

Appendix S. Analysis of Visual Effects to Historic Properties: Executive Summary for Public Release

Document Revision

A

Issue Date

November 2022



**Appendix S Analysis of Visual Effects to Historic Properties:
EXECUTIVE SUMMARY FOR PUBLIC RELEASE**

Mayflower Wind Energy LLC (Mayflower Wind) proposes an offshore wind renewable energy generation project (the Project) located in federal waters off the southern coast of Massachusetts in the Outer Continental Shelf (OCS) Lease Area OCS-A 0521 (Lease Area) approximately 48 kilometers (km) (26 nautical miles [nm]) south of Martha's Vineyard, Massachusetts and over 37 km (20 nm) south from Nantucket. The Project will deliver electricity to the regionally administered transmission system via two submarine Export Cable Corridors (ECCs) to anticipated points of interconnection (POIs) in Falmouth, Massachusetts and Brayton Point in Somerset, Massachusetts, respectively.

An Analysis of Visual Effects to Historic Properties (AVEHP) was completed to evaluate the Project's potential, to visually affect above-ground historic properties that are listed in, eligible for listing in, or potentially eligible for listing in the National Register of Historic Places (NRHP), are National Historic Landmarks (NHL), or are Traditional Cultural Properties (TCPs), and are located within the Preliminary Area of Potential Effects (PAPE) for the undertaking. Based on the nature of the onshore and offshore Project activities, physical or audible effects to above ground historic properties are not anticipated. Below-ground terrestrial archaeological resources, submerged archaeological resources, and geophysical and geotechnical studies are addressed in separate reports.

As a project that requires approval from the Bureau of Ocean Energy Management (BOEM), the Project is considered a federal undertaking and as such, must comply with Section 106 and Section 110 of the National Historic Preservation Act of 1966 (NHPA), as amended, and the National Environmental Policy Act of 1970 (NEPA). This investigation is intended to assist BOEM and the Massachusetts Historical Commission (MHC), serving as the State Historic Preservation Office, as well as Tribal Historic Preservation Offices (THPOs) with identifying historic properties and assessing the potential effects of the Project on those historic properties. The AVEHP follows guidelines set forth in BOEM's updated *Guidelines for Providing Archaeological and Historic Property Information, Pursuant to 30 CFR Part 585* (BOEM, 2020) and *National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation* (National Park Service [NPS], 1990). This effects evaluation follows the Criteria of Adverse Effect as outlined in 36 CFR 800.5 of Section 106 of the NHPA.

Potential visual effects to historic properties may result from a change to a historic property's setting. In the case of historic properties within the offshore PAPE, if some of their significance was derived from an unobstructed ocean view, then the introduction of Project Wind Turbine Generators (WTGs) and Offshore Substation Platform(s) (OSPs) to the setting has the potential to compromise the characteristics that make it eligible for the NRHP; and therefore, may result in an adverse effect. Similarly, some onshore historic properties, particularly those that may be within a historic district, where setting is an integral part of the significance, may be visually affected by the introduction of a new substation in the setting. Conversely, if a historic property does not derive part of its significance from an unobstructed ocean view, or the integrity of its setting has already been compromised by other intrusions or changes, then introduction of new visual elements would not be an adverse effect.

In accordance with the Section 106 guidelines, federal agencies shall make a "reasonable and good faith effort" to identify historic properties within the APE (or the Preliminary Area of Potential Effect (PAPE)), which is defined as the geographic area or areas within which an undertaking may directly or indirectly

cause changes in the character or use of historic properties, if any such properties exist. This assessment defined the PAPEs for the Offshore and Onshore Project Areas, with final determination to be made by the BOEM with input from consulting parties.

To determine the visual effects of the Project, AVEHP methodology relied upon viewshed modeling, background research, field investigation, desktop review, and analysis. Analysis considered all properties built in 1975 or prior, and particularly focused on those historic properties where setting is an integral part of the significance. To identify which resources have a maritime setting and seaward views as an integral part of their significance and have the potential to be affected by visual change introduced by Project activities in the PAPE, architectural historians reviewed documentation such as inventory forms, NRHP nominations, and reports from the Massachusetts Cultural Resource Information System (MACRIS) to gather specific physical and historical information about the resources, as well as their associated NRHP Criteria for Significance (Criteria A, B, C, or D) (36 CFR 60.4). Potential adverse effect determinations were made based on rankings used in the Visual Impact Assessment (VIA) (COP Appendix T) which rank visual contrast¹ of the Project from selected Key Observation Points. The VIA delineated the Area of Potential Visual Impact (APVI) which through a viewshed analysis for the onshore and offshore Project components. The maximum extent of viewshed delineation was set based on human visual acuity thresholds and to encompass the area in which the Onshore Project Area could potentially affect visual resources. The resultant mapped APVI represents the areas from which the Project may be visible; however actual visibility to the Project is confirmed with field observations. For the AVEHP, the offshore PAPE is defined as the portions of the APVI that fall extending up to 1 mi (1.6 km) landward from the coastline of Martha's Vineyard and Nantucket. The 1 mi (1.6 km) limit was determined based on field confirmation of visibility. The onshore PAPE was defined as the portions of the APVI which are located within 0.1 mi (0.16 km) of the substation site based on field confirmation of visibility within the APVI.

Offshore Project facilities that have the highest probability of introducing a new visual element are the WTGs and OSPs that will be constructed approximately 37 km (19.9 nm) south of Nantucket and 49 km (26 nm) southeast of Martha's Vineyard. The greatest potential for visual impact is from points along the southern shore of Nantucket and from the southeastern shore of Martha's Vineyard. Within the offshore PAPE there are 13 historic properties: two on Nantucket, eight on Martha's Vineyard and three TCPs. Of the 13 historic properties, seven have an ocean view that is an integral part of their significance and also appear to have a view of the offshore or onshore Project components. However, in most cases, mitigating factors such as distance, vegetative buffers, topography, atmospheric conditions, and earth's curvature eliminates the possibility of a substantial change in the viewshed.

Onshore, the Project component most likely to introduce a new visual element to a historic property is the substation at the Lawrence Lynch site in Falmouth, MA. During the preliminary design phases of the Project, potential visibility of above-ground Project facilities was taken into consideration. Previously disturbed sites were chosen for the onshore substation locations during the siting phase to limit the impact to nearby resources to the extent practicable. This was a conscious decision to avoid selection of greenfield sites, which would constitute a significantly higher impact by introducing yet another impact

¹ Visual contrast is defined as the extent to which a project appears different from the surrounding visual environment based on form, line, color and texture.

to the landscape and other natural and cultural resources. By co-locating the Project within areas of previous disturbance (e.g., using industrial site for the proposed substation), Mayflower Wind is minimizing impacts to the maximum extent practicable. As the Project design progresses, these and other avoidance and minimization efforts will be considered to reduce impacts to historic properties.

The analysis contained in this report was based on preliminary Project designs and may require revisions to the PAPE, historic properties within the PAPE, and the effects findings as the Project continues to develop. If, through the Section 106 and Section 110 processes, it is determined by the Massachusetts Historical Commission (MHC) or BOEM that the Project will result in adverse effects to historic properties, Mayflower Wind will consult with BOEM, MHC, THPOs, and consulting parties as necessary.