

Appendix R. Terrestrial Archaeological Resources Assessment - Brayton Point Phase 1A Executive Summary for Public Release

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Summary Report Mayflower Wind: Brayton Point HVDC Converter Station Onshore Facilities Somerset, Massachusetts

Terrestrial Archaeological Resources Assessment November 2022

Mayflower Wind, a joint venture of Shell New Energies LLC (Shell New Energies) and OW North America LLC (Ocean Winds), proposes to construct and operate the Mayflower Wind Project. The Project includes the offshore Mayflower Wind turbine array in federal waters on the Atlantic Outer Continental Shelf (OCS) within the Bureau of Ocean Energy Management (BOEM) Renewable Energy Lease Area OCS-A 0521 (Lease Area) approximately 20 miles (32 kilometers) south of Nantucket Island; inter-array cables, offshore substation platforms, and export cables that traverse federal and state waters with landfalls at Falmouth and Somerset, Massachusetts; and onshore HVDC converter stations, points of interconnection, and onshore, underground transmission delivery systems. Mayflower Wind proposes building the Brayton Point HVDC converter station in Somerset as a part of the onshore component of the Project.

Mayflower Wind contracted with The Public Archaeology Laboratory, Inc. (PAL) to conduct an archaeological reconnaissance and assessment for the Brayton Point HVDC converter station onshore facilities. The installation work will involve the construction of a new HVDC converter station, an underground cable system, and horizontal directional drilling (HDD) at the Lee River (preferred) or Taunton River (alternate) to connect the offshore export cables with the proposed HVDC converter station (Figure 1). The results of PAL's archaeological investigations were presented in a detailed technical report entitled *Technical Report: Terrestrial Archaeological Resources Assessment Mayflower Wind Offshore Wind Project: Brayton Point HVDC Converter Station Onshore Facilities and Underground Cable Route* (Waller 2022), which was prepared and submitted to the BOEM for the Mayflower Wind Project. The methods and results detailed in PAL's *Terrestrial Archaeological Resources Assessment* archaeological report for the Project are summarized below.

Purpose, Methods, and Consultation

The purpose of the archaeological assessment was to evaluate the potential for undiscovered archaeological sites to be present within Project work areas. The archaeological investigations included archival research, the development of Project-specific environmental and cultural contexts, review of studies of previous land uses, and a field review to evaluate the potential for undiscovered archaeological sites.



Figure 1. Proposed Mayflower Wind Brayton Point Converter Station onshore facilities.

Summary of Background Research

Project construction has the potential to affect archaeological properties and other cultural resources within the Project's Area of Potential Effects (APE). The archaeological reconnaissance identified previously reported archaeological sites within or near the Project study area and evaluated the potential for undiscovered sites at the HVDC converter station site, point of interconnection, onshore transmission route, the onshore export cable route alternatives, and horizontal direction drill alternates and landfalls. Information collected during the archival research combined with a site walkover provided the information necessary to assess the archaeological sensitivity, defined as the likelihood for belowground cultural resources to be present within proposed Project impact areas.

Historical aerial imagery and topographic maps track the evolution of Brayton Point from a seaside farm complex to a highly industrialized area dedicated to the generation and distribution of electrical power. Weetamoo, female sachem of the Pocasset Indian group of the Wampanoag Indian peoples, established her camp at present-day Fall River's Quequechan River in the seventeenth century. The nearby lands that include Somerset's Sewammock Neck, which ends at Brayton Point, was a place of Pocasset Indian seasonal encampments. The 1871 map of Swansea and Somerset depicts the J. Slade farmstead at the approximate location of the former Brayton Point cooling towers (see below). David A. Brayton and his heirs established their own farm and complex on Hogs Neck between 1871 and 1895.

Before the mid-twentieth century, Brayton Point was primarily agricultural with large fields demarcated by fieldstone walls extending southward from the salt marsh on the south side of the Fall River, Warren, and Providence rail line to Mount Hope Bay. Historical topographic maps indicate that Brayton Point changed very little between 1888 and 1957. By 1963, the Brayton family farm was abandoned, and industrial development of Brayton Point had begun with the construction of the New England Power Company facility. Development included earthmoving activities such as channeling to create docking slips and the construction of a large shipping pier on the east side of the Point that required filling in part of the Taunton River at Mount Hope Bay. Construction continued through the 1970s and 1980s with the further expansion of the power company that included the construction of large tanks on the neck next to the shipping pier and the excavation of a wide container channel through much of the property. Between 1985 and 1998, the open channel system was abandoned and filled, and by 1995 most of Brayton Point had been developed. Construction and remodeling of the Point continued with landfilling waste coal ash on the property generated through the coal firing process and the construction and completion of the Brayton Point Power Station cooling towers in 2009 and 2010. The plant closed power generation operations in 2017 and the cooling towers were demolished in 2019. Since 2019, many of the former power generation structures and facilities on Brayton Point have been torn down and others are in the process of being demolished.

Field Review and Sensitivity Assessment

The proposed Brayton Point HVDC converter station, underground cable system, and alternate HDD are within an industrial landscape that is actively undergoing dismantlement and demolition. The converter station will be built atop two large water containments north of the former Brayton Point Power Station east cooling tower foundation. The containment ponds were actively being filled and partially populated by phragmites vegetation. The Lee River HDD is proposed atop an artificial causeway next to a channel or canal excavated along the Lee River side of the Brayton Point Power Company property between 1971 and 1981. The Taunton River HDD alternate is proposed at a

parking lot on the Taunton River east of Brayton Point Road or at a second parking lot to the north. Underground duct bank, manholes and cables will be buried beneath existing stone or asphalt roadways within the former Brayton Point Power Station property.

Nineteenth-century railroad construction and rail dismantlement; and twentieth- and twenty-first-century construction, demolition, cutting and filling for a channel or canal, utilities installation and burial, and the disposition of waste material generated from the coal-firing operations in capped landfills have significantly altered the original landscape and disturbed or destroyed archaeological materials that may once have been present at the proposed Brayton Point HVDC converter station. The nearshore environment along the Taunton River shoreline has been significantly impacted by vegetative clearing, filling, surficial grading, and the construction and surfacing of a boat ramp. Accordingly, the archaeological sensitivity of the Project area includes the converter station, underground cable system and alternate HDD and landfall is not sensitive. Small pockets of natural soils with truncated remnant features may exist as isolates in areas where nineteenth-century agricultural tilling and twentieth-century disturbances from development is less than 3 feet (0.9 meters) below the pre-development land surface. However, due to the extensive disturbance, if any isolated materials are present, they would not be eligible for listing in the National/State Registers.

Recommendations

Most of Brayton Point, which includes the location of the proposed Brayton Point HVDC converter station, underground cable system and alternate HDD site has been impacted and substantially altered by development. Disturbance of shallowly buried soils on Brayton Point where archaeological sites pre-dating the twentieth century would most likely be found is extensive. Accordingly, construction of the Brayton Point HVDC converter station, underground cable system and HDD site will not impact significant historic properties eligible to the National/State Registers, and PAL recommended no further archaeological investigation of the Brayton Point HVDC converter station work area.

Reference

- Waller, Jr., Joseph N.
2022 *Terrestrial Archaeological Resources Assessment Mayflower Wind Offshore Wind Project: Brayton Point HVDC Converter Station Onshore Facilities and Underground Cable Route, Somerset, Massachusetts*. PAL Report No. 4256.01, Submitted to Mayflower Wind Energy LLC, Boston, MA.