.

Zoning was implemented so that homeowners would be protected from industrial development. There is a reason beautiful natural resources such as Dowses Beach and Spruce Pond Conservation Area are considered Article 97 land. Just because there is a small existing Eversource substation in Oak Street doesn't mean that the Spruce Pond Conservation Area as well as the Shootflying Hill Road area are now suddenly up for grabs.

Future generations - These are for the Barnstable citizens, now and for their future generations. It isn't right for the the Town Manager and his officials to exchange all of these beautiful, valuable, irreplaceable Town assets for a paltry \$16 million over 25 years, a tiny \$640,000 a year. These Town assets are "NOT FOR SALE."

Nearby cable landing sites - Like many Barnstable citizens, we support renewable energy. For instance, Solar PV has all the benefits of renewable energy. But why does the offshore wind developer have to use Craigville Beach and Dowses Beach, when the existing and available Canal Substation in Sandwich is just up the road? Or the other viable nearby alternative such as the South Coast Variant near New Bedford; the cost-effective and environmentally-friendly Shared Transmission for the New England region, etc.?

\$16 million over 25 years is *nothing* in the scheme of things - The Town Manager and his officials need to wake up to reality: the initially tempting number of \$16 million over 25 years - \$640,000 per year - is *nothing in the scheme of things*.

We understand that *if the cable landings will be made elsewhere, outside of the Town of Barnstable, the \$16 million will not go to the Town.*

So?

What happened to the Town officials who are supposed to make intelligent and responsible decisions that will benefit the community, enhance the Barnstable citizens' quality of life, support the local Main Street businesses, promote environmental protection of Article 97 lands, protect rare and vanishing Potential Sources of Drinking Water?

Instead, we now see Craigville Beach, historic Centerville Main Street, the West Barnstable zoned residential neighborhood and the Shootflying Hill Road Aquifer Protection Overlay District (that abuts the area that Weston & Sampson identified as a *rare* Potential Source of Drinking Water) being seemingly sacrificed for the benefit of *Connecticut* residents and businesses.

Why does the Town Manager think it is OK to support hypothetical Park City Wind to supply electricity to Connecticut residents and businesses - according to the Cape Cod Times - to the perceived and alleged detriment of the Barnstable citizens?

The same is true for estuarine Dowses Beach. Why does the Town Manager think it's OK to support hypothetical Commonwealth Wind and to use Article 97 land

as an electrical cable landing area? This estuarine beach area was designated in the Dowse Family real estate transaction as a “bathing beach” for the pleasure and use of the Barnstable citizens. Why aren’t the Town Manager and his officials respecting this designation?

To subject the Dowses beach parking lot to a multi-year industrial construction project that will bring three (3) massive, unnecessary, underground electrical vaults is unconscionable. All the while the electrical vaults present the adverse potential threat of EMF, a public health and safety hazard to children and unsuspecting Barnstable citizens?

No Peer Review - Again, we note the alleged absence of any Town commissioned *peer reviews* - including for microtunneling and HDD.

The Town of Barnstable is “*NOT for SALE.*”

Thank you.
Maria and Greg Gerdy

Reference

<https://www.toronto.ca/legdocs/mmis/2023/gg/bgrd/backgroundfile-234581.pdf>

From: [Greg Gerdy](#)
To: [Stryisky, Alexander \(EEA\)](#)
Cc: [Greg Gerdy](#)
Subject: Correction: New England Wind 2 Connector DEIR EEA #16611 - Public Comment
Date: Sunday, October 1, 2023 2:43:14 PM

CAUTION: This email originated from a sender outside of the Commonwealth of Massachusetts mail system. Do not click on links or open attachments unless you recognize the sender and know the content is safe.

Dear Mr. Stryisky,

1. Please be informed that the 14 August 2023 and 26 September 2023 public comments misstated the NEW2 Connector substation location as Shootflying Hill Road. It should be Spruce Pond Road.
2. The Weston & Sampson study (commissioned by the Town of Barnstable) identified a very promising and highly-rated “potential source of drinking water” that *abuts* the proposed West Barnstable Shootflying Hill Road location. This was referenced in the 26 September 2023 public comment.

Thank you.
Maria and Greg Gerdy



October 2, 2023

Mr. Alex Strycky, Environmental Analyst
Massachusetts Environmental Policy Act Office
100 Cambridge Street
Boston, MA 02114
alexander.strycky@state.ma.us

RE: New England Wind 2 Connector – Barnstable, Edgartown, Mashpee, and Nantucket (EEA No. 16611)

Dear Mr. Strycky,

Thank you for the opportunity to comment on the New England Wind 2 Connector filed with the Massachusetts Environmental Policy Act Office. I am writing today in my capacity as Executive Director of Barnstable Clean Water Coalition to express my strong support for both Avangrid's third project, Commonwealth Wind, and its grid interconnection in Barnstable, New England Wind 2 Connector.

New England Wind 2 Connector has many similarities to Avangrid's first two projects (Vineyard Wind 1 Connector and New England Wind 1 Connector) approved by the Commonwealth, including cables traversing a similar shared corridor below the seabed, using the same installation methods, and making landfall and connecting to the electric grid in Barnstable.

The Commonwealth of Massachusetts has led the nation in the pursuit of offshore wind. Avangrid's Commonwealth Wind project will continue this leadership by bringing more than 1,200 Megawatts (MW) of renewable offshore wind energy to the New England electric grid and increasing the reliability and diversity of the New England energy supply. This renewably sourced electricity will power 700,000 homes in Massachusetts and reduce the region's reliance on natural gas and oil for electricity generation and reduce year-round price volatility as natural gas supplies are already constrained. The project will cut greenhouse gas emissions by over 2.35 million US tons per year, the equivalent of taking over 460,000 cars off the road.

At the local level, Avangrid has the experience and has performed the necessary due diligence in their environmental safety plans for landing the New England Wind 2 Connector under Dowses Beach in Barnstable, MA. Construction work will be kept to only paved areas of the beach's public parking lot with no construction taking place along the public beach shoreline, in the dunes, in the marsh, or other environmental ecosystems. The method of Horizontal Directional Drilling under the beach to avoid impacts to valuable coastal resources is proven; the same method was used during construction for the Vineyard Wind 1 Connector project just a few miles east of Dowses Beach.

I urge you to expeditiously review and approve New England Wind 2 Connector.

Sincerely,

A handwritten signature in blue ink, appearing to read "Zenas Crocker", written over a horizontal line.

Zenas Crocker
Executive Director, Barnstable Clean Water Coalition
zcrocker@bcleanwater.org



VIA EMAIL ONLY

Alexander.stryisky@mass.gov

October 3, 2023

Mr. Alex Stryisky, Environmental Analyst
Massachusetts Environmental Policy Act Office, 100 Cambridge Street
Boston, MA 02114

RE: New England Wind 2 Connector – Barnstable, Edgartown, Mashpee, Nantucket (EEA No. 16611)

Dear Mr. Stryisky,

Thank you for the opportunity to comment on the New England Wind 2 Connector filed with the Massachusetts Environmental Policy Act Office.

We are writing on behalf of the Cape Cod Climate Change Collaborative, a non-profit 501(c)(3) organization whose mission is to reduce ways in which the Cape & Islands region contributes to climate change and to protect our region from its potentially devastating impacts.

We are writing to express strong support for both Avangrid's third project, Commonwealth Wind, and its grid interconnection in Barnstable, New England Wind 2 Connector.

New England Wind 2 Connector has similarities to Avangrid's first two projects (Vineyard Wind 1 Connector and New England Wind 1 Connector) approved by the Commonwealth, including cables traversing a similar shared corridor below the seabed, using the same installation methods, and making landfall and connecting to the electric grid in Barnstable.

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construction taking place along the public beach shoreline, in the dunes, in the marsh, or other environmental ecosystems. The method of Horizontal Directional Drilling under the beach to avoid impacts to valuable coastal resources is proven; the same method was used during construction for the Vineyard Wind 1 Connector project just a few miles east of Dowses Beach.

We urge you to expeditiously review and approve the New England Wind 2 Connector.

Respectfully,

Miranda Daniloff Mancusi

Miranda Daniloff Mancusi
Executive Director

3225 MAIN STREET • P.O. BOX 226
BARNSTABLE, MASSACHUSETTS 02630

(508) 362-3828 • Fax (508) 362-3136 • www.capecodcommission.org



CAPE COD
COMMISSION

Via Email

October 3, 2023

Rebecca Tepper, Secretary of Energy and Environmental Affairs
Executive Office of Energy and Environmental Affairs
Attn: MEPA Office, Alexander Strycky, MEPA Analyst
100 Cambridge Street, Suite 900, Boston, MA 02114

Re: Draft Environmental Impact Report
EEA No. 16611 (Cape Cod Commission File No. 22029)
New England Wind 2 Connector, Barnstable

Dear Secretary Tepper:

Thank you for the opportunity to provide comments on the above-referenced Draft Environmental Impact Report.

The New England Wind 2 Connector (the Project) consists of three High Voltage Alternating Current (HVAC) offshore export cables in a mapped Offshore Export Cable Corridor (OECC), onshore connection cables and transmission vaults at Dowses Beach in Barnstable, 6.7 miles of onshore transmission cable and ducts in existing roadway, a new substation off Oak Street in Barnstable, and an interconnection line from the substation to the existing higher voltage West Barnstable substation. When complete, the transmission cables will connect approximately 1200 Megawatts (MW) of renewable energy generated by offshore wind turbines to the ISO-NE electric grid, furthering Massachusetts' net-zero emissions goals.

The portion of the offshore cable route in Barnstable County waters, and all onshore components fall within the Cape Cod Commission's jurisdiction. The Project requires an Environmental Impact Report (EIR) and is therefore deemed a Development of Regional Impact (DRI) under § 12(i) of the Cape Cod Commission Act, c. 716 of the Acts of 1989. After MEPA review concludes, the Cape Cod Commission will conduct DRI review to assess the Project's consistency with the Cape Cod Regional Policy Plan (RPP) goals and objectives.

The DEIR indicates that various natural and built resources of Cape Cod are found in or near the Project work areas. Based on our review of the ENF and DEIR, RPP goals related to natural resources, water resources, transportation, energy, climate mitigation, cultural heritage, and community design are material to the Project scope and design. Accordingly, Commission staff offer the following comments for the Proponent to consider while completing the final EIR and preparing for DRI review.

Offshore Transmission Cable Route

The offshore elements of the Project will generally utilize the same OECC as the Vineyard Wind 1 and New England Wind 1 Connector projects; however, a portion of the OECC associated with the New England Wind 2 Connector in Centerville Harbor was not previously reviewed as part of those projects. Using a substantially shared OECC should minimize environmental, operational, and commercial impacts. The proposed OECC location appears to avoid and minimize impacts to sensitive ocean habitats, including North Atlantic Right Whale core habitat, eelgrass beds, and hard/complex ocean bottom. The DEIR was responsive to Commission staff comments on the ENF relative to impacts and mitigation measures for fisheries resources, sea turtles, offshore avian resources, and marine mammals. The Proponent also provided descriptions and drafts of appropriate plans for fisheries communications and benthic habitat monitoring.

Landfall Site

The proposed landfall site at Dowses Beach is mapped as habitat for Piping Plover and Least Tern. The beach and surrounding nearshore environment are also mapped BioMap Core Habitat and Critical Natural Landscape. The Proponent should continue to consult with the Natural Heritage and Endangered Species Program while developing a protection plan to avoid and minimize adverse impacts to rare species and habitats. Horizontal directional drilling (HDD) underneath the sand should prevent surface disruption of potential bird nesting areas. Additionally, the proposed construction will occur outside of bird nesting and foraging seasons, primarily during winter months. This construction timeline will minimize negative impacts to wildlife and disruption of public access to the beach during the summer.

Dowses Beach also includes DEP-mapped wetlands; however, all work is proposed in existing paved areas or underground. The work area will be restored to pre-construction conditions upon completion. As proposed, the Project will not increase the amount of impervious surface at Dowses Beach. Construction best management practices including spill prevention measures, erosion controls, stockpile containment and management, and inspection and oversight are proposed in the DEIR and should prevent adverse effects on wetland and water resources if implemented properly.

Project activities proposed within the floodplain include HDD at the beach landfall to complete the offshore-to-onshore transition and installation of underground transition vaults and transmission cable duct bank system, including over a causeway. Development within the floodplain is vulnerable to coastal storms and the effects of sea level rise. The Proponent provided detailed information in

the DEIR and the supplemental submission on how proposed infrastructure is being designed to address sea level rise and storms for the life of the Project. The Proponent should continue to evaluate and refine design concepts as the design progresses and coordinate with the Town on long-term planning for the parking lot, road segments, causeway, and infrastructure underneath them. Some of the HDD plans show areas of rip rap within coastal dunes to the north and west of the parking lot. The Proponent should clarify if this is existing or proposed and, if proposed, the purpose and need for the rip rap in this area.

Onshore Transmission Cable Route

Natural Resources Impacts

The Preferred and Alternative land-based cable routes are located entirely within public roadway layouts or within the existing parking lot at Dowses Beach. Commission staff do not anticipate adverse impacts to natural resources from the proposed land installation routes, provided that construction best management practices are followed. The DEIR indicates an undetermined number of public shade trees may be impacted along the route. To the extent feasible, removal of public shade trees should be avoided, and any trees removed should be replaced.

According to the DEIR, some of the underground easements associated with certain routes cross land protected under Article 97 of the Massachusetts Constitution for conservation purposes. Potential crossing locations include the existing parking lot and beach at the landfall site, along Dowses Beach Road, for onshore substation site access, and for the grid interconnection route. Commission staff suggest the Proponent investigate any alternatives to avoid adverse impacts on Article 97 lands. If unavoidable, the Proponent will be required to seek legislative approval, and should provide mitigation for any loss of protected open space lands.

The Preferred route passes through Commission-mapped freshwater recharge areas, a Barnstable Wellhead Protection Overlay District, a Barnstable Groundwater Protection Overlay District, and is adjacent to potential public water supply areas. The transmission cable components of the Project will result in no net increase of impervious surface, consistent with RPP objectives to protect water resources.

The Project timeline and Preferred route selection will overlap with the Town of Barnstable's sewer installation plan, Phases 1 and 2. By coordinating cable installation with the Town's sewer expansion, the Project is likely to expedite wastewater infrastructure development, save costs, and improve ground and surface water quality.

Transportation Impacts

The DEIR describes 7 potential onshore export cable routes, which were narrowed down to a Preferred (Osterville-West Barnstable Road) and Alternative (Old Mill Road) through the EFSB route evaluation process. As noted above, a substantial benefit associated with the Preferred route is potential alignment with Barnstable's sewer expansion, and associated cost reductions and

wastewater improvements. Commission staff recognize the value of these benefits but also recognize potential construction-related disruptions along Osterville-West Barnstable Road.

The DEIR addresses anticipated impacts to the business community. Commission staff suggest the Proponent account for and minimize impacts on other major traffic generators in area such as the four nearby schools, including Cape Cod Academy, Cape Cod Collaborative, West Villages Elementary School, and Barnstable United Elementary School, which are in operation during the proposed construction period—outside of the summer peak. The Proponent should consult with the schools and the Town of Barnstable School Superintendent regarding construction impacts that would affect access and operations for the four schools, including school bus routes.

The route selection alternatives analysis should also assess the relative traffic volumes on the Preferred and Alternative routes. Osterville-West Barnstable Road connects the villages of Osterville and Marstons Mills to the Mid-Cape Highway (Route 6), provides access to the Barnstable Transfer Station and carries an average daily traffic (ADT) volume of approximately 7,800 vehicles per day. By contrast, Lumbert Mill Road—which comprises a portion of the Alternative—has an ADT of approximately 3,000 vehicles per day (based on recent counts from September 2023) and primarily provides access to residential neighborhoods. Impacts to all roadway users should be carefully considered given that the Town of Barnstable has several other major construction projects planned or underway which will result in temporary pavement repairs/patches, lane closures and detours.

The DEIR and Appendix N (Draft Construction Management Plan) did not include specific details regarding location and duration of potential detour routes, planned lane closures or traffic management plans that will be prepared for major intersections, such as the Route 28 intersection crossing, and the complicated intersection of Old Falmouth Road at Race Lane/Old Stage Road. Additional details regarding traffic management plans along the Preferred and Noticed Alternative route should be provided in subsequent submissions. The Proponent should include any available updates on coordination with the Town of Barnstable on planned roadway improvements, such as the Cape Cod Rail Trail on Service Road and sewer infrastructure projects along the onshore cable route.

Existing infrastructure, including roads, sidewalks, traffic signal equipment and street trees, should be restored to the same or better condition post-construction. On affected roadways where work occurs in the shoulder area, there may be opportunities to leave a graded surface suitable for future installation of sidewalks or multi-use paths, if desired by the Town. Subsequent submissions should include any updates on coordination with MassDOT and Town officials regarding traffic management plans and strategies.

Historic/Archaeological Impacts

As described in the DEIR, the Preferred onshore cable route will pass through a portion of the Wianno National Register Historic District, and both Preferred and Alternative routes are adjacent to multiple National Register properties and hundreds of inventoried historic properties in the

Town of Barnstable. The cable will be installed predominantly underneath existing paved roadways and thus is not expected to impact these historic structures. The Proponent should identify areas where historic structures are close to the roadway and could be affected by heavy construction work during cable installation. In those areas, limitations should be placed on vibration-causing construction methods to reduce potential damage to significant historic structures.

The Proponent has retained a consultant, PAL Inc., to determine whether archaeological resources will be affected by the proposed route. Based on reconnaissance and intensive survey work, no significant archaeological resources were found along the proposed route, but archaeologically sensitive areas were identified where monitoring is advised during construction. Additional archaeological surveys are still underway, and their results should be addressed prior to finalizing the route and any mitigation needed to avoid impacts to archaeological resources.

Onshore Substation

The proposed new substation in Barnstable is on an approximately 15.2-acre undeveloped wooded upland site, most of which would need to be cleared and graded. The parcel is within a Potential Public Water Supply Area mapped by the Cape Cod Commission, the Barnstable Aquifer Protection Overlay District and adjacent to protected open space. Construction of the new substation will result in permanent loss of natural forest and increase impervious surface by 1.2 acres. The Proponent should ensure that the Town of Barnstable does not have any identified potential well sites within the vicinity of the substation parcel. If there are identified future well sites, construction, clearing, and staging should occur at least 400 feet from such sites.

Most substation equipment and enclosures are designed to be no more than 30 feet in height. The proposed new substation will be surrounded by undeveloped and wooded areas that provide a wide vegetated buffer to screen views of the substation from most locations, limiting visual impacts of the Project to surrounding areas. The DEIR indicates that the existing Eversource West Barnstable Substation, where the Project proposes to interconnect, requires modifications to accommodate the NE Wind 2 cable. The design for the expansion will be formulated in coordination with Eversource, who will then own and operate the substation. Commission staff suggest that available information on the substation expansion be included in future submissions.

The substation components using dielectric fluid will include containment systems, and the Proponent has committed to using additional containment volume capacity to account for Probable Maximum Precipitation events. The substation design proposes oil absorbing inhibition devices to reduce potential groundwater contamination. Commission staff suggest the Proponent provide an inventory which includes the identities and quantities of expected and potentially hazardous materials/wastes that will be generated, used, or stored on site.

The proposed stormwater management system for the substation incorporates low impact development (LID) strategies such as an infiltration basin, sediment forebays, and drainage swales, in addition to a rip-rap-lined channel down a steep slope to the infiltration basin. The substation yard will be covered with crushed stone which may allow for some infiltration. Drainage swales and

the infiltration basin will enable treatment and infiltration of stormwater beyond the capacity of the stone and soil on site. Commission staff recommend an operations and maintenance plan be included with the final EIR as some of the LID systems will require occasional maintenance to ensure effective stormwater storage and treatment.

Thank you for the opportunity to provide comments on the New England Wind 2 DEIR. Commission staff are available to answer any questions you may have.

Sincerely,



Kristy Senatori
Executive Director

Cc: Project File
via email-
Marc Bergeron, Epsilon Associates
Mark Ells, Barnstable Town Manager
Elizabeth Jenkins, Barnstable Director of Planning & Development
Cape Cod Commission Barnstable Representative
Cape Cod Commission Chair
Cape Cod Commission Committee on Planning & Regulation Chair



alexander.strysky@mass.gov

[Dashboard\(javascript:void\(0\);\)](#) > [View Comment\(javascript:void\(0\);\)](#)

View Comment

Comment Details			
EEA #/MEPA ID 16611	First Name Claire	Address Line 1 Bumps River Road	Organization NA
Comments Submit Date 10-3-2023	Last Name O'Connor	Address Line 2 --	Affiliation Description Individual
Certificate Action Date 10-3-2023	Phone --	State MASSACHUSETTS	Status Opened
Reviewer Strysky, Alexander	Email --	Zip Code 02655	

Comment Title or Subject

Topic: New England Wind 2 Connector (EEA No. 1611)

Comments

Letter submitted as attached.k

Attachments

[COltr923.docx\(null\)](#)

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September 29, 2023

Mr. Alex Strysky

Environmental Analyst Massachusetts Environmental Policy Act Office

100 Cambridge Street Boston, MA 02114

RE: New England Wind 2 Connector (EEA No. 16611)

Dear Mr. Strysky,

I write to offer my comments on the Commonwealth Wind application that is before your agency. I am a long-term resident of Osterville where I shop and dine downtown and enjoy the beauty of Dowses Beach. I have followed the Commonwealth Wind project and am delighted that we are finally seeing our ocean create clean energy. The time has come for our community to accept that a relatively minor, off-season disruption of the area is a small price to pay for the very tangible long-term benefits that renewable energy has to offer. I have lived in many places where maintaining underground infrastructure is a part of daily life and is integral to an efficient and modern society. I believe that Avangrid will do the right thing and make sure that Dowses and the downtown will be in as good if not better condition once this cable is installed. There are many members of this community who believe as I do, and I hope that you will approve this permit. Thank you for your time.

Very Truly Yours,

Claire O'Connor

Claire O'Connor

568 Bumps River Road Osterville, MA 02655



MEMORANDUM

TO: Rebecca L. Tepper, Secretary, EEA
ATTN: Alex Strycky, MEPA Office
FROM: Lisa Berry Engler, Director, CZM
DATE: October 3, 2023
RE: EEA-16611, DEIR - New England Wind 2 Connector

The Massachusetts Office of Coastal Zone Management (CZM) has completed its review of the above-referenced Draft Environmental Impact Report (DEIR), noticed in the *Environmental Monitor* dated July 26, 2023, and offers the following comments.

Project Description

The New England Wind (NEW2) Connector is part of the Commonwealth Wind project, an offshore wind energy generation facility proposed in federal waters within the southern portion of Bureau of Ocean Energy Management (BOEM) Lease Area OCS-A 0534 (Lease Area) and would produce up to 1,232 megawatts (MW) nameplate capacity annual renewable energy. Major elements of the Commonwealth Wind project include wind turbine generators (WTGs) and foundations, offshore electrical service platforms (ESPs) and foundations, inter-array cables, three offshore export cables, onshore export cables, and an onshore substation that will step up transmission voltage to 345 kilovolts (kV) for interconnection with the regional power grid at the existing 345-kV West Barnstable substation. All WTGs, ESPs, associated foundations, and inter-array cables, along with a portion of the offshore export cables, will be in federal waters outside of the Massachusetts Environmental Policy Act (MEPA) jurisdiction. The proposed NEW2 Connector project (the “Project”) constitutes the Massachusetts-jurisdictional elements of the Commonwealth Wind project and includes three offshore export cables, onshore export cables, and the new onshore substation. The three offshore export cables are proposed to be installed within an Offshore Export Cable Corridor (OECC) that travels from the northwestern corner of the Lease Area to the landfall site within a paved parking lot located at Dowses Beach in Barnstable.

Project Comments

Jurisdiction

The DEIR encompasses the elements of the Commonwealth Wind project proposed within Massachusetts state boundaries, including part of the offshore export cables, all the onshore underground cables, and the proposed onshore substation, collectively referred to as “New England Wind 2 Connector.” Although the DEIR focuses on the elements proposed within state boundaries, CZM’s federal consistency authority extends to activities that have reasonably foreseeable effects on any coastal use or coastal resources resulting from a federal agency activity or federal license or permit activity. Renewable energy leases and related authorizations by BOEM are listed as federal actions of the state’s approved Coastal Management Program (CMP). While CZM’s review of the entire project to ensure its consistency with policies of the CMP will occur through the BOEM renewable energy program and National Environmental Policy Act filings, the Proponent should provide sufficient detail and information on activities in adjacent federal waters as well as potential effects on state resources and uses including avian species and commercial and for-hire fishing in the Final



Environmental Impact Report (FEIR) to allow for a complete assessment of the entire project through this MEPA process.

Ocean Management Plan

To lay the combined 69 miles of export cable in state waters, the Proponent has estimated 27 acres of dredging impacts in sand waves, 110 acres of trenching impact due to fluidization of sediments during cable laying and disturbance due to instrument skids, 27 acres of seafloor disturbed by anchor setting and spudding for construction vessels, up to 29.4 acres of potential long-term cable protection, and 7.2 acres associated with nearshore grounding of installation vessels (Table 5-1). Of these impacted areas, the Proponent assumes up to 2.0 acres will be in mapped hard bottom habitat and up to 5.9 acres will be in mapped complex habitat (Table 5.2), both of which together comprise hard/complex seafloor—a Special, Sensitive, or Unique (SSU) resource protected by the Massachusetts Ocean Management Plan (OMP).

The DEIR explains how the project is consistent with the OMP by avoiding the mapped SSU habitats for North Atlantic right whales, eelgrass, and intertidal flats; using all practicable measures to avoid disturbing the hard/complex seafloor SSU; and that No Less Damaging Environmentally Practicable Alternative to the proposed cable layouts exists. The Proponent has described the public benefits of the project through the reduction of greenhouse gas emissions and a Host Community Agreement (HCA) with the Town of Barnstable. The public benefits include 1.59 million tons per year of carbon dioxide equivalents, 850 tons per year of NO_x, and 450 tons per year of SO₂ emissions that will be offset by the wind energy generated over the lifetime of the project. The Proponent is still in the process of coming to terms with the Town of Barnstable on the HCA. The FEIR should describe the HCA with the Town of Barnstable so that a review of how the public benefits of the project outweigh its detriments can be completed, as required under the OMP.

The Proponent proposes an ocean development mitigation fee starting at \$300,000 - which is within the range of the Class II fee (\$100,000-\$350,000) set out in the 2021 Massachusetts Ocean Management Plan - based on 8.3 acres of cable footprint (22.7 miles x 12 inches x 3 cables) and anticipated hardcover of 9.8 acres, for a total of 18.1 acres, and up to 91,500 cubic yards (cy) of sand wave dredging. The Proponent also proposes that the fee would increase by \$10,000 for each acre of cable protection required above the assumed 9.8 acres of cover and would increase by \$500 for every 1,000 cy of sand wave dredging required above the 91,500-cy expected in the ocean planning area. The proposed fee is consistent with the fee set by the Secretary for New England Wind 1 (NEW1) Connector (\$287,500) but also reflects the greater project footprint due to NEW2 having three cables.

To calculate an ocean development mitigation fee, a cable laying proponent should include the areas of disturbance associated with direct trenching, berms, and sediment drape due to sediment fluidization, instrument skids, sand wave dredging, anchor setting for construction vessels, and the placement of long-term cable protection. The proponent should provide an estimation of these additional areas in the FEIR. However, based on the information currently provided, the analysis of impacts, and considering the public benefits associated with the NEW2 Connector project, the calculation of the base fee and additional impact fee rates proposed in the DEIR appear appropriate at this time.

Cable Protection

The Expanded Environmental Notification Form (EENF) stated that cable protection would be employed if a minimum burial depth of 5 feet (ft) was not achieved within areas of “higher risk of

damage from anchor strikes.” For the DEIR, the Proponent summarized a risk assessment conducted that included a detailed decision framework for when to apply cable protection if sufficient burial depths were not achieved in various risk areas along the OECC. The areas of higher risk are based on existing vessel traffic patterns as identified via Automatic Information System data. To minimize the use of cable protection, for those sections of the OECC where the risk of anchor strike is negligible (i.e., where the risk of anchor strike is less than 1 in 100,000 years), the Proponent plans to use cable protection only if a minimum burial depth of 3.3 ft is not achieved. The FEIR should describe and depict these risk areas in relation to local ports and the OECC. Further, in advance of the Massachusetts Department of Environmental Protection (MassDEP) Chapter 91 permitting process, the Proponent should ground truth these proposed high-risk areas with the Division of Marine Fisheries (DMF) and local stakeholders, such as harbor masters.

Coastal Resource Areas and Coastal Resilience

The preferred landfall site identified in the DEIR is Dowses Beach. Although the resource area delineations have been updated since the ENF, the DEIR does not delineate the entire coastal dune at Dowses Beach. The barrier beach, by definition, is either a coastal dune, coastal beach, or wetland. The coastal dune in the footprint of the parking area has been modified in form and is not as high as the adjacent dunes, but it is a deposit of windblown or wave-deposited sand landward of the coastal beach. Its functions have been limited by the paving, however, pavement on barrier beaches, particularly in Velocity Zones, may be compromised in coastal storm events (as recognized in the erosion analysis in Appendix Q). In addition, sand may be deposited on the parking lot by winds and wave overwash. Therefore, the dune provides storm damage prevention and flood control functions that should be recognized in the wetlands resource area impact analysis. The coastal dune delineation and analysis of impacts should be updated in the FEIR.

The DEIR states that transition joint bays proposed to be installed two ft under the parking lot surface, are 61 ft long, 11 ft wide, and 8.5 ft high. The DEIR includes an analysis of the erosion that could happen in major coastal storm events under current conditions, as well as 2030 and 2050 sea levels. Since the lifespan of the infrastructure is longer than 25 years, the analysis should also be completed for 2070 conditions. The analysis in Appendix Q estimated that the maximum erosion of the barrier beach in the 2030 and 2050 storm scenarios modeled for the location of the joint bays would be 3.6 ft. The analysis includes several caveats at the beginning of the memorandum, including one that the model was not calibrated for the site. Based on these caveats, there is uncertainty associated with the erosion estimates for the site. The uncertainty should be calculated and provided. The DEIR states that an engineering analysis is underway to determine if the joint bays can be lowered in elevation to account for the predicted erosion. As critical infrastructure, the analysis should ensure the joint bays can function through extreme storm events. Updated analysis and clarification on these issues should be provided in the FEIR.

The DEIR states that the project engineers are currently modifying the duct bank design to enhance capacity to withstand the modeled scenarios, such as structurally anchoring the infrastructure and/or placing the infrastructure at a lower elevation to reduce exposure to erosion. The impacts of these structural modifications and the construction of a larger reinforced concrete structure within the causeway should be considered relative to the functions of coastal banks, salt marsh, and the causeway in providing storm damage prevention and flood control functions to landward areas. Impacts on coastal resource areas in Section 5 should be updated based on new designs.

Species of Concern

According to the Natural Heritage and Endangered Species Program (NHESP), the draft Piping Plover Protection Plan for Dowses Beach will be finalized as part of the Massachusetts Endangered Species Act (MESA) permitting process that will commence upon the conclusion of the MEPA review. As stated in the DEIR (section 7.3.1), the Proponent has committed to implement a conservation program to research and address the impacts of offshore wind development on coastal waterbird populations. The program will include research, conservation, and habitat restoration measures for avian populations that nest, forage, or migrate through offshore wind project areas, but will not be limited to “the boundaries of any particular offshore wind development footprint.” Conservation measures should be developed that mitigate unavoidable mortality to avian species of concern such as ongoing tern colony and plover monitoring and management, and the restoration and enhancement of critical nesting habitats. The Proponent should continue to coordinate with NHESP and other state agencies to develop the specifics of the conservation program including partners, funding, timing, and project locations. Additional information regarding the conservation program should be described in the FEIR. The development of the coastal waterbird conservation program will also be reviewed as part of CZM's ongoing federal consistency review process.

Monitoring Plan

As stated in previous comments on the EENF, the Proponent should implement a monitoring program that includes both short-term and long-term studies that quantify the physical effects of dredging, plowing, and cable laying on seafloor topography, benthic infauna, and sediment grain size; the extent, duration, and concentration/depth of suspended solids/sediment drape and any effects on flora and fauna (e.g., eelgrass); and ensure the long-term burial of the export cables. The purpose of a pre-construction and post-construction Benthic Habitat Monitoring Plan (BHMP) is to compare the predicted impacts as presented through the MEPA process with actual project impacts. Instead of proposing a BHMP for the proposed project, the Proponent has proposed a BHMP for the NEW1 project, which is the opposite of what the Proponent proposed in the NEW1 FEIR. In the NEW1 FEIR, the Proponent's preferred option for a BHMP was to monitor along the NEW2 cable corridor in 2024 (preconstruction) and later in 2027, 2029, and 2031 (years 1, 3, and 5 after the NEW2 cables are placed). Now in the NEW2 DEIR (Attachment L, Section 2.4), the Proponent is proposing to monitor along the easternmost of the NEW1 cables in 2026 (preconstruction), 2027 or 2028 (Year 1), 2029 or 2030 (Year 3), and possibly 2031 or 2032 (Year 5). Acknowledging the complications associated with monitoring in the vicinity of two other cable laying projects, the proposed plan to not monitor the NEW2 cable installation should be reevaluated. The Proponent should continue to engage state and federal agencies in a dialogue to finalize a BHMP for the NEW2 project.

The BHMP proposed for NEW1 has the components of a traditional benthic monitoring plan, but some important details are missing. The most important missing element is a plan to integrate the various analyses (i.e., video-based epifaunal community, infauna species diversity and abundance, community structure, sediment grain size, and sediment dispersion) into a decision/response framework. A conservative decision response framework would be one in which if any of the benthic habitat assessments show significant change, then either additional study or some form of mitigation would be enacted. Another decision/response framework looks at the Weight of Evidence (WOE) across all metrics and has *a priori* actions associated with the various combinations of impact/no impact detected. The WOE approach was used successfully in previous linear asset construction projects in Massachusetts.

As stated in comments on the EENF, geophysical surveys of the three export cables should be conducted immediately after construction to document and ensure cable location and burial depth. These surveys should include bathymetric analyses that depict the change in seafloor height after construction as compared to preconstruction. Reports on as-built cable depth and near-term changes in seafloor topography should be discussed with the resource agencies so that remediation options, if necessary, can be discussed and implemented. To assist in the MassDEP Chapter 91 licensing, the Proponent should describe a plan in the FEIR to assess and ensure cable burial depth at regular intervals and after significant storm events so that other water-dependent uses are not threatened or impeded by any exposed cable segment.

Lastly, total suspended solids concentrations during construction, both within and outside of the affected construction area should be monitored and an analysis of the depth and extent of sediment drape associated with the settling of suspended sediments should be conducted. The goal of this monitoring is to discern the magnitude and duration of impacts that occur when using the specific cable laying tool utilized for the NEW2 project in specific locations and during the specific time of construction. The intent is to identify impacts that are beyond the temporal and spatial scope modeled for the project. The proposed water quality monitoring plan should be included in the FEIR and reviewed as part of the MassDEP 401 Water Quality Certification process.

Fisheries Mitigation

As stated above, the Proponent may use up to 9.8 acres of hard cover to protect inadequately buried cable within the OECC. The Proponent should establish a gear loss/damage protocol to account for incidents involving fishing gear interacting with and becoming snagged upon or damaged by cable protection. The FEIR should describe this gear loss/damage protocol.

Using National Marine Fisheries Service commercial fishing revenue data (2008-2021), the Proponent estimates the annual fishing revenue along the OECC to be \$209,331 (2021 dollars). Based on an assumed 1.2 square mile dynamic safety zone around cable laying vessels, the Proponent estimates that the annual average fishing revenue in areas impacted by cable installation is approximately \$8,849 during the predicted 13.5-month period to install the three offshore export cables. Using the more conservative monthly average commercial fishing revenue along the OECC, the Proponent estimates that fishing revenue in areas impacted by cable installation would be approximately \$9,919 (2021 dollars). After consultation with CZM and DMF, the Proponent should refine the economic exposure analysis for the FEIR, using appropriate economic multipliers to represent upstream and downstream impacts. CZM will review the analysis of potential economic exposure to Massachusetts fisheries, in conjunction with DMF, through the federal consistency review process and in keeping with any guidance developed by BOEM.

Underwater Archeological Resources (This section reflects comments from the Massachusetts Board of Underwater Archeological Resources which is administratively hosted by CZM).

A Marine Archeological Resources Assessment (MARA) of the State waters portion of the NEW2 OECC was completed utilizing high-resolution geophysical and geotechnical survey data acquired by the Proponent within the OECC survey envelope encompassing both the NEW1 and NEW2 projects. The state waters MARA was performed by the Proponent's qualified marine archaeologist (QMA), Gray & Pape, Inc., under a Massachusetts Board of Underwater Archeological Resources (BUAR) Special Use Permit (21-006), under Massachusetts General Law (MGL) Chapter 91, section 63 and Code of Massachusetts Regulations (CMR) 312 CMR 2.0-2.15, and BUAR's published *Policy Guidance on Archeological Investigations and Related Survey Standards for the Discovery of*

Underwater Archaeological Resources. The Proponent's QMA participated in pre-survey meetings with BUAR to obtain feedback during the development and finalization of the marine archaeological survey plan, which was submitted as part of their BUAR permit application initially reviewed and approved by BUAR's full Board in December 2021. This BUAR permit was renewed in 2022 and is currently active. These details should be included in the FEIR.

The DEIR states in Section 9.2 that the responsibility of the QMA is to identify potential submerged cultural resources that may be eligible for listing in the National Register of Historic Places (NRHP) within the project route. While that is true for BOEM's and the State Historic Preservation Office's (SHPO) review of the project, within Massachusetts state waters, the responsibility of the QMA, acting on behalf of the Proponent, under its BUAR Special Use Permit, is expanded to include the identification of *any* underwater archaeological resource (not just those that are NRHP-eligible) that may be affected by the Proponent's proposed seabed-disturbing project activities. MGL Chapter 91, section 63, states that "no person, organization, or corporation may remove, displace, damage, or destroy underwater archaeological resources except in conformity with permits issued by BUAR." Further, MGL Chapter 6, section 180, states that "the Title to underwater archaeological resources located within the inland and coastal waters of the Commonwealth is hereby declared to be in the Commonwealth," and that it is the Board's duty and responsibility to encourage the discovery and reporting of and to "protect and preserve historical, scientific and archaeological information about underwater archaeological resources." Underwater archaeological resources are defined in MGL Chapter 6, section 180 as "abandoned properties, artifacts, treasure trove or sunken ships, which have remained unclaimed for one hundred years or more or which are valued at five thousand dollars or more, within the inland or coastal waters of the commonwealth...or upon lands thereunder, or any other objects one hundred years old or judged by the board to be of historical value which are located inside, upon or around said resources." While underwater archaeological resources are commonly shipwrecks (there are more than 3,500 reported shipwrecks within Massachusetts waters), they also include submerged wharves, aircraft, and ancient Indigenous archaeological deposits. BUAR is the sole trustee of the Commonwealth's underwater cultural heritage with different authority and responsibilities than those of the Massachusetts State Historic Preservation Office. BUAR's role as a consulting party and Massachusetts's representative in the Commonwealth's ownership rights to the underwater archaeological resources within the state waters portion of the project area should be reflected in the FEIR, in the Project's Final Historic Property Treatment Plans (HPTP), in Project Memorandums of Agreement, and in the distribution of potential mitigation funds for BUAR to address and permit any disturbances to Massachusetts's underwater archaeological resources.

Research conducted as part of the MARA included a review of historical documents, previous research reports, state inventory files, shipwreck inventories, secondary sources, and historical map analysis, utilizing materials from a variety of sources, including BUAR's archives. Marine high-resolution geophysical (HRG) surveys utilized a magnetometer, side-scan sonar, sub-bottom profiler, and multibeam echosounder. A geotechnical survey including bottom grabs, Cone Penetration Tests, and vibrocores, assisted in validating the QMA's geophysical data interpretations and provided material for additional geo-archaeological analysis. The DEIR states that results from the MARA (included in Volume II-D of the project's Construction and Operations Plan [COP]) were presented and discussed with BUAR. An internal document prepared by the QMA segregating the results from the MARA for the full project area reported in the COP to include those from within the state waters portion of the OECC was also provided to BUAR in September of 2023.

Section 9.2.1 of the DEIR states that archaeological investigations of the OECC have recovered no “pre-Contact Native American cultural materials” to date; however, no limited or comprehensive program of underwater pre-Contact period archaeological site identification testing has yet been performed. It may be that such testing is technologically infeasible because the thickness of marine sediments overlying archaeologically sensitive geological deposits precludes underwater test excavations. The FEIR should identify this issue and provide recommendations for how pre-Contact period underwater archaeological sites might be identified or how their potential presence will be addressed. Geoarchaeological analysis of the project’s HRG survey data indicates that an undefined “small percentage” of the project area contains preserved submerged ancient landforms (SALs) (e.g., ancient stream channel, lake, pond, and estuarine landscape features) that have the potential to contain archaeological materials. The QMA reported that approximately 11 archaeologically sensitive SALs (labeled as “Channel Groups”) have been identified within the State waters portion of the OECC. While avoidance of these areas is recommended by the QMA and is BUAR’s preference, the DEIR states that the scattered distribution of these SALs throughout the State waters portion of the OECC project area indicates complete avoidance of them is not likely to be possible. The DEIR states that a draft HPTP has been developed by the Proponent following federal review requirements to address mitigation for SALs that cannot be avoided and that consultations regarding the HPTP are ongoing among BOEM, Native American Tribes, and other parties as part of the Section 106 process. BUAR looks forward to contributing its comments to the HPTP development's consultation process. Neither the DEIR nor the August 2023 draft HPTP for SALs contains a plan for consulting with BUAR to permit and mitigate effects to Commonwealth-owned pre-Contact period underwater archaeological materials that may be identified within the State waters portion of the OECC and potentially affected by the proposed project’s seabed-disturbing activities. Such a plan should be developed by the Proponent and its QMA in consultation with BUAR, BOEM, SHPO, Tribes, and other participating parties as part of the development of a final HPTP and included in the FEIR.

Section 9.2.2 of the DEIR states that no potential shipwrecks were identified within the State waters portion of the OECC, but that two potential shipwrecks were identified within the Western Muskeget Variant (located entirely within State waters). The DEIR states that these potential shipwrecks will be avoided with the implementation of QMA-prepared avoidance buffers that comply with BUAR’s *Policy Guidance for Establishing Shipwreck and Underwater Resource Avoidance Protection Plans*. BUAR concurs with this approach.

Federal Consistency Review

The proposed project is subject to CZM federal consistency review and must be found to be consistent with CZM's enforceable program policies. For further information on this process, please contact Sean Duffey, Project Review Coordinator, at sean.duffey@mass.gov, or visit the CZM website at <https://www.mass.gov/federal-consistency-review-program>.

LE/tc/he/dr/rh

Cc: Todd Callaghan, MA CZM
Hollie Emery, MA CZM
Steve McKenna, MA CZM
Robert Boeri, MA CZM
David Robinson, BUAR
Dan McKiernan, MA DMF
John Logan, MA DMF

Justin Bopp, MA DMF
Mark Rousseau, MA DMF
Darcy Karle, Town of Barnstable
Jane Varkonda, Town of Edgartown
Susan Tuxbury, NMFS
Kaitlyn Shaw, NMFS
Ed Reiner, USEPA
Tim Timmermann, USEPA
Amy Hoenig, MA NHESP
Eve Schluter, MA NHESP
Maissoun Reda, MassDEP
David Wong, MassDEP
David Hill, MassDEP
Holly Carlson Johnston, Epsilon



October 3, 2023

Secretary Rebecca L. Tepper
Executive Office of Energy and Environmental Affairs
Attn: Alex Strysky, MEPA Office
100 Cambridge Street, Suite 900
Boston, Massachusetts 02114

Re: EEA#16611 – New England Wind 2 Connector (Barnstable) DEIR

Dear Secretary Tepper:

The Department of Conservation and Recreation (“DCR” or “the Department”) is pleased to submit the following comments in response to the Draft Environmental Impact Report (“DEIR”) filed by Commonwealth Wind, LLC (the “Proponent”) for the New England Wind 2 Connector (the “Project”).

The Proponent proposes to install three new cables that will connect offshore turbines to the proposed landfall site at Dowses Beach. An approximate 6.7-mile underground duct bank will be constructed to connect from the landfall site to a proposed new substation site off Oak Street in Barnstable.

The proposed substation site abuts DCR’s West Barnstable Fire Tower, and the Proponent proposes shared use of the fire tower access road. The Barnstable Fire Tower is the ‘Key’ tower for the Cape and the Islands, meaning that the tower operators facilitate communications between regional fire towers and municipal fire departments. Early detection of fires and the ability to pinpoint their exact locations significantly reduces the response time for local firefighters.

DCR’s concerns with the substation proposal include the need for 360 degrees of unobstructed views from the tower, the need for radio communications from the fire tower to not be adversely affected by the substation, and the ability to use the access road for day-to-day operations of the fire tower during and after construction.

The DEIR provides a Zone of Visual Influence analysis with line-of-site profiles in Volume 2, Appendix E. The line-of-site profile for the Barnstable Fire Tower demonstrates that the substation facility, including 80-foot-tall lightning masts, will not block views of the surrounding landscape from the fire tower. The Proponent indicates that they have checked with the Barnstable County Sheriff’s Department and the State Police regarding radio communication and these departments do not expect interference from the substation.

A review of access road considerations determined that DCR holds non-exclusive access rights over the Fire Tower Access Road. Owners of underlying parcels and their successors and assigns have the right to use the property for all purposes not inconsistent with DCR’s rights. As the Proponent gathers rights along the access road, they will seek written confirmation from DCR that the Proponent’s use of the access road is not inconsistent with DCR’s rights. DCR requests coordination with the Proponent related to establishing an

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Department of Conservation and Recreation

State Transportation Building

10 Park Plaza, Suite 6620

Boston, MA 02116-3978

617-626-1250 617-626-1351 Fax

www.mass.gov/dcr



Maura T. Healey

Governor

Kimberley Driscoll

Lt. Governor

Rebecca L. Tepper, Secretary

Executive Office of Energy & Environmental Affairs

Brian Arrigo, Commissioner

Department of Conservation & Recreation

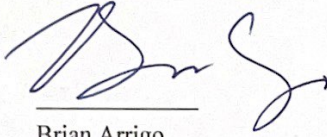
EEA #16611 DEIR

Page 2 of 2

agreement to memorialize proposed improvements and future maintenance responsibilities. DCR notes that a Construction and Access Permit may be required for use of the fire tower access road.

Thank you for the opportunity to comment on the DEIR. If you have any questions regarding these comments, or to request additional information or coordination with DCR, please contact DCR District Fire Warden Josh Nigro at josh.nigro@mass.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read "Brian Arrigo", written over a horizontal line.

Brian Arrigo
Commissioner

cc: Josh Nigro, Priscilla Geigis, Patrice Kish, Peter Mulcahy



Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

Southeast Regional Office • 20 Riverside Drive, Lakeville MA 02347 • 508-946-2700

Maura T. Healey
Governor

Kimberley Driscoll
Lieutenant Governor

Rebecca L. Tepper
Secretary

Bonnie Heiple
Commissioner

October 3, 2023

Rebecca L. Tepper,
Secretary of Energy and the Environment
Executive Office of Energy and
Environmental Affairs
100 Cambridge Street, Suite 900
ATTN: MEPA Office
Boston, MA 02114

RE: DEIR Review. EOEEA 16611
BARNSTABLE. New England Wind 2
Connector with proposed offshore export
cables to Dowses Public Beach in
Barnstable (Landfall Site), and onshore
underground electric transmission cables
within existing roadway layouts to a new
onshore electrical substation in Barnstable
and ultimately to an interconnection point at
Eversource's existing 345-kV West
Barnstable Substation

Dear Secretary Tepper,

The Southeast Regional Office of the Department of Environmental Protection (MassDEP) has reviewed the Draft Environmental Impact Report (DEIR) for New England Wind 2 Connector located with proposed offshore export cables from Federal/Massachusetts offshore boundary, northerly to Dowses Public Beach in Barnstable (Landfall Site), and onshore underground electric transmission cables within existing roadway layouts to a new onshore electrical substation in Barnstable and ultimately to an interconnection point at Eversource's existing 345-kV West Barnstable Substation, Barnstable, Massachusetts (EOEEA #16611). The Project Proponent provides the following information for the Project:

The Vineyard Wind Connector 2 includes two three-core offshore export cables connecting the offshore electrical service platform (ESP) located in the SWDA to the landfall site onshore. The two offshore export cables will transition to six single-core onshore export cables in transition vaults/joint bays at the landfall site, then continue underground within a buried concrete duct bank. The route for this duct bank will predominantly follow existing public roadway layouts to a proposed onshore substation. The substation will step up voltage to enable the interconnection with the electrical grid at the existing Eversource 345-kilovolt (kV) West Barnstable Substation.

Offshore elements of Vineyard Wind Connector 2 will largely utilize the OECC developed for the Vineyard Wind Connector 1, which will transit through state and federal waters. Within Massachusetts waters, the OECC will pass offshore through the towns of Edgartown, Nantucket, Barnstable, and possibly a corner of Mashpee before making landfall in Barnstable (see Figure 1-4 in Attachment B). The total length of the OECC

This information is available in alternate format. Contact Glynis Bugg at 617-348-4040.

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from Park City Wind in the SWDA to the landfall site is approximately 63 miles (101 kilometers [km]), with approximately 23 miles (37 km) of the OECC located within state waters. Onshore Project elements will be located entirely within the Town of Barnstable.

Bureau of Water Resources (BWR) Comments

Wetlands. The Department has reviewed the Draft Environmental Impact Report (DEIR) for the New England Wind 2 Connector Project and note the following:

- The Proponent has addressed the Program’s comments and the relevant performance standards to each of the jurisdictional wetland resource areas identified for the Project location.
- The Proponent indicates in the DEIR that the area occupied by the existing paved parking lot at the landfall site likely functioned as coastal dune prior to its development but in its existing condition does not provide the critical functions provided by coastal dunes. The Wetlands Program does not concur with the Proponent’s position and believes that the parking area should be included in the coastal dune delineation on the plans accompanying the Notices of Intent. Coastal Dunes are likely to be significant to storm damage prevention and flood control.
- The Project infrastructure on the causeway leading to Dowses Beach, as currently designed with a reinforced concrete structure at the proposed depth, has the potential to allow breaching at the causeway during extreme storm events, thus impacting coastal resource areas in the Project area, specifically salt marshes in the vicinity of the causeway. While the Project design is ongoing and not yet finalized, the Proponent must explore alternative designs that address the capacity of the resource areas to serve their respective functions and protect the interests of the Wetland Protection Act.

Waterways. The SERO Waterways Program has reviewed the DEIR submitted by Commonwealth Wind, LLC and determined that the Proponent has adequately responded to Chapter 91 comments raised during the initial review of the Project. As indicated in the DEIR, no material changes to the Project have occurred since the filing on the ENF. The DEIR does contain additional information regarding the option of utilizing a trenchless microtunnel across East Bay instead of running the cables over the culvert in the causeway which leads to Dowses Beach. While the Waterways Program may prefer this option, it would result in a significant closure of the parking lot at Dowses Beach during construction. In the FEIR and during the Chapter 91 Application review, the Waterways Program requests that the Proponent continue to explore options for locating the cables within the causeway which will have less impact on public access to Dowses Beach and not have the potential for the cable ducts to be exposed during severe coastal storms.

Waterways/Boston. For horizontal directional drilling (HDD) at Dowses Beach, MassDEP requests a frac out contingency plan. All HDD associated operations shall be conducted to minimize any potential for water quality impacts. During HDD, Best Management Practices shall be implemented to collect and manage the drill cuttings and excess drill fluids. A drill crew that specializes in HDD shall monitor the drilling operations and immediate corrective actions shall be taken should drill fluid seepage occur.

Bureau of Waste Site Cleanup (BWSC) Comments

The DEIR did not specifically address how to manage contaminated soil related to other disposal sites if found. Therefore, the Bureau of Waste Site Cleanup offers the following: Based upon the information provided, the Bureau of Waste Site Cleanup (BWSC) searched its databases for disposal sites and release notifications that have occurred at or might impact the proposed project area. A disposal site is a location where there has been a release to the environment of oil and/or hazardous material that is regulated under M.G.L. c. 21E, and the Massachusetts Contingency Plan [MCP – 310 CMR 40.0000].

While several sites are located proximate to the proposed Project area, MassDEP records indicate that many of these sites have been closed under the MCP. However, given the large Project area, it is possible that residual contaminated soil could be encountered during the work that may require notification and/or the implementation of a Utility Related Release Abatement Measure (URAM) or other mechanism to manage contaminated soil. Please refer to the paragraph below for additional information pertaining to discovery of contamination. The Project Proponent is also advised to include within their contingency plan a plan to manage contamination encountered during construction activities that are not related to spills or releases that occur while completing construction.

Interested parties may view a map showing the location of BWSC disposal sites using the MassGIS data viewer at [MassMapper](#). Under the Available Data Layers listed on the right sidebar, select “Regulated Areas”, and then “DEP Tier Classified 21E Sites”. MCP reports and the compliance status of specific disposal sites may be viewed using the BWSC Waste Sites/Reportable Release Lookup at: <https://eeaonline.eea.state.ma.us/portal#!/search/wastesite>

The Project Proponent is advised that if oil and/or hazardous material are identified during the implementation of this Project, notification pursuant to the Massachusetts Contingency Plan (310 CMR 40.0000) must be made to MassDEP, if necessary. A Licensed Site Professional (LSP) should be retained to determine if notification is required and, if need be, to render appropriate opinions. The LSP may evaluate whether risk reduction measures are necessary if contamination is present. The BWSC may be contacted for guidance if questions arise regarding cleanup.

Bureau of Air and Waste (BAW) Comments

Asbestos Program. The Project Proponent reports that the “Rubble generated by the demolition of the existing residential structure on the proposed substation site will be handled in accordance with MassDEP’s Solid Waste Regulations.”

The Project Proponent is advised of the following requirements:

Asbestos Survey Requirements.

Prior to conducting any demolition or renovation activities, MassDEP’s Asbestos Regulations at 310 CMR 7.15(4) requires any owner or operator of a building or facility to employ or engage a Department of Labor Standards (DLS) licensed asbestos inspector to thoroughly inspect the facility using US EPA approved procedures and methods to identify the presence, location and

quantity of any ACM or suspect ACM and to prepare a written asbestos survey report. The survey shall identify and assess suspect ACM located in all areas that will be breached or otherwise affected by the demolition activities, including, but not limited to wall cavities, pipe chases, subsurface conduits, areas above ceilings and under/between multiple layers of flooring. Adequate and representative samples must be collected of all suspect asbestos containing building materials and sent to a DLS certified laboratory for analysis, using US EPA approved analytical methods.

The written asbestos survey report shall contain an inventory of the exact locations of the ACM or suspect ACM from which samples were collected, analytical results of all samples taken, the date(s) such samples were collected, the name(s) of the persons who provided asbestos analytical services, and a blueprint, site map, diagram or written description of the facility and location(s) thereof subject to demolition or renovation. This documentation shall clearly identify each location subject to demolition and/or renovation and the corresponding footage (square and/or linear) of any ACM or suspect ACM in each location.

Asbestos Abatement Requirements.

The owner or operator must hire a DLS licensed asbestos abatement contractor to remove and dispose of any asbestos containing material(s) from the facility or facility component, prior to conducting any demolition or renovation activities. The removal and handling of asbestos from the facility or facility components must adhere to the Specific Asbestos Abatement Work Practice Standards required at 310 CMR 7.15(7).

If any proposed alterations or exemptions to Specific Asbestos Abatement Work Practice Standards required at 310 CMR 7.15(7) are proposed, the owner or operator must submit a Non-Traditional Asbestos Abatement Work Practice Plan (NTWP) to MassDEP for approval in accordance with 310 CMR 7.15 (14). As part of an NTWP submittal package, MassDEP will require pre- and post- abatement inspections to ensure alternate work practices specified in the approved NTWP are adhered to. The AQ 36 Non-Traditional Asbestos Abatement Work Practice Approval application form (AQ 36) and instructions for submitting the NTWP and AQ 36, can be found at the following links:

Application: <https://www.mass.gov/how-to/aq-36-non-traditional-asbestos-abatement-work-practice-approval>

Instructions: <https://www.mass.gov/doc/instructions-aq-36/download>

Asbestos Notification Requirements.

In accordance with 310 CMR 7.15 (6), the asbestos contractor is required to submit a BWP ANF-001 Asbestos Notification Form to MassDEP at least ten (10) working days prior to beginning any abatement or removal of asbestos containing materials from the facility. The AQ 04 (ANF 001) notification form, and instructions for completing an ANF 001, can be found at the following links:

Notification Form: <https://www.mass.gov/how-to/file-an-aq-04-anf-001-asbestos-removal-notification>

Instructions: <https://www.mass.gov/doc/bwp-aq-04-anf-001-asbestos-removal-notification-instructions-july-2015-0/download>

If you have any questions regarding the Asbestos Program comments above, please contact Colleen Ferguson at Colleen.Ferguson@mass.gov or by calling 617-680-6657.

Other Comments/Guidance

There being no further comments, the MassDEP Southeast Regional Office appreciates the opportunity to comment on this DEIR. If you have any questions regarding these comments, please contact George Zoto at George.Zoto@mass.gov or Jonathan Hobill at Jonathan.Hobill@mass.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read "Gerard M. R. Martin".

Gerard M. R. Martin,
Deputy Regional Director,
Bureau of Water Resources

GM/GZ

CC.: DEP/SERO

ATTN: Millie Garcia-Serrano, Regional Director
Gerard Martin, Deputy Regional Director, BWR
John Handrahan, Deputy Regional Director, BWSC
Seth Pickering, Deputy Regional Director, BAW
Jennifer Viveiros, Deputy Regional Director, BAS
Maissoun Reda, Chief, Wetlands and Waterways, BWR
Brendan Mullaney, Wetlands, BWR
David Hill, Waterways, BWR
Daniel Padien, Chief, Waterways, BWR/Boston
David Wong, Waterways, BWR/Boston
Colleen Ferguson, Chief, Asbestos, BAW
Mark Dakers, Chief, Solid Waste Management, BAW
Jennifer Wharff, Solid Waste Management, BAW
Daniel DiSalvio, Chief, Compliance and Enforcement, BAW
Thomas Cushing, Chief, Air Quality Permitting, BAW
Angela Gallagher, Chief, Site Management, BWSC
Amanda Gallagher, Site Management, BWSC



COMMONWEALTH OF MASSACHUSETTS
THE GENERAL COURT
STATE HOUSE, BOSTON 02133-1053

October 3, 2023

Mr. Alex Strycky, Environmental Analyst
Massachusetts Environmental Policy Act Office, 100 Cambridge Street
Boston, MA 02114

RE: New England Wind 2 Connector – Barnstable, Edgartown, Mashpee, and Nantucket (EEA No. 16611)

Dear Mr. Strycky,

We write to express our strong support for both Commonwealth Wind, Avangrid's third offshore wind project, and New England Wind 2 Connector, the corresponding grid interconnection in Barnstable, MA.

New England Wind 2 Connector has many similarities to Avangrid's first two projects (Vineyard Wind 1 Connector and New England Wind 1 Connector), which were already approved by the Commonwealth. Each of the projects include cables traversing a similar shared corridor below the seabed, using the same installation methods, and making landfall and connecting to the electric grid in Barnstable.

The Commonwealth of Massachusetts has led the nation in the pursuit of offshore wind. Avangrid's Commonwealth Wind project will continue this leadership by bringing more than 1,200 Megawatts of renewable offshore wind energy to the New England electric grid and increasing the reliability and diversity of the New England energy supply. This renewably sourced electricity will power 700,000 homes in Massachusetts and reduce the region's reliance on natural gas and oil. The project will cut greenhouse gas emissions by over 2.35 million US tons per year, equivalent to taking over 460,000 cars off the road.

At the local level, Avangrid has the experience and has performed the necessary due diligence in their environmental safety plans for landing the New England Wind 2 Connector under Dowses Beach in Barnstable. Construction work will be kept to only paved areas of the beach's public parking lot with no construction taking place along the public beach shoreline, in the dunes, in the marsh, or other environmental ecosystems. The method of Horizontal Directional Drilling under the beach is proven to avoid impacts to valuable coastal resources; the same method was used during construction for the Vineyard Wind 1 Connector project just a few miles east of Dowses Beach.

Submitted via Email

This project is urgently needed for the Commonwealth to meet our clean energy goals. We urge you to expeditiously review and approve the New England Wind 2 Connector.

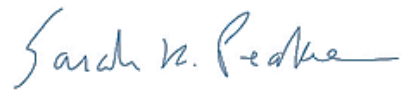
Sincerely,



Julian Cyr
State Senator
Cape & Islands



Su Moran
State Senator
Plymouth and Barnstable



Sarah Peake
State Representative
4th Barnstable



David Vieira
State Representative
3rd Barnstable



Dylan Fernandes
State Representative
Barnstable, Dukes & Nantucket



Kip Diggs
State Representative
2nd Barnstable



Chris Flanagan
State Representative
1st Barnstable

Submitted via Email

September 29, 2023

Mr. Alex Strysky, Environmental Analyst
Massachusetts Environmental Policy Act Office
100 Cambridge Street
Boston, MA 02114

RE: New England Wind 2 Connector (EEA No. 16611)

Dear Mr. Strysky,

Thank you for the opportunity to offer my comments on the Commonwealth Wind application that is before the Office of Energy and Environmental Affairs for Environmental Impact Review. My family home is in Barnstable where I have resided in the village of Centerville for my entire life.

As a middle school educator and the mother of a teenager, I am frequently reminded of the impact our decisions as adults will have on the future well-being of our children. Climate change is no longer just a threat – it is real. I see the impact of it every season on the Cape, with coastal erosion being of increasing concern. I am aware that there has been some opposition to this project by people who are concerned about beach aesthetics. After reading up on the project, I believe the clean energy benefit derived from this project vastly outweighs any temporary impact to the Barnstable shoreline and beaches. Minor disruptions to quiet parking lots and streets during the winter months is a small price to pay for this important renewable energy project. When I look out at Nantucket Sound, I will be happy to know that our waterways are working to give our children a fighting chance against the destruction caused by carbon emissions.

For the sake of future generations and our beloved Cape Cod, I urge you to approve this project. Thank you.

Sincerely,
Maureen E. Murphy
93 Long Beach Road
Centerville, MA 02632



TOWN OF BARNSTABLE

OFFICE OF TOWN ATTORNEY

367 Main Street
Hyannis, Massachusetts 02601-3907
Phone 508-862-4620
FAX 508-862-4782

KAREN L. NOBER, Town Attorney
CHARLES S. McLAUGHLIN, Jr., Senior Counsel
KATHLEEN CONNOLLY, Assistant Town Attorney

karen.nober@town.barnstable.ma.us
charles.mclaughlin@town.barnstable.ma.us
kathleen.connolly@town.barnstable.ma.us

By email to: Alexander.Stryisky@mass.gov

October 3, 2023

Secretary Rebecca L. Tepper
Executive Office of Energy and Environmental Affairs
Attn: Alex Stryisky, MEPA Office
100 Cambridge Street, Suite 900
Boston, Massachusetts 02114

Re: EEA#16611 – New England Wind 2 Connector (Barnstable) DEIR

Dear Secretary Tepper:

The Town of Barnstable (the “Town”) is pleased to submit the following comments in response to the Draft Environmental Impact Report (“DEIR”) filed by Commonwealth Wind, LLC for the above-referenced project (the “Project”).

The Town has a well-established track record of supporting large-scale renewable wind energy projects. Town staff have been working already with two separate project proponents as they advance wind energy projects in the Town in furtherance of the Commonwealth’s renewable energy goals. One of those projects is under construction. The Town has incurred and will continue to incur costs and impacts for many years within its neighborhoods due to these separate efforts. Indeed, in recognition of shared goals of increasing the supply of renewable energy, the Town has stepped up so far, perhaps more so than any other community in the Commonwealth, by accepting two significant wind energy projects along with their cumulative impacts and management challenges. However, the Town does not offer its support at this time for the current project. The Project has a proposed landfall location and route not chosen or supported by the Town. The Town remains concerned about impacts, not satisfactorily addressed in the DEIR, that could adversely affect protected open space and environmental resources, utility systems, water supply resources, small business, transportation and tourism. The Town has concerns with the Proponent’s present proposals and believes these require further review and analysis.

The Proponent has been proceeding through state permitting and review processes even though it has no Power-Purchase Agreement in place for the Project, having failed to meet its earlier commitment due to stated concerns over the Project's financial viability. The Project would require a variety of authorizations from the Town for temporary or permanent use and occupation of Town-owned property, including its roadways and parkland. Some of these authorizations involve dispositions or changes of use of land protected for open space, conservation or recreational purposes under Article 97 of the Amendments to the State Constitution ("Article 97") and, with that, require approval by the Massachusetts Legislature by a two-thirds roll-call vote. Any legislative actions under Article 97 first require compliance with the Public Land Preservation Act, G.L. c. 3, §5A, the Executive Office of Energy and Environmental Affairs' Article 97 Land Disposition Policy ("EEA Article 97 Policy") and a Home-Rule Petition authorized by the Town Council.

Export Cable Offshore Route Selection

The Town raises concern over the Proponent's analysis for its offshore route selection and landfall within the Town. In Section 4.2 of the DEIR, the Proponent appears to have chosen, primarily for cost, timing and other business considerations, to use High Voltage Alternating Current ("HVAC") cable over High Voltage Direct Current ("HVDC") cable. The Proponent asserts, without further elaboration, that its engineers have determined that 75 miles is the maximum length of its HVAC export cable, thereby screening out any other, including any more distant, landfall locations regardless of whether those locations would have fewer environmental impacts. The Proponent also screened out dual interconnection points in Section 4.3 by stating "[a]s described in Section 4.2.2, a dual interconnection alternative was dismissed in an effort to minimize construction impacts, environmental impacts, and cost." However, Section 4.2.2 does not contain any meaningful discussion of environmental impacts.

The DEIR's discussion also indicates that other dual and single interconnection locations were viewed unfavorably due to unquantified costs for upgrades, without detailed analysis of environmental impacts. Environmental analysis of the route selection is mostly limited to a single reference to the Massachusetts Ocean Management Plan ("OMP") encouraging common cable corridors to reduce seabed impacts. We appreciate the OMP's preference for encouraging common corridors for shared cable use, but doubt that preference is intended to forego consideration of onshore environmental impacts stemming from the route selection. The Town requests that these impacts are thoroughly analyzed and factored into the final route selection.

The Town asks that in the Final Environmental Impact Report ("FEIR") the Proponent perform a more detailed explanation of its offshore route selection, including any environmental consideration for choosing HVAC over HVDC cables, and its analysis for avoiding, minimizing or mitigating environmental impacts versus what may be viewed as a business decision for backing into the preferred alternative to achieve the Proponent's cost and timing considerations. Without this information, the Town does not believe one can conclude that the preferred route properly avoids, minimizes or mitigates impacts over other routes, or would satisfy the required alternative analysis under the PLPA to demonstrate "that all other options to avoid or minimize the disposition or change in use have been explored" as asserted in Section 2.7.5 of the DEIR. The Town requests that the Proponent commit, for any final cable decision, that only a "dry"

cable will be used without any liquid coolant within the cable. The Town remains concerned about any potential release of liquid coolant hazardous materials to the environment, particularly one that could impact water supply resources and the sole source aquifer.

Dowses Beach and Cable Landfall

Dowses Beach is a Town-owned ecologically sensitive, public recreational resource, used year-round, and protected by Article 97. The Proponent has proposed a subsurface onshore cable (landward of mean low water) and subsurface infrastructure in the parking lot at the beach. The Town neither requested nor supports the Proponent's proposal to use and occupy the beach. The proposed cable and infrastructure would require an easement from the Town following compliance with Article 97, the PLPA and the EEA Article 97 Policy. Further, the proposed use and occupation of the beach parking lot during construction must receive a permit authorization from the Town. Any irrevocable authorization over the Town's objection regardless of the duration, such as from the Energy Facilities Siting Board, would constitute a disposition under Article 97.

The DEIR lacks sufficient information and analysis of construction timing and impacts at Dowses Beach. The DEIR indicates, in some instances, when work will *not* occur at the beach, such as under time of year restrictions for important nesting habitat for protected avian species. However, the DEIR does not affirmatively address *when* the Proponent will undertake work at the beach or align that work with a clear schedule. Any Town-executed easement, as well as any revocable authorization for use and occupation, for Town-owned Article 97-protected open space would require that the beach and its parking lot remain open and accessible for year-round use. The Town would not provide, under any circumstances, an authorization that would limit or restrict public access to the beach or any part of the parking lot between May 1 and September 30. Further, the Town expects that access to the ADA-compliant fishing pier is maintained year-round. The Proponent should provide in the FEIR a more detailed discussion on a proposed work schedule that meets the Town's expectations.

The Dowses Beach landfall is a complex, integrated, ecological system of many parts. Damage to any single part of this system will inevitably and adversely affect other parts. Therefore, great care must be exercised at the outset to thoroughly understand how the Project could "go wrong" over its lifetime. The DEIR demonstrates, and indeed tacitly admits, that the requisite study has yet to be performed because the Proponent is currently redesigning elements of the landfall components, especially involving the Dowses causeway. Because redesign is underway and has yet to be shared with the Town, the Proponent's expressed confidence in the DEIR that the redesign will be compatible with environmental concerns is premature and not yet supported factually.

The Town also notes that Dowses Beach is a vantage point of unparalleled beauty that attracts residents year-round. The recent, closely watched Park City Wind presentation to the Town's Conservation Commission has demonstrated that Proponent's sitework, which will mimic the Park City Wind project, may be a highly disruptive undertaking that will limit access to Dowses Beach for lengthy periods of time over at least 2 years. The Proponent's proposal is complicated further because sole access to the Dowses Beach parking lot by the public and emergency

responders is over the narrow causeway. In connection with the causeway, the Proponent is undertaking a redesign related to beefing up the viability of the Project in severe weather conditions and associated high velocity storm surge. It is unclear how long the intense work will take, and how it might impact the underpinnings of the causeway during construction, during its lifetime and major storm events. In that regard, the Town requests in the FEIR that the Proponent discuss: plans for landfall work, causeway construction, how work on the beach will affect public access, including disabled-accessible parking spaces, and the duration of those impacts; plans for construction of reinforced and anchored concrete structures in, on, and adjacent to the causeway and the effect to the causeway in major storm events or over time; the hydrological impacts and how the hydrology will be maintained and preserved in this area; plans addressing the Proponent's future response to a cable fault or other planned or emergency condition that might close access to the causeway and how access would be timely restored without causing a change of use to this resource; plans for emergency responder access to the beach if the causeway is closed temporarily; and, electromagnetic field ("EMF") and thermal concerns for the proposed placement of the high voltage cable only 2 feet below the publicly accessible surface of the pavement atop the causeway.

Beyond being a beloved open space resource in the Town, Dowses Beach is Priority Habitat for endangered rare species, as identified by the Natural Heritage and Endangered Species Program ("NHESP") within the state Division of Fisheries and Wildlife. The Town manages the beach pursuant to a Conservation Permit issued by NHESP under the Massachusetts Endangered Species Act ("MESA"). The Proponent should document in its Final Environmental Impact Report ("FEIR") how its proposed work will be consistent with and not violate the Town's Conservation Permit under MESA for beach management.

Onshore Cable and Duct Bank

Construction Management Plan

The DEIR indicates that the Proponent's preferred route selection is a compelling public interest because it will yield sooner water quality improvements in one part of the Town by coordinating with the Town on its efforts to install sewer systems under its Comprehensive Wastewater Management Plan ("CWMP"). Achieving water quality improvements is indeed important; however, the reality is that the Town would need to adjust its efforts within its available resources to install sewer lines along the Proponent's preferred route, with other areas covered by the CWMP being shuffled for installation later. This shifting of schedules simply adjusts where and when water quality improvements will be realized eventually, does not necessarily reflect a Project benefit, and will make the Town's separate efforts even more challenging to plan and schedule. The Town needs to understand the Proponent's plans now so that the Town may design, plan and schedule its CWMP efforts. Implementation of the CWMP should not be delayed or made more challenging by the Project. The Town asks that the Proponent include a detailed Construction Management Plan in the FEIR.

A Construction Management Plan is not a minor detail to be worked out later due to the extent of the work and impacts of the Project within Town roadways, and the potential impact on the

Town's implementation of its CWMP. The Construction Management Plan should flesh out details that are relevant now to state permits and actions and allow the Town to properly plan. We know that the Project's planned exceedingly large duct bank (twice as large as what the Town accepted for the Vineyard Wind Project) will take up a significant portion of the area under Town roadways (typically most of a travel lane) and many roadway shoulders (likely requiring many tree removals and woodlands disturbance), leaving the remainder of public utilities to exist under the balance of the roadway cross section. We also know that miles of existing water main will need to be relocated, with expected impacts to other public utilities. These relocation efforts alone may generate meaningful air quality and other substantial environmental impacts, including due to increased traffic from road closures associated with relocating utilities and/or the Proponent's large duct banks. The planning for at least 2.5 miles of proposed Town sewer lines, if coordinated with the Project, requires a detailed understanding of where, when and how the Proponent will order and undertake the Project. The planning for this effort is already delayed due to uncertainties injected by the Project. The Construction Management Plan should reflect the Town's longstanding practice of not allowing non-emergency work within its roadways between Memorial Day and Labor Day, unless with written authorization from the Director of Public Works, and should include:

- Development of a formal project management team and reporting structure, to include:
 - A single point of contact with authority, providing liaison support to the Town and stakeholders
 - Onsite construction inspector(s)
 - Onsite safety officer
 - Local communications and outreach coordinator
- Adaptive construction schedule, including documented and approved work times, holidays, and time-of-year restrictions
- Staging requirements and plan
- Traffic control strategy and compliance with approved Town-approved traffic management plans
- Erosion control
- Spill prevention
- Paving and temporary trench patch approach
- Adaptive communications and outreach plan.

Companion to the Construction Management Plan, the Town requests that the Proponent include full-size, detailed buildable plans for at least the segments of the Project planned for Town-owned roadways and other property. The Town needs more detailed information than what has been shared, so that the Town can understand what the Proponent specifically proposes, review that proposal and plan for how that may affect the Town's efforts under the CWMP. The Town asks that the Proponent, prior to advertising to bid, provide 8-weeks advance notice for the Town to review plans, provide comments and allow the Proponent to respond and consult with the Town. The Town also asks that the Proponent assign a single point of contact that can manage the construction project, traffic management and public outreach, as well as be available and respond to Town and public concerns.

The Town observes from statements across the DEIR that the Proponent plans to coordinate with the Town on reviews, approval and implementation of its work and the Town's separate efforts, presumably both during design and construction. While we appreciate the offer of cooperation, the Town has been dedicating significant staff time and expense, far more than anticipated, to reviewing this Project and the Proponent's Park City Wind project, as well as with the Vineyard Wind Project, which is under construction. The DEIR contemplates the Town will continue dedicating extensive staff resources and expenses over the course of the Project for both anticipated needs and other issues that arise during the Project. Some of these efforts will require the Town to retain consultants and contractors. The Town believes that, with the significant present and future diversion of limited resources, the Proponent should commit to compensating the Town's costs associated with both the Project and addressing other Town efforts related to the Project.

Water Resources

The Town is concerned about the potential impact to its drinking water resources and the sole source aquifer. The Town requests that no Project infrastructure is located in the Zone I of any existing water supply. The Town asks that in the FEIR the Proponent confirm its spill prevention plans for the onshore cable route. The Town also requests that no substations are sited within the Zone II of a water supply, and any upgrades or expansions to any existing substations employ preventive and spill containment measures that would be implemented as part of a new substation. For any Project work within the Zone II of a water supply, the Town requests that the Proponent fund the Town retaining a qualified environmental compliance manager and/or Licensed Site Professional on site at all times to monitor activities and who would have the authority to suspend and later reinstate work while the Proponent responds to any release. The Town also requests that the Proponent maintain proper spill containment gear and materials on site, versus being readily available at an off-site location. The FEIR also should address more specifically how any dewatering activities will be managed within these areas under the Stormwater Pollution Prevention Plan ("SWPPP"). The DEIR indicates in Section 2.3.2 that the Proponent's contractor shall submit the detailed dewatering and drainage design plan. However, the Town believes that state permitting agencies, the Town and the public should have a good understanding, as part of the MEPA process, how these sensitive activities will occur.

Thermal Impacts

The DEIR contains little discussion of near- and long-term thermal impacts from duct banks installed under the Town rights of way. The Town is concerned, based on what we are learning now from construction of the Vineyard Wind project, that subsurface heat transfer from the duct banks is a much bigger issue than anticipated. We know that thermal impacts will require extensive relocation of public utilities, in addition to relocations already needed by the Project to get into the ground. The DEIR addresses the issue through the Proponent offering a general statement to coordinate with the Town and public utilities to relocate water lines and other utilities, as needed. The Town needs a clear, thorough understanding of how safe drinking water, sewer, gas and other critical utilities, relied upon by residents, business and institutions, will be managed and maintained. The Town requests that the FEIR include a detailed analysis of thermal impacts and how those may relate to the project route and any necessary upgrade, protection or

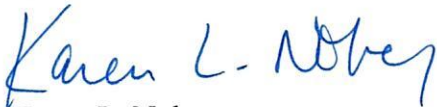
relocation to public utilities. Heat transfer has the potential to damage or degrade over time existing or planned utility systems. For example, water mains may experience unacceptable temperatures that could accelerate failure or affect sanitary conditions within the system. Heat and gas raise public safety concerns that need to be thoroughly vetted. Finally, with uncertainty over the long-term thermal impacts, the Town has concerns regarding the longevity of the significant investment being made with the construction of new sewer infrastructure, and these concerns need to be discussed in detail. The requested analysis should be factored into the Construction Management Plan so that the potential environmental impacts will be understood and, again, so that the Town can plan and implement its CWMP.

Decommissioning

The Certificate on the DEIR directs that Proponent address its plans for decommissioning of both offshore and onshore cables. The Proponent responded by addressing decommissioning in Section 2.8 of the DEIR. The DEIR indicates that, after consultation with the Town, the Proponent might remove the cables, but that they expect the duct bank to remain in place for possible reuse. The Town does not seek to take ownership of the duct bank at decommissioning and does not see potential duct bank reuse scenarios. A massive 10-foot by 3-foot concrete structure under miles of Town roadway, in perpetuity, would limit what can be done with the Town's roadways. The Town requests that the FEIR analyze full removal of the duct banks and pull vaults as part of the decommissioning. The analysis should address repaving the roadway as part of the removal.

Thank you for the opportunity to comment on the DEIR. If you have any questions, kindly contact Charles McLaughlin, Senior Counsel, at 508-862-4620 or by email at charles.mclaughlin@town.barnstable.ma.us.

Sincerely,



Karen L. Nober
Town Attorney



alexander.strysky@mass.gov

[Dashboard\(javascript:void\(0\);\)](#) > [View Comment\(javascript:void\(0\);\)](#)

View Comment

Comment Details			
EEA #/MEPA ID 16611	First Name William	Address Line 1 --	Organization --
Comments Submit Date 10-3-2023	Last Name MacLean	Address Line 2 --	Affiliation Description Individual
Certificate Action Date 10-3-2023	Phone --	State MASSACHUSETTS	Status Opened
Reviewer Strysky, Alexander	Email wmaclean10@gmail.com	Zip Code 02554	

Comment Title or Subject

Topic: New England Wind 2 Connector (EEA No. 1611)

Comments

Submission attached

Attachments

[WMcomments.docx\(null\)](#)

Update Status

Status

Opened

Share Comment

SHARE WITH A REGISTERED USER

[BACK TO SEARCH RESULTS](#)

October 2, 2023

Mr. Alex Stryisky, Environmental Analyst
Massachusetts Environmental Policy Act Office
100 Cambridge Street
Boston, MA 02114

RE: New England Wind 2 Connector (EEA No. 16611)

Dear Mr. Stryisky,

I am writing today to offer my support for the project referenced above. This renewable energy project is critically important to the Commonwealth for many reasons. My concern is about the future of jobs in the state. We need to grow and maintain a skilled workforce to be able to participate in the green and blue economy as it continues to evolve here in Massachusetts. I have observed the progress of the wind energy projects off the coast and am excited by what I see. Workers are learning new skills that will sustain them throughout their careers with a sense of pride and purpose. We cannot sit back and wait for a better time to move in this direction. Hopefully we will set a precedent for the rest of the country by leading in this new economy. As this sector grows, markets will react, and it will become an integral part of the Massachusetts workforce. Thank you for your consideration of my comments.

Respectfully submitted,
William MacLean
2 Spring Street
Nantucket, MA 02554

From: [Greg Gerdy](#)
To: [Strycky, Alexander \(EEA\)](#)
Cc: [Greg Gerdy](#)
Subject: New England 2 Connector - Update
Date: Friday, October 6, 2023 9:50:41 AM
Attachments: [10-05 TOWN COUNCIL MEETING.pdf](#)

CAUTION: This email originated from a sender outside of the Commonwealth of Massachusetts mail system. Do not click on links or open attachments unless you recognize the sender and know the content is safe.

Dear Mr. Strycky,

We understand that the public comment period for the New England Wind 2 Connector aka Commonwealth Wind LLC is over.

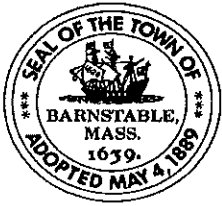
However, we are sending an update for your information.

Last night, at the Town of Barnstable Town Council meeting, there was a unanimous decision: revoking the authorization for the Town Manager to commence negotiations with Commonwealth Wind LLC for a new Host Community Agreement.

We have attached the Town Council agenda for your convenience.

Thank you.
Maria and Greg Gerdy

> [https://urldefense.com/v3/_https://tobweb.town.barnstable.ma.us/meetingnotices/10-05*20TOWN*20COUNCIL*20MEETING.pdf_:JSU!!!CPANwP4y!QiSiytSZIr-K9hUVLzGQ62RswIIK_bJ3lAE6lUIN8dmB7B1-nF6tDqyISLL2nSO6nZntwLmBQeJ9DiH-sTyVCTimNo\\$](https://urldefense.com/v3/_https://tobweb.town.barnstable.ma.us/meetingnotices/10-05*20TOWN*20COUNCIL*20MEETING.pdf_:JSU!!!CPANwP4y!QiSiytSZIr-K9hUVLzGQ62RswIIK_bJ3lAE6lUIN8dmB7B1-nF6tDqyISLL2nSO6nZntwLmBQeJ9DiH-sTyVCTimNo$)



Town of Barnstable
Town Council
James H. Crocker Jr. Hearing Room
367 Main Street, 2nd floor,
Hyannis, MA 02601
Office 508.862.4738 • Fax 508.862.4770
E-mail: council@town.barnstable.ma.us

3 OCT '23 PM3:47
BARNSTABLE TOWN CLERK

TOWN COUNCIL MEETING AGENDA

October 05, 2023

7:00pm

The October 05, 2023 Meeting of the Barnstable Town Council shall be conducted in person at 367 Main Street 2nd Floor James H. Crocker Jr. Hearing Room, Hyannis, MA. The public may attend in person or participate remotely in Public Comment or during a Public Hearing via the Zoom link listed below.

Councillors:

Matthew Levesque
President
Precinct 10

Jennifer Cullum
Vice President
Precinct 13

Gordon Starr
Precinct 1

Eric R. Steinhilber
Precinct 2

Betty Ludtke
Precinct 3

Nikolas Atsalis
Precinct 4

Paul Cusack
Precinct 5

Paul C. Neary
Precinct 6

Jessica Rapp Grasseti
Precinct 7

Jeffrey Mendes
Precinct 8

Tracy Shaughnessy
Precinct 9

Kristine Clark
Precinct 11

Paula Schnepf
Precinct 12

1. The meeting will be televised live via Xfinity Channel 8 or High Definition Channel 1072 or may be accessed via the Government Access Channel live stream on the Town of Barnstable's website: <http://streaming85.townofbarnstable.us/CablecastPublicSite/watch/1?channel=1>

2. Written Comments may be submitted to:
<https://tobweb.town.barnstable.ma.us/boardscommittees/towncouncil/Town Council/Agenda-Comment.asp>

3. Remote Participation: The public may participate in Public Comment or Public Hearings by utilizing the Zoom video link or telephone number and access meeting code

Join Zoom Meeting <https://townofbarnstable-us.zoom.us/j/88366551335> Meeting ID: 883 6655 1335
US Toll-free • 888 475 4499

PUBLIC SESSION

1. ROLL CALL

2. PLEDGE OF ALLEGIANCE

3. MOMENT OF SILENCE

4. PUBLIC COMMENT

5. COUNCIL RESPONSE TO PUBLIC COMMENT

6. TOWN MANAGER COMMUNICATIONS (Pre-Recorded)

7. ACT ON PUBLIC SESSION MINUTES

8. COMMUNICATIONS - from elected officials, boards, committees, and staff, commission reports, correspondence and announcements

9. ORDERS OF THE DAY

- A. Old Business
- B. New Business

10. ADJOURNMENT

NEXT REGULAR MEETING: October 19, 2023

Administrator:
Cynthia A. Lovell
Cynthia.lovell@town.barnstable.ma.us

ITEM NO.	INDEX TITLE	PAGE
A. OLD BUSINESS		
2024-037	Appointments to a Board/Committee/Commission: Comprehensive Financial Advisory Committee: James Sproul, as a regular member, to a term expiring 06/30/2026; Housing Committee: Asia Graves, as a regular member, to a term expiring 06/30/2026; Hyannis Main Street Waterfront Historic District Appeals Committee: Aaron Webb, as a regular member, to a term expiring 06/30/2024; Open Space Committee: Lev Malakhoff, as a regular member, to a term expiring 06/30/2024 (May be acted upon) (Majority Vote)	4
2024-038	Supplemental Appropriation Order in the amount of \$52,993 for the Barnstable School Department Fiscal Year 2024 Operating Budget for the purpose of funding a full-time Administrative Assistant position for Special Education Finances and Medicaid (Public Hearing) (Roll Call Majority Vote)	5-6
B. NEW BUSINESS		
2024-039	Resolve that the Town Council petition the County Commissioners of Barnstable County to formally discontinue a section of county highway, namely Old Stage Road, a portion of Pine Street and a portion of Church Street (May be acted upon) (Majority Vote)	7
2024-040	Resolve that the Town Council petition the County Commissioners of Barnstable County to formally discontinue two sections of County Highway, namely the entire length of Main Street and North Main Street in Centerville village (May be acted upon) (Majority Vote)	8
2024-041	Resolve that the Town Council petition the County Commissioners of Barnstable County to formally discontinue three sections of County Highway, namely a portion of Phinney’s Lane in Centerville village (May be acted upon) (Majority Vote)	9
2024-042	Resolve that the Town Council petition the County Commissioners of Barnstable County to formally discontinue two sections of County Highway, namely the entire length of Old Post Road in Centerville village (May be acted upon) (Majority Vote)	10-11
2024-043	Acceptance of a grant of a perpetual easement providing for public access rights to a portion of Dead Neck, Osterville (May be acted upon) (Roll Call Majority Vote)	12-13
2024-044	Transfer Order in the amount of \$49,000 from the Community Services Department Fiscal Year 2024 Personnel Budget to the Fiscal Year 2024 Community Services Department Operating Expense Budget for the purpose of funding a security services contract for town beaches (May be acted upon) (Majority Vote)	14-15
2024-045	Appropriation Order in the amount of \$9,800 for the redesign of the Hyannis Youth and Community Center website (Refer to Public Hearing 10/19/2023)	16-17
2024-046	Appropriation and Transfer Order in the Amount of \$3,500,000 from the General Fund Reserves to the Capital Trust Fund for the purpose of replenishing funds in the Capital Trust Funds (Refer to Public Hearing 10/19/2023)	18-19
2024-047	Resolve revoking the authorization for the Town Manager to commence negotiations with Commonwealth Wind for a new host community agreement (May be acted upon) (Majority Vote)	20

2024-048 Resolve postponing the granting of certain easements to Park City Wind LLC (May be acted upon)
(Majority Vote)..... 21-22

Please Note: The lists of matters are those reasonably anticipated by the Council President which may be discussed at the meeting. Not all items listed may be discussed and other items not listed may be discussed to the extent permitted by law. It is possible that if it so votes, the Council may go into executive session. The Council may also act on items in an order other than as they appear on this agenda. Persons interested are advised that in the event any matter taken up at the meeting remains unfinished at the close of the meeting, it may be continued to a future meeting, and with proper notice.

A. OLD BUSINESS (May be acted upon) (Majority Vote)

BARNSTABLE TOWN COUNCIL

ITEM# 2024-037
INTRO: 09/21/2023, 10/05/2023

2024-037 APPOINTMENTS TO A BOARD/COMMITTEE/COMMISSION

RESOLVED: That the Town Council appoints the following individuals to a multiple-member Board/Committee/Commission: **Comprehensive Financial Advisory Committee:** James Sproul, as a regular member, to a term expiring 06/30/2026; **Housing Committee:** Asia Graves, as a regular member, to a term expiring 06/30/2026; **Hyannis Main Street Waterfront Historic District Appeals Committee:** Aaron Webb, as a regular member, to a term expiring 06/30/2024; **Open Space Committee:** Lev Malakhoff, as a regular member, to a term expiring 06/30/2024

SPONSORS: Appointments Committee Members: Councilor Paula Schnepf, Chair; Councilor Tracy Shaughnessy; Councilor Jeffrey Mendes; Councilor Nikolas Atsalis; and Councilor Gordon Starr

DATE	ACTION TAKEN
<u>09/21/2023</u>	<u>First Reading</u>
_____	_____

- ___ Read Item
- ___ Rationale
- ___ Council Discussion
- ___ Vote

A. OLD BUSINESS (Public Hearing) (Roll Call Majority Vote)

BARNSTABLE TOWN COUNCIL

ITEM# 2024-038
INTRO: 09/21/2023, 10/05/2023

2024-038 SUPPLEMENTAL APPROPRIATION ORDER IN THE AMOUNT OF \$52,993 FOR THE BARNSTABLE SCHOOL DEPARTMENT FISCAL YEAR 2024 OPERATING BUDGET FOR THE PURPOSE OF FUNDING A FULL-TIME ADMINISTRATIVE ASSISTANT POSITION FOR SPECIAL EDUCATION FINANCES AND MEDICAID

ORDERED: That the amount of **\$52,993** be raised from current year revenue and added to the Fiscal Year 2024 Barnstable School Department Operating Budget of \$82,761,867 appropriated under Town Council Order 2023-156, resulting in a revised Fiscal Year 2024 Operating Budget of \$82,814,860.

SPONSOR: Mark S. Ells, Town Manager

DATE	ACTION TAKEN
<u>09/21/2023</u>	<u>Refer to Public Hearing 10/05/2023</u>

- _____ Read Item
- _____ Motion to Open Public Hearing
- _____ Rationale
- _____ Public Hearing
- _____ Close Public Hearing
- _____ Council Discussion
- _____ Vote

BARNSTABLE TOWN COUNCIL

ITEM# 2024-038

INTRO: 09/21/2023, 10/05/2023

SUMMARY

TO: Town Council
FROM: Mark S. Ells, Town Manager
THROUGH: Sara Ahern, Superintendent of Schools
DATE: September 21, 2023
SUBJECT: Supplemental Appropriation Order for the Fiscal Year 2024 School Department Operating Budget to Fund a Full-Time Administrative Assistant Position for Special Education Finances and Medicaid

BACKGROUND: The Superintendent and Director of Human Resources have engaged in a comprehensive review of the administrative assistant support services in the School Administration Building. By analyzing the job descriptions and responsibilities of various personnel, they have determined that there are several job functions in the area of finance and payroll that are currently not adequately covered by assistants within the school department.

Based on the analysis, the Superintendent and School Committee have revised one job description to focus on payroll and support of the Office of Student Services. They also developed a new job description for a new position, Administrative Assistant for Special Education Finances and Medicaid, to be sure that all critical functions are being executed.

ANALYSIS: Special education finances are some of the most complicated within the District and many of these expenses come with some form of reimbursement such as Circuit Breaker and Medicaid. This position tasks an individual as singularly responsible for supporting the implementation of special education finances in a comprehensive way.

Medicaid reimbursement is one of the primary areas that have been inadequately executed for several years. It is anticipated that, with a person devoted to finances of special education, the District will better be able to maximize the submission of Medicaid reimbursable expenses in collaboration with the Town's Finance Department.

FISCAL IMPACT: The Fiscal Year 2024 General Fund Operating Budget was balanced using an estimated \$300,000 in Medicaid revenue for anticipated reimbursements on eligible services provided to students of the Barnstable school system. This revenue estimate can be raised by \$52,993 in order to provide the funding for this position. Total Medicaid revenue received in Fiscal Year 2023 was \$375,750. It is projected that Medicaid reimbursements in the future can more than double with a position focused on collecting the data on eligible services that can be billed to Medicaid.

TOWN MANAGER RECOMMENDATION: Mark S. Ells, Town Manager, recommends approval of this budget increase.

STAFF ASSISTANCE: Sara Ahern, Superintendent of Schools

B. NEW BUSINESS (May be acted upon) (Majority Vote)

BARNSTABLE TOWN COUNCIL

**ITEM# 2024-039
INTRO: 10/05/2023**

2024-039 RESOLVE THAT THE TOWN COUNCIL PETITION THE COUNTY COMMISSIONERS OF BARNSTABLE COUNTY TO FORMALLY DISCONTINUE A SECTION OF COUNTY HIGHWAY, NAMELY OLD STAGE ROAD, A PORTION OF PINE STREET AND A PORTION OF CHURCH STREET

RESOLVED: That pursuant to General Laws Chapter 82, Section 5, the Town Council petition the County Commissioners of Barnstable County to formally discontinue a section of County Highway, namely Old Stage Road, a portion of Pine Street and a portion of Church Street extending northerly from Main Street in Centerville Village to Meetinghouse Way (Route 149) in West Barnstable Village, as described in 1924 Barnstable County Taking, being recorded in the Barnstable County Registry of Deeds in Book 409, Page 352, dated August 25, 1924, and as amended in Deed Book 410, Page 463, dated May 9, 1925, also shown on a Plan of Land recorded in said Registry Tube No. 7.

It is the intent thereby to render said sections of the County highway a Town way by operation of G.L. c. 82, § 5; and further, that said petition request that the discontinued sections of said County highway remain a public way, and that the Town Manager be authorized to execute and deliver any documents on behalf of the Town necessary to effectuate this resolve.

SPONSOR: Mark S. Ells, Town Manager

DATE	ACTION TAKEN
_____	_____
_____	_____

- ___ Read Item
- ___ Rationale
- ___ Council Discussion
- ___ Vote

B. NEW BUSINESS (May be acted upon) (Majority Vote)

BARNSTABLE TOWN COUNCIL

**ITEM# 2024-040
INTRO: 10/05/2023**

2024-040 RESOLVE THAT THE TOWN COUNCIL PETITION THE COUNTY COMMISSIONERS OF BARNSTABLE COUNTY TO FORMALLY DISCONTINUE TWO SECTIONS OF COUNTY HIGHWAY, NAMELY THE ENTIRE LENGTH OF MAIN STREET AND NORTH MAIN STREET IN CENTERVILLE VILLAGE

RESOLVED: That pursuant to General Laws Chapter 82, Section 5, the Town Council petition the County Commissioners of Barnstable County to formally discontinue two sections of County Highway, these two sections consisting of the entire length of Main Street and North Main Street in Centerville Village which, combined, extend from South Main Street to Pine Street, as described in two (2) Orders of Taking by the Barnstable County Commissioners, as follows:

The first section is a 1931 Barnstable County Taking, being recorded in the Barnstable County Registry of Deeds in Book 480, Page 125, dated February 20, 1931, also shown on a Plan of Land recorded in said Registry in Plan Book 43, Page 31.

The second section is a 1953 Barnstable County Taking, being recorded in the Barnstable County Registry of Deeds in Book 840, Page 80, dated April 24, 1953, also shown on a Plan of Land recorded in said Registry in Plan Book 109, Pages 107, 109 and 111.

It is the intent thereby to render said sections of the County highway a Town way by operation of G.L. c. 82, § 5; and further, that said petition request that the discontinued sections of said County highway remain a public way, and that the Town Manager be authorized to execute and deliver any documents on behalf of the Town necessary to effectuate this resolve.

SPONSOR: Mark S. Ells, Town Manager

DATE	ACTION TAKEN
_____	_____
_____	_____

- ___ Read Item
- ___ Rationale
- ___ Council Discussion
- ___ Vote

B. NEW BUSINESS (May be acted upon) (Majority Vote)

BARNSTABLE TOWN COUNCIL

**ITEM# 2024-041
INTRO: 10/05/2023**

2024-041 RESOLVE THAT THE TOWN COUNCIL PETITION THE COUNTY COMMISSIONERS OF BARNSTABLE COUNTY TO FORMALLY DISCONTINUE THREE SECTIONS OF COUNTY HIGHWAY, NAMELY A PORTION OF PHINNEY’S LANE IN CENTERVILLE VILLAGE

RESOLVED: That pursuant to General Laws Chapter 82, Section 5, the Town Council petition the County Commissioners of Barnstable County to formally discontinue three sections of County Highway, these three sections consisting of a portion of Phinney’s Lane in Centerville Village, which, combined, extend from Falmouth Road (Route 28) to North Main Street as described in three (3) Orders of Taking by the Barnstable County Commissioners, as follows:

The first section is a 1930 Barnstable County Taking, being recorded in the Barnstable County Registry of Deeds in Book 479, Page 284, dated December 19, 1930, also shown on a Plan of Land recorded in said Registry in Tube No. 5.

The second section is a 1932 Barnstable County Taking, being recorded in the Barnstable County Registry of Deeds in Book 493, Page 117, dated December 31, 1932, also shown on a Plan of Land recorded in said Registry in Plan Book 47 Page 45.

The third section is a 1912 Barnstable County Taking as described in the Commissioners’ Taking No. 642 of Phinney’s Lane, North Main Street and Mother’s Park Road in Barnstable described in the Written Taking Books at Volume 9, Page 81.

It is the intent thereby to render said sections of the County highway a Town way by operation of G.L. c. 82, § 5; and further, that said petition request that the discontinued sections of said County highway remain a public way, and that the Town Manager be authorized to execute and deliver any documents on behalf of the Town necessary to effectuate this resolve.

SPONSOR: Mark S. Ells, Town Manager

DATE	ACTION TAKEN
_____	_____
_____	_____

- ___ Read Item
- ___ Rationale
- ___ Council Discussion
- ___ Vote

B. NEW BUSINESS (May be acted upon) (Majority Vote)

BARNSTABLE TOWN COUNCIL

**ITEM# 2024-042
INTRO: 10/05/2023**

2024-042 RESOLVE THAT THE TOWN COUNCIL PETITION THE COUNTY COMMISSIONERS OF BARNSTABLE COUNTY TO FORMALLY DISCONTINUE TWO SECTIONS OF COUNTY HIGHWAY, NAMELY THE ENTIRE LENGTH OF OLD POST ROAD IN CENTERVILLE VILLAGE

RESOLVED: That pursuant to General Laws Chapter 82, Section 5, the Town Council petition the County Commissioners of Barnstable County to formally discontinue two sections of County Highway, these two sections consisting of the entire length of Old Post Road in Centerville Village, which, combined, extend from Phinney’s Lane to Old Stage Road as described in two (2) Orders of Taking by the Barnstable County Commissioners, as follows:

The first section is a 1916 Barnstable County Taking, being recorded in the Barnstable County Registry of Deeds in Book 347, Page 546, dated September 19, 1916, also shown on a Plan of Land recorded in said Registry in Plan Book 4, Page 105.

The second section is a 1972 Barnstable County Taking, being recorded in the Barnstable County Registry of Deeds in Book 1658, Page 286, dated May 30, 1972, also shown on a Plan of Land recorded in said Registry in Plan Book 257, Page 75.

It is the intent thereby to render said sections of the County highway a Town way by operation of G.L. c. 82, § 5; and further, that said petition request that the discontinued sections of said County highway remain a public way, and that the Town Manager be authorized to execute and deliver any documents on behalf of the Town necessary to effectuate this resolve.

SPONSOR: Mark S. Ells, Town Manager

DATE	ACTION TAKEN
_____	_____
_____	_____

- ___ Read Item
- ___ Rationale
- ___ Council Discussion
- ___ Vote

BARNSTABLE TOWN COUNCIL

ITEM# 2024-039
2024-040
2024-041
2024-042
INTRO: 10/05/2023

SUMMARY

TO: Town Council
FROM: Mark S. Ells, Town Manager
THROUGH: Charles McLaughlin, Senior Counsel
DATE: October 05, 2023
SUBJECT: Four resolves that the Town Council petition the County Commissioners of Barnstable County to formally discontinue sections of County Highways, namely,

1. 2024-039: Old Stage Road, including a portion of Church Street extending from North Main Street in Centerville to Meetinghouse Way in West Barnstable.
2. 2024-040: the entire length of Main Street and North Main Street, Centerville extending from South Main Street to Pine Street.
3. 2024-041: Phinney's Lane, from State Route 28 to North Main Street; and
4. 2024-942: the entire length of Old Post Road from Phinney's Lane to Old Stage Road

BACKGROUND: The roads described above and in the recorded County takings noted in the proposed votes have not been maintained by the County for generations and, to accommodate the Town's sewer expansion program as well as other potential uses of this road, it is necessary to request that the County abandon them and that the Town take these sections of roads over as public roads and that the Town agree to maintain them as such.

ANALYSIS: These roads comprise vital in-road routes for sewer lines that will be installed by the Town. G.L. c. 82, §5 establishes a clear procedure for obtaining these discontinuances via town petitions to Barnstable County requesting that the county discontinue these county ways (or sections thereof). A county way discontinued by following this procedure automatically becomes a town way, and, if requested, remains a public way.

FISCAL IMPACT: The Town has operated for years in the belief that these roads were owned by the Town. The Town has maintained these roads and has budgeted accordingly. There is no impact on the General Fund Operating Budget resulting from the legal formality of transferring these roads from the County to the Town's control or from petitioning that these roads remain a public way.

STAFF SUPPORT: Charles McLaughlin, Senior Counsel; Griffin Beaudoin, Town Engineer; Shane Brenner, Town Surveyor

B. NEW BUSINESS (May be acted upon) (Majority Vote)

BARNSTABLE TOWN COUNCIL

**ITEM# 2024-043
INTRO: 10/05/2023**

2024-043 ACCEPTANCE OF A GRANT OF A PERPETUAL EASEMENT PROVIDING FOR PUBLIC ACCESS RIGHTS TO A PORTION OF DEAD NECK, OSTERVILLE

RESOLVED: That the Town Council hereby authorizes the Town Manager to accept, on behalf of the Town, the grant of a perpetual easement providing for public access rights to a portion of Dead Neck, Osterville, as shown on a plan of land entitled, "Town of Barnstable, 367 Main Street, Barnstable, MA 02601, Dead Neck Nourishment Site Plan, Limit of Proposed Nourishment at Dead Neck, June 2023, Foth" on file with the Barnstable Department of Public Works and the Office of Town Council, subject to final review and approval by the Town Attorney. The Town Manager is authorized to negotiate, accept, sign, and deliver all documents necessary to effectuate this resolve and complete this transaction.

SPONSOR: Mark S. Ells, Town Manager

DATE	ACTION TAKEN
_____	_____
_____	_____

- ___ Read Item
- ___ Rationale
- ___ Council Discussion
- ___ Vote

BARNSTABLE TOWN COUNCIL

ITEM# 2024-043
INTRO: 10/05/2023

SUMMARY

TO: Town Council
THROUGH: Mark S. Ells, Town Manager
FROM: Charles McLaughlin, Senior Counsel
DATE: October 05, 2023
SUBJECT: Acceptance of a grant of a perpetual easement providing for public access rights to a portion of Dead Neck, Osterville

BACKGROUND: The Town is undertaking much needed dredge work in Osterville that will be carried out by the Barnstable County Dredge Program under contract. The Town needs a site close to the dredge upon which the dredge spoils may be deposited and the parties have agreed with the Commonwealth that Dead Neck is an ideal site for such deposits. The Town has received all necessary permits for the project work. Dead Neck is currently owned by Three Bays Preservation, Inc. Also, Massachusetts Audubon Society, Inc. Has a contingent interest in the property and is expected to acquire title to the subject property shortly. Therefore, both organizations will be parties to these documents.

The Chapter 91 dredging permit and associated regulations require that, as a condition of MassDEP approval, the public must be granted a perpetual easement and right to access the private property that will be improved with the dredge spoils deposits made possible by the expenditure of public funds. That easement must be held by a public entity, which in this case will be the Town of Barnstable.

Of note, Dead Neck is occupied seasonally by various avian species, including endangered piping plovers and roseate terns. The perpetual public easement will contain a provision allowing the temporary suspension of public access to protect endangered species in season. Their seasonal presence requires intense management protocols, approved by the Natural Heritage and Endangered Species Program within the state Division of Fisheries and Wildlife, to be in place and MassAudubon has been the lead management agency due both to its mission statement and the fact that MassAudubon owns all of the nearby island property not owned by Three Bays. The Town will assume responsibility for a portion of the cost of such management as required by its permitting. A cost-sharing joint management agreement is being negotiated between the Town and MassAudubon. Unlike other such agreements, it will not need separate Council approval as the project appropriation anticipated this expenditure in the project budget.

The work is scheduled to be completed this fall during a time of limited availability of the county dredge. If that window of opportunity is missed, this important project may be delayed for an extended period into 2024 or perhaps later.

FISCAL IMPACT: None

STAFF ASSISTANCE: Kate Connolly, Assistant Town Attorney, Charles McLaughlin, Senior Counsel, Thomas LaRosa, First Assistant Town Attorney

B. NEW BUSINESS (May be acted upon) (Majority Vote)

BARNSTABLE TOWN COUNCIL

**ITEM# 2024-044
INTRO: 10/05/2023**

2024-044 TRANSFER ORDER IN THE AMOUNT OF \$49,000 FROM THE COMMUNITY SERVICES DEPARTMENT FISCAL YEAR 2024 PERSONNEL BUDGET TO THE FISCAL YEAR 2024 COMMUNITY SERVICES DEPARTMENT OPERATING EXPENSE BUDGET FOR THE PURPOSE OF FUNDING A SECURITY SERVICES CONTRACT FOR TOWN BEACHES

ORDERED: That the Town Council does hereby authorize the Town Manager to transfer \$49,000 from the Fiscal Year 2024 Community Services Department General Fund Personnel Budget to the Fiscal Year 2024 Community Services Department General Fund Operating Expense Budget for the purpose of funding the cost of securing and opening specific beaches during the off season.

SPONSOR: Mark S. Ells, Town Manager

DATE	ACTION TAKEN
_____	_____
_____	_____

- ___ Read Item
- ___ Rationale
- ___ Council Discussion
- ___ Vote

BARNSTABLE TOWN COUNCIL

ITEM# 2024-044
INTRO: 10/05/2023

SUMMARY

TO: Town Council
FROM: Mark S. Ells, Town Manager
DATE: October 05, 2023
SUBJECT: Transfer Order in the amount of **\$49,000** from the Community Services Department Fiscal Year 2024 Personnel Budget to the Fiscal Year 2024 Community Services Department Operating Expense Budget for the purpose of funding a security services contract for town beaches

BACKGROUND: The Town of Barnstable has received countless requests from residents to secure certain beach parking lots for numerous years. As the town tries to navigate a balance between access and safety, we propose a pilot program to subcontract the securing and opening of Kalmus, Covell's, and Craigville beaches from October 10, 2023, through Memorial Day, May 27, 2024; last May, after numerous disturbances and safety concerns the town was forced into securing beaches. Due to labor shortages and costs the Community Services Department requests to implement this pilot program.

ANALYSIS: Currently the Department of Public Works has filled in to secure and unlock beaches during the extended times. The D.P.W. has personnel shortages and securing and opening beaches daily is not sustainable. The Barnstable Police Department is also short staffed and contracting out these services will reduce the town's resources needed to accomplish maintaining safety while not prohibiting access.

FISCAL IMPACT: The Community Services Department personnel budget is projected to have a surplus in Fiscal Year 2024 due to vacancy savings. The savings will be redirected to this pilot program. If successful, the cost may be added to the Fiscal Year 2025 budget for its continuance.

TOWN MANAGER RECOMMENDATION: Mark S. Ells, Town Manager, recommends approval of this Fiscal Year 2024 budget transfer.

STAFF ASSISTANCE: Christopher Gonnella, Director, Community Services Department

C. NEW BUSINESS (Refer to Public Hearing 10/19/2023)

BARNSTABLE TOWN COUNCIL

**ITEM# 2024-045
INTRO: 10/05/2023**

2024-045 APPROPRIATION ORDER IN THE AMOUNT OF \$9,800 FOR THE REDESIGN OF THE HYANNIS YOUTH AND COMMUNITY CENTER WEBSITE

ORDERED: That the amount of **\$9,800** be appropriated and provided from the Hyannis Youth and Community Center Enterprise Fund Reserves for the purpose of funding the cost of redesigning the operation’s website, and that the Town Manager is authorized to contract for and expend this appropriation for this purpose.

SPONSOR: Mark S. Ells, Town Manager

DATE	ACTION TAKEN
_____	_____
_____	_____

- ___ Read Item
- ___ Motion to Open Public Hearing
- ___ Rationale
- ___ Public Hearing
- ___ Close Public Hearing
- ___ Council Discussion
- ___ Vote

BARNSTABLE TOWN COUNCIL

ITEM# 2024-045
INTRO: 10/05/2023

TO: Town Council
FROM: Mark S. Ells, Town Manager
DATE: October 05, 2023
SUBJECT: Appropriation Order in the amount of **\$9,800** for the redesign of the Hyannis Youth and Community Center website

BACKGROUND: The Community Services Department was approved \$11,000 as part of transfer order # 2023-186 utilizing Fiscal Year 2023 salary savings to subcontract for a redesign of the Hyannis Youth and Community Center (HYCC) website. A vendor was selected, and as we were finalizing an agreement with the chosen company, they informed us of their decision to no longer be interested in the project and the funds allocated were closed to the HYCC Enterprise Fund surplus. We have met with a new vendor to complete the necessary redesign and are confident that this will be completed if these funds are approved.

ANALYSIS: The current HYCC website is antiquated and is not user friendly. The goals of the redesign are to make the site more accessible, improve navigation, make public offerings a focal point, interface current software and schedules onto new Word Press formatting, and to enhance advertising and sponsorship opportunities available at the HYCC.

FISCAL IMPACT: Funding for this project will be provided from the HYCC Enterprise Fund Reserve which was recently certified at \$706,568 by the Massachusetts Department of Revenue as of July 1, 2023.

TOWN MANAGER RECOMMENDATION: Mark S. Ells, Town Manager, recommends approving the requested transfer.

STAFF ASSISTANCE: Christopher Gonnella, Director of Community Services Department

B. NEW BUSINESS (Refer to Public Hearing 10/19/2023)

BARNSTABLE TOWN COUNCIL

**ITEM# 2024-046
INTRO: 10/05/2023**

**2024-046 APPROPRIATION AND TRANSFER ORDER IN THE AMOUNT OF \$3,500,000
FOR FROM THE GENERAL FUND RESERVES TO THE CAPITAL TRUST
FUND**

ORDERED: That the amount of **\$3,500,000** be appropriated from the General Fund reserves and transferred to the Capital Trust Fund for the purpose of replenishing funds in the Capital Trust Fund that were used to fund the school portables project under Town Council Order 2023-200.

SPONSOR: Mark S. Ells, Town Manager

DATE	ACTION TAKEN
_____	_____
_____	_____

- _____ Read Item
- _____ Motion to Open Public Hearing
- _____ Rationale
- _____ Public Hearing
- _____ Close Public Hearing
- _____ Council Discussion
- _____ Vote

BARNSTABLE TOWN COUNCIL

ITEM# 2024-046
INTRO: 10/05/2023

SUMMARY

TO: Town Council
FROM: Mark S. Ells, Town Manager
THROUGH: Mark A, Milne, CPA, Director of Finance
DATE: September 29, 2023
SUBJECT: Appropriation and Transfer Order in the Amount of **\$3,500,000** from the General Fund Reserves to the Capital Trust Fund for the purpose of replenishing funds in the Capital Trust Funds

BACKGROUND: The Barnstable School Committee voted to use \$3,500,000 from its share of the General Fund reserves (school savings account) at their June 7, 2023 meeting to fund the purchase of portable classrooms for the Hyannis West Elementary School and Barnstable Community Innovation School campuses.

The item first appeared on the Town Council’s June 15, 2023 meeting agenda and was referred to a public hearing on July 20, 2023. Since the public hearing occurred in the new fiscal year beginning on July 1, 2023 the funding source had to be changed from the General Fund reserves to the Capital Trust Fund. The Department of Revenue will not allow appropriations from a community’s General Fund reserves after June 30th until they are recertified by the department.

The town received a notification on September 25, 2023 from the Department of Revenue certifying the Town’s Free Cash (General Fund reserves) for \$32,722,432. This appropriation replenishes the funds used in the Capital Trust Fund for the school portables.

ANALYSIS: After setting aside from the General Fund reserves an amount equal to 4% of the General Fund budget in accordance with the town’s ordinances the balance in the General Fund reserves is allocated to a municipal and school savings account in accordance with a revenue sharing agreement. The allocation of the General Fund reserves on July 1, 2023 is as follows:

Allocation of Free Cash

	Municipal Savings	School Savings	Council Reserve	Opioid Settlement	Total
Balance on July 1, 2022	\$ 8,320,011	\$ 11,298,637	\$ 7,150,578	\$ -	\$ 26,769,227
FY23 Operating & Capital Budgets	(960,023)	(1,444,398)	-	-	(2,404,421)
FY24 Operating Budget	-	-	(250,000)	-	(250,000)
FY24 Capital Program	(1,921,405)	(1,918,846)	-	-	(3,840,251)
FY23 Returned Appropriations - Ops Budgets	1,921,409	99,147	-	-	2,020,556
FY23 Returned Appropriations - Fixed Costs	694,255	1,041,382	-	-	1,735,637
FY23 Net Excess Revenue	3,090,552	4,635,829	585,992	379,312	8,691,685
Certified as of July 1, 2023	11,144,799	13,711,752	7,486,570	379,312	32,722,432
Transfer to CTF for school portables	-	(3,500,000)	-	-	(3,500,000)
Balance Remaining	\$ 11,144,799	\$ 10,211,752	\$ 7,486,570	\$ 379,312	\$ 29,222,432

FISCAL IMPACT: The School Department’s savings account balance will be \$10,211,752 after this transfer and the balance in the Capital Trust Fund will increase to \$16,852,605 as of July 1, 2023.

TOWN MANAGER RECOMMENDATION: Mark S. Ells, Town Manager, recommends approving the requested transfer.

STAFF ASSISTANCE: Mark A, Milne, CPA, Director of Finance

B. NEW BUSINESS (May be acted upon) (Majority vote)

BARNSTABLE TOWN COUNCIL

**ITEM# 2024-047
INTRO: 10/05/2023**

2024-047 RESOLVE REVOKING THE AUTHORIZATION FOR THE TOWN MANAGER TO COMMENCE NEGOTIATIONS WITH COMMONWEALTH WIND FOR A NEW HOST COMMUNITY AGREEMENT

RESOLVED: That the Town Council does hereby revoke its authorization, as previously approved by the Town Council on November 3, 2022, in Town Council Item # 2023-054, for the Town Manager to commence negotiations with Commonwealth Wind LLC, a wholly owned subsidiary of Avangrid Renewables LLC, for a new Host Community Agreement (“HCA 3”), which authorization was based on Commonwealth Wind LLC securing a lease from the United States of America for submerged lands associated with the project, having in place a valid Power Purchase Agreement for the project, and demonstrating its project permitting.

DATE	ACTION TAKEN
_____	_____
_____	_____

- Read Item
- Rationale
- Council Discussion
- Vote

B. NEW BUSINESS (May be acted upon) (Majority Vote)

BARNSTABLE TOWN COUNCIL

**ITEM# 2024-048
INTRO: 10/05/2023**

**2024-048 RESOLVE POSTPONING THE GRANTING OF CERTAIN EASEMENTS TO
PARK CITY WIND LLC**

WHEREAS, pursuant to the Host Community Agreement dated May 6, 2022, between the Town and Park City Wind LLC (“HCA 2”) on June 2, 2022, the Town Council, in Town Council Item # 2022-192, approved the granting of an easement to Park City Wind LLC (“PCW”) in certain parcels of land, namely a portion of Craigville Beach known as Assessors’ Parcel 206-013 and a portion of 20 Main Street known as Assessors’ Parcel 228-138, and, in Town Council Item # 2022-193, approved the granting of an easement for utility purposes only to PCW extending from Craigville Beach to Shootflying Hill Road (together, the “Easements”), and authorized the Town Manager to execute and record any all instruments and documents in connection with the grant of the Easements;

WHEREAS, the Town’s support for HCA 2 was based, in part, on PCW securing a lease from the United States of America for submerged lands associated with the project, having in place a valid Power Purchase Agreement (“PPA”), and demonstrating its project permitting;

WHEREAS, the Town Manager has not yet taken any actions to effectuate the grant of the Easements by the Town;

WHEREAS, HCA 2 pertains to the construction of a wind generating facility in federal waters south of Martha’s Vineyard, referred to therein as Vineyard Connector 2, as more fully described and referred to as Phase 1 of New England Wind in filings with the Commonwealth’s Department of Public Utilities in DPU 20-56 and 20-57, and with the Energy Facilities Siting Board in EFSB 20-01; and

WHEREAS, PCW has now informed the Town that it has withdrawn from its PPA with State of Connecticut utilities; and

WHEREAS, no final decision has been issued by the EFSB in relation to the Vineyard Connector 2 project, including any decision regarding the final landfall and route(s) proposed by PCW;

THEREFORE, BE IT RESOLVED: That the Town Council hereby approves postponing the granting of the Easements and directs the Town Manager not to take any actions to grant the Easements prior to the issuance of the EFSB final decision regarding the Vineyard Connector 2 project and the date on which the appeal period for such decision expires.

BARNSTABLE TOWN COUNCIL

ITEMS# 2024-047 & 2024-048
INTRO: 10/05/2023

SUMMARY

TO: Town Council
FROM: Mark S. Ells, Town Manager
THROUGH: Karen L. Nober, Town Attorney
DATE: October 05, 2023
SUBJECT: Resolve revoking the authorization for the Town Manager to commence negotiations with Commonwealth Wind for a new host community agreement; and resolve postponing the granting of a certain easement to Park City Wind LLC

RATIONALE: Because Commonwealth Wind LLC defaulted on its Power Purchase Agreement with the state's utilities, the state has undertaken a new bid process for an offshore wind developer. In light of these changed circumstances, including the ongoing bid process and the fact that no developer has yet been selected by the state, the proposed resolve would revoke the Town Council's authorization for the Town Manager to negotiate a Host Community Agreement with Commonwealth Wind. Park City Wind LLC ("PCW") has just informed the Town that it has withdrawn from its Power Purchase Agreement renegotiations with state of Connecticut utilities. As a result, it appears that the state of Connecticut will now need to undertake its own new bid process. Additionally, PCW awaits a decision from the Massachusetts Energy Facilities Siting Board ("EFSB") with respect to its project, including landfall and route selection. Pursuant to the Town's Host Community Agreement with PCW, the Town Council approved the granting of certain easements to PCW. Because the EFSB has not issued its final decision with respect to the PCW project, including any decision regarding the final landfall and route(s) proposed by PCW, the proposed resolve would direct the Town Manager not to take any actions to grant the easements prior to the issuance of the EFSB final decision and the date on which the appeal period for such decision expires.

FISCAL IMPACT: None

STAFF ASSISTANCE: Karen L. Nober, Town Attorney; Charles McLaughlin, Senior Counsel; Thomas LaRosa, First Assistant Town Attorney