Appendix J Finding of Adverse Effect for the New England Wind Project Construction and Operations Plan

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Abbreviations and Acronyms

ACHP	Advisory Council on Historic Preservation
ADLS	aircraft detection and lighting system
APE	area of potential effects
BOEM	Bureau of Ocean Energy Management
CFR	Code of Federal Regulations
COP	construction and operations plan
EIS	environmental impact report
ESP	electrical service platform
ft	feet
mi	mile
MOA	Memorandum of Agreement
MW	megawatt
NEPA	National Environmental Policy Act
NHL	National Historic Landmark
NHPA	National Historic Preservation Act
NOI	Notice of Intent
NPR	National Park Service
NRHP	National Register of Historic Places
OCS	Outer Continental Shelf
OECC	offshore export cable corridor
OECR	onshore export cable route
Q&A	questions and answers
ROW	right-of-way
SCV	South Coast Variant
SFH	Shootflying Hill
SHPO	State Historic Preservation Officer
SWDA	Southern Wind Development Area
TCP	traditional cultural property
USC	U.S. Code
WTG	wind turbine generator
ZVI	zone of visual influence

J Finding of Adverse Effect for the New England Wind Project Construction and Operations Plan

The Bureau of Ocean Energy Management (BOEM) has made a Finding of Adverse Effect (Finding) under Section 106 of the National Historic Preservation Act (NHPA) pursuant to Code of Federal Regulations, Title 36, Section 800.5 (36 CFR § 800.5) for the New England Wind Project (proposed Project), consisting of construction and installation (construction), operations and maintenance (operations), and conceptual decommissioning (decommissioning) of an offshore wind energy project, as described in the proposed Project's Construction and Operations Plan (COP). BOEM finds that the undertaking would adversely affect the following historic properties:

- Gay Head Lighthouse;
- Nantucket Historic District National Historic Landmark (Nantucket District NHL);
- Chappaquiddick Island traditional cultural property (TCP);
- Moshup's Bridge and Vineyard Sound TCP;
- Nantucket Sound TCP, including 19 ancient submerged landform features that contribute to the TCP;
- Edwin Vanderhoop Homestead (Aquinnah Cultural Center);
- Gay Head-Aquinnah Shops Area; and
- 33 ancient submerged landform features on the Outer Continental Shelf (OCS) outside of these TCPs.

Resolution of adverse effects on historic properties will be codified through a Memorandum of Agreement (MOA) pursuant to 36 CFR § 800.6(c) (see Attachment J-1).

J.1 Description of the Undertaking

In the proposed Project COP (originally submitted on June 2, 2020, and comprehensively revised in December 2021 and April and May 2022), Park City Wind, LLC (Park City Wind or the applicant) proposes construction, operations, and decommissioning of an offshore wind energy project that would generate at least 2,036 megawatts (MW) and up to 2,600 MW of wind energy in two phases within BOEM Renewable Energy Lease Area OCS-A 0534 and potentially a portion of Lease Area OCS-A 0501, hereafter together referenced as the Southern Wind Development Area (SWDA) (Figures J-1 and J-2). If approved by BOEM, the applicant would construct and operate wind turbine generators (WTG) and electrical service platforms (ESP), an export cable to shore, and associated facilities for a 30-year term. BOEM is conducting its environmental and technical reviews of the COP (Epsilon 2022) under the National Environmental Policy Act (NEPA) for its decision regarding approval, disapproval, or approval with modifications of the proposed Project COP. The Draft Environmental Impact Statement (EIS) and COP for the proposed Project are available on the Project-specific website (https://www.boem.gov/renewable-energy/state-activities/new-england-wind-formerly-vineyard-wind-south). The EIS considers the potential impacts of the proposed Project, including impacts on cultural resources.

¹ The developer of the Vineyard Wind 1 Project (Vineyard Wind 1, LLC) will assign spare or extra positions in the southwestern portion of OCS-A 0501 to the applicant for the proposed Project if those positions are not developed as part of the Vineyard Wind 1 Project.

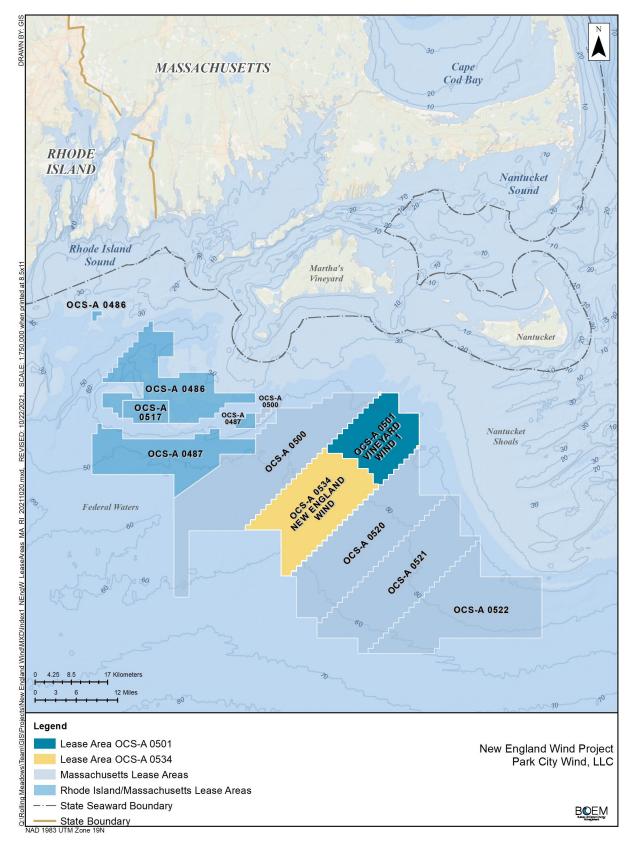


Figure J-1: Proposed Wind Development Area Relative to Rhode Island and Massachusetts Lease Areas

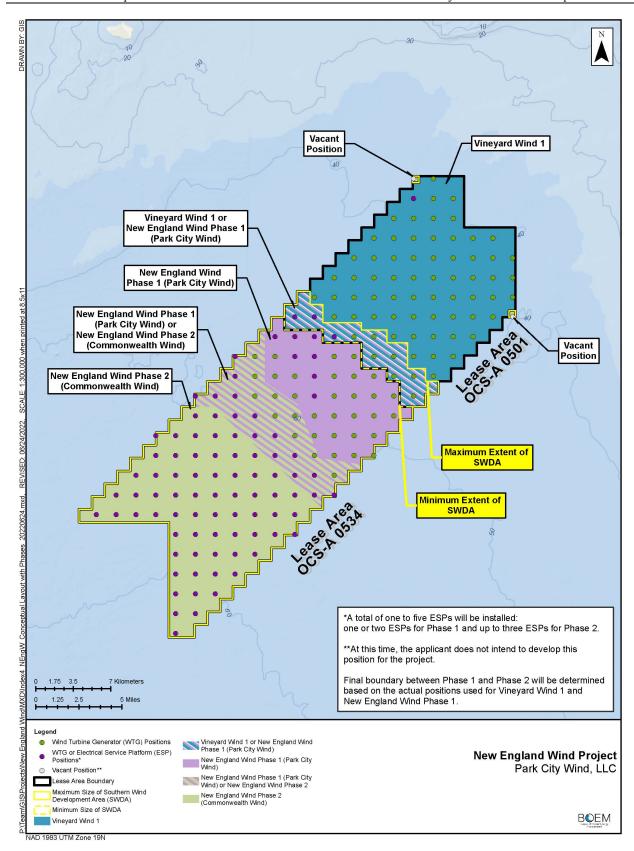


Figure J-2: Proposed Project Overview

BOEM has determined that construction, operations, and decommissioning constitute an undertaking subject to Section 106 of the NHPA (U.S. Code, Title 54 Section 306108 [54 USC § 306108]) and its implementing regulations (36 CFR Part 800), and that the activities proposed under the COP have the potential to affect historic properties.

J.1.1 Background

In 2014, BOEM prepared an environmental assessment to analyze the environmental impacts associated with issuing commercial wind leases and approving site assessment activities within the Massachusetts wind energy area (BOEM 2014). Additionally, in May 2012, BOEM executed the Massachusetts and Rhode Island Programmatic Agreement (BOEM 2012a) and concurrently conducted a NHPA Section 106 review of its decision to issue commercial leases within the Massachusetts wind energy area (BOEM 2012b). On April 1, 2015, BOEM held a competitive leasing process as prescribed in 30 CFR § 585.211 and awarded Lease Area OCS-A 0501 to Vineyard Wind 1, LLC. Subsequently, Vineyard Wind submitted a Site Assessment Plan for the installation of meteorological buoys, which BOEM reviewed under NHPA Section 106, resulting in its October 6, 2017, *Finding of No Historic Properties Affected* (BOEM 2017a).

On June 28, 2021, BOEM assigned 65,296 acres of Lease Area OCS-A 0501 to Vineyard Wind 1, LLC. The remaining 101,590 acres, which were designated Lease Area OCS-A 0534 and where most of the proposed Project would be developed, were assigned to the applicant (Figure J-1).² A small portion of Lease Area OCS-A 0501 not used for development of Vineyard Wind 1 Project may also be developed as part of the proposed Project. The applicant has the exclusive right to submit a COP for activities within Lease Area OCS-A 0534.³ On September 21, 2021, a restructuring of the project's parent company resulted in Avangrid Renewables taking full ownership of Lease Are OCS-A 0534. In October 2021, the project name changed from Vineyard Wind South to New England Wind to reflect the restructuring of the proposed Project's parent company.

J.1.2 Undertaking

The applicant proposes to construct, operate, and eventually decommission the proposed Project, which would consist of up to 130 WTG and up to 5 ESP positions and would be developed in two phases. Phase 1, also known as the Park City Wind Project, would deliver approximately 804 MW through the installation of 41 to 62 WTGs and one to two ESPs immediately southwest of the Vineyard Wind 1 Project, which is currently under construction. Phase 2, also known as the Commonwealth Wind Project, would deliver at least 1,232 MW through the installation of an additional 64 to 88 WTG/ESP positions, immediately southwest of Phase 1. The applicant would install up to five offshore export cables (two for Phase 1 and two to three for Phase 2) in an offshore export cable corridor (OECC) that would transmit the electricity generated by the WTGs to landing sites (one for each phase) in the Town of Barnstable, Massachusetts, and then to onshore export cable routes (OECR) (one for each phase) and one or more substation sites in the Town of Barnstable for interconnection with the regional electrical grid (Figures J-3 and J-4). Other proposed Project components would include onshore operations facilities within existing developed ports in the region.

² Except for the description of lease area, which now reflects the two different lease areas, the terms, conditions, and stipulations of the two leases, including the lease effective date of April 1, 2015, remain the same.

³ Lessees may request to assign a portion of their lease to another qualified legal entity.

If technical, logistical, or other unforeseen issues prevent all Phase 2 export cables from being installed in the proposed OECC, the applicant would develop and use the Western Muskeget Variant (Figure J-3) for one or more cables.

If technical, logistical, grid interconnection, or other unforeseen issues prevent all Phase 2 export cables from interconnecting at a substation site in the Town of Barnstable, the applicant would develop and use the South Coast Variant (SCV) in place of or in addition to the currently proposed Phase 2 OECC and OECR. The SCV OECC would extend from the SWDA to a landing site and OECR in Bristol County, Massachusetts (Figure J-3). The applicant has provided information on the portion of the SCV OECC outside of the 3-nautical-mile (3.4-mile) limit of territorial waters (i.e., "federal waters"). The applicant has not provided information on grid interconnection routes, onshore cable routes, landfall locations, and nearshore cable routes in Bristol County. Therefore, this Finding of Adverse Effect only evaluates the portion of the SCV in federal waters. If the applicant determines that the SCV is necessary, phased identification and evaluation of historic properties for the remainder of the SCV would be completed at that time, pursuant to 36 CFR § 800.4(b)(2). BOEM would conduct Section 106 consultation for the remainder of the SCV with the Massachusetts State Historic Preservation Officer (SHPO), Advisory Council on Historic Preservation (ACHP), federally recognized Tribal Nations, and other identified consulting parties, and the effects of the SCV to historic properties would be evaluated in a separate Finding and supplemental NEPA analysis.

If the SCV is used and information pertaining to identification of historic properties would not be available until after the Record of Decision is issued, BOEM will use the MOA (Attachment J-1) to establish commitments for phased identification and evaluation of historic properties within the area of potential effects (APE) in accordance with BOEM's existing *Guidelines for Providing Archaeological and Historic Property Information Pursuant to 30 CFR Part 585* and ensure potential historic properties are identified, effects assessed, and adverse effects resolved prior to construction.

J.1.3 Area of Potential Effects

The APE for this undertaking is defined by the Section 106 implementing regulations (36 CFR § 800.16[d]).

The geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The area of potential effects is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking.

BOEM (2020a) defines the undertaking's APE as the following:

- The depth and breadth of the seabed potentially affected by any bottom-disturbing activities, constituting the marine archaeological resources portion of the APE;
- The depth and breadth of terrestrial areas potentially affected by any ground-disturbing activities, constituting the terrestrial archaeological portion of the APE;
- The viewshed from which renewable energy structures, whether offshore or onshore, would be visible, constituting the viewshed portion of the APE; and
- Any temporary or permanent construction or staging areas, both onshore and offshore.

The SWDA, OECC, and terrestrial facilities make up the footprint of the proposed Project. The terrestrial archaeological resources portion of the APE (terrestrial APE), the marine archaeological resources portion of the APE (marine APE), and the APE for visual effects analysis (visual APE) are defined based on these proposed Project component footprints.

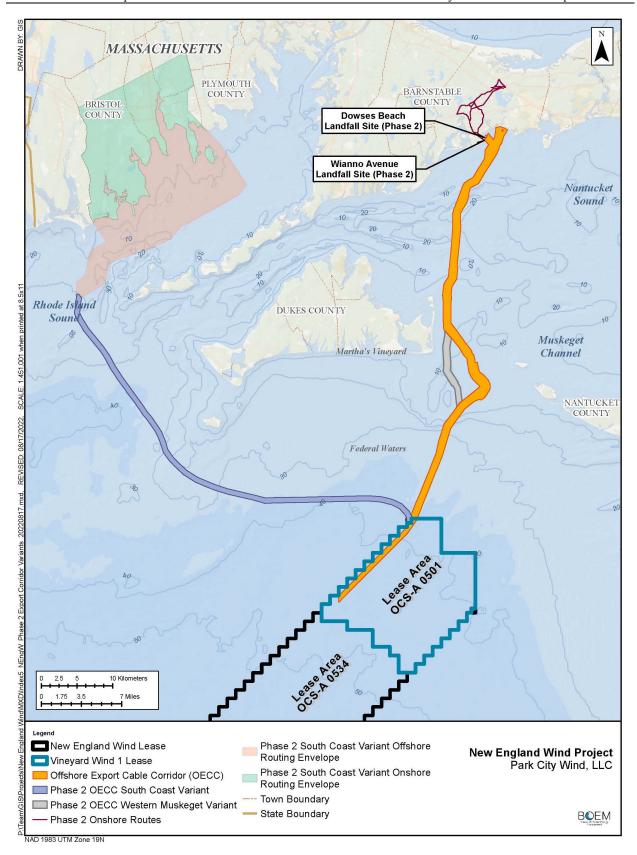


Figure J-3: Proposed Phase 2 Variants

J.1.3.1 Marine Area of Potential Effects

The marine APE includes the footprint for activities within the SWDA and OECC (Figure J-4). This includes areas affected by vessel anchors, the work zones around WTG and ESP positions, scour protection, inter-array cables, inter-link cables, offshore export cables, the portion of the SCV OECC in federal waters, and the Western Muskeget Variant of the OECC. Phase 1 would occupy 37,066 to 57,081 acres of the SWDA, while Phase 2 would occupy the remaining 54,857 to 74,873 acres, depending on the number of WTG and ESP positions used for each phase. Water depths in the SWDA range from 141 to 203 feet, and effects on the seafloor resulting from lift boat/jack-up vessels would be contained to the work zone around the WTGs and ESP(s) positions and OECC. The vertical APE is based on the maximum proposed disturbance depth defined within the proposed Project design envelope and varies by component, while the horizontal depth reflects the impacted area. Table J-1 summarizes the vertical and horizontal APE from each proposed Project offshore component.

Table J-1: Vertical and Horizontal Extent of the Marine Area of Potential Effects for the Proposed Project

Facility	APE	Extent (feet)
Cables	Vertical (below seafloor surface)	10
(Inter-array, inter-link, and OECC)	Horizontal	Entire SWDA and OECC
WTGs	Vertical	279
	Horizontal ^a	591
ESPs	Vertical	279
	Horizontal ^a	591

APE = area of potential effects; ESP = electrical service platform; OECC = offshore export cable corridor; SWDA = Southern Wind Development Area; WTG = wind turbine generator

The vertical APE for the cables is 10 feet below the seafloor surface, which is the maximum penetration depth of the anchors that may be used by vessels during cable installation. The target burial depth of the cables is 5 to 8 feet. The horizontal APE for the OECC is defined as the entire length and width of the OECC, which would extend up to 62.7 miles from the northernmost ESP in the SWDA to landfall sites in Barnstable County, with an average width of approximately 3,609 feet. If the applicant chooses to construct the SCV, the associated OECC would extend up to approximately 60 miles from the SWDA to a landfall site in Bristol County, including approximately 40 miles in federal waters. Because the applicant has only identified the federal waters portion of the SCV OECC (that portion beyond the 3-nautical-mile [3.5-mile] limit of the shore), the marine APE evaluated in this document only includes that area.

J.1.3.2 Terrestrial Area of Potential Effects

The terrestrial APE includes areas of potential ground disturbance associated with the onshore construction and operations of the proposed undertaking. The terrestrial APE is presented as part of the proposed Project design envelope, which includes the proposed substation sites, areas in and around the proposed landfall sites, as well as the OECR in the Town of Barnstable. Figure J-5 through J-8 show the terrestrial APE for both phases.

^a This is the maximum radius work zone around each WTG and ESP foundation where construction would occur.

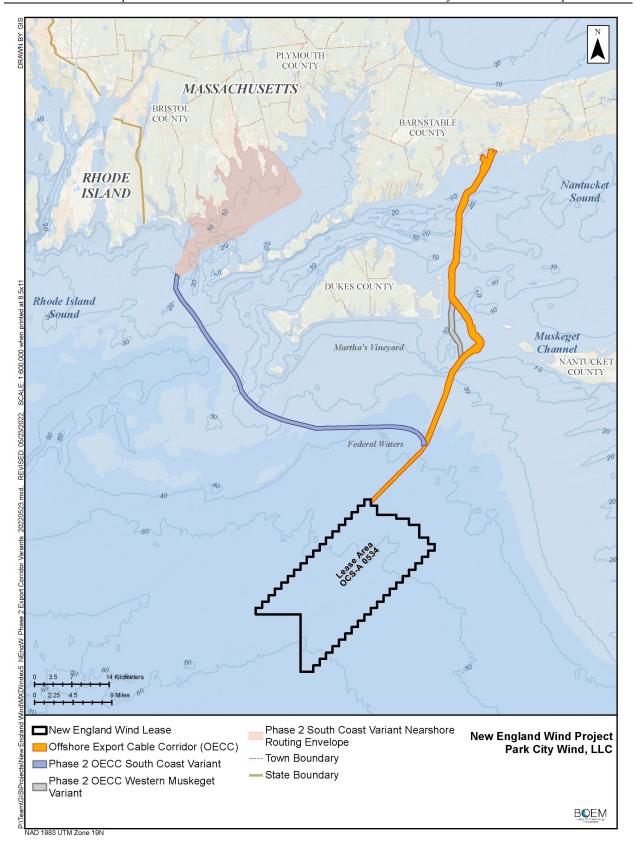
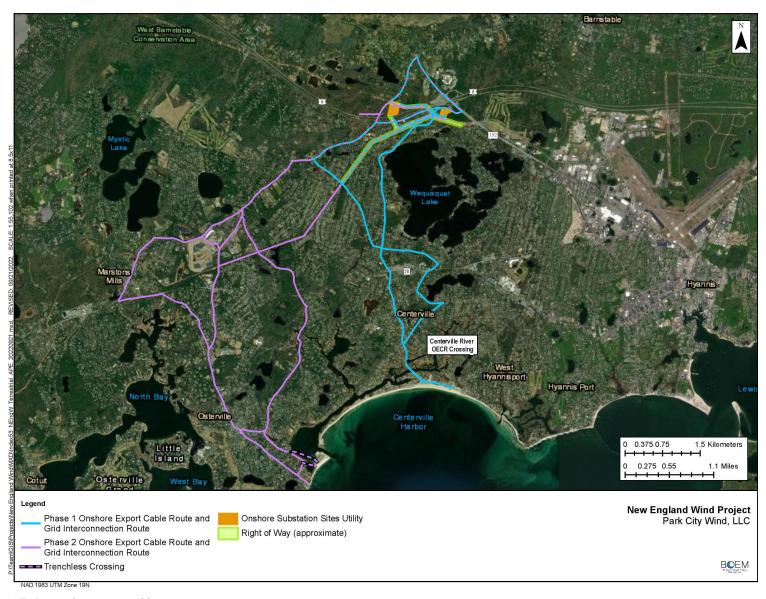


Figure J-4: Marine Area of Potential Effects

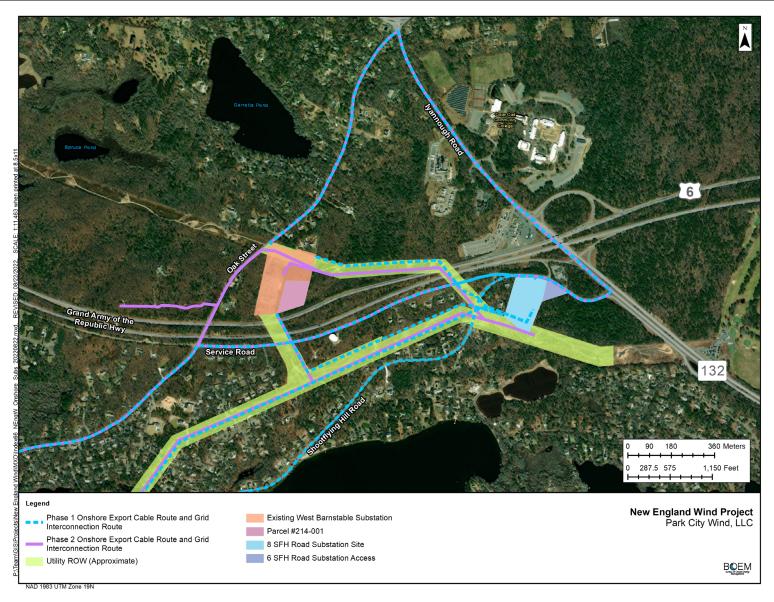


OECR = onshore export cable route

Figure J-5: Terrestrial Area of Potential Effects



Figure J-6: Terrestrial Area of Potential Effects, Phase 1 Landfall Sites



ROW = right-of-way; SFH = Shootflying Hill

Figure J-7: Terrestrial Area of Potential Effects, West Barnstable Substation Area



Figure J-8: Terrestrial Area of Potential Effects, Phase 2 Landfall Sites

Phase 1

The potential Phase 1 landfall sites at Covell's Beach or Craigville Beach, OECR and grid interconnection route options, 6 and 8 Shootflying Hill Road, the existing West Barnstable Substation, Parcel #214-001, and any temporary or permanent construction or staging areas, both onshore and offshore, comprise the APE for Phase 1's direct physical effects (Figures J-5 through J-7). During Phase 1, ground-disturbing activities would occur at the selected landfall site, along the OECR (including the Centerville River crossing and associated construction, staging, and laydown areas) and grid interconnection route, and at the onshore substation sites and associated parcels. The cable landfall would be accomplished with trenchless methods. The Phase 1 OECR would follow one of two potential routes depending on which landing site is chosen. These routes would extend approximately 4 to 6.5 miles in a northward direction to the Phase 1 onshore substation site near the existing West Barnstable Substation. The OECR would be installed underground primarily through trenching within or adjacent to existing roads and utility right-of-way (ROW). The OECR would include manhole covers at the landfall sites and along the selected route.

The Phase 1 onshore substation would be constructed at 8 Shootflying Hill Road on a privately owned 6.7-acre parcel of land. It would result in ground-disturbing activities associated with the removal of the existing Knights Inn Motel and its associated parking lot, and construction of the substation. The applicant has also secured an option to purchase a 1-acre parcel at 6 Shootflying Hill Road, immediately northeast of the proposed substation site, which would be used for an improved access road to the onshore substation site.

The Phase 1 OECR would cross the Centerville River. The applicant's preferred crossing methods are trenchless (microtunnel, horizontal directional drilling, and direct pipe), and would not disturb the surface or river bottom (COP Volume I, Section 3.3.1.10; Epsilon 2022). If these methods prove infeasible, the applicant would construct a utility bridge northeast (upstream) of the existing Craigville Beach Road bridge. The utility bridge would be an aboveground, independent structure parallel to and approximately 3 feet from the existing road bridge.

The applicant has secured an approximately 2.8-acre parcel, identified as assessor map parcel #214-001, immediately southeast of the West Barnstable Substation. This parcel could be used as the northern terminus of a trenchless OECR crossing of State Route 6, as well as the location of some substation structures currently intended for the 8 Shootflying Hill Road site.

Phase 2

During Phase 2, ground-disturbing activities would occur at the selected landfall site at either Dowses Beach or Wianno Avenue (Figure J-8), along the OECR and grid interconnection route (Figure J-5), and at the onshore substation sites and associated parcels (i.e., the same sites and parcels described for Phase 1; Figure J-7). Both Phase 2 landfall sites in the Town of Barnstable, all potential Phase 2 OECR and grid interconnection route options, and any temporary or permanent construction or staging areas, both onshore and offshore, are included in the APE (Figure J-6).

The potential Phase 2 landfall sites at Dowses Beach or Wianno Avenue, OECR and grid interconnection route options, 6 and 8 Shootflying Hill Road, the existing West Barnstable Substation, and Parcel #214-001 comprise the APE for Phase 2's direct physical effects.

J.1.3.3 Visual Area of Potential Effects

Using BOEM's (2020a) definitions, the visual area of effects is the viewshed from which renewable energy structures, whether offshore or onshore, would be visible (Figure J-9). As such, the APE will include areas from which the proposed undertaking would, with some certainty, be visible and recognizable under a reasonable range of meteorological conditions.

Offshore Visual Area of Potential Effects

The WTGs would be the tallest and most visible component of the proposed undertaking, with a nacelle-top height of 725 feet above mean lower low water and a maximum vertical blade-tip extension of 1,171 feet mean lower low water for both phases. As a result, the visual APE for the WTGs encompasses that of the ESPs, which would be substantially shorter. With this height, curvature of the earth, and during optimal viewing conditions (i.e., an absence of haze, fog, sea spray, etc.), the maximum theoretical distance from which the top of the nacelles (where required Federal Aviation Administration hazard lighting would be placed) could potentially be visible is 37.5 miles.

Taking into consideration this range of visibility, the applicant identified a zone of visual influence (ZVI). The ZVI includes land areas within the 37.5-mile maximum theoretical area of nacelle visibility where proposed WTGs could most likely be visible, based on topography, vegetation, and existing structures. While blade tips extending above nacelle top could theoretically be visible from larger distances, the ZVI represents ideal viewing conditions where the proposed WTGs would most likely be perceptible by viewers in reality. The applicant identified portions of the ZVI where both the nacelle and blades could be visible and where only the blades (i.e., the portion of the blades that extend above the nacelle) would be visible using geographic information system viewshed analyses that incorporated light detection and ranging data. EIS Section 3.17, Scenic and Visual Resources, and EIS Appendix I, Seascape and Landscape Visual Impact Assessment, used 40 nautical miles (46 miles) as the limit for seaward views.

Studies of onshore and offshore visibility (Sullivan et al. 2012, 2013) suggest that the extinction point for views of WTGs and other structures is much less than 40 nautical miles (46 miles); therefore, 40 nautical miles is used here as an intentionally conservative outer limit for visibility.

Mainland landfall sites, export cables within the OECC, and inter-array and inter-link cables within the SWDA would all be below the surface of the ocean or land, and thus would not generate visual effects beyond the temporary presence of construction vessels.

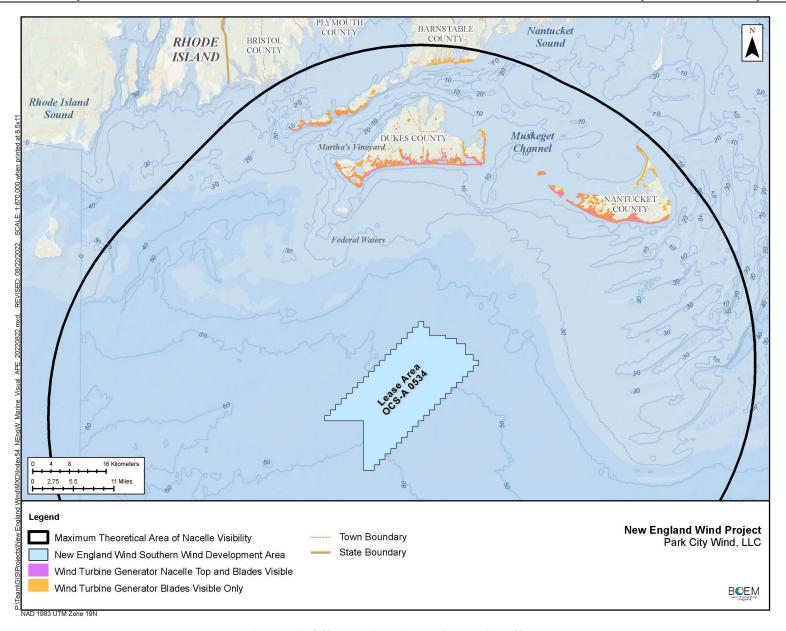


Figure J-9: Offshore Visual Area of Potential Effects

Onshore Area of Potential Effects for Direct Visual Effects

The proposed undertaking onshore facilities would generate direct visual effects near the onshore substation sites and parcels and at the Centerville River crossing, if an aboveground crossing technique is used for the Phase 1 OECR (Figures J-10 and J-11). A 0.25-mile buffer surrounding these sites encompasses the potential visual effects from the proposed undertaking construction and operations. After construction, the applicant would plant vegetative screening on the western and northern boundaries of the 8 Shootflying Hill Road onshore substation site to limit visibility from existing residences. The eastern boundary would be developed into a perimeter access drive, and the abutting land is undeveloped wooded land. The entire site would have a perimeter access fence, and the western edge could have attenuation walls, if necessary.

In addition to the bridge structure itself, the Centerville River utility bridge would include a 9-foot anti-climb fence that would constitute the most visible element of the proposed bridge structure. Overall, the placement of the bridge adjacent to the existing bridge; as well as existing topography, vegetation, and the winding course of the river, would largely obscure it from view. A 100-foot buffer surrounding the existing Centerville River bridge has been defined as the visual APE for this portion of the proposed undertaking's footprint.

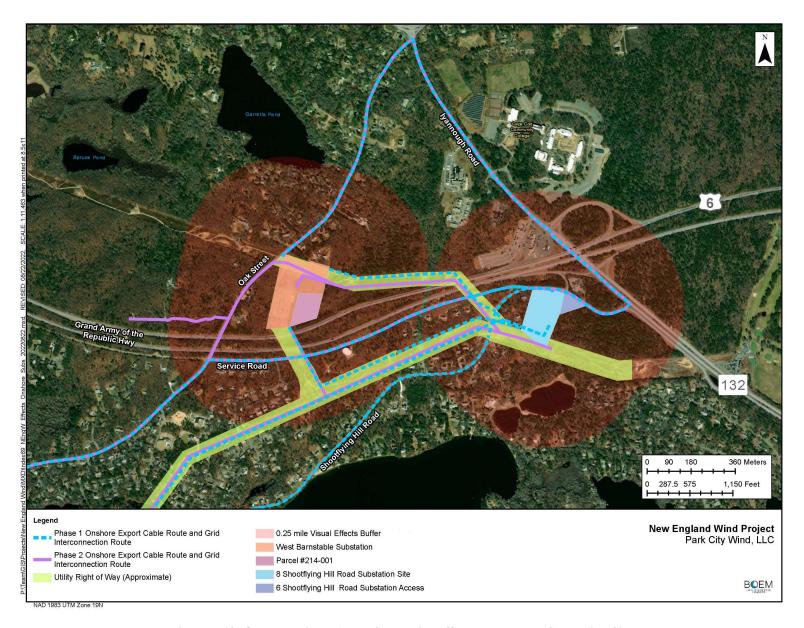


Figure J-10: Onshore Visual Area of Potential Effects, Barnstable Substation Sites

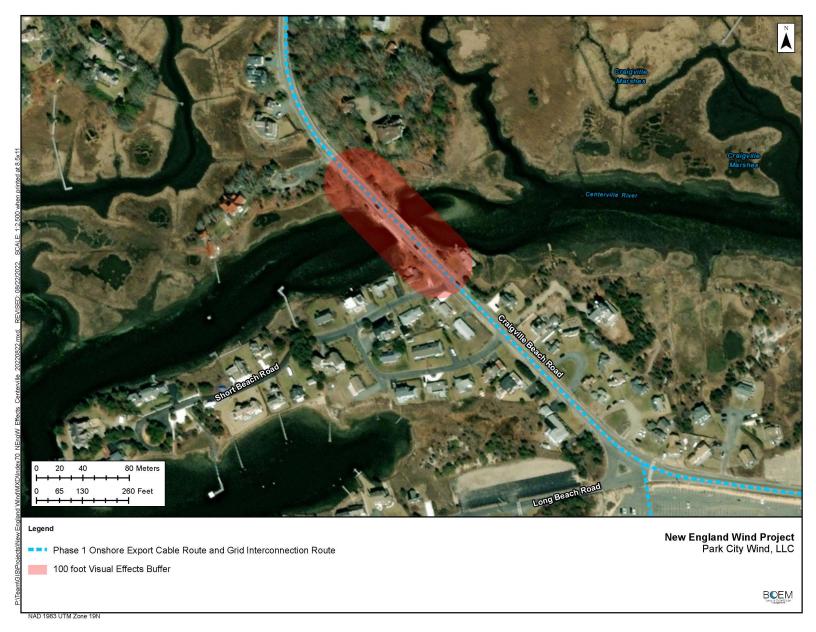


Figure J-11: Onshore Visual Area of Potential Effects, Centerville River Bridge

J.2 Steps Taken to Identify Historic Properties

J.2.1 Technical Reports

The applicant has conducted onshore and offshore cultural resource investigations (Table J-2) to identify known and previously undiscovered cultural resources within the marine, terrestrial, and visual portions of the APE. BOEM has reviewed all of the reports summarized in Table J-2 and found them to be sufficient. Collectively, BOEM finds that these reports represent a good-faith effort to identify historic properties within the proposed undertaking's APE. All of the documents summarized in Table J-2 will be shared with consulting parties and are hereby incorporated by reference.

Table J-2: Summary of Cultural Resources Investigations and Cultural Resources for the Proposed Project

Project Area/APE	Studiesa	Summary of Findings
Offshore	Marine Archaeological Assessment Report for the New England Wind Offshore Wind Farm for OCS-A 0534 Construction and Operations Plan (COP Volume II-D; Epsilon 2022)	 The applicant's cultural resources consultant conducted a marine archaeological resources assessment of high-resolution geophysical survey data collected by multiple non-intrusive survey campaigns by third party marine survey contractors within the SWDA. Three potential shipwrecks were identified within the SWDA, which are recommended for avoidance. Sixteen ancient submerged landform features were identified within the SWDA. Avoidance is recommended to the extent feasible.
Offshore	Marine Archaeological Assessment Report for the OECC (COP Volume II-D, Appendix A; Epsilon 2022)	 The applicant's cultural resources consultant conducted a marine archaeological resources assessment for the proposed OECC, as well as support for high-resolution geophysical surveys and geotechnical activities for the OECC. Survey activities were conducted over five seasons from 2016 to 2020 (extending to February 2021). One potential shipwreck was identified within the SWDA, which is recommended for avoidance. Sixteen ancient submerged landform features, identified as Channel Groups 8-18, 21-22, 29, and 30, are considered to belong to the Nantucket Sound TCP. Avoidance is recommended to the extent feasible.
Offshore	Marine Archaeological Assessment Report in Support of the South Coast Variant Offshore Export Cable Corridor Construction and Operations Plan (COP Volume II-D, Appendix E; Epsilon 2022)	 The applicant's cultural resources consultant conducted a marine archaeological resources assessment of the proposed SCV of the OECC, as well as to provide archaeological support for high-resolution geophysical marine surveys and subsequent geotechnical activities for the OECC. Two potential shipwrecks were identified within the SCV OECC, which are recommended for avoidance. Seventeen ancient submerged landform features were identified within the SCV OECC. Avoidance is recommended to the extent feasible.
Onshore	Terrestrial Archaeology Reports: Phase 1 Report: Archaeological Reconnaissance Survey, Vineyard Wind 501 South Phase 1 Onshore Development Area, Potential Export Cable Routes and	 The Phase 1 Reconnaissance Report survey was conducted for the potential export cable routes and proposed substation project in the Town of Barnstable. The study area consisted of the preliminary APE and a 0.5-mile buffer. Archival research identified 16 archaeological sites, including 8t pre-Contact sites, s7 post-Contact sites, and 1 site multicomponent within and/or adjacent to the study area. Zones of high archaeological sensitivity were identified in the proposed landfall sites at Covell's and Craigville beaches and the southern end of the OECR in Barnstable. Small zones of high sensitivity for pre-Contact sites are at the southern end of Long Pond and north shore of Wequaquet Lake.

Project Area/APE	Studiesa	Summary of Findings
	Proposed Substation (June 1, 2020) (COP Appendix III-G; Epsilon 2022)	 Zones of high and moderate sensitivity within the north portion of the APE are the substation at 8 Shootflying Hill Road, a section of existing utility ROW, and west of Wequaquet Lake. Zones of high sensitivity for post-Contact archaeological resources exist along the export cabling routes near an NRHP-listed property along Phinneys Lane. Zones of moderate sensitivity for pre- and post-Contact resources are within the potential export cabling routes along the Eversource ROW; Shootflying Hill; Great Marsh and Old Stage Roads; Main, South Main, and Oak Streets; and Phinneys Lane. Archaeological monitoring of Project construction activities was recommended within the identified zones of high and moderate archaeological sensitivity along existing roads in the proposed Project area. The consultant also recommended an intensive archaeological survey for the proposed substation at the 8 Shootflying Hill Road and Parcel #214-001.
Onshore	Terrestrial Archaeology Report–Phase 1 Report: Intensive Archaeological Survey New England Wind Phase 1 (Park City Wind)/New England Wind 1 Connector Onshore Project Components (COP Appendix III-G; Epsilon 2022)	 The Phase 1 Intensive Archaeological Survey was conducted in the locations of four proposed onshore components in the Town of Barnstable. The four onshore proposed Project components are 6.7-acre and 1.0- acre parcels for a substation site at 6 and 8 Shootflying Hill Road, a trenchless crossing entry bore and a 1,960-square-foot temporary work zone for an OECR crossing of the Centerville River within a 0.28-acre residential lot at 2 Short Beach Road, a trenchless exit pit and 400-foot-long pipe laydown north of the Centerville River in the shoulder of Craigville Beach Road, and a 2.8-acre parcel (Parcel #214001) for a proposed trenchless crossing under Route 6. Two pre-Contact find spots and a site were identified and recommended not eligible for NRHP listing. No additional archaeological investigations are recommended. Archaeological monitoring of other components within areas of moderate or high archaeological sensitivity would be conducted during construction.
Onshore	Technical Memorandum, Vineyard Wind 501 South Phase 2 Onshore Export Cable Routing and Substation Envelope, Cultural Resources Archaeological Due Diligence Study, June 1, 2020; Revised March 26, 2021 (COP Appendix III-G; Epsilon 2022)	 Due diligence study of the Phase 2 OECR and substation envelope was conducted. Portions overlap with Phase 1 potential cable routes. No NRHP-listed archaeological sites are within the study area. Forty-two pre-Contact and 15 post-Contact sites have been identified within the study area. The recorded pre-Contact sites can be considered to form four broad groups or clusters within different physiographic settings in the Phase 2 study area: Centerville Harbor, Cotuit/West Bay and North Bay, Santuit River, and the Race Lane and Wequaquet Lake clusters. The post-Contact sites are within the Cotuit/West Bay and North Bay, Marstons Mills, Race Lane and Prospect Street, Wequaquet Lake, and Garretts Pond (north of Route 6) sections of Barnstable. Based on the results of the due diligence review and the reconnaissance of the study area, the Phase 2 onshore export cable routing and substation envelope contains areas of moderate to high archaeological sensitivity.

Project Area/APE	Studiesa	Summary of Findings
Onshore	Archaeological Reconnaissance Survey New England Wind Phase 2 (Commonwealth Wind)/New England Wind 2 Connector (COP Appendix III-G; Epsilon 2022)	 The Phase 1 Reconnaissance Report survey was conducted for the Phase 2 connector and OECRs to identify known pre-Contact, Contact, and post-Contact cultural resources within 0.5-mile study area and the APE. The proposed Project area for this survey consisted of two alternate cable landfall sites at Dowses Beach and Wianno Avenue and potential OECRs along existing roadways and utility ROWs in Barnstable. Research identified no NRHP-listed archaeological site. Fifteen recorded pre-Contact and 13 post-Contact archaeological sites were identified within the OECR study area. Of the research identified sites, four pre-Contact, five post-Contact, and one site with pre-Contact, Contact, and post-Contact components may be located within and/or adjacent to the Phase 2 onshore export cabling route options. A combined windshield/walkover survey was conducted to further refine zones of archaeological sensitivity initially delineated in a due diligence study for the Phase 2 potential OECRs. Archaeological monitoring of Project construction areas within the staging areas required for horizontal directional drilling in the landfall area and during installation of OECR and other components within the identified zones of high and moderate archaeological sensitivity are
Onshore	Technical Memorandum, New England Phase 2 Potential Onshore Substation Sites, Cultural Resources Archaeological Due Diligence Study, April 20. 2022 (COP Appendix III-G; Epsilon 2022)	 Pour diligence study of the Phase 2 OECR and substation envelope was conducted. Portions overlap with Phase 1 potential cable routes. No NRHP-listed archaeological sites are within the study area. Forty-two pre-Contact and 15 post-Contact sites have been identified within the study area. The recorded pre-Contact sites can be considered to form four broad groups or clusters within different physiographic settings in the Phase 2 study area: Centerville Harbor, Cotuit/West Bay and North Bay, Santuit River, and the Race Lane and Wequaquet Lake clusters. The post-Contact sites are within the Cotuit/West Bay and North Bay, Marstons Mills, Race Lane and Prospect Street, Wequaquet Lake, and Garretts Pond (north of Route 6) sections of Barnstable. Based on the results of the due diligence review and the reconnaissance of the study area, the Phase 2 Onshore Export Cable Routing and Substation Envelope contains areas of moderate to high archaeological sensitivity.
Visual	New England Wind Visual Impact Assessment (COP Appendix III-H.a; Epsilon 2022)	The applicant's consultants conducted a visual impact assessment to identify potential visibility of the proposed Project's offshore facilities and determine the difference in landscape quality with and without the proposed Project in place.
Visual APE = area of potential a	New England Wind Historic Properties Visual Impact Assessment (COP Appendix III-H.b; Epsilon 2022)	 The Historic Properties Visual Impact Assessment identified a variety of historic properties that the proposed Project may affect. These include NHLs, properties listed on the NRHP, TCPs, properties on the Massachusetts State Register of Historic Places, and properties on the Inventory of Historic and Archaeological Assets of the Commonwealth. It was determined that the proposed Project would have a visual impact on the Gay Head Lighthouse and the Vineyard Sound and Moshup's Bridge TCP. Additionally, BOEM determined the proposed Project would have a visual impact on the Nantucket Historic District NHL, the Nantucket Sound TCP, the Chappaquiddick Island TCP, the Gay Head—Aquinnah Shops Area, and the Edwin Vanderhoop Homestead (Aquinnah Cultural Center).

APE = area of potential effects; BOEM = Bureau of Ocean Energy Management; COP = Construction and Operations Plan; NHL = National Historic Landmark; NRHP = National Register of Historic Places; OECC = offshore export cable corridor; OECR = onshore export cable route; ROW = right-of-way; SWDA = Southern Wind Development Area; TCP = traditional cultural property

^a Not all reports are publicly available due to sensitive information.

J.2.2 Consultation and Coordination with the Parties and Public

J.2.2.1 Early Coordination

Since 2009, BOEM has coordinated OCS renewable energy activities offshore Massachusetts with its federal, state, local, and tribal government partners through its Intergovernmental Renewable Energy Task Force. Additionally, BOEM has met regularly with federally recognized tribes that may be affected by renewable energy activities in the area since 2011, specifically during planning for the issuance of leases and review of site assessment activities. BOEM also hosts public information meetings to help keep interested stakeholders updated on major renewable energy milestones. Information pertaining to BOEM's Massachusetts Intergovernmental Renewable Energy Task Force meetings is available at https://www.boem.gov/Massachusetts-Renewable-Energy-Task-Force-Meetings/, and information pertaining to BOEM's overall stakeholder engagement efforts (separate from stakeholder engagement associated with individual offshore wind projects) is available at https://www.boem.gov/renewable-energy/state-activities/public-information-meetings.

J.2.2.2 National Environmental Policy Act Scoping and Public Hearings

Public Scoping-First Round

On June 30, 2021, BOEM issued a Notice of Intent (NOI) to prepare an EIS consistent with NEPA regulations (42 USC § 4321 et seq.) to assess the potential impacts of the Proposed Action and alternatives (86 *Federal Register* 34782 [June 30, 2021]). The NOI commenced a public scoping process for identifying issues and potential alternatives for consideration in the EIS. During the formal scoping period, from June 30 through July 30, 2021, three virtual public scoping meetings were held on the dates as outlined in Table J-3.

Table J-3: Public Scoping Meetings

Date	Time
July 19, 2021	Presentation, public statements, and Q&A at 5:30 p.m. eastern daylight time
July 23, 2021	Presentation, public statements, and Q&A at 1:30 p.m. eastern daylight time
July 26, 2021	Presentation, public statements, and Q&A at 5:30 p.m. eastern daylight time

Q&A =questions and answers

During the formal scoping period, federal agencies, state and local governments, and the general public had the opportunity to submit written and oral comments that would help BOEM identify potential significant resources and issues, impact-producing factors, reasonable alternatives (e.g., size, geographic, seasonal, or other restrictions on construction and siting of facilities and activities), and potential mitigation measures to analyze in the EIS, as well as to provide additional information. BOEM also indicated its intent to use the NEPA process to fulfill its review obligations under Section 106 of the NHPA (54 USC § 300101 et seq.), in lieu of the procedures set forth in 36 CFR § 800.3 through 800.6 for the proposed undertaking, as permitted by 36 CFR § 800.8(c), which requires federal agencies to assess the effects of projects on historic properties. Additionally, BOEM informed its Section 106 consultation by seeking public comment and input through the NOI regarding the identification of historic properties or potential effects on historic properties from activities associated with approval of the COP.

Public Scoping-Second Round

On August 19, 2021, the applicant (then operating as Vineyard Wind, LLC) notified BOEM of the potential need to establish an OECC for Phase 2 of the proposed Project, beyond those previously identified in the COP. The applicant also notified BOEM of the proposed Project's name change (Section J.1.1). On November 22, 2021, BOEM issued a Notice of Additional Public Scoping and Name

Change to announce the project name change, and to assess the potential impacts of the Phase 2 OECC alternative routes (86 Federal Register 66334 [November 22, 2021]). This notice commenced a second public scoping process, from November 22 through December 22, 2021, that was similar in intent and purpose to the first scoping process, focusing on the newly proposed Phase 2 OECC alternative routes. Information, including a video presentation was posted to BOEM's website at https://www.boem.gov/renewable-energy/state-activities/new-england-wind-formerly-vineyard-wind-south to provide supporting information on the Phase 2 OECC alternatives.

Through the NEPA scoping process, BOEM received a total of 17 comments regarding cultural, historical, and archaeological, or tribal resources during the public scoping periods. These are presented in BOEM's Scoping Summary Report for the proposed undertaking (BOEM 2022a), available at https://www.boem.gov/renewable-energy/state-activities/new-england-wind-virtual-meeting-room.

J.2.2.3 National Historic Preservation Act Section 106 Consultations

After receipt of the COP submission from the applicant, BOEM contacted 63 governments and organizations, providing information on the proposed undertaking and inviting each of them to be a consulting party to the NHPA Section 106 review of the COP (Attachment J-2). Entities that responded positively to BOEM's invitation or were subsequently made known to BOEM and added as consulting parties are listed in Attachment J -2. BOEM initiated NHPA Section 106 consultation with letters to these entities on June 14, 2021. BOEM used this correspondence to also notify these parties of the intention to use the NEPA substitution process for Section 106 consultation purposes, as described in 36 CFR § 800.8(c), and provided its *National Environmental Policy Act (NEPA) Substitution for Section 106 Consulting Party Guide* (BOEM 2021a). Additional notifications were sent on November 22, 2021, to describe the proposed Project design changes and project name change, following the additional scoping period. Additionally, parties were again invited to participate after BOEM held an initial NHPA Section 106 consultation meeting virtually on March 3, 2022.

BOEM has held the following government-to-government consultation meetings as of the time of publication of this Finding:

- August 13, 2021: with the Delaware Nation, the Delaware Tribe of Indians, the Mashantucket (Western)
 Pequot Tribal Nation, the Mashpee Wampanoag Tribe of Massachusetts, and the Wampanoag Tribe of Gay Head (Aquinnah);
- November 4, 2021: with the Delaware Nation, the Mashantucket (Western) Pequot Tribal Nation, the Mashpee Wampanoag Tribe of Massachusetts, and the Wampanoag Tribe of Gay Head (Aquinnah);
- May 2, 2022, and June 2, 2022: with the Wampanoag Tribe of Gay Head (Aquinnah);
- May 26, 2022: with the Mashantucket (Western) Pequot Tribal Nation, the Mashpee Wampanoag Tribe of Massachusetts, and the Wampanoag Tribe of Gay Head (Aquinnah); and
- June 2, 2022: the BOEM Director met in-person with the Mashpee Wampanoag Tribe of Massachusetts.

In these letters and consultation meetings, BOEM requested information from consulting parties on historic properties that may be potentially affected by the proposed undertaking.

BOEM intends to send technical reports pertinent to Section 106 consultation, including a memorandum summarizing the methodology for identifying the APE (ERM 2022), to consulting parties prior to publication of the Draft EIS. BOEM plans to continue consulting with state historic preservation offices, the ACHP, National Park Service (NPS), federally recognized Tribal Nations, and the consulting parties to seek their comments and input regarding the effects of the undertaking on historic properties and the

resolution of adverse effects including the development and implementation of treatment plans. BOEM intends to have at least three additional consultation meetings with all parties to receive final input about BOEM's plans for mitigations.

J.3 Application of the Criteria of Adverse Effect

The Criteria of Adverse Effect under NHPA Section 106 (36 CFR § 800.5(a)(1)) states that an undertaking has an adverse effect on a historic property:

when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the NRHP in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association...Adverse Effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative.

Adverse effects on historic properties include, but are not limited to (36 CFR § 800.5(a)(2)):

- i. Physical destruction of or damage to all or part of the property;
- ii. Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation, and provision of handicapped access, that is not consistent with the Secretary's standards for the treatment of historic properties (36 CFR Part 68) and applicable guidelines;
- iii. Removal of the property from its historic location;
- iv. Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance;
- v. Introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features;
- vi. Neglect of a property which causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization; and
- vii. Transfer, lease, or sale of property out of federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance.

Based on the studies conducted to identify historic properties within the proposed Project's marine APE, terrestrial APE, and visual APE and the assessment of effects upon those properties determined with consulting parties, BOEM has found the proposed Project would have an adverse effect on seven historic properties within the visual APE and 49 ancient submerged landform features identified within the marine APE, including the SWDA, OECC, and SCV. The assessment of visual effects considers the findings of the applicant's visual simulations and visual effects simulations of the proposed Project (COP Appendix III-H.b; Epsilon 2022), as well as BOEM's Cumulative Historic Resources Visual Effects Assessment (BOEM 2022b), which evaluated the visual effects of the proposed undertaking in relation to the visual effects from all other offshore wind projects in the Rhode Island and Massachusetts Lease Areas. The assessments in this section consider the four criteria established for potential inclusion in the National Register of Historic Places (NRHP) (NPS 1995), which identify historic properties:

- Criterion A—That are associated with events that have made a significant contribution to the broad patterns of our history; or
- Criterion B—That are associated with the lives of persons significant in our past; or

- Criterion C—That embody the distinctive characteristics of a type, period, or method of construction, or
 that represent the work of a master, or that possess high artistic values, or that represent a significant and
 distinguishable entity whose components may lack individual distinction; or
- Criterion D—That have yielded or may be likely to yield, information important in prehistory or history.

J.3.1 Assessment of Effects on Historic Properties in the Visual Area of Potential Effects

J.3.1.1 Gay Head Lighthouse, Martha's Vineyard

Gay Head Lighthouse is located on the southwestern most portion of the island of Martha's Vineyard, marking Devil's Bridge rocks, the shoals of the south shore of the island, and the entrance to Vineyard Sound from Buzzard's Bay on the route to Boston Harbor from the south. It was listed on the NRHP in 1987 as part of the Lights of Massachusetts Thematic Resources Area and is significant under the NRHP's Criteria A and C as a historic maritime structure and aid to navigation (DiStefano and Salzman 1981; Massachusetts Historical Commission 2015; and COP Section 6.2, Appendix III-H.b; Epsilon 2022).

Constructed in 1855-1856, the Gay Head Lighthouse was once one of the ten most important lights on the Atlantic Coast and originally contained one of the country's first Fresnel lenses. The brick and sandstone tower meets Criterion A for its association with the island's maritime history as an aid to navigation. The structure also meets Criterion C as an example of a 19th century maritime structure constructed of bricks using the clay from the Gay Head Cliffs. The 1856 lighthouse, a brick tower 45 feet in height, is the only remaining structure at the site; the original brick Keeper's House was replaced by a wooden house in 1906 and was torn down in 1961. Although the lighthouse was moved from its original location 150 feet east in 2015 and its setting and location are partially compromised, the structure retains integrity of design, material, workmanship, feeling, and association (DiStefano and Salzman 1981; Massachusetts Historical Commission 2015; and COP Section 6.2, Appendix III-H.b; Epsilon 2022).

The applicant's visual effects study concluded that the proposed Project would adversely affect the maritime setting of the Gay Head Lighthouse and its viewshed through the introduction of new elements out of character with the historic setting, feeling, and association, thereby diminishing its integrity. The applicant's analysis of the visibility of the proposed Project used the algorithm presented in OCS Study BOEM 2017-037 (BOEM 2017b). Based on the applicant's analysis, the project would be visible from the Gay Head Lighthouse, on average, 18 percent of the time annually (36 percent during the day and nearly 0 percent at night annually, due to use of an aircraft detection and lighting system [ADLS]) (COP Appendix III-H.b, Section 4.2; Epsilon 2022).

BOEM's (2022b) study of cumulative visual effects from offshore wind projects concluded that the proposed undertaking comprised approximately 17 percent of all theoretically visible WTG blade tips. The study also analyzed the number of WTGs theoretically visible from the Gay Head Lighthouse using three different tiered distances (10 to 20, 20 to 30, and 30 to 40 nautical miles [11.5 to 23, 23 to 34.5, and 34.5 to 46 miles]). This part of the study found that the proposed WTGs would comprise none of the WTGs visible within 20 nautical miles (23 miles), 24 percent of all WTGs visible at 20 to 30 nautical miles (23 to 34.5 miles), and 15 percent of all WTGs visible beyond 30 nautical miles (34.5 miles). In clear weather, proposed WTGs would be visible from the Gay Head Lighthouse and the surrounding property in views to the southeast. In views to the south, proposed WTGs would be theoretically visible in the far left of the observer's field of view and would be less noticeable to the casual observer than WTGs associated with other projects located in closer proximity to the Gay Head Lighthouse. The proposed WTGs would disappear from the field of view as the observer turns to the west. Overall, the undertaking would contribute minimally to the cumulative visual effects of offshore wind on the Gay Head Lighthouse (BOEM 2022b; COP Appendix III-H.b; Epsilon 2022).

In summary, other projects' WTGs would occupy the majority of the horizon line, and all of the open ocean horizon visible in 124-degree southward views from the Gay Head Lighthouse. WTGs associated with other projects are situated in front of the proposed Project's WTGs. While the proposed Project's WTGs would contribute to visual impacts on clear days by creating additional visual clutter on the southeast horizon, they would be visible less often due to weather conditions, and less visually prominent than other projects' WTGs due to distance (BOEM 2022b).

J.3.1.2 Edwin Vanderhoop Homestead (Aquinnah Cultural Center)

The Edwin Vanderhoop Homestead (also known as the Aquinnah Cultural Center; GAY.40/NRHP06000784) is a late 19th century two-story wood-frame, vernacular residence constructed sometime between 1890 and 1897. In 2006, the Edwin Vanderhoop Homestead was restored and opened as the Aquinnah Cultural Center. The property is eligible under Criteria A and C and is significant at the local level in the areas of architecture, Native American ethnic history, and social history.

The applicant's assessment of the visual effects of the proposed Project on the Edwin Vanderhoop Homestead/Aquinnah Cultural Center found that the setting, as it related to Criterion C, would be affected through the introduction of new elements; however, the view from the Homestead toward the SWDA is partially obstructed by topography and mature tree growth to the southeast. The view of the SWDA is possible to the south.

The applicant's visual effects study concluded that the proposed Project would adversely affect the maritime setting of the Edwin Vanderhoop Homestead and its viewshed through the introduction of new elements out of character with the historic setting, feeling, and association, thereby diminishing its integrity under Criterion C. (COP Appendix III-H.b; Epsilon 2022).

BOEM has concluded that the undertaking adversely affects the maritime setting of the Edwin Vanderhoop Homestead (Aquinnah Cultural Center) and its viewshed through the introduction of new ocean-founded visual elements out of character with the historic setting, feeling, and association, thereby diminishing its integrity. Existing topography and mature tree growth to the south and west partially obstruct the ocean view.

Based on reported visibilities at Martha's Vineyard Airport accounting for the use of ADLS, the applicant estimated that the ocean view from the Edwin Vanderhoop Homestead (Aquinnah Cultural Center), to the south and the west would be obstructed by the undertaking's new ocean-founded visual elements less than 42 percent of the time annually (COP Appendix III-H.b, Section 6.2; Epsilon 2022). Using the analysis for Gay Head Lighthouse, approximately 855 feet north of the Vanderhoop property, and using BOEM's (2017b) visibility algorithm, the proposed Project would be visible at least 18 percent of the time annually (36 percent during the day and nearly 0 percent at night annually, due to use of ADLS) (COP Appendix III-H.b, Section 4.2; Epsilon 2022).

BOEM's (2022b) study of cumulative visual effects from offshore wind projects concluded that for the Edwin Vanderhoop Homestead (Aquinnah Cultural Center), the proposed undertaking comprised approximately 17 percent of all theoretically visible WTG blade tips. The study also analyzed the number of WTGs theoretically visible from the Edwin Vanderhoop Homestead (Aquinnah Cultural Center) using three different tiered distances (10 to 20, 20 to 30, and 30 to 40 nautical miles [11.5 to 23, 23 to 34.5, and 34.5 to 46 miles]). This part of the study found that the proposed WTGs would comprise none of the WTGs visible within 20 nautical miles (23 miles), 24 percent of all WTGs visible at 20 to 30 nautical miles (23 to 34.5 miles), and 15 percent of all WTGs visible beyond 30 nautical miles (34.5 miles). In clear weather, proposed WTGs would be visible from the Edwin Vanderhoop Homestead (Aquinnah Cultural Center) and the surrounding property in views to the southeast. In views to the south, proposed WTGs would be theoretically visible in the far left of the observer's field of view and would be less

noticeable to the casual observer than WTGs associated with other projects located in closer proximity to the Homestead. The proposed WTGs would disappear from the field of view as the observer turns to the west. Overall, the undertaking would contribute minimally to the cumulative visual effects of offshore wind on Edwin Vanderhoop Homestead (Aquinnah Cultural Center) (BOEM 2022b; COP Appendix III-H.b; Epsilon 2022).

In summary, other projects' WTGs would occupy the majority of the horizon line, and all of the open ocean horizon visible in 124-degree southward views from the Edwin Vanderhoop Homestead (Aquinnah Cultural Center). WTGs associated with other projects are situated in front of the undertaking's WTGs. While the proposed Project's WTGs would contribute to visual impacts on clear days by creating additional visual clutter on the southeast horizon, they would be visible less often due to weather conditions, and less visually prominent than other projects' WTGs due to distance (BOEM 2022b).

J.3.1.3 Gay Head-Aquinnah Shops Area

A cluster of nine commercial buildings, the Gay Head–Aquinnah Shops Area (Aquinnah Shops Area; GAY.B), was constructed during the early to mid-20th century. The buildings overlook the Atlantic Ocean at the western tip of a circle formed by the intersection of Lighthouse Road and South Road and line the north and south sides of the walkway leading up to the Clay Cliffs of Aquinnah Scenic Overlook. The buildings form a U-shape and were constructed due to the increase of tourism to the cliffs that began during the early 20th century.

The applicant's visual effects study concluded that the proposed Project would adversely affect the maritime setting of the Gay Head–Aquinnah Shops Area and its viewshed through the introduction of new elements out of character with the historic setting, feeling, and association, thereby diminishing its integrity under Criterion C (Epsilon 2022).

BOEM has concluded that the undertaking would adversely affect the maritime setting of the Aquinnah Shops Area and its viewshed through the introduction of new ocean-founded visual elements that are out of character with the historic setting, feeling, and association, thereby diminishing its integrity. The undertaking is partially visible to the west from the Aquinnah Shops Area, owing to the Aquinnah Cliffs located to the north, west, and south of the Gay Head–Aquinnah Shops Area. Existing power lines and other modern elements already within the foreground of portions of the view are not located on the ocean, the association and historic feeling of which is integral to this property's setting; thus, their existence does not serve to remove nor offset the effect on the property resulting from the introduction of new ocean-founded visual elements in the proposed Project COP (Appendix III-H.b, Section 6.2; Epsilon 2022(COP Appendix III-H.b, Section 6.2; Epsilon 2022).

Based on reported visibilities at Martha's Vineyard Airport and accounting for the use of ADLS, the applicant estimated that the ocean view from the Aquinnah Shops Area to the south and the west would be obstructed by the undertaking's new ocean-founded visual elements less than 42 percent of the time annually (COP Section 4.2, Appendix III-H.b; Epsilon 2022). Using the additional analysis for Gay Head Lighthouse, approximately 706 feet north-northeast of the Aquinnah Shops Area property, and using BOEM's (2017b) visibility algorithm, the undertaking would be visible at least 18 percent of the time annually (36 percent during the day and nearly 0 percent at night annually, due to use of ADLS) (COP Section 4.2, Appendix III-H.b; Epsilon 2022).

BOEM's (2022b) study of cumulative visual effects from offshore wind projects concluded that for the Aquinnah Shops Area, the undertaking comprised approximately 17 percent of all theoretically visible WTG blade tips. The study also analyzed the number of WTGs theoretically visible from the Aquinnah Shops Area using three different tiered distances (10 to 20, 20 to 30, and 30 to 40 nautical miles [11.5 to 23, 23 to 34.5, and 34.5 to 46 miles]). This part of the study found that the proposed WTGs would

comprise none of the WTGs visible within 20 nautical miles (23 miles), 24 percent of all WTGs visible at 20 to 30 nautical miles (23 to 34.5 miles), and approximately 15 percent of all WTGs visible beyond 30 nautical miles (34.5 miles). In clear weather, proposed WTGs would be visible from the Aquinnah Shops Area and the surrounding property in views to the southeast. In views to the south, proposed WTGs would be theoretically visible in the far left of the observer's field of view and would be less noticeable to the casual observer than WTGs associated with other projects located in closer proximity to the Aquinnah Shops Area. The undertaking's WTGs would disappear from the field of view as the observer turns to the west. Overall, the undertaking would contribute minimally to the cumulative visual effects of offshore wind on Aquinnah Shops Area (BOEM 2022b; COP Appendix III-H.b; Epsilon 2022).

In summary, other projects' WTGs would occupy the majority of the horizon line, and all of the open ocean horizon visible in 124-degree southward views from the Aquinnah Shops Area. WTGs associated with other projects are situated in front of the undertaking's WTGs. While the proposed Project's WTGs would contribute to visual impacts on clear days by creating additional visual clutter on the southeast horizon, they would be visible less often due to weather conditions, and less visually prominent than other projects' WTGs due to distance (BOEM 2022b).

J.3.1.4 Nantucket Historic District National Historic Landmark

Situated approximately 30 miles south of Cape Cod, Massachusetts, the Nantucket District NHL comprises the entirety of the islands of Nantucket, Tuckernuck, and Muskeget. Combined, the three islands occupy approximately 28,000 acres, and contain 5,027 contributing resources (which constitute approximately half of the total number of contributing and non-contributing resources) located within the historic district. In 1955, Nantucket became one of the first local historic districts in Massachusetts and one of the earliest local historic districts in the nation through special legislation initiated by the town and enacted by the Commonwealth of Massachusetts. The Nantucket District NHL was listed on the NRHP in 1967, with several more recent updates, notably in 1975 and 2012 (Chase-Harrell and Pfeiffer 2012; Heintzelman 1975; and COP Appendix III-H.b, Section 6.3; Epsilon 2022).

According to the 2012 Landmark nomination,

The 1966 National Historic Landmark nomination for Nantucket focused entirely on its association with the American whaling industry (NHL Criterion 1) and the remarkable survival of the architecture and ambiance of an early whaling port (NHL Criterion 4), and the period of significance ended with the decline of whaling on Nantucket. While whaling built Nantucket, other factors preserved it; tourism replaced whaling as the island's economic mainstay, and historic preservation took early root on the island. With the passage of time, the importance of these factors in preserving the island's character has become apparent, and it is the purpose of this update to establish the national significance of tourism and historic preservation as well as whaling on Nantucket and to extend the period of significance to 1975, when the last element of governmental protection of the island was set in place by the expansion of the National Historic Landmark District to include the entirety of the island. This expansion followed the 1971 expansion of the local historic district to encompass the entire island as well as the outlying islands of Tuckernuck and Muskeget. These updates also recognize Nantucket's Native American and African-American communities and the important roles that they played in the whaling industry and the social history of the island (Chase-Harrell and Pfeiffer 2012).

The Nantucket District NHL is significant under Criterion A for its association with the development of Nantucket and the whaling industry, Criterion C for architectural examples including Georgian, Federal, Greek Revival, Italianate, Shingle and Colonial Revival, and Criterion D for the potential archaeological remains associated with Native American pre- and post-Contact use as well as historical archaeology. Despite modern construction and intrusions, it retains integrity of location, design, setting, material, workmanship, feeling, and association (Chase-Harrell and Pfeiffer 2012; Heintzelman 1975; and COP Section 6.3, Appendix III-H.b; Epsilon 2022).

The applicant's assessment of the visual effects of the proposed Project on the Nantucket District NHL found that the maritime setting of the Nantucket District NHL and its viewshed would be altered through the introduction of new elements; however, the applicant concluded that the undertaking would ultimately have no adverse effect on the Nantucket District NHL (COP Appendix III-H.b; Epsilon 2022). Specifically, the applicant found that the proposed Project would not be distinguishable, even in ideal weather conditions. Views to the southern direction would be affected, but the WTGs would appear as cloud shadows or other atmospheric phenomena (COP Appendix III-H.b; Epsilon 2022).

BOEM has concluded that the undertaking would adversely affect the Nantucket District NHL through the introduction of new ocean-founded visual elements that are out of character with the historic setting, feeling, and association of the resource, thereby diminishing its integrity. While the proposed undertaking is only partially visible from the Nantucket District NHL, and meteorological conditions would often obscure the view of the proposed Project, making it visible primarily during ideal weather conditions, the existence of the undertaking's visual elements ultimately are out of character and thus adversely affect the NHL.

Based on reported visibilities at Nantucket Memorial Airport and accounting for the use of ADLS, the applicant estimated that the ocean view from the Nantucket District NHL would be obstructed by the undertaking's new ocean-founded visual elements less than 37 percent of the time annually (COP Appendix III-H.b, Section 4.2; Epsilon 2022). Based on BOEM's (2017b) visibility algorithm, the proposed Project would be visible from the Nantucket District NHL approximately 14 percent of the time annually (27 percent during the day and nearly 0 percent at night due to use of ADLS (COP Appendix III-H.b, Section 4.2; Epsilon 2022)

BOEM's (2022b) study of cumulative visual effects from offshore wind projects concluded that for the Nantucket District NHL, the undertaking comprised between 15 and 21 percent of all theoretically visible WTG blade tips, while theoretically visible nacelle-top lights from the proposed Project would comprise 0 to 25 percent of total theoretically visible nacelle-top lights, depending on location. The study also analyzed the number of WTGs theoretically visible from the Nantucket District NHL using three different tiered distances (10 to 20, 20 to 30, and 30 to 40 nautical miles [11.5 to 23, 23 to 34.5, and 34.5 to 46 miles]). This part of the study found that none of the proposed Project's WTGs would be within 20 nautical miles (23 miles) of the Nantucket District NHL, while proposed Project WTGs would comprise 26 percent of all WTGs visible within 20 to 30 nautical miles (23 to 34.5 miles), and 13 percent of the WTGs visible beyond 30 nautical miles (34.5 miles). The WTGs associated with the undertaking would be visible from the Nantucket District NHL in views to the southwest. Views are mostly limited to beachfront areas, and views from the interior portion of the NHL would be rare due to screening by topography and/or vegetation. An observer can experience panoramic views of the open ocean from the beachfront and would also potentially experience views of WTGs from more than one project as they travel between the northwest and southeast shoreline. Overall, the undertaking would contribute less than other projects to the cumulative visual effects of offshore wind on Nantucket District NHL. Also, WTGs would not be visible from approximately 80 percent of the Nantucket District NHL, which means only about 20 percent of the island would experience adverse visual effects on their southern viewshed (COP Appendix III-H.b; Epsilon 2022).

In summary, WTGs from other projects would occupy a greater extent of the horizon line and would be closer and more frequently visible than the undertaking's WTGs due to atmospheric and weather conditions. None of the proposed undertaking's WTGs would be in the nearest distance zone (10 to 20 nautical miles [11.5 to 23 miles]). All of the undertaking's WTGs would be behind WTGs from other projects and would be visible less frequently and less noticeable to the casual observer in clear conditions (BOEM 2022b).

J.3.1.5 Chappaquiddick Island Traditional Cultural Property

BOEM determined Chappaquiddick Island to be potentially eligible for listing on the NRHP as a TCP (BOEM 2020b). The designation does not contain specific boundaries. BOEM found that the TCP is significant under Criterion A for "its association with and importance in maintaining the continuing cultural identity of the community" (BOEM 2020b). BOEM considers eight locations to comprise contributing elements of the Chappaquiddick Island TCP. Of these eight areas, six are considered to be within the APE. The traditional viewsheds would be altered by the introduction of human-made structures where no structures previously existed.

The applicant's assessment of the visual effects of the proposed Project on the Chappaquiddick Island TCP found that the setting would be minimally altered through the introduction of new elements, and specifically, the undertaking would only be visible from a portion of Chappaquiddick Island, as well as Norton Point and Katama Bay. Views to the north, east, and west from these locations would not be affected. The applicant stated that views of the proposed Project would be intermittent and only possible during ideal weather conditions, where the proposed Project would be barely distinguishable at the horizon line, especially without foreknowledge of the proposed Project.

Based on reported visibilities at Martha's Vineyard Airport and accounting for the use of ADLS, the applicant estimated that the ocean view from the Chappaquiddick Island TCP would be obstructed by the proposed undertaking's new ocean-founded visual elements less than 42 percent of the time in a given year (COP Appendix III-H.b; Section 4.2; Epsilon 2022). By comparison, using BOEM's (2017b) visibility algorithm, the proposed Project would be visible from the Chappaquiddick Island TCP approximately 22 percent of the time annually (43 percent during the day and nearly 0 percent at night due to the use of ADLS) (COP Appendix III-H.b, Section 4.2; Epsilon 2022).

BOEM has concluded that the TCP's traditional viewshed would be adversely affected through the introduction of the undertaking's new ocean-founded visual elements that are out of character with the historic setting, feeling, and association of the resource, thereby diminishing its integrity.

BOEM's (2022b) study of cumulative visual effects from offshore wind projects that the proposed WTGs would comprise between 6 and 16 percent of all visible WTGs and 20 to 23 percent of total nacelle tops theoretically visible from the Chappaquiddick Island TCP (which includes the Chappaquiddick Lots). This study also analyzed the number of WTGs theoretically visible from the Chappaquiddick Island TCP using three different tiered distances (10 to 20, 20 to 30, and 30 to 40 nautical miles [11.5 to 23, 23 to 34.5, and 34.5 to 46 miles]). This part of the study found that the proposed WTGs would comprise none of the proposed WTGs within 10 to 20 nautical miles (11.5 to 23 miles), 27 percent of all WTGs visible at 20 to 30 nautical miles (23 to 34.5 miles), and 10 percent of all WTGs visible beyond 30 nautical miles (34.5 miles). An observer would be able to experience panoramic views of the ocean from the beachfront and some inland waters of the Chappaquiddick Island TCP. In clear weather, the WTGs associated with the undertaking would be visible from portions of the Chappaquiddick Island TCP in views to the south. Views of undertaking and other projects' WTGs from the interior of the TCP would be rare, due to screening by topography and/or vegetation. The proposed WTGs and other offshore wind project WTGs would appear similar as the observer moves between the east and west beachfront areas of the property.

Overall, in clear conditions the undertaking would contribute approximately less than a quarter of the cumulative visual effects of offshore wind development on Chappaquiddick Island TCP. However, although WTGs would not be visible from 41 percent of the Chappaquiddick Island TCP, 59 percent of the island would have adverse visual effects on their southern viewshed (BOEM 2022b; COP Appendix III-H.b; Epsilon 2022).

In summary, WTGs from other projects would occupy a greater extent of the horizon line and are situated in front of the proposed Project WTGs. The proposed Project's WTGs would occupy a smaller extent of the horizon line and would be less noticeable to other project WTGs in a similar distance zone due to proximity. Both proposed Project and other project WTGs are unlikely to be missed by the casual observer, but the overall view would still be dominated by sea and sky (BOEM 2022b).

J.3.1.6 Vineyard Sound and Moshup's Bridge Traditional Cultural Property

The Vineyard Sound Moshup's Bridge TCP is considered eligible for listing in the NRHP under all four Criteria (A through D).

The maritime setting of Vineyard Sound and Moshup's Bridge TCP is an integral element to the resource's historical and cultural significance. The majority of the inland area of the TCP would have no visibility of the proposed undertaking, as it would be limited by the topographic changes and mature vegetation cover. The nearest WTG or ESP position is located approximately 16.8 miles to the south from the TCP. The proposed undertaking would be visible across the seascape portion of the TCP. Therefore, the proposed Project would have an adverse effect on the Vineyard Sound and Moshup's Bridge TCP by changing the character of the TCP's traditional setting. Finally, the proposed undertaking would only be visible from the TCP's southern view. All other views from the TCP would remain unaffected (COP Appendix III-H.b, Section 4.2; Epsilon 2022).

Based on reported visibilities at Martha's Vineyard Airport and accounting for the use of ADLS, the ocean view from the Vineyard Sound and Moshup's Bridge TCP would be obstructed by the proposed undertaking's new ocean-founded visual elements less than 42 percent of the time annually (COP Section 4.2, Appendix III-H.b; Epsilon 2022). By comparison using the additional analysis for Gay Head Lighthouse, and using BOEM's (2017b) visibility algorithm the proposed Project would be visible at least 18 percent of the time annually (36 percent during the day and nearly 0 percent at night due to use of ADLS) (COP Appendix III-H.b).

BOEM's (2022b) study of cumulative visual effects from offshore wind projects evaluated the Vineyard Sound and Moshup's Bridge TCP from a viewpoint on the cliffs near Squibnocket Point. BOEM's study concluded that the undertaking comprised 15 percent of all theoretically visible WTG blade tips from Squibnocket Point and 16 percent of theoretically visible nacelle-top lights, depending on viewer location. The study also analyzed the number of WTGs theoretically visible from the Vineyard Sound and Moshup's Bridge TCP using three different tiered distances (10 to 20, 20 to 30, and 30 to 40 nautical miles [11.5 to 23, 23 to 34.5, and 34.5 to 46 miles]). This part of the study found that the proposed undertaking's WTGs would comprise 3 percent of all WTGs visible at 10 to 20 nautical miles (11.5 to 23 miles), 29 percent of all WTGs visible at 20 to 30 nautical miles (23 to 34.5 miles), and 4 percent of all WTGs visible beyond 30 nautical miles.

No visual simulations were prepared specifically for the Vineyard Sound and Moshup's Bridge TCP, but the Aquinnah Cultural Center, used as a point for the Gay Head Lighthouse analysis. Squibnocket Point is approximately 4.5 miles closer to the undertaking than the Aquinnah Cultural Center and would have unobstructed ocean views of the proposed WTGs. When viewed from Squibnocket Point, the WTGs from the undertaking and other projects would be marginally larger and more prominent than if viewed from the Aquinnah Cultural Center. An observer would be able to experience panoramic views of the ocean

from the bluffs at Squibnocket Point. In clear weather, this view would include the proposed undertaking's WTGs to the southeast. However, WTGs from other projects would be in between the observer and the proposed Project's WTGs. Views from the proposed undertaking and other projects' WTGs from the interior of the TCP would be rare, due to screening by topography and/or other vegetation. The proposed undertaking's WTGs and other offshore wind project WTGs would appear similar as the observer moves across the bluffs along Squibnocket Point. Overall, the undertaking would contribute less than one-quarter of the cumulative visual effects of offshore wind on the TCP (BOEM 2022b; COP Appendix III-H.b; Epsilon 2022).

In summary, other projects' WTGs would occupy the majority of the horizon line and the entirety of the horizon line visible in 124-degree southward views from Squibnocket Point. WTGs associated with other projects are situated in front of the undertaking's WTGs. While the proposed undertaking's WTGs would contribute to visual impacts on clear days by creating additional visual clutter on the southeast horizon, they would be visible less often due to weather conditions, and less visually prominent than other projects' WTGs due to distance and the proposed undertaking's location behind WTGs from other projects. The WTGs from the proposed undertaking and other projects would be plainly visible to an observer, but the overall view would still be dominated by sea and sky (BOEM 2022b).

J.3.1.7 Nantucket Sound Traditional Cultural Property

The Nantucket Sound TCP has been determined eligible for listing in the NRHP under all four criteria (A through D); however, the boundary has not been fully defined.

The applicant's assessment of the visual effects of the proposed Project on the Nantucket Sound TCP found that the setting would be minimally altered through the introduction of new elements, and specifically, the undertaking would only be visible intermittently from the southern end of Nantucket Sound. Views to the north, east, and west from Nantucket Sound would not be affected. The applicant stated that views of the proposed Project would be intermittent and only possible during ideal weather conditions, where the proposed Project would be slightly visible above the horizon line.

Based on reported visibilities at Martha's Vineyard Airport and accounting for the use of ADLS, the applicant estimated that the ocean view from the Nantucket Sound TCP would be obstructed by the proposed undertaking's new ocean-founded visual elements less than 42 percent of the time in a given year (COP Appendix III-H.b; Section 4.2; Epsilon 2022). By comparison using BOEM's (2017b) visibility algorithm, the proposed Project would be visible from the Nantucket Sound TCP approximately 22 percent of the time annually (43 percent during the day and nearly 0 percent at night due to the use of ADLS) (COP Appendix III-H.b, Section 4.2; Epsilon 2022).

BOEM has concluded that the TCP's traditional viewshed would be adversely affected through the introduction of the undertaking's new ocean-founded visual elements that are out of character with the historic setting, feeling, and association of the resource, thereby diminishing its integrity.

BOEM's (2022b) study of cumulative visual effects from offshore wind projects concluded that the proposed WTGs would comprise between approximately 12 percent of all visible WTG blade tips and 3 percent of all visible nacelle-top lights from the East Beach location. This study also analyzed the number of WTGs theoretically visible from the Nantucket Sound TCP using three different tiered distances (10 to 20, 20 to 30, and 30 to 40 nautical miles [11.5 to 23, 23 to 34.5, and 34.5 to 46 miles]). This part of the study found that the proposed Project's WTGs would comprise none of all WTGs within 20 nautical miles (23 miles), 23 percent of all WTGs visible at 20 to 30 nautical miles (23 to 34.5 miles), and 15 percent of the WTGs visible beyond 30 nautical miles (34.5 miles). An observer would be able to experience panoramic views of the ocean from the beachfront and some inland waters of the Nantucket Sound TCP. In clear weather, the WTGs associated with the undertaking would be visible from portions

of the Nantucket Sound TCP in views to the southeast. Views of undertaking and other projects' WTGs from the interior of the TCP would be rare, due to screening by topography and/or vegetation. The proposed WTGs and other offshore wind project WTGs would appear similar as the observer moves between the east and west beachfront areas of the property. Overall, in clear conditions the undertaking would contribute less than 25 percent of the cumulative visual effects of offshore wind development on Nantucket Sound TCP (BOEM 2022b).

In summary, WTGs from other projects would occupy a greater extent of the horizon line, meaning proposed Project WTGs would be less noticeable than other project WTGs in similar distance zone due to proximity. Both proposed Project and other project WTGs are unlikely to be missed by the casual observer, but the overall view would still be dominated by sea and sky (BOEM 2022b).

J.3.2 Assessment of Effects on Historic Properties in the Marine Area of Potential Effects

This section discusses effects on ancient submerged landforms as contributing elements to the Nantucket Sound TCP. Documentary and field research conducted as part of the marine APE cultural resource investigations demonstrate that submerged portions of the proposed Project area were subaerial during and immediately following the last glacial maximum. The cultural resources investigations in the marine APE identified ancient submerged landform features (including stream channel, lake, and estuarine landscape features) within the marine APE that have the potential to contain pre-Contact Native American archaeological sites dating prior to the inundation of the OCS during the late Pleistocene and early Holocene (COP Appendix II-D, Section 5; Epsilon 2022). A 2020 archaeological geotechnical campaign conducted in part as a due diligence measure to identify archaeological potential, did not find any direct evidence of pre-Contact Native American cultural materials. However, the ancient landforms are considered archaeologically sensitive due to the potential for undiscovered archaeological materials to be present (COP Appendix II-D, Section 5; Epsilon 2022). A total of 15 ancient submerged landform features were identified in the marine APE for the SWDA, 16 ancient submerged landform features in the marine APE for the Western Muskeget Variant OECC, and 17 ancient submerged landform features in the marine APE for the SCV.

If archaeological resources are present within the identified ancient landforms and they retain sufficient integrity, these resources could be eligible for listing on the NRHP under Criterion D. During the last glacial maximum, at around 24,000 before present (B.P.), sea levels dropped approximately 180 to 85 feet below today's level. Sea level did not reach a near modern level until approximately 3,000 B.P. in the New England area. Consequently, a large amount of land on the OCS was exposed and existed as terrestrial land during the late Pleistocene and early Holocene. Native American oral histories and archaeological evidence demonstrate that Native American populations were present in the New England region, over 86 nautical miles (99 miles) inland from the coast at the time that the OCS was exposed. It is logical to assume that these people would have also occupied the now-submerged landscape on the OCS (Tuttle et al. 2019). Due to current technological constraints, very little archaeological information has been recovered from late Pleistocene and early Holocene archaeological sites on the OCS. As a result, very little archaeological material has been recovered related to Native American adaptations and lifeways on the then coastal plain and coast. Any archaeological information preserved within these sites, if present, would likely yield significant information important in the pre-Contact history of the region, making the sites eligible for NRHP listing under Criterion D.

In addition to the archaeological potential of these resources, all 19 ancient landforms identified along the OECC and the Western Muskeget Variant are contributing elements to the Nantucket Sound TCP due to their cultural significance to Native American tribes (COP Appendix A, Vol II-D, Epsilon 2022). Nantucket Sound is eligible for listing in the NRHP as a TCP and as a historic and archaeological property that has yielded and has the potential to yield important information. Although the exact

boundary is not precisely defined, the ACHP determination indicated that the sound is eligible as an integral, contributing feature of a larger district under all NRHP Criteria.

An additional 15 ancient submerged landform features were identified within the SWDA, outside of Nantucket Sound, on the OCS. Although these landforms are not contributing elements to the Nantucket Sound TCP, they have the potential for preserved, pre-Contact cultural materials that date to late Pleistocene and early Holocene. This is particularly true of the small, isolated paleo-streams valleys that were identified in the northern and western portions of the SWDA, locations that carry high potential for intact archaeological deposits. Due to their location on the OCS, these landforms would have been exposed during the last glacial maximum, and any cultural materials within these landforms would almost certainly date to the Paleoindian Period—as it is currently defined dating to 12,000 years B.P., if not earlier—and may thus contain the remains of or other cultural materials associated with, some of the first peoples of the Americas.

Federally recognized tribes have stated that all of the ancient submerged landform features identified within the marine APE, regardless of whether or not they contain archaeological data, are significant resources as vestiges of the landscape occupied by their ancestors and as the locations where events from tribal oral histories occurred. As a result, the ancient landform features identified within the marine APE could be eligible for listing on the NRHP under Criterion A of the NRHP Criteria due to their association with significant events, or series of events, significant to the cultural traditions and history of local Native American tribes.

The proposed Project would be able to avoid two of the 15 ancient submerged landform features present within the marine archaeology APE in the SWDA and would result in direct physical effects on the 49 other ancient submerged landforms that cannot be avoided, including 19 features that are contributing elements to the Nantucket Sound TCP. Direct physical effects on these resources would threaten the viability of the affected portion of these resources as both potential repositories of archaeological information as well as the cultural significance of these landforms to local Native American tribes. The severity of effects would depend on the horizontal and vertical extent of effects relative to the size of the intact ancient submerged landform. Due to the size of the offshore remote sensing survey areas in the OECC and SWDA, the full extent or size of individual ancient landforms cannot be defined. However, based on available information, construction of the proposed undertaking would result in the physical damage or destruction of at least a portion of each of the ancient landforms that cannot be avoided.

There are 17 ancient submerged landforms within the SCV footprint in federal waters. It may not be possible to avoid the ancient submerged landforms in the SCV. If avoidance is not possible, the proposed undertaking would result in the physical damage or destruction of at least a portion of the identified resources that cannot be avoided and adverse effects on these ancient submerged landforms.

Based on the information available from the marine archaeological resources surveys of the marine APE and the assessment of effects upon those properties, BOEM has found that the undertaking would result in direct adverse physical effects on 49 of the ancient submerged landforms that cannot be avoided in the OECC and SWDA. Two ancient submerged landforms will be avoided and would not be adversely affected. The undertaking would result in the permanent, physical destruction of or damage to all or part of each of the 49 ancient landforms that cannot be avoided. In addition, 19 of the 49 ancient submerged landforms that would be adversely affected by construction of the undertaking are located in Nantucket Sound and are likely contributing elements to the Nantucket Sound TCP.

J.3.3 Assessment of Effects on Shipwrecks and Potential Shipwrecks

Archaeological surveys within the marine archaeology portion of the APE identified eight potential shipwrecks in the OECC, SWDA, SCV, and Western Muskeget Variant, combined (COP Volume II-D, Section 5; COP Volume II-D, Section 5; and Appendix A; Epsilon 2022). All eight potential shipwrecks will be avoided with sufficient buffers by all proposed Project activities that are part of the undertaking; as a result, there would be no adverse effects on these potential historic properties.

J.3.4 Assessment of Effects on Historic Properties within the Terrestrial Area of Potential Effects

Both reconnaissance and intensive level archaeological surveys were conducted within the terrestrial archaeology portion of the APE for Phase 1. These surveys identified no NRHP eligible or listed sites. No additional archaeological investigations of the onshore components are planned. As currently designed, BOEM finds there will be no adverse effects on historic properties within the Phase 1 terrestrial archaeology APE.

The Phase 2 archaeological survey is still pending for the proposed onshore substation sites(s) and additional route segments and potential additional parcels near the onshore substation. This is part of a phased identification and evaluation of historic properties pursuant to 36 CFR § 800.4(b)(2). BOEM will conduct Section 106 consultation for the remainder of the Phase 2 terrestrial archaeology APE with the Massachusetts SHPO, ACHP, federally recognized Tribal Nations, and other identified consulting parties. The effects of the undertaking on historic properties would be evaluated prior to the Final EIS.

J.3.5 Assessment of Effects on Historic Properties

Based on the information available to BOEM from the studies conducted to identify historic properties within the visual APE for the undertaking and the assessment of effects upon those properties determined in consultation with the consulting parties, BOEM finds that the undertaking would have a direct adverse visual effect on the Gay Head Lighthouse, Edwin Vanderhoop Homestead (Aquinnah Cultural Center), the Gay Head—Aquinnah Shops Area, the Nantucket District NHL, the Chappaquiddick Island TCP, and the Nantucket Sound TCP. The undertaking would affect the character of the properties' setting that contributes to their historic significance by introducing visual elements that are out of character with the historic setting of the properties. However, BOEM determined that due to the distance and open viewshed, the integrity of the properties would not be so diminished as to disqualify any of them for NRHP eligibility.

The adverse effects on the viewshed of the aboveground historic properties would occupy the space for approximately 30 years, but they are unavoidable for reasons discussed in Section J.4.3. This application of the Criteria of Adverse Effect and determination that the effects are direct is based on pertinent NRHP Bulletins, subsequent clarification and guidance by the NPS and ACHP, and other documentation, including professionally prepared viewshed assessments and computer-simulated photographs and video.

J.4 Measures to Avoid, Minimize, or Mitigate Adverse Effects

BOEM will stipulate measures to avoid, minimize, or mitigate adverse effects on historic properties identified in the APE as adversely affected by the proposed Project. Specifically, BOEM will stipulate measures to avoid known terrestrial archaeological resources and submerged archaeological and ancient submerged landforms, as well as minimize visual effects on historic properties. BOEM will also stipulate measures that would be triggered in cases where avoidance of known ancient submerged landforms is not feasible or in cases where there is post-review discovery of previously unknown terrestrial or marine archaeological resources that are not currently found to be adversely affected by the Project. BOEM, with

the applicant, will develop and implement one or more historic property treatment plans in consultation with consulting parties that have a demonstrated interest in specific historic properties to address impacts on ancient submerged landforms if they cannot be avoided. Historic property treatment plans will also be prepared to mitigate visual adverse effects and cumulative visual adverse effects.

As part of the NRHP Section 106 process, the applicant has committed to the following measures to avoid, minimize, or mitigate adverse effects, as conditions of approval of the COP:

- 1. Painting the WTGs no lighter than RAL 9010 Pure White and no darker than RAL 7035 Light Grey in accordance with *Federal Aviation Administration Advisory Circular 70/7460-1M* (Federal Aviation Administration 2020) and BOEM's (2021b) *Guidelines for Lighting and Marking of Structures Supporting Renewable Energy Development* to minimize daytime visibility.
- 2. Installing ADLS to reduce the duration of nighttime lighting. The system would activate aviation warning lights only when an aircraft is in the vicinity of the SWDA, resulting in nighttime visibility of the project from adversely affected historic properties to an estimated less than 13 minutes annually (less than 0.1 percent of annual nighttime hours).
- 3. Preparing unanticipated discovery plans for both onshore and offshore archaeological resources and human remains.
- 4. Conducting additional archaeological investigations on unavoidable ancient submerged landforms in the OECC and SWDA.

a. OECC

- i. Target three distinct types of ancient submerged landforms for investigation:
 - 1. A preserved fluvial margin terrace withing the nearshore zone (Channel Groups 8 through 15);
 - 2. A preserved fluvial margin along Muskeget Channel (Channel Groups 16 through 22); and
 - 3. A preserved kettle/pond lake feature preserved in the offshore portion of the OECC leading into the SWDA (Channel Groups 29 through 30).
- ii. Each location will be tested using closely spaced vibracoring designed to examine these ancient submerged landforms at a higher spatial resolution.
- iii. If either the Western Muskeget Variant or SCV are to be used, any ancient submerged landforms that cannot be avoided will be mitigated following the same methods and protocols as those outlined for the OECC.

b. SWDA

- i. Vibracore up to 6 meters below the seafloor is recommended to recover sediments related to the stratigraphic units of interest.
- ii. Proposing a combined, broad brush and detailed approach to resolve these adverse effects:
 - 1. Collecting 1-2 cores at the majority of the submerged, ancient landforms to sample identified horizons; and/or
 - 2. Collecting a series of closely spaced cores at 2-4 select (not all) ancient submerged landforms based on similar geomorphic characteristics.

- c. All results would be delivered to the consulting tribes (state- and federally recognized), BOEM, Massachusetts Bureau of Underwater Archaeological Resources, Massachusetts Historical Commission, and any other relevant consulting parties in the form of a technical report with supporting digital data files.
- d. Tribal representatives will have the opportunity to be present for all stages of work.
- 5. Minimizing effects by primarily siting the OECR and grid intersection routes within existing ROWs and below roadways.
- 6. Conducting archaeological monitoring of construction activities in areas of moderate or high archaeological sensitivity in the Phase 1 terrestrial archaeological APE.
- 7. Conducting archaeological monitoring of construction activities within the staging areas required for the horizontal direct drilling in the landfall area and during installation of OECR and other components (duct banks, splice vaults) within the identified zone of moderate and high archaeological sensitivity in the Phase 2 terrestrial archaeological APE.

The NHPA Section 106 consultation process is ongoing for the proposed Project and will culminate in an MOA (see Attachment J-1) detailing avoidance, minimization, and mitigation measures to resolve adverse effects on historic properties to which the consulting parties agree. BOEM would continue to consult in good faith with the Massachusetts State Historic Preservation Office and other consulting parties to resolve adverse effects.

J.5 Phased Identification

Information pertaining to the identification of historic properties associated with the grid interconnection routes, onshore cable routes, landfall locations, and nearshore cable routes for the SCV in Bristol County added to the proposed Project in April 2022, will not be available until after the publication of the Draft EIS. Additional Phase 2 onshore substation parcels may also be identified at a later date. Phased identification and evaluation of historic properties for the remainder of the SCV and any additional Phase 2 onshore substations would be completed at that time, pursuant to 36 CFR § 800.4(b)(2) and in accordance with BOEM's existing *Guidelines for Providing Archaeological and Historic Property Information Pursuant to 30 CFR Part 585*, and ensure potential historic properties are identified, effects assessed, and adverse effects resolved prior to construction. BOEM would conduct Section 106 consultation with the Massachusetts SHPO, ACHP, federally recognized Tribal Nations, and other identified consulting parties. The SCV effects on historic properties would be evaluated in a separate supplemental NEPA analysis.

J.6 National Historic Landmarks and the National Historic Preservation Act Section 106 Process

The NPS, which administers the NHL program for the Secretary of the Interior, describes NHLs and requirements for NHLs as follows:

National Historic Landmarks (NHL) are designated by the Secretary under the authority of the Historic Sites Act of 1935, which authorizes the Secretary to identify historic and archaeological sites, buildings, and objects which "possess exceptional value as commemorating or illustrating the history of the United States" Section 110(f) of the NHPA requires that federal agencies exercise a higher standard of care when considering undertakings that may directly and adversely affect NHLs. The law requires that agencies, "to the maximum extent possible, undertake such planning and actions as may be necessary to minimize harm to such landmark." In those cases when an agency's undertaking directly and adversely affects an NHL, or when federal permits, licenses, grants, and other programs and projects under its jurisdiction or carried out by a state or local government pursuant to a Federal delegation or approval so affect an NHL, the agency should consider all prudent and feasible alternatives to avoid an adverse effect on the NHL.

NHPA Section 110(f) applies specifically to NHLs. BOEM is fulfilling its responsibilities to give a higher level of consideration to minimizing harm to NHLs by implementing the special set of requirements for protecting NHLs in compliance with NHPA Section 110(f) and 36 CFR § 800.10, which, in summary:

- Require the agency official, to the maximum extent possible, to undertake such planning and actions as
 may be necessary to minimize harm to any NHL that may be directly and adversely affected by an
 undertaking;
- Require the agency official to request the participation of ACHP in any consultation conducted under 36 CFR § 800.6 to resolve adverse effects on NHLs; and
- Direct the agency to notify the Secretary of the Interior of any consultation involving an NHL and to invite the Secretary of the Interior to participate in consultation where there may be an adverse effect.

The Historic Resources Visual Effects Assessment (BOEM 2022b) identified one NHL in the visual APE for the proposed Project: the Nantucket Historic District, described in Section J.3.4. BOEM has determined that the proposed Project would result in an adverse effect on the Nantucket Historic District NHL. BOEM is considering for these purposes:

- The magnitude of the undertaking's harm to the historical, archaeological, and cultural qualities of the NHL;
- The public interest in the NHL and in the undertaking as proposed; and
- The effect a mitigation action would have on meeting the goals and objectives of the undertaking (NPS 2013).

BOEM will identify and finalize mitigation measures specific to the NHL in consultation with consulting parties. These measures must be reasonable in cost and not be determined using inflexible criteria, as described by NPS (2013). In addition, mitigation of adverse effects and minimization of harm to the NHL would need to meet the following requirements:

- Reflect the heightened, national importance of the properties and be appropriate in magnitude, extent, nature, and location of the adverse effect;
- Focus on addressing diminished historic resource integrity with outcomes that are in the public interest;
 and
- Comply with the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings (NPS 2017).

BOEM has already invited the ACHP and NPS NHL staff, under the Secretary of the Interior, to consult on the proposed Project and these parties have accepted. Through consultation, BOEM would continue to consider additional minimization measures, to the maximum extent feasible and require mitigation of adverse effects on the NHL that remain after the application of minimization efforts. BOEM would identify and finalize mitigation measures specific to the NHL with consulting parties through either the development of an MOA and/or as conditions of approval of the Record of Decision under NEPA.

J.7 References

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ATTACHMENT J-1: MEMORANDUM OF AGREEMENT

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DRAFT MEMORANDUM OF AGREEMENT AMONG

THE BUREAU OF OCEAN ENERGY MANAGEMENT, THE MASSACHUSETTS STATE HISTORIC PRESERVATION OFFICER, PARK CITY WIND LLC, AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION REGARDING THE NEW ENGLAND WIND OFFSHORE WIND ENERGY PROJECT

WHEREAS, the Bureau of Ocean Energy Management (BOEM) plans to authorize construction and operations of the New England Wind Project (Project) pursuant to Section 8(p)(1)(C) of the Outer Continental Shelf (OCS) Lands Act (43 U.S. Code [USC] § 1337(p)(1)(C)), as amended by the Energy Policy Act of 2005; Public Law No. 109–58) and in accordance with Renewable Energy Regulations at 30 Code of Federal Regulations (CFR) Part 585; and

WHEREAS, BOEM determined that the Project constitutes an undertaking subject to Section 106 of the National Historic Preservation Act (NHPA), as amended (54 USC § 30618), and its implementing regulations (36 CFR Part 800), and consistent with the Programmatic Agreement (PA) regarding the review of OCS renewable energy activities offshore Massachusetts and Rhode Island (*Programmatic Agreement Among the U.S. Department of the Interior, Bureau of Ocean Energy Management, The State Historic Preservation Officers Of Massachusetts and Rhode Island; The Mashpee Wampanoag Tribe; The Narragansett Indian Tribe; The Wampanoag Tribe of Gay Head (Aquinnah); and The Advisory Council on Historic Preservation; regarding the "Smart from the Start" Atlantic Wind Energy Initiative: Leasing and Site Assessment Activities offshore Massachusetts and Rhode Island); and*

WHEREAS, BOEM plans [to approve, approve with conditions, or disapprove (This clause is subject to change. BOEM will make the final decision by the Final Environmental Impact Statement [EIS] and before the MOA is executed.)] the New England Wind Project Construction and Operations Plan (COP) submitted by Park City Wind LLC (Park City Wind) for construction and installation (construction), operations and maintenance (operations), and conceptual decommissioning (decommissioning) of the Project within Renewable Energy Lease Number (Lease Area) OCS-A 0534 and potentially a portion of the area covered by Lease Area OCS-A 0501 (collectively, the Southern Wind Development Area [SWDA]); and

WHEREAS, BOEM determined the construction, operations, and decommissioning of the Project, planned for up to 130 offshore wind turbine generators (WTG), up to 5 electrical service platforms (ESP; also known as offshore substations), up to 3 new or upgraded onshore substations, offshore export cables within an offshore export cable corridor (OECC), and onshore export cables in an onshore export cable route (OECR), could potentially adversely affect historic properties as defined under 36 CFR § 800.16(1)(1); and

WHEREAS, Phase 1, also known as the Park City Wind Project, would deliver approximately 804 megawatts through the installation of 41 to 62 WTGs and 1 to 2 ESPs immediately southwest of the Vineyard Wind 1 Project, which is currently under construction. Phase 2, also known as the Commonwealth Wind Project, would deliver at least 1,232 megawatts through the installation of an additional 64 to 88 WTG/ESP positions, immediately southwest of Phase 1. The applicant would install five offshore export cables (two for Phase 1 and three for Phase 2) in an OECC that would transmit the electricity generated by the WTGs to landing sites (one for each phase) in the Town of Barnstable,

Massachusetts, and then to OECRs (one for each phase) and one or more substation sites in the Town of Barnstable for interconnection with the regional electrical grid; and

WHEREAS, if technical, logistical, or other unforeseen issues prevent export cables from being installed in the proposed OECC, Park City Wind would develop and use the Western Muskeget Variant and/or the South Coast Variant (SCV) for one or more cables (Attachment 1, Area of Potential Effects Maps); and

WHEREAS, the SCV would diverge from the OECC and travel west-to-northwest near Buzzards Bay and transmit some or all electricity generated by Phase 2 to a grid interconnection point in Bristol County, Massachusetts, and Park City Wind identified an SCV OECC in federal waters and is developing detailed information about other SCV elements, including the OECC route through state waters and the OECR and substation site in Bristol County; and

WHEREAS, BOEM is preparing an EIS for the Project, pursuant to the National Environmental Policy Act (NEPA; 42 USC § 4321 et seq.) and elected to use the NEPA substitution process with its Section 106 consultation pursuant to 36 CFR § 800.8(c); and

WHEREAS, BOEM notified in advance the State Historic Preservation Officer (SHPO) of Massachusetts and the Advisory Council on Historic Preservation (ACHP) on June 10, 2021, of its decision to use NEPA substitution and followed the standards for developing environmental documents to comply with Section 106 consultation for this Project pursuant to 36 CFR § 800.8(c), and posted this decision in the *Federal Register* (Fed. Reg.) with BOEM's Notice of Intent to prepare an EIS for the Project on June 30, 2021; and

WHEREAS, BOEM, in accordance with 36 CFR § 800.3, invited ACHP to consult on the Project on June 16, 2021, and ACHP accepted on June 18, 2021, and chose to participate in the consultation pursuant to 36 CFR § 800.6(a)(1)(iii); and

WHEREAS, BOEM, in accordance with 36 CFR § 800.3, invited the Massachusetts SHPO to consult on the Project on June 11, 2021 and the Massachusetts SHPO accepted on July 8, 2021; and

WHEREAS, the Project is within a commercial lease area that was subject to previous NHPA Section 106 review by BOEM regarding the issuance of the commercial lease and approval of site assessment activities. Both NHPA Section 106 reviews for the lease issuance and the approval of the site assessment plan were conducted pursuant to the PA and concluded with No Historic Properties Affected on May 23, 2012.

WHEREAS, consistent with 36 CFR § 800.16(d) and BOEM's Guidelines for Providing Archaeological and Historic Property Information Pursuant to 30 CFR Part 585 (May 27, 2020), BOEM has defined the undertaking's area of potential effects (APE) as the depth and breadth of the seabed potentially impacted by any bottom-disturbing activities, constituting the marine archaeological resources portion of the APE (marine APE); the depth and breadth of terrestrial areas potentially impacted by any ground-disturbing activities, constituting the terrestrial archaeological resources portion of the APE (terrestrial APE); the viewshed from which renewable energy structures, whether located offshore or onshore, would be visible, constituting the viewshed portion of the APE (viewshed APE); and any temporary or permanent construction or staging areas, both onshore and offshore, which may fall into any of the above portions of the APE (Attachment 1). The APE is further described in Attachment 1; and

WHEREAS, BOEM identified 21 aboveground historic properties (including 3 traditional cultural properties [TCP]) in the offshore Project components' portion of the viewshed APE and 7 historic properties in the onshore Project components' portion of the viewshed APE; 6 submerged historic properties and 50 ancient submerged landforms and features (ASLF) in the marine APE; and no historic properties in the terrestrial APE; and

WHEREAS, BOEM identified one NHL within the visual APE for offshore development, the Nantucket Historic District; and

WHEREAS, within the range of the Project alternatives analyzed in the EIS, BOEM determined 3 aboveground historic properties and one NHL would be subject to visual adverse effects from WTGs, 3 TCPs would be subject to visual and physical adverse effects, no submerged historic properties, and 50 ASLFs may be potentially adversely affected by physical disturbance in the lease area and from export cable construction in the marine APE, and no historic properties in the terrestrial APE would be adversely affected with implementation of the undertaking; and

WHEREAS, BOEM determined that the implementation of the avoidance measures identified in the Memorandum of Agreement (MOA) will avoid adverse effects on 14 aboveground historic properties in the offshore viewshed APE, 6 historic properties in the onshore viewshed APE, and 8 submerged historic properties and 2 ASLFs in the marine APE; and

WHEREAS, BOEM determined all the ASLFs identified in the marine APE are eligible for the National Register of Historic Places (NRHP) under Criteria A and D; and

WHEREAS, under each of the Project alternatives analyzed in the EIS, BOEM has determined that the undertaking will have an adverse effect on 49 formerly subaerially exposed ASLFs with the potential to contain pre-Contact period archaeological resources within (Channel Groups 8-30, nonsequential) and outside (SAL06-19, Channel Groups 18, 19, 20, 32, and SCV-OECC-SAL1-17) the boundaries of the Nantucket Sound TCP, the Chappaquiddick Island TCP, and the Vineyard Sound and Moshup's Bridge TCP; and

WHEREAS, under each of the Project alternatives analyzed in the EIS, BOEM determined the undertaking would visually adversely affect three TCPs: the Nantucket Sound TCP, the Chappaquiddick Island TCP, and the Vineyard Sound and Moshup's Bridge TCP; and

WHEREAS, under each of the Project alternatives analyzed in the EIS, BOEM determined the Project would visually adversely affect four aboveground historic properties including one NHL: the Nantucket Historic District NHL, the Gay Head Lighthouse, the Edwin Vanderhoop Homestead (Aquinnah Cultural Center), which are listed in the NRHP; and the Gay Head Aquinnah Shops Area, which is eligible for listing on the NRHP; and

WHEREAS, Park City Wind provided additional information about the SCV, including information on marine and terrestrial archaeology resources along the SCV route in federal waters (i.e., those waters beyond the 3-nautical-mile [3.5-mile] limit from shore), as part of a COP supplemental filing in April 2022 (Epsilon 2022), and information pertaining to identification of historic properties in the portion of the SCV in state waters (i.e., those waters within the 3-nautical-mile limit from shore) or onshore may not be available until after the Record of Decision is issued; and

WHEREAS, if Park City Wind chooses to construct the SCV, BOEM would conduct additional analysis of potential effects on historic properties through phased identification; and

WHEREAS, BOEM is planning to conduct phased identification for potential effects on historic properties related to additional potential Phase 2 onshore substation locations that are not currently identified in the COP and will be identified before or soon after the COP is approved; and

WHEREAS, the Massachusetts SHPO concurred with BOEM's finding of adverse effect on [insert date of SHPO's concurrence]; and

WHEREAS, throughout this document the term "tribe," has the same meaning as 'Indian tribe,' as defined at 36 CFR § 800.16(m); and

WHEREAS, BOEM invited the following federally recognized tribes to consult on this Project: the Delaware Nation, the Delaware Tribe of Indians, the Mashantucket Pequot Tribal Nation, the Mashpee Wampanoag Tribe of Massachusetts, the Mohegan Tribe of Indians of Connecticut, the Narragansett Indian Tribe, the Shinnecock Indian Nation, and the Wampanoag Tribe of Gay Head (Aquinnah); and

WHEREAS, the Mashantucket Pequot Tribe, the Mashpee Wampanoag Tribe of Massachusetts, and the Wampanoag Tribe of Gay Head (Aquinnah) accepted BOEM's invitation to consult, and BOEM invited these tribes to sign the MOA as concurring parties; and

WHEREAS, in accordance with 36 CFR § 800.3, BOEM invited other federal agencies, state and local governments, and additional consulting parties with a demonstrated interest in the undertaking to participate in this consultation; the list of those accepting or declining to participate by either written response or no response to direct invitation are listed in Attachment 2, Lists of Invited and Participating Consulting Parties; and

WHEREAS, BOEM has consulted with Park City Wind in its capacity as applicant seeking federal approval of its COP, and, because the applicant has responsibilities under the MOA, BOEM has invited the applicant to be an invited signatory to this MOA; and

WHEREAS, construction of the Project requires a Department of the Army permit from the U.S. Army Corps of Engineers (USACE) for activities that result in the discharge of dredged or fill material into jurisdictional wetlands and/or other waters of the U.S. pursuant to Section 404 of the Clean Water Act (33 USC § 1344), and activities occurring in or affecting navigable waters of the U.S. pursuant to Section 10 of the Rivers and Harbors Act of 1899 (33 USC § 403); and

WHEREAS, BOEM invited USACE to consult because USACE will issue permits for the Project under Section 404 of the Clean Water Act (33 USC § 1344) and Section 10 of the Rivers and Harbors Act (33 USC § 403); and

WHEREAS, the USACE designated BOEM as the lead federal agency pursuant to 36 CFR § 800.2(a)(2) to act on its behalf for purposes of compliance with NHPA Section 106 for this Project (in a letter dated [MONTH, XX, 20XX]), BOEM invited the USACE to sign this MOA as a concurring party, and the USACE accepted the invitation to sign this MOA as a concurring party; and

WHEREAS, BOEM notified and invited the Secretary of the Interior (represented by the National Park Service [NPS]) to consult regarding this Project pursuant to NHPA Section 106 regulations, including consideration of the potential effects on the NHL as required under NHPA Section 110(f) (54 USC § 306107) and 36 CFR § 800.10, the NPS accepted BOEM's invitation to consult on July 7, 2021, and BOEM invited NPS to sign this MOA as a concurring party; and

WHEREAS, BOEM has consulted with signatories, invited signatories, and consulting parties participating in the development of this MOA regarding the definition of the undertaking, the delineation of the APEs, the identification and evaluation of historic properties, the assessment of potential effects on the historic properties, and on measures to avoid, minimize, and mitigate adverse effects on historic properties; and

WHEREAS, BOEM has planned and is taking action to minimize harm, as required by NHPA Section 110(f) and 36 CFR § 800.10 to the one adversely affected NHL in the viewshed APE, Nantucket Historic District, as explained in BOEM's *Finding of Adverse Effect for the New England Wind Project Construction and Operations Plan* (hereafter, the Finding of Effect, and dated [Month 2023]), with measures including (but not limited to) using non-reflective white and light gray paint on offshore structures and using navigational lighting that minimizes the visibility of the Project from the NHL; and

WHEREAS, pursuant to 36 CFR § 800.6, BOEM invited Park City Wind to sign as invited signatory and the consulting parties as listed in Attachment 2 to sign as concurring parties; however, the refusal of any consulting party to sign this MOA or otherwise concur does not invalidate or affect the effective dates of this MOA, and consulting parties who choose not to sign this MOA will continue to receive information if requested and will have an opportunity to participate in consultation as specified in this MOA; and

WHEREAS, signatories and invited signatories agree, consistent with 36 CFR § 800.6(b)(2), that adverse effects will be resolved in the manner set forth in this MOA; and

WHEREAS, BOEM sought and considered the view of the public regarding NHPA Section 106 for this Project through the NEPA process by holding virtual public scoping meetings when initiating the NEPA and NHPA Section 106 review on July 19, 23, and 26, 2021, and virtual public hearings related to the Draft EIS on [Month XX, Year]; and

WHEREAS, BOEM made the first Draft MOA available to the public for review and comment from [Month XX, Year], to [Month XX, Year], using BOEM's Project website, and BOEM [did or did not receive any comments from the public]; and

NOW, THEREFORE, BOEM, the Massachusetts SHPO, and the ACHP agree that the undertaking shall be implemented in accordance with the following stipulations in order to take into account the adverse effects of the undertaking on historic properties and resolve those adverse effects, pursuant to 36 CFR § 800.6(c).

STIPULATIONS

BOEM, with the assistance of Park City Wind, shall ensure that the following measures are carried out as conditions of its approval of the undertaking:

I. MEASURES TO AVOID ADVERSE EFFECTS ON IDENTIFIED HISTORIC PROPERTIES

A. Marine APE

- BOEM will include the following measures to avoid adverse effects within the marine APE as conditions of approval of the New England Wind COP Attachment 3, Historic Property Treatment Plan for Submerged Historical Properties:
 - i. Park City Wind will avoid known shipwrecks identified during marine archaeological surveys by a distance of no less than 164 feet (50 meters) from the known extent of the resource for placement of Project structures and when conducting seafloor-disturbing activities.
 - ii. Park City Wind will avoid potential shipwrecks and potentially significant debris fields previously identified during marine archaeological surveys by a distance of no less than 164 feet (50 meters) from the known extent of the resource for placement of proposed Project structures and when conducting seafloor-disturbing activities.
 - iii. Park City Wind will avoid two ASLFs previously identified during marine archaeological resource assessments for the proposed Project by a distance of no less than 164 feet (50 meters) from the known extent of the resource for placement of Project structures and when conducting seafloor-disturbing activities, to the extent practicable.

B. Visual APE

- 1. BOEM will include the following measure to avoid adverse effect within the viewshed APE as a condition of approval of the New England Wind COP:
 - i. To maintain avoidance of adverse effects on historic properties in the viewshed APE where BOEM determined no adverse effects or where no effects would occur, BOEM will require Park City Wind to ensure Project structures are within the Project design envelope (PDE), sizes, scale, locations, lighting prescription, and distances that were used to inform the definition of APE for the Project and for determining effects in the Finding of Effect (see the New England Wind Project COP).

II. MEASURES TO MINIMIZE ADVERSE EFFECTS ON IDENTIFIED HISTORIC PROPERTIES

A. Visual APE

- 1. BOEM has undertaken planning and actions to minimize adverse effects on aboveground historic properties in the visual APE. BOEM will include the following measures to minimize adverse effects within the visual APE as conditions of the approval of the New England Wind COP:
 - i. Park City Wind will use uniform WTG design, speed, height, and rotor diameter to reduce visual contrast and decrease visual clutter.

- ii. Park City Wind will use uniform WTG spacing of 1 nautical mile (1.15 mile) by 1 nautical mile (1.15 mile) in the north-to-south and east-to-west direction to decrease visual clutter.
- iii. Park City Wind will paint the WTGs no lighter than RAL 9010 Pure White and no darker than RAL 7035 Light Grey in accordance with Federal Aviation Administration Advisory Circular 70/7460-1M (2020) and BOEM's Guidelines for Lighting and Marking of Structures Supporting Renewable Energy Development (2021) to minimize daytime visibility.
- iv. Park City Wind will equip all WTGs and ESPs with an aircraft detection lighting system to reduce the duration of nighttime lighting. The system will activate aviation warning lights only when an aircraft is in the vicinity of the SWDA, resulting in nighttime visibility of the Project from adversely affected historic properties to an estimated less than 13 minutes annually (less than 0.1 percent of annual nighttime hours).

B. Terrestrial APE

- 1. BOEM has undertaken planning and actions to minimize adverse effects on historic properties in the terrestrial APE. BOEM will include the following measures to minimize adverse effects within the terrestrial APE as conditions of the approval of the New England Wind COP:
 - i. Park City Wind will minimize adverse effects by primarily siting the OECR and grid interconnection cable routes within existing roadway and/or public utility rights-of-way.
- 2. Park City Wind will conduct archaeological monitoring of construction activities in the areas of moderate or high archaeological sensitivity in the Phase 1 terrestrial archaeological APE.
- 3. Park City Wind will conduct archaeological monitoring of construction activities within the staging areas required for the horizontal directional drilling in the landfall area and during installation of OECR and other components (duct banks, splice vaults) within the identified zone of moderate and high archaeological sensitivity in the Phase 2 terrestrial archaeological APE.

III. MEASURES TO MITIGATE ADVERSE EFFECTS ON IDENTIFIED HISTORIC PROPERTIES

A. Marine APE

- 1. Park City Wind will be unable to avoid 49 ASLFs: SAL-04 through SAL-20 in SWDA, Channel Groups 8-32 (non-sequential) in the OECC, Channel Groups 18, 19, 20 in the Western Muskeget Variant, and SCV-OECC-SAL1 through SCV-OECC-SAL17 in the SCV. To mitigate adverse effects on the ASLFs, BOEM will include the following as conditions of approval of the New England Wind COP and require fulfillment of the following as mitigation measures prior to construction. Park City Wind will fund mitigation measures in accordance with Attachment 4, Historic Property Treatment Plan for Ancient Submerged Landforms and Features:
 - i. Pre-construction Geoarcheaology: Park City Wind will fulfill commitments for additional archaeological investigations of unavoidable

- ASLFs to better ascertain their chronological setting, archaeological period association, environmental setting, and evidence of human habitation, including acquiring additional vibracores within the upper 19 feet (6 meters) of the seabed.
- ii. Post-construction Seafloor Assessment: Park City Wind will fulfill commitments for post-construction seafloor assessment via visual inspection survey of up to three impacted, high-potential ASLFs where ground disturbance occurred.
- iii. Tribal Focused Mitigation: Park City Wind will fulfill commitments to mitigation supporting tribal objectives, including a detailed presentation generated to describe the scientific methods and processes undertaken as part of the offshore preconstruction surveys and archaeological assessment to document the buried and ASLFs in Nantucket Sound; a digital database of ASLF data analysis and mapping; a workshop for each tribe on use of geographic information system (GIS) software; and option for in-person presentation on ASLF study results to tribal representatives and community.

B. Visual APE

- 1. BOEM will include the following as conditions of approval of the New England Wind COP and as mitigation measures to resolve the adverse effects on the following historic properties that will be visually adversely affected: Gay Head Lighthouse; Edwin Vanderhoop Homestead (Aquinnah Cultural Center); Gay Head-Aquinnah Shops Area; Chappaquiddick Island TCP, Moshup's Bridge and Vineyard Sound TCP, and Nantucket Sound TCP. Additional details regarding treatment measures can be found in Attachments 5 through 9.
 - Park City Wind will fund fulfillment of mitigation measures prior to construction in accordance with Attachment 5, Historic Property Treatment Plan for the Edwin Vanderhoop Homestead and Gay Head – Aquinnah Shops Area:
 - a. Vineyard Sound and Moshup's Bridge TCP Mitigation: Park City will fulfill commitments to public education, scholarships and training for tribal resource and/or environmental stewardship, and coastal resilience and habitat restoration described in the Historic Property Treatment Plan for Vineyard Sound and Moshup's Bridge TCP,
 - b. NRHP Nomination of Gay Head-Aquinnah Shops: Park City Wind will fulfill commitments to draft a NRHP nomination for the Gay Head-Aquinnah Shops Area.
 - ii. Park City Wind will fund fulfillment of mitigation measures prior to construction in accordance with Attachment 6, Historic Property Treatment Plan for [REDACTED] TCP:
 - a. Survey and GIS Database of Contributing Resources to TCP: Park City Wind will fulfill commitments to conduct a photographic survey of up to 20 contributing sites and/or features to the TCP and develop a GIS database of contributing resources.

- b. Development of Interpretive Materials: Park City Wind will fulfill commitments to develop and incorporate digital media and interpretive materials, including ArcGIS story maps or other presentations, in conjunction with the GIS database.
- iii. Park City Wind will fund fulfillment of mitigation measures prior to construction in accordance with Attachment 7, Historic Property Treatment Plan for Gay Head Lighthouse:
 - a. Ongoing Maintenance: Park City Wind will fulfill commitments to fund assist with ongoing repairs and maintenance of Gay Head Lighthouse, including painting, annual maintenance of grounds and turf, repairs and maintenance to pathways for public circulation, including an existing Americans with Disabilities Act-compliant pathway, and other minor repairs.
- iv. Park City Wind will fund fulfillment of mitigation measures prior to construction in accordance with Attachment 8, Historic Property Treatment Plan for [REDACTED] TCP:
 - a. Public Education: Park City Wind will fulfill commitments to fund the development of public education materials related to Moshup and Moshup's Bridge.
 - b. Scholarships and Training for Tribal Resource and/or Environmental Stewardship: Park City Wind will fulfill commitments to fund scholarships and fees for professional training or certification in fields related to the TCP, including, but are not limited to, anthropology, archaeology, astronomy, aquaculture, biology, ethnohistory, history, marine construction/fisheries/sciences, or Native American studies.
 - c. Coastal Resilience and Habitat Restoration: Park City Wind will fulfill commitments to fund future planning and development of efforts to help mitigate negative impacts of climate change.
- v. Park City Wind will fund fulfillment of mitigation measures prior to construction in accordance with Attachment 9, Historic Property Treatment Plan for [REDACTED] TCP:
 - a. Nineteen of the adversely affected ASLFs in the Project OECC and Western Muskeget Variant are potential contributors to the Nantucket Sound TCP. Park City Wind will fulfill commitments to additional archaeological investigation described in the Historic Property Treatment Plan for Ancient Submerged Landforms and Features.

IV. PHASED IDENTIFICATION

- A. BOEM will implement the following consultation steps for phased identification of historic properties in accordance with BOEM's *Guidelines for Providing Archaeological and Historic Property Information Pursuant to Title 30 Code of Federal Regulations Part 585*. The final identification of historic properties related to the SCV or Phase 2 onshore substations may occur after publication of the Draft EIS, but prior to the initiation of construction. BOEM will conduct phased identification of historic properties, pursuant to 36 CFR § 800.4(b)(2) and following the steps below.
 - 1. BOEM, with the assistance of Park City Wind, will invite any additional consulting parties that may want to consult on this phased identification based on any new information regarding the specific locations of the SCV or Phase 2 onshore substations.
 - 2. For identification of historic properties within the marine, terrestrial, and viewshed potions of the APE, supplemental technical studies will be conducted by Park City Wind in accordance with Massachusetts SHPO guidelines and recommendations in BOEM's most recent *Guidelines*. Park City Wind will coordinate with the SHPO prior to the initiation of any such identification efforts.
 - i. BOEM will delineate the marine, terrestrial, and visual portions of the APE for the SCV.
 - ii. BOEM will delineate the terrestrial and visual portions of the APE for the Phase 2 onshore substations.
 - iii. BOEM will require that identification efforts for historic properties associated with marine archaeology, terrestrial archaeology, and above-ground resources be documented in technical reports that address the identification of historic properties and include an evaluation of effects due to the Project.
 - 3. BOEM will consult on the results of historic property identification that were not addressed in the pre-COP approval consultations.
 - 4. BOEM will treat all identified potential historic properties as eligible for inclusion in the NRHP unless BOEM determines, and the SHPO agrees, that a property is ineligible, pursuant to 36 CFR § 800.4(c).
 - 5. If BOEM identifies no additional historic properties or determines that no historic properties are adversely affected, BOEM, with the assistance of Park City Wind, will notify and consult with the signatories, invited signatories, and consulting parties following the consultation process set forth here in this stipulation.
 - i. Park City Wind will notify all the signatories, invited signatories, and consulting parties about the selection of the SCV or Phase 2 onshore substations and BOEM's determination by providing a written summary including any maps, a summary of the surveys and/or research conducted to identify historic properties and assess effects, and copies of the surveys.
 - ii. The signatories, invited signatories, and consulting parties will have 30 calendar days to review and comment on the survey reports, the results of the surveys, BOEM's determination, and the documents.
 - iii. After the 30-calendar review period has concluded and if no comments require additional consultation, Park City Wind will notify the signatories and consulting parties that the Massachusetts SHPO has

- concurred with BOEM's determination. If comments are received, Park City Wind will provide to signatories, invited signatories, and consulting parties a summary of the comments and BOEM's responses.
- iv. BOEM, with the assistance of Park City Wing, will conduct any consultation meetings if requested by the signatories or consulting parties.
- v. This MOA will not need to be amended if no additional historic properties are identified and/or determined to be adversely affected.
- 6. If BOEM determines new adverse effects to historic properties will occur, BOEM, with the assistance of Park City Wind, will notify and consult with the signatories, invited signatories, and consulting parties regarding BOEM's finding and the proposed measures to resolve the adverse effect(s) including the development of a new treatment plan(s) following the consultation process set forth in this stipulation.
 - i. Park City Wind will notify all signatories, invited signatories, and consulting parties about the selected SCV or Phase 2 onshore substations and BOEM's determination by providing a written summary including any maps, a summary of the surveys and/or research conducted to identify historic properties and assess effects, copies of the surveys, BOEM's determination, and the proposed resolution measures for the adverse effect(s).
 - ii. The signatories, invited signatories, and consulting parties will have 30 calendar days to review and comment on the documents including the adverse effect finding and the proposed resolution of adverse effect(s), including a draft treatment plan(s).
 - iii. BOEM, with the assistance of Park City Wind, will conduct additional consultation meetings, if necessary, during consultation on the adverse effect finding and during drafting and finalization of the treatment plan(s).
 - iv. BOEM, with the assistance of Park City Wind, will respond to the comments and make necessary edits to the documents.
 - v. Park City Wind will send the revised draft final documents to the other signatories, invited signatories, and consulting parties for review and comment during a 30-calendar day review and comment period. With this same submittal of draft final documents, Park City Wind will provide a summary of all the comments received on the documents and BOEM's responses.
 - vi. BOEM, with the assistance of Park City Wind, will respond to the comments on the draft final documents and make necessary edits to the documents.
 - vii. After BOEM has received concurrence from the Massachusetts SHPO on the finding of new adverse effect(s) and BOEM has accepted the final treatment plan(s), Park City Wind will provide all the signatories, invited signatories, and consulting parties with the final document(s) including the final treatment plan(s), a summary of comments, and BOEM's responses to comments, if any are received on the draft final documents.
 - viii. The MOA will not need to be amended after the treatment plan(s) is accepted by BOEM.

7. If a SHPO disagrees with BOEM's determination regarding whether an affected property is eligible for inclusion in the NRHP, or if the ACHP or the Secretary of the Interior so request, the agency official will obtain a determination of eligibility from the Secretary pursuant to 36 CFR Part 63 (36 CFR § 800.4(c)(2)).

Additional information on the phased identification plan can be found in Attachment 10, New England Wind Phased Identification Plan.

V. REVIEW PROCESS FOR DOCUMENTS

- A. The following process will be used for any document, report, or plan produced in accordance with Stipulations of this MOA:
 - 1. Draft Document
 - i. Park City Wind shall provide the document to BOEM for technical review and approval.
 - a. BOEM has 15 calendar days to complete its technical review.
 - b. If BOEM does not provide approval, it shall submit its comments back to Park City Wind, who will have 15 calendar days to address the comments.
 - c. After review and approval of the document by BOEM, BOEM, with the assistance of Park City Wind, shall provide the draft document to the consulting parties, except the ACHP, for review and comment.
 - d. Consulting parties shall have 30 calendar days to review and comment.
 - e. BOEM, with the assistance of Park City Wind, shall coordinate a meeting with consulting parties to facilitate comments on the document if requested by a consulting party.
 - f. BOEM shall consolidate comments received and provide them to Park City Wind within 15 calendar days of receiving comments from consulting parties.
 - g. BOEM, with the assistance of Park City Wind, will respond to the comments and make necessary edits to the documents.

2. Draft Final Document

- i. Park City Wind shall provide BOEM with the draft final document for technical review and approval.
 - a. BOEM has 15 calendar days to complete its technical review.
 - b. If BOEM does not provide approval, it shall submit its comments back to Park City Wind, who will have 15 calendar days to address the comments.

- ii. BOEM, with the assistance of Park City Wind, shall provide the final draft document to consulting parties, except the ACHP, for review and comment.
 - a. Consulting parties shall have 30 calendar days to review and comment.
 - b. BOEM, with the assistance of Park City Wind, shall coordinate a meeting with consulting parties to facilitate comments on the document if requested by a consulting party.
 - c. BOEM shall consolidate comments received and provide them to Park City Wind within 15 calendar days of receiving comments from consulting parties.
 - d. BOEM, with the assistance of Park City Wind, will respond to the comments and make necessary edits to the documents.

3. Final Document

- i. Park City Wind shall provide BOEM with the final document for approval.
 - a. BOEM has 15 calendar days to complete its technical review.
 - b. If BOEM does not provide approval, BOEM shall submit its comments back to Park City Wind, who will have 15 calendar days to address the comments.
 - c. BOEM, with the assistance of Park City Wind, shall provide the final document to consulting parties, except the ACHP, within 30 calendar days of approving the final document. With this same submittal of final documents, Park City Wind will provide a summary of all the comments received on the documents and BOEM's responses.

VI. PROJECT MODIFICATIONS

If Park City Wind proposes any modifications to the Project that expand the Project A. beyond the PDE included in the COP and/or outside the defined APEs, or if the proposed modifications change BOEM's final Section 106 determinations and findings for this Project, Park City Wind will notify and provide BOEM with information concerning the proposed modifications. BOEM will determine if these modifications require alteration of the conclusions reached in the Finding of Effect and, thus, will require additional consultation with the signatories, invited signatories, and consulting parties. If BOEM determines additional consultation is required, Park City Wind will provide the signatories, invited signatories, and consulting parties with the information concerning the proposed changes, and the signatories, invited signatories, and consulting parties will have 30 calendar days from receipt of this information to comment on the proposed changes. BOEM will take into account any comments from signatories, invited signatories, and consulting parties prior to agreeing to any proposed changes. Using the procedure below, BOEM will, as necessary, consult with the signatories, invited signatories, and consulting parties to identify and evaluate historic properties in any newly affected areas, assess the effects of the modification, and resolve any adverse effects.

- 1. If the Project is modified and BOEM identifies no additional historic properties or determines no historic properties are adversely affected due to the modification, BOEM, with the assistance of Park City Wind, will notify and consult with the signatories, invited signatories, and consulting parties following the consultation process set forth in this Stipulation VI.A.1.
 - i. Park City Wind will notify all signatories, invited signatories, and consulting parties about this proposed change and BOEM's determination by providing a written summary of the Project modification including any maps, a summary of any additional surveys and/or research conducted to identify historic properties and assess effects, and copies of the surveys.
 - ii. The signatories, invited signatories, and consulting parties will have 30 calendar days to review and comment on the proposed change, BOEM's determinations, and the documents.
 - iii. After the 30-day calendar review period has concluded and no comments require additional consultation, Park City Wind will notify the signatories and consulting parties that BOEM has approved the Project modification and, if they received any comments, provide a summary of the comments and BOEM's responses.
 - iv. BOEM, with the assistance of Park City Wind, will conduct any consultation meetings if requested by the signatories or consulting parties.
 - v. This MOA will not need to be amended if no additional historic properties are identified or adversely affected.
- 2. If BOEM determines new adverse effects on historic properties will occur due to a Project modification, BOEM, with the assistance of Park City Wind, will notify and consult with the relevant signatories, invited signatories, and consulting parties regarding BOEM's finding and the proposed measures to resolve the adverse effect(s) including the development of a new treatment plan(s) following the consultation process set forth in this Stipulation VI.A.2.
 - i. Park City Wind will notify all signatories, invited signatories, and consulting parties about this proposed modification, BOEM's determination, and the proposed resolution measures for the adverse effect(s).
 - ii. The signatories, invited signatories, and consulting parties will have 30 calendar days to review and comment on the adverse effect finding and the proposed resolution of adverse effect(s), including a draft treatment plan(s).
 - iii. BOEM, with the assistance of Park City Wind, will conduct additional consultation meetings, if necessary, during consultation on the adverse effect finding and during drafting and finalization of the treatment plans(s).
 - iv. BOEM, with the assistance of Park City Wind, will respond to comments and make necessary edits to the documents.

- v. Park City Wind will send the revised draft final documents to the other signatories, invited signatories, and consulting parties for review and comment during a 30-calendar day review and comment period. With the submittal of draft final documents, Park City Wind will provide a summary of all the comments received on the documents and BOEM's responses.
- vi. BOEM, with the assistance of Park City Wind, will respond to the comments on the draft final documents and make necessary edits to the documents
- vii. After BOEM has received concurrence from the appropriate SHPO(s) on the finding of new adverse effect(s), BOEM has accepted the final treatment plan(s), and BOEM has approved the Project modification. Park City Wind will notify all signatories, invited signatories, and consulting parties that BOEM has approved the Project modification and will provide the final document(s) including the final treatment plan(s) and a summary of comments and BOEM's responses to comments, if they receive any on the draft final documents. The MOA will not need to be amended after the treatment plan(s) is accepted by BOEM.
- 3. If any of the signatories, invited signatories, or consulting parties object to determinations, findings, or resolutions made pursuant to these measures (Stipulation VI.A.1 and VI.A.2), BOEM will resolve any such objections pursuant to the dispute resolution process set forth in Stipulation XI, Amendments.

VII. SUBMISSION OF DOCUMENTS

- A. ACHP, NPS, tribes, and consulting parties
 - 1. All submittals to ACHP, NPS, tribes, and consulting parties will be submitted electronically unless a specific request is made for the submittal to be provided in paper format.
- B. Massachusetts SHPO
 - 1. All submittals to Massachusetts SHPO will be in paper format and delivered by U.S. mail, delivery service, or by hand.
 - 2. Plans and specifications submitted to Massachusetts SHPO must measure no larger than 11- by 17-inch format (unless another format is agreed to in consultation); therefore, all documents produced that will be submitted to Massachusetts SHPO under this MOA must meet this format.

VIII. CURATION

- A. Collections from federal lands or the OCS:
 - 1. Any archaeological materials removed from federal lands or the OCS as a result of the actions required by this MOA shall be curated in accordance with 36 CFR 79, "Curation of Federally Owned and Administered Archaeological Collections," ACHP's Recommended Approach for Consultation on Recovery of Significant Information from Archaeological Sites published in the Federal Register (64 Fed. Reg. 27085-27087 [May 18, 1999]), or other provisions agreed to by the consulting parties and following applicable state guidelines. No excavation may be initiated before acceptance and approval of a curation plan.

- B. Collections from state, local government, and private lands:
 - 1. Archaeological materials from state or local government lands in the APE and the records and documentation associated with these materials shall be curated within the state of their origin at a repository preferred by the Massachusetts SHPO, or an approved and certified repository, in accordance with the standards and guidelines required by the Massachusetts SHPO. Lands as described here may include the seafloor in state waters. No excavation may be initiated before acceptance and approval of a curation plan.
 - 2. Collections from private lands that would remain private property: In cases where archaeological survey and testing are conducted on private land, any recovered collections remain the property of the landowner. In such instances, BOEM and Park City Wind, in coordination with the SHPO and affected Tribe(s), will encourage landowners to donate the collection(s) to an appropriate public or tribal entity. To the extent a private landowner requests that the materials be removed from the site, Park City Wind will seek to have the materials donated to the repository identified under Stipulation VIII.B\.1 through a written donation agreement developed in consultation with the consulting parties. BOEM, assisted by Park City Wind, will seek to have all materials from each state curated together in the same curation facility within the state of origin. In cases where the property owner wishes to transfer ownership of the collection(s) to a public or tribal entity, BOEM and Park City Wind will ensure that recovered artifacts and related documentation are curated in a suitable repository as agreed to by BOEM, Massachusetts SHPO, and affected tribe(s), and following applicable state guidelines. To the extent feasible, the materials and records resulting from the actions required by this MOA for private lands shall be curated in accordance with 36 CFR 79. No excavation may be initiated before acceptance and approval of a curation plan.

IX. PROFESSIONAL QUALIFICATIONS

- A. <u>SOI Standards for Archaeology and Historic Preservation.</u> Park City Wind will ensure all work carried out pursuant to this MOA meets the *Secretary of the Interior's Standards for Archaeology and Historic Preservation* (48 Fed. Reg. 44716, September 29, 1983), taking into account the suggested approaches to new construction in the Standards for Rehabilitation.
- B. <u>SOI Professional Qualification Standards.</u> Park City Wind will ensure that all work carried out pursuant to this MOA is performed by or under the direct supervision of historic preservation professionals who meet the *Secretary of the Interior's Professional Qualifications Standards* (48 Fed. Reg. 44738–44739). A "qualified professional" is a person who meets the relevant standards outlined in such SOI's standards. BOEM, or its designee, will ensure that consultants retained for services pursuant to the MOA meet these standards.
- C. <u>Tribal Consultation Experience.</u> Park City Wind will ensure that all work carried out pursuant to this MOA that requires consultation with tribes is performed by professionals who have demonstrated professional experience consulting with federally recognized tribes.
- D. <u>Investigations of ASLFs.</u> Park City Wind will ensure that the additional investigations of ASLFs will be conducted, and reports and other materials produced, by one or more qualified marine archaeologists and geological specialists who meet the *Secretary of the*

Interior's Professional Qualifications Standards, with experience both in conducting high-resolution geophysical (HRG) surveys and processing and interpreting the resulting data for archaeological potential, as well as collecting, subsampling, and analyzing cores.

X. DURATION

A. This MOA will expire at (1) the decommissioning of the Project in the lease area, as defined in Park City Wind's lease with BOEM (Lease Number OCS-A 0534) or (2) 30 years from the date of COP approval, whichever occurs first. Prior to such time, BOEM may consult with the other signatories and invited signatories to reconsider the terms of the MOA and amend it in accordance with Stipulation XI.

XI. POST-REVIEW DISCOVERIES

- A. <u>Implementation of Post-Review Discovery Plans</u>. If properties are discovered that may be historically significant or unanticipated effects on historic properties found, BOEM will implement the post-review discovery plans found in Attachment 11, New England Wind Terrestrial Unanticipated Discovery Plan, and Attachment 12, New England Wind Unanticipated Discoveries Plan for Submerged Archaeological Resources.
 - 1. The signatories acknowledge and agree that it is possible that additional historic properties may be discovered during implementation of the Project, despite the completion of a good faith effort to identify historic properties throughout the APEs.
- B. <u>All Post-Review Discoveries.</u> In the event of a post-review discovery of a property or unanticipated effects on a historic property prior to or during construction, operations, or decommissioning of the Project, Park City Wind will implement the following actions, which are consistent with the post-review discovery plan:
 - 1. Immediately halt all ground- or seafloor-disturbing activities within the area of discovery;
 - 2. If on-site archaeological investigations are required, as determined by the applicant's cultural resources consultants, notify BOEM of the discovery and conduct investigations;
 - 3. Keep the location of the discovery confidential and take no action that may adversely affect the discovered property until the applicant's cultural resources consultant conducts a review of the discovery site and determines how to proceed;
 - 4. Conduct any additional investigations to determine if the resource is eligible for listing in the NRHP (30 CFR § 585.802[b]) and consult with SHPO. BOEM will also be notified about the transmittal of information on the archaeological site to SHPO.
 - 5. If investigations indicate that the resource is eligible for the NRHP, BOEM, with the assistance of Park City Wind, will work with the other relevant signatories, invited signatories, and consulting parties to this MOA who have a demonstrated interest in the affected historic property and on the further avoidance, minimization, or mitigation of adverse effects.
 - 6. If there is any evidence that the discovery is from an Indigenous society or appears to be a preserved burial site, Park City Wind will contact the tribes as identified in the notification lists included in the post-review discovery plans within 72 hours of the discovery with details of what is known about the discovery and consult with the tribes pursuant to the post-review discovery plan.

XII. MONITORING AND REPORTING

At the beginning of each calendar year by January 31, following the execution of this MOA until it expires or is terminated, Park City Wind will prepare and, following BOEM's review and agreement to share this summary report, provide all signatories, invited signatories, and consulting parties to this MOA a summary report detailing work undertaken pursuant to the MOA. Such report will include a description of how the stipulations relating to avoidance and minimization measures (Stipulations I and II) were implemented, any scheduling changes proposed, any problems encountered, and any disputes and objections received in BOEM's efforts to carry out the terms of this MOA. Park City Wind can satisfy its reporting requirement under this stipulation by providing the relevant portions of the annual compliance certification required under 30 CFR § 585.633.

XIII. DISPUTE RESOLUTION

- A. Should any signatory to this MOA object to any actions proposed or the manner in which the terms of this MOA are implemented, it must notify BOEM in writing of its objection. BOEM shall consult with such party to resolve the objection.
 - 1. If BOEM determines that such objection cannot be resolved, BOEM will forward all documentation relevant to the dispute, including BOEM's proposed resolution, to the ACHP. The ACHP will provide BOEM its advice on the resolution of the objection within 30 calendar days of receiving adequate documentation. Prior to reaching a final decision on the dispute, BOEM will prepare a written response that takes into account any timely advice or comments regarding the dispute from the ACHP, signatories, invited signatories, and/or consulting parties, and provide them with a copy of the written response. BOEM will then make its final decision and proceed accordingly.
 - 2. If the ACHP does not provide its advice regarding the dispute within the 30-calendar-day time period, BOEM may make a final decision on the dispute and proceed accordingly. Prior to reaching such a final decision, BOEM will prepare a written response that takes into account any timely comments regarding the dispute from the signatories, invited signatories, and/or consulting parties to the MOA and provide them and the ACHP with a copy of such written response.
- B. BOEM's responsibility to carry out all other actions subject to the terms of this MOA that are not the subject of the dispute remain unchanged.
- C. At any time during the implementation of the measures stipulated in this MOA, should a member of the public object in writing to the signatories regarding the manner in which the measures stipulated in this MOA are being implemented, that signatory will notify BOEM. BOEM will review the objection and may notify the other signatories as appropriate and respond to the objector.

XIV. AMENDMENTS

- A. This MOA may be amended when such an amendment is agreed to in writing by all signatories and invited signatories. The amendment will be effective on the date a copy signed by all of the signatories and invited signatories is filed with the ACHP.
- B. Revisions to any attachment may be proposed by any signatory or invited signatory by submitting a draft of the proposed revisions to all signatories and invited signatories with a notification to the consulting parties. The signatories and invited signatories will consult for no more than 30 calendar days (or another time period agreed upon by all signatories and invited signatories) to consider the proposed revisions to the attachment. If the signatories and invited signatories unanimously agree to revise the attachment, BOEM will provide a copy of the revised attachment to the other signatories, invited signatories, and consulting parties. Revisions to any attachment to this MOA will not require an amendment to the MOA.

XV. COORDINATION WITH OTHER FEDERAL AGENCIES

- A. In the event that another federal agency not initially a party to or subject to this MOA receives an application for funding/license/permit for the undertaking as described in this MOA, that agency may fulfill its Section 106 responsibilities by stating in writing it concurs with the terms of this MOA and notifying the signatories and invited signatories that it intends to do so. Such federal agency may become a signatory, invited signatory, or a concurring party (collectively referred to as signing party) to the MOA as a means of complying with its responsibilities under Section 106 and based on its level of involvement in the undertaking. To become a signing party to the MOA, the agency official must provide written notice to the signatories and invited signatories that the agency agrees to the terms of the MOA, specifying the extent of the agency's intent to participate in the MOA. The participation of the agency is subject to approval by the signatories and invited signatories who must respond to the written notice within 30 calendar days, or the approval will be considered implicit. Any necessary amendments to the MOA as a result will be considered in accordance with Stipulation XI.
- B. Should the signatories and invited signatories approve the federal agency's request to be a signing party to this MOA, an amendment under this stipulation will not be necessary if the federal agency's participation does not change the undertaking in a manner that would require any modifications to the stipulations set forth in this MOA. BOEM will document these conditions and involvement of the federal agency in a written notification to the signatories, invited signatories, and consulting parties and include a copy of the federal agency's executed signature page, which will codify the addition of the federal agency as a signing party in lieu of an amendment.

XVI. ANTI-DEFICIENCY ACT

Pursuant to 31 USC § 1341(a)(1), nothing in this MOA will be construed as binding the United States to expend in any one fiscal year any sum in excess of appropriations made by Congress for this purpose, or to involve the United States in any contract or obligation for the further expenditure of money in excess of such appropriations.

Execution of this MOA by BOEM, the Massachusetts SHPO, and the ACHP, and implementation of its terms, evidence that BOEM has taken into account the effects of this undertaking on historic properties and afforded the ACHP an opportunity to comment on resolution of effects of this undertaking on historic properties.

XVII. TERMINATION

If any signatory or invited signatory to this MOA determines that its terms will not or cannot be carried out, that party will immediately consult with the other signatories, invited signatories, and consulting parties to attempt to develop an amendment per Stipulation XII. If within 30 calendar days (or another time period agreed to by all signatories) an amendment cannot be reached, any signatory or invited signatory may terminate the MOA upon written notification to the other signatories.

Once the MOA is terminated, and prior to work continuing on the undertaking, BOEM must either (a) execute an MOA pursuant to 36 CFR § 800.6, or (b) request, take into account, and respond to the comments of the ACHP under 36 CFR § 800.7. BOEM will notify the signatories and invited signatories as to the course of action it will pursue.

[SIGNATURES COMMENCE ON FOLLOWING PAGE]

Signatory:		
Bureau of Ocean Energy Management (BOEM)		
	Date:	_
Amanda Lefton		
Director		
Bureau of Ocean Energy Management		

Signatory:		
Massachusetts State Historic Preservation Officer (Sl	HPO)	
	Date:	
Brona Simon, State Historic Preservation Officer		

Signatory:		
Advisory Council on Historic Preservation (ACHP)		
	Date:	
Reid J. Nelson		
Executive Director, Acting		
Advisory Council on Historic Preservation		

Invited Signatory:	
Park City Wind LLC	
	Date:
[Name]	
[Title]	
[Affiliation]	

Concurring Party:	
United States Army Corps of Engineers (USACE)	
	Date:
[Name]	
[Title]	
[Affiliation]	

Concurring Party:	
Mashantucket Pequot Tribal Nation	
	Date:
[Name]	
[Title]	
Mashantucket Pequot Tribal Nation	

Concurring Party:		
Mashpee Wampanoag Tribe of Massachusetts		
	Date:	
[Name]		
[Title]		
Mashpee Wampanoag Tribe of Massachusetts		

Concurring Party:		
Wampanoag Tribe of Gay Head (Aquinnah)		
	Date:	
[Name]		
[Title]		
Wampanoag Tribe of Gay Head (Aquinnah)		

THE BUREAU OF OCEAN ENERGY MANAGEMENT, THE MASSACHUSETTS STATE HISTORIC PRESERVATION OFFICER, PARK CITY WIND LLC, AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION REGARDING THE NEW ENGLAND WIND OFFSHORE WIND ENERGY PROJECT

LIST OF ATTACHMENTS TO THE MOA

	TTACHMENT	1 - AREA	OF POTENTIAL	LEFFECTS N	//APS
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ATTACHMENT 2 – LISTS OF INVITED AND PARTICIPATING CONSULTING PARTIES

ATTACHMENT 3 – HISTORIC PROPERTY TREATMENT PLAN FOR SUBMERGED HISTORICAL PROPERTIES

ATTACHMENT 4 – HISTORIC PROPERTY TREATMENT PLAN FOR ANCIENT SUBMERGED LANDFORMS AND FEATURES

ATTACHMENT 5 – HISTORIC PROPERTY TREATMENT PLAN FOR THE EDWIN VANDERHOOP HOMESTEAD AND GAY HEAD – AQUINNAH SHOPS AREA

ATTACHMENT 6 – HISTORIC PROPERTY TREATMENT PLAN FOR [REDACTED] TCP

ATTACHMENT 7 – HISTORIC PROPERTY TREATMENT PLAN FOR GAY HEAD LIGHTHOUSE

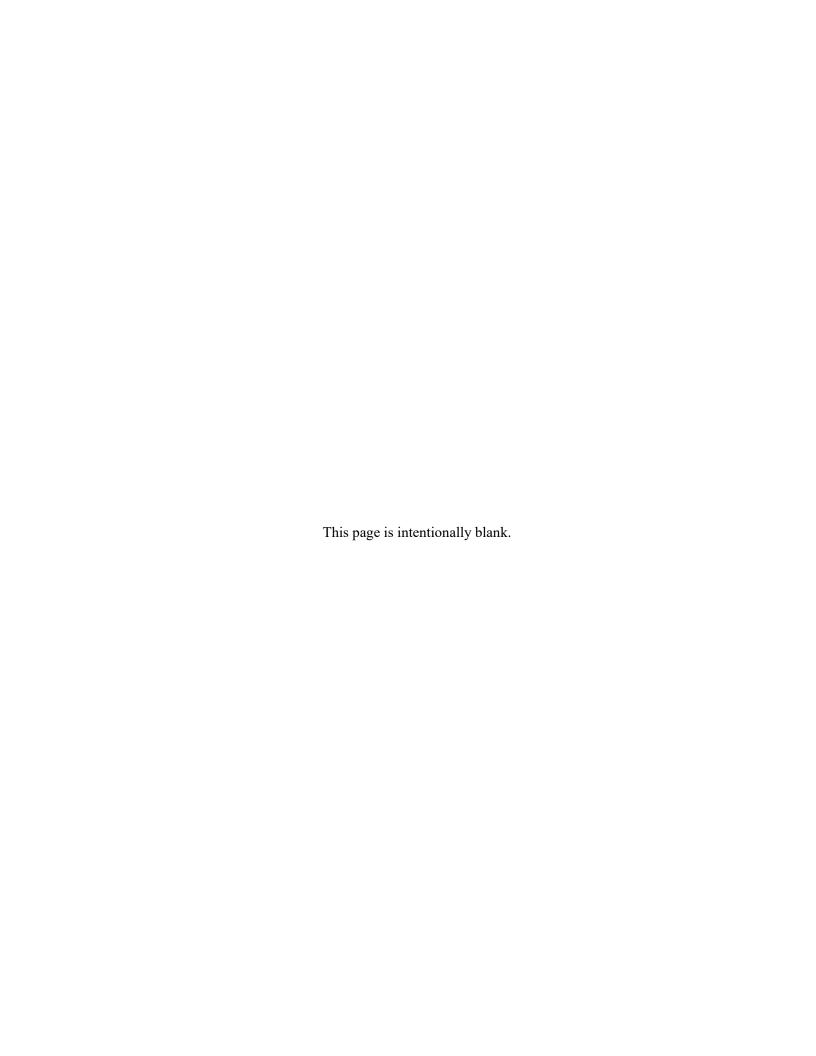
ATTACHMENT 8 – HISTORIC PROPERTY TREATMENT PLAN FOR [REDACTED] TCP

ATTACHMENT 9 – HISTORIC PROPERTY TREATMENT PLAN FOR [REDACTED] TCP

ATTACHMENT 10 – NEW ENGLAND WIND PHASED IDENTIFICATION PLAN

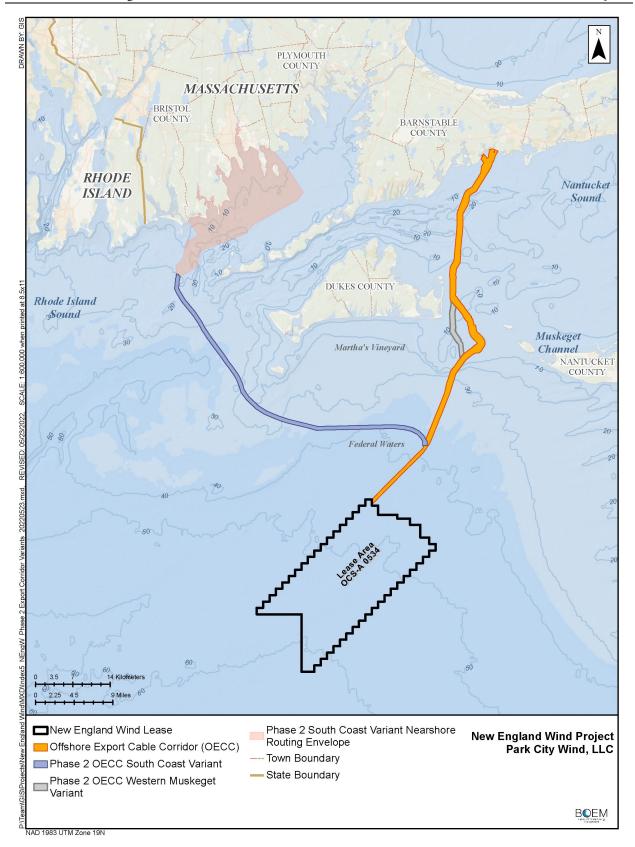
ATTACHMENT 11 - NEW ENGLAND WIND TERRESTRIAL UNANTICIPATED DISCOVERY PLAN

ATTACHMENT 12 – NEW ENGLAND WIND UNANTICIPATED DISCOVERIES PLAN FOR SUBMERGED ARCHAEOLOGICAL RESOURCES

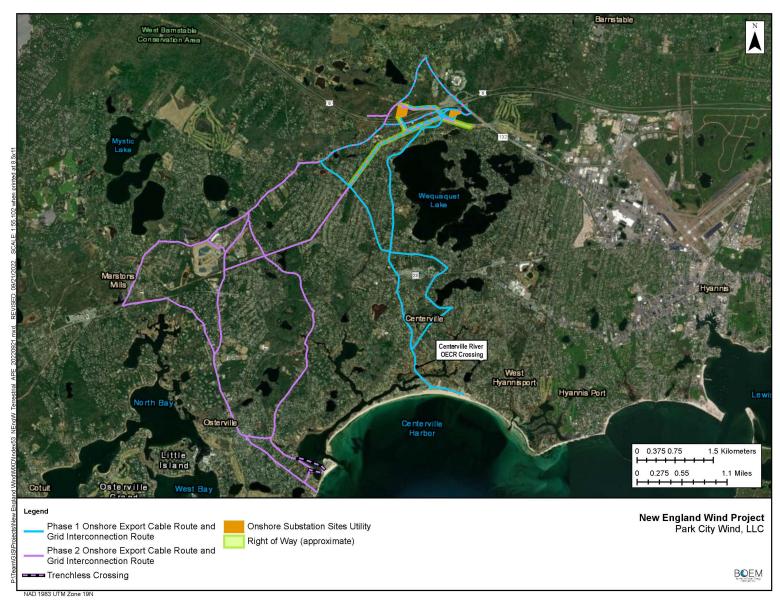


ATTACHMENT 1 – AREA OF POTENTIAL EFFECTS MAPS





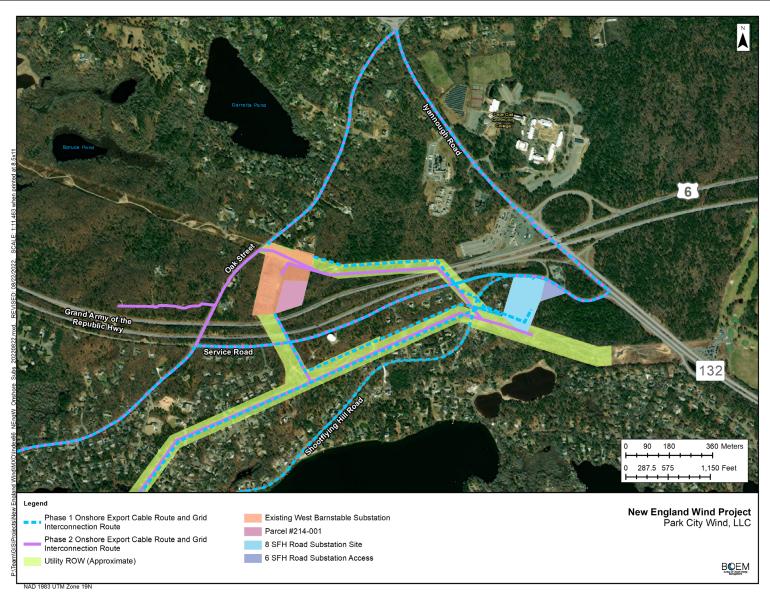
Marine Area of Potential Effects



Terrestrial Area of Potential Effects



Terrestrial Area of Potential Effects, Phase 1 Landfall Sites

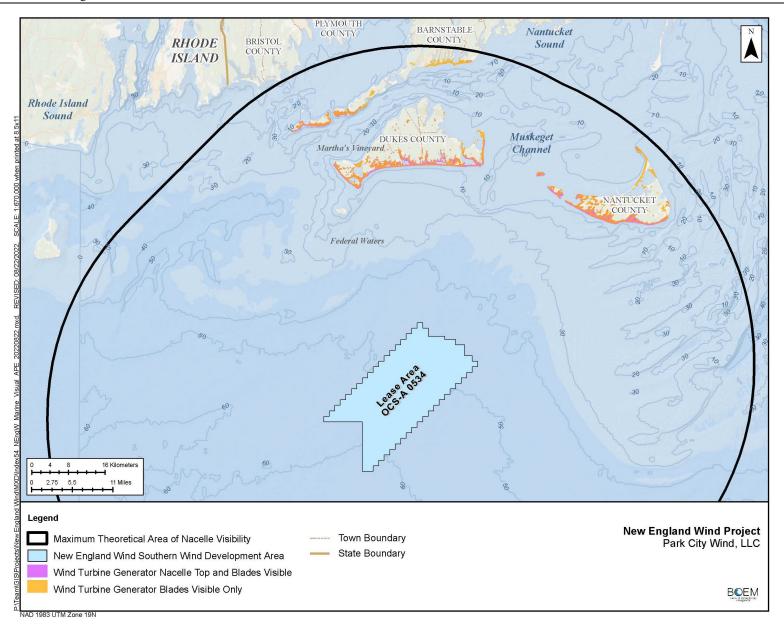


ROW = right-of-way; SFH = Shootflying Hill

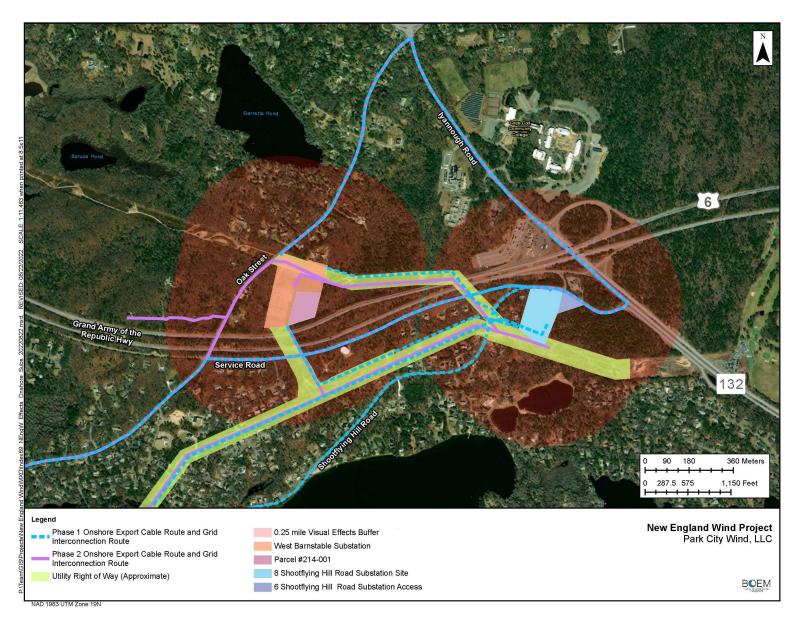
Terrestrial Area of Potential Effects, West Barnstable Substation Area



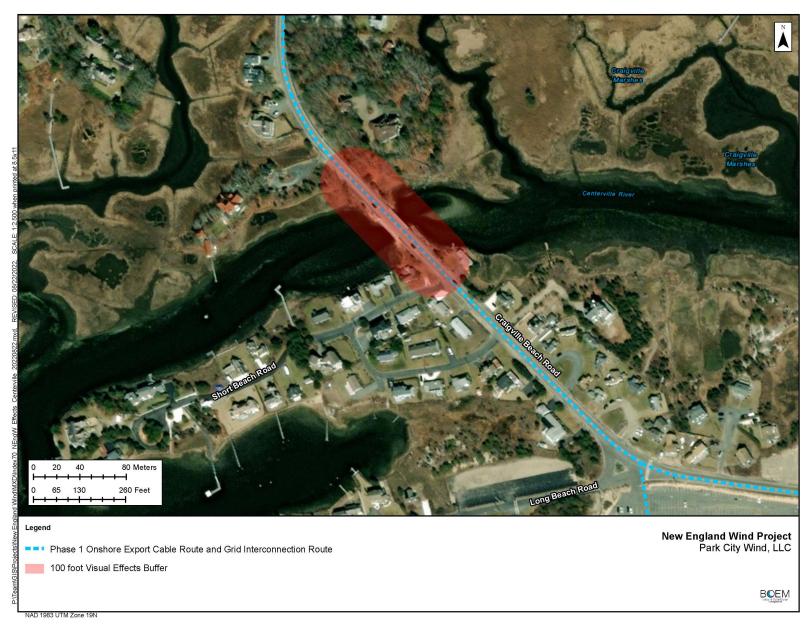
Terrestrial Area of Potential Effects, Phase 2 Landfall Sites



Offshore Visual Area of Potential Effects



Onshore Visual Area of Potential Effects, Barnstable Substation Sites



Onshore Visual Area of Potential Effects, Centerville River Bridge

Attachment 2-1: Entities Invited to be Consulting Parties

The following is a list of governments and organizations that BOEM contacted and invited to be a consulting party to the NHPA Section 106 review of the New England Wind Project (formerly Vineyard Wind South) between June 2021 and April 2022. During the consultations, additional parties were made known to BOEM and were added as they were identified. All counties and municipalities listed below are in Massachusetts unless otherwise specified.

- Advisory Council on Historic Preservation (ACHP)
- Alliance to Protect Nantucket Sound
- Avangrid
- Bureau of Safety and Environmental Enforcement
- Cape Cod Commission
- Non-federally recognized historic Massachusetts Chappaquiddick Tribe of the Wampanoag Nation
- City of New Bedford
- City of Fall River
- Connecticut Department of Economic and Community Development, State Historic Preservation Office
- County of Barnstable
- County of Bristol
- County of Dukes
- Cultural Heritage Partners
- The Delaware Nation
- Delaware Tribe of Indians
- Gay Head Lighthouse Advisory Board
- Historic District Commission (Nantucket)
- Maria Mitchell Association (Dark Skies Initiative)
- Martha's Vineyard Commission
- Mashantucket (Western) Pequot Tribal Nation
- Mashpee Wampanoag Tribe of Massachusetts

- Massachusetts Board of Underwater Archaeological Resources
- Massachusetts Commission on Indian Affairs
- Massachusetts Historical Commission
- Mohegan Tribe of Indians of Connecticut
- Nantucket Conservation Foundation
- Nantucket Historical Association
- Nantucket Historical Commission
- Nantucket Planning Commission
- Nantucket Preservation Trust
- Narragansett Indian Tribe
- National Oceanic and Atmospheric Administration, Habitat and Ecosystem Services Division
- National Park Service
- Office of the Deputy Assistant Secretary of the Navy for Environment
- Preservation Massachusetts
- Rhode Island Historical Preservation & Heritage Commission
- The Shinnecock Indian Nation
- Town of Aquinnah
- Town of Barnstable
- Town of Barnstable Historical Commission
- Town of Chilmark
- Town of Dartmouth
- Town of Dighton
- Town of Edgartown
- Town of Fairhaven

New England Wind Project Draft Memorandum of Agreement

Attachment 2 Lists of Invited and Participating Consulting Parties

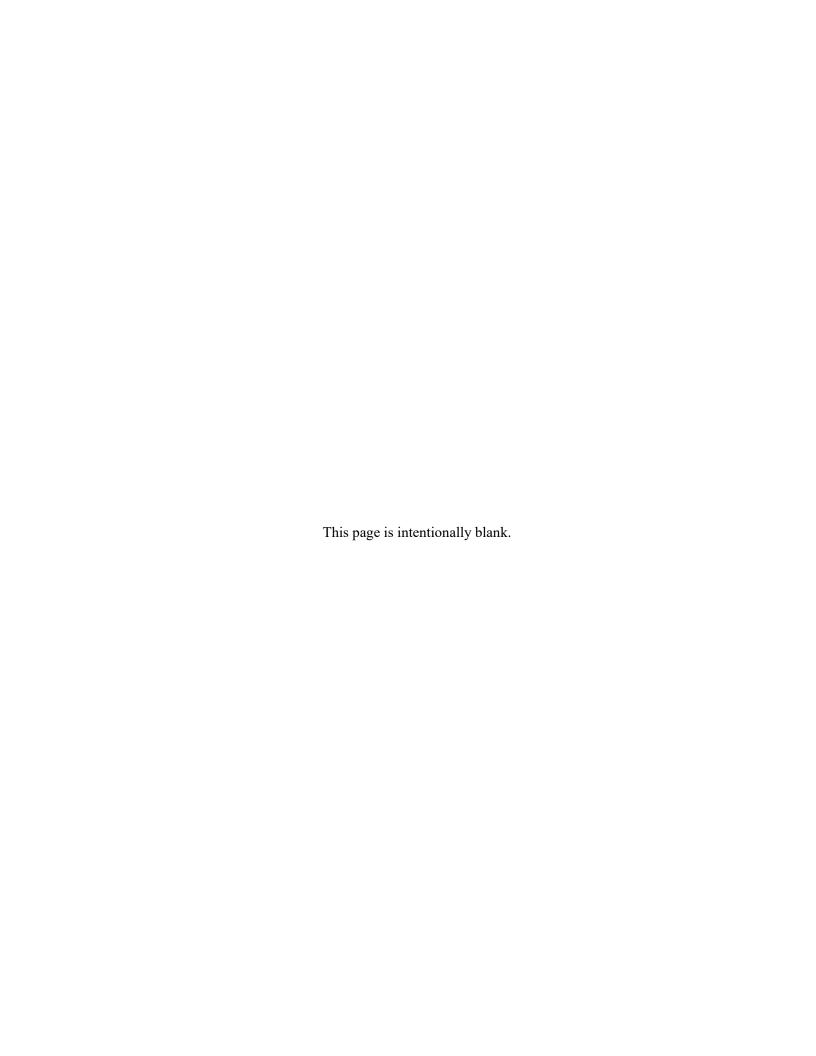
- Town of Falmouth
- Town of Gosnold
- Town of Nantucket
- Town of Oak Bluffs
- Town of Tisbury
- Town of West Tisbury
- Town and County of Nantucket (via their counsel)
- Trustees, Martha's Vineyard and Nantucket
- U.S. Environmental Protection Agency
- U.S. Federal Aviation Administration
- U.S. Fish and Wildlife Service
- U.S. Army Corps of Engineers
- U.S. Coast Guard
- U.S. Department of Defense
- Vineyard Power Cooperative
- Vineyard Wind
- Wampanoag Tribe of Gay Head (Aquinnah)

Attachment 2-2: Consulting Parties to the New England Wind Project

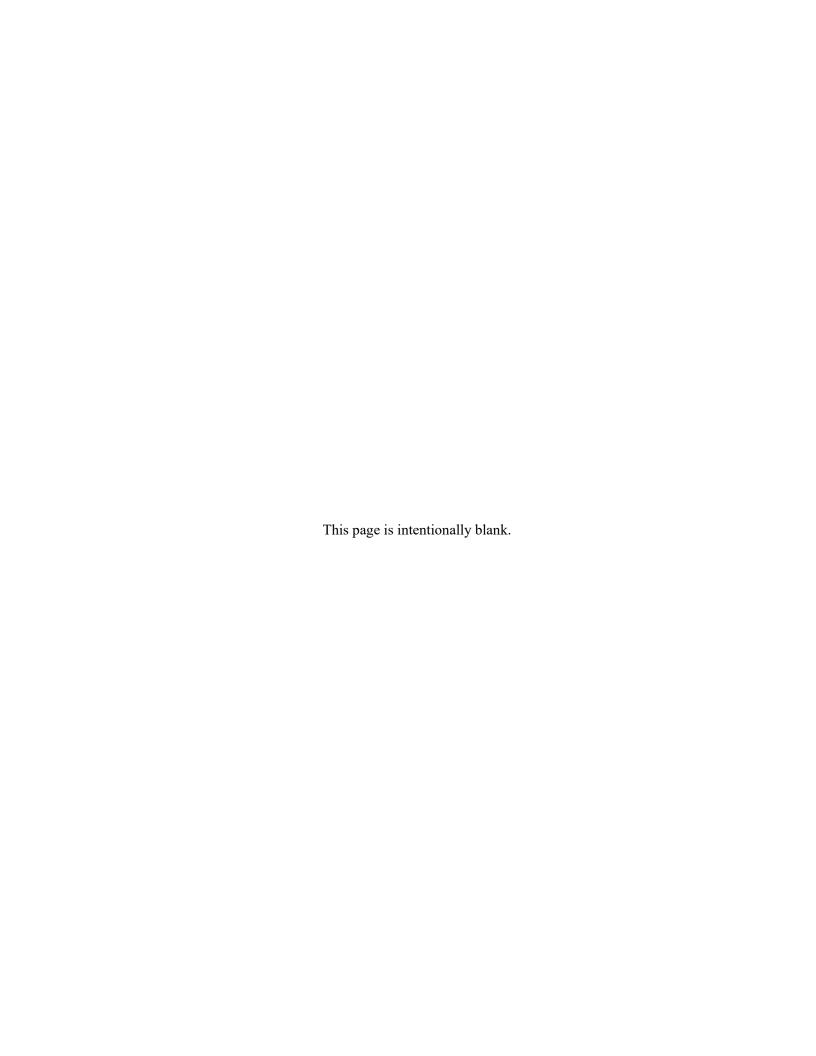
The following is a current list of consulting parties to the NHPA Section 106 review of the New England Wind Project, as of April 22, 2022.

- Advisory Council on Historic Preservation (ACHP)
- Alliance to Protect Nantucket Sound
- Bureau of Safety and Environmental Enforcement
- Cape Cod Commission
- County of Dukes
- County of Bristol
- Gay Head Lighthouse Advisory Board
- Maria Mitchell Association (Dark Skies Initiative) (withdrew August 27, 2020)
- Martha's Vineyard Commission
- Mashantucket (Western) Pequot Tribal Nation
- Mashpee Wampanoag Tribe of Massachusetts
- Massachusetts Board of Underwater Archaeological Resources
- Massachusetts Historical Commission
- Nantucket Historical Commission (withdrew September 10, 2020)
- Nantucket Historic District Commission (withdrew September 10, 2020)
- Nantucket Planning and Economic Development Commission (withdrew September 10, 2020)
- Nantucket Preservation Trust (withdrew August 27, 2020)
- National Park Service
- Office of the Deputy Assistant Secretary of the Navy for Environment
- Park City Wind
- Rhode Island Historical Preservation & Heritage Commission
- Town and County of Nantucket (withdrew August 27, 2020)
- Town of Barnstable, Historical Commission
- U.S. Army Corps of Engineers
- U. S. Environmental Protection Agency
- Wampanoag Tribe of Gay Head (Aquinnah)

Some of the parties consulted over the course of the NHPA Section 106 review have voluntarily withdrawn from further participation in the consultation, as indicated by the withdrawal date in parentheses for each of those parties.



${\tt ATTACHMENT~3-HISTORIC~PROPERTY~TREATMENT~PLAN~FOR~SUBMERGED~HISTORICAL~PROPERTIES}$





Draft New England Wind Historic Property Treatment Plan for Submerged Historical Properties

Submitted to:

BUREAU OF OCEAN ENERGY MANAGEMENT

45600 Woodland Rd

Sterling, VA 20166

Submitted by: Park City Wind LLC

Prepared by:









December 2022

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EXECUTIVE SUMMARY

This draft Historic Property Treatment Plan (HPTP) for Submerged Historical Properties (i.e., shipwrecks) potentially affected by the New England Wind project provides background data, historic property information, and detailed steps that will be implemented to carry out the mitigation identified during the Section 106 consultation process in the forthcoming Memorandum of Agreement (MOA) with the Bureau of Ocean Energy Management (BOEM), the Massachusetts State Historic Preservation Officer (MA SHPO), and the Advisory Council on Historic Preservation regarding the New England Wind project. The conditions of Construction and Operations Plan (COP) approval and the forthcoming MOA will identify a substantive baseline of specific mitigation measures to resolve the adverse visual effects to the properties identified below as a result of the construction and operation of the New England Wind project (the Undertaking) to satisfy requirements of Section 106 and 110(f) of the National Historic Preservation Act (NHPA) of 1966 (54 USC 300101; United States Code, 2016). This HPTP outlines the implementation steps and timeline for actions, and will be consistent with, or equivalent to, those substantive baseline mitigation measures identified in the conditions of COP approval and forthcoming MOA.

The National Environmental Policy Act (NEPA) substitution process will be utilized by BOEM to fulfill the Section 106 obligations as provided for in the NHPA implementing regulations (36 CFR § 800.8(c)). Furthermore, BOEM has notified the Advisory Council on Historic Preservation (ACHP), State Historic Preservation Officers, and consulting parties of BOEM's decision to use the NEPA substitution process. This draft HPTP has been provided by the Proponent for inclusion in the Draft Environmental Impact Statement (DEIS) for review by BOEM and consulting parties. Meaningful input on the resolution of adverse effects to, and form(s) of implementation at, the historic properties is anticipated.

This draft HPTP includes the mitigation measures proposed by the Proponent for historic properties based on the evaluations and outreach performed by the Proponent prior to the issuance of the DEIS. It is anticipated that the draft HPTP will undergo further revision and refinement as consultation with the Massachusetts State Historic Preservation Officer, the ACHP, and/or other consulting parties proceeds through the NEPA substitution process. Should BOEM make a finding of adverse effect for the historic property, the mitigation measure(s) described herein (and in revisions) will be included in the Record of Decision (ROD) and/or MOA issued in accordance with 40 CFR parts 1500-1508, and 36 CFR §§ 800.8, 800.10.

The timeline for implementation of the mitigation measures will be determined in consultation with parties that demonstrated interest in the affected historic property (hereafter, Participating Parties) based on the agreed upon mitigation measures described in the final version of this draft HPTP. This draft HPTP will be reviewed by, and further developed in, consultation with Participating Parties concurrent with BOEM's NEPA substitution schedule.

This draft HPTP is organized into the following sections:

Executive Summary

Section 1.0 Background Information

This section outlines the content of this HPTP and provides a description of the proposed development of New England Wind.

Section 2.0 Summary of Historic Property

This section summarizes the historic property discussed in this HPTP that may be adversely affected by the Undertaking and summarizes the provisions, attachments, and findings that informed the development of this document, most notably the New England Wind Construction and Operations Plan (NE Wind COP) and the Marine Archaeological Resource Assessment Reports (Volume II-D of the COP and Appendix E of the COP Addendum).

Section 3.0 Mitigation Measures

This section provides a review of mitigation measures proposed by the Proponent as identified in the COP or through consultation with stakeholders. Mitigation measure details may be revised during the consultation process.

Section 4.0 Implementation

This section establishes the process for executing the mitigation measures identified in Section 4.0.

Section 5.0 References

This section is a list of works cited for this draft HPTP.

1.0 BACKGROUND INFORMATION

1.1 Project Overview

New England Wind is the proposal to develop offshore renewable wind energy facilities in Bureau of Ocean Energy Management (BOEM) Lease Area OCS-A 0534 along with associated offshore and onshore cabling, onshore substations, and onshore operations and maintenance (O&M) facilities. New England Wind will be developed in two Phases with a maximum of 130 wind turbine generator (WTG) and electrical service platform (ESP) positions. Four or five offshore export cables will transmit electricity generated by the WTGs to onshore transmission systems in the Town of Barnstable, Massachusetts. Figure 1.1-1 provides an overview of the New England Wind project. Park City Wind LLC, a wholly owned subsidiary of Avangrid Renewables, LLC, is the Proponent of this Construction and Operations Plan (COP) and will be responsible for the construction, operation, and decommissioning of New England Wind. The construction, operation, and decommissioning of the New England Wind project are defined as the Undertaking and are subject to Section 106 of the National Historic Preservation Act (NHPA).

New England Wind's offshore renewable wind energy facilities are located immediately southwest of Vineyard Wind 1, which is located in Lease Area OCS-A 0501. New England Wind will occupy all of Lease Area OCS-A 0534 and potentially a portion of Lease Area OCS-A 0501 in the event that Vineyard Wind 1 does not develop "spare" or extra positions included in Lease Area OCS-A 0501 and Vineyard Wind 1 assigns those positions to Lease Area OCS-A 0534. For the purposes of the COP, the Southern Wind Development Area (SWDA) is defined as all of Lease Area OCS-A 0534 and the southwest portion of Lease Area OCS-A 0501, as shown in Figure 1.1-1. The SWDA may be approximately 411–453 square kilometers (km2) (101,590– 111,939 acres) in size depending upon the final footprint of Vineyard Wind 1. At this time, the Proponent does not intend to develop the two positions in the separate aliquots located along the northeastern boundary of Lease Area OCS-A 0501 as part of New England Wind. The SWDA (excluding the two separate aliquots closer to shore) is just over 32 kilometers (km) (20 miles [mi]) from the southwest corner of Martha's Vineyard and approximately 38 km (24 mi) from Nantucket (see Figure 1.1-1). Within the SWDA, the closest WTG is approximately 34.1 km (21.2 mi) from Martha's Vineyard and 40.4 km (25.1 mi) from Nantucket. The WTGs and ESP(s) in the SWDA will be oriented in an east-west, north-south grid pattern with one nautical mile (NM) (1.85 km) spacing between positions.

In order to transmit the power to shore, four or five offshore export cables—two cables for Phase 1 (Park City Wind) and two or three cables for Phase 2 (Commonwealth Wind) will connect the SWDA to shore. Unless technical, logistical, grid interconnection, or other unforeseen issues arise, all New England Wind offshore export cables will be installed within a shared Offshore Export Cable Corridor (OECC) that will travel from the northwestern corner of the SWDA along the northwestern edge of Lease Area OCS-A 0501 (through Vineyard Wind 1) and then head northward along the eastern side of Muskeget Channel toward landfall sites in the Town of Barnstable. The total length of the export cable route is approximately 101 km (Electrical Service Platform to shore). The OECC for New England Wind is largely the same OECC proposed in the approved Vineyard Wind 1 COP, but it has been widened to the west along the entire corridor and to the east in portions of Muskeget Channel. The two Vineyard Wind 1 offshore export cables

will also be installed within the New England Wind OECC. To avoid cable crossings, the Phase 1 cables are expected to be located to the west of the Vineyard Wind 1 cables and, subsequently, the Phase 2 cables are expected to be installed to the west of the Phase 1 cables.

While the Proponent intends to install all Phase 2 offshore export cables within this OECC, the Proponent has identified two variations of the OECC that may be employed for Phase 2: the Western Muskeget Variant (which passes along the western side of Muskeget Channel) and the South Coast Variant (which connects to a potential second grid interconnection point) (see Figure 1.1-1). These variations are necessary to provide the Proponent with commercial flexibility should technical, logistical, grid interconnection, or other unforeseen issues arise during the Construction and Operations Plan (COP) review and engineering processes. If it becomes necessary to employ the South Coast Variant and a second grid interconnection point is secured, the Proponent understands that BOEM would conduct a supplemental review of those portions of the South Coast Variant not otherwise considered in the Final Environmental Impact Statement.

This undertaking has the potential to affect submerged cultural resources; therefore, BOEM requires a marine archaeological resource assessment (MARA). The MARA for New England Wind (see COP Volume II-D and Appendix E of the COP Addendum for the South Coast Variant) is intended to assist BOEM and the Massachusetts Historical Commission (MHC), in its role as the State Historic Preservation Officer (SHPO), in their review of New England Wind under Section 106 of the NHPA and the National Environmental Policy Act (NEPA). The Preliminary Area of Potential Effects (PAPE) described herein has been developed to assist BOEM and MHC in identifying historic resources listed, or eligible for listing, in the National Register of Historic Places (National Register) in order to assess the potential effects of New England Wind on historic properties.

Best Management Practices within the MARA include involvement of a Qualified Marine Archaeologist (QMA) in the design, interpretation, and reporting phases of the non-intrusive, high-resolution geophysical (HRG) survey following BOEM's Guidelines for Providing Archaeological and Historic Property Information Pursuant to 30 CFR Part 585 (BOEM 2020). 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 PAPE. SEARCH provided technical expertise to the Proponent as the QMA for the SWDA, while Gray & Pape served as the QMA for the OECC and subject matter expert (SME) for that portion of the project.

1.1.1 Bottom Disturbing Activities

The PAPE for offshore wind projects includes the depth and breadth of the seabed potentially impacted by any bottom-disturbing activities. Bottom-disturbing activities within the SWDA are described in Section 1.1 of the MARA (see COP Volume II-D), bottom-disturbing activities within the OECC are described in Section 1.2 of Appendix A of the MARA, and bottom-disturbing activities within the South Coast Variant are defined in Section 1.1 of the South Coast Variant MARA (Appendix E of the COP Addendum). These activities include WTG and ESP foundation installation; scour protection installation; offshore export,

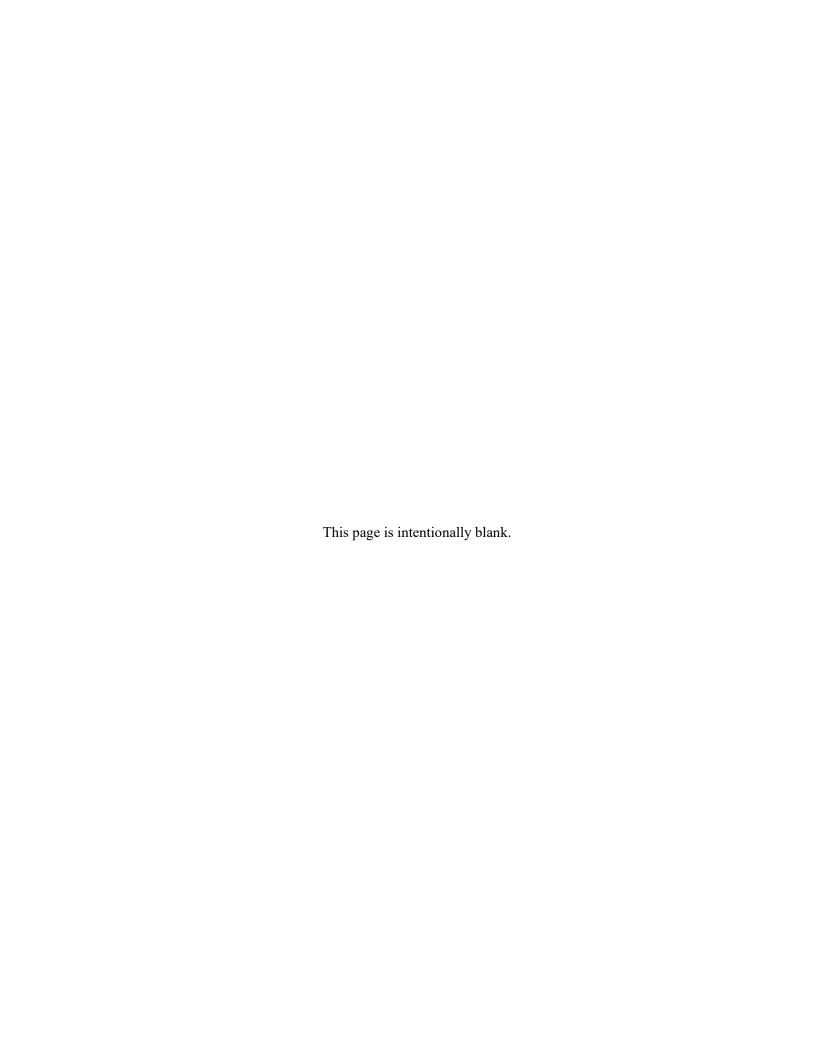
inter-array and inter-link cable installation; sand wave dredging in the OECC; vessel anchoring; use of jack-up vessels; and cable protection installation. Potential shipwrecks will be avoided with the implementation of avoidance buffers from the target boundaries as described in Section 2.0 and 3.0.

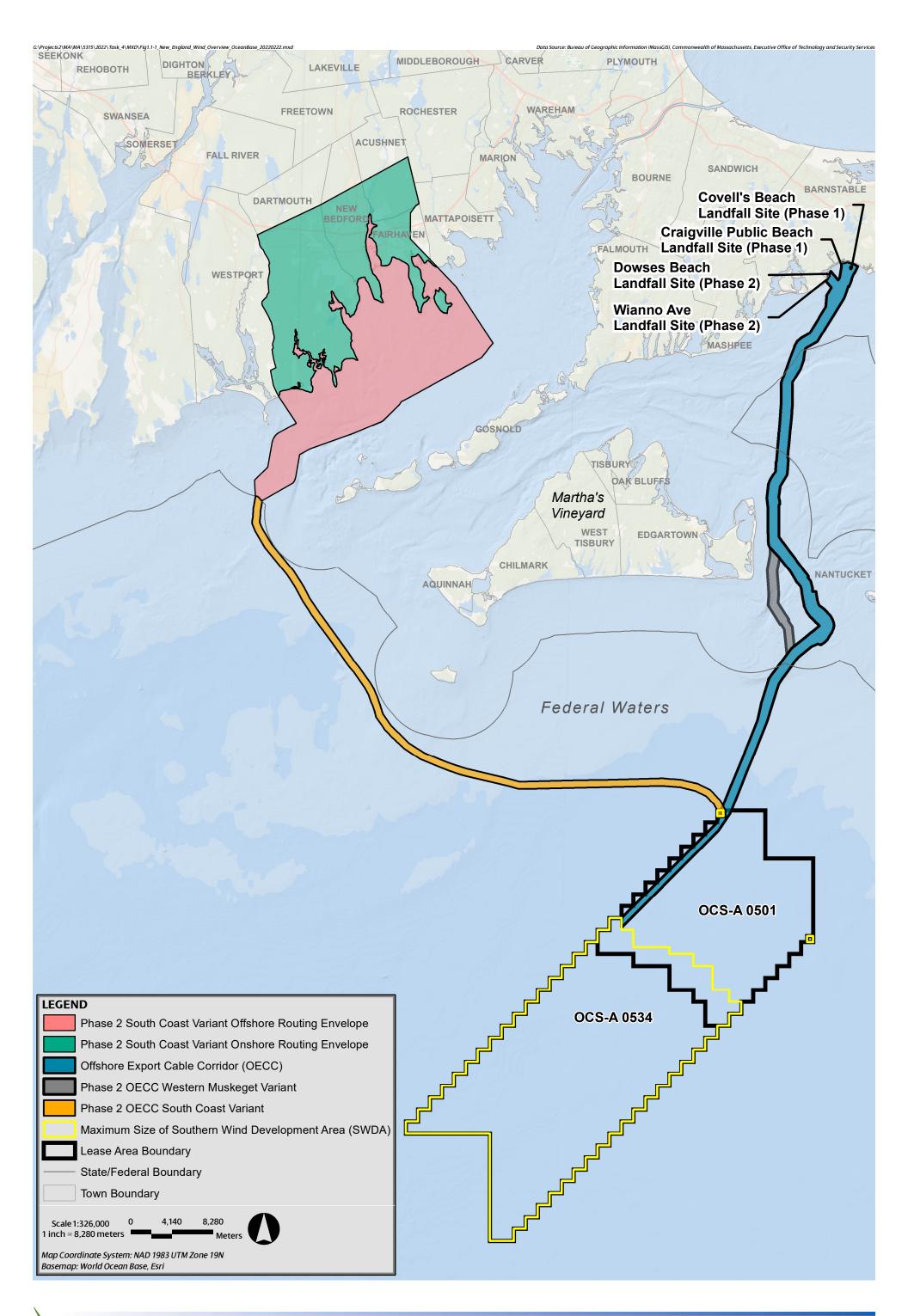
1.2 Historic Property Treatment Plan (HPTP) and Section 106 of the National Historic Preservation Act (NHPA)

This Historic Property Treatment Plan (HPTP) will be developed in accordance with the Section 106 and Section 110(f) review (36 CFR 800) of the Undertaking and the forthcoming Memorandum of Agreement (MOA). This HPTP provides background data, historic property information, and detailed steps that will be implemented to carry out the mitigation identified during the Section 106 consultation process in the forthcoming Memorandum of Agreement (MOA) with the Bureau of Ocean Energy Management (BOEM), the Massachusetts State Historic Preservation Officer (MA SHPO), and the Advisory Council on Historic Preservation regarding the New England Wind project.

The MARA reports provided in Volume II-D of the COP and Appendix E of the COP Addendum describe measures to avoid and minimize adverse effects to identified historic properties. Based on this, identified submerged historical properties will be avoided by the Project.

The conditions of COP approval and forthcoming MOA will include measures to avoid adverse effects to identified historic properties and will include measures to minimize adverse effects. This HPTP addresses the remaining mitigation provisions for the properties identified below.







All activities implemented under this HPTP will be conducted in accordance with the forthcoming conditionals of COP approval and the forthcoming MOA as well as with applicable local, state, and federal regulations and permitting requirements.

1.3 Participating Parties

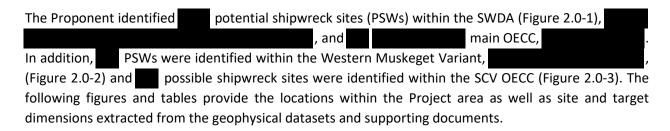
The National Environmental Policy Act (NEPA) substitution process will be utilized by BOEM to fulfill the Section 106 obligations as provided for in the NHPA implementing regulations (36 CFR § 800.8(c)). BOEM hosted the first Section 106-specific meeting with consulting parties on March 3, 2022 and the Proponent anticipates that BOEM will hold additional meetings pursuant to Sections 106 and 110(f) of the NHPA and in accordance with 36 CFR 800.8.

The Proponent is also conducting outreach meetings with various stakeholders to review the findings of the analysis to date and initiate discussion of proposed avoidance measures. These are parties that demonstrated interest in the affected historic property (Participating Parties). The Proponent has conducted and/or anticipates conducting outreach with the following parties:

- The Massachusetts Historical Commission
- The Massachusetts Board of Underwater Archaeological Resources

The Proponent further anticipates the above-mentioned parties will participate in the finalization of this draft HPTP through BOEM's Section 106 consultation process. This list may be amended if any additional parties are identified or request involvement during this process.

2.0 SUMMARY OF HISTORIC PROPERTY (SUBMERGED HISTORICAL PROPERTIES)



Further details on the PSWs are included in the MARA for the SWDA and the OECC (Volume II-D of the COP) and the MARA for the South Coast Variant (Appendix E of the COP Addendum). This supporting document details the field investigation history and geophysical datasets acquired.

2.1 Potential Shipwreck Sites

A discussion of the PSWs follows with an overview of site locations in the SWDA, OECC, Western Muskeget Variant, and South Coast Variant (see Table 2.1-1, Figure 2.0-1, Figure 2.0-2 and Figure 2.0-3).

Table 2.1-1 Historic Properties (PSWs) included in the HPTP

Property ID_	QMA ID Reference	Status	Mitigation/Treatment
		Will be avoided by a 50 m radius buffer zone from the	Avoided. None
		extent of the site.	required
		Will be avoided by a 50 m radius buffer zone from the	Avoided. None
		extent of its magnetic field.	required
		Will be avoided by a 50 m radius buffer from the extent of	Avoided. None
		the site.	required
		<u> </u>	
		Will be avoided by a recommended 100 m radius buffer	Avoided. None
		from the sonar target boundary.	required
		Will be avoided by a recommended 50 m radius buffer from	Avoided. None
		the sonar target boundary.	required
		Will be avoided by a recommended 50 m radius buffer from	Avoided. None
		the sonar target boundary.	required

Table 2.1-1 Historic Properties (PSWs) included in the HPTP (Continued)

Property	QMA ID	Status	Mitigation/Treatment	
_ ID	Reference			
		Will be avoided by a recommended 60 m radius buffer from	Avoided. None	
		the sonar target boundary.	required	
		Will be avoided by a recommended 60 m radius buffer from	Avoided. None	
		the sonar target boundary.	required	
Note:				
There are a total of PSWs identified in the OECC and SWDA, in the Western Muskeget Variant, and in the South Coast				
Variant .	_	_	_	

2.1.1 Southern Wind Development Area (SWDA)

2.1.1.1

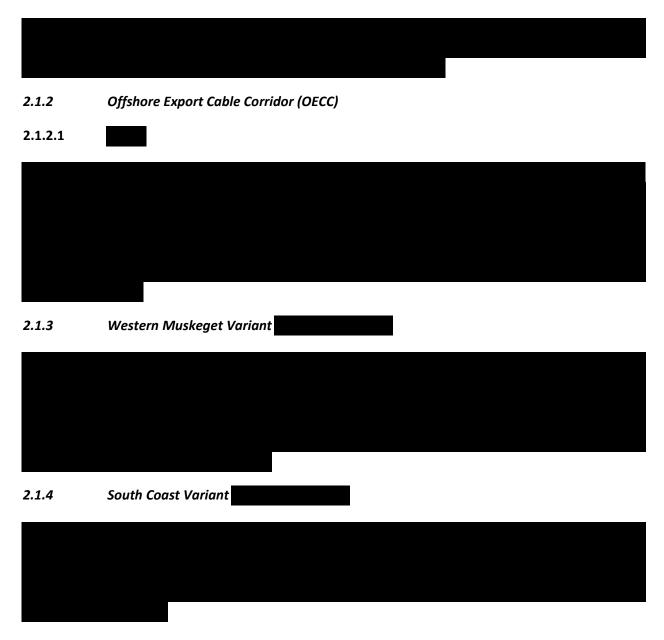


2.1.1.2



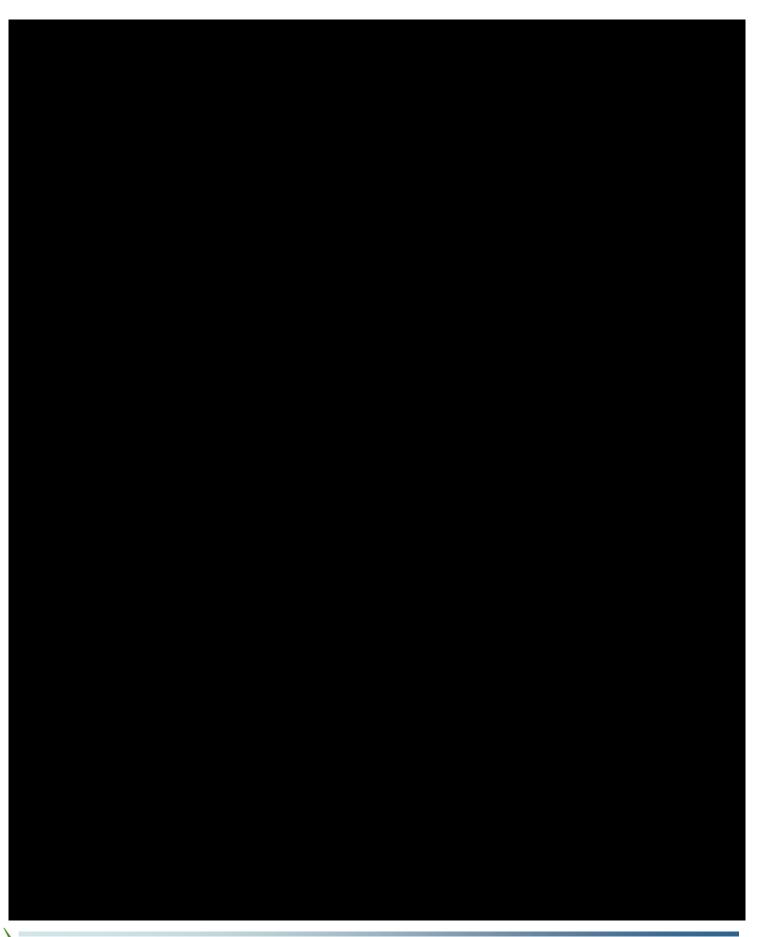
2.1.1.3

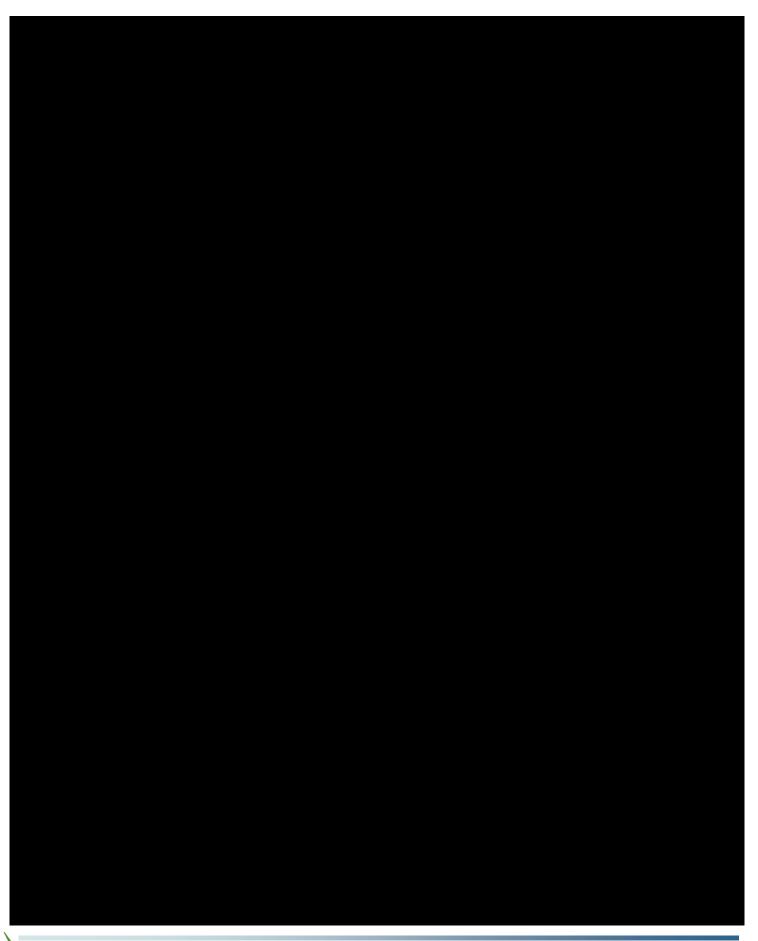




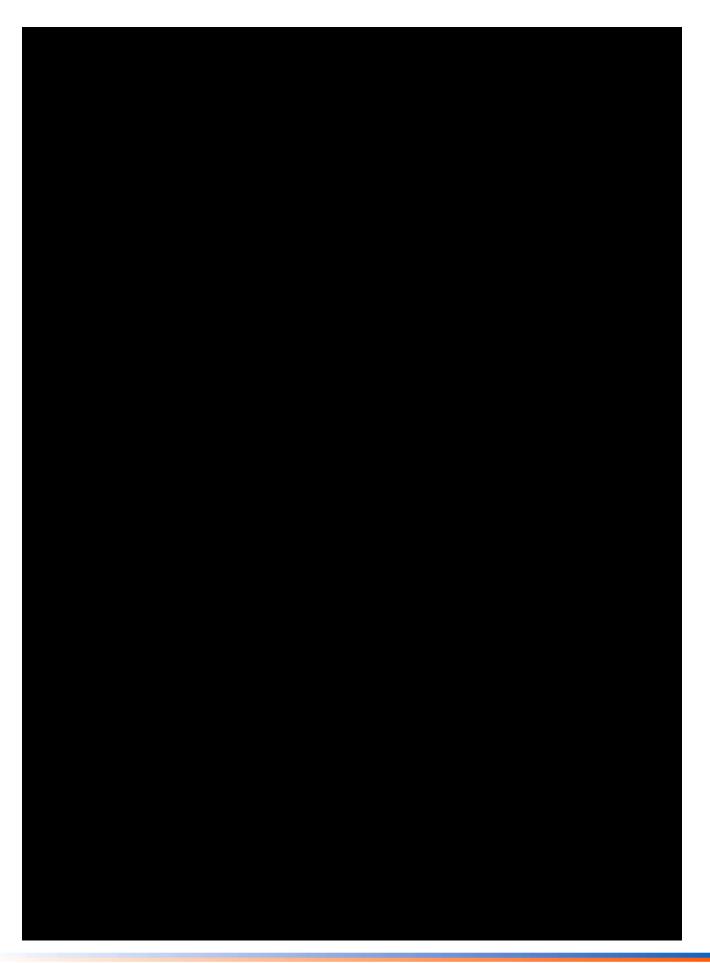
2.2 Historical Context

The waters off southern New England historically and through modern day witnessed a high degree of vessel traffic. The strong weather events and dangerous shoals common in the North Atlantic have contributed heavily to vessel losses in the region. Maritime accidents and shipwrecking events have included yachts and pleasure boats sailing from Block Island, Martha's Vineyard, and the coasts of Rhode Island and Narragansett Bay; fishing vessels operating out of Long Island and Martha's Vineyard; cargo vessels moving goods and fuel out of New York City and Providence; war time losses; and other maritime casualties. Extensive commercial traffic in and around the project areas since the Settlement Period (starting ~1620) equates to possible historical and modern debris scattered on and below the seafloor south of Cape Cod.









3.0 MITIGATION MEASURES

PSWs will be avoided with the implementation of avoidance buffers from the target boundaries. Avoidance buffers are 50-60 m from the edge of the target for the sites where fairly well-defined acoustic targets are present, has a 100 m recommended buffer due to the more widely scattered target and anomaly distribution in the area. This avoidance plan complies with the Massachusetts Board of Underwater Archaeological Resources (MBUAR) Policy Guidance for Establishing Shipwreck and Underwater Resource Avoidance Protection Plans. Given the planned avoidance, there would be no adverse effect to submerged historical properties. Accordingly, no mitigation measures are proposed in this HPTP.

4.0 IMPLEMENTATION

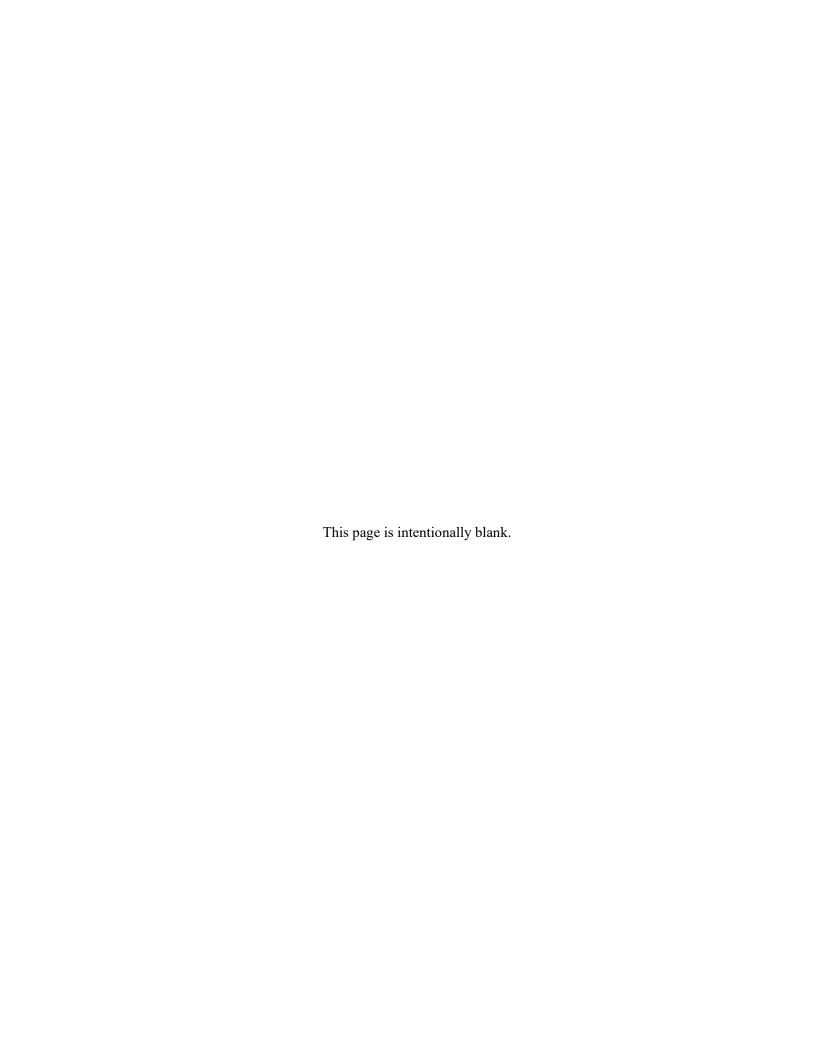
The Proponent will implement the planned avoidance of the potential shipwreck sites.

The Proponent will prepare and submit annual reports to BOEM during construction of New England Wind. These reports will describe implementation of avoidance buffers.

5.0 REFERENCES

- Code of Federal Regulations (CFR), 30 CFR Part 585.626(5), https://www.ecfr.gov/current/title-30/part-585/subject-group-ECFRf8a2719ff779a7d, accessed Jan 2022, Content of the Construction and Operations Plan.
- Bureau of Ocean Energy Management, 2020. Guidelines for Providing Archaeological and Historic Property Information Pursuant to 30 CFR Part 585, United States Department of the Interior, May 27, 2020, 23 pp.
- Geo SubSea, Gray & Pape, SEARCH, 2022. Proposed Cultural Resource Mitigation for Submerged, Ancient Landforms (draft), New England Wind Project, 87 pp.
- Gray & Pape, Inc., 2021. Marine Archaeological Resources Assessment in Support of the New England Wind Construction and Operations Plan for the Offshore Export Cable Corridor, December 2021, 191 pp. (Appendix A of SEARCH, INC. MARA).
- Massachusetts Board of Underwater Archaeological Resources (MBUAR). Policy Guidance for Establishing Shipwreck and Underwater Resource Avoidance Protection Plans.
- Park City Wind LLC, 2021/2022. Draft New England Wind Construction and Operations Plan for Lease OCS-A 0534, Volumes I (371 pp.), II (361 pp.), and III (934 pp.), December 2021/March 2022.
- SEARCH, INC., 2021. Marine Archaeological Resources Assessment for the New England Wind Offshore Wind Farm for OCS-A 0534 Construction and Operations Plan (SWDA Focus), December 2021, 194 pp.
- United States Code. 2016. Title 54 National Historic Preservation Act [as amended through December 16, 2016]. Available at https://www.achp.gov/sites/default/files/2018-06/nhpa.pdf. Accessed January 2022.

ATTACHMENT 4 – HISTORIC PROPERTY TREATMENT PLAN FOR ANCIENT SUBMERGED LANDFORMS AND FEATURES





Draft New England Wind Historic Property Treatment Plan for Submerged Ancient Landforms

Submitted to:
BUREAU OF OCEAN ENERGY MANAGEMENT
45600 Woodland Rd
Sterling, VA 20166

Submitted by: Park City Wind LLC

Prepared by:







December 2022

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EXECUTIVE SUMMARY

This draft Historic Property Treatment Plan (HPTP) for Submerged Ancient Landforms (SALs) adversely affected by the New England Wind project provides background data, historic property information, and detailed steps that will be implemented to carry out the mitigation identified during the Section 106 consultation process in the forthcoming Memorandum of Agreement (MOA) with the Bureau of Ocean Energy Management (BOEM), the Massachusetts State Historic Preservation Officer (MA SHPO), and the Advisory Council on Historic Preservation regarding the New England Wind project. The conditions of Construction and Operations Plan (COP) approval and the forthcoming MOA will identify a substantive baseline of specific mitigation measures to resolve the adverse visual effects to the properties identified below as a result of the construction and operation of the New England Wind project (the Undertaking) to satisfy requirements of Section 106 and 110(f) of the National Historic Preservation Act (NHPA) of 1966 (54 USC 300101; United States Code, 2016). This HPTP outlines the implementation steps and timeline for actions, and will be consistent with, or equivalent to, those substantive baseline mitigation measures identified in the conditions of COP approval and forthcoming MOA.

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This section provides a review of mitigation measures proposed by the Proponent as identified in the COP or through consultation with stakeholders. Mitigation measure details may be revised during the consultation process.

Section 4.0 Implementation

This section establishes the process for executing the mitigation measures identified in Section 4.0. As the consultation process continues, details for each mitigation measure such as the organizational responsibilities, timeline, and regulatory review requirements will continue to be outlined.

Section 5.0 References

This section is a list of works cited for this draft HPTP.

1.0 BACKGROUND INFORMATION

1.1 Project Overview

New England Wind is the proposal to develop offshore renewable wind energy facilities in Bureau of Ocean Energy Management (BOEM) Lease Area OCS-A 0534 along with associated offshore and onshore cabling, onshore substations, and onshore operations and maintenance (O&M) facilities. New England Wind will be developed in two Phases with a maximum of 130 wind turbine generator (WTG) and electrical service platform (ESP) positions. Four or five offshore export cables will transmit electricity generated by the WTGs to onshore transmission systems in the Town of Barnstable, Massachusetts. Figure 1.1-1 provides an overview of the New England Wind project. Park City Wind LLC, a wholly owned subsidiary of Avangrid Renewables, LLC, is the Proponent of this Construction and Operations Plan (COP) and will be responsible for the construction, operation, and decommissioning of New England Wind. The construction, operation, and decommissioning of the New England Wind project are defined as the Undertaking and are subject to Section 106 of the National Historic Preservation Act (NHPA).

New England Wind's offshore renewable wind energy facilities are located immediately southwest of Vineyard Wind 1, which is located in Lease Area OCS-A 0501. New England Wind will occupy all of Lease Area OCS-A 0534 and potentially a portion of Lease Area OCS-A 0501 in the event that Vineyard Wind 1 does not develop "spare" or extra positions included in Lease Area OCS-A 0501 and Vineyard Wind 1 assigns those positions to Lease Area OCS-A 0534. For the purposes of the COP, the Southern Wind Development Area (SWDA) is defined as all of Lease Area OCS-A 0534 and the southwest portion of Lease Area OCS-A 0501, as shown in Figure 1.1-1. The SWDA may be approximately 411–453 square kilometers (km2) (101,590– 111,939 acres) in size depending upon the final footprint of Vineyard Wind 1. At this time, the Proponent does not intend to develop the two positions in the separate aliquots located along the northeastern boundary of Lease Area OCS-A 0501 as part of New England Wind. The SWDA (excluding the two separate aliquots closer to shore) is just over 32 kilometers (km) (20 miles [mi]) from the southwest corner of Martha's Vineyard and approximately 38 km (24 mi) from Nantucket (see Figure 1.1-1). Within the SWDA, the closest WTG is approximately 34.1 km (21.2 mi) from Martha's Vineyard and 40.4 km (25.1 mi) from Nantucket. The WTGs and ESP(s) in the SWDA will be oriented in an east-west, north-south grid pattern with one nautical mile (NM) (1.85 km) spacing between positions.

In order to transmit the power to shore, four or five offshore export cables—two cables for Phase 1 (Park City Wind) and two or three cables for Phase 2 (Commonwealth Wind) will connect the SWDA to shore. Unless technical, logistical, grid interconnection, or other unforeseen issues arise, all New England Wind offshore export cables will be installed within a shared Offshore Export Cable Corridor (OECC) that will travel from the northwestern corner of the SWDA along the northwestern edge of Lease Area OCS-A 0501 (through Vineyard Wind 1) and then head northward along the eastern side of Muskeget Channel toward landfall sites in the Town of Barnstable. The total length of the export cable route is approximately 101 km (Electrical Service Platform to shore). The OECC for New England Wind is largely the same OECC proposed in the approved Vineyard Wind 1 COP, but it has been widened to the west along the entire corridor and to the east in portions of Muskeget Channel. The two Vineyard Wind 1 offshore export cables

will also be installed within the New England Wind OECC. To avoid cable crossings, the Phase 1 cables are expected to be located to the west of the Vineyard Wind 1 cables and, subsequently, the Phase 2 cables are expected to be installed to the west of the Phase 1 cables.

While the Proponent intends to install all Phase 2 offshore export cables within this OECC, the Proponent has identified two variations of the OECC that may be employed for Phase 2: the Western Muskeget Variant (which passes along the western side of Muskeget Channel) and the South Coast Variant (which connects to a potential second grid interconnection point) (see Figure 1.1-1). These variations are necessary to provide the Proponent with commercial flexibility should technical, logistical, grid interconnection, or other unforeseen issues arise during the COP review and engineering processes. If it becomes necessary to employ the South Coast Variant and a second grid interconnection point is secured, the Proponent understands that BOEM would conduct a supplemental review of those portions of the South Coast Variant not otherwise considered in the Final Environmental Impact Statement.

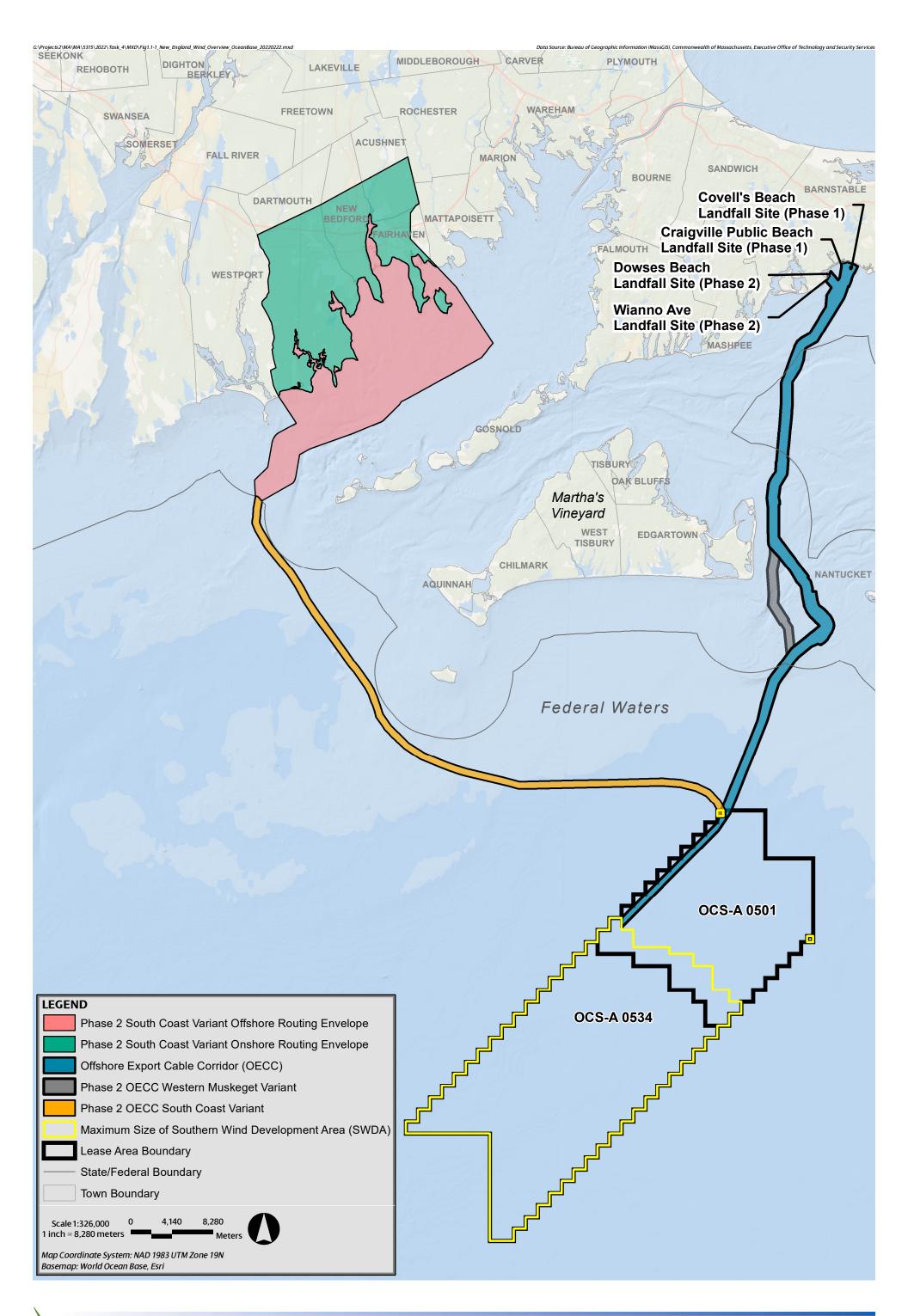
This Undertaking has the potential to affect submerged cultural resources; therefore, BOEM requires a marine archaeological resource assessment (MARA). The MARA for New England Wind (see COP Volume II-D and Appendix E of the COP Addendum for the South Coast Variant) is intended to assist BOEM and the Massachusetts Historical Commission (MHC), in its role as the State Historic Preservation Officer (SHPO), in their review of New England Wind under Section 106 of the NHPA and the National Environmental Policy Act (NEPA). The Preliminary Area of Potential Effects (PAPE) described herein has been developed to assist BOEM and MHC in identifying historic resources listed, or eligible for listing, in the National Register of Historic Places (National Register) in order to assess the potential effects of New England Wind on historic properties.

Best Management Practices within the MARA include involvement of a Qualified Marine Archaeologist (QMA) in the design, interpretation, and reporting phases of the non-intrusive, high-resolution geophysical (HRG) survey following BOEM's Guidelines for Providing Archaeological and Historic Property Information Pursuant to 30 CFR Part 585 (BOEM 2020) and the Massachusetts Board of Underwater Archaeological Resources (MBUAR) Policy Guidance on Archaeological Investigations and Related Survey Standards for the Discovery of Underwater Archaeological Resources. 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 PAPE. SEARCH provided technical expertise to the Proponent as the QMA for the SWDA, while Gray & Pape served as the QMA for the OECC and subject matter expert (SME) for that portion of the project.

1.1.1 Bottom Disturbing Activities

The PAPE for offshore wind projects includes the depth and breadth of the seabed potentially impacted by any bottom-disturbing activities. Bottom-disturbing activities within the SWDA are described in Section 1.1 of the MARA (see COP Volume II-D), bottom-disturbing activities within the OECC are described in Section 1.2 of Appendix A of the MARA, and bottom-disturbing activities within the South Coast Variant are defined in Section 1.1 of the South Coast Variant MARA (Appendix E of the COP Addendum). These

activities include WTG and ESP foundation installation; scour protection installation; offshore export, inter-array and inter-link cable installation; sand wave dredging in the OECC; vessel anchoring; use of jack-up vessels; and cable protection installation.						





1.2 Historic Property Treatment Plan (HPTP) and Section 106 of the National Historic Preservation Act (NHPA)

This Historic Property Treatment Plan (HPTP) will be developed in accordance with the Section 106 and Section 110(f) review (36 CFR 800) of the Undertaking and the forthcoming Memorandum of Agreement (MOA). This HPTP provides background data, historic property information, and detailed steps that will be implemented to carry out the mitigation identified during the Section 106 consultation process in the forthcoming MOA with the BOEM, the Massachusetts State Historic Preservation Officer (MA SHPO), and the Advisory Council on Historic Preservation regarding the New England Wind project.

The MARA reports provided in Volume II-D of the COP and Appendix E of the COP Addendum describes measures to avoid and/or minimize adverse effects to identified historic properties. This HPTP describes the proposed plans to resolve the remaining adverse effects after application of the above-referenced measures. The mitigation measures reflect a refinement of the mitigation framework proposed by the Proponent (see Appendix O of MARA in Volume II-D of the COP).

The conditions of COP approval and forthcoming MOA will include measures to avoid adverse effects to identified historic properties and will include measures to minimize adverse effects. This HPTP addresses the remaining mitigation provisions for the properties identified below.

All activities implemented under this HPTP will be conducted in accordance with the forthcoming conditionals of COP approval and the forthcoming MOA as well as with applicable local, state, and federal regulations and permitting requirements.

1.3 Participating Parties

The NEPA substitution process will be utilized by BOEM to fulfill the Section 106 obligations as provided for in the NHPA implementing regulations (36 CFR § 800.8(c)). BOEM hosted the first Section 106-specific meeting with consulting parties on March 3, 2022 and the Proponent anticipates that BOEM will hold additional meetings pursuant to Sections 106 and 110(f) of the NHPA and in accordance with 36 CFR 800.8.

The Proponent is also conducting outreach meetings with various stakeholders to review the findings of the analysis to date and initiate discussion of proposed mitigation measures. These are parties that demonstrated interest in the affected historic property (Participating Parties). The Proponent has conducted and/or anticipates conducting outreach with the following parties:

- The Massachusetts Historical Commission
- The Massachusetts Board of Underwater Archaeological Resources
- The Wampanoag Tribe of Gay Head (Aquinnah)
- Mashpee Wampanoag Tribe
- Narragansett Indian Tribe
- Mashantucket Pequot

- Mohegan Tribe of Indians
- Shinnecock Indian Nation
- Delaware Tribe of Indians

The Proponent further anticipates the above-mentioned parties will participate in the finalization of this draft HPTP through BOEM's Section 106 consultation process. This list may be amended if any additional parties are identified or request involvement during this process.

2.0 SUMMARY OF HISTORIC PROPERTY (SUBMERGED ANCIENT LANDFORMS)



Further details on the SALs are included in the MARA (Volume II-D of the COP). These supporting documents detail the field investigation history and geophysical datasets acquired.

2.1 Submerged Ancient Landforms

A discussion of the SALs that may be impacted follows with an overview of site locations in the SWDA and OECC in Figure 2.1-1 and Figure 2.1-2, respectively. SALs associated with the South Coast Variant are shown in Figure 2.1-3. Numerous additional SALs were identified and mapped outside the PAPE and are thus not adversely affected.

2.1.1 Physical Description and Existing Conditions

SALs are interpreted as remnants of past terrestrial and shallow marine environments that existed along previous coastlines during lower stands of sea level. The landforms now appear buried below the seafloor at varying depths due to different processes acting upon the continental shelf over the past 15,000 years. While no intact archaeological artifacts, deposits, resources, or sites have been identified offshore, the SALs represent locations of higher significance with the potential to contain those cultural resources.

Table 2-1 below summarizes the SALs that are unavoidable by the Project

This means

that installation of a project component (WTG foundation, inter-array cable [IAC] or export cable [EC]) and the associated construction activities (spudding, anchoring, dredging) may impact the SAL.

Table 2-1 Historic Properties (SALs) included in this HPTP

Table 2-1 Historic Properties (SALs) included in this HPTP (Continued)

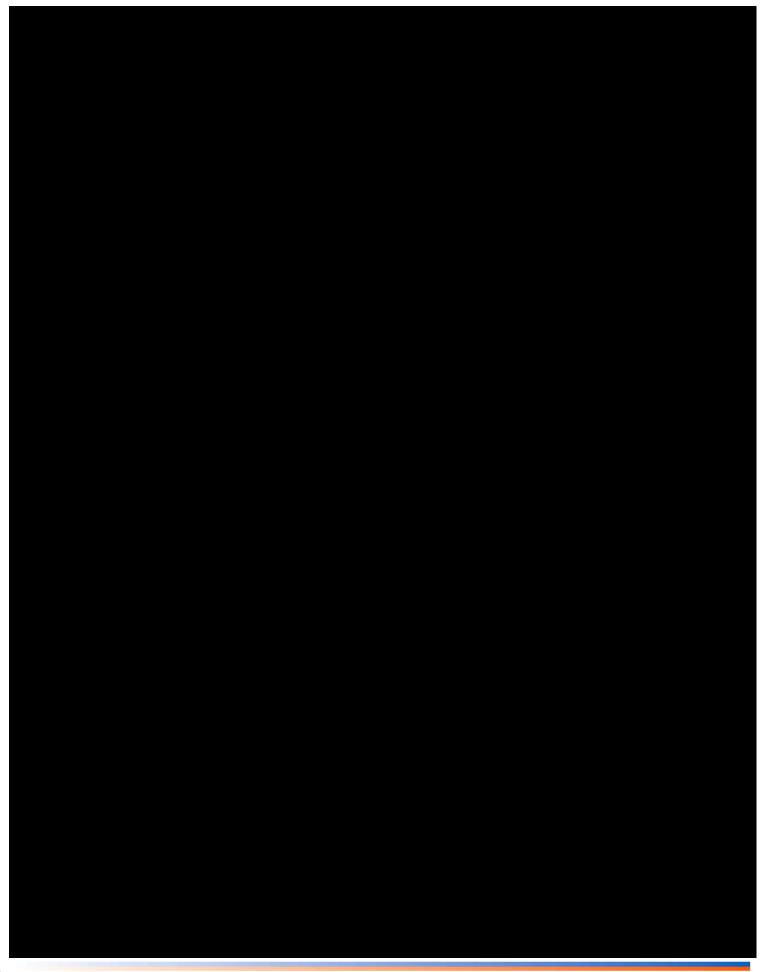


2.1.2 Historic Context

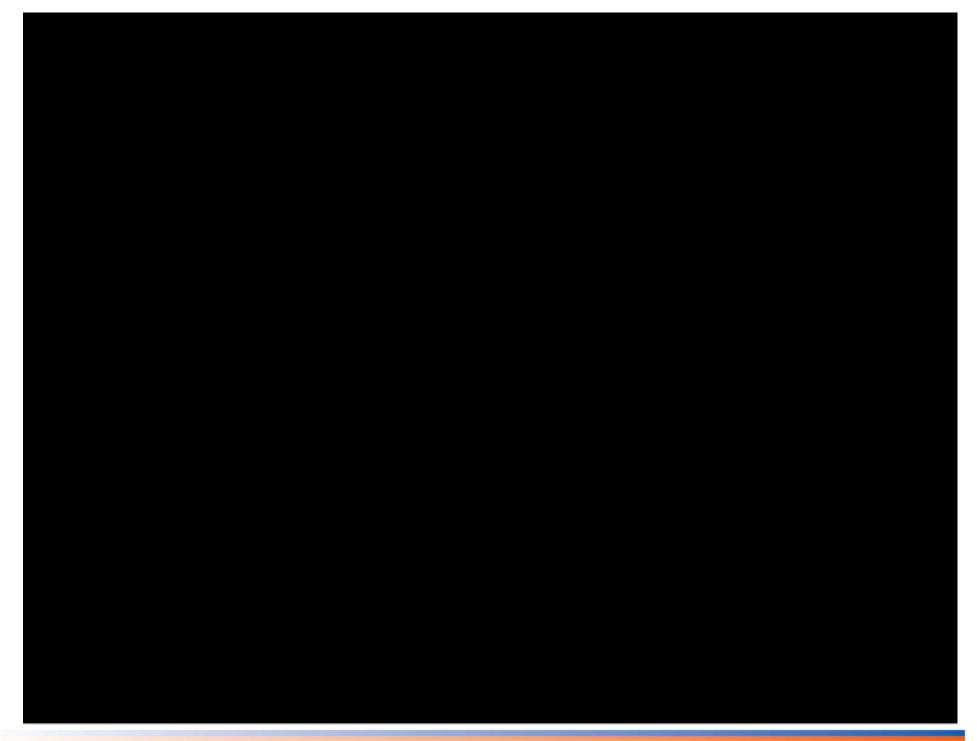
The identification of submerged paleolandscapes offers the potential to locate areas of archaeological interest and further our understanding of landscapes available for settlement by early cultural groups (Robinson et al. 2020). Using predictive models for shoreline migration, archaeologists can correlate dates and cultural periods with geological features on the submerged paleolandscape. Certain environmental factors are weighed when considering archaeological probability. Proximity to sources of fresh water, and thus the fauna that were drawn to them, was a significant determinant in the choice of pre-contact settlement locations (Gillam and Gillam 2016). Paleochannel terraces and floodplains exist intact on the OCS, as a result of sediment burial linked to large-scale flooding events by nearby water sources, and therefore retain the highest probability of containing intact pre-contact cultural resources (Joy 2018). Additionally, low-lying areas (e.g., estuaries) require low energy sea-level rise to become inundated; rapid sea-level rise would have submerged these environments quickly and deeply, possibly burying intact terrestrial soils. Therefore, these types of areas may possess a greater preservation potential than higher elevations, which are more likely to be affected by marine transgression and shoreface erosion.

2.1.3 NRHP Criteria

These SALs are considered to be significant for their potential to aid in our understanding of pre-Contact settlement along the OCS and the cultural and historical significance of these features to Native American Tribes and are recommended eligible for listing in the NRHP under Criterion D.









3.0 MITIGATION MEASURES

This section provides details on the proposed mitigation measures at the historic properties to address the nature, scope, size, and magnitude of adverse effects including cumulative effects caused by the Project.

3.1 Pre-Construction Geoarchaeology

In order to mitigate adverse effects to SALs, New England Wind is proposing to conduct additional archaeological investigations on unavoidable submerged, ancient landforms in the SWDA and OECC. This work will be consistent with an archaeological mitigation-level effort to recover additional information on the SALs to better ascertain their chronological setting, archaeological period association, their environmental setting, and whether evidence of human habitation exists within them. As such, additional vibracores will be acquired

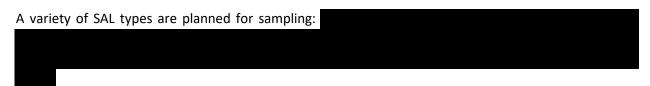
3.1.1 Purpose and Intended Outcome

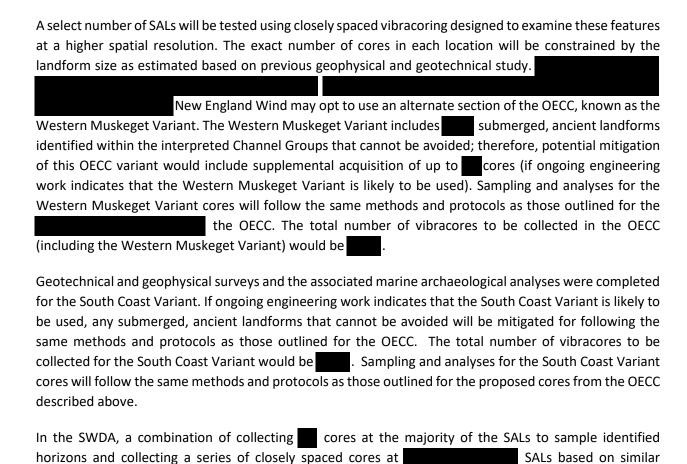
The objective of this mitigation approach is to acquire additional environmental and archaeological data to refine our understanding of the paleoenvironmental landscape and archaeological sensitivity of the Outer Continental Shelf (OCS) within the Project's PAPE and to establish a study that provides paleolandscape data that builds upon baseline data and can be used by future offshore projects to aid in landscape management.

Coring and sediment sampling can transform the relative stratigraphic interpretation of acoustic data into a reconstruction of subsurface stratigraphy and environmental conditions at a given point offshore grounded by absolute dating and illustrated by grain size, pollen, macrobotanical, micro-debitage, geochemical, and/or or point-count analysis. This information can be used to create a better understanding of the geographical, operational, and modified environments as described in the research questions below. In the case of the PAPE, these research questions will fulfill the need for mitigation of submerged, ancient landforms that cannot be avoided during construction activities. They can also be used to test broader hypotheses concerning the nature of the submerged landscape in Nantucket Sound, Muskeget Channel, and the OCS offshore Massachusetts. The results of such hypothesis testing also inform broader questions around human habitation on now-inundated landscapes within the Southern New England region of the OCS.

3.1.2 Scope of Work

This mitigation scope has specifically been built upon ongoing Section 106 Mitigation Studies currently underway (Vineyard Wind 1), with the intent of not duplicating but expanding upon the data acquisition approaches and techniques for assessing paleo-landscapes and environments.





The exact number of cores per SAL and their placement will be selected following a review of all available geophysical and geotechnical data, and specifically for their ability to provide data that will address the research questions outlined in the original mitigation plan. MBUAR, MHC, and Tribal representatives are expected to participate during every stage of the study and will be given the opportunity to review and comment on proposed core locations and their input incorporated into the coring plan.

The Proponent will release a request for proposals (RFP) for consultant services to complete this scope of work and will consult with Participating Parties in defining objectives and scope of work, as well as in the consultant selection process.

3.1.3 Research Questions

geomorphic characteristics will be utilized.

Coring and sediment sampling can transform the relative stratigraphic interpretation of acoustic data into a reconstruction of subsurface stratigraphy and environmental conditions at a given point offshore, grounded by absolute dating and illustrated by grain size, pollen, macrobotanical, micro-debitage, geochemical, and/or or point-count analysis. This information can be used to create a better understanding of the geographical, operational, and modified environments as described in the research questions below. In the case of the PAPE, these research questions will fulfill the need for mitigation of submerged, ancient landforms that cannot be avoided during construction activities. They can also be

used to test broader hypotheses concerning the nature of the submerged landscape in Nantucket Sound, Muskeget Channel, and the OCS offshore Massachusetts. The results of such hypothesis testing also inform broader questions around human habitation on now-inundated landscapes within the Southern New England region of the OCS.

3.1.3.1 The Geographical Environment

The geographical environment, that comprises the physical landscape, has been at least partially documented by the acoustic data as buried coastal features and/or the ravinement surface in the shallow subsurface. However, the data collected to date do not demonstrate that the physical landscape at these locations was utilized for human occupation. Answering this question will require a more intensive, targeted approach to testing specific submerged, ancient landforms. Based on previous coring efforts, three distinct submerged, ancient landform types were identified

The three

submerged, ancient landform types were consistently identified across multiple Channel Groups, suggesting that information from one Channel Group location may provide information about the submerged, ancient landform's role within the overall landscape at the time of subaerial exposure and potential human occupation or exploitation. Following stakeholder input on sampling locations each of the three submerged, ancient landform types will be tested using closely spaced vibracores designed to examine these landforms at a higher spatial resolution. The exact number of cores from each submerged, ancient landform type will be constrained by the landform size as estimated within the specific Channel Group selected for testing, and as mapped from previous geophysical and geotechnical study.

Research Question 1. What is the geomorphological and chronological setting of the submerged, ancient landform?

This research question will be addressed by geoarchaeological analysis of sediments recovered within vibracores, and as appropriate, radiocarbon dating of organic material recovered within the samples.

3.1.3.2 The Operational Environment

As noted above, the operational environment consists of the resources available for human use in the environment. Resources may include plants, animals, minerals, and water. Generally, it is possible to paint a broad picture of the paleoenvironment based on palynological, macro-botanical, and microfossil evidence recovered from sediment cores.

Research Question 2. What was the paleoenvironmental setting at the time the submerged, ancient landform was exposed?

This question will be addressed through the analysis of palynological, macro-botanical, and microfossil samples recovered from cores within terrestrial-originating deposits. Pollen remains are relatively durable in sediments and will provide information on the past vegetation of the area and may even identify food

or medicinal sources for past occupations. Macro-botanicals, when present, can complement palynological analysis to provide site-specific evidence for floral species present at a sample location. Microfossil analysis, particularly that seeking for diatoms, can offer information concerning hydrology at the site location; some taxa prefer freshwater, others saline, indicating whether or not any wetland deposits associated with these landforms were freshwater or coastal wetlands.

3.1.3.3 The Modified Environment

The modified environment is one that shows direct evidence of human use. This evidence may include actual artifacts created by humans, plant or animal remains indicating their use as subsistence resources by human groups, or chemical changes to the soil resulting from human occupation.

Research Question 3. Is there evidence of human modification of the environment?

This research question will be addressed through bulk geochemical analysis of nitrogen, faunal analysis of any bone or shell materials suggesting use of these as subsistence resources, bulk geochemical analysis of sediments for elements consistent with human occupation of a land surface such as nitrogen, and screening of the vibracore samples to collect any micro-debitage present.

3.1.3.4 Nantucket Sound Paleoenvironment

The additional work proposed herein has the ability to contribute_information on the environmental history of Nantucket Sound and offshore waters south of the islands.

Research Question 4. How do the results of the additional archaeological mitigation investigation fit within the broader geomorphological and paleoenvironmental context of Nantucket Sound?

This research question will be addressed during the planned review and synthesis of existing data and through a comparison of the results of the proposed mitigation activities with results from geological studies in available literature.

3.1.4 Core Analysis Methodology

Once the cores arrive at the laboratory, the sections will be cut open and split vertically in half, then logged and photographed by the Project QMA and team (including a geoarchaeologist). Half of the core will undergo a geoarchaeological assessment while the other half will be archived for future reference (archival length of time and location to be determined with stakeholders). The purpose of the geoarchaeological investigation of the vibracore samples is to identify elements of the preserved environments, as specified in the research questions (Section 3.3.3). Analysis will be focused on descriptive aspects that may be helpful in identifying whether a sample represented a marine sedimentary deposit or a coastal and/or terrestrial sedimentary deposit.

The core analysis will proceed in a stepwise fashion designed to maximize recovery of useful data from cores. Specific supplemental analyses (e.g., macro-botanical) will be conducted where appropriate.

Stage One: Geographical Environmental Analysis

- 1. Core splitting and scalar photography.
- 2. Geoarchaeological assessment of sediments in each core to identify preserved terrestrial landforms.
- 3. Selection of organic materials for radiocarbon dating if appropriate (see notes below).

Stage Two: Operational Environmental Analysis

- 1. Macro-botanical and micro-botanical analysis of terrestrial sediments to identify floral species represented at the core location.
- 2. Macro- and micro-fossil analysis of terrestrial sediment to identify faunal species present at the core location, followed by a refinement of the interpretation of the geographical/geomorphological context for the core location (e.g., coastal wetland versus inland wetland, for example, or alluvial terrace versus shoreface).

Stage Three: Modified Environmental Analysis

- 1. X-Ray Fluorescence (XRF) analysis for bulk elemental analysis of terrestrial landforms to seek geochemical evidence for human habitation.
- 2. Examination of any bone or shell materials present for evidence of human modification.
- 3. Micro-debitage analysis for evidence of human technological activities.

Terrestrial-originating deposits, representing glacially or postglacially deposited sediments, will be identified based on observed characteristics, including evidence of soil formation and/or remnant soil horizons; a structure other than single grained or massive; lack, or near lack, of marine shell; and the presence of organic materials of a possible terrestrial origin. Marine sediments, representing reworked glacially deposited sediments, will be identified by characteristics, including a lack of evidence of soil formation; a single grained or massive structure; the presence of marine shells; and the lack, or near lack, of organic materials of a possible terrestrial origin.

Descriptions of the core samples will follow set standards in accordance with United States Department of Agriculture (USDA) terminology discussed in the Soil Survey Manual (Soil Survey Staff, 1993, 2010). Descriptions of the samples will be recorded while the soil is in a moistened condition and will include (when possible) soil horizon, Munsell color, texture, mottling, soil structure, ped coatings, sedimentary structure and bedding characteristics, moisture consistency, boundary type, and inclusions, such as organic material or cultural artifacts. These descriptions will be recorded in accordance with the observed master horizons (with suitable subdivisions), noting any possible lithologic discontinuities (Stafford, 2004; Stafford & Creasman, 2002). These analyses will provide context to the sample and, possibly, to the type of landform (marine or terrestrial) from which the sample originated.

Once the geomorphology is described, subsamples will be taken from each core, including radiocarbon dating, bulk core geochemical analysis, palynological analysis, faunal analysis, and micro-debitage analysis. The locations of these samples will be dependent upon what is identified in each core, as

documented by the QMA and geoarchaeologist. Specifically, these subsampling techniques will occur within identified terrestrial-originating deposits. Radiocarbon sampling may include direct dating of larger fragments of carbon, or bulk carbon of the sediments themselves depending on the availability of carbon within the identified soil horizons. These samples will aid in determining the age of the landform, including its uppermost and lowermost depositional ages. Samples will be collected and supplied to a third-party laboratory for Accelerator Mass Spectrometry (AMS) dating.

Soil samples for bulk core geochemical analysis within the cores will also be collected. These samples will then be sent to the Paleo Research Institute, Golden, Colorado, for processing using XRF or a similarly qualified facility. Human activity modifies a soil's chemical characteristics by altering the amount of carbon, phosphorus, nitrogen, or carbonates within the deposits, typically increasing the ratios of carbon and nitrogen. Bulk core geochemical analysis can aid in determining the presence or absence of humans on a landform.

Palynological samples within terrestrial-originating deposits will be collected. Pollen is relatively durable in sediments and will provide information on the past vegetation of the area and may even identify food or medicinal sources for past occupations. Likewise, macro-botanical samples recovered from terrestrial-originating deposits can provide localized information concerning floral assemblages from a core location, and as with pollen, may even identify food or medicinal sources used by past human populations. Samples will be sent to the Paleo Research Institute, Golden, Colorado, or a similarly qualified facility for processing and analysis.

Faunal analysis of shell and bone will be carried out after sub-sampling for geochemical and palynological analyses. These analyses will examine any shell and bone that may be recovered from core samples that suggests these materials were deposited during human subsistence activities. Evidence for subsistence activities can include the following: deposits containing taxa known to occupy different environmental contexts (such as shellfish mingled with large mammal bones); signs of burning on shell or bone, shell deposits with only one taxon suggesting intentional harvesting.

Micro-debitage analysis will occur once all other samples are collected as this will destroy the remaining sample. This will determine the presence or absence of micro-debitage left behind by human production of stone tools. The remaining sediments of the core will be sorted through a geological sieve in search of lithic material related to the reduction stages of stone tool making. Micro-debitage measures less than 1 mm in size and can be abundant on archaeological sites around tool-making areas. Micro-debitage will be viewed using light microscopy and scanning electron microscopy methods, as available, to better identify their characteristics.

In the unlikely event that an archeological resource(s) is found in the cores, New England Wind will discuss arranging permanent curation or other appropriate next steps for the archaeological resource(s) with MBUAR for portions of the Project within state waters, and BOEM and the Tribes for both state and federal waters.

3.1.5 Standards

The Preconstruction Geoarchaeology work will be conducted in accordance with BOEM's *Guidelines for Providing Archaeological and Historic Property Information* Pursuant to 30 CFR Part 585. The qualified professional archaeologists leading the research will meet the SOI professional qualification standards for archeology (62 FR 33708) and BOEM's standards for QMAs.

3.1.6 Documentation

The Proponent will provide the following documentation to the Participating Parties for their review:

- Technical Report (draft and final versions).
- Technical Presentation (draft and final versions).

All results will be delivered to the Participating Parties in the form of a technical report with supporting digital data files.

Draft products will incur one round of review with edits and suggestions addressed in a given time frame, and final products issued thereafter. The technical report is designed to provide all the detail surrounding the Pre-Construction Geoarchaeology study methods and results from the scientific standpoint. The technical presentation is designed for use by all relevant stakeholders and the Tribes and government agencies and will explain how the study was accomplished and results achieved in a more informal, visual format. The approach and focus of these products will be discussed during the consultation and thus some objectives of these deliverables could change.

Products focused directly for the Tribes are discussed in Section 3.3.

3.1.7 Funds and Accounting

It is understood that the Proponent will be responsible for funding and implementing the mitigation measures described in this section. The final version of the HPTP will include specifics concerning funding amounts and the mechanisms for funding the mitigation measures.

3.1.8 Sampling Sensitivity

The Tribes have expressed concern with disturbance of the subsurface from pre-construction geoarchaeology surveys. In response to this feedback, the Proponent proposes a moderate quantity of vibracores to balance the collection of important information with the desire to minimize disturbances to SALs within the

3.2 Post-construction Seafloor Assessment

The MARA identifies multiple SALs that cannot be completely avoided by New England Wind. The Proponent proposes additional mitigation with the specific intent of identifying and assessing direct adverse effects to buried SALs as a result of construction activities including cable installation and

anchoring. Impacts are expected to include bottom disturbance associated with WTG and ESP foundation installation; scour protection installation; offshore export, inter-array and inter-link cable installation; sand wave dredging in the OECC; vessel anchoring; use of jack-up vessels; and cable protection installation. To assess the full effects of construction, this assessment will be conducted as soon as possible following completion of bottom-disturbing activities.

The post-construction seafloor assessment will be conducted via a visual inspection survey. The Proponent proposes to use remote operated vehicle (ROV) technology as the primary investigative tool to conduct the survey. This method will allow for the collection of data while avoiding unnecessary health and safety risks associated with diving. This survey would include visual inspection of only those portions of the cable trench where it has intersected an interpreted SAL with a high preservation potential for evidence of human occupation, or where anchors and associated anchor chain sweep directly overlie an interpreted, buried, high potential SAL.

The Proponent's QMAs will develop a survey design that will be submitted to BOEM for review and comment prior to deployment. The visual inspection will consider those methods best suited for reconnaissance level survey of post-construction impacts and potential documentation of disarticulated material at the seafloor and address up to

Results from this survey would be documented in a final report from the QMA.

3.3 Tribal Focused Mitigation

The following ideas and mitigation plans have been proposed to support Tribal objectives, to be further discussed during the consultation process.

- A detailed PowerPoint presentation will be generated to describe the scientific methods and processes undertaken as part of the offshore pre-construction surveys and archaeological assessment to document the buried and submerged, ancient landforms will be a technical and descriptive visual document to record all aspects of how the submerged, ancient landform study was performed and describe the results that were obtained. Input from the Tribes will help shape the background and supporting material that is desired for inclusion.
- Results of the submerged, ancient landform data analysis and mapping will be assembled in a
 digital format for use by the Tribes. This digital database will document the geographic location
 and vertical placement of the submerged, ancient landforms. A number of different geographical
 mapping software packages could be used for this, but we envision potentially interfacing the
 data in QGIS1 (freeware) with the Tribes.

¹ QGIS is powerful and open-source mapping software that allows users to import and create digital projects, charts, figures, and export all of the above for external use and is compatible with all ESRI ArcGIS products.

- The Project proponent team will setup one workshop for each Tribe to provide hands-on training for the use of the selected GIS software. This would include assistance getting the GIS software configured on a computer (provided by the Tribes) and the database loaded and operational. A tutorial on software use and guidance on viewing the information will be provided.
- Option of having a special in-person presentation of the submerged, ancient landform study results to the Tribal representatives and community.

One presentation for each Tribe could be planned and, as requested, tailored for the audience specified by each Tribe. Presentations would generally focus on the topic of the offshore environment and submerged landscapes. For example, Tribes may request that a presentation be given during a meeting of the tribal leaders and historic preservation office personnel, delivered to high school level students, or as a collaborative presentation given at a national tribal meeting. These various events offer opportunities to share within and among Tribes the knowledge that has been gained by the submerged landscape mitigation study. The Project proponent will develop the presentation resources and provide an opportunity for MHC and MBUAR to participate and comment on draft materials where feasible.

4.0 IMPLEMENTATION

Construction activities of the Undertaking that adversely affect a specific historic property cannot begin until BOEM has accepted the HPTP for that specific adversely affected historic property, consistent with the forthcoming conditions of COP approval. Construction activities that do not adversely affect historic properties may proceed prior to acceptance of the HPTPs.

4.1 Timeline

The timeline and organizational responsibilities will be developed in consultation with BOEM and the Participating Parties as the conditions of COP approval and the MOA are developed concurrent with BOEM's NEPA substitution schedule for New England Wind which is currently anticipated to include the following key dates:

- December 2022 Release of the Draft Environmental Impact Statement (DEIS) followed by a 60-day comment period for the DEIS.
- September 2023 -- Release of Final Environmental Impact Statement (FEIS).
- October 2023 -- NEPA Record of Decision (ROD) issuance.

It is anticipated that the mitigation measures identified in Section 3.0 will commence within 2 years of the execution of the MOA unless otherwise agreed by the Participating Parties and accepted by BOEM. Per Section 3.0, the Participating Parties will have a minimum of 45 days to review and comment on all draft reports or other work products developed for this HPTP. The Proponent assumes that the proposed scope of work will be completed within 5 years of the execution of the MOA unless a different timeline is agreed upon by Participating Parties and accepted by BOEM.

4.2 Organizational Responsibilities

4.2.1 Bureau of Ocean Energy Management (BOEM)

- BOEM is responsible for making all federal decisions and determining compliance with Section 106.
- BOEM must review and accept the HPTP before the implementing party may commence any actions.
- BOEM is responsible for consultation related to dispute resolution.
- BOEM in consultation with the Participating Parties will ensure that mitigation measures adequately resolve adverse effects, consistent with the NHPA.
- BOEM will be responsible for sharing the annual summary report with Participating Parties.

4.2.2 Avangrid Renewables, LLC

The Proponent will be responsible for implementing the HPTP.

- The Proponent will be responsible for considering the comments provided by the parties identified.
- Annual reporting to BOEM on implementation of the HPTP.
- Reporting responsibilities will be further outlined in consultation with BOEM as the HPTP is developed.
- Funding the mitigation measures specified in Section 3.0
- Completion of the scope(s) of work in Section 3.0
- Ensuring all Standards in Section 3.0 are met
- Providing the Documentation in Section 3.0 to the Participating Parties for review and comment
- The Proponent will be responsible for ensuring that all work that requires consultation with Tribal Nations are performed by professionals who have demonstrated professional experience consulting with federally recognized Tribes

4.2.3 Massachusetts Historical Commission (MHC); Massachusetts State Historic Preservation Officer; Massachusetts Bureau of Underwater Archaeological Resources

The state agencies will be participating stakeholders and provide subject matter expertise to support completion of the HPTP mitigation and compliance with all state regulations.

4.2.4 Participating Parties

- Provide feedback on draft scope of work, RFP, and consultant bids within 45 days.
- Tribes to provide input to shape the background and supporting material that is desired for inclusion in the PowerPoint presentation and digital database/GIS deliverable.
- Provide feedback on draft materials within 45 days.

4.2.5 Other Parties

The Proponent does not anticipate additional Participating Parties; however, should any be determined, this will be updated.

4.3 Participating Party Consultation

The Proponent has provided this draft HPTP to BOEM for inclusion in the DEIS for review by Participating Parties to provide input on the resolution of adverse effects to, and forms of implementing mitigation, at the historic properties. As part of the development of this draft HPTP, the Proponent will continue to conduct targeted outreach with the Participating Parties identified in Section 1.3. Notification will be sent to BOEM and applicable Participating Parties that the Treatment Plan has been implemented and is complete upon final development of the conditions of COP approval, the forthcoming MOA, and this HPTP.

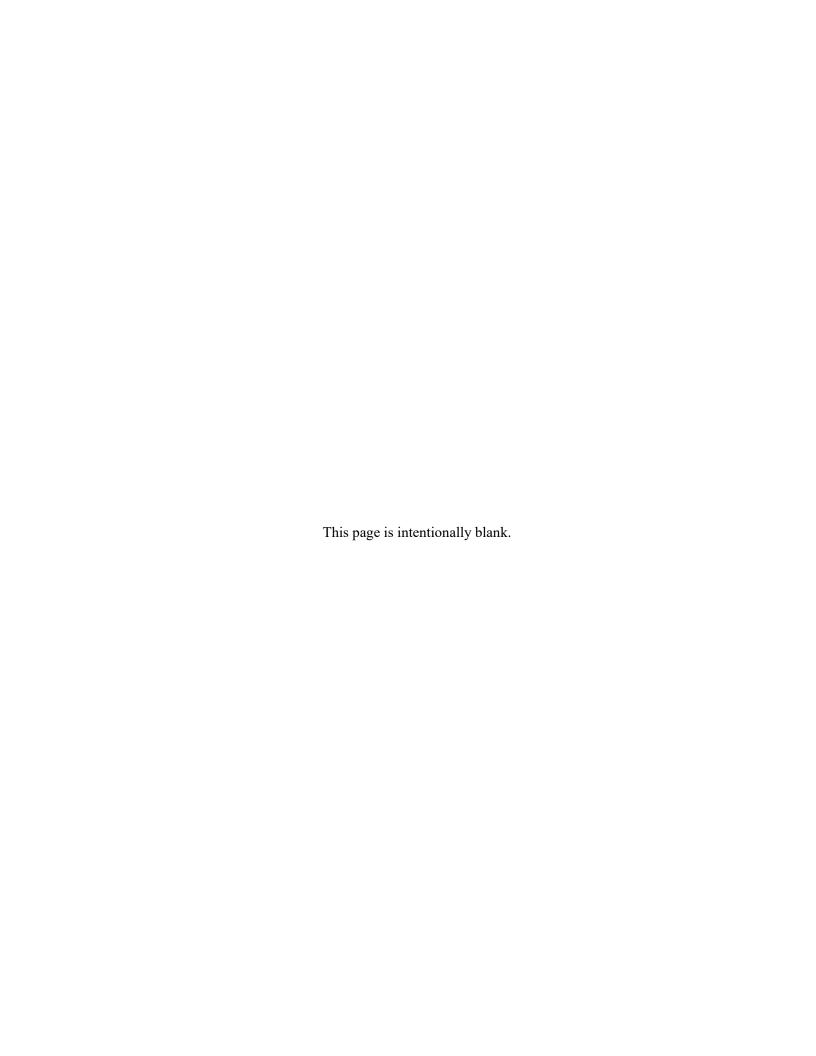
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ATTACHMENT 5 – HISTORIC PROPERTY TREATMENT PLAN FOR THE EDWIN VANDERHOOP HOMESTEAD AND GAY HEAD – AQUINNAH SHOPS AREA





Draft New England Wind Historic Property Treatment Plan for the Edwin Vanderhoop Homestead and the Gay Head – Aquinnah Shops Area

Submitted to:
BUREAU OF OCEAN ENERGY MANAGEMENT
45600 Woodland Rd
Sterling, VA 20166

Submitted by: Park City Wind LLC

Prepared by:



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EXECUTIVE SUMMARY

This draft Historic Property Treatment Plan (HPTP) for the Edwin Vanderhoop Homestead and the Gay Head – Aquinnah Shops Area adversely affected by New England Wind provides background data, historic property information, and detailed steps that will be implemented to carry out the mitigation identified during the Section 106 consultation process in the forthcoming Memorandum of Agreement (MOA) with the Bureau of Ocean Energy Management (BOEM), the Massachusetts State Historic Preservation Officer (MA SHPO), and the Advisory Council on Historic Preservation regarding the New England Wind project. The conditions of Construction and Operations Plan (COP) approval and the forthcoming MOA will identify a substantive baseline of specific mitigation measures to resolve the adverse visual effects to the properties identified below as a result of the construction and operation of New England Wind (the Undertaking) to satisfy requirements of Section 106 and 110(f) of the National Historic Preservation Act (NHPA) of 1966 (54 USC 300101; United States Code, 2016). This HPTP outlines the implementation steps and timeline for actions, and will be consistent with, or equivalent to, those substantive baseline mitigation measures identified in the conditions of COP approval and forthcoming MOA.

The National Environmental Policy Act (NEPA) substitution process will be utilized by BOEM to fulfill the Section 106 obligations as provided for in the NHPA implementing regulations (36 CFR § 800.8(c)). Furthermore, BOEM has notified the Advisory Council on Historic Preservation (ACHP), State Historic Preservation Officers, and consulting parties of BOEM's decision to use the NEPA substitution process. This draft HPTP has been provided by the Proponent for inclusion in the Draft Environmental Impact Statement (DEIS) for review by BOEM and consulting parties. Meaningful input on the resolution of adverse effects to, and form(s) of implementation at, the historic properties is anticipated.

This draft HPTP includes the mitigation measures proposed by the Proponent for historic properties based on the evaluations and outreach performed by the Proponent prior to the issuance of the DEIS. It is anticipated that the draft HPTP will sustain further revision and refinement as consultation with the Massachusetts State Historic Preservation Officer, the ACHP, and/or other consulting parties through the NEPA substitution process. Should BOEM make a finding of adverse effect for the historic property, the mitigation measure(s) described herein (and in revisions) will be included in the Record of Decision (ROD) and/or MOA issued in accordance with 40 CFR parts 1500-1508, and 36 CFR §§ 800.8, 800.10.

The timeline for implementation of the mitigation measures will be determined in consultation with parties that demonstrated interest in the affected historic property (hereafter, Participating Parties) based on the agreed upon mitigation measures described in the final version of this draft HPTP. This draft HPTP will be reviewed by, and further developed in, consultation with Participating Parties concurrent with BOEM's NEPA substitution schedule.

This draft HPTP is organized into the following sections:

Executive Summary

Section 1.0 Background Information

This section outlines the content of this HPTP and provides a description of the proposed development of New England Wind.

Section 2.0 Summary of Historic Property

This section summarizes the historic property discussed in this HPTP that may be adversely affected by the Undertaking and summarizes the provisions, attachments, and findings that informed the development of this document, most notably the New England Wind Construction and Operations Plan (NE Wind COP) and the Historic Properties Visual Impact Assessment (Appendix III-H.b).

Section 3.0 Mitigation Measures

This section provides a review of mitigation measures proposed by the Proponent as identified in the COP or through consultation with stakeholders. Mitigation measure details may be revised during the consultation process.

Section 4.0 Implementation

This section establishes the process for executing the mitigation measures identified in Section 4.0. As the consultation process continues, details for each mitigation measure such as the organizational responsibilities, timeline, and regulatory review requirements will continue to be outlined.

Section 5.0 References

This section is a list of works cited for this draft HPTP.

1.0 BACKGROUND INFORMATION

1.1 Project Overview

New England Wind is the proposal to develop offshore renewable wind energy facilities in Bureau of Ocean Energy Management (BOEM) Lease Area OCS-A 0534 along with associated offshore and onshore cabling, onshore substations, and onshore operations and maintenance (O&M) facilities. New England Wind will be developed in two Phases with a maximum of 130 wind turbine generator (WTG) and/or electrical service platform (ESP) positions. Four or five offshore export cables will transmit electricity generated by the WTGs to onshore transmission systems in the Town of Barnstable, Massachusetts. Figure 1.1-1 provides an overview of the New England Wind project. Park City Wind LLC, a wholly owned subsidiary of Avangrid Renewables, LLC, is the Proponent of this Construction and Operations Plan (COP) and will be responsible for the construction, operation, and decommissioning of New England Wind. The construction, operation, and decommissioning of the New England Wind project are defined as the Undertaking and are subject to Section 106 of the National Historic Preservation Act (NHPA).

New England Wind's offshore renewable wind energy facilities are located immediately southwest of Vineyard Wind 1, which is located in Lease Area OCS-A 0501. New England Wind will occupy all of Lease Area OCS-A 0534 and potentially a portion of Lease Area OCS-A 0501 in the event that Vineyard Wind 1 does not develop "spare" or extra positions included in Lease Area OCS-A 0501 and Vineyard Wind 1 assigns those positions to Lease Area OCS-A 0534. For the purposes of the COP, the Southern Wind Development Area (SWDA) is defined as all of Lease Area OCS-A 0534 and the southwest portion of Lease Area OCS-A 0501, as shown in Figure 1.1-1. The SWDA may be approximately 411–453 square kilometers (km2) (101,590–111,939 acres) in size depending upon the final footprint of Vineyard Wind 1. At this time, the Proponent does not intend to develop the two positions in the separate aliquots located along the northeastern boundary of Lease Area OCS-A 0501 as part of New England Wind. The SWDA (excluding the two separate aliquots closer to shore) is just over 32 kilometers (km) (20 miles [mi]) from the southwest corner of Martha's Vineyard and approximately 38 km (24 mi) from Nantucket (see Figure 1.1-2). Within the SWDA, the closest WTG is approximately 34.1 km (21.2 mi) from Martha's Vineyard and 40.4 km (25.1 mi) from Nantucket. The WTGs and ESP(s) in the SWDA will be oriented in an east-west, north-south grid pattern with one nautical mile (NM) (1.85 km) spacing between positions.

The Historic Properties Visual Impact Assessment (Appendix III-H.b of COP Volume III) for New England Wind is intended to assist BOEM and the Massachusetts Historical Commission (MHC), in its role as the State Historic Preservation Officer (SHPO), in their review of New England Wind under Section 106 of the NHPA and the National Environmental Policy Act. The Preliminary Area of Potential Effects (PAPE) described herein has been developed to assist BOEM and MHC in identifying historic resources listed, or eligible for listing, in the National Register of Historic Places (National Register) in order to assess the potential effects of New England Wind on historic properties.





1.2 Historic Property Treatment Plan (HPTP) and Section 106 of the National Historic Preservation Act (NHPA)

This Historic Property Treatment Plan (HPTP) will be developed in accordance with the Section 106 and Section 110(f) review (36 CFR 800) of the Undertaking and the forthcoming Memorandum of Agreement (MOA). This HPTP provides background data, historic property information, and detailed steps that will be implemented to carry out the mitigation identified during the Section 106 consultation process in the forthcoming Memorandum of Agreement (MOA) with the Bureau of Ocean Energy Management (BOEM), the Massachusetts State Historic Preservation Officer (MA SHPO), and the Advisory Council on Historic Preservation regarding the New England Wind project.

The conditions of COP approval and forthcoming MOA will include measures to avoid and/or minimize adverse effects to identified historic properties, including planned distance of the Undertaking from historic properties, uniform WTG design, speed, height, and rotor diameter to reduce visual contrast, uniform spacing of WTGs to decrease visual clutter, and lighting and marking requirements to minimize visibility. This HPTP addresses the remaining mitigation provisions for the properties identified below.

All activities implemented under this HPTP will be conducted in accordance with the forthcoming conditionals of COP approval and the forthcoming MOA as well as with applicable local, state, and federal regulations and permitting requirements.

1.3 Participating Parties

The National Environmental Policy Act (NEPA) substitution process will be utilized by BOEM to fulfill the Section 106 obligations as provided for in the NHPA implementing regulations (36 CFR § 800.8(c)). BOEM hosted the first Section 106-specific meeting with consulting parties on March 3, 2022 and the Proponent anticipates that BOEM will hold additional meetings pursuant to Sections 106 and 110(f) of the NHPA and in accordance with 36 CFR 800.8.

The Proponent is also conducting outreach meetings with various stakeholders to review the findings of the analysis to date and initiate discussion of proposed mitigation measures. These are parties that demonstrated interest in the affected historic property (Participating Parties). The Proponent has conducted and/or anticipates conducting outreach with the following parties:

- The Massachusetts Historical Commission (MHC)
- The Town of Aquinnah
- The Wampanoag Tribe of Gay Head (Aquinnah)
- [Other Tribes or consulting parties may be added]

The Proponent further anticipates the above-mentioned parties will participate in the finalization of this draft HPTP through BOEM's Section 106 consultation process. This list may be amended if any additional parties are identified during this process.

2.0 SUMMARY OF HISTORIC PROPERTY (EDWIN VANDERHOOP HOMESTEAD AND GAY HEAD – AQUINNAH SHOPS AREA)

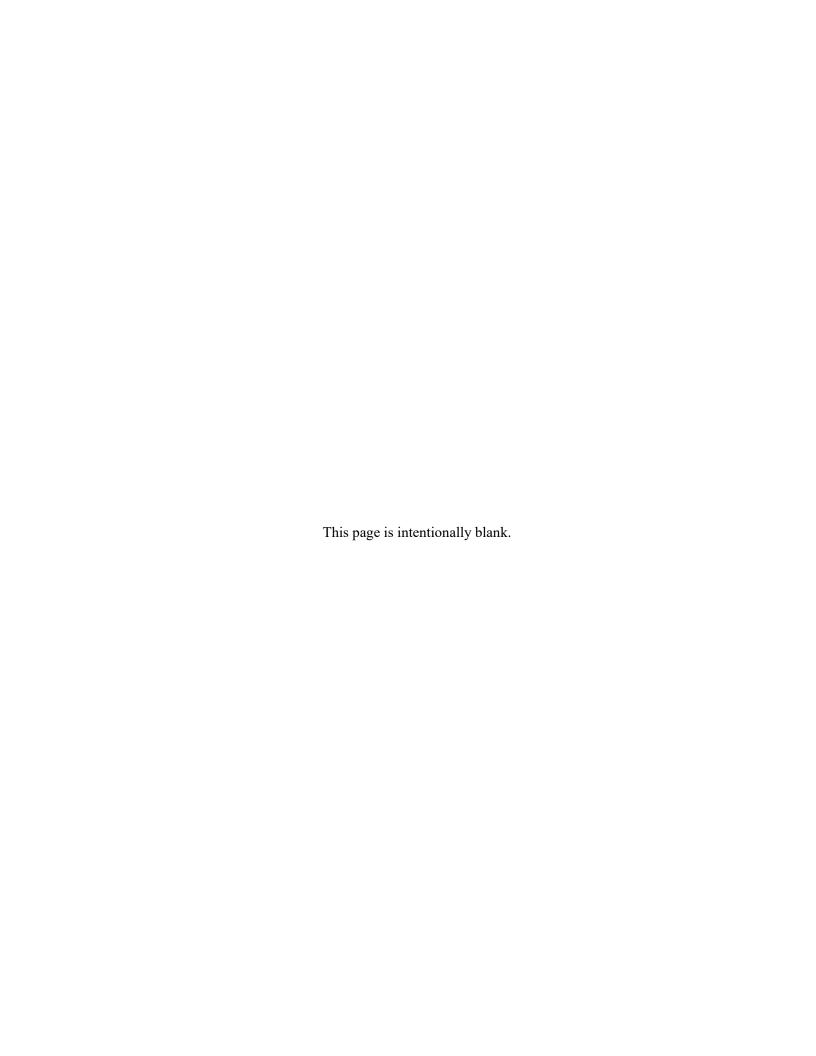
Edwin Vanderhoop Homestead (GAY.40) 35 South Road, Aquinnah, NRIND

The Edwin Vanderhoop Homestead is individually listed on the National Register (Figure 2.0-1). The late 19th century Edwin Vanderhoop Homestead is a two-and-a-half story Victorian Eclectic style residence. The building's complex plan consists of a rectangular side-gable main block and several intersecting gable roof extensions. The house was constructed for Edwin Vanderhoop, son of William Adriann Vanderhoop, the first member of the family to settle in Gay Head. The Vanderhoops would become important figures in the development of Gay Head. The building is significant under Criteria A and C as an excellent example of a Victorian Eclectic style house and its association with the Vanderhoop family, a prominent local family. The Edwin Vanderhoop Homestead retains integrity of location, design, setting, material, workmanship, feeling, and association.

The Homestead is oriented to take advantage of the ocean view and the seaside setting is integral to its setting. The maritime setting of this resource, and its viewshed, would be altered through the introduction of new elements; however, view from the Homestead toward the SWDA is partially obstructed by topography and mature tree growth to the southeast. View of the SWDA is possible to the south. View of the Homestead to the north and east will be unaffected. View of the Homestead to the south and the west (at an extreme angle) will be affected in ideal weather conditions.

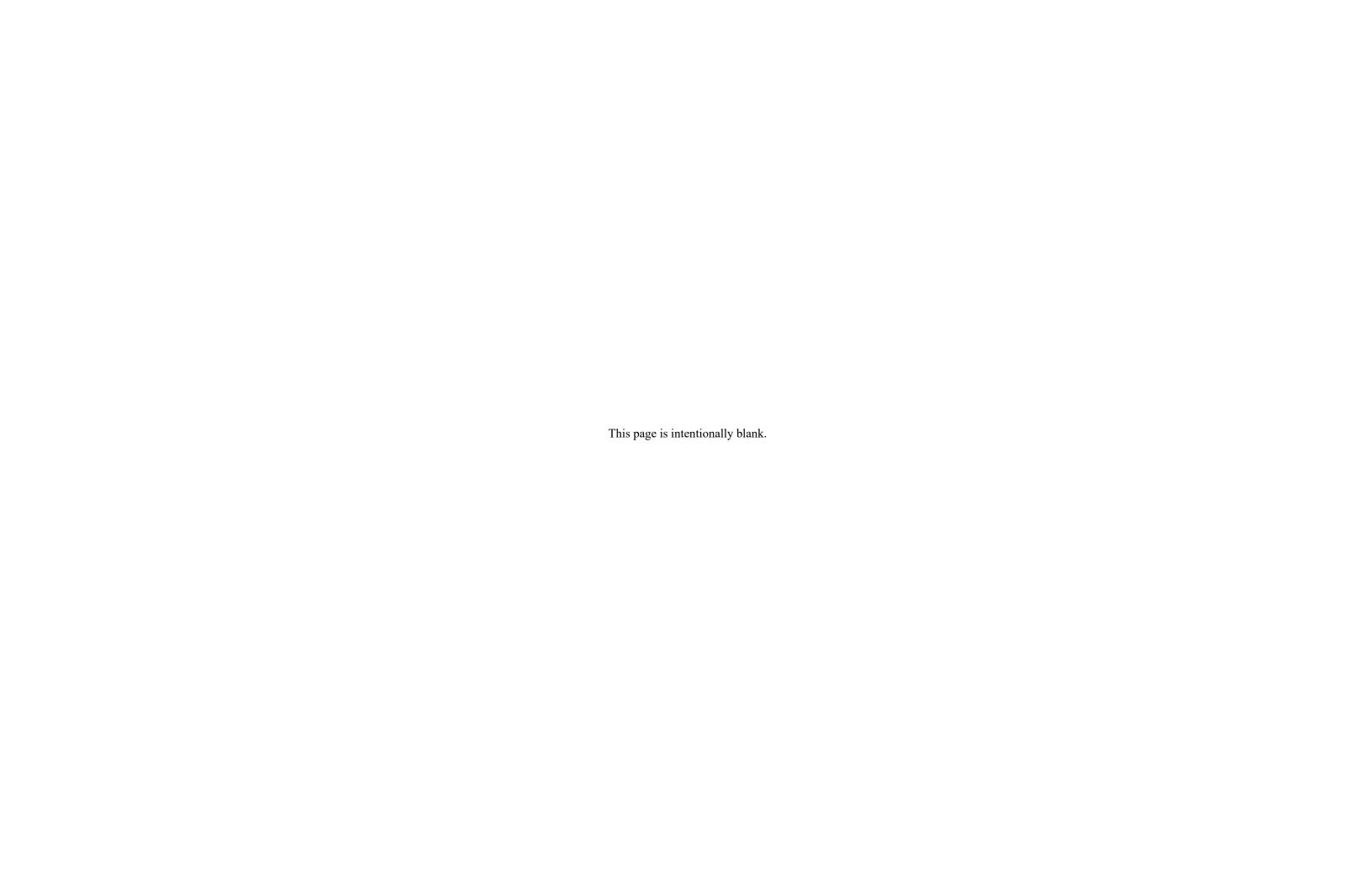
The Homestead is located at the western end of Martha's Vineyard approximately 40.8 km (25.4 mi) from the nearest WTG or ESP. On average, based on airport reported visibilities and accounting for the proposed use of an Aircraft Detection Lighting System (ADLS), visibility from Martha's Vineyard Airport is 16 km (10 mi) or greater 42% of the time in a given year due to weather conditions (see Table 4-1 of Appendix III-H.b). This means that, at minimum, the SWDA will not be visible 58% of the year. In addition to general weather conditions, other factors such as haze and sea spray may further reduce visibility. Photo simulations B-1a to B-1g and C-1a to C-1d in Appendix III-H.a provide representative views of the SWDA.

Eligibility Criterion A would not be affected by the SWDA. Criterion C, as it relates to the setting of the Homestead, would be affected; however, this effect would primarily be the southern view and a portion of the western view. View of the Homestead to the north and east would remain unaffected. While only partial visibility of the SWDA is possible from the Homestead and variable visibility of the SWDA is possible depending upon weather conditions, it is conservatively determined that an adverse effect to the setting of the Homestead may occur.









Gay Head – Aquinnah Shops Area (GAY.B) Aquinnah Circle, Aquinnah, NRDIS Eliqible

The Gay Head – Aquinnah Shops Area (the "Shops") is a cluster of nine commercial buildings overlooking the Atlantic Ocean (Figure 2.0-1). Constructed during the early to mid-20th century, the buildings form a U-shaped cluster along the north and south sides of a walkway extending to the Clay Cliffs of Aquinnah Scenic Overlook. The Aquinnah Shops Area is significant under Criteria A and C as a collection of mid-20th century roadside shops associated with the rise of the automobile era and increased tourism at Gay Head Cliffs. These building are part of a group of buildings developed as part of tourism at the Gay Head Cliffs starting in the 19th century with the arrival of steamships. Over time, buildings were developed and then later replaced. The present simple wood shingle gable roofed one to one-and-a-half story buildings are examples of roadside Americana developed in the mid-20th century as car travel became more popular and the buildings are sited to take advantage of the cliffside location as a tourist attraction. Despite some alterations to the buildings, the Gay Head – Aquinnah Shops Area retains integrity of location, setting, material, workmanship, feeling, and association.

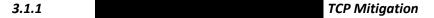
The Shops were built to take advantage of the ocean view and the seaside setting is integral to their setting. The Shops located at the western end of Martha's Vineyard are 40.9 km (25.4 mi) from the nearest WTG or ESP. The maritime setting of this resource, and its viewshed, would be altered through the introduction of new elements. However, existing powerlines and other modern elements are already within the foreground of the viewshed as opposed to the SWDA, which will only be partially visible, far off on the horizon. Additionally, existing topography and vegetation partially screen the SWDA from view. Photo simulations B-1a to B-1g and C-1a-C-1d in Appendix III-H.a, which are for a location in proximity to the Gay Head - Aquinnah Shops Area, provide representative views of the SWDA from the Gay Head - Aquinnah Shops Area.

The Shops were constructed as a means of capitalizing on tourism in Gay Head, in particular the Gay Head Cliffs, which are located to the north, west, and south of the Shops. The Gay Head overlook, where tourists view the Cliffs, is located to the north of the Shops and views to the north and east of the Cliffs are the primary viewsheds of the Gay Head Cliffs. A view to the south over the Shops towards the SWDA is possible from the overlook, but is not a significant viewshed as the Shops themselves conflict with the purpose of the overlook, which is to view the natural scenic character of the Cliffs and no view of the Cliffs is possible from this angle. Eligibility Criterion A would not be affected by the SWDA, but Criterion C, as it relates to setting of the Shops, would be affected. The primary viewpoints of the Shops are west or north from Aquinnah Circle; view of the SWDA is not possible with a northern view and the SWDA is only partially visible to the west at an extreme angle. While significant viewsheds will not be altered, it is conservatively determined that an adverse effect may occur.

3.0 MITIGATION MEASURES

Mitigation measures for the Edwin Vanderhoop Homestead and the Gay Head - Aquinnah Shops Area are detailed below.

3.1 Mitigation Measures



TCP. Thus, mitigation measures outlined are also applicable to the historic resources listed in this HPTP. The mitigation measures proposed in the

Mitigation measures are subject to change as consultation is ongoing.

3.1.2 National Register of Historic Places District Nomination for Aquinnah Shops Area

Purpose and Intended Outcome

Specifically for the Aquinnah Shops Area, the Proponent is proposing to draft a National Register of Historic Places District Nomination. The listing of the Aquinnah Shops on the National Register will assist in their preservation by documenting their current condition, acknowledging their historic significance, and potentially allowing for the use of historic tax credits to assist in financing future rehabilitation projects.

Scope of Work

The scope of work will be developed in accordance with the Participating Parties and is envisioned to include the documentation of existing conditions and a draft nomination for the National Register of Historic Places.

Methodology

The Proponent will prepare an RFP and will consult with Participating Parties in defining objectives and scope of work, as well as in the consultant selection process.

Standards

All work will be conducted in accordance with state and federal applicable standards and will be overseen by professionals meeting the qualifications specified in the Secretary of the Interior's *Professional Qualifications Standards* (36 CFR Part 61). All work that requires consultation with Tribal Nations will be

performed by professionals who have demonstrated professional experience consulting with federally recognized Tribes. Professionals selected shall have demonstrated experience documenting historic places.

Documentation

The Proponent will provide the following documentation to the Participating Parties for their review:

- Draft proposed scope of work.
- RFP and consultant bids in response to RFP.
- Draft version of the National Register nomination materials for review and comment by the Participating Parties.
- Final version of the National Register nomination materials.
- Annual progress report to BOEM describing the implementation of the mitigation measures.

Funds and Accounting

Funding amounts for this specific mitigation measure will be determined following BOEM's release of their findings of adverse effects and consulting party review of the draft HPTP and the DEIS. The final version of the HPTP will include specifics concerning funding amounts and the mechanisms for funding the mitigation measures.

3.2 Additional Mitigation Measures

The Proponent is also implementing the following mitigation measures.

3.2.1 Uniform Layout and Paint Color Selection

The Proponent is avoiding and minimizing visual impacts to the maximum extent practicable. The WTGs for each phase will have uniform design, height, and rotor diameter and will be aligned and spaced consistently with other offshore wind facilities, thereby reducing potential for visual clutter. Additionally, the WTGs will be no lighter than RAL 9010 Pure White and no darker than RAL 7035 Light Grey in color in accordance with BOEM and Federal Aviation Administration (FAA) guidance; the Proponent anticipates painting the WTGs off-white/light grey to reduce contrast with the sea and sky and thus, minimize daytime visibility of the WTGs. The conservative threshold for visibility in meteorological analyses is "the greatest distance at which an observer can just see a black object viewed against the horizon sky" (see Section 3.3 of Appendix III-H.a). The Phase 1 and Phase 2 WTGs will not be black; instead, the expected off-white/light grey color will be highly compatible with the hue, saturation, and brightness of the background sky. This lack of contrast between the WTGs and the background means that the percentage of the time the structures might be visible is greatly reduced. Additionally, the upper portion of the ESP(s) will be a grey color which would appear muted and indistinct. Color contrast decreases as distance increases. Color contrast will diminish or disappear completely during periods of haze, fog, or precipitation.

3.2.2 Lighting

Lighting will be kept to the minimum necessary to comply with navigation safety requirements and safe operating conditions. Required marine navigation lights mounted near the top of each WTG/ESP foundation (or on the corners of each ESP) are expected to be visible only to distances of approximately 9.3 km (5 NM). As the closest coastal vantage point is at least 34.1 km (21.2 mi) from the nearest WTG, marine navigation lights will not be visible from shore.

3.2.3 Aircraft Detection Lighting Systems (ADLS)

Subject to BOEM approval, the Proponent also expects to use an ADLS that automatically turns on, and off, aviation obstruction lights in response to the detection of aircraft for the Phase 1 WTGs. For Phase 2, the Proponent would expect to use the same or similar approaches used for Vineyard Wind 1 and/or Phase 1 to reduce lighting, including the use of an ADLS. Based on historical use of the airspace, it is estimated that the aviation obstruction lights on both the nacelle and tower (if needed) will be activated for less than one hour per year (less than 0.1% of the nighttime hours) (see Appendix III-K). The effect of nighttime lighting from the aviation obstruction lights is acknowledged as part of the overall visibility and visual effect of the SWDA; however, the effect of nighttime lighting is substantially minimized through the use of ADLS. As stated previously, meteorological conditions will serve to obscure or block view of the SWDA providing additional minimization of the effect of nighttime lighting. For Phase 1, the onshore export cables to the onshore substation will be primarily installed underground and will typically be within public roadway layouts, although portions of the duct bank may be within existing utility rights-of-way (ROWs). From the onshore substation, grid interconnection cables will also be installed underground. Underground installation of onshore cables is also expected for Phase 2, thus minimizing potential visual effects to adjacent properties.

4.0 IMPLEMENTATION

Construction activities of the Undertaking that adversely affect a specific historic property cannot begin until BOEM has accepted the HPTP for that specific adversely affected historic property, consistent with the forthcoming conditions of COP approval. Construction activities that do not adversely affect historic properties may proceed prior to acceptance of the HPTPs.

4.1 Timeline

The timeline and organizational responsibilities will be developed in consultation with BOEM and the Participating Parties as the conditions of COP approval and the MOA are developed concurrent with BOEM's National Environmental Policy Act (NEPA) substitution schedule for New England Wind which is currently anticipated to include the following key dates:

- December 2022 Release of the Draft Environmental Impact Statement (DEIS) followed by a 60-day comment period for the DEIS.
- September 2023 -- Release of Final Environmental Impact Statement (FEIS).
- October 2023 -- NEPA Record of Decision (ROD) issuance.

It is anticipated that the mitigation measures identified in Section 3.0 will commence within 2 years of the execution of the MOA unless otherwise agreed by the Participating Parties and accepted by BOEM. Per Section 3.0, the Participating Parties will have a minimum of 45 days to review and comment on all draft reports or other work products developed for this HPTP. The Proponent assumes that the proposed scope of work will be completed within 5 years of the execution of the MOA unless a different timeline is agreed upon by Participating Parties and accepted by BOEM.

4.2 Organizational Responsibilities

4.2.1 Bureau of Ocean Energy Management (BOEM)

- BOEM is responsible for making all federal decisions and determining compliance with Section 106.
- BOEM must review and accept the HPTP before the implementing party may commence any actions.
- BOEM is responsible for consultation related to dispute resolution.
- BOEM in consultation with the Participating Parties will ensure that mitigation measures adequately resolve adverse effects, consistent with the NHPA.
- BOEM will be responsible for sharing the annual summary report with Participating Parties.

4.2.2 Avangrid Renewables, LLC

- The Proponent will be responsible for implementing the HPTP.
- The Proponent will be responsible for considering the comments provided by the parties identified.
- Funding the mitigation measures specified in Section 3.0.
- Completion of the scope(s) of work in Section 3.0.
- The Proponent will be responsible for ensuring that all work that requires consultation with Tribal Nations are performed by professionals who have demonstrated professional experience consulting with federally recognized Tribes.
- Annual reporting to BOEM on implementation of the HPTP.

4.2.3 Participating Parties

- Participating Parties are responsible for providing feedback on draft scope of work, RFP, and consultant bids within 45 days.
- Participating Parties are responsible for providing feedback on draft materials associated with the National Register Nomination within 45 days.

4.2.4 Other Parties

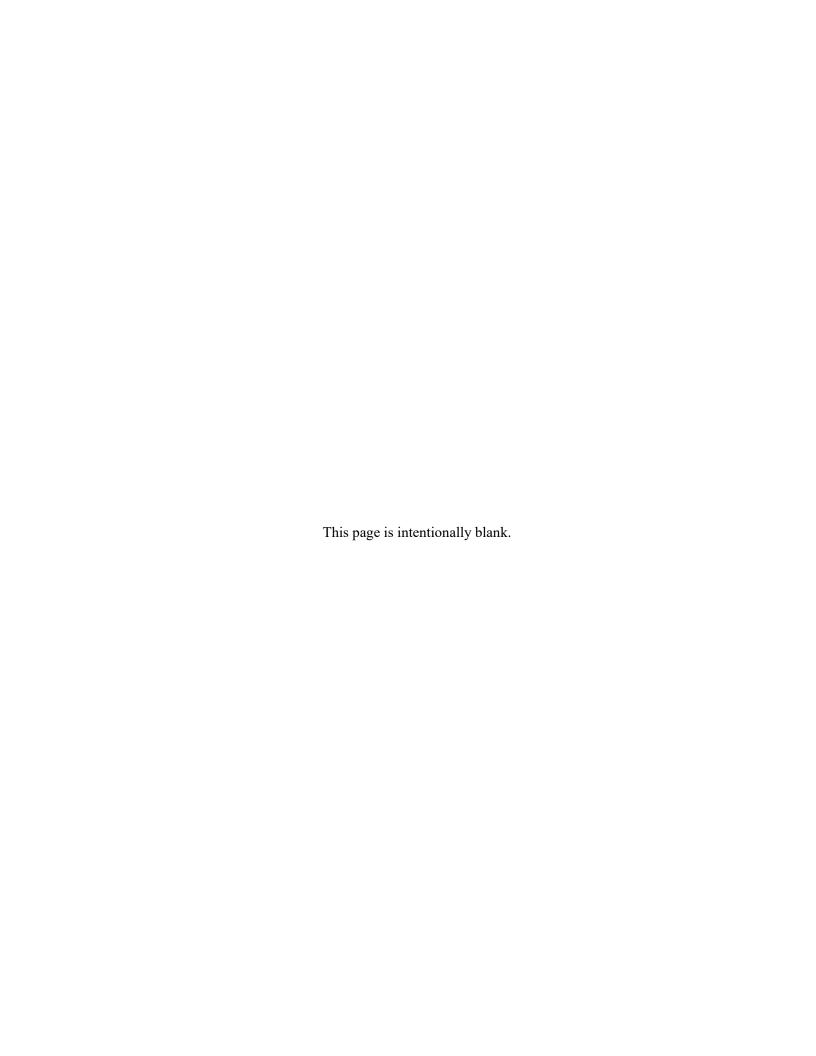
The Proponent does not anticipate additional consulting parties; however, should any be determined, this section will be updated.

4.3 Participating Party Consultation

The Proponent has provided this draft HPTP to BOEM for inclusion in the DEIS for review by Participating Parties to provide input on the resolution of adverse effects to, and forms of implementing mitigation, to the Edwin Vanderhoop Homestead and the Gay Head - Aquinnah Shops Area. As part of the development of this draft HPTP, the Proponent will continue to conduct targeted outreach with the Participating Parties identified in Section 1.3. Notification will be sent to BOEM and applicable Participating Parties that the Treatment Plan has been implemented and is complete upon final development of the conditions of COP approval, the forthcoming MOA, and this HPTP.

5.0 REFERENCES

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ATTACHMENT 6 – HISTORIC PROPERTY TREATMENT PLAN FOR [REDACTED] TCP





Draft New England Wind Historic Property Treatment Plan for Traditional Cultural Property

Submitted to:
BUREAU OF OCEAN ENERGY MANAGEMENT
45600 Woodland Rd
Sterling, VA 20166

Submitted by: Park City Wind LLC

Prepared by:



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EXECUTIVE SUMMARY

Traditional Cultural Property (TCP) adversely affected by New England Wind provides background data, historic property information, and detailed steps that will be implemented to carry out the mitigation identified during the Section 106 consultation process in the forthcoming Memorandum of Agreement (MOA) with the Bureau of Ocean Energy Management (BOEM), the Massachusetts State Historic Preservation Officer (MA SHPO), and the Advisory Council on Historic Preservation regarding the New England Wind project. The conditions of Construction and Operations Plan (COP) approval and the forthcoming MOA will identify a substantive baseline of specific mitigation measures to resolve the adverse visual effects to the properties identified below as a result of the construction and operation of New England Wind (the Undertaking) to satisfy requirements of Section 106 and 110(f) of the National Historic Preservation Act (NHPA) of 1966 (54 USC 300101; United States Code, 2016). This HPTP outlines the implementation steps and timeline for actions, and will be consistent with, or equivalent to, those substantive baseline mitigation measures identified in the conditions of COP approval and forthcoming MOA.

The National Environmental Policy Act (NEPA) substitution process will be utilized by BOEM to fulfill the Section 106 obligations as provided for in the NHPA implementing regulations (36 CFR § 800.8(c)). Furthermore, BOEM has notified the Advisory Council on Historic Preservation (ACHP), State Historic Preservation Officers, and consulting parties of BOEM's decision to use the NEPA substitution process. This draft HPTP has been provided by the Proponent for inclusion in the Draft Environmental Impact Statement (DEIS) for review by BOEM and consulting parties. Meaningful input on the resolution of adverse effects to, and form(s) of implementation at, the historic properties is anticipated.

This draft HPTP includes the mitigation measures proposed by the Proponent for historic properties based on the evaluations and outreach performed by the Proponent prior to the issuance of the DEIS. It is anticipated that the draft HPTP will sustain further revision and refinement as consultation with the Massachusetts State Historic Preservation Officer, the ACHP, and/or other consulting parties through the NEPA substitution process. Should BOEM make a finding of adverse effect for the historic property, the mitigation measure(s) described herein (and in revisions) will be included in the Record of Decision (ROD) and/or MOA issued in accordance with 40 CFR parts 1500-1508, and 36 CFR §§ 800.8, 800.10.

The timeline for implementation of the mitigation measures will be determined in consultation with parties that demonstrated interest in the affected historic property (hereafter, Participating Parties) based on the agreed upon mitigation measures described in the final version of this draft HPTP. This draft HPTP will be reviewed by, and further developed in, consultation with Participating Parties concurrent with BOEM's NEPA substitution schedule.

This draft HPTP is organized into the following sections:

Executive Summary

Section 1.0 Background Information

This section outlines the content of this HPTP and provides a description of the proposed development of New England Wind.

Section 2.0 Summary of Historic Property

This section summarizes the historic property discussed in this HPTP that may be adversely affected by the Undertaking and summarizes the provisions, attachments, and findings that informed the development of this document, most notably the New England Wind Construction and Operations Plan (NE Wind COP) and the Historic Properties Visual Impact Assessment (Appendix III-H.b).

Section 3.0 Mitigation Measures

This section provides a review of mitigation measures proposed by the Proponent as identified in the COP or through consultation with stakeholders. Mitigation measure details may be revised during the consultation process.

Section 4.0 Implementation

This section establishes the process for executing the mitigation measures identified in Section 4.0. As the consultation process continues, details for each mitigation measure such as the organizational responsibilities, timeline, and regulatory review requirements will continue to be outlined.

Section 5.0 References

This section is a list of works cited for this draft HPTP.

1.0 BACKGROUND INFORMATION

1.1 Project Overview

New England Wind is the proposal to develop offshore renewable wind energy facilities in Bureau of Ocean Energy Management (BOEM) Lease Area OCS-A 0534 along with associated offshore and onshore cabling, onshore substations, and onshore operations and maintenance (O&M) facilities. New England Wind will be developed in two Phases with a maximum of 130 wind turbine generator (WTG) and/or electrical service platform (ESP) positions. Four or five offshore export cables will transmit electricity generated by the WTGs to onshore transmission systems in the Town of Barnstable, Massachusetts. Figure 1.1-1 provides an overview of the New England Wind project. Park City Wind LLC, a wholly owned subsidiary of Avangrid Renewables, LLC, is the Proponent of this Construction and Operations Plan (COP) and will be responsible for the construction, operation, and decommissioning of New England Wind. The construction, operation, and decommissioning of the New England Wind project are defined as the Undertaking and are subject to Section 106 of the National Historic Preservation Act (NHPA).

New England Wind's offshore renewable wind energy facilities are located immediately southwest of Vineyard Wind 1, which is located in Lease Area OCS-A 0501. New England Wind will occupy all of Lease Area OCS-A 0534 and potentially a portion of Lease Area OCS-A 0501 in the event that Vineyard Wind 1 does not develop "spare" or extra positions included in Lease Area OCS-A 0501 and Vineyard Wind 1 assigns those positions to Lease Area OCS-A 0534. For the purposes of the COP, the Southern Wind Development Area (SWDA) is defined as all of Lease Area OCS-A 0534 and the southwest portion of Lease Area OCS-A 0501, as shown in Figure 1.1-1. The SWDA may be approximately 411–453 square kilometers (km2) (101,590–111,939 acres) in size depending upon the final footprint of Vineyard Wind 1. At this time, the Proponent does not intend to develop the two positions in the separate aliquots located along the northeastern boundary of Lease Area OCS-A 0501 as part of New England Wind. The SWDA (excluding the two separate aliquots closer to shore) is just over 32 kilometers (km) (20 miles [mi]) from the southwest corner of Martha's Vineyard and approximately 38 km (24 mi) from Nantucket (see Figure 1.1-2). Within the SWDA, the closest WTG is approximately 34.1 km (21.2 mi) from Martha's Vineyard and 40.4 km (25.1 mi) from Nantucket. The WTGs and ESP(s) in the SWDA will be oriented in an east-west, north-south grid pattern with one nautical mile (NM) (1.85 km) spacing between positions.

The Historic Properties Visual Impact Assessment (Appendix III-H.b of COP Volume III) for New England Wind is intended to assist BOEM and the Massachusetts Historical Commission (MHC), in its role as the State Historic Preservation Officer (SHPO), in their review of New England Wind under Section 106 of the NHPA and the National Environmental Policy Act. The Preliminary Area of Potential Effects (PAPE) described herein has been developed to assist BOEM and MHC in identifying historic resources listed, or eligible for listing, in the National Register of Historic Places (National Register) in order to assess the potential effects of New England Wind on historic properties.





1.2 Historic Property Treatment Plan (HPTP) and Section 106 of the National Historic Preservation Act (NHPA)

This Historic Property Treatment Plan (HPTP) will be developed in accordance with the Section 106 and Section 110(f) review (36 CFR 800) of the Undertaking and the forthcoming Memorandum of Agreement (MOA). This HPTP provides background data, historic property information, and detailed steps that will be implemented to carry out the mitigation identified during the Section 106 consultation process in the forthcoming Memorandum of Agreement (MOA) with the Bureau of Ocean Energy Management (BOEM), the Massachusetts State Historic Preservation Officer (MA SHPO), and the Advisory Council on Historic Preservation regarding the New England Wind project.

The conditions of COP approval and forthcoming MOA will include measures to avoid and/or minimize adverse effects to identified historic properties, including planned distance of the Undertaking from historic properties, uniform WTG design, speed, height, and rotor diameter to reduce visual contrast, uniform spacing of WTGs to decrease visual clutter, and lighting and marking requirements to minimize visibility. This HPTP addresses the remaining mitigation provisions for the properties identified below.

All activities implemented under this HPTP will be conducted in accordance with the forthcoming conditionals of COP approval and the forthcoming MOA as well as with applicable local, state, and federal regulations and permitting requirements.

1.3 Participating Parties

The National Environmental Policy Act (NEPA) substitution process will be utilized by BOEM to fulfill the Section 106 obligations as provided for in the NHPA implementing regulations (36 CFR § 800.8(c)). BOEM hosted the first Section 106-specific meeting with consulting parties on March 3, 2022 and the Proponent anticipates that BOEM will hold additional meetings pursuant to Sections 106 and 110(f) of the NHPA and in accordance with 36 CFR 800.8.

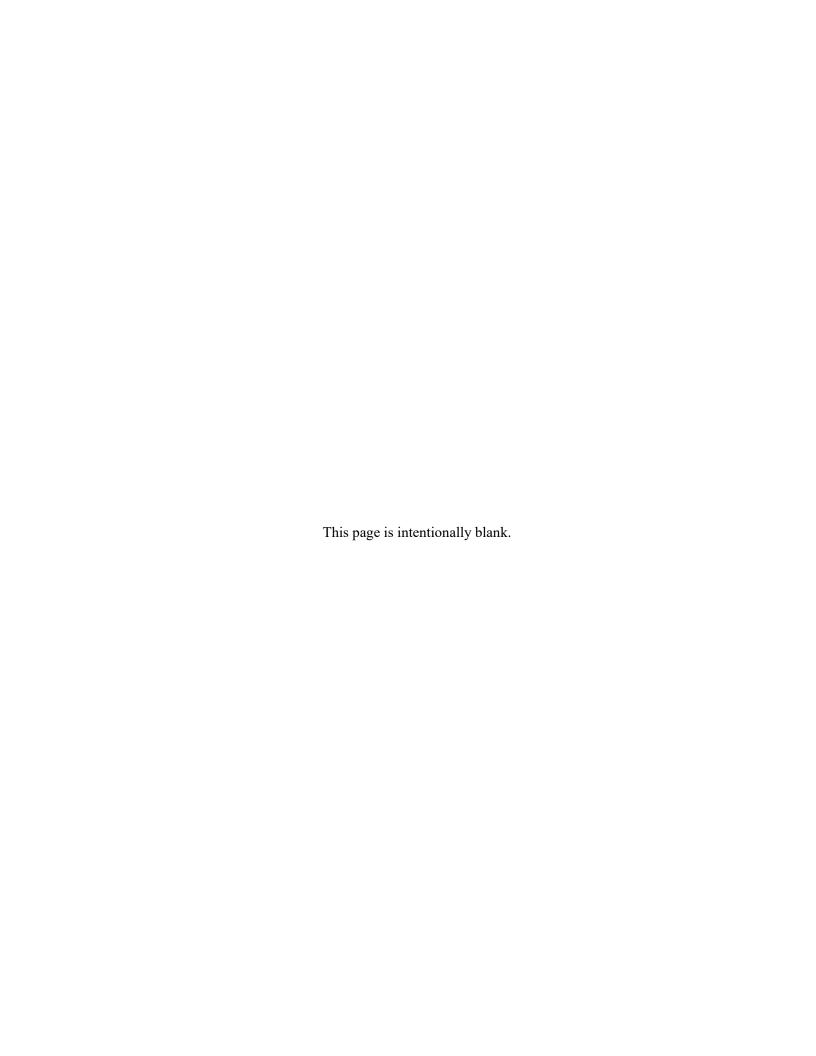
The Proponent is also conducting outreach meetings with various stakeholders to review the findings of the analysis to date and initiate discussion of proposed mitigation measures. These are parties that demonstrated interest in the affected historic property (Participating Parties). The Proponent has conducted and/or anticipates conducting outreach with the following parties:

- The Massachusetts Historical Commission
- The Chappaquiddick Tribe of Wampanoag Nation
- [Other Tribes or consulting parties may be added]

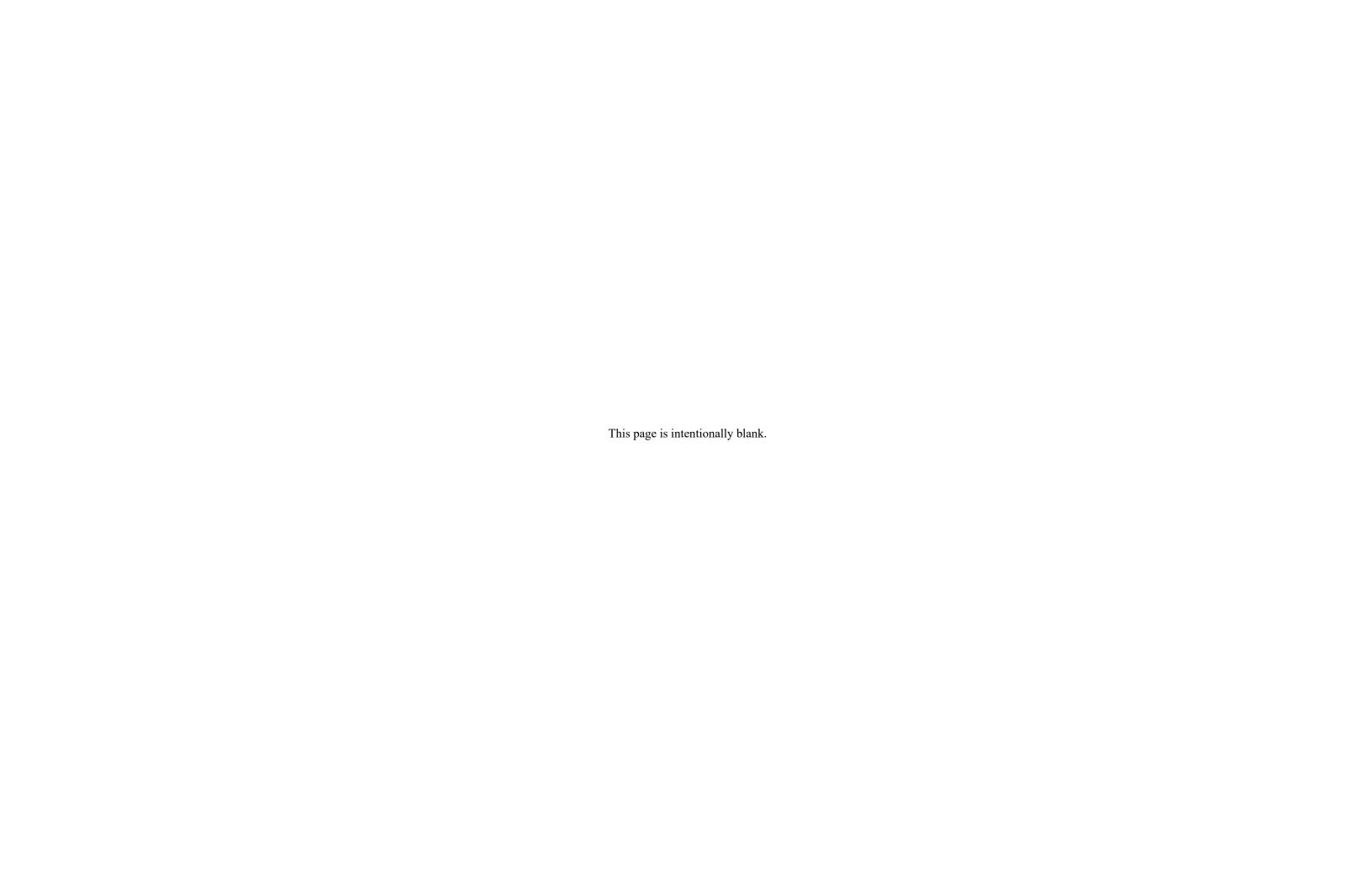
The Proponent further anticipates the above-mentioned parties will participate in the finalization of this draft HPTP through BOEM's Section 106 consultation process. This list may be amended if any additional parties are identified during this process.

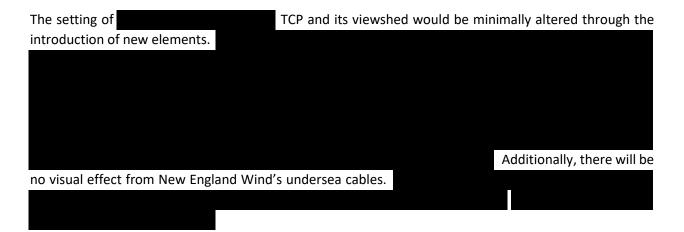
2.0 SUMMARY OF HISTORIC PROPERTY TRADITIONAL CULTURAL PROPERTY)

	has been determ	ined by BOEM to b	e potentially eligib	ole for listing on t	he National
Register as a traditi	onal cultural proper	ty (TCP; BOEM 20	20).		
The TCD					
The TCP					
Based upon a revie	ew of available histo	orical information	on		









Visibility of the SWDA will be intermittent and only possible during ideal weather conditions as even moderate haze obscures the SWDA from view. Even in ideal weather conditions, the WTGs will be barely distinguishable at the horizon line. Without foreknowledge of New England Wind, it would likely not be possible for an observer to understand what is visible as the WTGs appear as cloud shadows or other atmospheric phenomena. While significant viewsheds will not be altered, it is conservatively determined that an adverse effect may occur.

3.0 MITIGATION MEASURES

Mitigation measures for the TCP are detailed below.

3.1 Survey and GIS Database of Contributing Resources to the TCP

Purpose and Intended Outcome

Physical features associated with, and contributing resources to, the TCP will be identified and organized into a non-proprietary spatial database to assist in prioritizing preservation efforts and as a public education product. This information shall be publicly accessible and therefore will not include locations of areas of archaeological sensitivity or locations of areas of religious or cultural sensitivity to Tribal Nations.

Scope of Work

The scope of work will be developed in accordance with the Participating Parties and is envisioned to include conducting a photographic survey of contributing features to the National Register eligible TCP (both those previously identified and yet to be determined) and developing a GIS database of Contributing Resources to the TCP. As part of this mitigation measure, the Proponent will work with the Participating Parties to identify publicly available contributing resources.

; through the proposed survey, additional contributing properties may be identified.

The development of the GIS database will include drafting a preliminary platform, proposed interfaces, and database structure that accommodates the agreed upon narrative descriptions and characteristics requested to be documented. Examples of data layers could include:

- existing conditions
- identifying sites at risk due to coastal erosion, storm surge, or habitat degradation
- resources that provide contextual value

Up to 20 sites will be identified through the survey, though it is noted some may be excluded due to sensitivity concerns. Contributing properties identified shall be documented on appropriate Massachusetts Historical Commission (MHC) survey forms.

Methodology

The Proponent will prepare an RFP, in consultation with Participating Parties, and in accordance with National Register Bulletins #30 (Rural Historic Landscapes) and #38 (Traditional Cultural Properties). Participating Parties will be consulted in defining objectives and scope of work, as well as in the consultant selection process. The field investigation and photographic survey will identify locations and features that contribute to the historic character TCP including natural landscape areas of historic activities (hunting, fishing, settlement areas) as well as historic buildings and structures, where

applicable. The survey will include historical and archaeological background research on the history of . The background research will assist in identifying areas of historic significance and provide information for the public education portion of the project. (No archaeological field excavations are proposed as part of this mitigation measure.)

Standards

All work will be conducted in accordance with applicable standards and will be overseen by professionals meeting the qualifications specified in the Secretary of the Interior's *Professional Qualifications Standards* (36 CFR Part 61). All work that requires consultation with Tribal Nations are performed by professionals who have demonstrated professional experience consulting with federally recognized Tribes. The GIS work will be developed by professionals with demonstrated experience and will be overseen by a qualified Geographic Information Systems Professional. Professionals selected shall have demonstrated experience documenting Traditional Cultural Properties per National Register Bulletin #38 and Rural Historic Landscapes per National Register Bulletin #30.

Documentation

The Proponent will provide the following documentation to the Participating Parties for their review:

- Draft proposed scope of work.
- RFP and consultant bids in response to RFP.
- MHC survey forms for contributing properties.
- Draft version of the GIS database.
- Final version of the GIS database.
- Annual progress report to BOEM describing the implementation of the mitigation measures.

Funds and Accounting

Funding amounts for this specific mitigation measure will be determined following BOEM's release of their findings of adverse effects and consulting party review of the draft HPTP and the DEIS. The final version of the HPTP will include specifics concerning funding amounts and the mechanisms for funding the mitigation measures.

3.2 Development of Interpretative Materials

Purpose and Intended Outcome

The Proponent will develop and incorporate other digital media pertaining to the physical and cultural elements of the historic property in a manner that enhances intratribal and extra-tribal appreciation in conjunction with the GIS database described above. ArcGIS story maps or comparable presentations could include relevant publicly available archival data, oral histories, news stories, video footage, and public domain datasets.

Scope of Work

The scope of work will be developed in accordance with the Participating Parties and is envisioned to include a plan for developing interpretative material including the following:

- Hosting a meeting with Participating Parties to review the selected contributing features to the National Register eligible
- Preparing and presenting a draft ArcGIS StoryMap (which would include a viewing of the end user's perspective); and
- Developing an introduction and providing training on how the digital media platform functions for the Participating Parties.

The scope of work will also include soliciting feedback during the meeting and agreeing to a schedule for incorporating comments and presenting a final product.

Methodology

The Proponent will prepare an RFP and will consult with Participating Parties in defining objectives and scope of work, as well as in the consultant selection process.

Standards

All work will be conducted in accordance with state and federal applicable standards and will be overseen by professionals meeting the qualifications specified in the Secretary of the *Interior's Professional Qualifications Standards* (36 CFR Part 61). All work that requires consultation with Tribal Nations are performed by professionals who have demonstrated professional experience consulting with federally recognized Tribes.

Documentation

The Proponent will provide the following documentation to the Participating Parties for their review:

- Draft proposed scope of work.
- RFP and consultant bids in response to RFPs.
- A draft version of the interpretative materials.
- A final version of the interpretative materials. Annual progress report to BOEM describing the implementation of the mitigation measures.

Funds and Accounting

Funding amounts for this specific mitigation measure will be determined following BOEM's release of their findings of adverse effects and consulting party review of the draft HPTP and the DEIS. The final version of the HPTP will include specifics concerning funding amounts and the mechanisms for funding the

3.3 Additional Mitigation Measures

The Proponent is also implementing the following mitigation measures.

3.3.1 Uniform Layout and Paint Color Selection

The Proponent is avoiding and minimizing visual impacts to the maximum extent practicable. The WTGs for each phase will have uniform design, height, and rotor diameter and will be aligned and spaced consistently with other offshore wind facilities, thereby reducing potential for visual clutter. Additionally, the WTGs will be no lighter than RAL 9010 Pure White and no darker than RAL 7035 Light Grey in color in accordance with BOEM and Federal Aviation Administration (FAA) guidance; the Proponent anticipates painting the WTGs off-white/light grey to reduce contrast with the sea and sky and thus, minimize daytime visibility of the WTGs. The conservative threshold for visibility in meteorological analyses is "the greatest distance at which an observer can just see a black object viewed against the horizon sky" (see Section 3.3 of Appendix III-H.a). The Phase 1 and Phase 2 WTGs will not be black; instead, the expected off-white/light grey color will be highly compatible with the hue, saturation, and brightness of the background sky. This lack of contrast between the WTGs and the background means that the percentage of the time the structures might be visible is greatly reduced. Additionally, the upper portion of the ESP(s) will be a grey color which would appear muted and indistinct. Color contrast decreases as distance increases. Color contrast will diminish or disappear completely during periods of haze, fog, or precipitation.

3.3.2 Lighting

Lighting will be kept to the minimum necessary to comply with navigation safety requirements and safe operating conditions. Required marine navigation lights mounted near the top of each WTG/ESP foundation (or on the corners of each ESP) are expected to be visible only to distances of approximately 9.3 km (5 NM). As the closest coastal vantage point is at least 34.1 km (21.2 mi) from the nearest WTG, marine navigation lights will not be visible from shore.

3.3.3 Aircraft Detection Lighting Systems (ADLS)

Subject to BOEM approval, the Proponent also expects to use an Aircraft Detection Lighting System (ADLS) that automatically turns on, and off, aviation obstruction lights in response to the detection of aircraft for the Phase 1 WTGs. For Phase 2, the Proponent would expect to use the same or similar approaches used for Vineyard Wind 1 and/or Phase 1 to reduce lighting, including the use of an ADLS. Based on historical use of the airspace, it is estimated that the aviation obstruction lights on both the nacelle and tower (if needed) will be activated for less than one hour per year (less than 0.1% of the nighttime hours) (see Appendix III-K). The effect of nighttime lighting from the aviation obstruction lights is acknowledged as part of the overall visibility and visual effect of the SWDA; however, the effect of nighttime lighting is

substantially minimized through the use of ADLS. As stated previously, meteorological conditions will serve to obscure or block view of the SWDA providing additional minimization of the effect of nighttime lighting. For Phase 1, the onshore export cables to the onshore substation will be primarily installed underground and will typically be within public roadway layouts, although portions of the duct bank may be within existing utility rights-of-way (ROWs). From the onshore substation, grid interconnection cables will also be installed underground. Underground installation of onshore cables is also expected for Phase 2, thus minimizing potential visual effects to adjacent properties.

4.0 IMPLEMENTATION

Construction activities of the Undertaking that adversely affect a specific historic property cannot begin until BOEM has accepted the HPTP for that specific adversely affected historic property, consistent with the forthcoming conditions of COP approval. Construction activities that do not adversely affect historic properties may proceed prior to acceptance of the HPTPs.

4.1 Timeline

The timeline and organizational responsibilities will be developed in consultation with BOEM and the Participating Parties as the conditions of COP approval and the MOA are developed concurrent with BOEM's National Environmental Policy Act (NEPA) substitution schedule for New England Wind which is currently anticipated to include the following key dates:

- December 2022 Release of the Draft Environmental Impact Statement (DEIS) followed by a 60-day public comment period for the DEIS.
- September 2023 -- Release of Final Environmental Impact Statement (FEIS).
- October 2023 -- NEPA Record of Decision (ROD) issuance.

It is anticipated that the mitigation measure identified in Section 3.0 will commence within 2 years of the execution of the MOA unless otherwise agreed by the Participating Parties and accepted by BOEM. Per Section 3.0, the Participating Parties will have a minimum of 45 days to review and comment on all draft reports or other work products developed for this HPTP. The Proponent assumes that the proposed scope of work will be completed within 5 years of the execution of the MOA unless a different timeline is agreed upon by consulting parties and accepted by BOEM.

4.2 Organizational Responsibilities

4.2.1 Bureau of Ocean Energy Management (BOEM)

- BOEM is responsible for making all federal decisions and determining compliance with Section 106.
- BOEM must review and accept the HPTP before the implementing party may commence any actions.
- BOEM is responsible for consultation related to dispute resolution.
- BOEM in consultation with the Participating Parties will ensure that mitigation measures adequately resolve adverse effects, consistent with the NHPA.
- BOEM will be responsible for sharing the annual summary report with Participating Parties.

4.2.2 Avangrid Renewables, LLC

- The Proponent will be responsible for implementing the HPTP.
- The Proponent will be responsible for considering the comments provided by the parties identified.
- Annual reporting to BOEM on implementation of the HPTP.
- Funding the mitigation measures specified in Section 3.0.
- Completion of the scope(s) of work in Section 3.0.
- Ensuring all Standards in Section 3.0 are met.
- Providing the Documentation in Section 3.0 to the Participating Parties for review and comment.
- The Proponent will be responsible for ensuring that all work that requires consultation with Tribal Nations are performed by professionals who have demonstrated professional experience consulting with federally recognized Tribes.

4.2.3 Participating Parties

- Identify resources of significance to support GIS database development mitigation measure (if selected).
- Provide feedback on draft scope of work, RFP, and consultant bids within 45 days.
- Provide feedback on draft materials within 45 days.

4.2.4 Other Parties

The Proponent does not anticipate additional consulting parties; however, should any be determined, this will be updated.

4.3 Participating Party Consultation

The Proponent has provided this draft HPTP to BOEM for inclusion in the DEIS for review by Participating Parties to provide input on the resolution of adverse effects to, and forms of implementing mitigation, to TCP. As part of the development of this draft HPTP, the Proponent will continue to conduct targeted outreach with the Participating Parties identified in Section 1.3. Notification will be sent to BOEM and applicable Participating Parties that the Treatment Plan has been implemented and is complete upon final development of the conditions of COP approval, the forthcoming MOA, and this HPTP.

5.0 REFERENCES

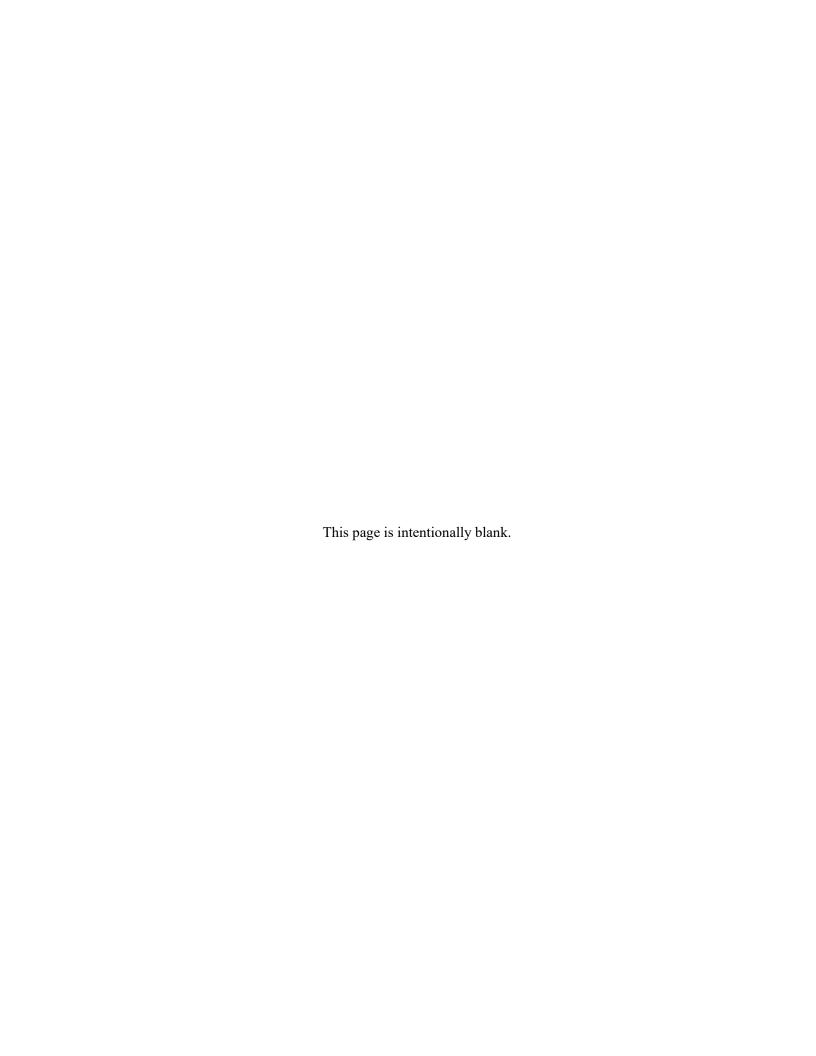
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ATTACHMENT 7 – HISTORIC PR	OPERTY TREATMED	NT PLAN FOR GAY F	IEAD LIGHTHOUSE





Draft New England Wind Historic Property Treatment Plan for the Gay Head Lighthouse

Submitted to:

BUREAU OF OCEAN ENERGY MANAGEMENT

45600 Woodland Rd

Sterling, VA 20166

Submitted by: Park City Wind LLC

Prepared by:



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EXECUTIVE SUMMARY

This draft Historic Property Treatment Plan (HPTP) for the Gay Head Lighthouse adversely affected by New England Wind provides background data, historic property information, and detailed steps that will be implemented to carry out the mitigation identified during the Section 106 consultation process in the forthcoming Memorandum of Agreement (MOA) with the Bureau of Ocean Energy Management (BOEM), the Massachusetts State Historic Preservation Officer (MA SHPO), and the Advisory Council on Historic Preservation regarding the New England Wind project. The conditions of Construction and Operations Plan (COP) approval and the forthcoming MOA will identify a substantive baseline of specific mitigation measures to resolve the adverse visual effects to the properties identified below as a result of the construction and operation of New England Wind (the Undertaking) to satisfy requirements of Section 106 and 110(f) of the National Historic Preservation Act (NHPA) of 1966 (54 USC 300101; United States Code, 2016). This HPTP outlines the implementation steps and timeline for actions, and will be consistent with, or equivalent to, those substantive baseline mitigation measures identified in the conditions of COP approval and forthcoming MOA.

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This draft HPTP includes the mitigation measures proposed by the Proponent for historic properties based on the evaluations and outreach performed by the Proponent prior to the issuance of the DEIS. It is anticipated that the draft HPTP will sustain further revision and refinement as consultation with the Massachusetts State Historic Preservation Officer, the ACHP, and/or other consulting parties through the NEPA substitution process. Should BOEM make a finding of adverse effect for the historic property, the mitigation measure(s) described herein (and in revisions) will be included in the Record of Decision (ROD) and/or MOA issued in accordance with 40 CFR parts 1500-1508, and 36 CFR §§ 800.8, 800.10.

The timeline for implementation of the mitigation measures will be determined in consultation with parties that demonstrated interest in the affected historic property (hereafter, Participating Parties) based on the agreed upon mitigation measures described in the final version of this draft HPTP. This draft HPTP will be reviewed by, and further developed in, consultation with Participating Parties concurrent with BOEM's NEPA substitution schedule.

This draft HPTP is organized into the following sections:

Executive Summary

Section 1.0 Background Information

This section outlines the content of this HPTP and provides a description of the proposed development of New England Wind.

Section 2.0 Summary of Historic Property

This section summarizes the historic property discussed in this HPTP that may be adversely affected by the Undertaking and summarizes the provisions, attachments, and findings that informed the development of this document, most notably the New England Wind Construction and Operations Plan (NE Wind COP) and the Historic Properties Visual Impact Assessment (Appendix III-H.b).

Section 3.0 Mitigation Measures

This section provides a review of mitigation measures proposed by the Proponent as identified in the COP or through consultation with stakeholders. Mitigation measure details may be revised during the consultation process.

Section 4.0 Implementation

This section establishes the process for executing the mitigation measures identified in Section 4.0. As the consultation process continues, details for each mitigation measure such as the organizational responsibilities, timeline, and regulatory review requirements will continue to be outlined.

Section 5.0 References

This section is a list of works cited for this draft HPTP.

1.0 BACKGROUND INFORMATION

1.1 Project Overview

New England Wind is the proposal to develop offshore renewable wind energy facilities in Bureau of Ocean Energy Management (BOEM) Lease Area OCS-A 0534 along with associated offshore and onshore cabling, onshore substations, and onshore operations and maintenance (O&M) facilities. New England Wind will be developed in two Phases with a maximum of 130 wind turbine generator (WTG) and/or electrical service platform (ESP) positions. Four or five offshore export cables will transmit electricity generated by the WTGs to onshore transmission systems in the Town of Barnstable, Massachusetts. Figure 1.1-1 provides an overview of the New England Wind project. Park City Wind LLC, a wholly owned subsidiary of Avangrid Renewables, LLC, is the Proponent of this Construction and Operations Plan (COP) and will be responsible for the construction, operation, and decommissioning of New England Wind. The construction, operation, and decommissioning of the New England Wind project are defined as the Undertaking and are subject to Section 106 of the National Historic Preservation Act (NHPA).

New England Wind's offshore renewable wind energy facilities are located immediately southwest of Vineyard Wind 1, which is located in Lease Area OCS-A 0501. New England Wind will occupy all of Lease Area OCS-A 0534 and potentially a portion of Lease Area OCS-A 0501 in the event that Vineyard Wind 1 does not develop "spare" or extra positions included in Lease Area OCS-A 0501 and Vineyard Wind 1 assigns those positions to Lease Area OCS-A 0534. For the purposes of the COP, the Southern Wind Development Area (SWDA) is defined as all of Lease Area OCS-A 0534 and the southwest portion of Lease Area OCS-A 0501, as shown in Figure 1.1-1. The SWDA may be approximately 411–453 square kilometers (km2) (101,590–111,939 acres) in size depending upon the final footprint of Vineyard Wind 1. At this time, the Proponent does not intend to develop the two positions in the separate aliquots located along the northeastern boundary of Lease Area OCS-A 0501 as part of New England Wind. The SWDA (excluding the two separate aliquots closer to shore) is just over 32 kilometers (km) (20 miles [mi]) from the southwest corner of Martha's Vineyard and approximately 38 km (24 mi) from Nantucket (see Figure 1.1-2). Within the SWDA, the closest WTG is approximately 34.1 km (21.2 mi) from Martha's Vineyard and 40.4 km (25.1 mi) from Nantucket. The WTGs and ESP(s) in the SWDA will be oriented in an east-west, north-south grid pattern with one nautical mile (NM) (1.85 km) spacing between positions.

The Historic Properties Visual Impact Assessment (Appendix III-H.b of COP Volume III) for New England Wind is intended to assist BOEM and the Massachusetts Historical Commission (MHC), in its role as the State Historic Preservation Officer (SHPO), in their review of New England Wind under Section 106 of the NHPA and the National Environmental Policy Act. The Preliminary Area of Potential Effects (PAPE) described herein has been developed to assist BOEM and MHC in identifying historic resources listed, or eligible for listing, in the National Register of Historic Places (National Register) in order to assess the potential effects of New England Wind on historic properties.





1.2 Historic Property Treatment Plan (HPTP) and Section 106 of the National Historic Preservation Act (NHPA)

This Historic Property Treatment Plan (HPTP) will be developed in accordance with the Section 106 and Section 110(f) review (36 CFR 800) of the Undertaking and the forthcoming Memorandum of Agreement (MOA). This HPTP provides background data, historic property information, and detailed steps that will be implemented to carry out the mitigation identified during the Section 106 consultation process in the forthcoming Memorandum of Agreement (MOA) with the Bureau of Ocean Energy Management (BOEM), the Massachusetts State Historic Preservation Officer (MA SHPO), and the Advisory Council on Historic Preservation regarding the New England Wind project.

The conditions of COP approval and forthcoming MOA will include measures to avoid and/or minimize adverse effects to identified historic properties, including planned distance of the Undertaking from historic properties, uniform WTG design, speed, height, and rotor diameter to reduce visual contrast, uniform spacing of WTGs to decrease visual clutter, and lighting and marking requirements to minimize visibility. This HPTP addresses the remaining mitigation provisions for the properties identified below.

All activities implemented under this HPTP will be conducted in accordance with the forthcoming conditionals of COP approval and the forthcoming MOA as well as with applicable local, state, and federal regulations and permitting requirements.

1.2.1 Municipal Regulations

Consistent with the forthcoming conditions of COP approval and MOA, before implementation any onsite mitigation measures will be coordinated with local municipalities, and commissions to obtain approvals, as appropriate. These may include, but are not limited to: building permits, zoning, land use, planning, historic commissions, and design review boards.

1.2.2 Preservation Easements and Restrictions

Any implementation of treatment plans will be in accordance with approvals through preservation restrictions where applicable.

Preservation easements and restrictions protect significant historic, archaeological, or cultural resources. The State of Massachusetts preservation restrictions are outlined in Massachusetts General Law Chapter 184, Sections 31-33. The Massachusetts Historical Commission (MHC) holds a Historic Preservation Restriction, and the United States Coast Guard (USCG) holds an Aid to Navigation Easement on the historic property per 10 USC 2668 Easements for Rights of Way. Any mitigation work associated with the historic property will comply with the conditions of all extant historic preservation easements. See Section 3.0 for additional information.

1.3 Participating Parties

The National Environmental Policy Act (NEPA) substitution process will be utilized by BOEM to fulfill the Section 106 obligations as provided for in the NHPA implementing regulations (36 CFR § 800.8(c)). BOEM hosted the first Section 106-specific meeting with consulting parties on March 3, 2022 and the Proponent anticipates that BOEM will hold additional meetings pursuant to Sections 106 and 110(f) of the NHPA and in accordance with 36 CFR 800.8.

The Proponent is also conducting outreach meetings with various stakeholders to review the findings of the analysis to date and initiate discussion of proposed mitigation measures. These are parties that demonstrated interest in the affected historic property (Participating Parties). The Proponent has conducted and/or anticipates conducting outreach with the following parties:

- The Massachusetts Historical Commission
- The Town of Aquinnah
- The Gay Head Lighthouse Advisory Committee
- The Wampanoag Tribe of Gay Head (Aquinnah)
- The United States Coast Guard (USCG) (if necessary)
- [Other Tribes or consulting parties may be added]

The Proponent further anticipates the above-mentioned parties will participate in the finalization of this draft HPTP through BOEM's Section 106 consultation process. This list may be amended if any additional parties are identified during this process.

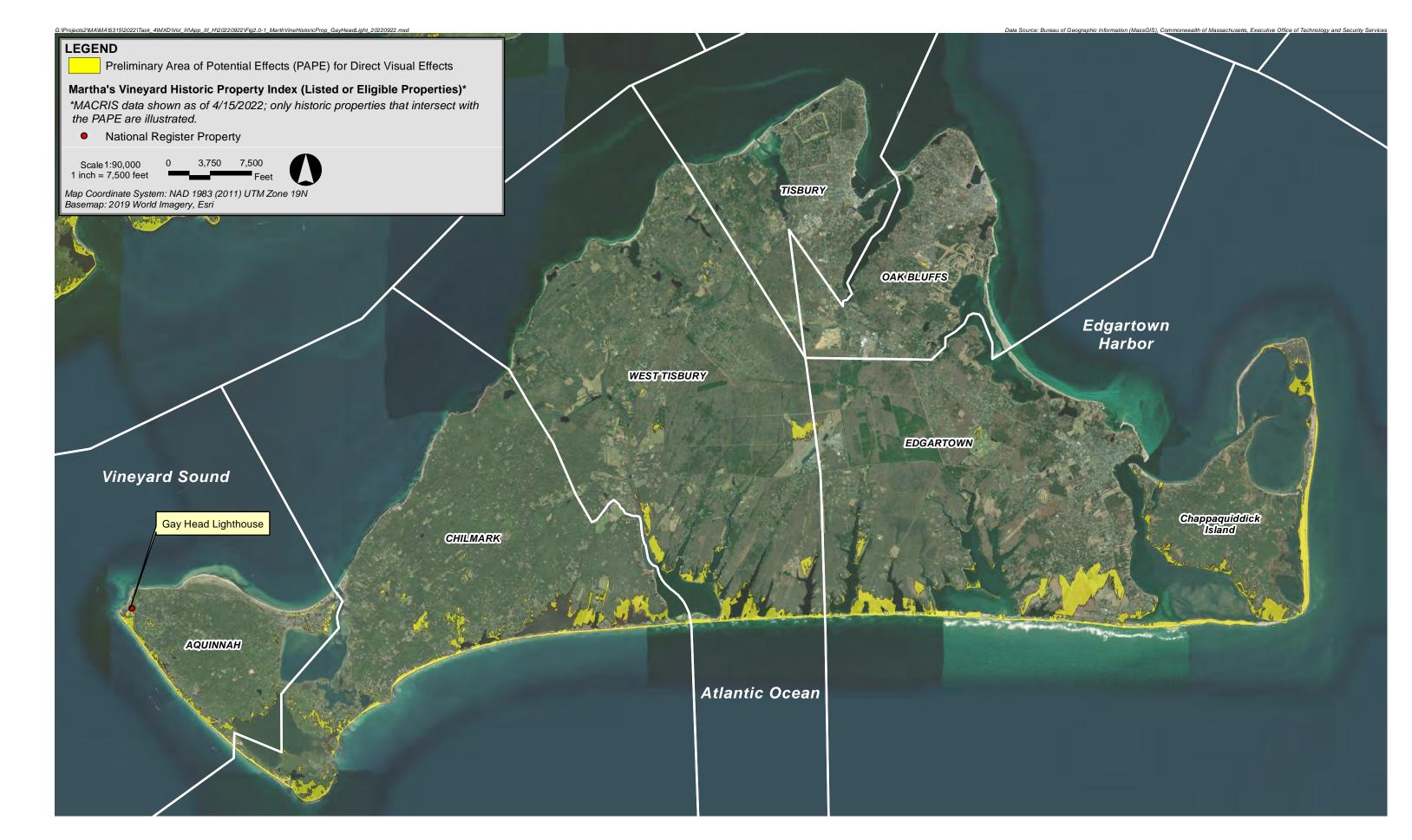
2.0 SUMMARY OF HISTORIC PROPERTY (GAY HEAD LIGHTHOUSE)

The Gay Head Lighthouse, which is located on the southwestern-most portion of Martha's Vineyard (Figure 2.0-1), is listed on the National Register and is significant under Criteria A and C as a historic maritime structure and aid to navigation. Constructed in 1855–1856, the Gay Head Lighthouse was once one of the 10 most important lights on the Atlantic Coast and originally contained one of the country's first Fresnel lenses. The 14 m (45 ft) tall brick and sandstone tower meets Criterion A for its association with the island's maritime history as an aid to navigation. The structure also meets Criterion C as an example of a 19th century maritime structure. Although the Gay Head Lighthouse was moved from its original location 45.7 m (150 ft) east in 2015 and its setting and location are partially compromised, the structure retains integrity of design, material, workmanship, feeling, and association.

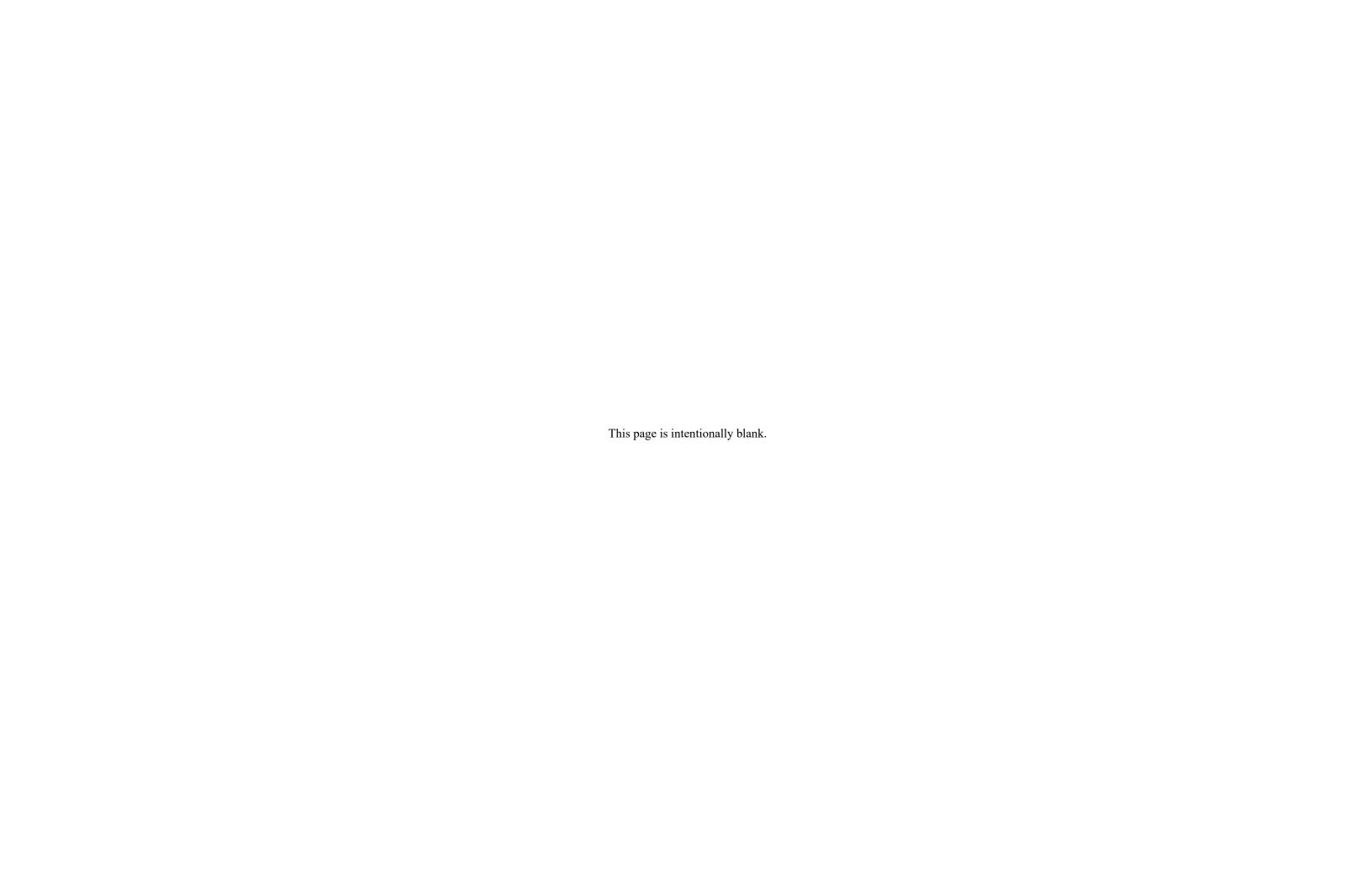
As a lighthouse, an ocean view toward the horizon is integral to its character and setting as well as its historic function. The maritime setting of this resource, and its viewshed, would be adversely affected through the introduction of new elements. The construction of the WTGs/ESP(s) would alter the experience of an observer of the lighthouse when the SWDA is visible. Views in the southern/southeastern direction would be affected; views toward the north, east, and west would not be affected.

Gay Head Lighthouse is 41.0 km (25.5 mi) from the nearest WTG or ESP. Photo simulations B-1a to B-1g and C-1a to C-1d in Appendix III-H.a, which are for a location in proximity to the Gay Head Lighthouse (the Aquinnah Cultural Center), provide representative views of the SWDA from the Gay Head Lighthouse. As described further in Section 4.2 of Appendix III-H.b, based on the methodology in BOEM 2017-037, and taking into account the proposed use of an ADLS, on average for all conditions, New England Wind's WTGs/ESP(s) could be visible 18% of the time from the Gay Head Lighthouse (see Table 4-2 of Appendix III-H.b). In addition to general weather conditions, other factors such as haze and sea spray may further reduce visibility.

Gay Head Lighthouse is located 45.7 m (150 ft) from its original location and is surrounded by a modern stone wall and fence. Although the structure has been moved from its original location (which has partially compromised its setting) and the SWDA is only partially visible from Gay Head Lighthouse (depending on and meteorological conditions), New England Wind introduces visual elements that are out of character with the historic setting, feeling, and association of the property. Therefore, eligibility Criterion A and Criterion C (as it relates to the setting of Gay Head Lighthouse and its clear horizon view) would be adversely affected by New England Wind. However, it should be noted that the adverse effect is inconsistent and weather dependent; for the vast majority of the time, the SWDA will not be visible.







3.0 MITIGATION MEASURES

Mitigation measures for the Gay Head Lighthouse are detailed below.

3.1 Ongoing Maintenance of the Lighthouse

Purpose and Intended Outcome

Based on multiple meetings conducted between the Proponent and representatives from the Gay Head Lighthouse Advisory Committee, the Proponent proposes to assist with ongoing repair and maintenance of the Gay Head Lighthouse through the provision of funds for ongoing maintenance work. The Proponent understands that support for such ongoing maintenance work is a priority for the Gay Head Lighthouse Advisory Committee and is required by existing agreements with MHC and the USCG.

Scope of Work

The Proponent has met with the Gay Head Lighthouse Advisory Committee on multiple occasions to identify and prioritize maintenance tasks. The Gay Head Lighthouse Advisory Committee expects that ongoing maintenance work will primarily consist of the following tasks:

- Painting (interior and exterior) and power washing of the structures, typically done every other
 year. Painting activities are expected to involve maintenance of existing conditions only; no
 changes in paint color are anticipated.
- Annual maintenance of the grounds and turf to preserve safe conditions for public use and to
 prevent water infiltration, erosion and washout that could inhibit public access and/or result in
 damage the lighthouse foundation and Gay Head Cliffs. Maintenance of the turf is also part of an
 existing agreement between the Gay Head Lighthouse Advisory Committee and the USCG.
- Repairing and maintaining pathways for public circulation, including maintaining an existing Americans with Disabilities Act (ADA) compliant pathway.
- Minor repairs due to public use and general wear and tear, such as replacing or repairing electrical outlets, railings, plaster, and/or fencing.

Written documentation of the existing conditions will be provided, as well as summary of activities completed.

Methodology

This work will build off the mitigation work approved during the federal review of the Vineyard Wind 1 project. The Gay Head Lighthouse Advisory Committee will implement the ongoing maintenance and will hire an outside consultant when needed.

Standards

All work will be conducted in accordance with applicable standards. Examples of standards that may be applicable include:

- United States Coast Guard Aid to Navigation (ATON) Access Easement (U. S. Department of Homeland Security and U. S. Coast Guard, 2005);
- Preservation Brief 17: Architectural Character Identifying the Visual Aspects of Historic Buildings as an Aid to Preserving their Character (Nelson, 1988);
- Preservation Brief 47: Maintaining the Exterior of Small and Medium Size Historic Buildings;
- National Register Bulletin 34: Guidelines for Evaluating and Documenting Historic Aids to Navigation;
- Historic Lighthouse Preservation Handbook;
- IALA-AISM Lighthouse Conservation Manual;
- Preservation Restriction (RIGL Title 42, Section 42-45-9); and
- The Secretary of the Interior's Standards for Treatment of Historic Properties (36 CFR 68);
- The Secretary of the Interior's *Professional Qualifications Standards* (36 CFR Part 61), as applicable;
- The Secretary of the Interior's Standards for Treatment of Historic Properties (36 CFR 68); and
- The Secretary of the Interior's *Professional Qualifications Standards* (36 CFR Part 61), as applicable.

Documentation

The Proponent will provide the following documentation to the Participating Parties for their review:

- Draft proposed list of anticipated maintenance tasks and a written agreement outlining the appropriate scope, standards, documentation, and decision-making for any potential additional maintenance activities not included in the list of anticipated maintenance tasks.
- Final list of anticipated maintenance tasks and a written agreement outlining the appropriate scope, standards, documentation, and decision-making for any potential additional maintenance activities not included in the list of anticipated maintenance tasks.
- Description of proposed funding mechanism.
- Annual progress report to BOEM describing the implementation of the mitigation measures.

Funds and Accounting

Funding amounts for this specific mitigation measure will be determined following BOEM's release of their findings of adverse effects and consulting party review of the draft HPTP and the DEIS. The final version of the HPTP will include specifics concerning funding amounts and the mechanisms for funding the mitigation measures. At present, it is envisioned that the Proponent will establish an escrow account through a one-time payment; the escrow account will be available to the Gay Head Lighthouse Advisory Committee to withdraw funds from for annual maintenance activities over the life of the lease.

3.2 Additional Mitigation Measures

The Proponent is also implementing the following mitigation measures.

3.2.1 Uniform Layout and Paint Color Selection

The Proponent is avoiding and minimizing visual impacts to the maximum extent practicable. The WTGs for each phase will have uniform design, height, and rotor diameter and will be aligned and spaced consistently with other offshore wind facilities, thereby reducing potential for visual clutter. Additionally, the WTGs will be no lighter than RAL 9010 Pure White and no darker than RAL 7035 Light Grey in color in accordance with BOEM and Federal Aviation Administration (FAA) guidance; the Proponent anticipates painting the WTGs off-white/light grey to reduce contrast with the sea and sky and thus, minimize daytime visibility of the WTGs. The conservative threshold for visibility in meteorological analyses is "the greatest distance at which an observer can just see a black object viewed against the horizon sky" (see Section 3.3 of Appendix III-H.a). The Phase 1 and Phase 2 WTGs will not be black; instead, the expected off-white/light grey color will be highly compatible with the hue, saturation, and brightness of the background sky. This lack of contrast between the WTGs and the background means that the percentage of the time the structures might be visible is greatly reduced. Additionally, the upper portion of the ESP(s) will be a grey color which would appear muted and indistinct. Color contrast decreases as distance increases. Color contrast will diminish or disappear completely during periods of haze, fog, or precipitation.

3.2.2 Lighting

Lighting will be kept to the minimum necessary to comply with navigation safety requirements and safe operating conditions. Required marine navigation lights mounted near the top of each WTG/ESP foundation (or on the corners of each ESP) are expected to be visible only to distances of approximately 9.3 km (5 NM). As the closest coastal vantage point is at least 34.1 km (21.2 mi) from the nearest WTG, marine navigation lights will not be visible from shore.

3.2.3 Aircraft Detection Lighting Systems (ADLS)

Subject to BOEM approval, the Proponent also expects to use an Aircraft Detection Lighting System (ADLS) that automatically turns on, and off, aviation obstruction lights in response to the detection of aircraft for the Phase 1 WTGs. For Phase 2, the Proponent would expect to use the same or similar approaches used for Vineyard Wind 1 and/or Phase 1 to reduce lighting, including the use of an ADLS. Based on historical use of the airspace, it is estimated that the aviation obstruction lights on both the nacelle and tower (if

needed) will be activated for less than one hour per year (less than 0.1% of the nighttime hours) (see Appendix III-K). The effect of nighttime lighting from the aviation obstruction lights is acknowledged as part of the overall visibility and visual effect of the SWDA; however, the effect of nighttime lighting is substantially minimized through the use of ADLS. As stated previously, meteorological conditions will serve to obscure or block view of the SWDA providing additional minimization of the effect of nighttime lighting. For Phase 1, the onshore export cables to the onshore substation will be primarily installed underground and will typically be within public roadway layouts, although portions of the duct bank may be within existing utility rights-of-way (ROWs). From the onshore substation, grid interconnection cables will also be installed underground. Underground installation of onshore cables is also expected for Phase 2, thus minimizing potential visual effects to adjacent properties.

4.0 IMPLEMENTATION

Construction activities of the Undertaking that adversely affect a specific historic property cannot begin until BOEM has accepted the HPTP for that specific adversely affected historic property, consistent with the forthcoming conditions of COP approval. Construction activities that do not adversely affect historic properties may proceed prior to acceptance of the HPTPs.

4.1 Timeline

The timeline and organizational responsibilities will be developed in consultation with BOEM and the Participating Parties as the conditions of COP approval and the MOA are developed concurrent with BOEM's National Environmental Policy Act (NEPA) substitution schedule for New England Wind which is currently anticipated to include the following key dates:

- December 2022 Release of the Draft Environmental Impact Statement (DEIS) followed by a 60-day comment period for the DEIS.
- September 2023 -- Release of Final Environmental Impact Statement (FEIS).
- October 2023 -- NEPA Record of Decision (ROD) issuance.

It is anticipated that the mitigation measures identified in Section 3.0 will commence within 2 years of the execution of the MOA unless otherwise agreed by the Participating Parties and accepted by BOEM. Per Section 3.0, the Participating Parties will have a minimum of 45 days to review and comment on all draft work products developed for this HPTP. The Proponent assumes that the proposed scope of work will be completed within 5 years of the execution of the MOA unless a different timeline is agreed upon by Participating Parties and accepted by BOEM. Specific to the ongoing maintenance activities described in Section 3.1, the Proponent anticipates that the proposed funding mechanism for these maintenance activities will be established at financial close unless a different timeline is agreed upon by the Proponent and Participating Parties and accepted by BOEM.

4.2 Organizational Responsibilities

4.2.1 Bureau of Ocean Energy Management (BOEM)

- BOEM is responsible for making all federal decisions and determining compliance with Section 106.
- BOEM must review and accept the HPTP before the implementing party may commence any actions.
- BOEM is responsible for consultation related to dispute resolution.
- BOEM in consultation with the Participating Parties will ensure that mitigation measures adequately resolve adverse effects, consistent with the NHPA.
- BOEM will be responsible for sharing the annual summary report with Participating Parties.

4.2.2 Avangrid Renewables, LLC

- The Proponent will be responsible for funding the Ongoing Maintenance of the Lighthouse (see Section 3.1) and for implementing the additional mitigation measures (see Section 3.2).
- The Proponent will be responsible for considering the comments provided by the parties identified.
- Annual reporting to BOEM on implementation of the HPTP.
- Funding the mitigation measures specified in Section 3.0.
- Completion of the scope(s) of work in Section 3.2.
- Providing the Documentation in Section 3.0 to the Participating Parties for review and comment.
- The Proponent will be responsible for ensuring that all work that requires consultation with Tribal Nations is performed by professionals who have demonstrated professional experience consulting with federally recognized Tribes.

4.2.3 The Gay Head Lighthouse Advisory Committee

- Identify expected list of maintenance tasks.
- Provide feedback on documentation described in Section 3.1 within 45 days.
- If required under the terms of the Preservation Restriction, the Committee shall submit the scope of work for maintenance activities to MHC for review and approval.
- The Committee shall ensure that all maintenance activities are conducted in accordance with the Secretary of the Interior (SOI) Standards for Rehabilitation (36 CFR 68), as part of their consultation with MHC.
- Provide annual report to Avangrid for submission to BOEM on annual maintenance activities.

4.2.4 Massachusetts Historical Commission (MHC); Massachusetts State Historic Preservation Officer

If necessary, the scope of work will be submitted under the terms of the Preservation Restriction and the scope of work will be submitted for compliance with the SOI Standards for Rehabilitation (36 CFR 68).

4.2.5 Wampanoag Tribe of Gay Head (Aquinnah)

The Wampanoag Tribe of Gay Head (Aquinnah) may, at their sole discretion, participate in consultations for the development and finalization of the HPTP in recognition of the traditional cultural and religious significance of the historic property to the Tribe.

4.2.6 Other Parties

The Proponent does not anticipate additional consulting parties, should any be determined, this will be updated.

4.3 Participating Party Consultation

The Proponent has provided this draft HPTP to BOEM for inclusion in the DEIS for review by Participating Parties to provide input on the resolution of adverse effects to, and forms of implementing mitigation, at the historic property of Gay Head Lighthouse. As part of the development of this draft HPTP, the Proponent will continue to conduct targeted outreach with the Participating Parties identified in Section 1.3. Notification will be sent to BOEM and applicable Participating Parties that the Treatment Plan has been implemented and is complete upon final development of the conditions of COP approval, the forthcoming MOA, and this HPTP.

5.0 REFERENCES

- [BOEM] Bureau of Ocean Energy Management. 2020. Finding of adverse effect for the Vineyard Wind 1
 Project Construction and Operations Plan. Revised November 13, 2020. Retrieved from:
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ATTACHMENT 8 – HISTORIC PROPERTY TREATMENT PLAN FOR [REDACTED] TCP





Draft New England Wind Historic Property Treatment Plan for Traditional Cultural Property

Submitted to:
BUREAU OF OCEAN ENERGY MANAGEMENT
45600 Woodland Rd
Sterling, VA 20166

Submitted by: Park City Wind LLC

Prepared by:



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EXECUTIVE SUMMARY

This draft Historic Property Treatment Plan (HPTP) for the

Traditional Cultural Property (TCP) adversely affected by New England Wind provides background data, historic property information, and detailed steps that will be implemented to carry out the mitigation identified during the Section 106 consultation process in the forthcoming Memorandum of Agreement (MOA) with the Bureau of Ocean Energy Management (BOEM), the Massachusetts State Historic Preservation Officer (MA SHPO), and the Advisory Council on Historic Preservation regarding the New England Wind project. The conditions of Construction and Operations Plan (COP) approval and the forthcoming MOA will identify a substantive baseline of specific mitigation measures to resolve the adverse visual effects to the properties identified below as a result of the construction and operation of New England Wind (the Undertaking) to satisfy requirements of Section 106 and 110(f) of the National Historic Preservation Act (NHPA) of 1966 (54 USC 300101; United States Code, 2016). This HPTP outlines the implementation steps and timeline for actions, and will be consistent with, or equivalent to, those substantive baseline mitigation measures identified in the conditions of COP approval and forthcoming MOA.

The National Environmental Policy Act (NEPA) substitution process will be utilized by BOEM to fulfill the Section 106 obligations as provided for in the NHPA implementing regulations (36 CFR § 800.8(c)). Furthermore, BOEM has notified the Advisory Council on Historic Preservation (ACHP), State Historic Preservation Officers, and consulting parties of BOEM's decision to use the NEPA substitution process. This draft HPTP has been provided by the Proponent for inclusion in the Draft Environmental Impact Statement (DEIS) for review by BOEM and consulting parties. Meaningful input on the resolution of adverse effects to, and form(s) of implementation at, the historic properties is anticipated.

This draft HPTP includes the mitigation measures proposed by the Proponent for historic properties based on the evaluations and outreach performed by the Proponent prior to the issuance of the DEIS. It is anticipated that the draft HPTP will sustain further revision and refinement as consultation with the Massachusetts State Historic Preservation Officer, the ACHP, and/or other consulting parties through the NEPA substitution process. Should BOEM make a finding of adverse effect for the historic property, the mitigation measure(s) described herein (and in revisions) will be included in the Record of Decision (ROD) and/or MOA issued in accordance with 40 CFR parts 1500-1508, and 36 CFR §§ 800.8, 800.10.

The timeline for implementation of the mitigation measures will be determined in consultation with parties that demonstrated interest in the affected historic property (hereafter, Participating Parties) based on the agreed upon mitigation measures described in the final version of this draft HPTP. This draft HPTP will be reviewed by, and further developed in, consultation with Participating Parties concurrent with BOEM's NEPA substitution schedule.

This draft HPTP is organized into the following sections:

Executive Summary

Section 1.0 Background Information

This section outlines the content of this HPTP and provides a description of the proposed development of New England Wind.

Section 2.0 Summary of Historic Property

This section summarizes the historic property discussed in this HPTP that may be adversely affected by the Undertaking and summarizes the provisions, attachments, and findings that informed the development of this document, most notably the New England Wind Construction and Operations Plan (NE Wind COP) and the Historic Properties Visual Impact Assessment (Appendix III-H.b).

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This section provides a review of mitigation measures proposed by the Proponent as identified in the COP or through consultation with stakeholders. Mitigation measure details may be revised during the consultation process.

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1.0 BACKGROUND INFORMATION

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New England Wind is the proposal to develop offshore renewable wind energy facilities in Bureau of Ocean Energy Management (BOEM) Lease Area OCS-A 0534 along with associated offshore and onshore cabling, onshore substations, and onshore operations and maintenance (O&M) facilities. New England Wind will be developed in two Phases with a maximum of 130 wind turbine generator (WTG) and/or electrical service platform (ESP) positions. Four or five offshore export cables will transmit electricity generated by the WTGs to onshore transmission systems in the Town of Barnstable, Massachusetts. Figure 1.1-1 provides an overview of the New England Wind project. Park City Wind LLC, a wholly owned subsidiary of Avangrid Renewables, LLC, is the Proponent of this Construction and Operations Plan (COP) and will be responsible for the construction, operation, and decommissioning of New England Wind. The construction, operation, and decommissioning of the New England Wind project are defined as the Undertaking and are subject to Section 106 of the National Historic Preservation Act (NHPA).

New England Wind's offshore renewable wind energy facilities are located immediately southwest of Vineyard Wind 1, which is located in Lease Area OCS-A 0501. New England Wind will occupy all of Lease Area OCS-A 0534 and potentially a portion of Lease Area OCS-A 0501 in the event that Vineyard Wind 1 does not develop "spare" or extra positions included in Lease Area OCS-A 0501 and Vineyard Wind 1 assigns those positions to Lease Area OCS-A 0534. For the purposes of the COP, the Southern Wind Development Area (SWDA) is defined as all of Lease Area OCS-A 0534 and the southwest portion of Lease Area OCS-A 0501, as shown in Figure 1.1-1. The SWDA may be approximately 411–453 square kilometers (km2) (101,590–111,939 acres) in size depending upon the final footprint of Vineyard Wind 1. At this time, the Proponent does not intend to develop the two positions in the separate aliquots located along the northeastern boundary of Lease Area OCS-A 0501 as part of New England Wind. The SWDA (excluding the two separate aliquots closer to shore) is just over 32 kilometers (km) (20 miles [mi]) from the southwest corner of Martha's Vineyard and approximately 38 km (24 mi) from Nantucket (see Figure 1.1-2). Within the SWDA, the closest WTG is approximately 34.1 km (21.2 mi) from Martha's Vineyard and 40.4 km (25.1 mi) from Nantucket. The WTGs and ESP(s) in the SWDA will be oriented in an east-west, north-south grid pattern with one nautical mile (NM) (1.85 km) spacing between positions.

The Historic Properties Visual Impact Assessment (Appendix III-H.b of COP Volume III) for New England Wind is intended to assist BOEM and the Massachusetts Historical Commission (MHC), in its role as the State Historic Preservation Officer (SHPO), in their review of New England Wind under Section 106 of the NHPA and the National Environmental Policy Act. The Preliminary Area of Potential Effects (PAPE) described herein has been developed to assist BOEM and MHC in identifying historic resources listed, or eligible for listing, in the National Register of Historic Places (National Register) in order to assess the potential effects of New England Wind on historic properties.





1.2 Historic Property Treatment Plan (HPTP) and Section 106 of the National Historic Preservation Act (NHPA)

This Historic Property Treatment Plan (HPTP) will be developed in accordance with the Section 106 and Section 110(f) review (36 CFR 800) of the Undertaking and the forthcoming Memorandum of Agreement (MOA). This HPTP provides background data, historic property information, and detailed steps that will be implemented to carry out the mitigation identified during the Section 106 consultation process in the forthcoming Memorandum of Agreement (MOA) with the Bureau of Ocean Energy Management (BOEM), the Massachusetts State Historic Preservation Officer (MA SHPO), and the Advisory Council on Historic Preservation regarding the New England Wind project.

The conditions of COP approval and forthcoming MOA will include measures to avoid and/or minimize adverse effects to identified historic properties, including planned distance of the Undertaking from historic properties, uniform WTG design, speed, height, and rotor diameter to reduce visual contrast, uniform spacing of WTGs to decrease visual clutter, and lighting and marking requirements to minimize visibility. This HPTP addresses the remaining mitigation provisions for the properties identified below.

All activities implemented under this HPTP will be conducted in accordance with the forthcoming conditionals of COP approval and the forthcoming MOA as well as with applicable local, state, and federal regulations and permitting requirements.

1.3 Participating Parties

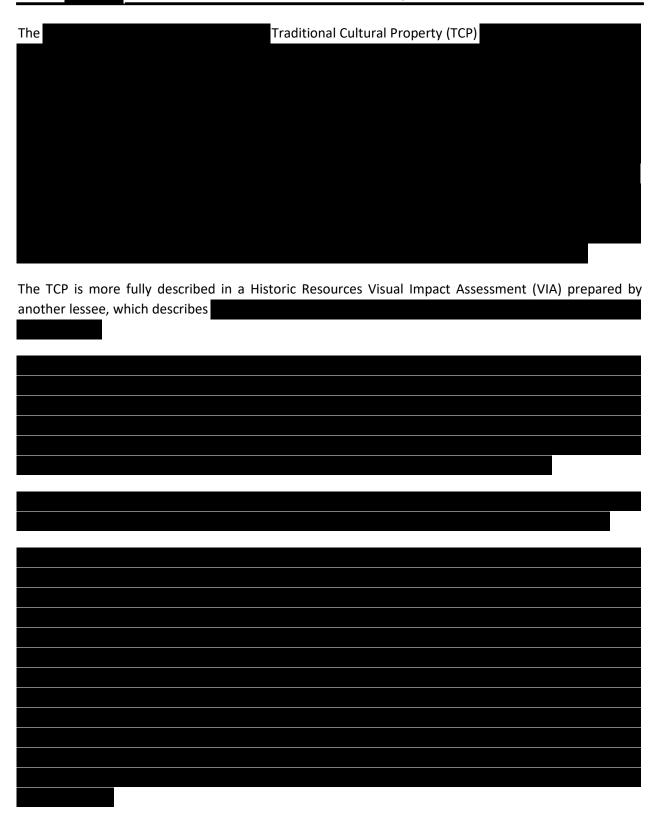
The National Environmental Policy Act (NEPA) substitution process will be utilized by BOEM to fulfill the Section 106 obligations as provided for in the NHPA implementing regulations (36 CFR § 800.8(c)). BOEM hosted the first Section 106-specific meeting with consulting parties on March 3, 2022 and the Proponent anticipates that BOEM will hold additional meetings pursuant to Sections 106 and 110(f) of the NHPA and in accordance with 36 CFR 800.8.

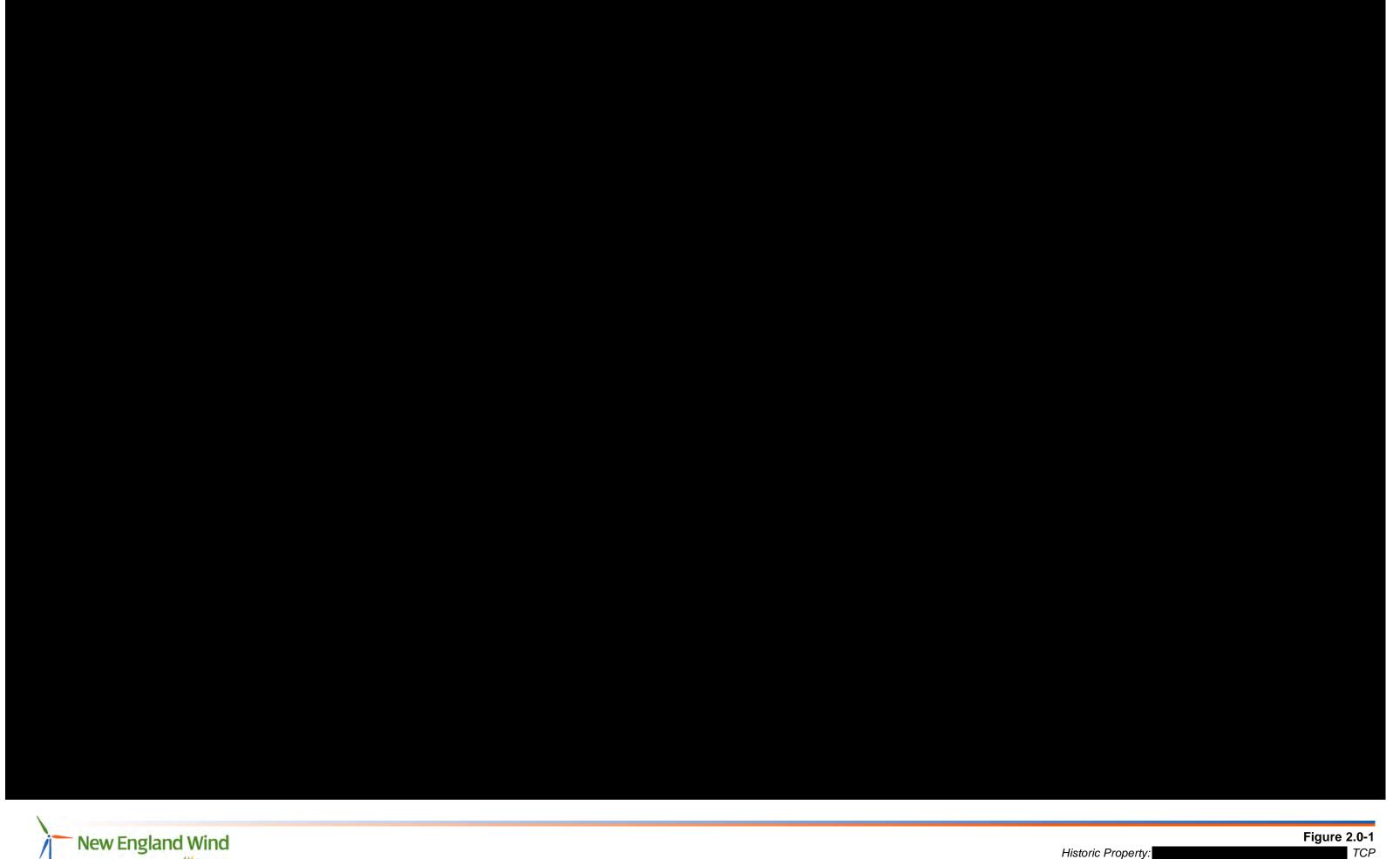
The Proponent is also conducting outreach meetings with various stakeholders to review the findings of the analysis to date and initiate discussion of proposed mitigation measures. These are parties that demonstrated interest in the affected historic property (Participating Parties). The Proponent has conducted and/or anticipates conducting outreach with the following parties:

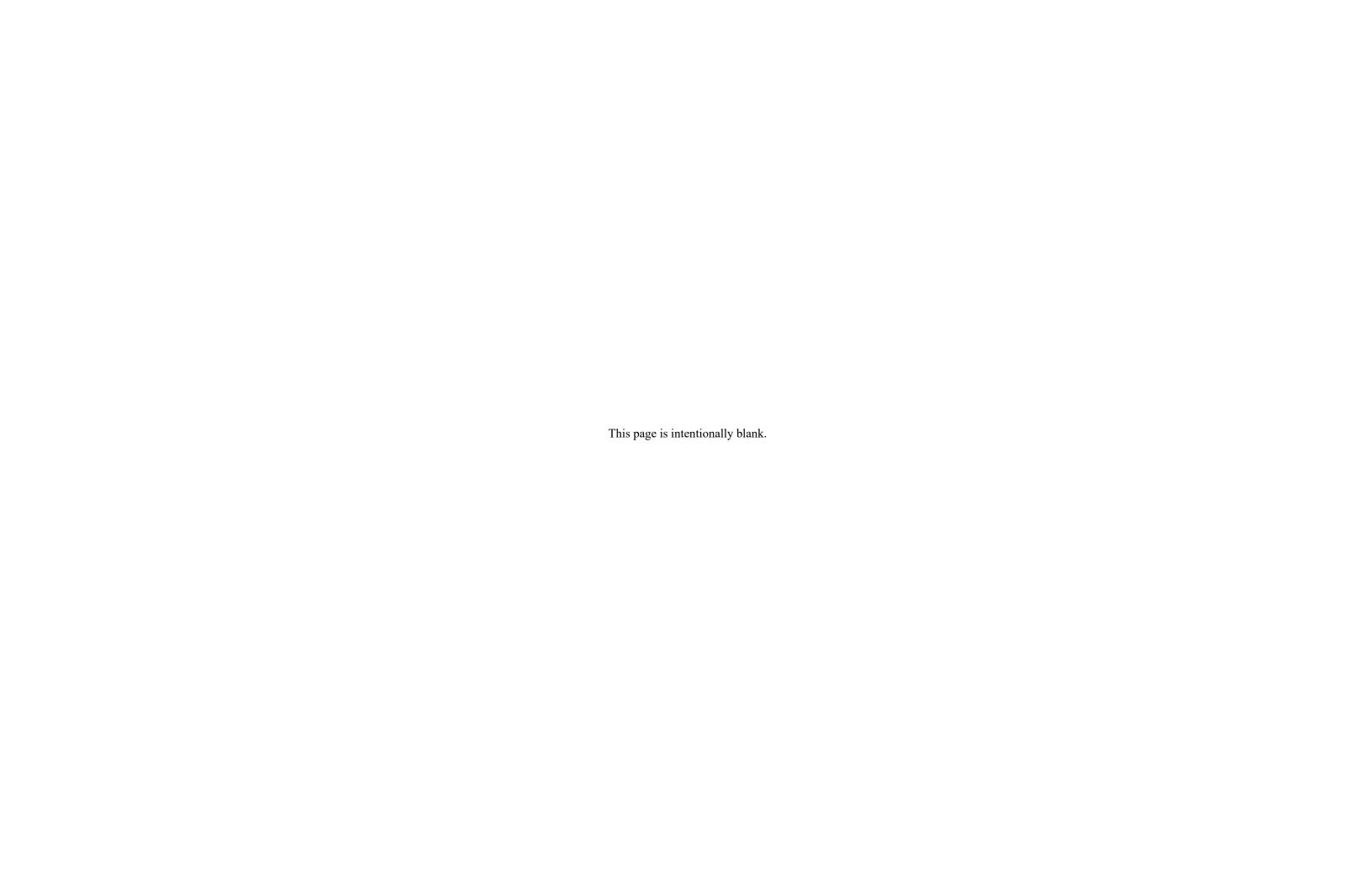
- The Town of Aquinnah
- The Massachusetts Historical Commission (MHC)
- The Massachusetts Board of Underwater Archaeological Resources (MBUAR)
- The Wampanoag Tribe of Gay Head (Aquinnah)
- The Mashpee Wampanoag Tribe
- [Other Tribes or consulting parties may be added]

The Proponent further anticipates the above-mentioned parties will participate in the finalization of thi draft HPTP through BOEM's Section 106 consultation process. This list may be amended if any additional parties are identified during this process.		

2.0 SUMMARY OF HISTORIC PROPERTY (TRADTIONAL CULTURAL PROPERTY)







The	TCP is considered eligible for listing on the National Register
under:	
•	
-	
The maritime setting of this resource and i	its viewshed would be altered through the introduction of new
elements.	
There are a variety of mitigating factors af	fecting potential visibility of the SWDA and the adverse effect.

	will be minimized due to distance, environmental factors, the proposed paint color, and the
proposed AD	DLS. Further,

3.0 MITIGATION MEASURES

3.1	Public Education for		TCP
	to conduct one or more	of the mitigation measures	described under Sections 3.1 through 3.3.
contrib	ute funds not to exceed		
Mitigat	ion measures for		TCP are detailed below. The Proponent wil

Purpose and Intended Outcome

The Proponent is presently consulting with the Wampanoag Tribe of Gay Head (Aquinnah) and the Mashpee Wampanoag Tribe on New England Wind's potential effects to historic properties and mitigation ideas. The Proponent has agreed to contribute funds for public education purposes on The Proponent will continue to consult with the Participating Parties to determine the most appropriate use of the funds and the scope of work.

Scope of Work

The scope of work will be developed in accordance with the Participating Parties and is envisioned to include the creation of public education materials. A consultant hired to create the materials will facilitate a meeting with Participating Parties to identify resources for interpretative exhibits and a medium of preference – printed or digital. If printed materials are preferred, the consultant will discuss with Participating Parties where such materials will be kept,

Using interviews and appropriate historical, archaeological and archival research, finished products will include information on the history, development, and significance of cultural resources

TCP.

Proposed finished products may include an informational pamphlet, website, audio tour and/or a combination of static and interactive interpretive materials.

Methodology

The Proponent will prepare an RFP and will consult with Participating Parties in defining objectives and scope of work, as well as in the consultant selection process.

Standards

All work will be conducted in accordance with state and federal applicable standards and will be overseen by professionals meeting the qualifications specified in the Secretary of the Interior's *Professional Qualifications Standards* (36 CFR Part 61). All work that requires consultation with Tribal Nations are performed by professionals who have demonstrated professional experience consulting with federally recognized Tribes. Professionals selected shall have demonstrated experience creating public education materials and documenting Traditional Cultural Properties per National Register Bulletin #30.

Documentation

The Proponent will provide the following documentation to the Participating Parties for their review:

- Draft proposed scope of work.
- RFP and consultant bids in response to RFP.
- Draft version of the educational materials for review and comment by the Participating Parties.
- Final version of the educational materials.
- Annual progress report to BOEM describing the implementation of the mitigation measures.

Funds and Accounting

Funding amounts for this specific mitigation measure will be determined following BOEM's release of their findings of adverse effects and consulting party review of the draft HPTP and the DEIS. The final version of the HPTP will include specifics concerning funding amounts and the mechanisms for funding the mitigation measures.

3.2 Scholarships and Training for Tribal Resource and/or Environmental Stewardship

Purpose and Intended Outcome

The Proponent proposes funding for scholarships and fees in fields of relation to the historic resource. Examples of fields that could be applicable for professional training or certification include, but are not limited to anthropology, archaeology, astronomy aquaculture, biology, ethnohistory, history, marine construction/fisheries/sciences, or Native American studies.

Scope of Work

The scope of work will be developed in accordance with the Participating Parties and is envisioned to include scholarship and training for Tribal resource stewardship purposes.

Methodology

The Proponent will prepare an RFP and will consult with Participating Parties in defining objectives and scope of work, as well as in the consultant selection process.

Standards

All work will be conducted in accordance with state and federal applicable standards. All work that requires consultation with Tribal Nations are performed by professionals who have demonstrated professional experience consulting with federally recognized Tribes. Professionals selected shall have demonstrated experience in education and training program management and fiscal reporting.

Documentation

The Proponent will provide the following documentation to the Participating Parties for their review:

- Draft proposed scope of work.
- RFP and consultant bids in response to RFP.
- Once complete, a summary report of the work completed will be distributed.
- Annual progress report to BOEM describing the implementation of the mitigation measures.

Funds and Accounting

Funding amounts for this specific mitigation measure will be determined following BOEM's release of their findings of adverse effects and consulting party review of the draft HPTP and the DEIS. The final version of the HPTP will include specifics concerning funding amounts and the mechanisms for funding the mitigation measures. The total funding amount for mitigation measures described in Sections 3.1 through 3.3 will not exceed

3.3 Coastal Resilience and Habitat Restoration

Purpose and Intended Outcome

Impacts to the TCP associated with climate change such as rising seas and water temperatures, expansion of invasive species, increased frequency and intensity of coastal storms etc., are expected to represent significant threats to the defining features of this historic property. The purpose and intended outcome of this mitigation measure is to provide funding for future planning and development of efforts to help mitigate the negative externalities associated with climate change.

Scope of Work

The scope of work will be developed in accordance with the Participating Parties and is envisioned to include coastal resilience and habitat restoration purposes.

Methodology

The Proponent will prepare an RFP and will consult with Participating Parties in defining objectives and scope of work, as well as in the consultant selection process.

Standards

All work will be conducted in accordance with state and federal applicable standards. All work that requires consultation with Tribal Nations are performed by professionals who have demonstrated professional experience consulting with federally recognized Tribes.

Documentation

The Proponent will provide the following documentation to the Participating Parties for their review:

- Draft proposed scope of work.
- RFPs and consultant bids in response to RFP.
- Once complete, a summary report of the work completed will be distributed.
- Annual progress report to BOEM describing the implementation of the mitigation measures.

Funds and Accounting

Funding amounts for this specific mitigation measure will be determined following BOEM's release of their findings of adverse effects and consulting party review of the draft HPTP and the DEIS. The final version of the HPTP will include specifics concerning funding amounts and the mechanisms for funding the mitigation measures. The total funding amount for mitigation measures described in Sections 3.1 through 3.3 will not exceed

3.4 Additional Mitigation Measures

The Proponent is also implementing the following mitigation measures.

3.4.1 Uniform Layout and Paint Color Selection

The Proponent is avoiding and minimizing visual impacts to the maximum extent practicable. The WTGs for each phase will have uniform design, height, and rotor diameter and will be aligned and spaced consistently with other offshore wind facilities, thereby reducing potential for visual clutter. Additionally, the WTGs will be no lighter than RAL 9010 Pure White and no darker than RAL 7035 Light Grey in color in accordance with BOEM and Federal Aviation Administration (FAA) guidance; the Proponent anticipates painting the WTGs off-white/light grey to reduce contrast with the sea and sky and thus, minimize daytime visibility of the WTGs. The conservative threshold for visibility in meteorological analyses is "the greatest distance at which an observer can just see a black object viewed against the horizon sky" (see Section 3.3 of Appendix III-H.a). The Phase 1 and Phase 2 WTGs will not be black; instead, the expected off-white/light grey color will be highly compatible with the hue, saturation, and brightness of the background sky. This lack of contrast between the WTGs and the background means that the percentage of the time the structures might be visible is greatly reduced. Additionally, the upper portion of the ESP(s) will be a grey color which would appear muted and indistinct. Color contrast decreases as distance increases. Color contrast will diminish or disappear completely during periods of haze, fog, or precipitation.

3.4.2 Lighting

Lighting will be kept to the minimum necessary to comply with navigation safety requirements and safe operating conditions. Required marine navigation lights mounted near the top of each WTG/ESP foundation (or on the corners of each ESP) are expected to be visible only to distances of approximately 9.3 km (5 NM). As the closest coastal vantage point is at least 34.1 km (21.2 mi) from the nearest WTG, marine navigation lights will not be visible from shore.

3.4.3 Aircraft Detection Lighting Systems (ADLS)

Subject to BOEM approval, the Proponent also expects to use an ADLS that automatically turns on, and off, aviation obstruction lights in response to the detection of aircraft for the Phase 1 WTGs. For Phase 2, the Proponent would expect to use the same or similar approaches used for Vineyard Wind 1 and/or Phase 1 to reduce lighting, including the use of an ADLS. Based on historical use of the airspace, it is estimated that the aviation obstruction lights on both the nacelle and tower (if needed) will be activated for less than one hour per year (less than 0.1% of the nighttime hours) (see Appendix III-K). The effect of nighttime lighting from the aviation obstruction lights is acknowledged as part of the overall visibility and visual effect of the SWDA; however, the effect of nighttime lighting is substantially minimized through the use of ADLS. As stated previously, meteorological conditions will serve to obscure or block view of the SWDA providing additional minimization of the effect of nighttime lighting. For Phase 1, the onshore export cables to the onshore substation will be primarily installed underground and will typically be within public roadway layouts, although portions of the duct bank may be within existing utility rights-of-way (ROWs). From the onshore substation, grid interconnection cables will also be installed underground. Underground installation of onshore cables is also expected for Phase 2, thus minimizing potential visual effects to adjacent properties.

4.0 IMPLEMENTATION

Construction activities of the Undertaking that adversely affect a specific historic property cannot begin until BOEM has accepted the HPTP for that specific adversely affected historic property, consistent with the forthcoming conditions of COP approval. Construction activities that do not adversely affect historic properties may proceed prior to acceptance of the HPTPs.

4.1 Timeline

The timeline and organizational responsibilities will be developed in consultation with BOEM and the Participating Parties as the conditions of COP approval and the MOA are developed concurrent with BOEM's National Environmental Policy Act (NEPA) substitution schedule for New England Wind which is currently anticipated to include the following key dates:

- December 2022 Release of the Draft Environmental Impact Statement (DEIS) followed by a 60-day comment period for the DEIS.
- September 2023 -- Release of Final Environmental Impact Statement (FEIS).
- October 2023 -- NEPA Record of Decision (ROD) issuance.

It is anticipated that the mitigation measures identified in Section 3.0 will commence within 2 years of the execution of the MOA unless otherwise agreed by the Participating Parties and accepted by BOEM. Per Section 3.0, the Participating Parties will have a minimum of 45 days to review and comment on all draft reports or other work products developed for this HPTP. The Proponent assumes that the proposed scope of work will be completed within 5 years of the execution of the MOA unless a different timeline is agreed upon by Participating Parties and accepted by BOEM.

4.2 Organizational Responsibilities

4.2.1 Bureau of Ocean Energy Management (BOEM)

- BOEM is responsible for making all federal decisions and determining compliance with Section 106.
- BOEM must review and accept the HPTP before the implementing party may commence any actions.
- BOEM is responsible for consultation related to dispute resolution.
- BOEM in consultation with the Participating Parties will ensure that mitigation measures adequately resolve adverse effects, consistent with the NHPA.
- BOEM will be responsible for sharing the annual summary report with Participating Parties.

4.2.2 Avangrid Renewables, LLC

The Proponent will be responsible for implementing the HPTP.

- The Proponent will be responsible for considering the comments provided by the parties identified.
- Annual reporting to BOEM on implementation of the HPTP.
- Funding the mitigation measures specified in Section 3.0.
- Completion of the scope(s) of work in Section 3.0.
- Ensuring all Standards in Section 3.0 are met.
- Providing the Documentation in Section 3.0 to the Participating Parties for review and comment.
- The Proponent will be responsible for ensuring that all work that requires consultation with Tribal Nations are performed by professionals who have demonstrated professional experience consulting with federally recognized Tribes.

4.2.3 Participating Parties

- Identify resources of significance to support public education mitigation measure (if selected).
- Provide feedback on draft scope of work, RFP, and consultant bids within 45 days.
- Provide feedback on draft materials within 45 days.

4.2.4 Other Parties

The Proponent does not anticipate additional consulting parties; however, should any be determined, this will be updated.

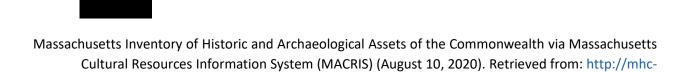
4.3 Participating Party Consultation

The Proponent has provided this draft HPTP to BOEM for inclusion in the DEIS for review by Participating Parties to provide input on the resolution of adverse effects to, and forms of implementing mitigation, to TCP. As part of the development of this draft HPTP, the Proponent will continue to conduct targeted outreach with the Participating Parties identified in Section 1.3. Notification will be sent to BOEM and applicable Participating Parties that the Treatment Plan has been implemented and is complete upon final development of the conditions of COP approval, the forthcoming MOA, and this HPTP.

5.0 REFERENCES

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ATTACHMENT 9 – HISTORIC PROPERTY TREATMENT PLAN FOR [REDACTED] TCP





Draft New England Wind Historic Property Treatment Plan for the Traditional Cultural Property

Submitted to:
BUREAU OF OCEAN ENERGY MANAGEMENT
45600 Woodland Rd
Sterling, VA 20166

Submitted by: Park City Wind LLC

Prepared by:



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EXECUTIVE SUMMARY

This draft Historic Property Treatment Plan (HPTP) for the (TCP) adversely affected by New England Wind provides background data, historic property information, and detailed steps that will be implemented to carry out the mitigation identified during the Section 106 consultation process in the forthcoming Memorandum of Agreement (MOA) with the Bureau of Ocean Energy Management (BOEM), the Massachusetts State Historic Preservation Officer (MA SHPO), and the Advisory Council on Historic Preservation regarding the New England Wind project. The conditions of Construction and Operations Plan (COP) approval and the forthcoming MOA will identify a substantive baseline of specific mitigation measures to resolve the adverse visual effects to the properties identified below as a result of the construction and operation of New England Wind (the Undertaking) to satisfy requirements of Section 106 and 110(f) of the National Historic Preservation Act (NHPA) of 1966 (54 USC 300101; United States Code, 2016). This HPTP outlines the implementation steps and timeline for actions, and will be consistent with, or equivalent to, those substantive baseline mitigation measures identified in the conditions of COP approval and forthcoming MOA.

The National Environmental Policy Act (NEPA) substitution process will be utilized by BOEM to fulfill the Section 106 obligations as provided for in the NHPA implementing regulations (36 CFR § 800.8(c)). Furthermore, BOEM has notified the Advisory Council on Historic Preservation (ACHP), State Historic Preservation Officers, and consulting parties of BOEM's decision to use the NEPA substitution process. This draft HPTP has been provided by the Proponent for inclusion in the Draft Environmental Impact Statement (DEIS) for review by BOEM and consulting parties. Meaningful input on the resolution of adverse effects to, and form(s) of implementation at, the historic properties is anticipated.

This draft HPTP includes the mitigation measures proposed by the Proponent for historic properties based on the evaluations and outreach performed by the Proponent prior to the issuance of the DEIS. It is anticipated that the draft HPTP will sustain further revision and refinement as consultation with the Massachusetts State Historic Preservation Officer, the ACHP, and/or other consulting parties through the NEPA substitution process. Should BOEM make a finding of adverse effect for the historic property, the mitigation measure(s) described herein (and in revisions) will be included in the Record of Decision (ROD) and/or MOA issued in accordance with 40 CFR parts 1500-1508, and 36 CFR §§ 800.8, 800.10.

The timeline for implementation of the mitigation measures will be determined in consultation with parties that demonstrated interest in the affected historic property (hereafter, Participating Parties) based on the agreed upon mitigation measures described in the final version of this draft HPTP. This draft HPTP will be reviewed by, and further developed in, consultation with Participating Parties concurrent with BOEM's NEPA substitution schedule.

This draft HPTP is organized into the following sections:

Executive Summary

Section 1.0 Background Information

This section outlines the content of this HPTP and provides a description of the proposed development of New England Wind.

Section 2.0 Summary of Historic Property

This section summarizes the historic property discussed in this HPTP that may be adversely affected by the Undertaking and summarizes the provisions, attachments, and findings that informed the development of this document, most notably the New England Wind Construction and Operations Plan (NE Wind COP) and the Historic Properties Visual Impact Assessment (Appendix III-H.b).

Section 3.0 Mitigation Measures

This section provides a review of mitigation measures proposed by the Proponent as identified in the COP or through consultation with stakeholders. Mitigation measure details may be revised during the consultation process.

Section 4.0 Implementation

This section establishes the process for executing the mitigation measures identified in Section 4.0. As the consultation process continues, details for each mitigation measure such as the organizational responsibilities, timeline, and regulatory review requirements will continue to be outlined.

Section 5.0 References

This section is a list of works cited for this draft HPTP.

1.0 BACKGROUND INFORMATION

1.1 Project Overview

New England Wind is the proposal to develop offshore renewable wind energy facilities in Bureau of Ocean Energy Management (BOEM) Lease Area OCS-A 0534 along with associated offshore and onshore cabling, onshore substations, and onshore operations and maintenance (O&M) facilities. New England Wind will be developed in two Phases with a maximum of 130 wind turbine generator (WTG) and/or electrical service platform (ESP) positions. Four or five offshore export cables will transmit electricity generated by the WTGs to onshore transmission systems in the Town of Barnstable, Massachusetts. Figure 1.1-1 provides an overview of the New England Wind project. Park City Wind LLC, a wholly owned subsidiary of Avangrid Renewables, LLC, is the Proponent of this Construction and Operations Plan (COP) and will be responsible for the construction, operation, and decommissioning of New England Wind. The construction, operation, and decommissioning of the New England Wind project are defined as the Undertaking and are subject to Section 106 of the National Historic Preservation Act (NHPA).

New England Wind's offshore renewable wind energy facilities are located immediately southwest of Vineyard Wind 1, which is located in Lease Area OCS-A 0501. New England Wind will occupy all of Lease Area OCS-A 0534 and potentially a portion of Lease Area OCS-A 0501 in the event that Vineyard Wind 1 does not develop "spare" or extra positions included in Lease Area OCS-A 0501 and Vineyard Wind 1 assigns those positions to Lease Area OCS-A 0534. For the purposes of the COP, the Southern Wind Development Area (SWDA) is defined as all of Lease Area OCS-A 0534 and the southwest portion of Lease Area OCS-A 0501, as shown in Figure 1.1-1. The SWDA may be approximately 411–453 square kilometers (km2) (101,590–111,939 acres) in size depending upon the final footprint of Vineyard Wind 1. At this time, the Proponent does not intend to develop the two positions in the separate aliquots located along the northeastern boundary of Lease Area OCS-A 0501 as part of New England Wind. The SWDA (excluding the two separate aliquots closer to shore) is just over 32 kilometers (km) (20 miles [mi]) from the southwest corner of Martha's Vineyard and approximately 38 km (24 mi) from Nantucket (see Figure 1.1-2). Within the SWDA, the closest WTG is approximately 34.1 km (21.2 mi) from Martha's Vineyard and 40.4 km (25.1 mi) from Nantucket. The WTGs and ESP(s) in the SWDA will be oriented in an east-west, north-south grid pattern with one nautical mile (NM) (1.85 km) spacing between positions.

The Historic Properties Visual Impact Assessment (Appendix III-H.b of COP Volume III) for New England Wind is intended to assist BOEM and the Massachusetts Historical Commission (MHC), in its role as the State Historic Preservation Officer (SHPO), in their review of New England Wind under Section 106 of the NHPA and the National Environmental Policy Act. The Preliminary Area of Potential Effects (PAPE) described herein has been developed to assist BOEM and MHC in identifying historic resources listed, or eligible for listing, in the National Register of Historic Places (National Register) in order to assess the potential effects of New England Wind on historic properties.





1.2 Historic Property Treatment Plan (HPTP) and Section 106 of the National Historic Preservation Act (NHPA)

This Historic Property Treatment Plan (HPTP) will be developed in accordance with the Section 106 and Section 110(f) review (36 CFR 800) of the Undertaking and the forthcoming Memorandum of Agreement (MOA). This HPTP provides background data, historic property information, and detailed steps that will be implemented to carry out the mitigation identified during the Section 106 consultation process in the forthcoming Memorandum of Agreement (MOA) with the Bureau of Ocean Energy Management (BOEM), the Massachusetts State Historic Preservation Officer (MA SHPO), and the Advisory Council on Historic Preservation regarding the New England Wind project.

The conditions of COP approval and forthcoming MOA will include measures to avoid and/or minimize adverse effects to identified historic properties, including planned distance of the Undertaking from historic properties, uniform WTG design, speed, height, and rotor diameter to reduce visual contrast, uniform spacing of WTGs to decrease visual clutter, and lighting and marking requirements to minimize visibility. This HPTP addresses the remaining mitigation provisions for the properties identified below.

All activities implemented under this HPTP will be conducted in accordance with the forthcoming conditionals of COP approval and the forthcoming MOA as well as with applicable local, state, and federal regulations and permitting requirements.

1.3 Participating Parties

The National Environmental Policy Act (NEPA) substitution process will be utilized by BOEM to fulfill the Section 106 obligations as provided for in the NHPA implementing regulations (36 CFR § 800.8(c)). BOEM hosted the first Section 106-specific meeting with consulting parties on March 3, 2022 and the Proponent anticipates that BOEM will hold additional meetings pursuant to Sections 106 and 110(f) of the NHPA and in accordance with 36 CFR 800.8.

The Proponent is also conducting outreach meetings with various stakeholders to review the findings of the analysis to date and initiate discussion of proposed mitigation measures. These are parties that demonstrated interest in the affected historic property (Participating Parties). The Proponent has conducted and/or anticipates conducting outreach with the following parties:

- The Massachusetts Historical Commission (MHC)
- The Massachusetts Board of Underwater Resources (MBUAR)
- The Wampanoag Tribe of Gay Head (Aquinnah)
- The Mashpee Wampanoag Tribe
- The Chappaquiddick Tribe of Wampanoag Nation
- [Other Tribes or consulting parties]

The Proponent further anticipates the above-mentioned parties will participate in the finalization of this draft HPTP through BOEM's Section 106 consultation process. This list may be amended if any additional parties are identified during this process.

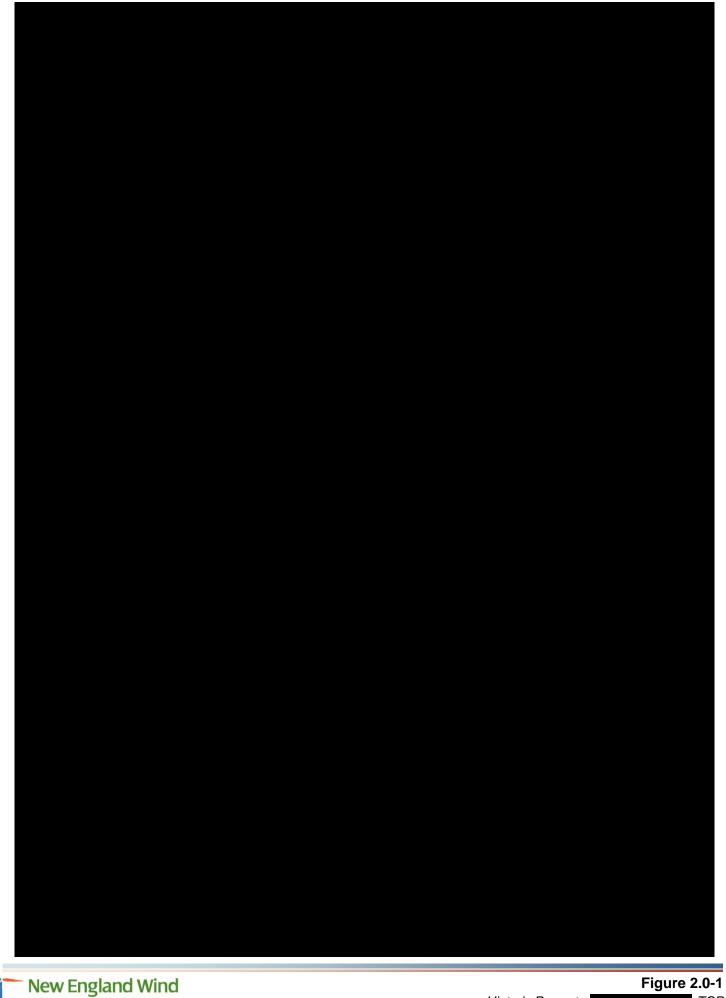
2.0 SUMMARY OF HISTORIC PROPERTY (CULTURAL PROPERTY)

TRADTIONAL

has been determined eligible for listing on the National Register as a tradi property by the Keeper of the National Register. Roughly bound	itional cultural
(Figure 2.0-1). The Keeper in eligibility criteria determined that:	her review of
Additionally, there will be no visual effect from New E undersea cables. For the southern view, visibility of the SWDA will be intermittent de weather conditions and the WTGs would only be visible slightly above the horizon line.	_
Per BOEM guidance on April 12, 2022, views from	

SALs are interpreted as remnants of past

terrestrial and shallow marine environments that existed along previous coastlines during lower stands of sea level. The landforms now appear buried below the seafloor at varying depths due to different processes acting upon the continental shelf over the past 15,000 years. While no intact archaeological artifacts, deposits, resources, or sites have been identified offshore, the SALs represent locations of higher significance with the potential to contain those cultural resources. Further details on the SALs are included in the Submerged Ancient Landform HPTP, as well as in the Marine Archaeological Resources Assessment included as Volume II-D of the COP.





3.0 MITIGATION MEASURES

Mitigation measures for the TCP are detailed below.

3.1 Mitigation Measures

Mitigation measures are proposed below, however; ongoing consultation has informed the importance of Submerged Ancient Landforms (SALs) and the SAL study proposed below and detailed in the SAL HPTP will serve as the main focus of mitigation for the

3.1.1 Submerged Ancient Landform (SAL) Study

As noted in Section 2.0, potential SALs have been identified

TCP. In order to mitigate adverse effects to SALs, the Proponent is proposing to conduct additional archaeological investigations on unavoidable SALs in the OECC. Further details on the SALs and the proposed mitigation measures are included in the Submerged Ancient Landform HPTP, as well as in the Marine Archaeological Resources Assessment included as Volume II-D of the COP.

3.1.2 Uniform Layout and Paint Color Selection

The Proponent is avoiding and minimizing visual impacts to the maximum extent practicable. The WTGs for each phase will have uniform design, height, and rotor diameter and will be aligned and spaced consistently with other offshore wind facilities, thereby reducing potential for visual clutter. Additionally, the WTGs will be no lighter than RAL 9010 Pure White and no darker than RAL 7035 Light Grey in color in accordance with BOEM and Federal Aviation Administration (FAA) guidance; the Proponent anticipates painting the WTGs off-white/light grey to reduce contrast with the sea and sky and thus, minimize daytime visibility of the WTGs. The conservative threshold for visibility in meteorological analyses is "the greatest distance at which an observer can just see a black object viewed against the horizon sky" (see Section 3.3 of Appendix III-H.a). The Phase 1 and Phase 2 WTGs will not be black; instead, the expected off-white/light grey color will be highly compatible with the hue, saturation, and brightness of the background sky. This lack of contrast between the WTGs and the background means that the percentage of the time the structures might be visible is greatly reduced. Additionally, the upper portion of the ESP(s) will be a grey color which would appear muted and indistinct. Color contrast decreases as distance increases. Color contrast will diminish or disappear completely during periods of haze, fog, or precipitation.

3.1.3 Lighting

Lighting will be kept to the minimum necessary to comply with navigation safety requirements and safe operating conditions. Required marine navigation lights mounted near the top of each WTG/ESP foundation (or on the corners of each ESP) are expected to be visible only to distances of approximately 9.3 km (5 NM). As the closest coastal vantage point is at least 34.1 km (21.2 mi) from the nearest WTG, marine navigation lights will not be visible from shore.

3.1.4 Aircraft Detection Lighting Systems (ADLS)

Subject to BOEM approval, the Proponent also expects to use an Aircraft Detection Lighting System (ADLS) that automatically turns on, and off, aviation obstruction lights in response to the detection of aircraft for the Phase 1 WTGs. For Phase 2, the Proponent would expect to use the same or similar approaches used for Vineyard Wind 1 and/or Phase 1 to reduce lighting, including the use of an ADLS. Based on historical use of the airspace, it is estimated that the aviation obstruction lights on both the nacelle and tower (if needed) will be activated for less than one hour per year (less than 0.1% of the nighttime hours) (see Appendix III-K). The effect of nighttime lighting from the aviation obstruction lights is acknowledged as part of the overall visibility and visual effect of the SWDA; however, the effect of nighttime lighting is substantially minimized through the use of ADLS. As stated previously, meteorological conditions will serve to obscure or block view of the SWDA providing additional minimization of the effect of nighttime lighting. For Phase 1, the onshore export cables to the onshore substation will be primarily installed underground and will typically be within public roadway layouts, although portions of the duct bank may be within existing utility rights-of-way (ROWs). From the onshore substation, grid interconnection cables will also be installed underground. Underground installation of onshore cables is also expected for Phase 2, thus minimizing potential visual effects to adjacent properties.

4.0 IMPLEMENTATION

Construction activities of the Undertaking that adversely affect a specific historic property cannot begin until BOEM has accepted the HPTP for that specific adversely affected historic property, consistent with the forthcoming conditions of COP approval. Construction activities that do not adversely affect historic properties may proceed prior to acceptance of the HPTPs.

4.1 Timeline

The timeline and organizational responsibilities will be developed in consultation with BOEM and the Participating Parties as the conditions of COP approval and the MOA are developed concurrent with BOEM's National Environmental Policy Act (NEPA) substitution schedule for New England Wind which is currently anticipated to include the following key dates:

- December 2022 Release of the Draft Environmental Impact Statement (DEIS) followed by a 60-day comment period for the DEIS.
- September 2023 -- Release of Final Environmental Impact Statement (FEIS).
- October 2023 -- NEPA Record of Decision (ROD) issuance.

It is anticipated that the mitigation measures identified in Section 3.0 will commence within 2 years of the execution of the MOA unless otherwise agreed by the Participating Parties and accepted by BOEM. Per Section 3.0, the Participating Parties will have a minimum of 45 days to review and comment on all draft reports or other work products developed for this HPTP. The Proponent assumes that the proposed scope of work will be completed within 5 years of the execution of the MOA unless a different timeline is agreed upon by Participating Parties and accepted by BOEM.

4.2 Organizational Responsibilities

4.2.1 Bureau of Ocean Energy Management (BOEM)

- BOEM is responsible for making all federal decisions and determining compliance with Section 106.
- BOEM must review and accept the HPTP before the implementing party may commence any actions.
- BOEM is responsible for consultation related to dispute resolution.
- BOEM in consultation with the Participating Parties will ensure that mitigation measures adequately resolve adverse effects, consistent with the NHPA.
- BOEM will be responsible for sharing the annual summary report with Participating Parties.

4.2.2 Avangrid Renewables, LLC

• The Proponent will be responsible for implementing the HPTP.

- The Proponent will be responsible for considering the comments provided by the parties identified.
- Annual reporting to BOEM on the implementation of the HPTP.
- Funding the mitigation measures specified in Section 3.0.
- Completion of the scope(s) of work in Section 3.0.
- The Proponent will be responsible for ensuring that all work that requires consultation with Tribal Nations are performed by professionals who have demonstrated professional experience consulting with federally recognized Tribes.

4.2.3 Participating Parties

Participating Parties are responsible for providing feedback on draft materials associated with the SAL study within 45 days.

4.2.3 Other Parties

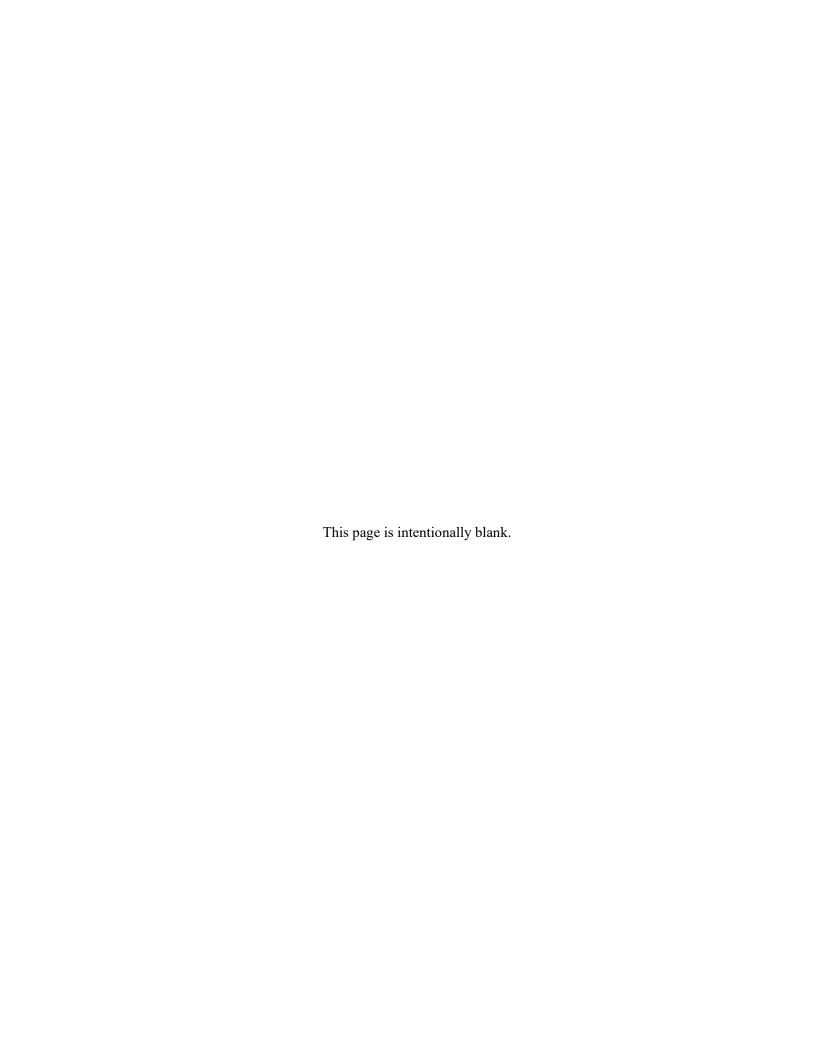
The Proponent does not anticipate additional consulting parties, should any be determined, this will be updated.

4.3 Participating Party Consultation

The Proponent has provided this draft HPTP to BOEM for inclusion in the DEIS for review by Participating Parties to provide input on the resolution of adverse effects to, and forms of implementing mitigation, to TCP. As part of the development of this draft HPTP, the Proponent will continue to conduct targeted outreach with the Participating Parties identified in Section 1.3. Notification will be sent to BOEM and applicable Participating Parties that the Treatment Plan has been implemented and is complete upon final development of the conditions of COP approval, the forthcoming MOA, and this HPTP.

5.0 REFERENCES

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ATTACHMENT 10 – NEW ENGLAND WIND PHASED IDENTIFICATION PLAN





New England Wind Phased Identification Plan for Terrestrial Archaeology

Submitted to:

BUREAU OF OCEAN ENERGY MANAGEMENT

45600 Woodland Rd

Sterling, VA 20166

Submitted by: Park City Wind LLC

Prepared by:



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1.0 INTRODUCTION

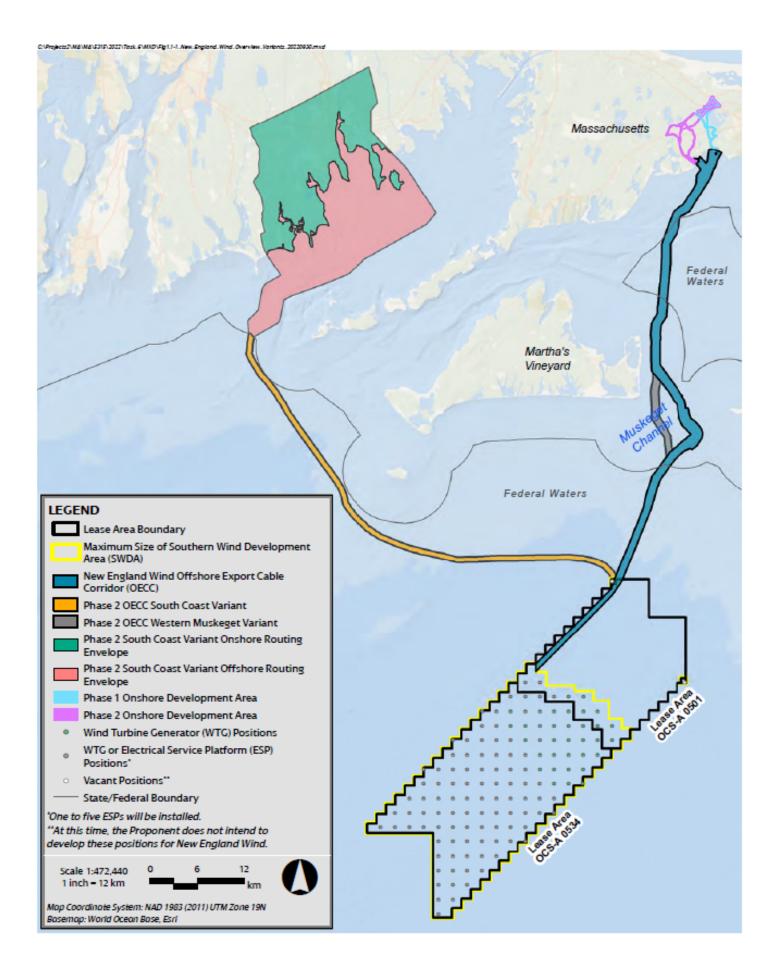
The following document is a supplement to the New England Wind Terrestrial Archaeology Resource Assessment (TARA) distributed for National Historic Preservation Act (NHPA) Section 106 Consultation. Preparation of the TARA is ongoing while property access permissions are acquired to conduct Phase 1B archaeological investigations for potential substation locations and associated cable routes. The Bureau of Ocean Energy Management (BOEM) has determined, in accordance with Section 106 regulations (36 CFR § 800.4 (b)(2)), that a phased identification approach is appropriate for the survey, reporting, and consultation related to this outstanding archaeological investigation. The Phased Identification Plan for Terrestrial Archaeology below serves as a process document detailing the steps New England Wind expects to take to complete the required cultural resources survey and includes a schedule of associated milestones. All milestones are anticipated to be completed before issuance of the Final Environmental Impact Statement (FEIS) and BOEM's Record of Decision (ROD).

1.1 Description of the Undertaking

1.1.1 Project Overview

New England Wind is the proposal to develop offshore renewable wind energy facilities in BOEM Lease Area OCS-A 0534 along with associated offshore and onshore cabling, onshore substations, and onshore operations and maintenance (O&M) facilities. New England Wind will be developed in two Phases with a maximum of 130 wind turbine generator (WTG) and/or electrical service platform (ESP) positions. Four or five offshore export cables will transmit electricity generated by the WTGs to onshore transmission systems in the Town of Barnstable, Massachusetts. Figure 1.1-1 provides an overview of the New England Wind project. Park City Wind LLC, a wholly owned subsidiary of Avangrid Renewables, LLC, is the Proponent of this Construction and Operations Plan (COP) and will be responsible for the construction, operation, and decommissioning of New England Wind.

New England Wind's proposed offshore renewable wind energy facilities are located in Lease Area OCS-A 0534. New England Wind will occupy all of Lease Area OCS-A 0534 and potentially a portion of Lease Area OCS-A 0501 in the event that Vineyard Wind 1 does not develop "spare" or extra positions included in Lease Area OCS-A 0501 and Vineyard Wind 1 assigns those positions to Lease Area OCS-A 0534. For the purposes of this application, the Southern Wind Development Area (SWDA) is defined as all of Lease Area OCS-A 0534 and the southwest portion of Lease Area OCS-A 0501. The SWDA may be approximately 411–453 square kilometers (km2) (101,590–111,939 acres) in size depending upon the final footprint of Vineyard Wind 1. At this time, the Proponent does not intend to develop the two positions in the separate aliquots located along the northeastern boundary of Lease Area OCS-A 0501 as part of New England Wind. The SWDA (excluding the two separate aliquots closer to shore) is just over 32 kilometers (km) (20 miles [mi]) from the southwest corner of Martha's Vineyard and approximately 38 km (24 mi) from Nantucket. Within the SWDA, the closest WTG is approximately 34.1 km (21.2 mi) from Martha's





Vineyard and 40.4 km (25.1 mi) from Nantucket. The WTGs and ESP(s) in the SWDA will be oriented in an east-west, north-south grid pattern with one nautical mile (NM) (1.85 km) spacing between positions. See Figure 1.1-1 for an overview of New England Wind.

Phase 1 of New England Wind

Phase 1, which includes Park City Wind, will be developed immediately southwest of the Vineyard Wind 1 project. The Phase 1 Envelope includes 41 to 62 WTGs and one or two ESP(s). Depending upon the capacity of the WTGs, Phase 1 will occupy 150–231 km2 (37,066–57,081 acres) of the SWDA. The Phase 1 Envelope includes two WTG foundation types: monopiles and piled jackets. Strings of WTGs will connect with the ESP(s) via a submarine inter-array cable transmission system. The ESP(s) will also be supported by a monopile or jacket foundation. Two high-voltage alternating current (HVAC) offshore export cables up to 101 km (54 NM) in length (per cable) installed within the SWDA and an Offshore Export Cable Corridor (OECC) will transmit electricity from the ESP(s) to a landfall site at the Craigville Public Beach or Covell's Beach in the Town of Barnstable. Underground onshore export cables, located principally in roadway layouts, will connect the landfall site to a new Phase 1 onshore substation in Barnstable. Grid interconnection cables will then connect the Phase 1 onshore substation to the ISO New England (ISO-NE) electric grid at Eversource's existing 345 kilovolt substation in West Barnstable.

Phase 2 of New England Wind

Phase 2, which includes Commonwealth Wind, will be immediately southwest of Phase 1 and will occupy the remainder of the SWDA. Phase 2 may include one or more projects, depending on market conditions. The footprint and total number of WTG and ESP positions in Phase 2 depends upon the final footprint of Phase 1; Phase 2 is expected to include 64 to 88 WTG/ESP positions (up to three positions will be occupied by ESPs) within an area ranging from 222–303 km² (54,857–74,873 acres). The Phase 2 Envelope includes three general WTG foundation types: monopiles, jackets (with piles or suction buckets), or bottom-frame foundations (with piles or suction buckets). Inter-array cables will transmit electricity from the WTGs to the ESP(s). The ESP(s) will also be supported by a monopile or jacket foundation (with piles or suction buckets).

Two or three HVAC offshore export cables, each with a maximum length of 116–124 km (63–67 NM) per cable, will transmit power from the ESP(s) to shore. Unless technical, logistical, grid interconnection, or other unforeseen issues arise, all Phase 2 offshore export cables will be installed within the same OECC as the Phase 1 cables from the northwestern corner of the SWDA to within approximately 2–3 km (1–2 mi) of shore, at which point the OECC for Phase 2 will diverge to the Dowses Beach Landfall Site and/or Wianno Avenue Landfall Site in Barnstable.¹ Underground onshore export cables, located primarily within in roadway layouts, will connect the

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As described further in Section 4.1.3 of COP Volume I, the Proponent has identified two variations of the Phase 2 OECC in the event that technical, logistical, grid interconnection, or other unforeseen issues arise during the COP review and engineering processes that preclude one or more Phase 2 offshore export cables from being installed within all or a portion of the OECC.

landfall site(s) to one or two new onshore substations in the Town of Barnstable. Grid interconnection cables will then connect the onshore substation site(s) to the West Barnstable Substation.

1.1.2 Required Permits

Table 1 in Appendix A lists the required federal, state, regional (county), and local level reviews and permits. Filing dates are provided for those permit applications or review documents that have already been submitted.

1.1.3 Agency and Public Outreach

The Proponent has been actively consulting with BOEM, federal and state agencies, regional commissions, affected municipalities, and federally-recognized tribes since 2019. A list of meetings related to the New England Wind project, conducted as of March 2021 is provided in Volume I of the COP at Table 5.2-1. In addition to these meetings, members of the Proponent's team have participated in hundreds of meetings with agencies, tribes, and municipalities since 2015 regarding the development of Vineyard Wind 1.

Following the submittal of initial filings in 2020, there have been and will continue to be a number of agency-convened public hearings and informational meetings. These include BOEM/National Environmental Policy Act (NEPA) scoping sessions, Massachusetts EFSB public statement hearing(s), and a Massachusetts Environmental Policy Act (MEPA) consultation session(s).

In addition to the consultations described above, extensive and ongoing consultations with key stakeholders have been conducted by the Proponent and its community partner, Vineyard Power Cooperative (Vineyard Power). To-date, the Proponent has held dozens of information sessions and regularly holds office hours sessions in Barnstable, Covell's Beach, Martha's Vineyard, and across Cape Cod. The Proponent also sponsors and staffs information tables at a variety of environmental, fisheries-related, and community events to reach a variety of stakeholders.

The Proponent also has a dedicated team to lead outreach with state- and federally-recognized tribes and other relevant stakeholders. The Proponent anticipates conducting additional outreach to those parties with a demonstrated interest in this Phased Identification Plan for Terrestrial Archaeology.

1.2 Area of Potential Effect (APE)

The Area of Potential Effects (APE) is defined in 36 CFR § 800.16 as "the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist." The APE for direct physical effects to onshore/terrestrial archaeological resources is defined as any areas of ground disturbance that may occur within the footprint of New England Wind's onshore facilities and construction staging areas.

1.2.1 Phase 1

For Phase 1, the Preliminary APE (PAPE) for onshore direct physical effects includes potential Onshore Export Cable Routes, Grid Interconnection Routes, landfall sites, proposed substation site and associated parcels at 6 and 8 Shootflying Hill Road, and Parcel #214-001, and onshore construction staging areas (see Figure 1.2-1). Phase 1 potential onshore export cabling routes are sited along existing roadways or utility rights-of-ways (ROWs) and onshore cables will be installed underground. Wherever possible, expanded work zones and construction staging areas along the onshore routes will be located within previously developed areas, such as nearby parking lots. The proposed Phase 1 substation at 8 Shootflying Hill Road will connect to the existing West Barnstable Substation. An adjacent parcel at 6 Shootflying Hill Road, which is located immediately northeast of the proposed substation site, will be used for an improved access road to the onshore substation site. An additional parcel of land (Parcel #214-001) located immediately southeast of the existing West Barnstable Substation is expected to be utilized for Phase 1.

1.2.2 Phase 2

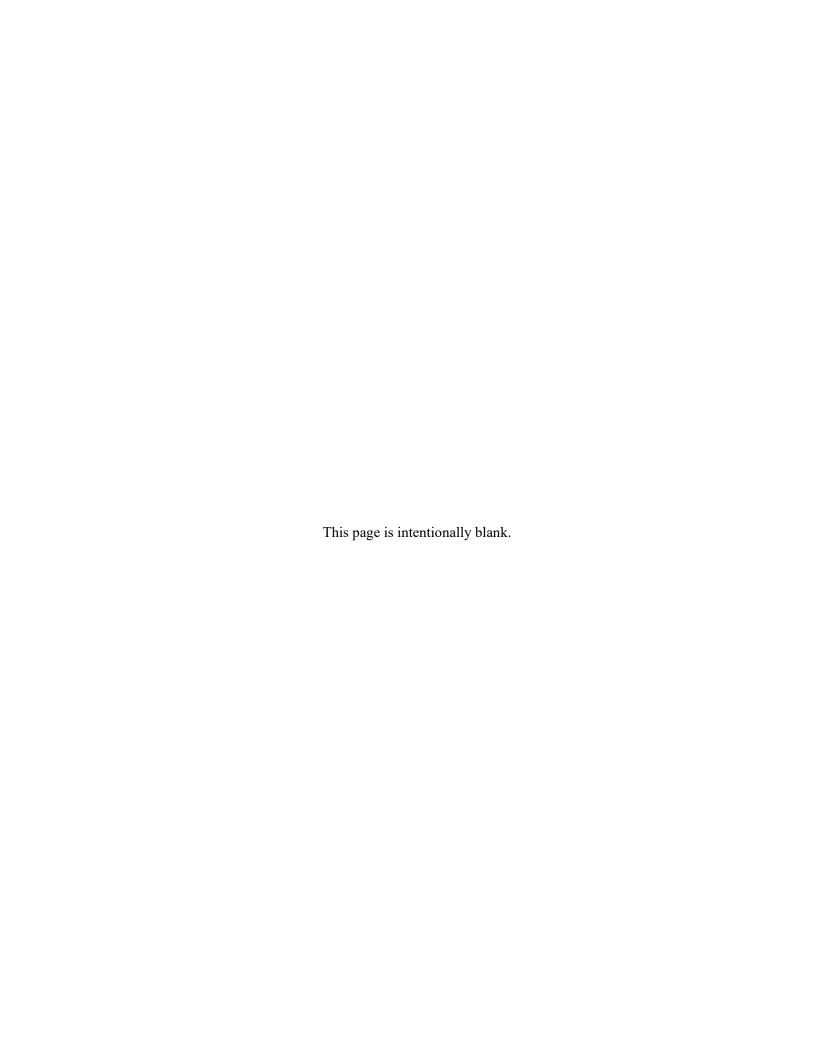
For Phase 2, the PAPE for onshore direct physical effects includes potential Onshore Export Cable Routes and Grid Interconnection Routes, landfall sites, proposed onshore substation site(s), Parcel #214-001, and onshore construction staging areas (see Figure 1.2-1). Phase 2 potential onshore export cabling routes are sited along existing roadways or utility ROWs and onshore cables will be installed underground. Wherever possible, expanded work zones and construction staging areas along the onshore routes will be located within previously developed areas, such as nearby parking lots. Similar to Phase 1, Phase 2 includes an interconnection at the existing West Barnstable Substation and includes potential use of an adjacent parcel (Parcel #214-001) to accomplish a cable crossing under the Route 6 highway corridor.

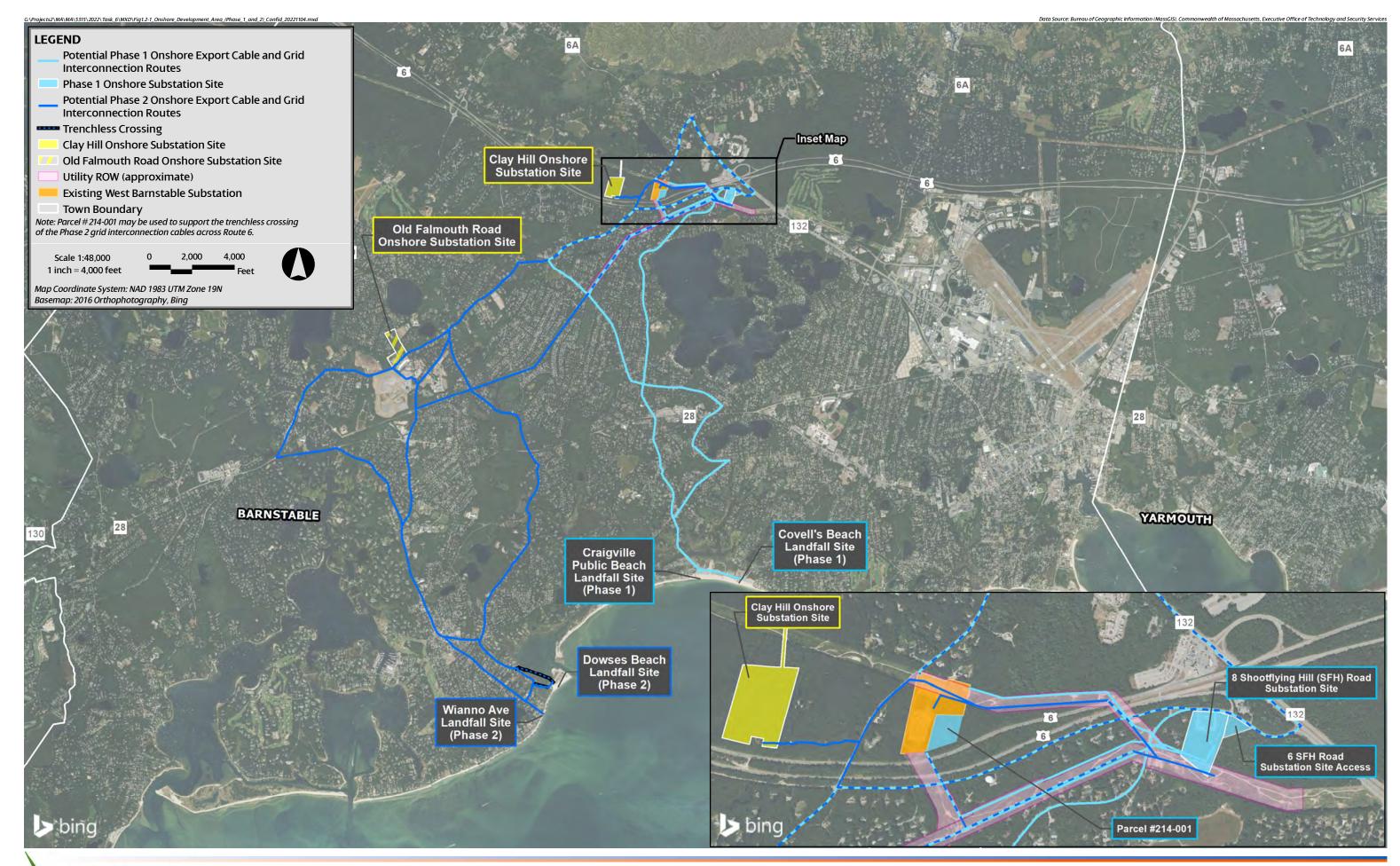
1.3 Identification of Historic Properties

Terrestrial archaeology surveys have been conducted for each Phase of New England Wind. Detailed survey reports are included in Appendix III-G of the COP. A summary of work completed for each Phase to date is included below.

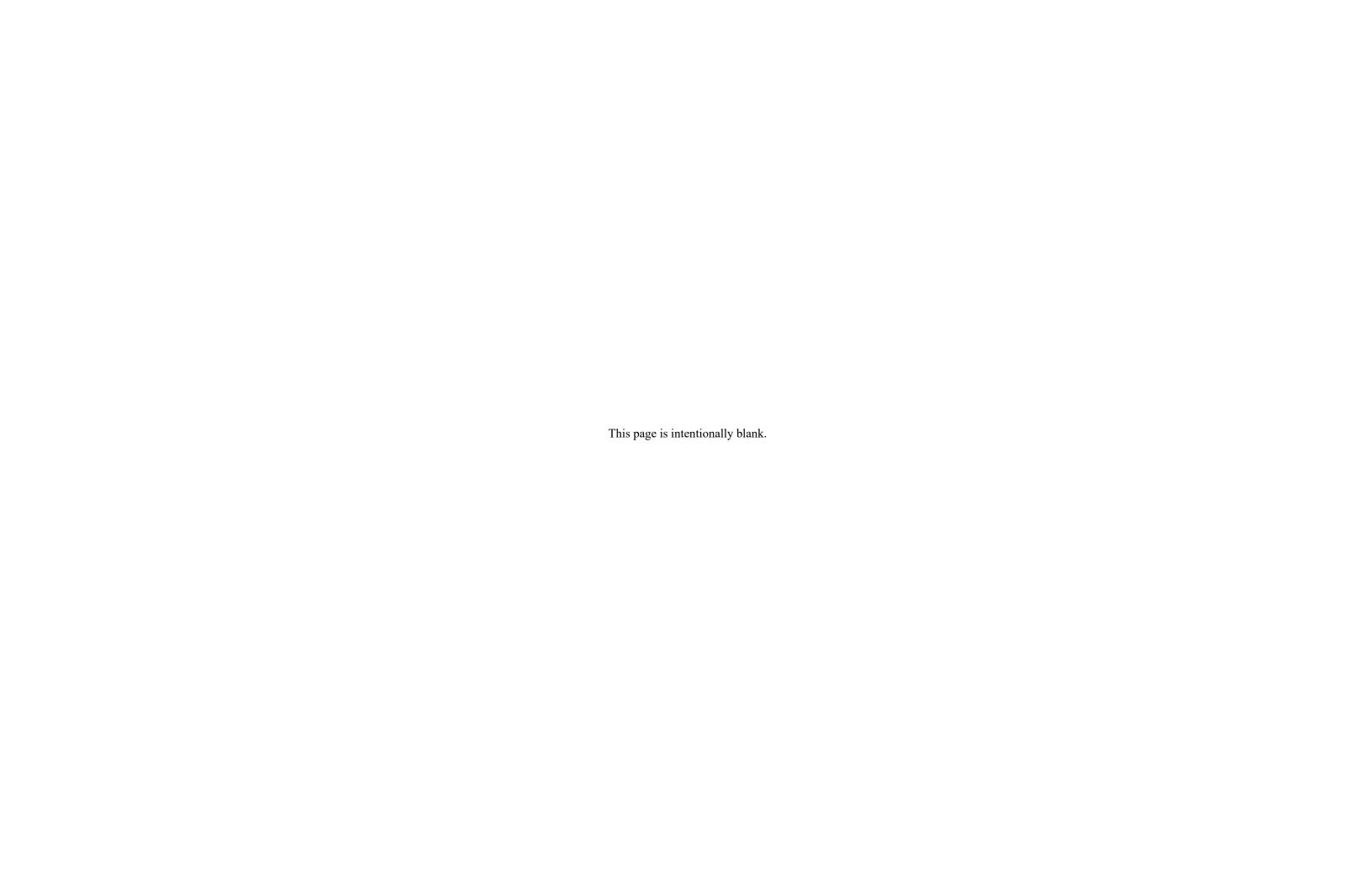
Phase 1

In May 2020, an archaeological reconnaissance survey was conducted for the Phase 1 Onshore Development Area (as shown on Figure 1.2-1). The reconnaissance survey included the (1) landfall sites, (2) Onshore Export Cable Routes, (3) onshore substation site, (4) Grid Interconnection Routes, which connect the onshore substation to the grid interconnection point, and (5) the grid interconnection point at the West Barnstable Substation. An archaeological sensitivity assessment was prepared for the Phase 1 Onshore Development Area and zones of low, moderate, and high archaeological sensitivity were identified.





New England Wind



Archaeological monitoring is recommended and planned for Phase 1 onshore construction activities within the staging areas required for HDD at the selected landfall site and during installation of Onshore Export Cable and other facilities (splice vaults) within the identified zones of high and moderate archaeological sensitivity in the Phase 1 Onshore Development Area. An intensive survey of archaeologically sensitive portions of the proposed substation site at 8 Shootflying Hill Road and Parcel #214-001 was recommended and was subsequently conducted as described in the following paragraph.

In October 2021, an intensive archaeological survey was conducted at four locations: (1) 6 Shoot flying Hill Road, (2) 8 Shootflying Hill Road, (3) Parcel #214-001, and (4) at trenchless crossing entry and exit locations for the Centerville River crossing (including 2 Short Beach Road) and potential work areas along Craigville Beach Road north and south of Centerville River. Pre-contact Native American material was identified within testing locations at the proposed substation parcel at 8 Shootflying Hill Road, the proposed trenchless crossing entry/exit pit location in Parcel 214, and at the proposed trenchless crossing entry bore and temporary work zone at 2 Short Beach Road. The pre-contact Native American find spots and site identified in the proposed substation at 8 Shootflying Hill Road, trenchless crossing entry bore and temporary work zone at 2 Short Beach Road and proposed entry/exit pit in Parcel 214 are not considered to be significant cultural resources.

No additional archaeological investigations are recommended or planned for the 8 Shootflying Hill Road Find Spot, 2 Short Beach Road Find Spot, and the Parcel 214 Site. No pre-contact cultural materials, faunal remains, or subsurface features such as shell midden or refuse pits associated with Site 19-BN-253 were found in test pits within the proposed trenchless crossing exit pit and 400-ft long pipe laydown area on the east side of Craigville Beach Road. Therefore, no additional archaeological investigations of these components of the onshore cabling route are recommended or planned. Archaeological monitoring of other components of New England Wind within areas of moderate or high archaeological sensitivity will be conducted during construction.

Phase 2

In June 2020, a due diligence review was completed for the Phase 2 Onshore Routing and Substation Envelope in Barnstable, Massachusetts. This review was completed prior to the identification of specific landfall sites and Onshore Export and Grid Interconnection Cable Routes for Phase 2, so the review was focused on a broad area in Barnstable. The due diligence report includes an inventory of recorded pre-contact, contact, and post-contact period archaeological sites (grouped by physiographic setting) and provides information about the types, nature, and distribution of archaeological resources located within the study area.

Results of archival research identified no archaeological properties listed in the National Register of Historic Places in the Phase 2 Onshore Routing and Substation Envelope. A total of 42 precontact archaeological sites and 15 post-contact archaeological sites were identified within the

study area. Further consultation with the Massachusetts Historical Commission (MHC) and local federally recognized Tribes regarding the potential for New England Wind to affect both known and un-recorded cultural resources that may be present within the study area was recommended.

In November 2021, an archaeological reconnaissance survey was conducted for the Phase 2 Onshore Development Area (as shown on Figure 1.2-1). The reconnaissance survey included the: (1) landfall sites, (2) Onshore Export Cable Routes and Grid Interconnection Routes, and (3) the grid interconnection point at the West Barnstable Substation. The exact location of the Phase 2 onshore substation site(s) was not determined at the time of the survey, but the site(s) were anticipated to be located generally along the onshore routes included in these studies. An archaeological sensitivity assessment was prepared for the Phase 2 Onshore Development Area and zones of low, moderate, and high archaeological sensitivity were identified. Archaeological monitoring is recommended for Phase 2 onshore construction activities within the staging areas at the landfall site(s) and during installation of Onshore Export Cable and other components (duct banks, splice vaults) within the identified zones of high and moderate archaeological sensitivity in the Phase 2 Onshore Development Area.

In April 2022 an additional due diligence study was conducted for two potential onshore substation sites for Phase 2 (the Clay Hill onshore substation site and the Old Falmouth Road onshore substation site). No archaeological sites are recorded within the two potential substation sites. However, zones of high and moderate archaeological sensitivity are present in both potential substation parcels (see Appendix B for sensitivity maps). An intensive survey of archaeologically sensitive portions of the proposed substation sites is recommended and is planned to be conducted as described in Section 2.0.

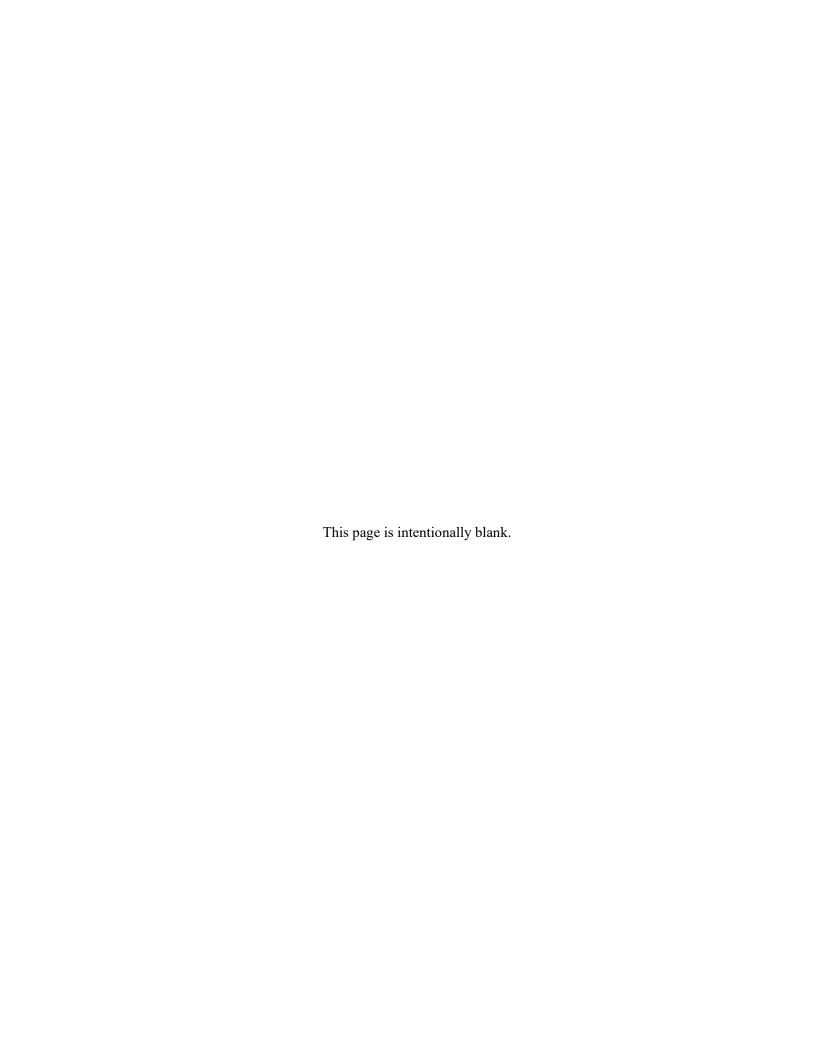
During the design phase of New England Wind, avoidance and minimization of potential adverse effects to terrestrial archaeological resources were considered and implemented through measures such as sighting the Onshore Export Cable Routes and Grid Interconnection Routes within existing ROWs and along existing roadway layouts to the extent feasible. The archaeological surveys conducted for Phase 1 and Phase 2 Onshore Development Areas identified areas of moderate and high archaeological sensitivity and as recommended, the Proponent plans to conduct monitoring during construction in these areas. No further investigations are recommended for those areas subjected to an intensive survey.

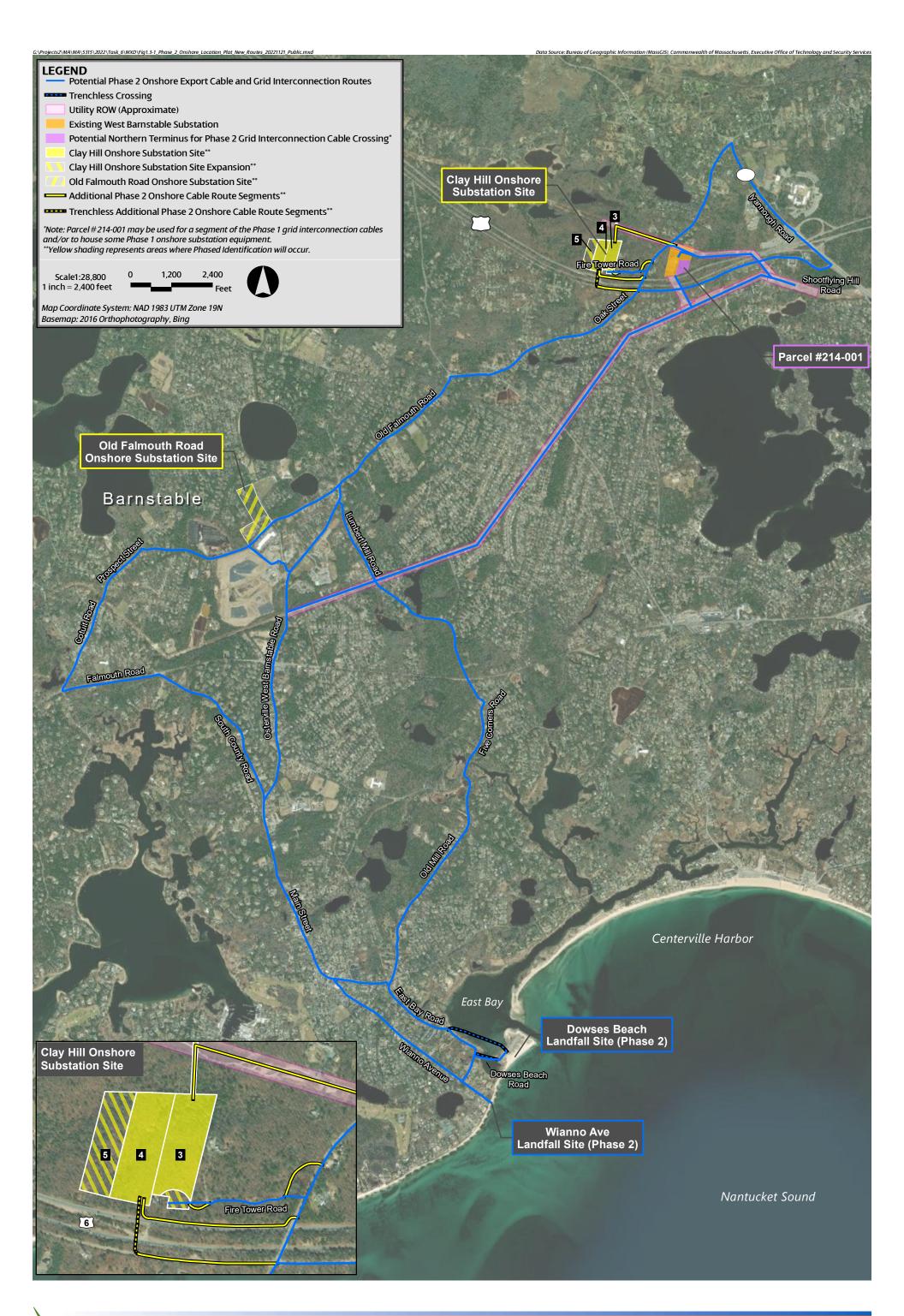
Figure 1.2-1 indicates where terrestrial archaeology survey for Phase 1 and Phase 2 of New England Wind have been completed. Section 2.1.2 describes the limited locations where additional terrestrial archaeology survey is needed.

Summary

With the exception of monitoring moderate and high sensitivity areas during construction, the Proponent has completed all terrestrial archaeological investigations for the Phase 1 PAPE and the results of which have been incorporated into the TARA. Accordingly, Phase 1 archaeological surveys and results are not discussed in the remainder of this Phased Identification Plan (PIP) for Terrestrial Archaeology.

The following sections of this PIP focus on the outstanding terrestrial archaeological survey and reporting needs for the Phase 2 PAPE. A Phase 1B intensive archaeological survey is needed at the proposed Phase 2 onshore substation site(s) (see Figure 1.3-1). In addition, based on ongoing design, the Proponent has identified additional route segments and potential additional parcels near the onshore substation, which will require additional archaeological survey. These proposed survey areas are further discussed in Section 2.1.2 and are shown shaded in yellow in Figure 1.3-1. All other Phase 2 terrestrial survey activities have been completed.







2.0 PHASED IDENTIFICATION

2.1 Section 106 Phased Identification Plan (PIP)

2.1.1 Pre-Record of Decision (ROD) Phased Identification

Prior to the publication of the FEIS, issuance of the ROD and/or adoption of a Memorandum of Agreement (MOA), phased identification will occur for the following select areas of the terrestrial PAPE:

- the Phase 2 onshore substation site(s)
- additional Onshore Export Cable and Grid Interconnection Route segments

These phased identification activities and associated Section 106 Consultation will be completed prior to the FEIS; the schedule is further described in Section 2.2.

2.1.2 Scope of Phased Identification

Overview

As detailed above, all Phase 1 terrestrial archaeology assessments were completed in December 2021 and several terrestrial archaeology assessments have also been completed for Phase 2. A PIP is necessary for the Phase 2 onshore substation site(s) because the Proponent does not yet have site control and was previously unable to access the onshore substation site(s) to complete fieldwork. Based on ongoing design the Proponent is evaluating expansion of the boundary of the Clay Hill onshore substation site from the two adjacent parcels evaluated in April 2022 (Barnstable Assessors Parcels 195-005 and 195-006; referred to as "Parcels 3 and 4").

The western boundary of the Clay Hill onshore substation site has been expanded to include a third parcel to the west (Barnstable Assessors Parcel 195-037; referred to as "Parcel 5") and to include the southern portion (approximately 0.5 acres) of Parcel 3 (Barnstable Assessors Parcel 194-016). The site was expanded to provide additional flexibility for substation design and equipment layout, including to potentially minimize noise and visual impacts to sensitive receptors. Parcels 3, 4, and 5, which together total approximately 20.6 acres, are located north of Route 6 (Mid-Cape Highway) (Figure 1.3-1). The three parcels are underdeveloped and wooded. Recently, the Proponent executed an agreement that provides the ability to access all three parcels (Parcels 3, 4, and 5) and the Phase 1B survey is planned for this fall (see Section 2.2).

The Proponent does not have site control or the ability to access the Old Falmouth Road onshore substation site and currently does not expect to use this site. In the unlikely event that the Proponent plans to utilize the Old Falmouth Road onshore substation site, a Phase 1B survey would be conducted in accordance with the schedule in Section 2.2.

As part of the ongoing design, the Proponent recently completed a detailed and comprehensive construction feasibility study of the Onshore Export Cable and Grid Interconnection Routes for Phase 2. This study led to the identification of limited new onshore cable route segments in the immediate vicinity of the Clay Hill onshore substation site that may need to be used to address potential constructability considerations (these are referred to as the "Additional Phase 2 Onshore Cable Route Segments"). Figure 1.3-1 identifies these additional segments. A Phase 1A Study and, if needed, a Phase 1B study are expected to be completed in accordance with the schedule in Section 2.2.

The Additional Phase 2 Onshore Cable Route Segments are each 0.15 to 0.86 km (0.09 to 0.54 miles) long. Onshore export and grid interconnection cables are expected to primarily be installed in an underground duct bank (i.e., an array of plastic conduits encased in concrete) within public roadway layouts and utility ROWs.

Description of Survey Types and Methods

A Phase 1B study will be completed at the expanded Clay Hill onshore substation site (i.e., at Parcels 3, 4, and 5). Archaeological investigations of the substation parcels will occur in zones of high and moderate sensitivity with shovel test pits placed at 10-m intervals along judgmentally placed transects. Some test pits will be placed in zones of low archaeological sensitivity to confirm that ranking.

In the unlikely event that the Proponent needs to use the Old Falmouth Road onshore substation site, a Phase 1B survey would also be conducted at this site.

A Phase 1A Survey will be completed to evaluate the Additional Phase 2 Onshore Cable Route Segments (see Figure 1.3-1). Where access is possible, the Additional Phase 2 Onshore Cable Route Segments will be examined more closely by walkover survey/ground inspection and judgmental use of soil auger coring. Environmental characteristics such as physical conditions of the site, the degree of natural or human disturbance, proximity to sensitive resources such as estuarine environments, among others, will be documented. If the Phase 1A Survey indicates that a Phase 1B survey is needed, it will be conducted according to the schedule in Section 2.2.

As part of the planned Phase 1A and 1B Surveys, National Registry of Historic Places (NRHP) eligibility determinations and assessments of effects will be completed.

Unanticipated Discoveries Plan

The Proponent has prepared a plan for unanticipated discoveries (see "Procedures Guiding the Discovery of Unanticipated Archaeological Resources and Human Remains" in Appendix III-G of the COP). This plan will be followed and implemented during all planned studies described in this PIP.

2.2 Schedule

The Phase 1B study for the Clay Hill onshore substation site (Parcels 3, 4, and 5) and the Phase 1A study of the Additional Phase 2 Onshore Cable Route Segments are planned to occur this fall, with the report submitted to BOEM in November/December 2022. Upon review of the report and acceptance by BOEM, results will be circulated to consulting parties.

If the Phase 1A Survey of the Additional Phase 2 Onshore Cable Route Segments indicates that a Phase 1B survey is needed, it will be conducted prior to the FEIS.

In the unlikely event that the Proponent needs to use the Old Falmouth Road onshore substation site, a Phase 1B survey will be conducted prior to the FEIS. Should the Proponent identify additional parcels as potential onshore substation sites at a later date, archaeological survey and Section 106 Consultation will be conducted in a manner consistent with this Phased Identification Plan and/or in accordance with stipulations in a forthcoming MOA.

Table 2.2-1 provides the anticipated NEPA/Section 106 milestones, including actions led by BOEM and actions led by the Proponent.

Table 2.2-1 Anticipated NEPA/Section 106 Milestones

Upcoming NEPA/Section 106 Milestones			
Cultural Reports Distributed to Section 106 Consulting Parties	December 2022		
Completion of Outstanding Archaeological Surveys	November 2022		
Draft Environmental Impact Statement Published	Anticipated December 23, 2022		
TARA Addendum Submitted for BOEM Review	December 2022		
TARA Addendum Submitted to Section 106 Consulting Parties	February 2023		
Potential TARA Addendum Consultation Meeting-	February 2023		
Section 106 Consulting Party Review of TARA Addendum Closes	March 2023 (30-day review period)		
Final Environmental Impact Statement Published	Anticipated September 22, 2023		
Record of Decision	Anticipated October 20, 2023		

APPENDIX A REQUIRED ENVIRONMENTAL PERMITS

Table 1 Required Environmental Permits for New England Wind

Agency/ Regulatory Authority	Permit/Approval	Phase 1 Status (as of November 2022)	Phase 2 Status (as of November 2022)
Federal Permits/Approx	vals		
	Site Assessment Plan (SAP) approval ²	Completed.	Completed.
	Construction and Operations Plan (COP) approval/Record of Decision (ROD)	COP filed with BOEM July 2, 2020	COP filed with BOEM July 2, 2020
	National Environmental Policy Act (NEPA) Environmental Review	Initiated by BOEM June 30, 2021	Initiated by BOEM June 30, 2021
Bureau of Ocean Energy Management (BOEM)	Consultation under Section 7 of the Endangered Species Act with National Marine Fisheries Service (NMFS) and US Fish and Wildlife Service (USFWS), coordination with states under the Coastal Zone Management Act (CZMA), government-togovernment tribal consultations, consultation under Section 106 of the National Historic Preservation Act (NHPA), and consultation with NMFS for Essential Fish Habitat (EFH).	To be initiated by BOEM	To be initiated by BOEM
	Facility Design Report (FDR) and Fabrication and Installation Report (FIR)	To be filed (TBF)	TBF
US Environmental Protection Agency (EPA)	EPA Permits under Section 316(b) of the Clean Water Act (CWA), including National Pollutant Discharge Elimination System (NPDES) Permit(s)	TBF	TBF
	OCS Air Permit	Initial application filed October 7, 2022	Initial application filed October 7, 2022
US Army Corps of Engineers (USACE)	CWA Section 404 Permit (Required for side-casting of dredged material and placement of foundations, scour protection, and cable protection)	Application Filed August 1, 2022	Application Filed August 1, 2022

-

A meteorological-oceanographic buoy (metocean buoy) was installed in Lease Area OCS-A 0501 (prior to its segregation into Lease Areas OCS-A 0501 and OCS-A 0534) under an approved SAP in May 2018.

Table 1 Required Environmental Permits for the Project (Continued)

Agency/ Regulatory Authority	Permit/Approval	Phase 1 Status (as of November 2022)	Phase 2 Status (as of November 2022)
Federal Permits/Approv	vals		
	Rivers and Harbors Act of 1899 Section 10 Individual Permit (Required for all offshore structures and dredging activities)		
US National Marine Fisheries Service (NMFS)	Letter of Authorization (LOA) or Incidental Harassment Authorization (IHA)	Application considered adequate and complete July 20, 2022	Application considered adequate and complete July 20, 2022
US Coast Guard (USCG)	Private Aid to Navigation (PATON) authorization	TBF	TBF
Federal Aviation Administration (FAA)	No Hazard Determination (for activities at construction staging areas and vessel transits, if required)	TBF	TBF
ISO New England			
ISO New England (ISO- NE)	Interconnection Authorization	Interconnection request under review	Interconnection request(s) under review.
State Permits/Approval	s		
Massachusetts Environmental Policy Act (MEPA) Office	Certificate of the Secretary of Energy and Environmental Affairs on the Final Environmental Impact Report	Environmental notification form (ENF) filed on June 11, 2020 Draft Environmental Impact Report (DEIR) submitted March 19, 2021 (Certificate received June 25, 2021). Final Environmental Impact Report (FEIR) filed December 15, 2021 (Certificate received January 28, 2022)	Environmental notification form (ENF) filed on September 30, 2022
Massachusetts Energy Facilities Siting Board (EFSB)	G.L. ch. 164, § 69 Approval	Petition filed on May 28, 2020	Petition filed on November 1, 2022
Massachusetts Department of Public Utilities (DPU)	G.L. ch. 164, § 72, Approval to Construct G.L. ch. 40A, § 3 Zoning Exemption (if needed)	Petitions filed on May 28, 2020	Petition filed on November 1, 2022

Table 1 Required Environmental Permits for the Project (Continued)

Agency/ Regulatory Authority	Permit/Approval	Phase 1 Status (as of November 2022)	Phase 2 Status (as of November 2022)
State Permits/Approva	ls	,	
Massachusetts Department of Environmental	Chapter 91 Waterways License and Dredge Permit/ Water Quality Certification (Section 401 of the CWA)	Application filed May 5, 2022	TBF
Protection (MassDEP)	Approval of Easement (Drinking Water Regulations) ³	N/A	TBF (if needed)
Massachusetts Division of Marine Fisheries (DMF)	Letter of Authorization and/or Scientific Permit (for surveys and pre-lay grapnel run)	TBF	TBF
Massachusetts	Non-Vehicular Access Permits	TBF	TBF
Department of Transportation (MassDOT)	Rail Division Use and Occupancy License (if needed)	TBF (if needed)	TBF (if needed)
Massachusetts Board of Underwater Archaeological Resources (MBUAR)	Special Use Permit	Special Use Permit 17-003 Renewal Application submitted December 20, 2020 Permit 17-003 renewal approved February 26, 2021 (issued to Gray & Pape ⁴).	Special Use Permit 17-003 Renewal Application submitted December 20, 2020 Permit 17-003 renewal approved February 26, 2021 (issued to Gray & Pape ⁴).
Natural Heritage and Endangered Species Program (NHESP)	Conservation and Management Permit (if needed)	Massachusetts ESA Determination issued April 1, 2022 with conditions and will not result in a Take of state-listed species	TBF (if needed)
Massachusetts Historical Commission (MHC)	Archaeological Investigation Permits (950 CMR § 70.00)	Reconnaissance survey permit application filed May 4, 2020 State Archaeologist's Permit #4006 for Reconnaissance Survey issued May 12, 2020 State Archaeologist's Permit #4006 amended and extended March 2, 2021 (issued to PAL ⁵).	Intensive survey permit application filed August 18, 2022 State Archaeologist's Permit #4227 for Intensive Survey issued October 4, 2022 (issued to PAL ⁵).

Not required for Phase 1, which does not cross any Zone 1 areas. An Approval of Easement could be required for Phase 2 if a Phase 2 onshore route passes through a Zone I area.

⁴ Gray & Pape's archaeological work is on behalf of Park City Wind LLC.

⁵ PAL's archaeological work is on behalf of Park City Wind LLC.

Table 1 Required Environmental Permits for the Project (Continued)

Agency/ Regulatory Authority	Permit/Approval	Phase 1 Status (as of November 2022)	Phase 2 Status (as of November 2022)
State Permits/Approva	s		
Massachusetts Office of Coastal Zone		Included as Appendix III-S of the COP	Included as Appendix III-S of the COP.
Management (CZM)/ Rhode Island Coastal Resources Management Council (CRMC)	Federal Consistency Determination (15 CFR § 930.57)	MA CZM review initiated September 14,2022 RI CRMC review initiated August 5, 2022	MA CZM review initiated September 14,2022 RI CRMC review initiated August 5, 2022
Regional Permits/Appro	ovals		
Cape Cod Commission (Barnstable County)	Development of Regional Impact (DRI) Review	Application filed June 10, 2022	TBF
Martha's Vineyard Commission (MVC)	DRI Review	Application filed June 17, 2022	TBF
Local Permits/Approval	s		
Barnstable Conservation Commission	Order of Conditions (Massachusetts Wetlands Protection Act and municipal wetland non zoning bylaws)	NOI filed April 29, 2022	ТВҒ
Barnstable Department of Public Works (DPW) and/or Town Council	Street Opening Permits/Grants of Location	TBF	TBF
Barnstable Planning/Zoning	Zoning approvals as necessary	TBF	TBF
Edgartown Conservation Commission	Order of Conditions (Massachusetts Wetlands Protection Act and municipal wetland non-zoning bylaws)	NOI filed March 23, 2022	ТВҒ
Nantucket Conservation Commission	Order of Conditions (Massachusetts Wetlands Protection Act and municipal wetland non-zoning bylaws)	Order of Conditions issued May 16, 2022.	TBF
Mashpee Conservation Commission	Order of Conditions (Massachusetts Wetlands Protection Act and municipal wetland non-zoning bylaws) (if needed)	N/A	TBF (if needed)

Appendix B Sensitivity Maps at Onshore Substation Sites

Note: Appendix B provides the sensitivity maps of the onshore substation sites evaluated in April 2022. The Clay Hill onshore substation site was subsequently expanded, and Figure 1.3-1 provides an overview of the substation expansion and additional proposed terrestrial archaeology survey areas.

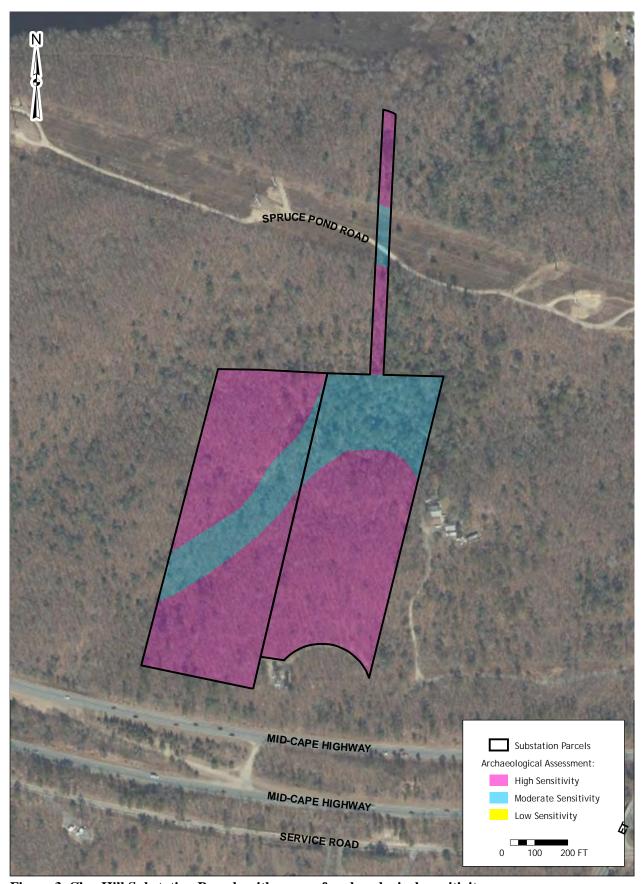


Figure 3. Clay Hill Substation Parcels with zones of archaeological sensitivity.

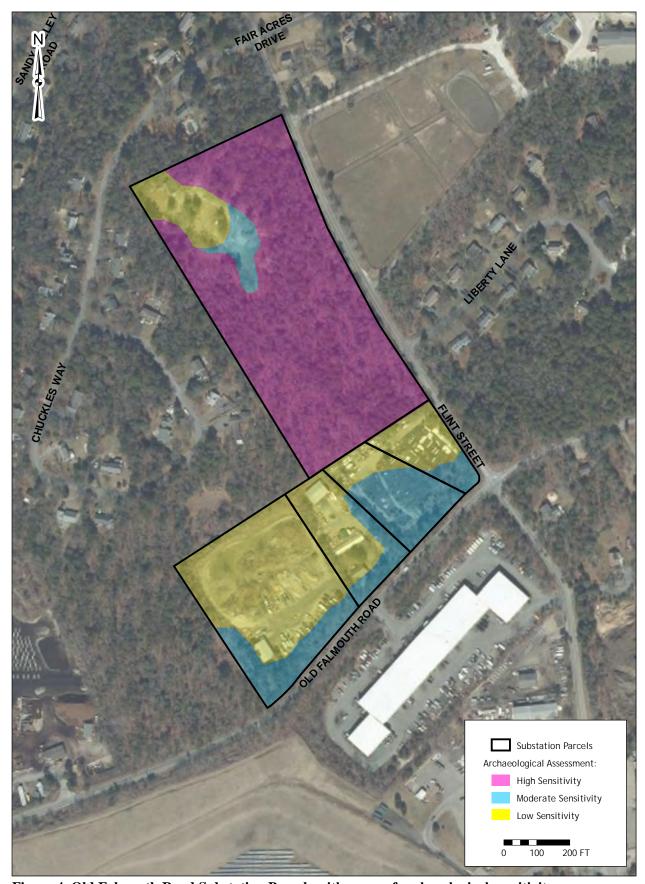


Figure 4. Old Falmouth Road Substation Parcels with zones of archaeological sensitivity.

ATTACHMENT 11 – NEW ENGLAND WIND TERRESTRIAL UNANTICIPA	ATED DISCOVERY PLAN



New England Wind Phase 1 and Phase 2 Onshore Cabling Route and Substation New England Wind Offshore Wind Energy Project`

Barnstable, Massachusetts

Procedures Guiding the Discovery of Unanticipated Archaeological Resources and Human Remains

Prepared for

Park City Wind LLC

Prepared by

The Public Archaeology Laboratory, Inc. 26 Main Street Pawtucket, Rhode Island 02860



February 2022

(revised August 2022)

Post-Review Discoveries Plan
Procedures Guiding the Discovery of Unanticipated Archaeological Resources and Human Remains
New England Wind Phase 1 and 2/ Upland Cabling Route and Substation
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Introduction

Park City Wind LLC (the "Proponent") is proposing to develop offshore renewable wind energy facilities in Lease Area OCS-A 0534 along with associated offshore and onshore cabling, onshore substations, and onshore operations and maintenance (O&M) facilities (herein referred to as "New England Wind" or the "Project"). Lease Area OCS-A 0534 is in federal waters south of Martha's Vineyard and Nantucket and has been designated by the Bureau of Ocean Energy Management (BOEM) for offshore wind energy development.

New England Wind will be developed in two Phases. Phase 1 of New England Wind, also known as Park City Wind, will deliver 804-megawatts (MW) of power via export cables that will make landfall within paved parking areas at either Craigville Public Beach or Covell's Beach in Barnstable, Massachusetts. From the Phase 1 landfall site, onshore export cables (installed primarily within an underground duct bank) will deliver power to an onshore substation to be constructed on a 6.7 acre parcel located at 8 Shootflying Hill Road. From the new onshore substation, grid interconnection cables will connect the substation to the grid interconnection point at the existing West Barnstable Substation. Phase 2, also known as Commonwealth Wind, will deliver 1,200-1500 MW of power via export cables that will make landfall at Dowses Beach and/or Wianno Avenue in Barnstable, Massachusetts. Onshore export cables (connecting the landfall site[s]to the Phase 2 onshore substation site[s]) and grid interconnection cables (connecting the substation[s] to the grid interconnection point at the existing West Barnstable Substation) are also expected to be installed underground, within public roadway layouts and utility rights-of-way (ROW). The properties needed for the Phase 2 onshore substation site(s) have not yet been secured. If technical, logistical, grid interconnection, or other unforeseen issues arise that preclude one or more Phase 2 export cables from interconnecting at the West Barnstable Substation, the Proponent may use the South Coast Variant of the Offshore Export Cable Corridor to interconnect at a second grid interconnection point along the South Coast of Massachusetts.

The Proponent is committed to the protection and preservation of cultural resources, in accordance with federal and state legislation, and is continuing that commitment during the construction of the upland terrestrial elements of New England Wind including the upland cabling route and the substation (Appendix A). The Proponent recognizes that while sections of the onshore cabling route and substation parcels have previously been subject to archaeological investigations and other areas were previously disturbed by existing utilities and buildings, it is possible that significant archaeological resources and/or human remains may be discovered during construction activities, particularly during excavation. The Proponent also recognizes the importance of compliance with federal, state, and municipal laws and regulations regarding the treatment of human remains, if any are discovered.

The Public Archaeology Laboratory Inc. ("PAL") is assisting the Proponent in the implementation of this Plan and the procedures guiding the unanticipated discovery of cultural resources and human remains detailed herein. The procedures will be implemented for two separate phases of work. During installation of the onshore cabling under roadways and in rights-of-way, in areas designated as having moderate and high archaeological sensitivity, an archaeologist will be on-site monitoring construction. Therefore, some of the notification procedures outlined below will be streamlined. In areas where archaeological investigation has been completed, such as the substation and entry/exit pits for trenchless crossings, an archaeologist will not be present and all the notification procedures outlined below will be in effect. These procedures were developed in consultation with the Massachusetts Historical Commission ("MHC"), office of the State Historic Preservation Officer ("SHPO") and federally recognized Indian tribes. These procedures summarize the approach that the Proponent will use to address unanticipated discoveries of archaeological resources or human remains within the Project's Area of Potential Effect ("APE").

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Standards/Guidelines and Laws/Regulations for Post-Review Discoveries of Archaeological Resources and Human Remains

Federal

- Section 106 of the National Historic Preservation Act of 1966, as amended (54 USC 300101) and Advisory Council on Historic Preservation implementing regulations (36 CFR 800).
- Secretary of the Interior's Standards for Archeology and Historic Preservation (48 CFR 44716-42);
- Advisory Council on Historic Preservation (ACHP): *Policy Statement Regarding Treatment of Burial Sites, Human Remains, and Funerary Objects*, Advisory Council February 23,2007).

Massachusetts

- Massachusetts Unmarked Burial Law (M.G.L. c. 7, s. 38A, c. 38, s.6, c. 9, ss. 26A & 27C, and c.114, s.17);
- Massachusetts SHPO: *Know How #4 What to do when Human Burials are Uncovered* (no date) (Appendix B);
- Massachusetts Historical Commission *Policy and Guidelines for Non-Native Human Remains Which Are Over 100 Years Old or Older* (1990); M.G.L. Chapter 9, Section 26A (7) (Appendix C).

Consultation with Federal and State Agencies and Indian Tribes

As part of the Project, Park City Wind LLC has been consulting with the Massachusetts SHPO, the federally recognized Indian tribes, the Mashpee Wampanoag Tribe and the Wampanoag Tribe of Gay Head/Aquinnah, and other interested stakeholders. All contact information for the SHPO, federally recognized Indian tribes, and other stakeholders is in this Post-Review Discoveries Plan. In the event any archaeological resources and/or human remains are encountered during construction of the Project, the Proponent and their Cultural Resources Manager ("CRM") will contact the relevant parties, as set forth in these Procedures.

Identification/Training

Basic training is required to identify potential archaeological sites. Park City Wind LLC and its employees and contractors should have a basic understanding of the types of archaeological resources that could be present in the onshore section of the project. All Project inspectors, Resident Engineers, and Construction Supervisors working on the Project's onshore excavation activities will be given basic training in archaeological site recognition by qualified PAL staff.

The purpose of this training will be to review the Proponent's commitments regarding cultural resources compliance and provide an overview of the general cultural history of the Project area, so that the Proponent and contractor's personnel will be aware of the kinds of archaeological resources that may be encountered during construction. In addition, the training program will emphasize the exact protocol to be followed, as outlined in these Procedures, regarding actions to be taken and notification required in the event of a discovery, such as human remains, during construction. The MHC's fact sheet entitled "Know How #4 What to Do When Human Burials are Uncovered" will be distributed (Appendix B).

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The training will be designed to ensure that New England Wind personnel and construction contractors involved in excavation activities for the onshore portion of New England Wind understand the extent of the archaeological surveys performed to date. The training will also review the distinction between archaeological sites that have been located and "cleared" under the cultural resource management process and any new discoveries that may occur during the construction process.

Notification Procedures

The following section details the protocols that will be followed in the event that archaeological resources or human remains are discovered during the construction process.

Archaeological Discovery Protocol

The following procedures will be adhered to in the event of a potential discovery of archaeological resources during construction.

- 1. In the event that suspected archaeological resources are uncovered during a construction activity, that activity shall immediately be halted until it can be determined whether the resources are cultural and, if so, whether they represent a potentially significant site.
- 2. The Contractor will immediately notify the Resident Engineer of the potential discovery. Notification will include the specific construction area (e.g., trench wall, spoil pile, foundation excavation) in which the potential site is located.
- 3. The Resident Engineer will direct a Stop Work order to the Contractor's Site Foreman to flag or fence off the archaeological discovery location and direct the Contractor to take measures to ensure site security. Any discovery made on a weekend or overnight hours will be protected until all appropriate parties are notified of the discovery. The Contractor will not restart work in the area of the find until the Resident Engineer has granted clearance.
- 4. The Resident Engineer will indicate the location and date of the discovery on the project plans and will undertake a site visit or otherwise coordinate an on-site archaeological consultation.
- 5. Upon notification or discovery of a possible archaeological site, the Resident Engineer will contact the Proponent's cultural resource consultants (PAL), who will in turn be responsible for determining whether a visit to the area is required. That determination may be made by viewing photographs of any object or soil discolorations sent to the archaeologist in combination with a verbal description from the Resident Engineer. If a site visit is necessary, the archaeologist will have a crew on site within 24 hours after notification.
 - If on-site archaeological investigations are required, PAL will inform the Resident Engineer who then will inform the construction contractor. BOEM will also be notified of the need to conduct archaeological investigations. No construction work at the discovery site that could affect the archaeological resource will be performed until the archaeological fieldwork is complete. The site will be flagged as being off-limits for work but will not be identified as an archaeological site *per se* in order to protect the resources.
- 6. If PAL determines a site visit is not required as the reported discovery is found to not be a potentially significant archaeological resource, PAL will notify the Resident Engineer who will

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- 7. If PAL determines a site visit is required, the PAL archaeologist will conduct a review of the discovery site in accordance with MHC standards and guidelines. Since the area will have been partially disturbed by construction activities, the objective of cultural resource investigations will be to evaluate the discovery site quickly so that notifications and consultation can proceed. BOEM will also be notified of the results of the discovery and evaluation to facilitate consultations.
- 8. The archaeologist will determine, based on any cultural materials or subsurface features found and the cultural sensitivity of the area in general, whether the site is potentially significant and requires immediate notification of the SHPO by telephone. If not, information about the site will be faxed or sent by express mail to the SHPO in order to ensure a quick site clearance. The Proponent and PAL will work with the SHPO to ensure that a treatment plan for the site is developed and implemented as quickly as possible. BOEM will also be notified about the transmittal of information on the archaeological site to the SHPO.
- 9. If the site is determined to be a significant archaeological resource threatened by onshore development for New England Wind, PAL, at the direction of the Proponent and in consultation with the SHPO, BOEM and as appropriate, Indian tribes and any other relevant consulting parties, will develop and implement under a State Archaeologist's permit (950 CMR 70) a site mitigation plan.

Duration of any work stoppages will be contingent upon the significance of the identified archaeological resource(s) and consultation with Proponent, SHPO, and other appropriate parties to determine the appropriate measures to avoid, minimize, or mitigate any adverse effects to the site.

Discovery of Human Remains Protocol

If any human remains are to be encountered, they will likely be discovered in excavations, possibly below areas where previous ground disturbance (e.g., road construction, existing utilities) has occurred.

At all times human remains must be treated with the utmost dignity and respect. Human remains and/or associated artifacts will be left in place and not disturbed. No skeletal remains or materials associated with the remains will be collected or removed until appropriate consultation has taken place and a plan of action has been developed.

- 1. If any personnel on the construction site identify human remains or possible human remains, all construction work in the immediate vicinity that could affect the integrity of the remains will cease immediately. The remains should not be touched, moved, or further disturbed. The Resident Engineer will be informed immediately and notified of the exact location of the remains, as well as of the time of discovery. The Resident Engineer will direct a Stop Work order to the Contractor's Site Foreman to take measures to ensure site security.
- 2. The Resident Engineer will be responsible for immediately contacting the PAL archaeologist.
- 3. The PAL archaeologist and Park City Wind LLC will be responsible for notifying appropriate company personnel as well as the State Archaeologist, the Office of the Chief Medical Examiner (OCME), the State Police, and BOEM. If the PAL archaeologist determines that the remains are obviously human and recent, this will be communicated to all the contacts, including the OCME. If the PAL archaeologist considers that the remains appear to be over 100 years old, this will be indicated to the OCME, and the State Archaeologist so that they can coordinate and respond. The State Archaeologist will determine if the remains are Native American and if so, will notify the Massachusetts Commission on Indian Affairs.

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- 4. Park City Wind LLC, BOEM staff, and the State Archaeologist will consult with the property owner and the Commission on Indian Affairs if the remains are Native American, to discuss whether there are prudent and feasible alternatives to protect the remains. The results of this consultation will be made in writing. If it is not possible to protect the remains, they may be excavated only under a Special Permit (950 CMR 70.20[2]) granted by the State Archaeologist after review of an adequate data recovery plan that specifies a qualified research team and an appropriate research design (950 CMR 70.11[2]), including a proposal for disposition of the remains that is consistent with the results of consultation.
- 5. If the remains are non-Native, the State Archaeologist will determine whether a skeletal analysis of the remains will be conducted and whether the remains will be deposited in a curatorial facility or reinterred. These decisions will be made in consultation with BOEM and other interested parties as defined in the *Policy and Guidelines for Non-Native Human Remains Which Are Over 100 Years Old or Older* (MHC 1990) (Appendix C).
- 6. In all cases, due care will be taken in the excavation and subsequent transport and storage of the remains to ensure their security and respectful treatment.

CONTACTS

State Police

Appropriate State Police Barracks

Phone: 911

Medical Examiner

Massachusetts Office of the Chief Medical Examiner

720 Albany Street

Boston, Massachusetts 02118

Contact: Mindy Hull, MD, Chief Medical Examiner

Phone: (617) 267-6767

State Historic Preservation Office

Massachusetts Historical Commission

220 Morrissey Boulevard Boston, Massachusetts 02125

Contact: Brona Simon, State Archaeologist and SHPO

Tel: (617) 727-8470 brona.simon@state.ma.us

Massachusetts Commission on Indian Affairs

100 Cambridge Street, Suite 300 Boston, Massachusetts 02114

Contact: John A. Peters, Jr., Executive Director

Phone: (617) 573-1292

Email: john.peters@state.ma.us

Federally Recognized Tribal Contacts

Mashpee Wampanoag Indian Tribe

Post-Review Discoveries Plan

Procedures Guiding the Discovery of Unanticipated Archaeological Resources and Human Remains

New England Wind Phase 1 and 2/ Upland Cabling Route and Substation

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483 Great Neck Rd. South, Mashpee, MA 02649

Contact: David Weeden, Deputy Tribal Historic Preservation Officer

Phone: (508) 447-0208, ext. 102 Email: dweeden@mwtribe.com

Wampanoag Tribe of Gay Head (Aquinnah)

20 Black Brook Road

Aquinnah, Massachusetts 02535

Contact: Bettina M. Washington, Tribal Historic Preservation Officer

Phone: (508) 560-9014

Email: thpo@wampanoagtribe-nsn.gov

Federal Agency

Bureau of Ocean Energy Management Office of Renewable Energy Programs

45600 Woodland Road, VAM-OREP

Sterling, VA.20166

Contact: Laura Kate Schnitzer, Archaeologist

Email: laura.schnitzer@boem.gov

Project Proponent

Park City Wind, LLC

Contact: Maria Hartnett Phone: (410) 451-9766

Email: mHartnett@epsilonassociates.com>

Cultural Resource Consultant

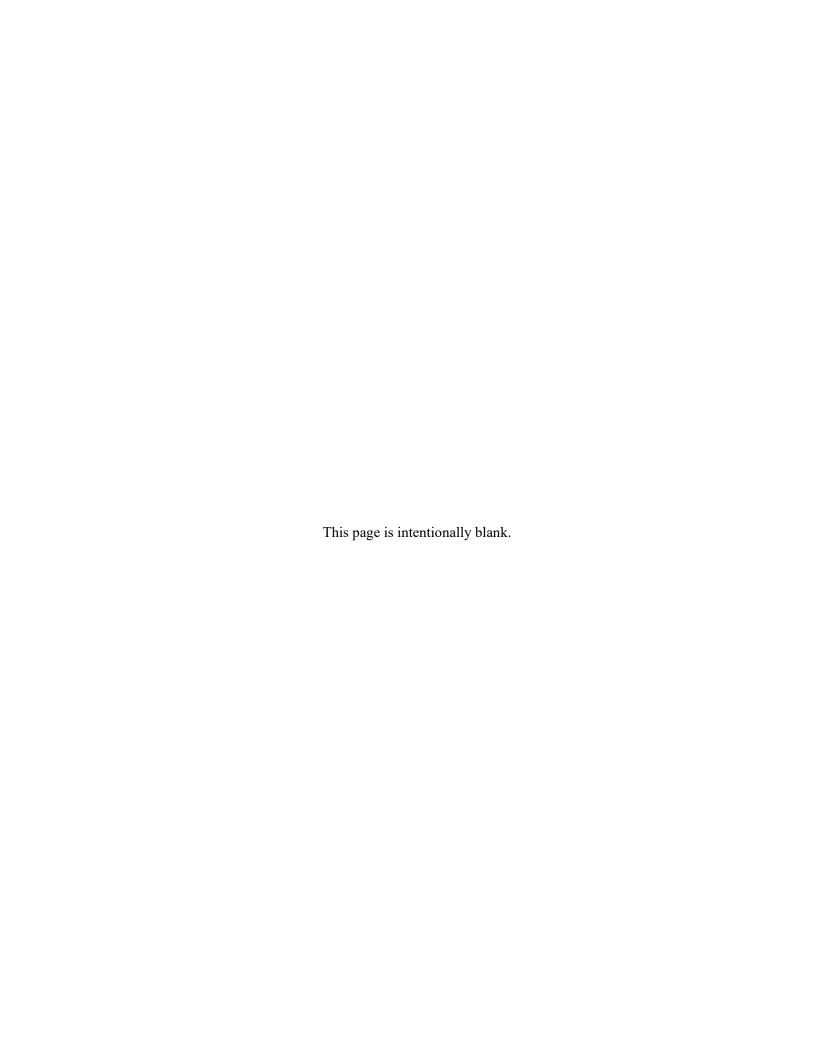
The Public Archaeology Laboratory, Inc.

26 Main Street

Pawtucket, RI 02860

Contact: Deborah C. Cox. President Phone: 401-487-4002/401-728-8780

Email: dcox@palinc.com



ATTACHMENT 12 – NEW ENGLAND WIND UNANTICIPATED DISCOVERIES PLAN FOR SUBMERGED ARCHAEOLOGICAL RESOURCES





Construction and Operations Plan

Lease Area OCS-A 0534

Volume II-D Appendices

November 2022

Submitted by Park City Wind LLC Submitted to
Bureau of Ocean Energy
Management
45600 Woodland Rd
Sterling, VA 20166

Prepared by
Epsilon Associates, Inc.

Epsilon

ASSOCIATES INC.



New England Wind Construction and Operations Plan for Lease Area OCS-A 0534 Volume II-D Appendices

Submitted to:
BUREAU OF OCEAN ENERGY MANAGEMENT

45600 Woodland Rd Sterling, VA 20166

Submitted by: Park City Wind LLC



In Association with:

Baird & Associates
Biodiversity Research Institute
Capitol Air Space Group
Geo SubSea LLC
Geraldine Edens. P.A.

JASCO Applied Sciences
Public Archaeology Laboratory, Inc.
RPS
Saratoga Associates
SEARCH. Inc.

Gray & Pape Wood Thilsted Partners Ltd

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UNANTICIPATED SUBMERGED ARCHAEOLOGICAL DISCOVERIES PLAN

UNANTICIPATED DISCOVERIES OF ARCHAEOLOGICAL SITES, HISTORIC SITES, AND SUBMERGED CULTURAL RESOURCES, INCLUDING HUMAN REMAINS

New England Wind is the proposal to develop offshore renewable wind energy facilities in Bureau of Ocean Energy Management (BOEM) Lease Area OCS-A 0534 along with associated offshore and onshore cabling, onshore substations, and onshore operations and maintenance (O&M) facilities. Park City Wind LLC, a wholly owned subsidiary of Avangrid Renewables, LLC, is the Proponent of this undertaking and will be responsible for the construction, operation, and decommissioning of New England Wind. New England Wind constitutes a federal undertaking with the potential to affect submerged historic properties and is therefore subject to consultation under Section 106 of the National Historic Preservation Act (NHPA) (Title 54 U.S.C. § 306108). A preliminary area of potential effects (PAPE) was developed for the purposes of preparing a marine archaeological resources assessment (MARA) report. The PAPE for submerged portions of the proposed project covers an approximately 411–453 square kilometers (km2) (101,590–111,939 acres) in size depending upon the final footprint of Vineyard Wind 1.

Although a robust MARA was conducted, it is impossible to ensure that all cultural resources were discovered within the submerged portions of New England Wind. Even at sites that have been previously identified and assessed, there is a potential for the discovery of previously unidentified archaeological components, features, or human remains that may require investigation and assessment. Furthermore, identified historic properties may sustain effects that were not originally anticipated. Therefore, a procedure has been developed for the treatment of unanticipated discoveries that may occur during site development, operations and maintenance, and decommissioning. This Unanticipated Discoveries Plan (UDP) is subject to revisions based on consultations with interested parties and the provisions of any Memorandum of Agreement that may be executed for the Project pursuant to Section 106 of the National Historic Preservation Act or the Act's implementing regulations at 36 CFR Part 800. The implementation of the final UDP will be overseen by a qualified marine archaeologist (QMA), as designated by the Proponent, who meets or exceeds the Secretary of the Interior's *Professional Qualifications Standards* for archaeology.

If unanticipated cultural resources are discovered, the following steps should be taken:

- 1) Per Lease Stipulation 4.2.7.1, all bottom-disturbing activities in the immediate area of the discovery shall cease in accordance with all safety procedures and emergency shut down protocols and every effort will be made to avoid or minimize impacts to the cultural resource(s).
- 2) The marine contractor or other responsible party shall immediately notify the Proponent of the discovery.
- 3) The Proponent shall evaluate the nature of the discovery and will retain the services of a qualified marine archaeologist to assist in such evaluations and associated consultations.
- 4) The Proponent shall keep the location of the discovery confidential and take no action that may adversely affect the archaeological resource until BOEM has made an evaluation and instructs the applicant on how to proceed.
- 5) The Proponent shall conduct additional investigations as directed by BOEM to determine if the resources is eligible for listing in the National Register of Historic Places (30 CFR 585.802(b)).
- 6) Per Lease Stipulation 4.2.7.2, BOEM shall be notified of the potential archaeological resource within 24 hours of the discovery. The Proponent shall also notify the State Historic Preservation Officer (SHPO) of Massachusetts, the State Archaeologist and the Tribal Historic Preservation Officers (THPOs) or other designated representatives of the consulting tribal governments.
- 7) Per Lease Stipulation 4.2.7.3, within 72 hours of the discovery, the Proponent shall issue a report

- in writing to BOEM providing available information concerning the nature and condition of the cultural resource and observed attributes relevant to the resource's potential eligibility for listing in the National Register of Historic Places. If the discovery is in state waters, MBUAR and MHC will be notified in writing.
- 8) The Proponent shall consult with BOEM, as feasible, to obtain technical advice and guidance for the evaluation of the discovered cultural resource.
- 9) If the impacted resource is determined by BOEM to be National Register eligible, a mitigation plan shall be prepared by the Proponent for the discovered cultural resource. This plan must be reviewed by BOEM prior to submission to the SHPOs and tribal representatives for their review and comment. The consulting parties are expected to respond with preliminary comments within two working days, with final comments to follow as quickly as possible.
- 10) Per Lease Stipulation 4.2.6, the Proponent may not impact a known archaeological resource without prior approval from BOEM. No development activities in the vicinity of the cultural resource will resume until either a mitigation plan is executed or, if BOEM determines a mitigation plan is not warranted, BOEM provides written approval to Park City Wind, LLC to resume construction.

Should the Proponent designate persons to serve as Onboard Representatives on each vessel during bottom-disturbing activities, training and resources will be produced to ensure the Onboard Representatives can identify potential submerged cultural resources. If training is elected, it will occur prior to all bottom-disturbing activities. Unanticipated discoveries are possible during any bottom-disturbing activities including anchoring and recovery, pre-construction surveys, visual inspections/seafloor imaging, etc. Any materials encountered (except potential human remains) should be photographed and placed immediately into seawater in a clean container that can be sealed. No photographs shall be taken of any potential human remains.

If human remains are encountered:

- 1. All work in the near vicinity of the human remains should cease and reasonable efforts should be made to avoid and protect the remains from additional impact. In cases of inclement weather, any recovered human remains should be protected with tarpaulins.
- 2. The State Police Detectives at the local District Attorney's Office, Office of the Chief Medical Examiner, State Archaeologist, Director of the MBUAR, and the Environmental Police should be immediately notified by the Proponent as to the findings.
- 3. A qualified professional archaeologist should be retained to investigate the reported discovery, inventory the remains and any associated artifacts, and assist in coordinating with state and local officials.
- 4. A plan for the avoidance of any further impact to the human remains and/or mitigative excavation, reinternment, or a combination of these treatments will be developed in consultation with the State Archaeologist, the SHPO, and if applicable, appropriate Indian tribes or closest lineal descendants. All parties will be expected to respond with advice and guidance in an efficient time frame. Once the plan is agreed to by all parties, the plan will be implemented.

Notification Points of Contact (to be updated annually):

Office of the Chief Medical

Examiner 720 Albany St. Boston, MA 02118 Phone: (617)-267-6767

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Director MBUAR 251 Causeway Street Suite 900 Boston, MA 02114 Phone: (617)-626-1141 david.s.robinson@mass.gov

Brona Simon

State Historic Preservation Officer & Executive Director
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Environmental Police

Emergency 24/7 Statewide Dispatch 251 Causeway Street Suite 101 Boston, MA 02114 Phone: (800)-632-8075

John A. Peters

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Bettina M. Washington

Tribal Historic Preservation Officer Wampanoag Tribe of Gay Head (Aquinnah) 20 Black Brook Road Aquinnah, MA 02535 Phone: (508) 560-9014

thpo@wampanoagtribe-nsn.gov

BOEM

Bureau of Ocean Energy Management Office of Renewable energy Programs 45600 Woodland Road (VAM-OREP) Sterling, VA 20166 Phone: (703)-787-1085

Dukes County District Attorney's Office

81 Main Street Edgartown, MA 02539 Phone: (508)-627-7780

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ATTACHMENT J-2: ENTITIES INVITED TO BE CONSULTING PARTIES

The following is a list of governments and organizations that BOEM contacted and invited to be a consulting party to the NHPA Section 106 review of the New England Wind Project (formerly Vineyard Wind South) between June 2021 and April 2022. During the consultations, additional parties were made known to BOEM and were added as they were identified (Attachment J-3). All counties and municipalities listed below are in Massachusetts unless otherwise specified.

- Advisory Council on Historic Preservation (ACHP)
- Alliance to Protect Nantucket Sound
- Avangrid
- Bureau of Safety and Environmental Enforcement
- Cape Cod Commission
- Non-federally recognized historic Massachusetts Chappaquiddick Tribe of the Wampanoag Nation
- City of New Bedford
- City of Fall River
- Connecticut Department of Economic and Community Development, State Historic Preservation Office
- County of Barnstable
- County of Bristol
- County of Dukes
- Cultural Heritage Partners
- The Delaware Nation
- Delaware Tribe of Indians
- Gay Head Lighthouse Advisory Board
- Historic District Commission (Nantucket)
- Maria Mitchell Association (Dark Skies Initiative)
- Martha's Vineyard Commission
- Mashantucket (Western) Pequot Tribal Nation
- Mashpee Wampanoag Tribe of Massachusetts

- Massachusetts Board of Underwater Archaeological Resources
- Massachusetts Commission on Indian Affairs
- Massachusetts Historical Commission
- Mohegan Tribe of Indians of Connecticut
- Nantucket Conservation Foundation
- Nantucket Historical Association
- Nantucket Historical Commission
- Nantucket Planning Commission
- Nantucket Preservation Trust
- Narragansett Indian Tribe
- National Oceanic and Atmospheric Administration, Habitat and Ecosystem Services Division
- National Park Service
- Office of the Deputy Assistant Secretary of the Navy for Environment
- Preservation Massachusetts
- Rhode Island Historical Preservation & Heritage Commission
- The Shinnecock Indian Nation
- Town of Aquinnah
- Town of Barnstable
- Town of Barnstable Historical Commission
- Town of Chilmark
- Town of Dartmouth
- Town of Dighton
- Town of Edgartown
- Town of Fairhaven
- Town of Falmouth

- Town of Gosnold
- Town of Nantucket
- Town of Oak Bluffs
- Town of Tisbury
- Town of West Tisbury
- Town and County of Nantucket (via their counsel)
- Trustees, Martha's Vineyard and Nantucket
- U.S. Environmental Protection Agency
- U.S. Federal Aviation Administration
- U.S. Fish and Wildlife Service
- U.S. Army Corps of Engineers
- U.S. Coast Guard
- U.S. Department of Defense
- Vineyard Power Cooperative
- Vineyard Wind
- Wampanoag Tribe of Gay Head (Aquinnah)

ATTACHMENT J-3: CONSULTING PARTIES TO THE NEW ENGLAND WIND PROJECT

The following is a current list of consulting parties to the NHPA Section 106 review of the New England Wind Project, as of April 22, 2022.

- Advisory Council on Historic Preservation (ACHP)
- Alliance to Protect Nantucket Sound
- Bureau of Safety and Environmental Enforcement
- Cape Cod Commission
- County of Dukes
- County of Bristol
- Gay Head Lighthouse Advisory Board
- Martha's Vineyard Commission
- Mashantucket (Western) Pequot Tribal Nation
- Mashpee Wampanoag Tribe of Massachusetts
- Massachusetts Board of Underwater Archaeological Resources
- Massachusetts Historical Commission
- Nantucket Historical Commission (withdrew July 26, 2021)
- National Park Service
- Office of the Deputy Assistant Secretary of the Navy for Environment
- Park City Wind
- Rhode Island Historical Preservation & Heritage Commission
- Town of Nantucket (withdrew July 26, 2021)
- Town of Barnstable, Historical Commission
- U.S. Army Corps of Engineers
- U. S. Environmental Protection Agency
- Wampanoag Tribe of Gay Head (Aquinnah)

Some of the parties consulted over the course of the NHPA Section 106 review have voluntarily withdrawn from further participation in the consultation, as indicated by the withdrawal date in parentheses for each of those parties.

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