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February 9, 2018

CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS
ON THE
ENVIRONMENTAL NOTIFICATION FORM

PROJECT NAME	: Vineyard Wind Connector
PROJECT MUNICIPALITY	: Barnstable, Yarmouth, State/Federal Waters
PROJECT WATERSHED	: Cape & Islands
EEA NUMBER	: 15787
PROJECT PROPONENT	: Vineyard Wind
DATE NOTICED IN MONITOR	: December 20, 2017

Pursuant to the Massachusetts Environmental Policy Act (MEPA; M.G.L. c. 30, ss. 61-62I) and Section 11.06 of the MEPA regulations (301 CMR 11.00), I hereby determine that this project **requires** the preparation of a mandatory Environmental Impact Report (EIR). This Certificate includes a Scope for the Draft EIR (DEIR).

The Vineyard Wind project is proposed in response to the clean energy mandate of Chapter 188 of the Acts of 2016 (An Act to Promote Energy Diversity) and associated Request for Proposals (RFP). The RFP was issued by energy distribution companies, in coordination with the Department of Energy Resources (DOER), to solicit long-term contracts to satisfy the policy directives encompassed within Section 83C of the Act and to assist the Commonwealth with meeting its Global Warming Solution Act (GWSA) goals. The project proposes to construct an offshore wind project located in the federally designated Wind Energy Area (WEA) which is under the jurisdiction of the Bureau of Ocean Energy Management (BOEM). The WEA is located in federal waters to the south of Martha's Vineyard. Vineyard Wind will deliver up to 800 megawatts (MW) of energy to the New England energy grid via three submarine export cables that will make landfall in Massachusetts. The Environmental Notification Form (ENF) indicates that the Vineyard Wind project would offset carbon dioxide (CO_2) emissions by approximately 1,680,000 tons per year (tpy).

As described in the 2015 Massachusetts Ocean Management Plan (OMP), the state has set a goal of developing 2,000 MW of wind-power capacity by 2020. Offshore wind is a potentially inexhaustible renewable resource that is available in close proximity to areas with high electricity demands. If developed with care and forethought, it can be compatible with other ocean uses and resource protection.

Project Description

The purpose of Vineyard Wind is to generate and distribute Offshore Wind Energy Generation[1] to Massachusetts in accordance with An Act to Promote Energy Diversity (the Act). The Act was promulgated as part of a strategy to meet the Commonwealth's GHG reduction and energy goals. For the purpose of MEPA review, the portion of Vineyard Wind subject to state jurisdiction is referred to as the Vineyard Wind Connector and the "Project". Major elements of Vineyard Wind include a wind turbine array, offshore electrical service platforms (ESPs), offshore submarine transmission cables, onshore underground transmission cables, and an onshore substation. Up to three offshore export cables will be installed to distribute the energy to the New England bulk power grid. The Project includes offshore transmission cables in state waters, onshore cables and a substation. The ENF presents two alternative offshore cable corridors (a Western cable corridor and an Eastern cable corridor) which will make landfall at one of three potential sites in Massachusetts. Approximately 19 to 21 miles of the transmission lines will be located in state waters.

Each 10-inch diameter offshore export cable will be comprised of a three-core 220 kilovolt (kV) alternating current (AC) cable for power transmission bundled with a fiber optic cable. The cables are proposed to be buried approximately three to six feet below the seafloor using jetting, jet-plow, plow, or mechanical trenching. Where burial is not possible due to subsurface conditions, it will be laid on the ocean floor and covered by rock or concrete mattresses. Within the transition zone between Nantucket Sound and land, Horizontal Directional Drilling (HDD) or open trenching will be used to install the cable.

The onshore cable Preferred Route (6 miles long) extends from Yarmouth to Barnstable; the Noticed Alternative (5.4 miles long) is located exclusively within Barnstable. The substation is proposed on land adjacent to the existing Eversource 115 kV Switching Station in Barnstable.

Vineyard Wind will include two 200-MW offshore cables and one 400-MW offshore cable. If developed in phases, the first 400 MW would be installed with two 200-MW offshore cables, and the second 400 MW would be installed with a single 400-MW cable; the second 400 MW of capacity will require an interlink with the initial phase.

Project Area

Both cable corridors extend through Nantucket Sound. A portion of the cable route within state waters lies within the Cape and Islands Ocean Sanctuary (CIOS) and the Massachusetts OMP planning

[1] Chapter 188 of the Acts of 2016 defines Offshore Wind Energy Generation as offshore electric generating resources derived from wind that: (1) are Class I renewable energy generating sources, as defined in section 11F of Chapter 25A of the General Laws; (2) have a commercial operations date on or after January 1, 2018, that has been verified by DOER; and (3) operate in a designated WEA for which an initial federal lease was issued on a competitive basis after January 1, 2012.

area. The Western cable corridor to the preferred landing site will extend through approximately 21 miles of state waters, while the Eastern cable corridor to the preferred landing will extend through approximately 19 miles of state waters.

The substation is proposed within a 6.35-acre site that is zoned for industrial use. It is located on Independence Drive within the Independence Park commercial/industrial area. The majority of the site is wooded and includes some limited parking areas and a small building. The site is bordered to the north by the Barnstable Switching Station, to the west by the former Cape Cod Times building, to the south by Independence Drive, and to the east by a 150- to 200-foot wide electric transmission corridor. The surrounding area has been zoned, permitted and developed or is proposed to be developed with residential, general commercial and recreational uses. A residential neighborhood is located approximately 2,000 feet from the site. Onshore transmission lines are proposed primarily within paved roadways and other existing rights of way (ROW) in Yarmouth and Barnstable. Activities associated with extending the transmission cable onto shore using HDD or open trenching will take place within one of three landfall sites: New Hampshire Avenue in Yarmouth (preferred); Great Island in Yarmouth; and Covell's Beach in Barnstable.

According to the Massachusetts Natural Heritage and Endangered Species Program (NHESP), portions of the project area are mapped as Priority and Estimated Habitat for rare species including Roseate Tern (*Sterna dougallii*)[2], Common Tern (*Sterna hirundo*), Least Tern (*Sternula antillarum*), Water-willow Borer Moth (*Papaipema sulphurata*), Scarlet Bluet (*Enallagma pictum*), and Piping Plover (*Charadrius melodus*).[3] 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) indicates that the cable routes will pass through 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).

Lewis Bay supports a variety of marine resources including winter flounder (*Pseudopleuronectes americanus*), horseshoe crabs, and shellfish. Sections of the Lewis Bay shoreline are mapped soft shell clam (*Mya arenaria*), American oyster (*Crassostrea virginica*), and quahog habitat. Oyster aquaculture grants are present along the eastern shoreline. Most of Lewis Bay is identified as bay scallop habitat and it supports a seasonal bay scallop fishery. Covell's Beach is mapped as a horseshoe crab nesting beach and waters offshore of the beach are mapped as surf clam habitat. The Great Island beach is identified as a horseshoe crab spawning beach. Waters offshore of portions of Covell's Beach, the entrance channel to Lewis Bay, and Great Island beach contain mapped eelgrass (*Zostera marina*) habitat.

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[2] Species also federally protected pursuant to the U.S. Endangered Species Act (ESA, 50 CFR 17.11).
[3] 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. A number of properties included in the Massachusetts Historical Commission (MHC) Inventory of Historic and Archaeological Assets of the Commonwealth (Inventory) and State and National Registers are located along the onshore segment of the transmission route. Both the Preferred Route and Noticed Alternative extend through and are adjacent to archaeological sites.

In addition, portions of the Project extend through land held in accordance with Article 97 of the Amendments of the Constitution of the Commonwealth (Article 97) and open space parcels permanently protected through a conservation restriction (CR).

Environmental Impacts and Mitigation

As noted previously, Vineyard Wind is proposed to provide clean, renewable energy. Impacts identified in the ENF are limited to those associated with the Vineyard Wind Connector. Potential environmental impacts within Massachusetts include alteration of 8.05 acres of land, creation of up to 0.5 acres of impervious area, and alteration to wetland resource areas. The project will impact approximately 4,054,016 square feet (sf) (93.1 acres) of Land Under the Ocean (LUO), of which some portion will be Land Containing Shellfish, associated with installation of the submarine cable (1,995,840 sf), dredging of sand waves (2,051,676 sf), and installation of the cofferdam at the end of the preferred landfall site (6,500 sf). Installation of the land-based section of the transmission line will alter approximately 14,000 sf of Land Subject to Coastal Storm Flowage (LSCSF) and 4,000 sf of Riverfront Area (RFA). Open-cut trenching at the preferred landfall site will alter approximately 500 sf of Coastal Beach. The project proposes dredging of approximately 160,800 cubic yards (cy) based on the Western Offshore Export Cable Corridor through Muskeget Channel.

The submarine cable will be installed using jetting or jet-plow, or mechanical trenching to minimize the area of dredging and direct seafloor impact. HDD will be used for the transition to landfall to avoid impacts to coastal wetland resource areas along the alternate landfall sites (Covell's Beach and Great Island). HDD will also be considered for the preferred landfall site. Areas of Coastal Beach, RFA, and LSCSF impacted during construction will be restored. The project will be required to comply with management standards in the OMP to minimize impacts to marine resources. Best management practices (BMPs) will be employed during the construction period. The substation will include full containment for any components containing dielectric fluids including transformers and capacitor banks.

Permits and Jurisdiction

The Project is subject to a Mandatory EIR because it requires Agency Action and it will alter ten or more acres of other wetlands (LUO) pursuant to 301 CMR 11.03(3)(a)(1)(b) of the MEPA regulations. The project also exceeds ENF thresholds at 301 CMR 11.03(3)(b)(3) for dredging of 10,000 or more cy of material and at 301 CMR 11.03(7)(b)(4) for construction of electric transmission lines with a capacity of 69 or more kV that are over one mile in length. Based on consultation with NHESP, the Project may exceed the ENF threshold at 301 CMR 11.03(2)(b)(2) for disturbance of greater than two acres of designated priority habitat that results in a take of a state-listed rare species. Depending on the landfall site and on-shore transmission route selected, the Project may also exceed ENF thresholds at 301 CMR 11.03(1)(b)(3) for 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) for release of an interest in land held for conservation purposes; and 301 CMR 11.03(3)(b)(1)(a) for alteration of coastal dune.

The Project will require a Section 401 Water Quality Certification (WQC), a Chapter 91 (c. 91) License, and Approval of Easement pursuant to 310 CMR 22.00 from the Massachusetts Department of Environmental Protection (MassDEP); review under the Massachusetts Endangered Species Act (MESA) by NHESP; review under the OMP and Ocean Sanctuaries Act; a Non-Vehicular Access Permit, Road Crossing Permits, and a Rail Division Use and Occupancy License from the Massachusetts Department of Transportation (MassDOT); and Approval under MGL Chapter 164 Sections 69J and 72, and Chapter 40A Section 3 Zoning Exemption from the Energy Facility Siting Board (EFSB) and the Department of Public Utilities (DPU). Consistent with the request for proposals issued pursuant to Section 83 of Chapter 169 of the Acts of 2008 (An Act Relative to Green Communities), as amended by Chapter 188 of the Acts of 2016, the distribution companies must submit any long-term contract proposed to the DPU for review and approval. The Project also requires a Federal Consistency review by the Massachusetts Office of Coastal Zone Management (CZM). The Project is subject to the MEPA Greenhouse Gas (GHG) Emissions Policy and Protocol (the Policy) and it may require Authorization from the State Legislature in accordance with Article 97.

The Project will require Orders of Conditions from Conservation Commissions in Edgartown, Yarmouth, and Barnstable, and potentially, Nantucket and Mashpee (or in the case of an appeal, Superseding Orders of Conditions from MassDEP).

Vineyard Wind and elements of the Vineyard Wind Connector require approvals from BOEM[5]; an Individual Permit from the U.S. Army Corps of Engineers (ACOE) under Section 404 of the Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act (RHA); review from U.S. National Marine Fisheries Service (NMFS), U.S. Coast Guard (USCG), and Federal Aviation Administration (FAA); consultation with and Field Investigation Permits from MHC in accordance with Section 106 of the National Historic Preservation Act (NHPA) of 1966 and M.G.L. Chapter 9, Sections 26-27C; a Special Use Permit from BUAR; Development of Regional Impact (DRI) review from the Cape Cod Commission (CCC) and Martha's Vineyard Commission (MVC); 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 Agency Actions that are likely, directly or indirectly, to cause Damage to the Environment. The MEPA regulations at 301 CMR 11.02 Definitions define Damage to the Environment as:

> *Any destruction or impairment (not including insignificant damage or impairment), actual or probable, to any of the natural resources of the Commonwealth including, but not limited to, air*

[5] 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).

pollution, GHG emissions, water pollution, improper sewage disposal, pesticide pollution, excessive noise, improper operation of dumping grounds, reduction of groundwater levels, impairment of water quality, increases in flooding or storm water flows, impairment and eutrophication of rivers, streams, flood plains, lakes, ponds or other surface or subsurface water resources, destruction of seashores, dunes, marine resources, underwater archaeological resources, wetlands, open spaces, natural areas, parks, or historic districts or sites.

The subject matter of the EFSB/DPU approvals and the c. 91 License are sufficiently broad such that jurisdiction is functionally equivalent to full scope jurisdiction and extends to all aspects of the Project that are likely, directly or indirectly, to cause Damage to the Environment.

SCOPE

General

The ENF provides a general description of Vineyard Wind and associated project components. It identifies in more detail Project impacts and mitigation measures. The DEIR should provide a description, plans, characterize baseline environmental conditions and identify environmental impacts and mitigation for the Vineyard Wind project. It should provide a more detailed description and project plans for the Vineyard Wind Connector. The description and plans should clearly identify baseline environmental conditions and potential impacts for the purpose of State Agency and public review. It should follow Section 11.07 of the MEPA regulations for outline and content, as modified by this Scope. The DEIR should clearly demonstrate that the Proponent has sought to avoid, minimize and mitigate Damage to the Environment to the maximum extent feasible.

I have received numerous comments from public officials, including Senator Julian Cyr and Representative Dylan Fernandes, State Agencies, environmental advocates, local residents, and other members of the public concerning the proposed project and associated environmental impacts. Comments were received from the Town of Barnstable, Town of Yarmouth, and the Town of Chatham. Many commenters strongly support the development of renewable offshore wind energy. Other comments express significant concerns regarding impacts of the project within Nantucket Sound, Hyannis Harbor, and Lewis Bay, and request that I deny the project or require the Proponent to select an alternative to the landing site proposed at New Hampshire Avenue in Yarmouth.

The purpose of MEPA is to provide meaningful opportunities for public review of the potential environmental impacts of Projects for which Agency Action is required, and to assist each Agency in using (in addition to applying any other applicable statutory and regulatory standards and requirements) all feasible means to avoid Damage to the Environment or, to the extent Damage to the Environment cannot be avoided, to minimize and mitigate Damage to the Environment to the maximum extent practicable. MEPA is not a permitting process and I do not have the authority to approve or deny a project.

As noted previously, MEPA jurisdiction is limited to "*Any destruction or impairment (not including insignificant damage or impairment), actual or probable, to any of the natural resources of the Commonwealth...*".

Comments on the ENF request that the Scope include review of the environmental impacts associated with the entire project, both those elements within state jurisdiction and those outside of Massachusetts. The bids will be reviewed by an Evaluation Team consisting of the distribution companies and, in an advisory role, DOER. The bids will be evaluated on a number of qualitative and quantitative criteria identified in the RFP which include, but are not limited to, costs, reliability and environmental impacts and benefits of the project. The RFP requires identification of environmental impacts and benefits associated with energy generation and transmission. The bid submitted by the Proponent includes an assessment of environmental impacts in Massachusetts and in federal waters for both generation and transmission which will be reviewed by the Evaluation Team. While the mandate of the Evaluation Team is quite broad, the Energy Diversity Act does not alter MEPA jurisdiction and, therefore, the Scope requires information to support Agency review of the project regarding impacts to the natural resources of the Commonwealth, alternatives to avoid, minimize and mitigate those impacts and identification of associated mitigation measures.

The Proponent has agreed to include within the DEIR, the information provided in the RFP regarding environmental impacts associated with energy generation and transmission outside of Massachusetts. To support meaningful agency and public review of the project and assessment of alternatives to avoid, minimize and mitigate impacts in state waters, the DEIR must provide a description and plans of Vineyard Wind and project elements in federal and state waters. It must identify environmental impacts to federal and state resources as well as cumulative impacts.

Project Description and Permitting

The ENF describes site conditions and provides a basic project description and conceptual plans. It identifies existing infrastructure both onshore and offshore. It identifies the Project's potential impacts on land alteration, wetland resources, benthic conditions in Nantucket Sound, and temporary impacts associated with the construction period. The ENF identifies potential measures to avoid, minimize and mitigate impacts.

The DEIR should provide a detailed description of the Project and identify any changes to the Project since the filing of the ENF. 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.

The DEIR should provide a more detailed description of project elements within state jurisdiction consistent with the MEPA regulations. Plans of the Project should be provided at a legible scale and clearly identify buildings, impervious areas, and boundaries of tidelands, and wetland resource areas. The DEIR should provide plans detailing impacts to wetland/coastal resource areas; the area of land disturbance; the location and proposed conditions of the substation, cable, and interconnection to the transmission system; and stormwater management measures. The DEIR should provide the results of a noise study for the substation and identify expected sound levels at nearby residential areas. The DEIR should identify and describe measures to mitigate the project's impacts.

The DEIR should identify and describe jurisdictional areas; State, federal and local permitting and review requirements; and provide an update on the status of each of these pending actions. It should

include a description and analysis of applicable statutory and regulatory standards and requirements, and a discussion of the Project's consistency with those standards.

The proposed routes pass through areas mapped as provisional within Cape Cod ocean planning areas. Within these areas cable installations are permitted, subject to certain performance standards. The DEIR should address consistency with the CCC Regional Plan and the MVC Island Plan.

Federal Consistency

The federal Coastal Zone Management Act specifically delegates review authority over projects in federal waters to the Coastal Zone Management Office of the adjacent coastal state, provided that the state has a federally approved Coastal Zone Management Plan. Therefore, CZM review will extend to the overall Vineyard Wind Project and is not limited to the Vineyard Wind Connector. I expect that the DEIR will provide context and information regarding cumulative impacts of the entire project to support meaningful review and, in particular, to support Federal Consistency Review by CZM. The DEIR should address consistency with CZM program policies to facilitate the Federal Consistency Review and provide a detailed response to the CZM comment letter. The Proponent should consult with CZM regarding its comment letter and evaluation of impacts.

Ocean Management Plan

The project is subject to review under the Massachusetts OMP. The OMP was developed pursuant to the Oceans Act (Chapter 114 of the Acts of 2008) in 2009 and was updated in 2015. The OMP identifies and 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 OMP contains siting and management standards applicable to specific ocean-based activities to protect SSU resources and water-dependent uses. For cable projects, the OMP identifies the applicable SSUs as core habitat areas for the North Atlantic Right Whale and Humpback Whale, areas of hard/complex seafloor, intertidal flats, and eelgrass. According to CZM, hard/complex seafloor includes: exposed bedrock or concentrations of boulder, cobble or similar hard bottom; morphologically rugged seafloor conditions characterized by high variability in bathymetric aspect and gradient; or artificial reefs, wrecks or functionally equivalent structures that provide a substrate for hard bottom biological communities.

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 should demonstrate that the Project will comply with the management standards by identifying the project purpose and constraints, reviewing alternatives that would avoid SSUs (including alternative interconnection points from federal to state waters), providing sufficient details of existing and proposed conditions along the proposed cable route, documenting environmental impacts of the project and mitigation measures, and addressing its public benefits.

The DEIR should document benthic conditions along the cable route by providing the results of surveys conducted in accordance with the recommendations provided by CZM and DMF, including video, multi-beam and side-scan sonar, bathymetry, sub-bottom profiling, vibracore sampling, benthic grab samples, and sediment grabs. The survey data should be used to establish precise boundaries of hard/complex bottom habitat areas to determine impacts to SSUs and to provide a comparison to post-construction conditions. The Proponent should consult with CZM and DMF regarding the survey methodology, data collection and presentation of the data.

The OMP includes mapped areas of commercial and recreational fishing and navigation in Nantucket Sound that could be affected by the project. The DEIR should describe activities that could be affected by the installation of the cable, including restrictions on navigation, fishing and the placement of fixed or mobile fishing gear. As recommended by DMF, the Proponent should coordinate with DMF, the Massachusetts Lobstermen's Association (MLA), commercial surf clam fisheries' groups, and New England Fisheries Management Council (NEFMC) to consider design and construction measures to minimize interference with fishing activity and impacts to fish habitat. The Proponent should also coordinate with municipal shellfish constables and aquaculture grant owners to ensure the Project avoids interference with shellfish relay or aquaculture operations. The DEIR should provide an update on these consultations. The DEIR should include a communications plan for alerting mariners of the location and timing of activities in Nantucket Sound.

The Oceans Act established an Ocean Development Mitigation Fee to be assessed for offshore development projects. The purpose of the fee is to compensate the Commonwealth for impacts to ocean resources and the broad public interests and rights in the lands, waters and resources of the OMP areas. The fee will be established through MEPA review. The OMP contains language and guidance as to the process and framework for determining the fee. The information and analysis contained in the DEIR, consultation with agencies and public comment will inform my determination of the fee. If the Project is permitted, the fee must be deposited in the Oceans and Waterways Trust.

Alternatives Analysis

The ENF includes an analysis of two offshore submarine transmission routes (Western and Eastern Corridors) including nearshore variants, three landing/interconnection sites, and two onshore transmission routes (Preferred Route and Noticed Alternative) including onshore variants. The routes would begin at the wind turbine array and follow the same northerly route before diverging at the boundary with state waters through the CIOS. The offshore routes then continue separately through a pocket of federal waters in Nantucket Sound before re-entering state waters and making landfall at one of three potential sites on the southern shore of Cape Cod. The ENF indicates that the offshore route identification occurred through consultation with the Ocean Management Team and consideration of factors including OMP guidelines, bathymetric data, navigation corridors, and a preliminary geophysical survey along approximately 125 miles of potential offshore route segments. The ENF indicates that both offshore routes are feasible, avoid core habitat mapped for whales, avoid mapped eelgrass habitat, and minimize impacts to mapped SSU areas. The routes have generally equivalent impacts.

Landfall sites include New Hampshire Avenue (preferred) and Great Island in Yarmouth and Covell's Beach in Barnstable. Open trench installation is proposed at the preferred New Hampshire Avenue landfall site. HDD is proposed at the alternative landfall sites where it is necessary to avoid

impacts to sensitive resources or recreational interests. Offshore cable installation is proposed via jetting, jet-plow, plow, or mechanical trenching.

The following onshore routes were considered by the Proponent and described in the ENF: the Preferred Route, five variants of the Preferred Route, the Noticed Alternative, and a variant of the Noticed Alternative.

The DEIR should include a comprehensive alternatives analysis for offshore and onshore routing, landfall sites, and construction methodology to demonstrate that Damage to the Environment will be avoided, minimized or mitigated to the maximum extent practicable. The analysis should evaluate routing via the Nantucket Offshore Export Cable Corridor. The DEIR should include analysis of onshore interconnection sites including Brayton Point Substation in Somerset and Canal Generating Station in Sandwich. The DEIR should further evaluate the West Barnstable 345 kV Substation as a potential interconnection location and expansion of the Barnstable 115 kV Substation. The DEIR should provide further analysis of the preliminary corridors recommended in the OMP.

The DEIR should include conceptual layout plans, a summary of potential environmental impacts, and a supporting narrative for each of the alternatives identified in the ENF, and those identified in this Certificate. The DEIR should describe, quantify and provide in a tabular format, each alternative's impacts on land alteration, creation of impervious area, and impacts to wetland/coastal resource areas. The DEIR should describe how alternative phasing could be developed to avoid and minimize environmental impacts.

CZM, DMF, NHESP, and MassDEP have identified additional alternatives that should be reviewed in the DEIR. As discussed above, the offshore cable routes would pass through mapped SSUs, including whale core habitat and areas of hard/complex seafloor. The DEIR should include additional analysis demonstrating that no less environmentally damaging practicable alternatives exists and how additional surveys may provide more accurate characterization or delineation of SSU resources. The DEIR should include information to document that the project is a water-dependent facility in accordance with the Waterways Regulations (310 CMR 9.00). It should include a comprehensive analysis of alternatives that the project cannot be reasonably located away from tidal waters, as described below.

The Proponent should continue to explore alternatives to reduce impacts to environmental resources through design modification or the addition of features to further mitigate potential impacts. Additional recommendations provided in this Certificate may result in a modified design that would further avoid, minimize, or mitigate Damage to the Environment. The DEIR should discuss identify mitigation that has been evaluated and why measures will or will not be adopted.

Wetlands, Waterways, and Water Quality

Vineyard Wind includes work within wetland resource areas and activities that trigger Federal, State and local wetland permitting jurisdiction, each with its own performance standards and regulations. The Conservation Commissions of Yarmouth, Barnstable, and Edgartown and potentially Nantucket and Mashpee will review the project to determine its consistency with the Wetlands Protection Act (WPA), the Wetlands Regulations (310 CMR 10.00), and associated performance

standards, including the stormwater management standards (SMS). MassDEP will also review the Project to determine its consistency with the 401 WQC (314 CMR 9.00) and c. 91 regulations (310 CMR 9.00). Finally, ACOE review will determine its consistency with Section 404 of the Federal CWA and Section 10 of the RHA.

The DEIR should demonstrate that the Project will avoid, minimize or mitigate wetland resource area impacts to the maximum extent practicable. It should clearly outline a comprehensive wetland mitigation program that meets ACOE, MassDEP, and local bylaw requirements and performance standards. This mitigation program should include monitoring, construction period measures, and restoration. The DEIR should address comments from MassDEP, CZM, DMF and others regarding identification of wetland resource area impacts and appropriate mitigation.

According to the ENF, the installation of submarine cable within Massachusetts will impact approximately 4,054,016 sf (93.1 acres) of LUO including 1,995,840 sf (45.8 acres) associated with trenching activities based on a six-foot wide area, 2,051,676 sf (47.1 acres) associated with dredging of sand waves, and 6,500 sf (0.15 acres) associated with installation of a coffer dam at the preferred landfall site. Onshore, the project will impact approximately 500 sf of Coastal Beach, 14,000 sf of LSCSF, and 4,000 sf of RFA for installation of the transmission cable. The ENF indicates that Variant 4 would impact Coastal Dune.

The DEIR should describe impacts to onshore and offshore resource areas including those within federal waters. These impacts should be disaggregated into those under MEPA jurisdiction and those under federal jurisdiction. The DEIR should demonstrate that the Project can be designed and constructed consistent with applicable regulations. Plans should clearly delineate all applicable resource area and buffer zone boundaries including FEMA FIRM floodplain elevations and depict project elements in relation to wetland resource areas and any associated buffer zones. It should describe the nature of all impacts that cannot be avoided and whether they will be temporary or permanent in nature. The DEIR should address how the area of LUO impacted by cable installation was calculated. CZM comments indicate that cable impacts from the Block Island Wind Farm project occurred over an average width of 25 feet up to 30 feet. The DEIR should present revised calculations for impacts associated with cable installation based on this current information.

Offshore installation of up to three cables is proposed via jetting, jet-plow, plow, or mechanical trenching. These installation techniques will create a six-foot wide trench in which each cable will be simultaneously buried to a depth of three to six feet and covered with sediment. Where subsurface conditions prevent burial of the cable it will be placed on the seafloor and covered with protective material. The DEIR should provide greater detail about the installation method, its impacts and mitigation measures. It should specify where certain installation methods will be used. The DEIR should calculate additional impacts associated with sidecasting of dredged and trenched materials. It should describe whether the cable laying vessel will use dynamic positioning, anchor and kedge positioning, or stationary spud-anchoring during the cable installation process. CZM recommends the use of dynamic positioning vessels to minimize benthic impacts associated with anchors and anchor lines.

The DEIR should describe the areal dispersion and duration of suspended mud and soft sediments in the deep, infrequently disturbed habitats that are present along the proposed cable route. It should discuss how a determination will be made as to whether the required cable burial depth and

sediment cover have been attained and any additional burial or cable protection measures that may be necessary if the cable has not been adequately buried. Based on the surveys of benthic and subsurface conditions, the DEIR should identify areas where cable burial may not be achievable. The DEIR should evaluate other alternatives for cable installation such as hand jetting to avoid the need for armoring. If armoring cannot be avoided, the DEIR should describe in more detail the types of protection that will be placed over the cable (rock or concrete mattresses). The DEIR should propose mitigation to offset conversion of benthic habitat.

The ENF indicates that either HDD or open-trench installation will be used to construct the offshore cable as it transitions to landside transmission cable system at one of three identified landfall sites. MassDEP recommends the project use HDD to minimize impacts to the near shore area of LUO and Coastal Beach. The DEIR should provide detailed analysis of both alternatives and provide an evaluation and rationale for the preferred landfall method. The cables will be pulled through the proposed underground duct bank (one cable per conduit) onshore. The DEIR should describe construction staging for both methods. The DEIR should describe HDD operations and identify the location where the submarine cable will transition from a trench to the HDD conduit. It should describe impacts associated with the transition between construction techniques, such as potential release of drilling fluid where the HDD meets the seafloor. The DEIR should provide a contingency plan describing measures that will be undertaken to minimize and contain turbidity and sedimentation during the drilling or trenching process and if HDD drilling slurry is released into the environment.

Onshore cable will be installed via open trenching through existing roadways and ROWs. The project will add up to 0.8 acres of new impervious area associated with foundations, containment sumps, a small control building, and potentially paved access driveway and parking areas at the proposed substation site. The proposed substation will be equipped with full containment for any components containing dielectric fluids, including all transformers and capacitor banks; no equipment will contain polychlorinated biphenyls (PCBs). Erosion and sedimentation BMPs will be installed to protect wetland resource areas and other sensitive areas during construction. Following construction, the project will restore any disturbed areas. The Proponent will prepare a Stormwater Pollution Prevention Plan (SWPPP) in accordance with the NPDES Permit.

The DEIR should describe the proposed stormwater management system for the substation and address how it will be designed to comply with the SMS, including the use of BMPs to improve stormwater quality and to maintain pre-development peak flow rates and volumes. The onshore segment of the Project is proposed within or proximate to the Zone I and Zone II of public water supplies, which are considered Critical Areas. The DEIR should demonstrate that adequate protection of sensitive resources will be provided. It should include an evaluation of environmentally sensitive site design and LID techniques, structural stormwater best management practices (BMPs) and pollution prevention. It should describe the operations and management plan to ensure the long-term effectiveness of the system.

The submarine cable will be located within flowed tidelands of Nantucket Sound and Lewis Bay and will be subject to licensing under c. 91 and the Waterways Regulations. The DEIR should clearly delineate the landward extent of c. 91 jurisdiction, including any filled tidelands along the shoreline. The DEIR should discuss the Project's consistency with the applicable c. 91 regulations. According to MassDEP, as a facility generating electricity from wind power which requires an EIR pursuant to 310 CMR 9.12(2)(e), MassDEP shall find the project to be water-dependent based on a comprehensive

alternatives analysis demonstrating that the facility requires direct access to or location in tidal waters and cannot reasonably be located or operated away from tidal waters. For projects subject to an EIR, the alternatives analysis must be provided during MEPA review so that I may make a finding regarding water-dependency. The proposed offshore export cables will require approximately 160,800 cy of dredging of sand waves within state waters to a depth that will average 1.6 feet (up to 15 feet). The ENF indicates that these dredged corridors will be approximately 65 feet wide for each of the three cables.

Rare Species, Wildlife, and Marine Resources

The cable routes extend through diverse marine environments within the Outer Continental Shelf, Nantucket Sound, and the CIOS. As noted by the NHESP, CZM, and DMF, the area includes habitat and prey species relied upon by rare species, including several state- and federally-listed terns (Roseate, Common, and Least) as well as shellfish and finfish species that are important to the commercial and recreational fishing industries.

The DEIR should include sufficient information about existing conditions along and adjacent to the proposed cable route to determine potential impacts to rare species, marine species, and their habitat. The DEIR should assess the impacts of the cable on commercial and recreational fishing, and navigation. The DEIR should also review impacts associated with the operation and maintenance of the cable, including cable repair or monitoring activities, placement or maintenance of protective covering, and electromagnetic fields and heat. It should address establishment of time of year (TOY) restrictions and other mitigation measures to minimize impacts to species and habitats.

The DEIR should assess the direct and indirect impacts of the project on state-listed and migratory birds in the project area. The Proponent should provide avian data and study plans to NHESP for its review and comment. The Proponent should consult with NHESP prior to filing the DEIR regarding an Avian Risk Assessment.

Climate Change

Executive Order 569: Establishing an Integrated Climate Change Strategy for the Commonwealth (EO 569) was issued on September 16, 2016. EO 569 recognizes the serious threat presented by climate change and directs agencies within the administration to develop and implement an integrated strategy that leverages state resources to combat climate change and prepare for its impacts. The Order seeks to ensure that Massachusetts will meet GHG emissions reduction limits established under the GWSA of 2008.

The GHG Policy and requirements to analyze the effects of climate change through EIR review is an important part of this statewide strategy. These analyses advance proponents' understanding of a project's contribution and vulnerability to climate change.

Greenhouse Gas (GHG) Emissions

This Project is subject to review under the May 5, 2010 MEPA GHG Policy because it exceeds thresholds for a mandatory EIR. The DEIR should identify features of the transmission line, ESPs, and substation that will minimize line losses, such as the use of premium efficiency substation transformers

and other components. The DEIR should identify mitigation commitments to reduce construction period carbon dioxide (CO_2) emissions and identify construction practices and/or design features that will minimize the leakage of Sulfur Hexafluoride (SF6) gas, a potent GHG. As previously indicated, the project has the potential to offset CO_2 emissions by approximately 1,680,000 tpy.

The ENF indicates that the only enclosed structure on the proposed substation site will be a single story 1,210-sf building; it is unclear if this will be a conditioned space. The DEIR should address whether conditioned space (if proposed) or other operations will use energy from sources other than the electricity to be transmitted by the project. If energy from the electric grid or delivered fossil fuels (propane, oil) will be used, the DEIR should include an analysis that calculates and compares GHG emissions associated with: 1) a Base Case that conforms to the 9th Edition of the Massachusetts Building Code, which incorporates the standards of the International Energy Conservation Code (IECC 2015) and American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE 90.1, plus amendments) and 2) a Mitigation Alternative that achieves greater reductions in GHG emissions. The analysis should demonstrate that the project is taking all feasible measures to mitigate GHG impacts. At a minimum, the DEIR should consider reusing waste heat to heat and cool any conditioned spaces. The Proponent should consult with staff from the MEPA office and DOER regarding the form and content of a GHG analysis.

Climate Change Adaptation and Resiliency

The DEIR should provide an analysis and discussion of potential effects of climate change on the Project in the context of improving reliability and resiliency of the system. The DEIR should identify any potential impacts and address how the Project will be designed to adapt and/or sustain such impacts. To assist in the evaluation of climate change resiliency and adaptation measures the Proponent should review EEA's *Climate Change Adaptation Report* (September 2011) [7] and CZM's December 2013 report entitled, "*Sea Level Rise: Understanding and Applying Trends and Future Scenarios for Analysis and Planning*"[8].

This analysis should consider floodplain areas as may be reflected in the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) issued for the project area. If a FIRM map is pending during the design/analysis phase, the Proponent should use the pending maps, as recent amendments have tended to result in increased areas potentially subject to inundation during storm events.

If the analysis indicates the potential for climate change-induced flooding impacts, the DEIR should demonstrate that the Project will include ecosystem-based adaptation measures and infrastructure design to address likely impacts related to predicted sea level rise, storm intensity and extreme heat. The DEIR should evaluate incorporation of flood storage to accommodate the likelihood of extended flood periods and low-impact development (LID) elements. The DEIR should evaluate the feasibility of: elevation of infrastructure and electrical equipment; use of water-resistant materials for structural elements below base flood elevation; and emergency power sources.

[7] http://www.mass.gov/eea/docs/eea/energy/cca/eea-climate-adaptation-report.pdf
[8] http://www.mass.gov/eea/docs/czm/stormsmart/slr-guidance-2013.pdf

Land Alteration

The ENF indicates that the Project will alter approximately 8.05 acres of land associated with trenching (1.7 acres) and construction of the substation (6.35 acres). The DEIR should quantify the total amount of alteration associated with each project element and identify the location, type and amount of alteration in previously undisturbed areas. It should identify measures to reduce the amount of land alteration and, in particular, clearing of land.

Article 97 and Conservation Land

The Project may require legislative authorization for a conversion of land protected by Article 97. According to the ENF, Variants 2 (Utility ROW) and 3 (Bike Path) of the Preferred Route would each require one underground crossing of land subject to Article 97 jurisdiction. For Variant 2, the crossing would occur within an existing utility easement. The Noticed Alternative would cross an open space parcel within the utility ROW owned by the Town of Barnstable and managed by the Barnstable Conservation Commission that is shown on MassGIS as subject to Article 97 jurisdiction.

A change in use of Article 97 land requires legislative authorization and compliance with the Executive Office of Energy and Environmental Affairs (EEA) Article 97 Land Disposition Policy (Article 97 Policy). A primary goal of the Policy is to ensure no net loss of Article 97 lands under the ownership and control of the Commonwealth. Allowances are made within the Policy for exceptional dispositions. The DEIR should provide an update on proposed conversion of Article 97 land. The DEIR should describe how the project will be consistent with the EEA Article 97 Land Disposition Policy, including an alternatives analysis and identification of mitigation.

The Project may require a release or modification of conservation restrictions on parcels along Variant 4 and the Noticed Alternative. Variant 4 (Great Island Landfall Site) would be located within the 90-acre Great Island parcel, which is designated a private open space and held in perpetuity under a CR by the Chase Family and Trustees of Reservations. The Noticed Alternative would cross several contiguous parcels within the utility ROW on which the Barnstable Conservation Commission holds a CR. These open space parcels are located north of Communication Way and directly west of the Barnstable Switching Station. The DEIR should address whether the Project will require the release or modification of any restrictions.

Traffic and Transportation

The Project requires a Non-Vehicular Access Permit, Road Crossing Permits, and a Rail Division Use and Occupancy License from MassDOT. All onshore export cables will be buried within concrete duct banks, primarily within paved public roadway layouts with some shorter stretches in existing utility transmission ROW, a MassDOT-owned railroad ROW, and possibly along a MassDOT-proposed bike path corridor. The majority of these roads are maintained by the Towns of Yarmouth or Barnstable. The Preferred Route will cross state highways at three locations: an open trench crossing of Route 28 in Yarmouth, and two crossings beneath bridge spans of Route 6 at Willow Street in Yarmouth and Mary Dunn Road in Barnstable.

Traffic impacts are limited to the construction period. The ENF indicates that the Proponent has consulted with MassDOT regarding proposed open trenching. The Proponent will work closely with the municipalities and MassDOT to develop Traffic Management Plans (TMPs) to evaluate construction-related traffic impacts, maintain safe and efficient access for all modes of travel in the vicinity of access points to the ROW, and propose mitigation including night work, signage, and similar measures. The TMP will be submitted for review and approval by appropriate municipal authorities. As part of a Host Community Agreement, the Proponent proposes to pay for the town to hire a construction monitor to ensure compliance with the TMP and communicate with the town and address any resident concerns during construction.

The Proponent and MassDOT should coordinate appropriate times, length and management of roadway shutdowns to limit impacts to travelers. The DEIR should address MassDOT's suggestion regarding adoption of a Temporary Traffic Control Plan (TTCP). The DEIR should include a construction management plan that will minimize impacts and duration of work within the state highway layout. Review and approval of the TMPs will likely occur in conjunction with the MassDOT permitting process. The DEIR should provide an update on any consultations with MassDOT. The DEIR should provide an outline of the TMPs and describe potential construction sequencing and its impacts to traffic, particularly on local roadways in Yarmouth and Barnstable.

Noise

The DEIR should include a noise study to assess impacts associated with the operation of the substation. It should identify any expected increases in sound levels in residential areas. It should identify measures to reduce impacts including noise muffling design and maintenance of a wooded buffer between the facility and residences.

Water Supply

The Project is located within the Cape Cod's Sole Source Aquifer and will pass through the Zone I and Zone II of several public water supply wells in the Towns of Yarmouth and Barnstable. The proposed substation site will be located within the Barnstable Groundwater (GW) Protection Overlay and Wellhead (WH) Protection Overlay Districts and is directly upstream from Barnstable's public water supply wells. The GW and WH districts include limitations on hazardous substance use, generation, storage, and disposal, as well as limits on areas of disturbance and impervious surface. The ENF indicates that the substation will be designed and constructed to provide full containment of any fluids within substation equipment. The ENF notes that although there is a low probability of any leakage, the Proponent will commit to such containment, given the sensitive nature of the Cape Cod watershed and based on consultations with local officials and comments at public meetings.

Comments from the Town of Barnstable identify concerns regarding drinking water supply contamination and identify the need for additional information and analysis in the DEIR. The DEIR should describe how groundwater will be protected from potential contaminants including provision of full containment of all fluids within substation equipment. The DEIR should describe the project's compliance with the Massachusetts Drinking Water Regulations (310 CMR 22.00). The DEIR should demonstrate that the project will not have a significant adverse impact on water quality pursuant to 310 CMR 22.21(1)(b)(5). According to comments from MassDEP, the Project will require approval of a

utility easement within a Zone I including, but not limited to, no fueling, no storage of oil and hazardous material (OHM), regular inspection for leaks, accessible spill containment materials, and a spills contingency plan. The DEIR should confirm that the use of fertilizers, pesticides, herbicides, and other non-mechanical means of vegetation control will be prohibited within the area subject to any easement. The DEIR should describe measures to ensure the prevention of a release of OHM during construction in the Zone I. The DEIR should describe the potential for any leaching of cable materials into surrounding soils and groundwater. The DEIR should demonstrate that cable installation will not create a preferential pathway for contamination transport into the Zone I of Yarmouth well 4351000-02G. The Proponent should consult with the Town of Barnstable regarding its concerns regarding water supply.

Cultural Resources

Both offshore and onshore components of the Project are located in areas with significant cultural resources associated with ancient and historic period Native American activities and colonial settlement. In addition to the high density of shipwrecks, coastal waters affected by the project may include submerged ancient Native American cultural resources. The Project route contains numerous historic and archaeological resources which are either listed in the State and/or National Register of Historic Places, Inventory, or within local historic districts. It will require review from MHC pursuant to the Programmatic Agreement with BOEM as part of Section 106 of the NHPA. BUAR issued a Special Use Permit on September 28, 2017 for a marine archaeological reconnaissance survey in Barnstable, Martha's Vineyard, Nantucket, and Yarmouth. Activities allowed under this permit include archaeological reconnaissance and remote sensing, video documentation, benthic grab sample collection, and vibracore sampling in the permit area. MHC issued an archaeological permit to conduct a terrestrial archaeological reconnaissance survey for the onshore segment of the project.

The DEIR should review historic records and provide the results of surveys requested by BUAR and MHC. The Proponent should coordinate its planned marine surveys with BUAR, CZM and DMF to address data collection, including systematic sub-bottom coring and collection of geophysical data. The DEIR should evaluate any impacts to historic resources along the overland cable route. The Proponent should consult with MHC to develop and conduct a detailed archaeological sensitivity assessment for the project and provide the results in the DEIR. I encourage the Proponent to consult with local historical commissions. The DEIR should provide an update on consultations and the results of studies and surveys conducted. It should include measures to avoid, minimize and/or mitigate impacts.

Port Facilities

The Proponent intends to use the New Bedford Marine Commerce Terminal facility, owned by the Massachusetts Clean Energy Center (MassCEC), for construction staging. The 26-acre facility is located on the City of New Bedford's industrial waterfront and was built to support offshore wind energy projects. The terminal is just upstream of the ACOE's hurricane barrier and has access to interstate highways. The facility is located within a Designated Port Authority (DPA). The facility will be used to offload, prepare, and load components for delivery to the wind turbine array area for installation. The Proponent may stage activities from other Massachusetts or Atlantic ports. The DEIR should describe potential use of port facilities.

Hazardous Materials

According to MassDEP, a number of disposal sites are located within the Project area which were previously or are currently regulated under M.G.L c.21E and the Massachusetts Contingency Plan (MCP) (310 CMR 40.0000). Sites which are open (active) require continued response actions under the MCP. The presence of these disposal sites increases the likelihood of encountering hazardous materials during the construction process. The DEIR should provide a brief summary of the response actions along the project area to date. The DEIR should describe how the project will comply with M.G.L. c. 21E during construction.

The Proponent is advised that excavating, removing, and/or disposing of contaminated soil, pumping of contaminated groundwater, or working in contaminated media must be done under the provisions of M.G.L. c. 21E and the Occupational Safety and Health Act (OSHA). If oil and/or hazardous material are identified during the implementation of the project, notification pursuant to the MCP must be made to MassDEP, if necessary. A Licensed Site Professional (LSP) should be retained for this project given the potential impact of MCP-regulated sites on the proposed construction activities. The LSP may evaluate whether risk reduction measures are necessary to mitigate the presence of contamination. The Proponent should prepare a Spills Contingency Plan.

Decommissioning

The DEIR should discuss the anticipated lifespan of the proposed project and identify decommissioning plans, including the process, timeline, methodology, and funding mechanism. The DEIR should describe potential impacts and identify measures to avoid, minimize, and mitigate impacts associated with the decommissioning process.

Construction Period

The Project must comply with MassDEP's Solid Waste and Air Quality Control regulations, pursuant to M.G.L. Chapter 40, Section 54, during construction. All construction activities should be undertaken in compliance with the conditions of all State and local permits. The DEIR should discuss potential construction period activities and related permitting requirements. The ENF indicates that an Environmental Inspector will provide oversight of construction activities.

The DEIR should describe potential construction period impacts associated with offshore and onshore elements (including but not limited to land disturbance, traffic management, materials management, parking, air quality, noise impacts, water quality, habitat, etc.) and outline feasible measures that can be implemented to eliminate or minimize these impacts in a draft Construction Management Plan (CMP). The draft CMP should identify construction methodology, staging areas and how traffic within the project area will be safely maintained. The DEIR should also address TOY restrictions and notification regarding timing and location of marine installation. It should identify notification and construction protocols to be implemented if contamination is encountered during construction. The DEIR should quantify and characterize the material to be generated and define waste management and diversion goals to be implemented by the contractors constructing the project. The DEIR should discuss the solid waste and air quality regulatory requirements raised in MassDEP's comment letter.

I strongly encourage the Proponent to adopt measures to reduce air quality impacts from certain categories of construction vehicles. The DEIR should provide information on the emission controls that will be used for all on-site construction vehicles in an effort to minimize construction vehicle emissions. The DEIR should provide a discussion on using construction equipment with engines manufactured to Tier 4 federal emission standards or best available control technology (BACT). I remind the Proponent that EPA has mandated that Ultra Low Sulfur Diesel (ULSD) fuel be used in all off-road construction equipment. The DEIR should confirm that the project will require its construction contractors to use ULSD fuel in off-road equipment and indicate whether it will incorporate additional measures to minimize construction-period emissions. The DEIR should address how the project will support compliance with the Massachusetts Idling regulation at 310 CMR 7.11.

Mitigation and Section 61 Findings

The DEIR should include a separate chapter summarizing proposed mitigation measures. This chapter should include draft Section 61 Findings for each State Agency that will issue permits for the Project. The DEIR should contain clear commitments to implement mitigation measures, estimate the individual costs of each proposed measure, identify the parties responsible for implementation, and contain a schedule for implementation.

Responses to Comments

The DEIR should contain a copy of this Certificate and a copy of each comment letter received. In order 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, and shall not be construed, to enlarge the scope of the DEIR beyond what has been expressly identified in this certificate. I recommend that the Proponent use either an indexed response to comments format, or a direct narrative response.

Circulation

In accordance with Section 11.16 of the MEPA Regulations and as modified by this Certificate, the Proponent should circulate a hard copy of the DEIR to each State Agency and municipal agency from which the Proponent will seek permits or approvals. The Proponent must circulate a copy of the DEIR to all other parties that submitted individual written comments.

In accordance with 301 CMR 11.16(5), the Proponent may circulate copies of the DEIR to these other parties in CD-ROM format or by directing commenters to a project website address. However, the Proponent should make available a reasonable number of hard copies to accommodate those without convenient access to a computer and distribute these upon request on a first-come, first-served basis. The Proponent should send correspondence accompanying the CD-ROM or identifying the website address of the online version of the DEIR and indicate that hard copies are available upon request, noting relevant comment deadlines, and appropriate addresses for submission of comments. An electronic copy of the filing should also be provided to the MEPA Office on a CD-ROM or USB drive. A copy of the DEIR should be made available for review at the public library in Yarmouth, Barnstable, Edgartown, Mashpee and Nantucket.

February 9, 2018
Date

Matthew A. Beaton

Comments received:

01/25/2018	Massachusetts Historical Commission (MHC)
01/30/2018	Massachusetts Office of Coastal Zone Management (CZM)
01/30/2018	Massachusetts Natural Heritage and Endangered Species Program (NHESP)
01/30/2018	Massachusetts Department of Transportation (MassDOT)
01/30/2018	Massachusetts Division of Marine Fisheries (DMF)
01/31/2018	Massachusetts Department of Environmental Protection (MassDEP)
01/30/2018	State Senator Julian Cyr and State Representative Dylan Fernandes
01/22/2018	Cape Cod Commission (CCC)
01/30/2018	Martha's Vineyard Commission (MVC)
02/06/2018	MVC (2)
01/26/2018	Town of Yarmouth
01/30/2018	Town of Barnstable
01/30/2018	Town of Chatham Department of Natural Resources Shellfish Division
01/29/2018	Acadia Center
01/29/2018	Association to Preserve Cape Cod (APCC)
01/29/2018	Massachusetts Lobstermen's Association, Inc. (MLA)
01/29/2018	Associated Industries of Massachusetts (AIM)
01/30/2018	Alliance to Protect Nantucket Sound
01/30/2018	Conservation Law Foundation (CLF)
01/30/2018	National Wildlife Federation
01/30/2018	Mass Audubon
01/30/2018	Environmental League of Massachusetts (ELM)
01/17/2018	Hyannis Park Civic Association, Lewis Bay Neighborhood Association, Wimbledon Shores Beach Association, Acres of Pines Beach Association, Crowell Beach Association, Ocean Harbor Estates, Grist Mill Village Civic Association and Great Island Associates
01/06/2018	Arthur and Judith Warren
01/06/2018	Anne and Robert Monaldo
01/06/2018	Joanne Shamp
01/06/2018	Dan and Karen Crowley
01/06/2018	M. Teresa Preziosi
01/06/2018	Raymond Barce
01/06/2018	Thomas and Sharon Bryan
01/06/2018	Joann Barce
01/06/2018	Katherine F. DiTrapano
01/06/2018	Jay and Janice Burke

01/06/2018	Mr. and Mrs. Denis E. Vachon
01/06/2018	Kevin and Jess Crowley
01/06/2018	Martha and Ron Turner
01/07/2018	Marlene Bartos
01/07/2018	Elizabeth M. and Richard F. Powell
01/07/2018	Elissa Arffa
01/07/2018	Zabelle and Joseph D'Amico (1)
01/07/2018	Kathleen Schatz
01/07/2018	Marianne Sforza
01/07/2018	John and Joyce Tobin
01/07/2018	Margaret and James Flagg (1)
01/07/2018	Michelle Conover
01/07/2018	David L. Korn
01/07/2018	Sonia Lingos
01/07/2018	Jarod Korn
01/08/2018	Joanna DiTrapano
01/08/2018	Carl Kovamees
01/08/2018	Ann MacDonald
01/08/2018	Richard Bevilacqua
01/08/2018	Peter and Diane DeFalco
01/08/2018	Ethel and George Poulos
01/08/2018	John and Effie Lagadinos
01/09/2018	Sean and Kelly Jancski
01/09/2018	Maureen T. MacKay
01/09/2018	Tom Durkin (1)
01/10/2018	Mardi Sawyer
01/11/2018	Steve Rooney
01/12/2018	Andrea Gottfried
01/13/2018	Penny Berrier
01/13/2018	Aileen
01/15/2018	Maryellen Mara-Christian and Mark Christian
01/15/2018	David Bernstein
01/15/2018	Kerry Diomandes
01/16/2018	Ann Berwick
01/16/2018	Michael B. Jacobs, Chairman, Vineyard Power Co-operative, Inc.
01/17/2018	Herb Rice
01/17/2018	Dick Elkin
01/17/2018	Anne S. Mazar
01/17/2018	Megan Amsler
01/17/2018	Laura Plunkett
01/17/2018	Matilda Brett
01/17/2018	Peter Waasdorp
01/17/2018	David Mead-Fox
01/17/2018	Richard Toole
01/18/2018	Lisa Coedy
01/18/2018	Robert Boettger

01/18/2018	Robert Manz
01/18/2018	Kirstin Moritz
01/18/2018	Daniel D. Ewing III
01/18/2018	Jan Kubiac
01/18/2018	Angela Carbone
01/18/2018	Roderick Robertson
01/18/2018	Kathleen E. Campbell
01/19/2018	Alyssa Greeley
01/19/2018	Jan Hively
01/19/2018	Carol Ewing
01/19/2018	Dr. W. J. Overholtz
01/19/2018	Susan Starkey
01/20/2018	Kristie Kapp
01/20/2018	Richard and Linda Loring
01/22/2018	Linda Genovese
01/22/2018	Robert Genovese
01/22/2018	Charles Grant Walker
01/22/2018	Gail Benson
01/22/2018	Scott T. McGraw
01/23/2018	Conrad Geyser
01/23/2018	Tom Durkin (2)
01/24/2018	Ellen Marchisio
01/24/2018	Jean Stern
01/25/2018	Rosemary Dreger Carey
01/25/2018	Don Mallinson
01/25/2018	Pauline and Frank Fioilla (sp)
01/25/2018	Roy Mackintosh
01/25/2018	Zabelle and Joseph D'Amico (2)
01/26/2018	Nicole Morris-McLaughlin
01/26/2018	Justin Ingold
01/26/2018	Daniel H. Webb
01/26/2018	Laurie Clifford
01/26/2018	Sofia S. Lingos
01/27/2018	John Hickey
01/27/2018	Deborah and Eleanor M. Hochanadel
01/28/2018	William Bridwell
01/28/2018	Tara Andreola
01/28/2018	Margaret and James Flagg (2)
01/28/2018	Judith Nadeau, Jim and Melanie McManus, and Joan Burke
01/29/2018	Elizabeth McNamara
01/29/2018	Richard R. Bennett
01/29/2018	Joyce and Bill Cullen
01/29/2018	Claire Linnan (duplicate email on 01/30/2018)
01/29/2018	Michael J. Holyoak
01/29/2018	A. Douglas Peabody
01/29/2018	Heidi Cadman

01/29/2018	Linda Nolan
01/29/2018	Ann Simeone
01/29/2018	Gwen Brickett and Charles vonLaudermann
01/29/2018	Helen
01/29/2018	Linda and Richard Lombard
01/29/2018	Vida Morris
01/29/2018	Jim Reed
01/29/2018	Margaret Goud Collins
01/29/2018	Quinton Zondervan
01/29/2018	Tom Hodgson
01/29/2018	Margaret and Anne McNamara
01/29/2018	Patricia and Paul Demers
01/29/2018	Chris Greeley
01/29/2018	Joyce Flynn
01/30/2018	Jay Burnett
01/30/2018	Michelle Sgarlat
01/30/2018	John C. Henderson
01/30/2018	Mark Kozma
01/30/2018	Elizabeth Arden
01/30/2018	Joan E. and Denise K. Cummings
01/30/2018	Lucinda Van Doren-Abrecht
01/30/2018	Susan Brita
01/30/2018	Lori and Will Donnellan
01/30/2018	The Peri Family
01/30/2018	Peri S. Wentworth
01/30/2018	Michael Carroll
01/30/2018	J. Gregory Milne
01/31/2018	No Name
01/31/2018	Christine Gault
01/31/2018	Matthew E. White

MAB/PPP/ppp