

**TERRESTRIAL ARCHAEOLOGICAL RESOURCES ASSESSMENT
FOR THE MARYLAND OFFSHORE WIND PROJECT
LOCATED IN MARYLAND AND DELAWARE**

Non-Technical Summary

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INTRODUCTION

R. Christopher Goodwin and Associates, Inc. (RCG&A) completed Phase I archaeological survey to support the development of the Maryland Offshore Wind Project (Project). This work was performed on behalf of US Wind, Inc., (US Wind) is a majority owned by Renexia, a leader in renewable energy development in Italy and a subsidiary of Toto Holding S.p.A. The Project is located in the Commercial Lease of Submerged Lands for Renewable Energy Development on the Outer Continental Shelf (OCS) Offshore Maryland (Lease No. OCS-A 0490 [Lease]), by the merge of Lease Areas OCS-A 0489 and OCS-A 0490. The merged Lease area was granted to US Wind by the Bureau of Ocean Energy Management (BOEM) on January 10, 2018. The Lease area covers approximately 79,706.31 acres (32,256 hectares) off the Maryland coastline.

The Project's Offshore Export Cable Corridor (OECC) will connect the Lease area to the onshore Point of Interconnection (POI) at the US Wind Substations Property on Burton's Island, Delaware. Although several routes are being considered, the preferred cable route extends from the Lease area to a landfall location at 3R's Beach, Delaware and extends through Indian River Bay to the POI. The onshore components of this route (Onshore Export Cable Corridor 1 [OnECC1]) are minimal and include two Horizontal Directional Drill (HDD) corridors from 3R's Beach to the Indian River Bay and another HDD corridor from the Indian River to the Burton's Island POI. Several variant routes were under consideration including three options (OnECC1a, OnECC1b, and OnECC1c) that would utilize the same landfall as OnECC1 at 3R's Beach but would approach the POI via a southern land-based route. Another variant route (OnECC2) that was considered incorporated an alternative landfall at Tower Road Beach that would approach the POI from the north via a land-based route around Rehoboth and Indian River Bays. All of the variant routes would be buried within or adjacent to previously disturbed Right-of-Ways (ROWs) along roadways or utility corridors. The preferred OnECC1 route and the alternatives (OnECC1a-c and OnECC2)

are all located within Sussex County, Delaware. In addition, US Wind anticipates installing an operations and maintenance facility (O&M Facility) in West Ocean City, Maryland.

From 2021 to 2023, US Wind and R. Christopher Goodwin & Associates Inc. (RCG&A), the Consulting Archeologist, completed a Terrestrial Archaeological Resource Assessment (TARA) of the Project's preferred and variant onshore components. The results of the TARA are presented in a detailed report which is included as Appendix I2 of the Project's Construction and Operations Plan (COP). This document serves to summarize the methods and results of the TARA.

Regulatory Triggers

Construction of the Onshore Project Components may physically impact and have an Adverse Effect on archaeological sites located in or adjacent to the Project area. Section 106 (36 CFR Part 800) of the National Historic Preservation Act (NHPA) of 1966, as amended, requires Federal agencies to take into account the effects of their undertakings on historic properties. Historic properties include archaeological sites that are considered eligible for listing, were determined eligible for listing, or are already listed in the National Register of Historic Places (NRHP). Only these properties warrant consideration under Section 106 of the NHPA. The TARA was completed as part of the effort to identify and assess the Project's potential effects on terrestrial archaeological resources and is anticipated to support the Section 106 process of NHPA with analyses required under the National Environmental Policy Act (NEPA).

Preliminary Area of Potential Effects: Onshore Components

The Project's Area of Potential Effects (APE) is defined as the geographic area or areas within which the undertaking may directly or indirectly cause alterations in the character of use of historic properties, if any such properties exist (36 CFR 800.169d). Since the Project design is not far enough along to have a refined APE, US Wind in coordination with BOEM is utilizing a Preliminary Area of Potential Effects (PAPE) which incorporates "a reasonable range of project designs" associated with various components of the project (e.g., wind turbine generator options, export cable routes, substation locations). As the Project continues, BOEM will formally determine the boundaries of the APE for the onshore project in consultation with the Maryland and Delaware State Historic Preservation Offices (SHPOs), affected Native American Tribes and Tribal Historic Preservation officers (THPOs), and other consulting parties in accordance with 36 CFR 800.4.

US Wind's terrestrial PAPE (Figure 1) consists of all preferred onshore project elements (Preferred PAPE) as well as four alternative variants cable routes (Variant PAPEs) that were taken into consideration in case the Preferred PAPE is determined to be unfeasible. The Preferred PAPE specifically includes the US Wind

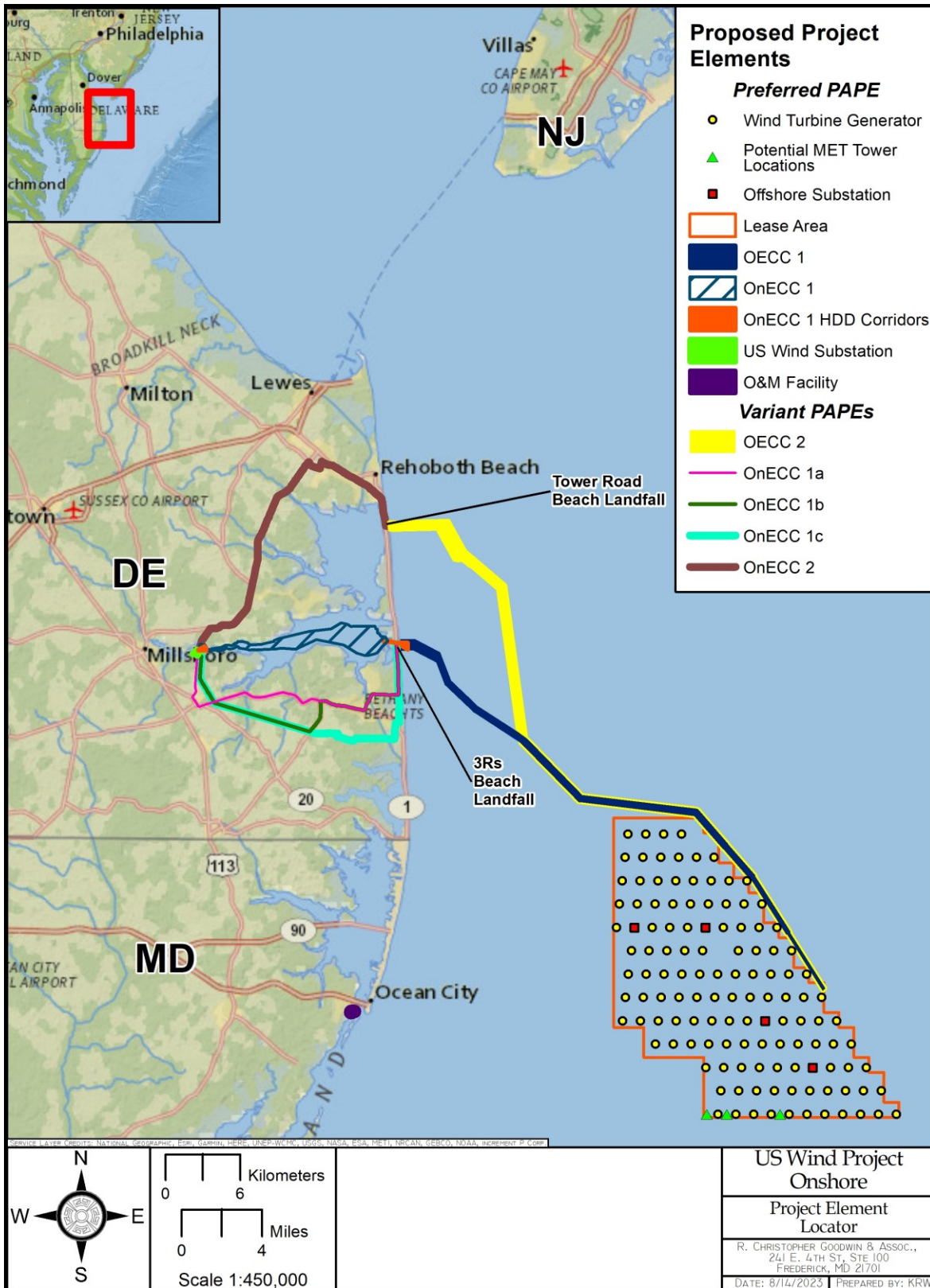


Figure 1. Overview of US Wind’s Maryland Offshore Wind Project Preliminary Area of Potential Effect (PAPE)

Substations property on Burton’s Island, Delaware, the O&M Facility property in West Ocean City, Maryland, and the preferred cable route (OnECC1) connecting the OCS Lease area to the US Wind Substations through the Indian River Bay in Delaware. The only terrestrial portions of the OnECC1 component of the Preferred PAPE are those areas of the associated HDD corridors that cross unsubmerged land. The Variant PAPE otherwise includes each of the alternative cable routes that are under consideration in case the preferred OnECC1 route is determined to be unfeasible. These Variant PAPE cable routes are predominately terrestrial and incorporate a 50-ft buffer along the proposed centerline of each route. All of the Variant PAPEs follow existing roadways or utility corridors that are assumed to be largely disturbed.

TERRESTRIAL ARCHAEOLOGICAL RESOURCE ASSESSMENT (TARA) OVERVIEW

The TARA investigation identified previously recorded terrestrial archaeological resources within the vicinity of the Preferred and Variant PAPEs and provided an assessment of the archaeological sensitivity of all proposed onshore Project components. In addition, a systematic Phase I survey was conducted at the proposed US Wind Indian River Substation POI at Burton’s Island and archaeological monitoring was performed during onshore geotechnical soil bore surveys at the preferred landfall option at 3R’s Beach and the alternative landfall option at Tower Road Beach.

Desktop Review and Archaeological Sensitivity Analysis

RCG&A examined digital data available for download from the National Park Service’s NRHP website and online from the Delaware and Maryland State Archaeological databases. These databases include data on recorded buildings, archaeological sites, NRHP listings, archaeological and building districts, cemeteries, determination of eligibility assessments, and previous cultural resource investigations. In addition, historic maps and aerials were examined for all terrestrial Project components in order to identify former structures and landscape features. Past and present environmental data also was gathered from various resources including previous environmental research reports in order to understand the dynamic nature of the Project Area’s coastal environment and to identify areas of potential historic landscape modification.

All of the gathered data was incorporated into a Geographic Information System (GIS) database in order to formulate an archaeological sensitivity model for all Project components. The resulting model served to classify areas of the Preferred and Variant PAPEs as having high, moderate, or low potential for archaeological resources. The model helped identify which routes had the lowest potential for impacting archaeological resources and aided planning efforts for subsequent archaeological investigations.

In regards to the Preferred PAPE, background research identified one previously identified archaeological site along the edge of the PAPE for the US Wind Substations and adjacent HDD corridor to Burton's Island. The site and its vicinity were deemed high probability within the archaeological sensitivity model. The 3R's Beach landfall and associated HDD corridors for OnECC1 were otherwise classified as low potential due to road disturbance and unsuitable environmental conditions for the presence and preservation of archaeological resources. Review of the proposed O&M Facility component of the Preferred PAPE in Maryland revealed that its location is situated on artificial land that was formed in the mid to late twentieth century and has since been heavily developed. Prior to the landform's creation, the area was uninhabitable marshland. As such, the O&M Facility was identified as having very low potential for archaeological resources.

The alternative cable routes incorporated under the Variant PAPEs are otherwise largely situated within previously disturbed ROW's reflecting areas of low archaeological sensitivity. However, all of the variant routes traverse landscapes that were well occupied historically and traverse environments known to have been utilized extensively by Indigenous groups both historically and during the precontact periods. As such, portions of the Variant PAPE that extend outside of the disturbed ROWs and occupy any undisturbed land were generally classified as locations of high or moderate archaeological sensitivity. Additional archaeological investigations may be needed should any of these variant terrestrial cable routes be selected for construction.

Geotechnical Monitoring Results

In May of 2022, RCG&A conducted limited archaeological monitoring of onshore geotechnical soil borings at the landfall transition vaults at 3R's Beach for the Preferred PAPE and at Tower Road Beach for the OnECC2 Variant PAPE. During the investigation, one of the soil bores at 3R's Beach encountered organic remnants at a depth of 122.5 to 123 feet (37 to 37.5 meters) below surface. The anomaly was interpreted as a possible void or porous layer of organics and/or soil. Through consultation with the Department of Natural Resources and Environmental Control archaeologists, the organic debris was determined to not be of cultural significance. Additional soil bores in the vicinity did not encounter the organic horizon and no cultural material was identified in any of the bores at either landfall location. Following the investigation, RCG&A's staff geologists reviewed the soil bore logs and did not identify any strata that appeared to represent cultural horizons.

Phase I Survey Results

Considering the alternative routes associated with the Variant PAPEs (OnECC1a-c and OnECC2) are backup options, comprehensive subsurface Phase I archaeological survey was reserved for the terrestrial components of the Preferred PAPE only. Due to the low potential of archaeological resources at the 3R's Beach components of the Preferred PAPE, the archaeological monitoring of geotechnical soil bores was deemed sufficient for the Phase I survey. The O&M Facility component of the Preferred PAPE was found to occupy a modern artificial landform with very low to no archaeological sensitivity and no archaeological survey was deemed necessary at the location. As such, only the US Wind Substations Property and the adjacent OnECC1 Burton's Island HDD corridor components of the Preferred PAPE were selected for Phase I subsurface archaeological survey.

The Indian River to Burton's Island HDD corridor and US Wind Substations Property were subject to a standard Phase I shovel test survey in 2023. At this location, one archaeological site had previously been identified along the boundary of the Preferred PAPE. In total, 678 shovel tests were excavated during the Phase I survey, of which 43 yielded a total of 123 (893.39 grams) retained artifacts resulting in an expansion of the previously identified site. The Site represents several loci of Woodland period (ca. 3,000 to 350 years before present) precontact artifacts and historic period artifacts ranging from the late eighteenth to the late nineteenth century. The recovery of a large quantity of artifacts below the topsoil horizon at the site suggests the potential for intact cultural horizons below surface. As a result, the site was recommended as potentially eligible for listing in the NRHP.

US Wind is committed to minimizing its impacts to cultural resources during the Project's construction and operation. As such, the Project designs and construction plans have been modified in order to avoid and protect the site. As part of the Section 106 process, a draft Onshore Construction Monitoring Plan, and a draft Unexpected Discovery Plan have been developed by US Wind to support consultation with the SHPO, THPOs, and other consulting parties that will establish various measures to protect the site throughout the Project's construction and continued operation. While finalization of the plans are pending input from the Project's consulting parties, US Wind anticipates, at a minimum, for the site's protection to include a protective buffer that will be demarcated with temporary barriers and will prevent any work within the site's vicinity. In addition, Archaeological and Tribal Monitors are anticipated at a minimum during ground disturbing activities in order to oversee the site's protection and to address any unexpected discoveries that may arise. A Historic Property Archaeological Protection Plan will be developed for long-term operations and maintenance avoidance measures.

SUMMARY AND RECOMMENDATIONS

The TARA investigation resulted in the development of an archaeological sensitivity model to aid US Wind's Project planning and the identification of the extent to which the boundary of a previously identified archaeological site extended into the Project's Preferred PAPE. US Wind intends to avoid all impacts to the Site on Burton's Island and will institute protection and monitoring plans during construction in the vicinity of the site to ensure compliance with the avoidance measures. An Unexpected Discoveries Plan has been developed to provide appropriate procedures in the event that an unexpected cultural resource is uncovered or identified and long-term avoidance measures will be detailed in a Historic Property Archaeological Protection Plan to address long-term operations and maintenance avoidance measures.

With the understanding that the Site on Burton's Island will be fully avoided, RCG&A and US Wind recommends that the Project will have No Adverse Effect to terrestrial Historic Properties within the Preferred PAPE. None of the Variant PAPEs are currently being pursued for proposed project activities and as such, the Project will have no potential to affect any terrestrial Historic Properties identified within the Variant PAPEs.