AUG 09 2016

Finding of No Historic Properties Affected for the Issuance of a Commercial Lease within the New York Wind Energy Area on the Outer Continental Shelf Offshore New York

Finding

The Bureau of Ocean Energy Management (BOEM) has made a Finding of No Historic Properties Affected (Finding) for this undertaking, pursuant to 36 CFR § 800.4(d)(1). Through lease stipulations, BOEM will require the lessee to avoid, during geotechnical testing (i.e. ground disturbing) activities, any potential historic properties identified through high-resolution geophysical surveys.

Documentation in Support of the Finding

I. Description of the Undertaking

Summary

This document describes BOEM's compliance with Section 106 of the National Historic Preservation Act and documents the agency's Finding for the undertaking of issuing a commercial lease within the New York Wind Energy Area (WEA). BOEM has prepared this documentation in support of the Finding, following the standards outlined at 36 CFR § 800.11(d) and as fulfillment of Stipulation I of the Programmatic Agreement among BOEM, the State Historic Preservation Officers (SHPOs) of New York and New Jersey, and the Advisory Council on Historic Preservation (ACHP). This Finding and supporting documentation are being provided to the signatories to this agreement, as well as the Shinnecock Indian Nation, National Park Service (NPS), and Monmouth County New Jersey, who are consulting parties to this undertaking. This Finding and supporting documentation will be made available for public inspection by placement on BOEM's public website prior to the bureau approving the undertaking.

Federal Involvement

The Energy Policy Act of 2005, Pub. L. No. 109-58, added Section 8(p)(1)(C) to the Outer Continental Shelf (OCS) Lands Act, which grants the Secretary of the Interior the authority to issue leases, easements, or rights-of-way on the OCS for the purpose of renewable energy development, including wind energy development. See 43 U.S.C. § 1337(p)(1)(C). The Secretary delegated this authority to the former Minerals Management Service, now BOEM. On April 22, 2009, BOEM promulgated final regulations implementing this authority at 30 CFR § 585.

Under the renewable energy regulations, the issuance of leases and subsequent approval of wind energy development on the OCS is a staged decision-making process. BOEM's wind energy program occurs in four distinct phases, as described below.

- *Planning and Analysis*. The first phase is to identify suitable areas to be considered for wind energy leasing through collaborative, consultative, and analytical processes; including input from state Renewable Energy Task Forces, public information meetings, and other stakeholders.

- *Lease Issuance*. The second phase, issuance of a commercial wind energy lease, gives the lessee the exclusive right to subsequently seek BOEM approval for the development of the leasehold. The lease does not grant the lessee the right to construct any facilities; rather, the lease grants the lessee the right to use the leased area to develop its plans, which must be approved by BOEM before the lessee can move on to the next stage of the process (see 30 CFR § 585.600 and § 585.601).

- *Approval of a Site Assessment Plan (SAP).* The third stage of the process is the submission of a SAP, which contains the lessee's detailed proposal for the construction of a meteorological tower, installation of meteorological buoys, or a combination of the two on the leasehold. The SAP allows the lessee to install and operate site assessment facilities for a specified term. The lessee's SAP must be approved by BOEM before it conducts these "site assessment" activities on the leasehold. BOEM may approve, approve with modification, or disapprove a lessee's SAP (see 30 CFR § 585.605–585.618).

- *Approval of a Construction and Operation Plan (COP).* The fourth stage of the process is the submission of a COP, a detailed plan for the construction and operation of a wind energy project on the lease. A COP allows the lessee to construct and operate wind turbine generators and associated facilities for a specified term. BOEM approval of a COP is a precondition to the construction of any wind energy facility on the OCS. As with a SAP, BOEM may approve, approve with modification, or disapprove a lessee's COP (see 30 CFR § 585.620–585.638).

The regulations also require that a lessee provide the results of surveys with its SAP and COP for the areas affected by the activities proposed in each plan (see 30 CFR § 585.610(b) and § 585.626, respectively), including the results of a shallow hazards survey, geological survey, geotechnical investigation, and archaeological resource identification survey. BOEM refers to these surveys as "site characterization" activities and provides guidelines for conducting these surveys and submitting their results as part of a SAP or COP. See *Guidelines for Providing Archaeological and Historic Property Information Pursuant to 30 CFR Part 585* and *Guidelines for Providing Geophysical, Geotechnical, and Geohazard Information Pursuant to 30 CFR Part 585* at: http://www.boem.gov/Survey-Guidelines/, which advise lessees to survey the entirety of the area they propose to impact.

On March 16, 2016, BOEM announced the identification of a WEA located within federal waters offshore New York (Appendix A). BOEM has determined that issuing a

commercial lease within the WEA offshore New York constitutes an undertaking subject to Section 106 of the National Historic Preservation Act (NHPA; 16 U.S.C. 470f) and its implementing regulations (36 CFR § 800), and that the subsequent site characterization activities associated with commercial lease issuance (e.g., geotechnical surveys) constitute activities that have the potential to cause effects to historic properties.

BOEM has implemented a Programmatic Agreement pursuant to 36 CFR § 800.14(b) to fulfill its obligations under Section 106 of the NHPA for renewable energy activities on the OCS offshore New York and New Jersey. The agreement has been developed for two primary reasons; first, the bureau's decisions to issue leases and approve SAPs, COPs, or other plans are complex and multiple; and second, BOEM will not have the results of archaeological surveys prior to the issuance of leases and, as such, will be conducting historic property identification and evaluation efforts in phases (36 CFR § 800.4(b)(2)). The Programmatic Agreement was executed June 3, 2016, among BOEM, the SHPOs of New York and New Jersey, and the ACHP (Appendix B).

The agreement provides for Section 106 consultation to continue through both the commercial leasing process and BOEM's decision-making process regarding the approval, approval with modification, or disapproval of lessees' SAP, COP, or other plan, and will also allow for a phased identification and evaluation of historic properties (36 CFR § 800.4(b)(2)). Furthermore, the agreement establishes the process to determine and document the area of potential effects (APE) for each undertaking; to identify historic properties located within each undertaking's APE that are listed in or eligible for listing in the National Register of Historic Places (NRHP); to assess potential adverse effects; and to avoid, reduce, or resolve any such effects through the process set forth in the agreements.

Description of the Wind Energy Area

The New York WEA consists of five OCS blocks and 148 sub-blocks (Figure 1). The WEA begins approximately 11 nautical miles (nmi; 12.65 miles [mi]) south of Long Beach, New York, and extends approximately 26 nmi (29.92 mi) southeast along its longest portion. The entire area is approximately 127 square miles (81,130 acres).

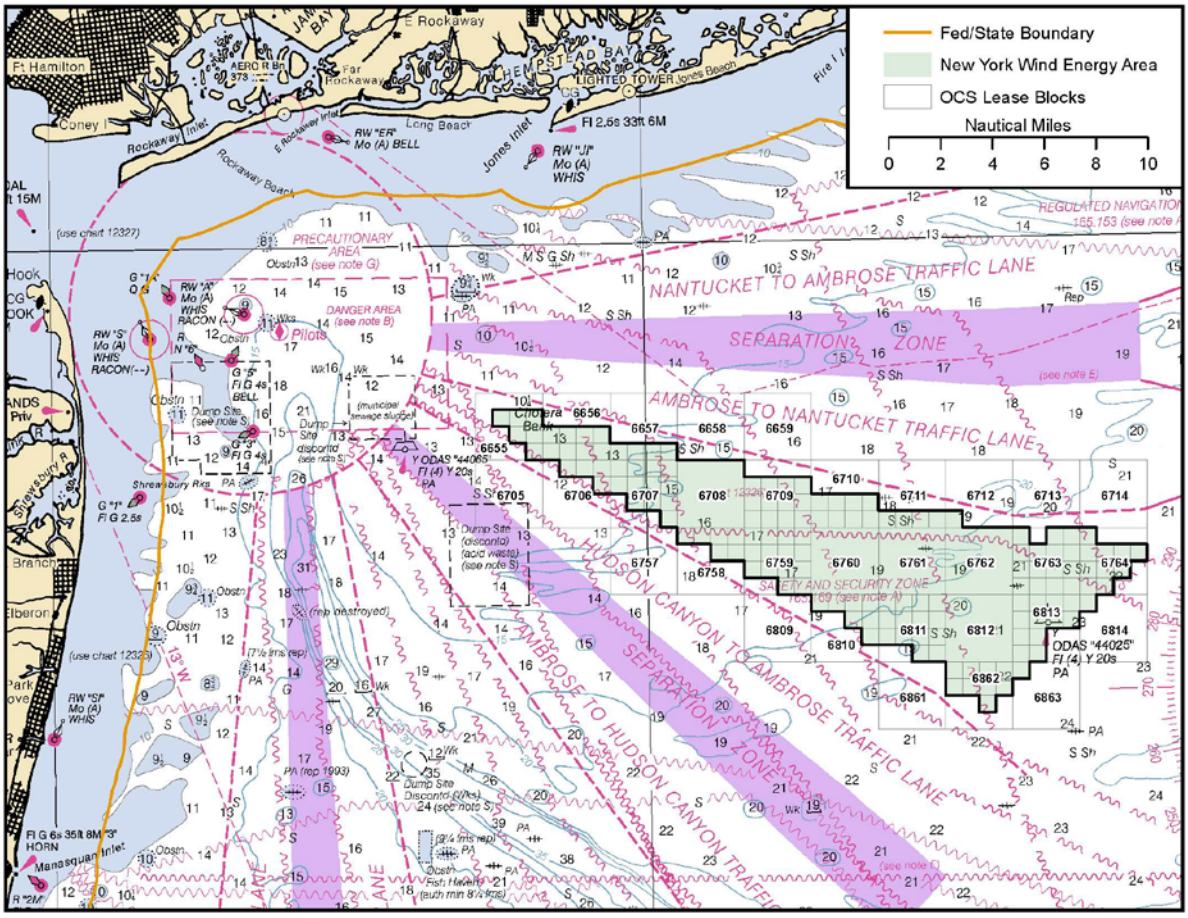

Figure 1: The New York Wind Energy Area Illustrated on Nautical Chart.

The Undertaking

The proposed undertaking considered in this Finding includes the issuance of a commercial lease within the New York WEA, and takes into account the execution of associated site characterization activities on this commercial lease. A lessee must submit the results of site characterization surveys with their SAP (30 CFR § 585.610 and 585.611) and COP (30 CFR § 585.626(a) and § 585.627). Site characterization activities include both high resolution geophysical surveys, which do not involve bottom disturbing activities, as well as geotechnical investigations, which may include bottom disturbing activities. Although BOEM does not issue permits or approvals for these site characterization activities, it will not consider approving a lessee's SAP or COP if the required survey information is not included.

The proposed undertaking does not, however, include cabling or connection to shore-based facilities; nor does it include consideration of commercial-scale facilities, or construction or placement of any site assessment structures (e.g. meteorological tower and/or buoys). Should a lessee propose to deploy site assessment structures within the New York WEA, they would submit a SAP to BOEM, which BOEM would consider under a separate Section 106 review pursuant to Stipulations II and III of the

Programmatic Agreement. Should the lessee propose to construct and operate a commercial-scale wind energy facility within the New York WEA, they would submit a COP to BOEM, which BOEM would also consider under a separate Section 106 review pursuant to Stipulations II and III of the Programmatic Agreement.

The purpose of high resolution geophysical (HRG) surveys is to acquire shallow hazards data, identify potential archaeological resources, characterize seafloor conditions, and conduct bathymetric charting. BOEM anticipates that the high resolution geophysical surveys would be conducted using the following equipment: swath bathymetry system, magnetometer, side-scan sonar, and sub-bottom profiler. This equipment does not come in contact with the seafloor and is typically towed from a moving survey vessel that does not require anchoring. BOEM does not consider HRG surveys to be an activity that has the potential to cause effects to historic properties.

Geotechnical testing, or sub-bottom sampling, involves seafloor disturbing activities, and has the potential to cause effects to historic properties. Geotechnical testing is conducted to assess the suitability of shallow foundation soils to support a structure or transmission cable under any operational and environmental conditions that might be encountered (including extreme events), and to document soil characteristics necessary for the design and installation of all structures and cables. Sub-bottom sampling obtains physical and chemical data on surface sediments to provide BOEM with a detailed geotechnical evaluation of the structure's foundation(s) based on analysis of soil borings from the site (e.g., 30 CFR § 585.626(4)). The results allow for a thorough investigation of the stratigraphic and geoengineering properties of the sediment that may affect the foundations or anchoring systems of a proposed wind energy project, which would be necessary for BOEM to consider approving a SAP or COP.

The renewable energy regulations require sediment testing at the site of any proposed bottom-founded structure. *See* 30 CFR § 585.610(b) (SAP) and § 585.626(a) (COP). BOEM assumes that one sub-bottom sample would be taken at the foundation location for each anticipated structure that would later be proposed in a SAP or COP. Geotechnical investigation may include the use of equipment such as gravity cores, piston cores, vibracores, deep borings, and Cone Penetration Tests (CPT), among others. Some of these methods require the use of anchored vessels, multi-point anchored barges, or jack-up barges.

BOEM also anticipates cases where geotechnical testing methods may be employed as part of the identification of historic properties. In some instances, sub-bottom sampling may be the only available method of testing the presence or absence of horizons of archaeological potential within features of interest identified during geophysical survey. As agreed to by the signatories under Stipulation III of the Programmatic Agreement, vibracores or other direct samples collected by or under the supervision of a Qualified Marine Archaeologist for the purposes—at least in part—of historic property identification or National Register eligibility testing and evaluation are exempt from Section 106 review.

Area of Potential Effects

As defined in the Section 106 regulations (36 CFR § 800.16(d)), the area of potential effects (APE) is 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 is influenced by the scale and nature of an undertaking, and may be different for different kinds of effects caused by the undertaking.

As agreed to by the signatories under Stipulation I.A of the Programmatic Agreement, the APE for this undertaking is defined as the depth and breadth of the seabed that could potentially be impacted by geotechnical testing. As discussed above, site characterization activities include both high resolution geophysical survey and geotechnical (sub-bottom) sampling. High resolution geophysical surveys will not impact historic properties because they do not contact the seafloor, and because they do not require anchoring. However, geotechnical (sub-bottom) sampling may include the collection of core samples, soil borings, or other ground disturbing techniques that could directly impact historic properties located on or below the seafloor, if present. In addition, geotechnical sampling may also require the use of barges or anchored vessels that also could also directly impact historic properties, if present.

Based on the distance from shore and the manner in which site characterization studies will likely occur, BOEM has concluded that the equipment and vessels performing these activities will be indistinguishable from existing lighted vessel traffic. Therefore, BOEM has not defined as part of the APE onshore areas from which the site characterization activities would be visible. In addition, there is no indication that the issuance of a lease and subsequent site characterization studies will involve expansion of existing port infrastructure. Therefore, onshore staging activities are not considered as part of the APE for this specific undertaking.

Consultation with Appropriate Parties and the Public

Under stipulation I.C of the Programmatic Agreement for the undertaking of issuing a commercial lease, BOEM committed to identify consulting parties pursuant to 36 CFR § 800.3(f); consult on existing, non-proprietary information regarding the proposed undertaking and the geographic extent of the APE; and to solicit additional information on historic properties within the APE from the consulting parties and the public.

On May 28, 2014, BOEM published a notice in the *Federal Register* announcing the Notice of Intent to Prepare an Environmental Assessment (79 FR 30643). This notice, in part, solicited public comment and input regarding the identification of, and potential effects to, historic properties from leasing and site assessment activities for the purpose of obtaining public input for the Section 106 review (36 CFR § 800.2(d)(3)). No comments regarding historic properties were received in response to this notice.

During the Area Identification process to delineate the New York WEA, BOEM conducted outreach and coordination with the New York and New Jersey SHPOs and NPS. As part of an effort to evaluate potential viewshed impacts from future commercial wind energy development with the New York WEA, BOEM completed a visualization study in coordination with NPS, the results of which can be viewed at: http://www.boem.gov/New-York-Visual-Simulations/.

The New York SHPO provided written comments October 6, 2015, in response to their review of the draft visualization study (Appendix C). New York SHPO noted that numerous historic properties listed in, or eligible for listing in, the National Register are located along the New York coastline, and specifically identified Jones Beach State Park as a historic property of concern in regards to potential visual impacts.

NPS provided written comments on December 23, 2015, in response to their review of the draft visualization study (Appendix D). NPS stated concern that potential commercial development within the New York WEA could have negative impacts on Fire Island National Seashore, Gateway National Recreation Area, and National Historic Landmarks. NPS identified historic properties within Gateway National Recreation Area including: Sandy Hook Light National Historic Landmark; Fort Hancock and Sandy Hook National Historic Landmark; Spermaceti Cove Life Saving Station; Jacob Riis Park Historic District; Fort Tilden Historic District; Silver Gull Beach Club Historic District; Breezy Point Surf Club; Floyd Bennett Field; Miller Field; and Fort Wadsworth. Within Fire Island National Seashore, NPS identified Fire Island Lighthouse and Fire Island Light Station Historic District.

The New Jersey SHPO provided written comment on May 6, 2016, that also included reference to the visualization study (Appendix E). New Jersey SHPO stated concern that there may be adverse visual effects to historic properties in New Jersey from commercial scale wind energy development within the New York WEA.

With respect to the concerns raised by the consulting parties regarding visual impacts from commercial development within the New York WEA, the historic properties identified by the parties are not within the APE for the undertaking under consideration in this Finding. Should a lessee propose to deploy site assessment structures or propose to construct and operate commercial-scale facilities within the New York WEA, they would submit a plan to BOEM, which BOEM would consider under a separate Section 106 review pursuant to Stipulations II and III of the Programmatic Agreement.

On June 6, 2016, BOEM published a notice in the *Federal Register* announcing the availability of an Environmental Assessment for public review and comment (81 FR 36344). This notice, in part, solicited public comment to inform the bureau's environmental review. One response dated July 13, 2016, was received from NPS (Appendix F). NPS reiterated concerns noted in previous correspondence regarding visual impacts from commercial wind energy development to onshore areas including Gateway National Recreation Area, Fire Island National Seashore, and National Historic Landmarks. NPS further acknowledged that the identification of historic properties

within the viewshed Area of Potential Effects, and consideration of effects to these historic properties from commercial-scale wind energy development within the New York WEA, would occur under future Section 106 consultation if BOEM receives a SAP or COP. No additional comments regarding historic properties were received in response to this notice.

Concurrent with the public review and comment period for the Environmental Assessment, BOEM held public meetings to provide an overview of the environmental review and to offer additional opportunities for public comment. The meetings were held at the following locations: Long Branch, NJ (June 20, 2016), Hempstead, NY (June 21, 2016), Westhampton Beach, NY (June 22, 2016), Narragansett, RI (June 23, 2016), and New Bedford, MA (June 27, 2016). None of the comments or feedback received at these meetings concerned historic properties, the scope of historic properties identification efforts, or any other topic relevant to the Section 106 review of the undertaking that is the subject of this Finding.

Comments were received from the Shinnecock Indian Nation March 16, 2016, in response to the *Finding of No Historic Properties Affected for the Approval of the U.S. Wind Inc. Site Assessment Plan on the Outer Continental Shelf Offshore Maryland* (Appendix G). Although in regards to a different undertaking, the comments provide information relevant to the geographic extent of areas of interest to the Shinnecock Indian Nation. The comments state that the Shinnecock people are traditional whalers and fisherman who have used coastal waterways throughout the New York Bight and Mid-Atlantic. The comments suggest that due to the Nation's historical use of waterways for canoe journeys, trade, and travel, as well as proud history of whaling along the Mid-Atlantic coast and beyond, the Nation may have interest in historic properties within the APE for the undertaking that is the subject of this Finding. The Shinnecock Indian Nation also requested that the Unkechaug Nation, a state recognized tribe located on Long Island, NY, be included as a consulting party to undertakings in any areas of interest to the Shinnecock.

BOEM initiated Section 106 consultation for the undertaking of issuing a commercial lease within the New York WEA June 27, 2016. BOEM initiated consultation through letters of invitation to the New York and New Jersey SHPOs, and ACHP as signatories to the agreement, as well as to the Shinnecock Indian Nation and NPS. BOEM additionally contacted representatives of local governments, state recognized tribes, and federally recognized tribes to solicit information on historic properties and to determine their interest in participating as a consulting party (Table 1 and Appendix H).

The New Jersey SHPO responded July 20, 2016, with consultation comments on the proposed undertaking indicating that they are not aware of any historic properties within the APE and noting that the State of New Jersey does not have comprehensive survey of submerged historic properties within state and federal waters off the coast of New Jersey (Appendix I). BOEM also received a request via email from Monmouth County New Jersey to be included as a consulting party in the Section 106 review for this undertaking (Appendix J).

BOEM shared this Finding in draft form with the consulting parties and held a Section 106 consultation webinar August 3, 2016. The meeting was attended by representatives from the New York and New Jersey SHPOs, and Monmouth County New Jersey. At this meeting the New York SHPO reiterated concerns regarding visual impacts from commercial wind energy development within the New York WEA.

Table 1. Entities Solicited for Information and Concerns Regarding Historic Properties and the Proposed Undertaking

SHPOs

New Jersey	New York		

Federally Recognized Tribes

Delaware Nation	Mohegan Indian Tribe of Connecticut	Shinnecock Indian Nation	Stockbridge Munsee Community

Other Federal Agencies

National Park Service, Northeast Region			

State Recognized Tribes

Unkechaug Nation			

Local Governments

Borough of Queens, City of New York	Borough of Rumson, NJ	City of Asbury Park, NJ	City of Long Beach, NY
City of Long Branch, NJ	Monmouth County New Jersey	Nassau County New York	Suffolk County New York
Town of Brookhaven New York	Town of Hempstead New York	Town of Islip New York	

II. Description of the Steps Taken to Identify Historic Properties

As documented in the Programmatic Agreement, BOEM has determined that the identification and evaluation of historic properties will be conducted through a phased approach, pursuant to 36 CFR § 800.4(b)(2), where the final identification of historic properties may occur after the issuance of a lease or grant, but before the approval of a plan, because lessees conduct site characterization surveys in preparation for plan submittal.

BOEM has reviewed existing and available information regarding historic properties that may be present within the APE, including any data concerning possible historic properties not yet identified. Sources of this information include consultation with the appropriate parties and the public, accessing information gathered through BOEM-funded studies, and reviewing cultural resources information compiled for preparation of the environmental assessment.

Relevant BOEM studies include an updated study of archaeological resource potential on the Atlantic OCS (TRC 2012). The study compiles information on reported shipwrecks in the Atlantic Shipwreck Database and, additionally, models the potential for pre-European contact sites based on reconstruction of sea level rise, human settlement patterns, and site formation and preservation conditions. BOEM's Atlantic Shipwreck Database does not represent a complete listing of all potential shipwrecks located on the Atlantic OCS, but rather it serves as a baseline source of existing and available information for the purposes of corroborating and supporting identification efforts. In many cases, the locational accuracy of database entries varies greatly.

To date, the New York WEA has not been subjected to a complete and comprehensive archaeological identification survey; however, the types of historic properties expected to be present within the APE include both submerged pre-contact and historic period archaeological sites.

Pre-contact Historic Properties

During the Late Pleistocene, at the Last Glacial Maximum (20,000 years before present [B.P.]), the glaciers that covered vast portions of the Earth's surface sequestered massive amounts of water as ice and lowered global sea level approximately 394 feet (ft) (120 meters [m]). Corresponding with lower global sea level during the Late Pleistocene, the section of the OCS where the New York WEA is located was once exposed, dry land which was subsequently submerged by rising sea level during the Early Holocene. These once exposed areas are identified as having a high potential for the presence of now-submerged archaeological sites dating to the time periods during which they were exposed (TRC 2012). While no pre-contact period archaeological sites have been identified on the OCS offshore New York at this time, known pre-contact archaeological sites are located onshore in formerly upland locations on western Staten Island (at Port Mobil and Wards Point), 29 nmi (53.7 km) west of the closest point of the WEA (Schuldenrein et al. 2013).

Based on the present understanding of the archaeological record, early human populations developed distinct cultures and lifeways corresponding with three broadly-construed periods defined by archaeologists as: Paleoindian (circa 15,000 to 10,000 B.P.), Archaic (10,000 to 3000 B.P.), and Woodland (3000 B.P. to 400 B.P.). Paleoindian society was semi-nomadic within a defined territory (TRC 2012) using a broad spectrum of plants and animals for subsistence. Small to medium-sized fauna would have been the predominant focus for game, as the large megafauna (mammoth and mastodon) populations were declining in response to climatic changes (Schuldenrein et al. 2013). The transition to Early Archaic cultures is characterized by nomadic cultures becoming more complex and establishing sedentary societies, whereas the transition to Woodland cultures is based on the development of agriculture.

The Paleoindian period was a time of slowly moderating climate with cooler temperatures, increased precipitation, and rapid sea level rise. Several episodes of melting occurred (up to 11,000 B.P.) as a result of the North American ice sheet

collapsing (TRC 2012). As the sea level rose and isostatic rebound occurred, smaller drainages were captured and deeply incised drainages formed across portions of the OCS. These drainages formed highly localized productive estuarine environments that would have been utilized for food procurement, fresh water sources, and habitation as the marine transgression continued moving shoreward across the OCS. The enhanced sediment flows in these drainages associated with catastrophic flooding and increased precipitation would have provided localized burial of possible Paleoindian sites, if present, below the transgressive sediment reworking. The only known Paleoindian sites within the region are found onshore in formerly upland locations at Port Mobil and Ward's Point on western Staten Island along the Arthur Kill (Schuldenrein et al. 2013).

By the early Archaic Period (10,000 B.P.), the climate had become warmer with less precipitation. Sea level had risen from −330 ft (−100 m) to −75 ft (−23 m) below present day levels (Schuldenrein et al. 2013). The −75 ft (−23 m) depth contour is located at the westernmost extent of the New York WEA, indicating that by the early Archaic period the majority of the WEA had been inundated. Prior to this inundation, the WEA was likely exposed dry land, although it would have been proximal to the shoreline and experiencing continued transgression with rapid burial of deeply incised drainages, ponds, or lagoons. By the Middle Archaic, sea level rise would have completely inundated the WEA and the shoreline would have migrated landward to approximately 33 to 40 ft (10 to 12 m) below present sea level (Schuldenrein et al. 2013). After inundation, the WEA would have been exposed to wave and current-based sediment transport and reworking during the Later Archaic to present day.

Based on sea level rise, the New York WEA has a high potential for the presence submerged archaeological sites dating from the Paleoindian through Early Archaic periods, and very low to no potential for the presence of submerged archaeological sites more recent than the end of the Early Archaic.

Historic Period Historic Properties

The waters of the New York OCS are some of the heaviest trafficked shipping routes in the country. Every class or type of ship has transited through or operated in the vicinity of the New York WEA since the 17th century to the present day (Huie 1941; Rattray 1973; Bourque 1979; Morris and Quinn 1989; TRC 2012). As the internal network of canals and rail developed and allowed the movement of goods to and from coastal cities, maritime technologies kept pace, becoming more complex with the advent of steam-, oil-, and internal combustion-powered vessels. An ever increasing amount of trade developed across the Atlantic, which moved through port cities, such as New York. Of all the major ports for coastal and international commerce, none rivaled the Port of New York, which became the economic engine of the developing nation (Huie 1941; Bourque 1979). The volume of shipping that was transiting through the Port of New York from 1710 to 1780 during the Dutch and English colonial periods indicates there were well over 300 vessels transiting the vicinity of the WEA, and that number grew to more than 1,500 vessels in the 1780s (Bourque 1979).

Later, in the 19th century, between 1821 through 1882, the volume of ships entering the Port of New York grew explosively (Huie 1941). In 1821, 910 foreign ships entered the port, likely crossing the vicinity of the WEA. By 1882, this number had increased to 4,531 foreign ships (Huie 1941). The reported marine casualties in the port of New York and the vicinity of the WEA indicate a growing number of potential shipwrecks (Table 2). This table is not a complete list and represents only those shipwreck events witnessed or reported by survivors.

Table 2:
Shipping Losses Reported in New York Waters

Year	Reported Vessel Losses
1600–1650	6
1651–1700	2
1701–1750	3
1751–1800	32
1801–1850	157
1851–1900	514

Source: Rattray, 1973

The highest concentrations of reported shipwrecks in this area cluster around shipping channels and uncharted obstructions, as well as the Atlantic side of Long Island where sailing vessels foundered during storms as they tried to enter the port. Other sources put the number of marine casualties along the Atlantic coast at over 15,000 to 20,000 (TRC 2012). Of the entire reported vessel losses, 10 to 20 percent are estimated to have sunk in the open waters of the OCS (TRC 2012). Shipwrecks potentially located in the WEA could date as far back as the 16th century with ships of discovery, but the bulk of the potential losses are more likely to be from the 19th to mid-20th century.

There are nine shipwrecks reported for the WEA, two of which have dates for sinking; the remaining seven do not have dates associated with them. One of the nine is simply identified as an unknown vessel and has no further data to suggest construction, rig, or purpose. Additionally, the precision of the hull locations of the nine vessels is medium to low, and the hulls may be up to 3 mi (4.8 km) from the plotted positions.

Table 3: Shipwrecks Reported in the Vicinity of the New York WEA

Record	Vessel	Position Accuracy	Year Sunk	History
7791	*Irma C*	Medium	Unknown	Identified as Irma C
7815	*Florence*	Medium	Unknown	Identified as Florence
7706	*Three Sisters*	Medium	Unknown	Identified as Three Sisters
1533	*Burnside*	Low	1913	24 NO. 8391; schooner, 855 GT, sunk April 20, 1913 by marine casualty, accuracy within 1 mi (1.6 km)
1542	*Tarantula*	Low	1918	24 NO.120; subchaser, 160 GT, sunk October 28, 1918, by marine casualty, accuracy 1 to 3 mi (1.6 to 4.8 km) Recorded April 1, 1923.
7774	*Happy Days*	Medium	Unknown	Identified as Happy Days
7721	*Durley Chine*	Medium	Unknown	Identified as Durley Chine
7732	*Skippy*	Medium	Unknown	Identified as Skippy
7741	*Unknown*	Medium	Unknown	No further information available

GT = gross tonnage

III. Required Elements in the Lease

Per Stipulation I.E of the Programmatic Agreement, where practicable, BOEM will require avoidance of potential historic properties through lease stipulations, resulting in BOEM recording a Finding of No Historic Properties Affected, consistent with 36 CFR § 800.4(d)(1). Inclusion of the following elements in the lease will ensure the identification and avoidance of historic properties, and is a requirement of this Finding.

The following elements, designed to avoid impacts to offshore historic properties from bottom-disturbing activities associated with site characterization surveys, would be included in a commercial lease issued for the New York WEA:

- The Lessee must provide the results of an archaeological survey with its plans.

- The Lessee must ensure that the analysis of archaeological survey data collected in support of plan submittal and the preparation of archaeological reports in support of plan submittal are conducted by a Qualified Marine Archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards (48 FR 44738–44739) and has experience analyzing marine geophysical data.

- The lessee may only conduct geotechnical exploration activities, including geotechnical sampling or other direct sampling or investigation techniques, which are performed in support of plan (i.e., SAP and/or COP) submittal, in areas in which an archaeological analysis of the results of geophysical surveys has been completed for that area.

- The Qualified Marine Archaeologist's analysis of the geophysical data must include a determination of whether any potential archaeological resources are present in the area of geotechnical sampling, including consideration of both pre-contact and historic period archaeological resources.

- If present in the area, the lessee's geotechnical sampling activities must avoid any potential archaeological resources by a minimum of 164 ft (50 m). The avoidance distance must be calculated by the Qualified Marine Archaeologist from the maximum discernible extent of the archaeological resource.

- The Qualified Marine Archaeologist must certify in the lessee's archaeological reports included with a SAP or COP that geotechnical exploration activities did not affect potential historic properties identified as a result of the HRG surveys.

- In no case may the lessee's actions affect a potential archaeological resource without BOEM's prior approval.

In addition, BOEM would require that the lessee observe the unanticipated finds requirements at 30 CFR 585.802. The following elements would be included in a commercial lease issued within the New York WEA:

- If the lessee, while conducting site characterization activities in support of plan (i.e., SAP and/or COP) submittal, discovers a potential archaeological resource such as the presence of a shipwreck or pre-contact archaeological site within the project area, the lessee must:

    - Immediate halt of seafloor-disturbing activities in the area of discovery;

    - Notify the lessor within 24 hours of discovery;

    - Notify the lessor in writing by report within 72 hours of its discovery;

    - Keep the location of the discovery confidential and take no action that may adversely affect the archaeological resource until the lessor has made an evaluation and instructs the applicant on how to proceed; and

    - Conduct any additional investigations as directed by the lessor to determine if the resource is eligible for listing in the NRHP (30 CFR 585.802(b)). The lessor will direct the lessee to conduct such investigations if: (1) the site has been affected by the lessee's project activities; or (2) impacts on the site or on the area of potential effect cannot be avoided. If investigations indicate that the resource is potentially eligible for listing in the NRHP, the lessor will tell the lessee how to protect the resource or how to mitigate adverse effects on the site. If the lessor incurs costs in protecting the resource, under Section 110(g) of the NHPA, the lessor may charge the lessee reasonable costs for

carrying out preservation responsibilities under the OCS Lands Act (30 CFR 585.802(c-d)).

IV. The Basis for the Determination of No Historic Properties Affected

This Finding is based on the review conducted by BOEM of existing and available information, consultation with interested and affected parties, and the conclusions drawn from this information. The required identification and avoidance measures that will be included in commercial leases will ensure that the proposed undertaking will not affect historic properties. Therefore, no historic properties will be affected for the undertaking of issuing a commercial lease within the New York WEA, consistent with 36 CFR § 800.4(d).

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APPENDICES

Appendix A: Announcement of Area Identification: Commercial Wind Energy Leasing on the Outer Continental Shelf Offshore New York.

Appendix B: Programmatic Agreement among The U.S. Department of the Interior, Bureau of Ocean Energy Management, the State Historic Preservation Officers of New Jersey and New York, the Shinnecock Indian Nation, and the Advisory Council on Historic Preservation Regarding Review of Outer Continental Shelf Renewable Energy Activities Offshore New Jersey and New York Under Section 106 of the National Historic Preservation Act.

Appendix C: Correspondence from the New York SHPO to BOEM, October 6, 2015.

Appendix D: Correspondence from NPS to BOEM, December 23, 2015.

Appendix E: Correspondence from the New Jersey SHPO to BOEM, May 6, 2016.

Appendix F: Correspondence from NPS to BOEM, July 13, 2016.

Appendix G: Correspondence from the Shinnecock Indian Nation to BOEM, March 16, 2016.

Appendix H: Correspondence from BOEM to Nassau County New York, June 17, 2016; a similar letter was sent to all potential consulting parties.

Appendix I: Correspondence from the New Jersey SHPO to BOEM, July 20, 2016.

Appendix J: Email correspondence from Monmouth County New Jersey to BOEM, July 19, 2016.

ANNOUNCEMENT OF AREA IDENTIFICATION

Commercial Wind Energy Leasing on the Outer Continental Shelf Offshore New York

March 16, 2016

Pursuant to 30 C.F.R. § 585.211(b), the Bureau of Ocean Energy Management (BOEM) has completed the Area Identification process to delineate a Wind Energy Area (WEA) offshore New York.

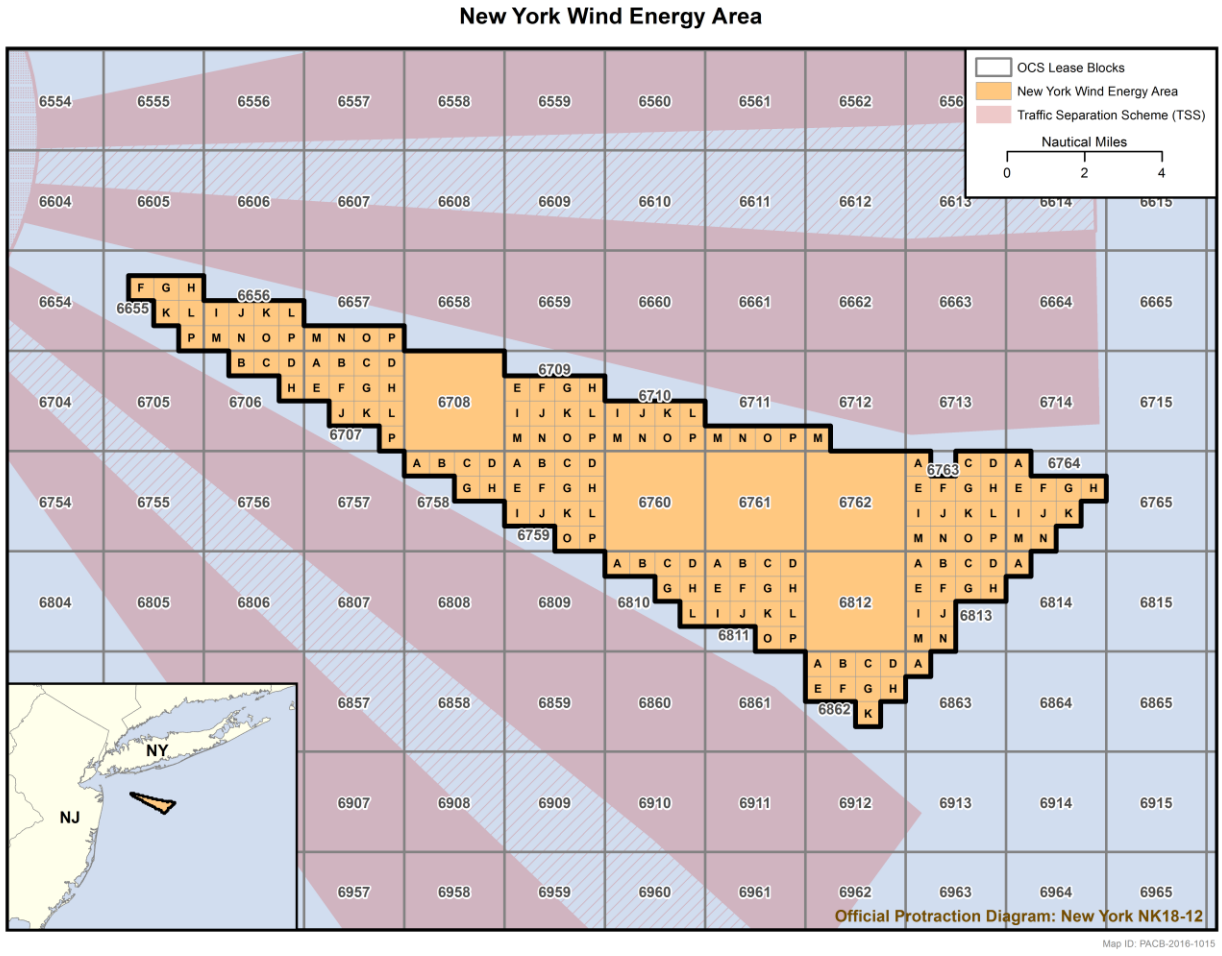
BOEM is announcing the New York WEA after concluding more than four years of review and consideration of the proposed area. The goal of BOEM's Area Identification process is to identify the offshore locations that appear most suitable for wind energy development. The New York WEA consists of five OCS blocks and 148 sub-blocks. It begins approximately 11 nautical miles (nmi) south of Long Beach, New York, and extends approximately 26 nmi southeast along its longest portion. The entire area is approximately 127 square miles, 81,130 acres, or 32,832 hectares.

The WEA being considered for leasing offshore New York is based upon an unsolicited lease application that BOEM received on September 8, 2011, from the New York Power Authority (NYPA). In that request, NYPA proposes to construct a 350-700 megawatt (MW) wind facility offshore Long Island. In analyzing this proposed area, BOEM published a Request for Interest (2013), a Call for Information and Nominations (2014), and a Notice of Intent to Prepare an Environmental Assessment (2014); held numerous stakeholder meetings; and worked with BOEM's New York Intergovernmental Renewable Energy Task Force to gather data and information about the area.

As a next step toward leasing the New York WEA, BOEM may publish a Proposed Sale Notice for public comment, which will describe the area being offered for leasing and the proposed terms and conditions of a wind energy auction. Then, upon considering public comments and completing the necessary environmental assessment (EA) and consultations, BOEM may publish a Final Sale Notice that announces the date, time, and specific conditions of the auction. BOEM expects the environmental review to be completed and the notices to be published later in 2016.

In BOEM's EA, conducted pursuant to the National Environmental Policy Act (NEPA), BOEM is only considering the issuance of a lease and approval of a site assessment plan for the New York WEA. BOEM is not considering, and the EA will not support, any decisions regarding the construction and operation of a wind energy facility. In the future, should a lessee propose to construct a commercial wind energy facility, the lessee will be required to submit a construction and operations plan for BOEM's review and approval. BOEM would then prepare a site-specific NEPA document and conduct necessary environmental consultations before making a final decision to approve the construction of the proposed project. As the process moves forward, BOEM will continue to analyze issues and work with stakeholders before a decision is made to authorize the development of a wind power facility offshore New York.

Figure 1. The New York Wind Energy Area



PROGRAMMATIC AGREEMENT
Among
The U.S. Department of the Interior, Bureau of Ocean Energy Management,
The State Historic Preservation Officers of New Jersey and New York,
The Shinnecock Indian Nation, and
The Advisory Council on Historic Preservation
Regarding Review of Outer Continental Shelf Renewable Energy Activities
Offshore New Jersey and New York
Under Section 106 of the National Historic Preservation Act

WHEREAS, the Outer Continental Shelf Lands Act grants the Secretary of the Interior (Secretary) the authority to issue leases, easements, or rights-of-way on the Outer Continental Shelf (OCS) for the purpose of renewable energy development, including wind energy development (*see* 43 U.S.C. §1337(p)(1)(C)), and to promulgate regulations to carry out this authority (*see* 43 U.S.C. §1337(p)(8)); and,

WHEREAS, the Secretary delegated this authority to the former Minerals Management Service, now the Bureau of Ocean Energy Management (BOEM), and promulgated final regulations implementing this authority at 30 CFR §585; and,

WHEREAS, under the renewable energy regulations, the issuance of leases and subsequent approval of wind energy development on the OCS is a staged decision-making process that occurs in distinct phases; and,

WHEREAS, OCS means all submerged lands lying seaward and outside of the area of lands beneath navigable waters, as defined in Section 2 of the Submerged Lands Act (43 U.S.C. §1301), whose subsoil and seabed appertain to the United States and are subject to its jurisdiction and control (see 30 CFR §585.112); and,

WHEREAS, BOEM may issue commercial leases, limited leases, research leases, Right-of-Way (ROW) grants, or Right-of-Use and easement (RUE) grants on the OCS (see Appendix); and,

WHEREAS, Commercial leases, Limited leases, ROW grants, and RUE grants do not authorize the lessee or grantee to construct any facilities; rather, the lease or grant authorizes the lessee or grantee the right to use the leased area to develop plans, which must be submitted to and approved by BOEM before the lessee or grantee implements its plans (*see* 30 CFR §585.600 and §585.601); and,

WHEREAS, under BOEM's renewable energy regulations, BOEM will review and may approve, approve with modifications, or disapprove Site Assessment Plans (SAPs), Construction and Operations Plans (COPs), General Activities Plans (GAPs), or other plans, collectively "Plans" (*see* 30 CFR §585.613(e), §585.628(f), and §585.648(e)); and,

WHEREAS, BOEM determined that issuing leases and grants and approving Plans constitute undertakings subject to Section 106 of the National Historic Preservation Act (NHPA) (16 U.S.C. §470(f)), and its implementing regulations (36 CFR §800); and,

WHEREAS, the issuance of a commercial lease, limited lease, ROW grant, or RUE grant has the potential to affect historic properties insofar as it may lead to the lessee or grantee conducting geophysical survey and geotechnical testing; and,

WHEREAS, BOEM has determined that geophysical survey is not likely to have the potential to affect historic properties; and,

WHEREAS, the issuance of a research lease or approval of a Plan has the potential to affect historic properties insofar as it may lead to the lessee conducting geotechnical testing; constructing and operating site assessment facilities and renewable energy structures; and, placing and operating transmission cables, pipelines, and/or associated facilities that involve the transportation or transmission of electricity or other energy products from renewable energy projects; and,

WHEREAS, BOEM may issue multiple renewable energy leases and grants and approve multiple Plans associated with each lease or grant issued on the OCS; and,

WHEREAS, BOEM's renewable energy regulations also contemplate the development of a lease in multiple phases (*see* 30 CFR §585.629); and

WHEREAS, BOEM determined that the implementation of the Offshore Renewable Energy Program is complex, as the decisions on these undertakings are phased, and the effects on historic properties are regional in scope, pursuant to 36 CFR §800.14(b); and,

WHEREAS, 36 CFR §800.4(b)(2) provides for deferral of final identification and evaluation of historic properties when provided for in a Programmatic Agreement (Agreement) executed pursuant to 36 CFR §800.14(b); and,

WHEREAS, BOEM determined that the identification and evaluation of historic properties shall be conducted through a phased approach, pursuant to 36 CFR §800.4(b)(2), where the final identification of historic properties may occur after the issuance of a lease or grant and before the approval of a Plan because lessees conduct site characterization surveys in preparation for Plan submittal (*see* 30 CFR Part 585); and,

WHEREAS, the deferral of final identification and evaluation of historic properties could result in the discovery of previously unknown historic properties that could significantly impact project planning, siting, and timelines; and,

WHEREAS, 36 CFR §800.14(b)(3) provides for developing programmatic agreements for complex or multiple undertakings and §800.14(b)(1) provides for using such agreements when effects on historic properties cannot be fully determined prior to approval of an undertaking (*see* §800.14(b)(1)(ii)), when effects on historic properties are regional in scope (*see* §800.14(b)(1)(i)), and for other circumstances warranting a departure from the normal Section 106 process (*see* §800.14(b)(1)(v)); and,

WHEREAS, BOEM, the New Jersey State Historic Preservation Officer (SHPO), the New York SHPO, and the Advisory Council on Historic Preservation (ACHP) are consulting parties and signatories to this Agreement, pursuant to 36 CFR §800.14; and,

WHEREAS, the Shinnecock Indian Nation is a Tribe, as defined at 36 CFR §800.16(m), that has chosen to consult with BOEM and participate in development of this Agreement; and

WHEREAS, BOEM shall continue to consult with this and other Tribes, Tribal Historic Preservation Officers (THPO), and/or their designee to identify properties of religious and cultural significance that may be eligible for listing in the National Register of Historic Places (including Traditional Cultural Properties) and that may be affected by these undertakings; and,

WHEREAS, the Section 106 consultations described in this Agreement will be used to establish a process to identify historic properties located within the undertakings' Area(s) of Potential Effects (APE); to assess potential effects; and to avoid, reduce, or resolve any adverse effects; and,

WHEREAS, BOEM involves the public and identifies other consulting parties through notifications, requests for comments, existing renewable energy task forces, contact with the SHPO, and National Environmental Policy Act scoping meetings and communications for these proposed actions;

NOW, THEREFORE, BOEM, the New Jersey SHPO, the New York SHPO, and the ACHP agree that Section 106 review shall be conducted in accordance with the following stipulations:

STIPULATIONS

I. For the undertakings of issuing a commercial lease, limited lease, research lease, ROW grant, or RUE grant, the signatories agree:

A. The APE will be defined as the depth and breadth of the seabed that could potentially be impacted by geotechnical testing.

B. A reasonable and good faith effort to carry out appropriate identification of historic properties within the APE is presented in BOEM's *Guidelines for Providing Geological and Geophysical, Hazards, and Archaeological Information Pursuant to 30 CFR Part 585* (July 2015; *Guidelines*; *see* 36 CFR §800.4(b)(1)). Should BOEM wish to alter any archaeological survey-related information included in the *Guidelines*, BOEM will first consult with the signatories.

C. Prior to lease or grant issuance under this part, BOEM will identify consulting parties, pursuant to 36 CFR §800.3(f). BOEM will consult on existing, non-proprietary information regarding the proposed undertaking and the geographic extent of the APE, as defined in Stipulation I.A. BOEM also will solicit additional information on potential historic properties within the APE from consulting parties and the public.

D. BOEM will administratively treat all identified potential historic properties as eligible for inclusion in the National Register unless BOEM determines, and the SHPOs, or THPO if on tribal lands, agree that a property is ineligible, pursuant to 36 CFR §800.4(c).

E. Where practicable, BOEM will require lessees and grantees to avoid effects to historic properties through lease stipulations, resulting in BOEM recording a finding of *no historic properties affected*, consistent with 36 CFR §800.4(d)(1). If it is determined that there will be effects to historic properties, BOEM will follow 36 CFR §800.5. Any adverse effects will be resolved by following 36 CFR §800.6 and 36 CFR §800.10 for National Historic Landmarks.

II. For the undertakings of approving a Plan, except as described under Stipulation IV below, the signatories agree:

A. The APE will be defined as the depth and breadth of the seabed that could potentially be impacted by seafloor/bottom-disturbing activities associated with the undertakings; the offshore and onshore viewshed from which renewable energy structures would be visible; and, if applicable, the depth, breadth, and viewshed of onshore locations where transmission cables or pipelines come ashore until they connect to existing power grid structures.

B. The following constitute a reasonable and good faith effort to carry out appropriate identification of historic properties (*see* 36 CFR §800.4(b)(1)):

1. For the identification of historic properties within the seabed portion of the APE located on the OCS, historic property identification survey results generated in accordance with BOEM's *Guidelines*.

2. For the identification of historic properties within the seabed portion of the APE located in state submerged lands or within the onshore terrestrial portion of the APE, historic property identification conducted in accordance with state (or tribal, if on tribal lands) guidelines. BOEM will request the developer to coordinate with the SHPO, or THPO if on tribal lands, prior to the initiation of any such identification efforts.

3. For the identification of historic properties within the viewshed portion of the APE, historic property identification conducted in accordance with state (or tribal, if on tribal lands) guidelines. BOEM will request the developer to coordinate with the SHPO, or THPO if on tribal lands, prior to the initiation of any such identification efforts.

C. Prior to approving a Plan, BOEM will identify consulting parties, pursuant to 36 CFR §800.3(f). BOEM will consult on existing, non-proprietary information regarding the proposed undertaking (including the results of historic property identification surveys) and the geographic extent of the APE, as defined in Stipulation II.A. BOEM also will solicit from the consulting parties and the public additional information on potential historic properties within the APE.

D. BOEM will treat all identified potential historic properties as eligible for inclusion in the National Register unless BOEM determines, and the SHPOs, or THPO if on tribal lands, agrees, that a property is ineligible, pursuant to 36 CFR §800.4(c).

E. Where practicable, as a condition of Plan approval, BOEM will require the lessee to relocate elements of the proposed project that may affect potential historic properties, resulting in BOEM recording a finding of *no historic properties affected*, consistent with 36 CFR §800.4(d)(1).

1. If effects to identified properties cannot be avoided, BOEM will evaluate the National Register eligibility of the properties, in accordance with 36 CFR §800.4(c).

a. If BOEM determines all of the properties affected are ineligible for inclusion in the National Register, and the SHPO, or THPO if on tribal lands, agrees, BOEM will make a finding of *no historic properties affected*, consistent with 36 CFR §800.4(d)(1).

b. If BOEM determines any of the properties affected are eligible for inclusion in the National Register, and the SHPO or THPO if on tribal lands, agrees, and if it is determined that there will be effects to historic properties, BOEM will follow 36 CFR §800.5. Any adverse effects will be resolved by following 36 CFR §800.6 and 36 CFR §800.10 for National Historic Landmarks.

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

III. Activities exempt from review. The signatories agree to exempt from Section 106 review the following categories of activities because they have little or no potential to affect a historic property's National Register qualifying characteristics:

A. Archaeological Sampling: Vibracores or other direct samples collected, by or under the supervision of a Qualified Marine Archaeologist, for the purposes—at least in part—of historic property identification or National Register eligibility testing and evaluation.

B. Meteorological Buoys: Proposed installation, operation, and removal of meteorological buoys when the results of geophysical data collected meet the standards established in BOEM's *Guidelines* and either: 1) resulted in the identification of no archaeological site within the seabed portion of the APE for the buoy, or 2) if the project can be relocated so that the APE does not contain an archaeological site, if any such sites are identified during geophysical survey. The signatories agree that offshore meteorological buoys have no effect on onshore historic properties since they are temporary in nature and indistinguishable from lighted vessel traffic.

C. Meteorological Towers: Proposed construction, installation, operation, and removal of meteorological towers when the following conditions are met:

1. The results of archaeological survey within the offshore APE meet the standards established in BOEM's *Guidelines* and either: 1) resulted in the identification of no archaeological site within the seabed portion of the APE for the tower, or 2) if the project can be relocated so that the offshore APE does not contain an archaeological site, if any such sites are identified during geophysical survey, and

2. The applicant documents that there will be no potential for onshore visibility of the meteorological tower and therefore, no onshore APE or the results of historic property identification within the viewshed APE meet the standards outlined by the SHPO, or THPO if on tribal lands, and no historic properties are identified.

IV. Tribal Consultation. BOEM shall continue to consult with affected Tribes throughout the implementation of this Agreement on subjects related to the undertakings in a government-to-government manner consistent with Executive Order 13175, Presidential memoranda, and the Department of the Interior's Policy on Consultation with Indian Tribes.

V. Public Participation

A. Because BOEM and the signatories recognize the importance of public participation in the Section 106 process, BOEM shall continue to provide opportunities for public participation and shall consult with the signatories on possible approaches for keeping the public involved and informed throughout the term of this Agreement.

B. BOEM shall keep the public informed and may produce reports on historic properties and on the Section 106 process that may be made available to the public at BOEM's headquarters, on the BOEM website, and through other reasonable means insofar as the information shared conforms to the confidentiality clause of this Agreement.

VI. Confidentiality. Because BOEM and the signatories agree that it is important to withhold from disclosure sensitive information such as that which is protected by NHPA Section 304 (16 U.S.C. §470w-3) (e.g., the location, character, and ownership of a historic resource, if disclosure would cause a significant invasion of privacy, risk harm to the historic resources, or impede the use of a traditional religious site by practitioners), BOEM shall:

A. Request that each signatory inform the other signatories if, by law, regulation or policy, it is unable to withhold sensitive data from public release.

B. Arrange for the signatories to consult as needed on how to protect such information collected or generated under this Agreement.

C. Follow, as appropriate, 36 CFR §800.11(c) for authorization to withhold information pursuant to NHPA Section 304, and otherwise withhold sensitive information to the extent allowable by laws including the Freedom of Information Act, 5 U.S.C. §552, through the Department of the Interior regulations at 43 CFR Part 2.

D. Request that the signatories agree that materials generated during consultation be treated by the signatories as internal and pre-decisional until they are formally released, although the signatories understand that they may need to be released by one of the signatories if required by law.

VII. Administrative Stipulations

A. In coordinating reviews, BOEM shall follow this process:

1. Standard Review: The signatories shall have a standard review period of thirty (30) calendar days for commenting on all documents which are developed under the terms of this Agreement, from the date they are received by the signatory. This includes technical reports of historic property identification and eligibility determinations, as well as agency findings.

2. Expedited Request for Review: The signatories recognize the time-sensitive nature of this work and shall attempt to expedite comments or concurrence when BOEM so requests. No request for expedited review shall be less than fifteen (15) calendar days.

3. If a signatory cannot meet BOEM's expedited review period request, it shall notify BOEM in writing within fifteen (15) calendar days.

4. If a signatory fails to provide comments or respond within the time frame requested by BOEM (either standard or expedited), then BOEM may proceed as though it received concurrence. BOEM shall consider all comments received within the review period.

5. Unless otherwise indicated below, all signatories will send correspondence and materials for review via electronic media or an alternate method specified by a signatory for a particular review. Should BOEM transmit the review materials by the alternate method, the review period will begin on the date the materials were received by the signatory, as confirmed by delivery receipt. All submissions to NY SHPO must be submitted via Cultural Resources Information System (CRIS) online submission system. All submissions to NJ SHPO must be submitted via hardcopy or, if the document(s) are extremely large, by electronic media.

6. Each signatory shall designate a point of contact for carrying out this Agreement and provide this contact's information to the other signatories, updating it as necessary while this Agreement is in force. Updating a

point of contact alone shall not necessitate an amendment to this Agreement.

B. Dispute Resolution. Should any signatory object in writing to BOEM regarding an action carried out in accordance with this Agreement, or lack of compliance with the terms of this Agreement, the signatories shall consult to resolve the objection. Should the signatories be unable to resolve the disagreement, BOEM shall forward its background information on the dispute as well as its proposed resolution of the dispute to the ACHP. Within forty-five (45) calendar days after receipt of all pertinent documentation, the ACHP shall either: (1) provide BOEM with written recommendations, which BOEM shall take into account in reaching a final decision regarding the dispute; or (2) notify BOEM that it shall comment pursuant to 36 CFR §800.7(c), and proceed to comment. BOEM shall take this ACHP comment into account, in accordance with 36 CFR §800.7(c)(4). Any ACHP recommendation or comment shall be understood to pertain only to the subject matter of the dispute; BOEM's responsibility to carry out all actions under this Agreement that is not subjects of dispute shall remain unchanged.

C. Amendments. Any signatory may propose to BOEM in writing that this Agreement be amended, whereupon BOEM shall consult with the signatories to consider such amendment. This Agreement may then be amended when agreed to in writing by all signatories, becoming effective on the date that the amendment is executed by the ACHP as the last signatory.

D. BOEM shall prepare an annual report that will summarize actions taking place between October 1st and September 30th and make this report available to Signatories and Concurring Parties by December 31st of each year this Agreement is in effect. The annual report will summarize any activities exempted from review under this Section, as well as any other actions taken to implement the terms of this Agreement.

E. Coordination with other Federal agencies. In the event that another Federal agency believes it has Section 106 responsibilities related to the undertakings which are the subject of this Agreement, BOEM will request to coordinate its review with those other agencies. Additionally, that agency may attempt to satisfy its Section 106 responsibilities by agreeing in writing to the terms of this Agreement and notifying and consulting with the SHPO, THPO or tribal designee, and the ACHP. Any modifications to this Agreement that may be necessary for meeting that agency's Section 106 obligations shall be considered in accordance with this Agreement.

F. Adding Concurring Parties. In the event that another party wishes to assert its support of this Agreement, that party may prepare a letter indicating its concurrence, which BOEM will attach to this Agreement and circulate among the signatories.

G. Terms of Agreement.

1. This Agreement shall remain in full force for twenty-five (25) years from the date this Agreement is executed, defined as the date the last signatory signs, unless otherwise extended by amendment in accordance with this Agreement. The term is related to the expected length of operations of commercial leases, which is given at 30 CFR §585.235.

2. The signatories agree to meet every five (5) years, beginning from the date the Agreement is executed, to discuss the Agreement, to determine whether amendment or termination is necessary, and to evaluate the adequacy of information exchange between the parties.

H. Termination.

1. If any signatory determines that the terms of this Agreement cannot be carried out or are not being carried out, that signatory shall notify the other signatories in writing and consult with them to seek amendment of the Agreement. If within sixty (60) calendar days of such notification, an amendment cannot be made, any signatory may terminate the Agreement upon written notice to the other signatories.

2. If termination is occasioned by BOEM's final decision on the last Plan considered under the Renewable Energy Regulations, BOEM shall notify the signatories and the public, in writing.

I. Anti-Deficiency Act. Pursuant to 31 U.S.C. §1341(a)(1), nothing in this Agreement shall 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.

J. Existing Law and Rights. Nothing in this Agreement shall abrogate existing laws or the rights of any consulting party or signatory to this Agreement.

Commercial lease means a lease, issued under the renewable energy regulations, that specifies the terms and conditions under which a person can conduct commercial activities (*see* 30 CFR §585.112);

Commercial activities mean, for renewable energy leases and grants, all activities associated with the generation, storage, or transmission of electricity or other energy products from a renewable energy project on the Outer Continental Shelf (OCS), and for which such electricity or other energy product is intended for distribution, sale, or other commercial use, except for electricity or other energy products distributed or sold pursuant to technology-testing activities on a limited lease. This term also includes activities associated with all stages of development, including initial site characterization and assessment, facility construction, and project decommissioning (*see* 30 CFR §585.112);

Limited lease means a lease, issued under the renewable energy regulations, that specifies the terms and conditions under which a person may conduct activities on the OCS that support the production of energy, but do not result in the production of electricity or other energy products for sale, distribution, or other commercial use exceeding a limit specified in the lease (*see* 30 CFR §585.112);

Research lease means an OCS lease, Right-of-Way (ROW) grant, and/or Right-of-Use (RUE) grant, issued under the renewable energy regulations at 30 CFR §585.238, to a Federal agency or a state for renewable energy research activities that support the future production, transportation, or transmission of renewable energy;

ROW grant means an authorization issued under the renewable energy regulations to use a portion of the OCS for the construction and use of a cable or pipeline for the purpose of gathering, transmitting, distributing, or otherwise transporting electricity or other energy product generated or produced from renewable energy. A ROW grant authorizes the holder to install on the OCS cables, pipelines, and associated facilities that involve the transportation or transmission of electricity or other energy products from renewable energy projects (*see* 30 CFR §585.112);

RUE grant means an easement issued under the renewable energy regulations that authorizes use of a designated portion of the OCS to support activities on a lease or other use authorization for renewable energy activities. A RUE grant authorizes the holder to construct and maintain facilities or other installations on the OCS that support the production, transportation, or

transmission of electricity or other energy products from any renewable energy resource (*see* 30 CFR §585.112);

Geotechnical testing means the process by which site-specific sediment and underlying geologic data are acquired from the seafloor and the sub-bottom and includes, but is not limited to, such methods as borings, vibracores, and cone penetration tests;

Geophysical survey means a marine remote-sensing survey using, but not limited to, such equipment as side-scan sonar, magnetometer, shallow and medium (seismic) penetration sub-bottom profiler systems, narrow beam or multibeam echo sounder, or other such equipment employed for the purposes of providing data on geological conditions, identifying shallow hazards, identifying archaeological resources, charting bathymetry, and gathering other site characterization information;

Historic property means any pre-contact or historic period district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places (*see* 36 CFR §800.16(l)(1));

Tribal land means all lands within the exterior boundaries of any Indian reservation and all dependent Indian communities (*see* 36 CFR§800.16(x));

Qualified marine archaeologist means a person who meets the Secretary of the Interior's Professional Qualification Standards for Archaeology (48 FR 44738-44739), and has experience analyzing marine geophysical data;

Qualified architectural historian means a person who meets the Secretary of the Interior's Professional Qualification Standards for architectural history (48 FR 44738-44739), and has experience analyzing structures, historic districts, and landscapes.

AGREED

Execution of this Agreement by BOEM, the SHPOs, and the ACHP, and the implementation of its terms are evidence that BOEM has fulfilled its responsibilities pursuant to Section 106 of the National Historic Preservation Act.

SIGNATORIES

U.S. Department of the Interior, Bureau of Ocean Energy Management

By: _____ Date: April 19, 2016

James F. Bennett
Chief, Office of Renewable Energy Programs
Bureau of Ocean Energy Management

State Historic Preservation Office, New York State Parks

By: Ruth Pierpont Date: 5/20/16

Ruth Pierpont
Deputy State Historic Preservation Office
New York State Parks, Recreation and Historic Preservation

State Historic Preservation Office, State of New Jersey

By: _____ Date: 5/6/2016

Daniel D. Saunders
Deputy State Historic Preservation Officer
State Historic Preservation Office
State of New Jersey

Invited Signatory: Shinnecock Indian Nation

By: _____ Date: _____

[NAME]
[TITLE]
Shinnecock Indian Nation

Advisory Council on Historic Preservation

By: John M. Fowler Date: 6/3/16

John M. Fowler
Executive Director
Advisory Council on Historic Preservation

NEW YORK STATE OF OPPORTUNITY. | Parks, Recreation and Historic Preservation

ANDREW M. CUOMO
Governor

ROSE HARVEY
Commissioner

October 6, 2015

William Hoffman
Archaeologist
Bureau of Renewable Energy Program
45600 Woodland Road
Mail Stop VAM-OREP
Sterling, VA 20166

Re: BOEM New York Visual Simulations/Area Identification
Offshore Wind Project New York Call Area
Off the South Coast of Long Island
15PR05581

Dear Mr. Hoffman:

It is our understanding that BOEM has identified an area of potential future wind energy leasing offshore Long Island, New York as part of the Planning and Analysis phase of the Wind Energy Commercial Leasing Process. We appreciate the time that you and your team spent meeting with us at Peebles Island on 26 August 2015 to share with us the visibility study for this hypothetical wind energy project located on OCS offshore New York ("NY Call Area"). The view shed models were most helpful in providing us with an initial understanding of the potential visibility of the project from key areas of the surrounding landscape. In particular, the video simulations that took into account meteorological conditions and day vs. night views were very instructive. As BOEM is not currently considering the approval of a specific project within the NY Call Area, the SHPO cannot offer substantive comments at this time. However, we can provide some initial observations and thoughts for your consideration. The State Historic Preservation Office appreciates the opportunity to consult with you early on as part of the Section 106 process in considering the effects of the potential wind farm project on historic and archaeological properties.

Given the largely flat and open nature of the area surrounding the potential offshore wind farm project, careful consideration should be given to establishing the Area of Potential Effect so that key view sheds are taken into account. Underwater archaeological investigations for this project must be specialized as well. Remote sensing surveys (e.g., magnetometry, ultra-high resolution multibeam sonar bathymetry, and sub-bottom sonar surveys) by an experienced cultural resources firm will be necessary to determine if archaeological resources including submerged Native American sites as well as shipwrecks are potentially present at the wind turbines, substations, anchorages, cable runs, and staging areas.

If the project proceeds, we ask that BOEM and their cultural resources specialists meet with us in advance of initiating surveys so that questions concerning scope and methods can be resolved at the outset. For information on National Register listed properties and previously determined National Register eligible properties I invite you to explore our Cultural Resources Information System (CRIS)

http://nysparks.com/shpo/online-tools/. Click on the CRIS icon. You'll need to agree to the terms, then you can start by logging in as a guest or you can apply to NY.gov to get a designated ID for CRIS. By selecting "search" on the top green bar you can search for both locations and data for properties within the APE. Please note, that we are in the process of commencing a large-scale survey project using funds received through the National Park Service for Hurricane Sandy Disaster Relief so the data available in CRIS on historic resources along the south shore of Long Island, Queens, Brooklyn, and the east shore of Staten Island will greatly improve over what is currently in CRIS.

While the potential visual effects on the numerous NR-listed and NR-eligible properties will need to be evaluated should this project move forward, at this time we want to call your attention to our National Register-listed Jones Beach State Park in Nassau County. The potential visual impacts appear to be the greatest at night with the blinking field of red lights. It is important to note that Jones Beach was listed under the national level of significance meaning that it is worthy of consideration as a possible National Historic Landmark by the National Park Service. The boundaries of the NR listing extend approximately one mile from the southern shoreline of Jones Beach into the waters of the Atlantic Ocean. The nomination states that Jones Beach "unlike other public beaches on the coastal United States . . . was not a scenic area acquired for conservation and/or passive recreation" but, "an extensive naturalistic landscape and transportation system almost entirely created through human intervention specifically to provide active recreation for a massive urban population. As such, it is a landmark in the history of public recreation in the United States."

Thank you again for reaching out our agency at this early stage of the Wind Energy Commercial Leasing Process. Please note that we ask you to submit any future correspondence for this planning project by using the online CRIS system under project number 15PR05581.

Sincerely,

Kathleen A Howe

Kathleen A. Howe
Survey Coordinator

cc: Kathleen Martens, OPRHP
Ron Rausch, OPRHP

United States Department of the Interior

NATIONAL PARK SERVICE
Northeast Region
United States Custom House
200 Chestnut Street
Philadelphia, PA 19106

IN REPLY REFER TO:
A.1.2.(NER-RSS)

DEC 2 3 2015

Memorandum

To: Michelle V. Morin, Chief, Environmental Branch for Renewable Energy, Bureau of Ocean Energy Management (BOEM)

From: Frank R. Hays, Associate Regional Director, Resource Stewardship and Science, Northeast Region, National Park Service (NPS)

Subject: NPS Comments on the Visibility Study Conducted for a Hypothetical Wind Energy Project on the Outer Continental Shelf, Offshore New York

NPS is providing this memorandum in response to BOEM's presentation on November 5 and letter requesting our comments received on December 1. We appreciate BOEM seeking our input as it works to complete its area identification. Moreover, the NPS joins BOEM in supporting the Department of the Interior's effort to be "Smart from the Start" in planning and permitting renewable energy projects to ensure that they are sited, constructed and operated in a manner that is protective of the units of the National Park System. Because no commercial wind energy projects have yet been built in U.S. waters, and we do not yet fully understand the actual short and long-term impacts associated with doing so, nor the efficacy of mitigation measures, the NPS urges a cautious approach in considering granting leases for the siting of facilities in waters off the coast of national park units.

The NPS Organic Act of 1916 requires the NPS "…to conserve the scenery and the natural and historic objects and wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations."[1] As such, we greatly appreciates BOEM consulting with us regarding locations in which to prepare visual simulations of theoretical wind farms that will affect natural and cultural resources, as well as the experience of park visitors.

Upon review of the simulations, the NPS is concerned that potential wind development in the proposed Call Area could have negative impacts on Fire Island National Seashore (the Seashore), and its federally protected wilderness area, Gateway National Recreation Area (Gateway), and a number of area National Historic Landmarks (NHLs). The attached document provides detailed

[1] 54 U.S.C. 100101*et seq.*

descriptions of the resource values of the Seashore, Gateway, and NPS managed NHLs for your reference.

NPS has had limited time to offer a detailed review of the study. The comments provided here and in the attached document contain some initial thoughts, questions and input about potential impacts from wind development in the Call Area and about specific aspects of the visual simulation study. Further comments may be provided in the future. We also understand that this is the first of a number of likely visual simulations to be conducted, should this project continue to move forward. As the size of offshore wind turbines is expected to continue to increase, much larger turbines – though fewer, would be substantially more visible from certain viewpoints within the parks.

Our primary concerns are impacts to visual and night sky resources. The video simulations depicting red lights blinking in unison atop each turbine tower are of particular concern as successful mitigation of impacts to parks and NHLs may not be possible given safety considerations that dictate turbine lighting. The following are some of our specific concerns:

- The location of the proposed turbine field (Call Area) will be visible from almost all of the historic districts and resources in Gateway. According to Figure 3-4, "Viewshed based on Top of Canopy Elevation Model," which you shared with NPS, the hub and blade is expected to be visible from the Sandy Hook Light NHL, Fort Hancock and Sandy Hook NHL District, Spermaceti Cove Life Saving Station (individually listed on the National Register), Jacob Riis Park Historic District, Fort Tilden Historic District, Silver Gull Beach Club Historic District, and Breezy Point Surf Club. In addition, the tips of the blades may be visible from Floyd Bennett Field, Miller Field, and Fort Wadsworth.
- The video simulations from Sandy Hook and Jacob Riis Park suggest that the turbines will be visible, but not intrusive during the day and will likely have minimal impact on the historic districts and the viewsheds. This is true provided the turbine color (gray), height, location, and configuration remain as proposed. If the height of the turbines is increased and the color changed, the proposed call area may have a greater visual impact on Gateway's historic resources and viewsheds during the day.
- The night lighting has the potential to negatively visually impact these same historic districts in Gateway, as well as throughout the Seashore, including at the Fire Island Lighthouse, Sailors Have, and the Fire Island Light Station Historic District. The view from the parks and historic districts to the ocean is part of the cultural landscape. While ship lights currently dot the view as they move in and out of the harbor at night, the lights are fleeting as they cross the horizon. The proposed red blinking lights in a fixed position on the horizon will change the ocean view from all districts and have a negative impact on existing viewsheds.
- The Seashore is also concerned about potential visibility of the flashing lights in the western section of the Fire Island Wilderness, which begins just east of Watch Hill. The Seashore is mandated through the Wilderness Act (1964) to preserve the area for wilderness character, which includes providing for solitude and unconfined recreation. Night sky is a measure for this wilderness character quality in the Seashore's Wilderness Character monitoring

protocols (Draft Wilderness Stewardship Plan/Draft General Management Plan). The proposed project has the potential to decrease this quality of wilderness character.

Thank you for the opportunity to provide these comments. Should you have any questions or need additional information, please contact Mary Krueger, Energy Specialist for the Northeast Region at Mary_C_Krueger@nps.gov or 617-223-5066.

Attachment

cc:
Raymond Sauvajot, Associate Director, Natural Resources Stewardship and Science
Celina Cunningham, Advisor to BOEM Director

Attachment: Overview of Resource Values of Fire Island National Seashore and Gateway National Recreation Area and Specific Comments/Questions Regarding Visual Simulation Study for Offshore New York Wind Energy Call Area

Fire Island National Seashore (the Seashore) and Gateway National Recreation Area (Gateway) are the two National Park System units that would be most affected by offshore wind area development as proposed in the visual simulation study. A number of National Historic Landmarks (NHLs) would also be affected. Some of these are owned and managed by the National Park Service (NPS), while others are privately owned. For additional context the NPS units are described below, followed by specific questions and comments on the visual simulation study itself.

Fire Island National Seashore

Fire Island National Seashore (the Seashore), a unit of the National Park System, is located along the south shore of Long Island in Suffolk County, New York. The Seashore encompasses 19,580 acres of upland, tidal, and submerged lands along a 26-mile stretch of the 32-mile barrier island, part of a much larger barrier islands system stretching from New York City to the east end of Long Island at Montauk Point. Easily accessed on Fire Island are nearly 1,400 acres of federally designated wilderness, an extensive dune system, centuries-old maritime forests, solitary beaches and the Fire Island Lighthouse. Also part of the Seashore on nearby Long Island is the William Floyd Estate, the home of one of New York's signers of the Declaration of Independence. On September 11, 1964, Congress passed Public Law 88-587 establishing the Seashore "for the purpose of conserving and preserving for the use of future generations certain relatively unspoiled and undeveloped beaches, dunes, and other natural features… Which possess high value to the Nation as an example of unspoiled areas of great beauty in close proximity to large concentrations of urban population..."

During the summer season, the resident population of Fire Island swells to approximately 30,000 with a total of well over two million visitors each year. Recreational visitation to sites and facilities owned or managed by the Seashore in 2014 was 384,343. On Fire Island, the Seashore's primary visitor facilities are Fire Island Lighthouse, Sailors Haven, Watch Hill, and the Wilderness Visitor Center. Fire Island Lighthouse is maintained and operated by the Fire Island Lighthouse Preservation Society, which offers tours and other visitor programming. Concessioners operate marinas Sailors Haven and Watch Hill (allowing overnight stays totaling up to 14 days) and a campground at Watch Hill. Located at either end of Fire Island and accessible by vehicle are major state and county parks/beaches with sizable visitation. Also on Long Island about 15 miles east of Patchogue is the historic William Floyd Estate.

The Seashore's soon-to-be released General Management Plan outlines the Seashore's Purpose as follows: "Together with the Fire Island communities, government agencies, and other partners, Fire Island National Seashore conserves, preserves, and protects for the use and appreciation of current and future generations Fire Island's larger landscape including its

relatively undeveloped beaches, dunes, and other natural features and processes and its marine environment....Fire Island National Seashore conserves, preserves, and protects the historic structures, cultural landscapes, museum collections, and archeological resources associated with the Seashore including the Fire Island Light Station and the William Floyd Estate. The Seashore preserves the primitive and natural character of the Otis Pike Fire Island High Dune Wilderness and protects its wilderness character."

The Otis Pike Fire Island High Dune Wilderness (Fire Island Wilderness) offers a rare opportunity for a broad spectrum of the American public to experience wilderness. On December 20, 1980, Congress passed Public Law 96-585 establishing the Fire Island Wilderness encompassing roughly 1,400 acres of the Seashore. The Fire Island Wilderness is distinct, as it is the smallest wilderness managed by the National Park Service (NPS), and the only federally designated wilderness in New York State. The establishment of the Fire Island Wilderness is the culmination of previous legislative and management direction to preserve and maintain this section of the Seashore in a primitive and natural state.

NPS Management Policy 4.10 (Lightscape Management), states that the NPS will preserve, to the greatest extent possible, the natural lightscapes of parks, which are natural resources and values that exist in the absence of human-caused light. Night skies are an important resource at Fire Island National Seashore. The Seashore's GMP states:

> While the glow of Long Island's developed south shore is apparent from Fire Island, the more immediate experience on Fire Island is the opportunity to observe the naturally dark night sky as one looks out over the Atlantic Ocean. On Fire Island and at the William Floyd Estate, the naturally dark night sky would be preserved to the degree feasible. The NPS would minimize or reconfigure artificial light sources within the Seashore and would work with adjoining areas to reconfigure artificial lighting to better enable opportunities to see the moon, stars, planets, and other celestial features.

The NPS strives to preserve natural ambient landscapes and other values that exist in the absence of man-made light. The Seashore is located in one of the most densely developed regions in the world. In addition to its proximity to New York City, the communities and Seashore facilities located on Fire Island produce light and also affect the night sky. As a result, when looking to the north, there are constant impacts on the night sky, even in some of the most obscure areas. While the glow of Long Island's developed south shore is apparent from Fire Island, the more immediate experience on Fire Island is the opportunity to observe the naturally dark night sky as one looks out over the Atlantic Ocean.

The Seashore provides important habitat for marine and terrestrial plants and animals, including a number of rare, threatened, and endangered species. Seashore lands are an important part of the Atlantic flyway and provide shelter for more than 330 migratory, over-wintering, and resident bird species. The Seashore continues its collaborative efforts to preserve and monitor critical habitats and open spaces for the protection of threatened and endangered species. Two federally

listed bird species are known to nest within the Seashore — the threatened Piping Plover (Charadrius melodus) and the endangered roseate tern (Sterna dougallii). The state-listed threatened least tern (Sternula antillarum) and the common tern (Sterna hirundo) nest on Fire Island. The black skimmer (Rhynchops niger) and the osprey (Pandion haliaetus) are bird species of special concern in New York State. Sea beach amaranth (Amaranthus pumilus) is a federally-listed threatened annual plant species that grows on some of Fire Island's beaches as does sea beach knotweed (Polygonum glaucum), a New York State rare plant.

In the past, management of the Seashore—as with other coastal national parks and seashores—has focused more on terrestrial than on aquatic resources. Yet Fire Island's boundaries extend 4,000 feet on average into the Great South Bay, and 1,000 feet into the Atlantic Ocean, encompassing a wealth of submerged and tidal resources, both natural and cultural. Over 70 percent of the Seashore is submerged. In recent years, Seashore officials have become increasingly concerned about the protection of these marine resources. At the same time, the NPS has been affirming its commitment to marine resource protection service-wide, through development of new plans and initiatives. The Seashore is committed to conducting research and providing better protection to its marine resources, which will include understanding the impacts of offshore development.

Gateway National Recreation Area

Gateway National Recreation Area (Gateway) is a unit of the National Park System owned and managed by the NPS. Gateway was established "in order to preserve and protect for the use and enjoyment of present and future generations an area possessing outstanding natural and recreational features." Federal legislation establishing the park was signed into law in October of 1972, and signified the culmination of many years of effort by citizens, planners, activists, the NPS, and members of Congress to create one of the first urban national parks in the United States. Gateway covers more than 40 square miles in New York and New Jersey and serves over 6 million people a year. This is an area that is twice the size of the island of Manhattan. The park is divided into three different areas in Monmouth County, New Jersey and the New York City boroughs of Brooklyn, Queens and Staten Island.

The legislative boundary for Gateway is 27,025 acres and extends into adjacent waters, including the Atlantic Ocean, Jamaica Bay, Raritan Bay and Upper and Lower New York Bay. The park has three administrative units: the Jamaica Bay Unit, Sandy Hook Unit, and Staten Island Unit which together manage 21,860 acres of land and water. These three district geographic areas are linked together by similar types of resources and recreation uses, yet retain distinctive characteristics that make them special.

The Jamaica Bay unit is the largest of the three units and is one of the largest expanses of open space in the region, consisting of over 19,000 acres of land, bay and ocean waters within two boroughs of New York: Brooklyn and Queens. The unit includes: Plumb Beach, Floyd Bennett Field, Bergen Beach, Canarsie Pier, Pennsylvania Avenue and Fountain Avenue Parks, Frank

Charles Memorial Park, Hamilton Beach, Spring Creek, Jacobus Riis Park, Fort Tilden, Breezy Point Tip and the Jamaica Bay Wildlife Refuge in the center of the bay.

With respect to Jamaica Bay, the park's enabling legislation specifically states the following: "The Secretary shall administer and protect the islands and waters within the Jamaica Bay Unit with the primary aim of conserving the natural resources, fish and wildlife located therein, and shall permit no development or use of the area which is incompatible with this purpose." The heart of the bay has been designated the Jamaica Bay Wildlife Refuge, which encompasses over 9,000 acres within the boroughs of Brooklyn and Queens in New York City. The site provides a variety of habitats for over 300 species of birds. It is a critical stop-over area along the Eastern Flyway migration route and is considered to be one of best birding areas in the western hemisphere. The Refuge was the first site to be designated as an "Important Bird Area" by the National Audubon Society.

Floyd Bennett Field was New York City's first municipal airport and the site of many historic achievements in aviation in the 1930s through 1950s. During World War II, it served as Naval Air Station New York, the busiest Naval Air Station in the United States. Manufacturers delivered new aircraft to Floyd Bennett Field, where Naval transport pilots tested and commissioned the planes before flying them, primarily to the West Coast for use in the Pacific Theater. The pilots transported approximately 40,000 new warplanes during this period. Floyd Bennett Field was also the first helicopter training facility in the world, training Allied pilots in sea-rescue techniques. The field is still in use as a helicopter facility. The New York Police Department owns and operates a heliport at Floyd Bennett Field known as NYPD Air Operations Heliport - NY22 (FAA Identifier).

Jacob Riis Park is named after the famed reformer and photojournalist. It, too, has a distinguished aviation history, serving as Naval Air Station Rockaway from 1917 to 1928, and was the starting point of the first transatlantic flight in 1919. Jacob Riis Park was designed and built under the auspices of Robert Moses, and included an Art Deco bathhouse and an extensive sand beach. The art deco bath house was built in 1932, and is listed on the National Register of Historic Places (NRHP).

Fort Tilden is a former military site that overlooks the approach to New York Harbor and today includes dunes, a maritime forest, freshwater ponds and coastal defense resources including Battery Harris and the Nike Missile Launch Site. An observation deck is located on top of Battery Harris which allows for panoramic views of the bay and the ocean.

Floyd Bennett Field, Jacobus Riis Park, Fort Tilden and the beach clubs located along the Rockaway Peninsula's Atlantic shoreline are each individual National Register historic districts. Jacob Riis Park is also a cultural landscape. Historic structures and their relationship to the ocean is a significant characteristic that defines the cultural landscape and is important to the historic integrity of the Park.

The Staten Island Unit encompasses almost 2,974 acres of land, bay and ocean waters and four areas including Great Kills Park, World War Veterans Park at Miller Field, Fort Wadsworth, and Swinburne and Hoffman Islands in Staten Island, New York. Fort Wadsworth, located along the shores of New York Harbor above and below the Verrazano Narrows Bridge, is one of the oldest military sites in the nation. Listed on the NRHP, the Fort has controlled the entrance to New York Harbor since the Revolutionary War and includes coastal defense resources such as Battery Weed and Fort Tompkins. Fort Tompkins is located on the bluff above Battery Weed and affords the visitors with panoramic views of the harbor, lower Manhattan, and the area beyond the bridge. Miller Army Airfield was constructed just after WWI and today includes a National Register airplane hangar, and the Elm Tree Light which was an aid to navigation, along with the swamp white oak forest. Great Kills, also located along the Atlantic shoreline, includes saltmarshes, beaches, nature trails, and a marina. Finally, Hoffman and Swinburne Islands, located off the coast of Staten Island, are important bird nesting areas.

The Sandy Hook unit consists of 4,688 acres of land, bay and ocean waters in Monmouth County, New Jersey. The Fort Hancock and Sandy Hook Proving Ground NHL District includes the entire peninsula with a boundary that begins at the Route 36 Bridge and extends into the waters at the tip of the hook, and includes lands managed by NPS and the United States Coast Guard. Fort Hancock is a former U.S. Army fort that provided coastal defense for New York Harbor from 1895 until 1974. The unit contains over 100 historic structures, natural areas and shorelines adjacent to the Atlantic Ocean and Sandy Hook Bay. Located within the NHL district, is the individually listed Sandy Hook Light NHL and the National Register Spermaceti Cove Life Saving Station. Sandy Hook Light is the oldest continuously active lighthouse in the US. It has guided ships into the harbor since 1764. Tours of the lighthouse are given daily. Spermaceti Cove Life Saving Station, constructed in 1894, is a Duluth-type station with a watch tower. Like other lifesaving stations, it was constructed for the purpose of saving lives and property from shipwrecks. Closed since Hurricane Sandy, it will reopen this year and again be opened to the public as a visitor center. Historic structures and their relationship to the ocean is a significant characteristic that defines the cultural landscape and is important to the park's historic integrity.

At Gateway NRA, "darkness and night sky" is a fundamental value. The park's GMP states, "[v]iewing of the night sky is an important aspect of visitor experience in Gateway" (NPS, 2014). Dark (night) skies are of particular importance to Gateway NRA visitors, many of whom have very limited access to night skies with relatively low levels of "light pollution" and are introduced to night sky programs for the first time at the park. Floyd Bennett Field is recognized as one of the interior and/or more remote sections of the park where artificial light sources do not impair night sky viewing opportunities. Currently, astronomy programs that draw audiences to appreciate the park's night sky are incorporated into camping programming at Floyd Bennett Field's Ecology Village, Great Kills and Sandy Hook. Thus, the effects of lighting on park resources and values should be considered as the project moves forward.

Natural Lightscapes, Night Skies and the Visual Simulation Study

NPS appreciates the extensive effort to provide simulations of a hypothetical project to help determine the potential visual impacts of a wind farm offshore New York. The report and simulations are very thorough and well done. We conclude with a discussion of human perception of vision and movement, and specific questions and comments about the study.

Human Perception

When considering potential impacts and methods of assessing the visual impact at night, an analysis must account for how the eye sees differently in low light. For example, at night, foveal vision (pertaining to the center of focus) is greatly diminished and peripheral vision is enhanced. As a result, the visual scene is dominated by objects off the center of focus. A flashing beacon, such as those typically installed on wind turbines, is easily noticed as much as 80° off axis of sight. Because people tend to rely more heavily on peripheral vision at night, the portion of the horizon affected by the wind turbines in terms of night time visibility will seem larger. Basically, regardless of where a visitor looks (in the general direction of the turbines), their peripheral vision will pick up the light from the turbines.

Flashing lights will draw a visitor's attention to a greater degree than a constant light source. The flash of a strobe will be perceived as motion. Humans are sensitive to perceived motion in their environment. To enjoy the night skies, visitors require low light levels that allow full adaptation to scotopic (night) vision. Exposure to turbine anti-collision lighting can disrupt this process. The simulations depict red obstruction lighting. Although some bird species can be disoriented by red lights, human scotopic vision is less disrupted by red light. However, human perception of flashing beacons in this area will present a challenge to mitigate that may not be entirely successful given the lighting patterns that safety considerations may dictate.

Impacts would not be limited to wind facility operation. As construction would likely be ongoing throughout the night, substantial impacts could be expected from construction lighting under standard practices. The reflective nature of water exacerbates the scattering of construction lighting more so than an equivalent project on land.

NPS comments have mostly focused on impacts to humans. Impacts to wildlife for which NPS has management responsibility should be analyzed.

Questions and Comments Concerning the Visual Simulations

NPS has a number of specific questions and comments about the visual simulation study:

- According to the Simulation Report, lighting data used in the simulations were collected at a wind energy installation near Palm Springs, CA. Palm Springs represents a dry desert environment, whereas the project area is characterized by very different atmospheric

conditions (e.g. high humidity, and high occurrence of cloud cover). Do the simulations reflect scattering of light due to typical atmospheric conditions in the project area? (The daytime simulations appear to incorporate these data, but it is not clear if they were also included in night time simulations.)

- Cloud cover can increase visibility of lights on the horizon and increase skyglow. Do the simulations assume clear skies or do they assess the scattering of light due to cloud cover over the project area?

- A distinction between visibility Rating 5 and 6 is that rating 6 includes a reference to contrast resulting from "motion." Flashing lights are perceived as motion by humans. As a result, the night time simulations that were rated as "5s" should be "6s" due to the sense of motion induced by the flashing nature of the anti-collision lighting.

- Offshore wind turbines often include additional marine anti-collision lighting to avoid collisions by mariner vessels. It is unclear whether the simulations include marine anti-collision lighting.

- Blade Movement and Sun Reflection/Glare: While a great deal of attention, rigor and data went into establishing the effects of variable atmospheric conditions, such as relative humidity, on visibility of the hypothetical off-shore wind project from the KOPs, NPS couldn't find any analysis on how movement of the blades and sun reflection would impact daytime visibility, other than an acknowledgment that it does. This would seem to be a large gap in the analysis of daytime visibility (factors that would augment visibility). Just as one cannot fully understand the effects of more than 130 red lights flashing in unison thirty times a minute at night without seeing the videos, similarly, the visual effects of movement of the blades and sun glare cannot be understood without an animation. NPS recommends such animations are included in future visual simulation studies in this area.

- Top of Canopy Viewshed Modeling: NPS uses the approach that vegetation, especially outside the boundary or control of a property, should not be considered a visual buffer (viewshed limiting factor or a factor that restricts visibility), as it is not a permanent or consistent landscape feature. Trees outside of a property boundary of any visually sensitive site that are not within the control of the site owner/manager, can, generally, be removed by choice. Furthermore, all vegetation, even that within the control of a site, can be and are lost to storms, fire, old age, disease etc., and can take generations to reestablish to the point where they would be a viewshed limiting factor. For example, over 200 trees at Green–Wood Cemetery came down during Sandy. A bare earth/no vegetation condition should be considered as a worst case scenario for the reasons cited. It is also not clear if leaf-off conditions were factored into the Top of Canopy Viewshed Model. Please clarify.

- It is very important that the limitations of using visual simulations be highlighted. Though the explanation of visibility is correct, the report goes on to state that "since wireframe images lack lighting and atmospheric conditions the wireframe simulations exaggerate the visibility of the structures." (Visual Simulation Report, pg. 50) This section continues a good discussion explaining the lighting visibility conditions that are represented in the simulations. Appendix E also adds that since the wireframes do not have meteorological conditions or lighting added to the simulation that the "turbines in those images appear more distinct and apparent than they might when viewed under actual weather conditions" and that "These images overstate visibility as such conditions are unlikely in a real world scenario." However, it must be kept in mind that no matter the quality of the simulation when those components are added that they are based on photographs or videos, and, ultimately, what they simulate is a photograph or a video of the proposed project, not the actual visual experience a viewer would have in a real landscape looking at the real project (NZILA Education Foundation 2010; Scottish Natural Heritage 2006). Because of the wide range of viewing conditions under which they will be viewed – despite the proper instructions – it should be qualified that the simulations do not necessarily represent a true visual experience. Because of limitations inherent in the photographic medium, simulations are approximations of what the project would look like and are not the same as "being there." Indeed, observations made by Benson (2005) suggest that simulations of proposed wind farms in VIAs often underestimated the impacts compared with field observations of the built projects, in part, because "the windfarm often looked nearer, more visible, and more conspicuous than the photomontage predicted."

References

Benson, J. 2005. "The Visualization of Wind Farms." In *Visualization for Landscape and Environmental Planning: Technology and Applications*, edited by I.D. Bishop and E. Lange, 184–192. Oxford: Taylor & Francis.

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Office of Renewable
Energy Programs

Project#: 14-2601-5
HPO-E2016-041-PROD

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MAIL CODE 501-04B
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CHRIS CHRISTIE
Governor

KIM GUADAGNO
Lt. Governor

BOB MARTIN
Commissioner

May 6, 2016

Brandi M. Carrier
Archaeologist, Atlantic Regional Preservation Officer
Department of the Interior
Bureau of Ocean Energy Management
Office of Renewable Energy Programs
45600 Woodland Road, VAM-OREP
Sterling, VA 20166

Re: Programmatic Agreement (PA) between BOEM, NJ and NY SHPOs, Tribes, and ACHP regarding review of Outer Continental Shelf renewable energy activities offshore of New Jersey and New York

Dear Ms. Carrier:

The above-referenced PA has been signed by Deputy State Historic Preservation Officer for the State of New Jersey, Daniel D. Saunders, and I am returning it to you as requested. The Historic Preservation Office (HPO) looks forward to continued consultation as set forth in the PA. The HPO would like to thank BOEM for your substantial efforts to complete the Section 106 Review process.

Based upon visual simulations that BOEM provided to us, we believe there may be adverse visual effects caused by the construction of wind turbines, particularly at night when they all flash in unison. We look forward to working with you in the future to assess the effects of this project on historic properties.

If you have any questions, please contact me at (609) 984-5816, or Mr. Saunders at (609) 633-2397.

Sincerely,

Katherine J. Marcopul

Katherine J. Marcopul
Supervising Historic
Preservation Specialist

Attachment

United States Department of the Interior

NATIONAL PARK SERVICE
Northeast Region
United States Custom House
200 Chestnut Street
Philadelphia, PA 19106

IN REPLY REFER TO:
A.1.2.(NER-RSS)

July 13, 2016

Program Manager, Office of Renewable Energy
Bureau of Ocean Energy Management
45600 Woodland Road
Sterling, Virginia 20166

www.regulations.gov

Subject: Environmental Assessment for Commercial Wind Lease Issuance and Site Assessment Activities on the Atlantic Outer Continental Shelf (OCS) Offshore New York; MMAA104000; [Docket No. BOEM–2016–0038]; NPS EQ-16/0063

Dear Director Hopper,

The National Park Service (NPS) is pleased to provide comments on the Environmental Assessment for Commercial Wind Lease Issuance and Site Assessment Activities on the Atlantic Outer Continental Shelf (OCS) Offshore New York. NPS previously detailed concerns regarding potential wind energy projects offshore New York in our December 23, 2015 memorandum to BOEM (published on the BOEM web site). We maintain these concerns, but acknowledge the following points made in the EA:

- "BOEM does not consider the issuance of a lease to constitute an irreversible and irretrievable commitment of agency resources toward the authorization of a commercial wind power facility. Section 1.1.1 of this EA describes BOEM's phased planning and authorization process for offshore wind development. Under this process, the issuance of a lease only grants the lessee the exclusive right to use the leasehold to (1) gather resource and site characterization information, (2) develop its plans, and (3) subsequently seek BOEM approval of its plans for the development of the leasehold." EA, pg. 1-6

- "Should a lessee submit a COP, BOEM would consider its merits, perform the necessary consultations with the appropriate state, federal, local, and tribal entities, solicit input from the public and the Task Force, and perform an independent, comprehensive, site- and project specific NEPA analysis." EA, pg. 1-7.

- "BOEM does not consider development of a commercial wind power facility within the WEA, and its attendant environmental impacts, to be reasonably foreseeable at this time." EA, pg. 1-7.

- **Viewshed**. The National Park Service (NPS) and New York State Historic Preservation Office (SHPO) expressed concerns regarding the potential for visual impacts to onshore areas from wind power development (primarily Fire Island National Seashore [FIIS], Gateway Recreation Area, and various National Historic Landmarks). BOEM conducted stakeholder outreach with NPS, the New York SHPO, and the New Jersey SHPO. Under BOEM's commercial wind energy leasing process, full identification of historic properties and consideration of visual impacts from commercial wind development (wind turbines) does not occur until BOEM's review of a lessee's COP, during which Section 106 consultations under the National Historic Preservation Act (NHPA) will be conducted.

We look forward to continuing opportunities to participate in the potential development of the wind energy area offshore New York and to consideration of our concerns through State Task Force activities, review under NEPA and as a consulting party under Section 106 of the National Historic Preservation Act. As to the alternatives described in the EA, NPS is most supportive of Alternative B as any night lighting on MET tower(s) or buoys is less likely to be visible from Fire Island National Seashore, Gateway National Recreation Area and area National Historic Landmarks.

We appreciate efforts to consider and address NPS concerns. Thank you for the opportunity to provide comments on the Environmental Assessment for Commercial Wind Lease Issuance and Site Assessment Activities on the Atlantic Outer Continental Shelf (OCS) Offshore New York. If you have any questions or need additional information, please contact Mary Krueger, Energy Specialist for the Northeast Region at Mary_C_Krueger@nps.gov or 617-223-5066.

Sincerely,

Frank R. Hays
Associate Regional Director
Resource Stewardship and Science
Northeast Region

SHINNECOCK INDIAN NATION
Shinnecock Indian Territory
P.O. Box 5006 Southampton, New York 11969-5006
Phone (631) 283-6143 Fax (631) 283-0751

The oldest self-governing
Tribe of Indians in the United States

March 11, 2016

Department of the Interior
Bureau of Ocean Energy Management
Office of Renewable Energy Programs
45600 Woodland Drive, V AM-OREP
Sterling, Virginia 20166
Attn: William Hoffman, Archaeologist

Re: Comments on BOEM US Wind Inc. Draft Finding of No Historical Properties Affected

Dear Mr. Hoffman

Thank you for inviting the Shinnecock Indian Nation ("Nation") to provide historic and cultural resources information and comments related to the BOEM US Wind Inc. Draft Finding of No Historical Properties Affected. Please see the attached document containing the information that you have requested that has been prepared by the Nation's Legal Department. The Nation does not yet have a Historic Preservation Office but our Legal Department has reviewed the submitted materials in accordance with Section 106 of the National Historic Preservation Act. Should you have any questions, please contact the Nation's Legal Department at Legal@shinnecock.org or call to speak with Shinnecock Tribal Attorney Kelly Dennis or Tela Troge at (631) 283-6143.

Sincerely,

Bryan Polite, Chairman
Shinnecock Indian Nation Council of Trustees

Comments on BOEM US Wind Inc. Draft Finding of No Historical Properties Affected

Submitted by:

SHINNECOCK INDIAN NATION

Date: March 11, 2016

I. Introduction

Thank you for inviting the Shinnecock Indian Nation to provide historic and cultural resources comments on the Draft Finding of No Historical Properties Affected ("Finding") for the US Wind Inc. commercial wind lease activities. The Shinnecock Indian Nation ("Nation") is the one of the oldest self-governing Indian Nations in the State of New York and is a federally recognized Indian tribe (75 Fed. Reg. 60810, Oct. 1, 2010). The elected governing body of the Nation is a seven member Council of Trustees. The Nation does not yet have a Historic Preservation Office but our Legal Department has reviewed the submitted materials in accordance with Section 106 of the National Historic Preservation Act.

The Nation exerts the authority and responsibility to protect the heritage and traditions of the Shinnecock People and acknowledges that the Nation's Legal Department is best qualified to review these materials. We understand that the Bureau of Ocean Energy Management (BOEM) has determined that approving the Site Assessment Plan (SAP) for U.S. Wind Inc. constitutes an undertaking under Section 106 of the National Historic Preservation Act. Thank you for inviting the Shinnecock Indian Nation to participate as a consulting party the approval of the SAP. We also appreciate BOEM sharing information regarding the proposed undertaking including the results of the lessee's archaeological and historic property identification surveys pursuant to the Programmatic Agreement that includes the Nation as a signatory.

II. Overview

The Shinnecock people are traditional whalers and fisherman who have used the coastal waterways for travel and trade. We have used southern navigation routes in the Mid-Atlantic affected area for our canoe journey and whaling. "Historically, whales provided Mid-Atlantic tribal people such as the Shinnecocks with food, raw materials, a source of spiritual and ceremonial strength, and valuable trade goods."[1]

Issues impacting ocean and coastal historical and cultural resources, shellfish, water rights, fishing rights, and fisheries generally are important to Shinnecock. The

[1] Tribal Uses, Mid-Atlantic Regional Ocean Assessment, http://roa.midatlanticocean.org/ocean-uses/status-trends-and-linkages/tribal-uses/.

Shinnecock use the shells of quahog, whelk, and conch in the region to create wampum beads, strings, collars, and belts. Before Europeans used wampum as a currency in trade with native peoples, it served as an important element in Tribes' cultural and political negotiations (Wampum Trail Project 2015).[2] The agreement of Chief Wyandanch's Deed in 1659 continues to protect Shinnecock hunting, fishing, and gathering rights on ceded territory.

Due particularly to the Nation's historical use of waterways for canoe journeys, trade and travel, as well as proud history of whaling along the mid-Atlantic coast and beyond, the Nation may have historical properties within the project area that could be disturbed by the activities of U.S. Wind, Inc. Clovis points that may have been used by the Shinnecock may be found within the affected areas as they have been found at Paw Paw Cove in Maryland, Cactus Hill in southern Virginia, and Meadowcroft in western Pennsylvania, as well as the the Delmarva Peninsula where 350 Clovis points have been discovered (Blankenship 2007).[3]

The Nation has also has treaty rights over whales within the focal area and on their migration paths. These treaty rights extend to the Nation's honoring of whales in religious ceremonies. The Nation also wishes for BOEM and other concerned parties to be aware of the significance of turtles to the Nation as a vital element in the Nation's creation story and the Nation's great want to protect the ecosystem for the benefit of the turtles.

The Shinnecock people, from pre-colonial times to the present, were orientated towards the tidal bays and ocean waters.[4] The ancestors of the Shinnecock lived in small villages along the sea where they harvested a variety of food resources, including oysters and clams as a central part of their diet.[5] The Shinnecock people were also known for fashioning and trading fine beads made from the Northern quahog clam and welk shells (wampum) to other northeastern coastal tribes.[6] Moreover, by the time the European settlers arrived, the Shinnecock people were described to have "mastered the surf and were taking larger fish from the deep water beyond."[7]

The Shinnecock people have maintained their right to the access to and use of the surrounding waters, the Shinnecock Bay in particular, from time immemorial. In one of

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[2] *Id.*

[3] Tribal Uses, Mid-Atlantic Regional Ocean Assessment, http://roa.midatlanticocean.org/ocean-uses/status-trends-and-linkages/tribal-uses/

[4] WILLIAM PELLETREAU, RECORDS OF THE TOWN OF SOUTHHAMPTON, WITH OTHER ANCIENT DOCUMENTS OF HISTORIC VALUE, at III "Introduction" (Sag-Harbor, N.Y., J. H. Hunt, printer 1874), "The historical records of the Town of Southampton state that "it appears that the whole extent of what is now the town of Southampton was owned by the Shinnecock tribe of Indians, who were divided into many small bands, and were living in villages that were without exception situated near the different creeks or branches of the bays...." *Id.*

[5] GAYNELL STONE, THE SHINNECOCK INDIANS: A CULTURE HISTORY 32 (Vol. VI. Lexington: Ginn Custom Publishing, 1983).

[6] Bevy Deer Jensen, *An Ancient History and Culture,* SHINNECOCK INDIAN NATION, http://www.shinnecocknation.org/history.

[7] STONE, at 32.

the first agreements with the Shinnecock following the 1640 deed, the Colony of New Haven recognized Shinnecock aboriginal rights in a 1648 agreement stating that,

> The Sachems would have Libertie, freely to fish in any or all the cricks and ponds, and hunt up and downe in the woods withough Molestation. Likewise they are to have the fynns and tails of all such whales as shall be cast up, to fish in all convemient places for Shells to make wampum. Allsoe, if the Indyans, hunting of any deere, they should chase them into the water, and the English should kill them, the English shall have the body, the Sachem the skin...[8]

From ancient times the Shinnecock were involved with the sea, and introduced the first European settlers to offshore whaling.[9] The Shinnecok fashioned harpoons and net sinkers to pursue whale hunts. An account from 1605 describes such an expedition as led by a sachem (a chief) and a party of men on several canoes attacked a small whale with spears and harpoons with ropes attached "to draw the canoes close enough to the wounded beast for the archers to finish the kill."[10] The whale was an Atlantic right whale (Eubalaena glacialis), which swam vulnerably close to Long Island beaches during the winter months, known as "the 'right' whale to pursue."[11] Along with capturing the whale for sustenance, the Shinnecock people also practiced ceremonies associated with the sacrifice of fins and tail of a whale as secured in the 1648 agreement.[12]

In the 1830s Shinnecock men shipped from various ports along Long Island and became well respected for their prowess around New England.[13] Due to excess hunting, the ability to hunt whales closer to shore proved more difficult and whaling became a more dangerous undertaking.[14] Given that nearly all Shinnecock men were fishermen or whalers and had volunteered for many risky maritime emergencies, Captain John Lewis requested that Shinnecock men assist with rescuing seamen and salvaging cargo on the *Circassian* that was shipwrecked on a sandbar after a blizzard in with winter of 1876.[15]

A well-documented event describing the experience of Shinnecock people at sea is the *Circassian* tragedy of December 30, 1876. Several cargo salvage attempts were made by Shinnecock men between December 15 and December 30, 1876.[16] By December 30, 1876, a winter storm tore the *Circassian* apart and all ten of the Shinnecock men

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[8] *Id.*
[9] *Id.* at 136.
[10] *Id.* at 32.
[11] *Id.* at 33.
[12] *Id.* at 42. (In ceremonies, a whale deity was honored and asked to protect fishermen on expeditions in dangerous, deep waters. The rite was practiced to drive away an evil force while at the same time propitiating a good spirit. Once the good spirit drove away the evil spirit a dance and feast continued. These elaborate rituals signifying the special relationship between Shinnecock people and the whale were condemned by Christian colonial authorities and prohibited by law.)
[13] *See generally Id.* at 376.
[14] *Id.*
[15] STONE, at 376.
[16] *Id.*

attempting to salvage cargo died.[17] The loss of ten Shinnecock men, three of whom were tribal leaders, was devastating for the small community striving to be self-sufficient politically and economically.[18] The Tribe at that time numbered only about 175 and several of the other men were away on whaling voyages and would not return for at least two years.[19] Shinnecock expeditions to sea nevertheless continued until blubber for oil was no longer required and the whaling industry died at the end of the 19th century. Some Shinnecock men ventured as far out as the Arctic Sea on the *Amethyst*, but in 1887 that ship cracked in half and two Shinnecock men drowned.[20]

Today's tribal fishermen use thousands of years of tradition, experience, and ocean stewardship practices for commercial and subsistence fishing. We continue to harvest shellfish in tribal waters, and strive to maintain shellfish and finfish hatcheries that are used to replenish and stock natural populations of important species. Many Tribal members are employed as wampum makers as their chosen traditional profession. The Shinnecock is also one of the many Tribes to participate in the "canoe journey" in this region, which conveys knowledge of traditional navigation routes to younger generations, while fostering relations among neighboring coastal Tribes in the region. Along the canoe journey route, tribal ceremonies are held and blessings offered for the bounty and protection of the sea.[21]

III. Programmatic Agreement

Given the Shinnecock's historical connection to the ocean waters and coast as described above, the Shinnecock Indian Nation signed onto a Programmatic Agreement to ensure protection of any disturbance to ancestral remains, funerary objects, sacred objects, and objects of cultural patrimony along the mid-Atlantic coast where the activities are being proposed. On January 31, 2012, BOEM executed a Programmatic Agreement to fulfill its obligations under Section 106 for the undertakings of lease issuance and approval of SAPs offshore the Mid-Atlantic States. This agreement provides for Section 106 consultation to continue through both the commercial leasing process and BOEM's decision-making process regarding the approval, approval with modification, or disapproval of lessees' SAP, and will also allow for a phased identification and evaluation of historic properties (36 CFR § 800.4(b)(2)).

Furthermore, the agreement establishes the process to determine and document the area of potential effects (APE) for each undertaking to identify historic properties located within each undertaking's APE that are listed in or eligible for listing in the National Register of Historic Places (National Register); to assess potential adverse effects; and to avoid, reduce, or resolve any such effects through the process set forth in the agreement.

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[17] *Id.* at 385.
[18] STONE, at 387.
[19] *Id.*
[20] *Id.* at 389.
[21] Tribal Uses, Mid-Atlantic Regional Ocean Assessment, http://roa.midatlanticocean.org/ocean-uses/status-trends-and-linkages/tribal-uses/.

Telephone calls, emails, meetings, webinars, and the circulation and discussion of the Programmatic Agreement that guides the Section 106 consultation for the undertaking were considered in this Finding of No Historical Properties Affected. The Nation requests that it be provided with information as to the dates of the formal consultation, the point of contact of each party, and any record of a call, meeting, or webinar conducted where a representative of the Nation was in attendance or was requested to be present. Please also share if there is a record for phased identification and evaluation of historic properties not otherwise included on Table 2 showing the Historic Properties Identified within the Viewshed APE. The Nation requests this information so that we may ensure proper implementation of the Programmatic Agreement for BOEM to satisfy its Section 106 responsibilities of the undertakings on historic properties and to afford a reasonable opportunity to comment.

IV. Consultation with Appropriate Parties

BOEM identified and contacted 16 state-recognized tribes, one of whom, the Lenape Tribe of Delaware, chose to consult with BOEM and participate in the development of the Programmatic Agreement. The Shinnecock Indian Nation is concerned given that the Unkechaug Indian Nation is not included as a party or listed among the other state-recognized tribes as an entity solicited for information and comments regarding historic proprieties within the mid-Atlantic WEAs during development of the Programmatic Agreement. The Shinnecock Indian Nation has significant historical and familial ties to the Unkechaug people where we have all shared in ceremonies and trade. Only the Shinnecock Indian Nation is currently federally recognized whereas the Unkechaug Nation remains state recognized on Long Island. The Nation requests clarification that the Unkechaug Indian Nation has been contacted and solicited for comment.

V. Wildlife Concerns

The Shinnecock Indian Nation is further concerned that the range of North Atlantic right whales (listed as "endangered" under the Endangered Species Act and "depleted" under the Marine Mammal Protection Act) humpback whales, sperm whales, blue whales, Sei whales are included in the proposed area of development and may approach near shore habitats during feeding activities. Threatened wildlife also include the piping plover, red knot, sea beach amaranth, loggerhead sea turtle, green sea turtle, leatherback sea turtle, blueback herring, and alewife. Along with the National Park Service (NPS), the Shinnecock Indian Nation is also concerned with the lack of data of migratory bird species and bats that utilize the Atlantic flyway and their behavioral responses to offshore wind turbines. The Nation requests that any studies on wildlife (particularly on whales, turtles, and migratory bird species) that may be adversely also be shared with the Nation as this has the potential to negatively impact the cultural and historic resources of the Nation.

IV. Conclusion

The Nation welcomes BOEM's commitment to initiating consultation with tribes and satisfying Section 106 responsibilities for the proposed undertaking on historic properties through the Programmatic Agreement. We look forward to working with BOEM and academic institutions in collaborating to develop protocols and best practices for identifying and mapping submerged paleocultural landscapes offshore. Mapping submerged areas of cultural importance to Tribes is a goal shared by many in the region.

Although there has been a Finding of No Historic Properties Affected, where historical properties and cultural resources are potentially present in the area, the Shinnecock Indian Nation, Unkechaug Indian Nation, and other tribes must be notified and consulted. From there, the Nation anticipates coordinated efforts to pursue archaeological investigations, make detailed documentation, preserve materials, and initiate a construction protection plan to avoid destruction and desecration of these sensitive historic properties and cultural resources.

Should you have any questions, please contact the Nation's Legal Department at Legal@shinnecock.org or call to speak with Shinnecock Tribal Attorney Kelly Dennis or Tela Troge at (631) 283-6143.

United States Department of the Interior

BUREAU OF OCEAN ENERGY MANAGEMENT
WASHINGTON, DC 20240-0001

JUN 17 2016

Mr. Edward P. Mangano
County Executive
Nassau County
1550 Franklin Avenue
Mineolo, New York 11501

Dear Mr. Mangano:

On March 16, 2016, the Bureau of Ocean Energy Management (BOEM) announced the identification of a Wind Energy Area (WEA) located within federal waters offshore New York. Designated in consultation with the New York Renewable Energy Task Force, the WEA represents an area of the Outer Continental Shelf (OCS) that appears most suitable for commercial wind energy development. BOEM has additionally announced the availability of an environmental assessment that considers the potential impacts associated with issuing a lease, associated geophysical and geotechnical surveys, and approving the installation of resource assessment facilities (i.e., meteorological tower and/or buoys) within the WEA. Information regarding the WEA offshore New York is provided in the enclosed map and *Announcement of Area Identification*. Additional information regarding renewable energy activities offshore New York, including a link to the environmental assessment, is available online at: www.boem.gov/New-York/.

Section 106 of the National Historic Preservation Act requires federal agencies to take into account the effects of their undertakings on historic properties. BOEM has executed a Programmatic Agreement with the Advisory Council on Historic Preservation, and the State Historic Preservation Officers of New York and New Jersey, to guide review of the bureau's renewable energy activities on the OCS offshore New York and New Jersey under Section106 of the National Historic Preservation Act (*see*: http://www.boem.gov/NY-NJ-Programmatic-Agreement-Executed/). Per this agreement, BOEM is initiating Section 106 review for the undertaking of issuing a lease within the New York WEA. A commercial lease gives the lessee the exclusive right to subsequently seek BOEM approval for the development of the leasehold. The lease does not grant the lessee the right to construct any facilities; rather, the lease grants the lessee the right to use the leased area to develop its plans, which BOEM must approve before the lessee can move on to the next stage of the process. A separate project-specific Section 106 review would take place in the future, should a lessee submit a plan.

As part of initiating its Section 106 review, BOEM is contacting representatives of local governments and other organizations to determine their interest in participating as a consulting party. BOEM requests that you send written notification if you are interested in participating as a consulting party in the Section 106 review for the issuance of a lease within the New York WEA. Email is acceptable and may be forwarded to my attention. If Nassau County has information pertaining to historic properties that may be located within the WEA, the geographic extent of which is illustrated in the enclosed map, BOEM invites you to bring this information to

the agency's attention to be considered in the decision-making process. BOEM also invites comments regarding any other concerns the proposed undertaking may raise in regards to historic preservation matters. If you have questions or require additional information, you may contact me directly at (703) 787-1549 or William.Hoffman@boem.gov.

Please send correspondence to the following address:

Bureau of Ocean Energy Management
Office of Renewable Energy Programs
45600 Woodland Road, VAM-OREP
Sterling, Virginia 20166

Thank you in advance for your timely response and cooperation. I look forward to receiving your reply within thirty (30) days of receipt of this correspondence.

Sincerely,

William Hoffman
Archaeologist

Enclosures

State of New Jersey
MAIL CODE 501-04B
DEPARTMENT OF ENVIRONMENTAL PROTECTION
NATURAL & HISTORIC RESOURCES
HISTORIC PRESERVATION OFFICE
P.O. Box 420
Trenton, NJ 08625-0420
TEL. (609) 984-0176 FAX (609) 984-0578

CHRIS CHRISTIE
Governor

KIM GUADAGNO
Lt. Governor

BOB MARTIN
Commissioner

RECEIVED
JUL 25 2016
Office of Renewable
Energy Programs

July 20, 2016

William Hoffman
Archaeologist
Bureau of Ocean Energy Management
Office of Renewable Energy Programs
45600 Woodland Road, VAM-OREP
Sterling, Virginia, 20166

Dear Mr. Hoffman:

As Deputy State Historic Preservation Officer for New Jersey, in accordance with 36 CFR Part 800: Protection of Historic Properties, as published in the Federal Register on December 12, 2000 (65 FR 77725-77739) and amended on July 6, 2004 (69 FR 40553-40555), I am providing Consultation Comments on the following proposed undertaking:

Statewide
New York-New Jersey Wind Energy Area
Bureau of Ocean Energy Management
United States Department of the Interior

800.4 Identification of Historic Properties

Thank you for providing the Historic Preservation Office (HPO) with the opportunity to review and comment on the potential for the above-referenced undertaking to affect historic properties. According to the documentation submitted, the Bureau of Ocean Energy Management is requesting any information the HPO may have regarding historic properties located within the proposed Wind Energy Area (WEA). Unfortunately, the State of New Jersey does not have comprehensive survey of submerged historic properties within State and Federal waters off the coast of New Jersey. Much of the data utilized by this office is derived from limited cultural resource survey, as well as information contained within the National Oceanic and Atmospheric Agency's (NOAA) Office of Coast Survey's Wrecks and Obstructions database. A review of information on file at the HPO does not indicate the presence of previously identified historic properties or cultural resource surveys within the proposed WEA. The HPO looks forward to further consultation regarding the identification of historic properties for the proposed

undertaking, pursuant to the Programmatic Agreement for Outer Continental Shelf Renewable Energy Activities Offshore New Jersey and New York.

Additional Comments

Thank you again for providing this opportunity to review and comment on this proposed undertaking. If additional consultation with the HPO is needed for this undertaking, please reference the HPO project number 14-2601 in any future calls, emails, submissions or written correspondence to help expedite your review and response. If you have any questions, please feel free to contact Jesse West-Rosenthal (609-984-6019) of my staff with questions regarding archaeology, or Michelle Craren (609-292-0032) with questions regarding historic architecture.

Sincerely,

Katherine J. Marcopul

Katherine J. Marcopul
Deputy State Historic
Preservation Officer

KJM/JWR

Hoffman, William <william.hoffman@boem.gov>

Wind Energy Area Located Offshore New York

3 messages

Sampson, Edward <Edward.Sampson@co.monmouth.nj.us> Tue, Jul 19, 2016 at 11:03 AM
To: "william.hoffman@boem.gov" <william.hoffman@boem.gov>

Mr. Hoffman-

In response to your letter dated 6/17/16 to Teri O'Connor, County Administrator, please be advised that the County of Monmouth is interested in participating as a consulting party in the Section 106 review for the issuance of a lease within the New York WEA.

Thank you,

Edward Sampson, PP, AICP

Director of Planning

Monmouth County Division of Planning

1 East Main Street

Freehold, NJ 07728

Office (732) 431-7460 x2997

Fax (732) 409-7540

Hoffman, William <william.hoffman@boem.gov> Tue, Jul 19, 2016 at 11:03 AM
To: edward.sampson@co.monmouth.nj.us

I will be out of the office Monday 7/18 through Friday 7/22 with limited email access.

If you need immediate assistance, please contact Michelle Morin, Chief, Environment Branch for Renewable Energy at (703) 787-1300 or michelle.morin@boem.gov.

--
William Hoffman, RPA
Archaeologist
Bureau of Ocean Energy Management
Office of Renewable Energy Programs
45600 Woodland Road, VAM-OREP
Sterling, Virginia 20166

Phone: (703) 787-1549 Fax: (703) 787-1708
William.Hoffman@boem.gov

Hoffman, William <william.hoffman@boem.gov> Tue, Jul 19, 2016 at 11:25 AM
To: "Sampson, Edward" <Edward.Sampson@co.monmouth.nj.us>

Hello Edward,

Thank you for the response, I received your email and will include Monmouth County as a consulting party. We have scheduled a Section 106 consultation webinar August 3, 2016, from 10 AM to 12 PM to discuss further, I will send you additional information in a separate email. Please don't hesitate to get in touch if you have questions or require additional information.

Best,
Willie
[Quoted text hidden]

--
William Hoffman, RPA
Archaeologist
Bureau of Ocean Energy Management
Office of Renewable Energy Programs
45600 Woodland Road, VAM-OREP
Sterling, Virginia 20166

Phone: (703) 787-1549 Fax: (703) 787-1708
William.Hoffman@boem.gov