New England Wind

AVANGRID RENEWABLES

Construction and Operations Plan

Lease Area OCS-A 0534

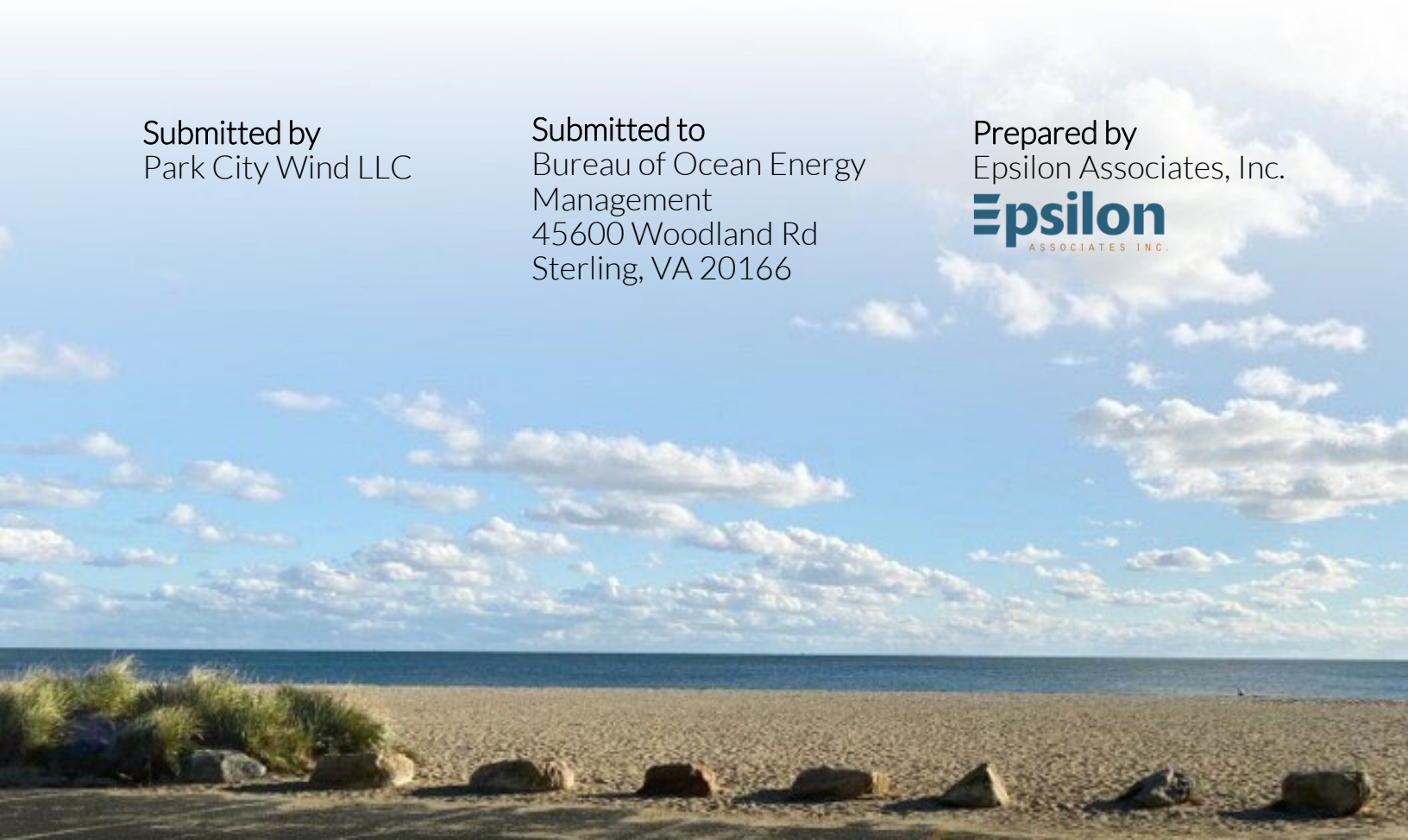
Volume III Appendices

December 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.



New England Wind Construction and Operations Plan for Lease Area OCS-A 0534

Summary of Terrestrial Archaeology Resource Assessments

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

Submitted by:
Park City Wind LLC

Prepared by:
Epsilon Associates Inc.

In Association with:
Public Archaeology Laboratory, Inc.

December 2022

TABLE OF CONTENTS

List of Figures

1.0 INTRODUCTION

Park City Wind, LLC (the Proponent) is proposing to develop offshore renewable wind energy facilities in Bureau of Ocean Energy Management (BOEM) Lease Area OCS-A 0534. This development is known as New England Wind and includes two phases: Phase 1 (which includes Park City Wind) and Phase 2 (which includes Commonwealth Wind). On behalf of the Proponent, the Public Archaeology Laboratory, Inc. (PAL) has conducted onshore due diligence surveys, archaeological reconnaissance surveys, and intensive archaeological surveys. The results of each archaeological assessment completed for each Phase of New England Wind are presented in detailed technical reports and included as Appendix III-G Terrestrial Archaeology Resources Reports of the Construction and Operations Plan (COP) submitted to BOEM for New England Wind. Epsilon Associates Inc. (Epsilon) has prepared this summary of the archaeological survey methods and results described in Appendix III-G.

The archaeological surveys were conducted for the Phase 1 and Phase 2 onshore Preliminary Areas of Potential Effects (PAPE). In accordance with BOEM's "Guidelines for Providing Historic Property Information Pursuant to 30 CFR Part 585" (dated May 27, 2020), the PAPE for terrestrial cultural resources is comprised of the depth and breadth of terrestrial areas potentially impacted by any ground-disturbing activities within the footprint of New England Wind's onshore facilities and construction staging areas (BOEM 2020).

The purpose of the due diligence surveys, archaeological reconnaissance surveys, and the intensive archaeological surveys was to evaluate the likelihood for, and determine if, any significant archaeological resources were located in the PAPE. In addition to this, the surveys are intended to assist with federal and state agency consultation and to provide necessary information (including National Register of Historic Places [NRHP] eligibility determinations and assessments of effects) to facilitate review of the New England Wind project under Section 106 of the National Historic Preservation Act (NHPA).

2.0 DESCRIPTION OF NEW ENGLAND WIND

2.1 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. Offshore export cables will transmit electricity generated by the WTGs to onshore transmission systems in the Town of Barnstable, Massachusetts. Park City Wind LLC, a wholly owned subsidiary of Avangrid Renewables, LLC, is the Proponent and will be responsible for the construction, operation, and decommissioning of New England Wind.

2.1.1 Phase 1 of New England Wind and Onshore Preliminary Area of Potential Effects

Phase 1, which includes Park City Wind, will be developed immediately southwest of the Vineyard Wind 1 project. The Phase 1 landfall site is planned at the Craigville Public Beach or Covell's Beach in the Town of Barnstable. Underground onshore export cables, located principally in roadway layouts or utility rights-of-ways (ROWs), will connect the landfall site to a new Phase 1 onshore substation at 6 and 8 Shootflying Hill Road 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. 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. 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 onshore 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 2.1-1). 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. 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.

G:\Projects2\MA\MA\5315\2022\Task_6\MXD\Fig1.2-1_Onshore_Development_Area_(Phase_1_and_2)_Confid_20221104.mxd

Data Source: Bureau of Geographic Information (MassGIS), Commonwealth of Massachusetts, Executive Office of Technology and Security Services

LEGEND

- Potential Phase 1 Onshore Export Cable and Grid Interconnection Routes
- Phase 1 Onshore Substation Site
- Potential Phase 2 Onshore Export Cable and Grid Interconnection Routes
- Trenchless Crossing
- Clay Hill Onshore Substation Site
- Old Falmouth Road Onshore Substation Site
- Utility ROW (approximate)
- Existing West Barnstable Substation
- Town Boundary

Note: Parcel #214-001 may be used to support the trenchless crossing of the Phase 2 grid interconnection cables across Route 6.

Scale 1:48,000
1 inch = 4,000 feet

0 2,000 4,000 Feet

Map Coordinate System: NAD 1983 UTM Zone 19N
Basemap: 2016 Orthophotography, Bing

Clay Hill Onshore Substation Site

Old Falmouth Road Onshore Substation Site

Inset Map

Craigville Public Beach Landfall Site (Phase 1)

Covell's Beach Landfall Site (Phase 1)

Dowses Beach Landfall Site (Phase 2)

Wianno Ave Landfall Site (Phase 2)

BARNSTABLE

YARMOUTH

6A

6

28

130

132

bing

Clay Hill Onshore Substation Site

8 Shootflying Hill (SFH) Road Substation Site

6 SFH Road Substation Site Access

Parcel #214-001

New England Wind

AVANGRID RENEWABLES

Figure 2.1-1

Overview of Existing Terrestrial Archaeology Survey Areas for Phases 1 and 2

2.1.2 Phase 2 of New England Wind and Onshore Preliminary Area of Potential Effects

Phase 2, which includes Commonwealth Wind, will be located immediately southwest of Phase 1. The Phase 2 landfall site is at Dowses Beach Landfall Site and/or Wianno Avenue Landfall Site in Barnstable[1] Underground onshore export cables, located primarily within in roadway layouts or utility ROWs, will connect the 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. 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. 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 onshore 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.

[1] 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.

3.0 METHODS

3.1 Due Diligence Survey Methods

The due diligence reviews completed consisted of a search of the Massachusetts Historical Commission's (MHC) Inventory of the Historic and Archaeological Assets of the Commonwealth (MHC Inventory) and the Massachusetts Cultural Resource Information System (MACRIS) to identify previously recorded archaeological sites within the Phase 1 or Phase 2 PAPEs. This inventory search provided information about the types, nature, and distribution of archaeological resources located within the study area. During a due diligence survey archaeology staff would do a drive through the PAPE and assign broad zones of sensitivity.

3.2 Archaeological Reconnaissance Survey Methods

Archaeological reconnaissance surveys included reviewing archival information within one half mile (0.5) zone on either side of the cable routing centerlines and substation parcel boundaries. The survey had three main parts: archival research, windshield/walkover, and predictive modeling.

Archival research included collecting and reviewing environmental studies and data related to bedrock and surficial geological characteristics as well as studies related to hydrology, drainage patterns, and soil type. In addition to this, cultural and historical research was conducted within the broader region to provide context to the specific study area.

Windshield and walkover surveys were conducted to examine the general physical condition of the onshore PAPE where access was possible. Where access was possible, segments were 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, were documented. Where access was not possible, aerial photography combined with topography was evaluated.

The archival research and windshield/walkover surveys information was combined to develop a predictive model of potential site types and potential significant affiliations. The predictive model was utilized to rank the potential of the onshore PAPE into zones of low, moderate, and high sensitivity based on their probability to contain terrestrial archaeological sites using criteria such as the proximity of recorded and documented sites, local land use history, environmental data, and existing conditions.

3.3 Intensive Archaeological Survey Methods

Based upon previous work completed in due diligence and archaeological reconnaissance surveys, intensive archaeological survey were conducted in select locations. Intensive archaeological surveys were conducted with three strategies: (1) Background research, including a review of

historical literature, maps, and cultural resource management reports; and local informant interviews. Background research included coordinating with state and local resources to review state site files, artifact collection reports, and town reconnaissance surveys. (2) Field investigations, consisting of walkover assessment surveys and subsurface archaeological testing. Field surveys were conducted in areas identified as zones of high and moderate sensitivity with excavations of shovel test pits at 10-meter (m) intervals as well as shovel test pits placed at varied intervals along judgmentally placed transects. Some test pits were additionally located in zones of low archaeological sensitivity to confirm that ranking. Finally, (3) laboratory processing and analyses of recovered cultural materials was completed.

3.4 Consultations

The Proponent and/or PAL consulted with the Massachusetts State Historic Preservation Office (SHPO), the federally recognized Indian tribes (the Mashpee Wampanoag Tribe and the Wampanoag Tribe of Gay Head/Aquinnah), and other interested stakeholders in consultation with BOEM pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended (36 CFR 800). Reconnaissance and intensive archaeological surveys were conducted by PAL under State Archaeologist permits issued by the MHC. More detail is included in Appendix III-G for each phase of consultation.

4.0 RESULTS

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.

4.1 Phase 1

In May 2020, an archaeological reconnaissance survey was conducted for the Phase 1 onshore PAPE (as shown on Figure 2.1-1). 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 PAPE and zones of low, moderate, and high archaeological sensitivity were identified. An intensive survey of archaeologically sensitive portions of the proposed substation site and adjacent parcel was recommended.

In October 2021, an intensive archaeological survey was conducted at four locations associated with the onshore substation site, associated parcels, and potential work areas along the onshore cable routes. Limited cultural materials were recovered and based upon isolated finds were determined not to be National Register eligible and no further archaeological investigations were recommended by PAL.

Archaeological monitoring of other New England Wind onshore construction activities (where it was not feasible to dig during survey) within areas of moderate or high archaeological sensitivity is recommended and will be conducted during construction. Further detail is included in Appendix III-G.

4.2 Phase 2

In June 2020, a due diligence review was completed for the Phase 2 onshore PAPE 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.

In November 2021, an archaeological reconnaissance survey was conducted for the Phase 2 onshore PAPE (as shown on Figure 2.1-1). 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 PAPE and zones of low, moderate, and high archaeological sensitivity were identified.

In April 2022 an additional due diligence study was conducted for two potential onshore substation sites. 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. An intensive survey of archaeologically sensitive portions of the proposed substation sites is recommended and is planned.

Archaeological monitoring of other New England Wind onshore construction activities (where it is not feasible to dig during survey) within areas of moderate or high archaeological sensitivity is recommended and will be conducted during construction.

4.3 Unanticipated Discoveries Plan

The Proponent has prepared a plan for unanticipated discoveries that provides procedures to guide the discovery of unanticipated archaeological resources and human remains.

5.0 REFERENCES

[BOEM] Bureau of Ocean Energy Management. 2020. Guidelines for Providing Historic Property Information Pursuant to 30 CFR Part 585. https://www.boem.gov/sites/default/files/documents/about-boem/Archaeology%20and%20Historic%20Property%20Guidelines.pdf