
Minerals Management Service Documentation of Section 106 Finding of Adverse Effect

**Prepared for Submission to
Massachusetts Historical Commission
Pursuant to 36 CFR 800.6(a)(3)
for the Cape Wind Energy Project**

This report was prepared for the Minerals Management Service (MMS) under contract No. M08-PC-20400 by Ecosystem Management & Associates, Inc. (EM&A). Brandi M. Carrier Jones (EM&A) compiled and edited the report with information provided by the MMS and with contributions from Public Archaeology Laboratory, Inc. (PAL) as well as by composing original text.

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**Brandi M. Carrier Jones, Compiler and Editor
Ecosystem Management & Associates, Inc.**

REPORT AVAILABILITY

Copies of this report can be obtained from the Minerals Management Service at the following addresses:

U.S. Department of the Interior
Minerals Management Service
381 Elden Street
Herndon VA, 20170

<http://www.mms.gov/offshore/AlternativeEnergy/CapeWind.htm>

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LIST OF ABBREVIATIONS, SYMBOLS, AND ACRONYMS

Term	Abbreviation, Symbol, or Acronym
Area of Potential Effects	APE
Automated Wreck and Obstruction Information System.....	AWOIS
Before Present	B.P.
Draft Environmental Impact Statement	DEIS
Ecosystem Management and Associates, Inc.	EM&A
Electrical Service Platform	ESP
Feet.....	ft
Finding of Adverse Effect	FAE
Kilometer(s)	km
Massachusetts Board of Underwater Archaeological Research	MBUAR
Massachusetts Environmental Policy Act office	MEPA
Massachusetts Historical Commission	MHC
Meter(s).....	m
Mile(s).....	mi
Minerals Management Service	MMS
National Historic Landmark	NHL
National Historic Preservation Act	NHPA
National Register of Historic Places	NRHP
Public Archaeology Laboratory, Inc.....	PAL
Right of Way.....	ROW
State Historic Preservation Officer	SHPO
United States Army Corps of Engineers.....	USACE
View Point (in Visual Simulation).....	VP
Wind Turbine Generators	WTGs

1.0 Introduction

The purpose of this report is to analyze the potential adverse effects of the Cape Wind Energy Project on historic properties under the Criteria of Adverse Effect (36 CFR Part 800.5(a)(1) for compliance with Section 106 of the National Historic Preservation Act (NHPA). The report contains information provided by the MMS and references field surveys conducted by PAL in addition to summary analysis provided by EM&A.

The Minerals Management Service (MMS), in applying the Criteria of Adverse Effect (36 CFR Part 800.5(a)(1), initiates consultation with the State Historic Preservation Officer (SHPO) at the Massachusetts Historical Commission (MHC) regarding the Finding of Adverse Effect (FAE) for the construction, operation, and decommissioning of the Cape Wind Energy Project pursuant to 36 CFR 800.5. The proposed project will have an adverse visual effect for the 25-year life of the project on twenty-eight above-ground historic properties, and will impact the traditional religious and ceremonial practices of the Gay Head/Aquinnah and Mashpee Wampanoag Tribes, including visual intrusion into one specific sacred historical site identified to the MMS by the Tribes. Concurrence is requested with this Adverse Effect Determination.

2.0 Description of the Undertaking

The proposed project entails the construction, operation, and decommissioning of 130 Wind Turbine Generators (WTGs) located in a grid pattern on and near Horseshoe Shoal in Nantucket Sound, Massachusetts, as well as an Electrical Service Platform (ESP), inner-array cables, and two transmission cables (USDOI MMS 2008; Figure 2.1). Each of the 130 WTGs will generate electricity independently of each other. Solid dielectric submarine inner-array cables from each WTG will interconnect with the grid and terminate at the ESP; the ESP would serve as the common interconnection point for all of the WTGs. The proposed submarine transmission cable system is approximately 20.1 kilometers (km; 12.5 miles [mi]) in length extending from the ESP to the landfall location in Yarmouth, MA. Of the 20.1 km, 12.2 km [7.6 mi] are located within the Massachusetts territorial line (approximately 5.6 km [3.5 mi] from shore). The two submarine transmission cables would travel north to northeast through Nantucket Sound and into Lewis Bay, passing by the western side of Egg Island and making landfall at New Hampshire Avenue, in Yarmouth (USDOI MMS 2008). The Minerals Management Service (MMS) is the lead federal agency for the project, as the issuer of the lease for offshore alternative energy production.

2.1 Definition of the Area of Potential Effect (APE)

The Area of Potential Effects (APE) for the onshore component of the proposed project includes areas where physical ground disturbance would occur during construction, operation and maintenance, and decommissioning (e.g., the areas along the overland route to the Barnstable Switching Station where the transmission cable will tie-in), as well as those areas within view of the site of the proposed project (e.g., historic properties on Cape Cod, Martha's Vineyard, and Nantucket from which open views of the visible components of the proposed project, e.g. WTGs would be possible). The APE for offshore archaeological resources includes the footprints of the WTG structures on the sea floor; the work area around each WTG where marine sediments may be disturbed; the jet plowed trenches for installation of the inner-array cables connecting the WTGs to the ESP; the jet plowed trenches for the transmission cable system from the ESP to the landfall site; and associated marine work areas such as anchor drop areas (USDOI MMS 2008).

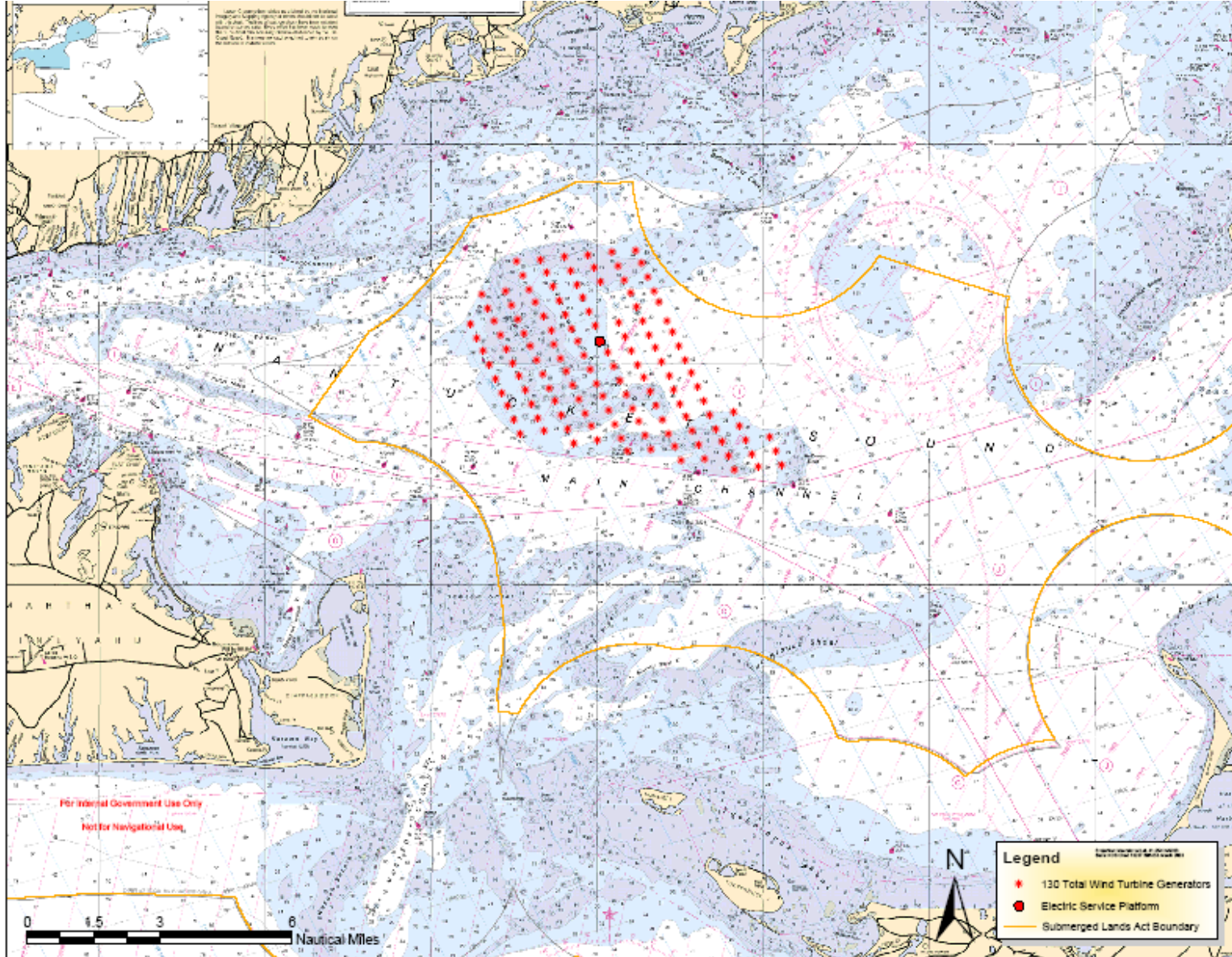


Figure 2.1. Map Depicting Location of Proposed Project Area.

3.0 Efforts to Identify Historic Properties

3.1 Onshore Cultural Resources

3.1.1 Historic Archaeological Sites

Pursuant to 36 CFR 800.4(b) and through consultation with the MHC, an archaeological survey was conducted to identify any historic archaeological sites that may be located within the proposed project's APE (Report No. 4.3.5-1). No onshore historic archaeological sites were identified in the proposed project's APE. In a letter dated April 22, 2004, MHC indicated their concurrence with the report findings by accepting the report as final and requesting a copy of the final document (see Appendix B).

3.1.2 Above-Ground Historic Resources

Given that the proposed location of the onshore electric transmission cable system is beneath existing public roads and the within the NSTAR Right Of Way (ROW), there would be no physical impacts to historic structures. Therefore the APE for above-ground historic resources applies exclusively to visual effects, that is, views from the above-ground historic resources toward the offshore proposed project site (USDOI MMS 2008). Due to the generally level topography, mature wooded vegetation, and intervening structures found on the Cape and the Islands, it was found during field surveys that open views were generally limited to historic resources along the coast, usually within approximately 91 meters (m; 300 feet [ft]) of the shoreline (Report No. 4.3.5-1).

Known historic resources in communities within potential visual range of the offshore turbines were compiled based upon a review of available databases and records at MHC. Historic structures and districts were identified in the Towns of Barnstable, Falmouth, Yarmouth, Dennis, Harwich, Chatham, Nantucket, Oak Bluffs, Tisbury and Edgartown.

The initial inventory of historic resources within the APE followed the United States Army Corps of Engineers' (USACE) regulations, and included only properties that were already listed on the NRHP or those that had been determined formally eligible for the NRHP (Report No. 4.3.5-1). In response to comments received on the proposed project, the USACE expanded the inventory to include properties listed in the MHC's *Inventory of Historic and Archaeological Assets of the Commonwealth*, the State Register of Historic Places, including local historic districts, and properties identified through public comments (e.g., Ritter House and William Street Historic District on Martha's Vineyard) that had been determined eligible for the NRHP by the MHC (USDOI MMS 2008).

3.1.2.1 Visual Simulation Locations

In order to assess visual impacts to historic structures, twelve simulation locations were selected in consultation with the MEPA and MHC as representative worst-case visual impacts to historic structures from the proposed project. A description of the visual character and setting at each of the twelve visual simulation locations is presented below, and is based upon field

reconnaissance, background research, and a review of the NRHP Inventory Nomination Forms, where available, as well as other documentation in MHC files (Report No. 4.3.5-1). The geographic locations themselves are depicted in Figures 3.1-3.4. As a result of initial visual simulations, the USACE found that sixteen historic above-ground properties, including two National Historic Landmarks [NHLs], four historic districts, and 10 individual properties, would be adversely affected by the proposed project (USDOI MMS 2008).

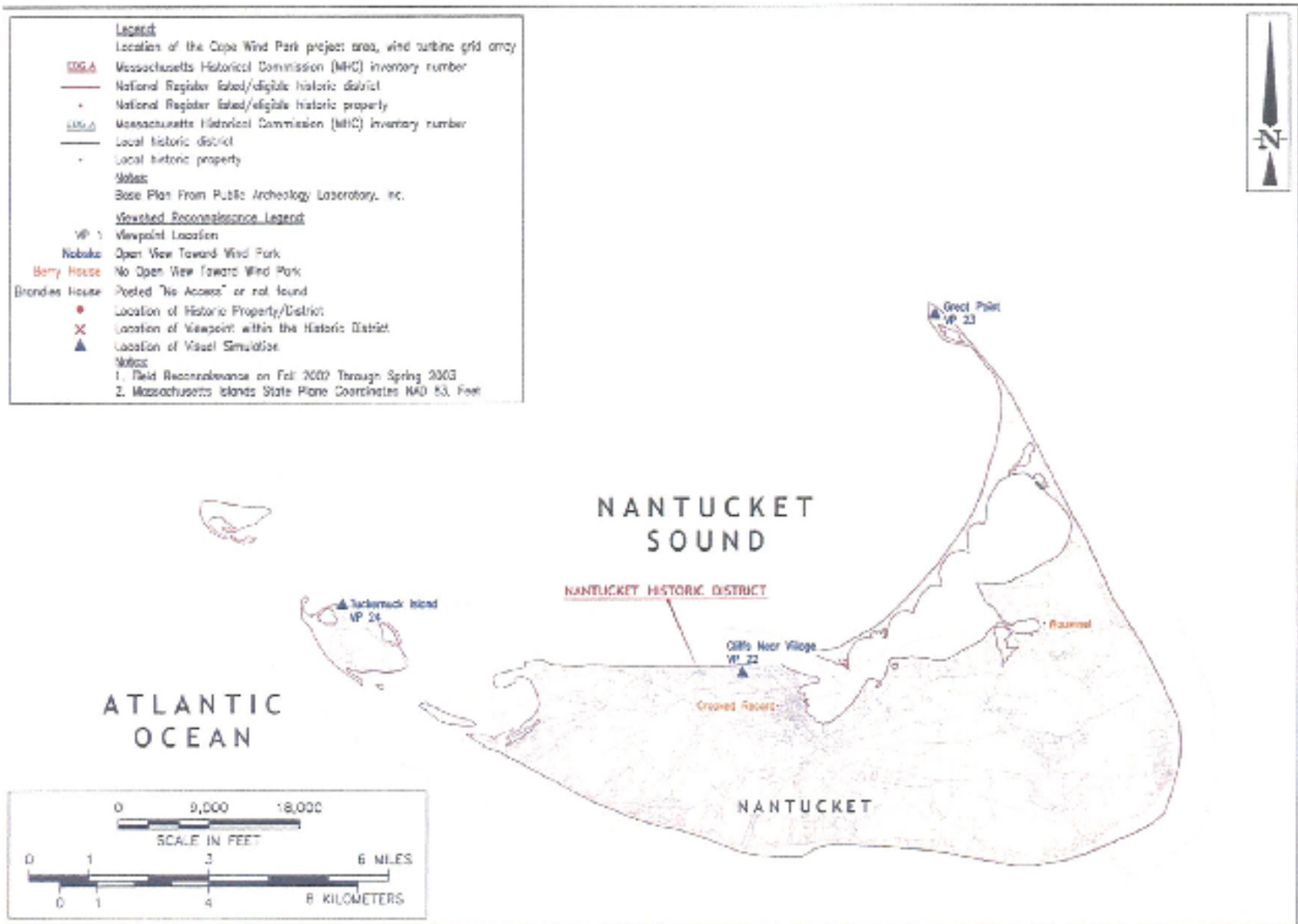


Figure 3.1. Map Depicting Location of View Points Used in Visual Simulations

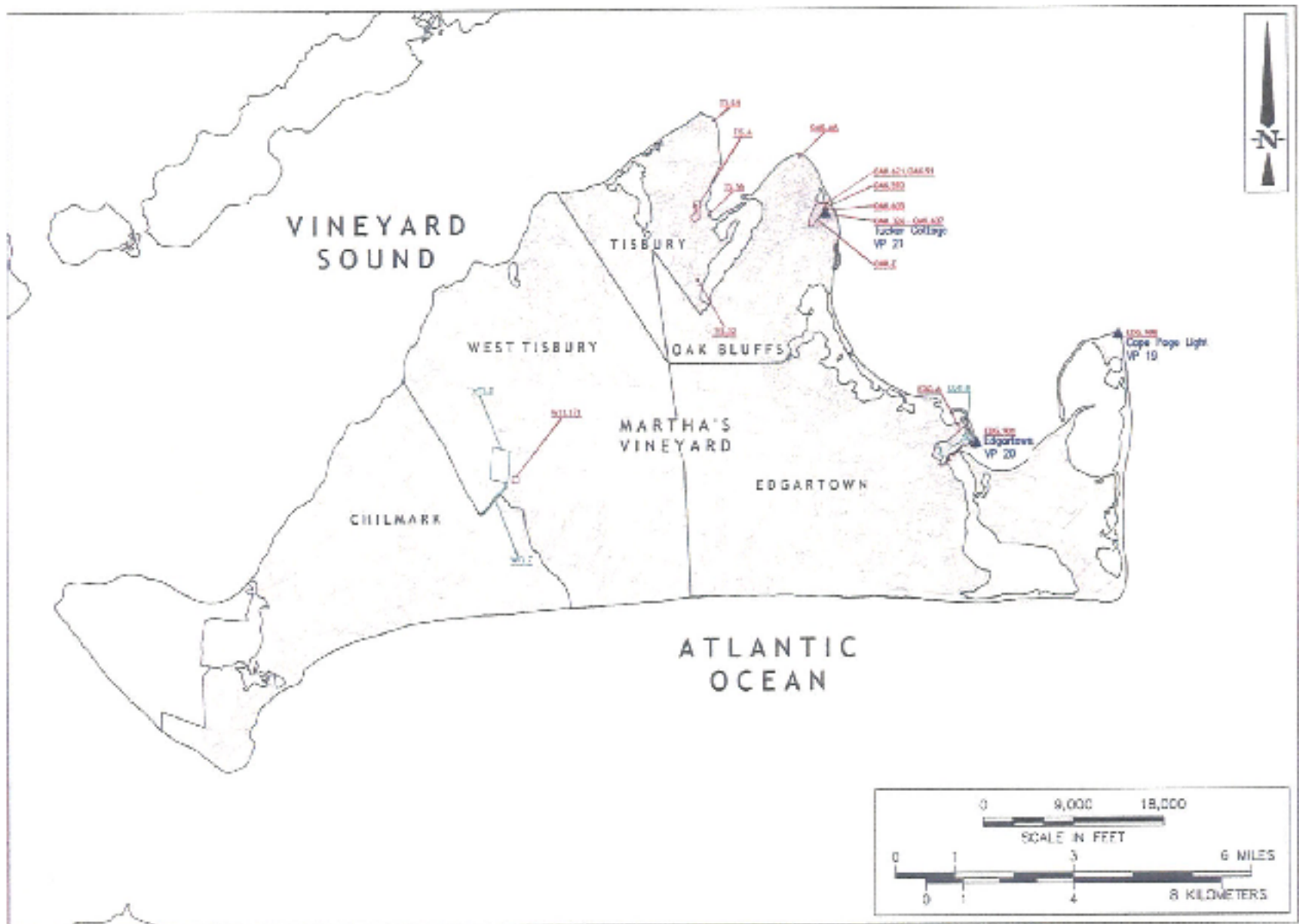


Figure 3.2. Map Depicting Location of View Points Used in Visual Simulations

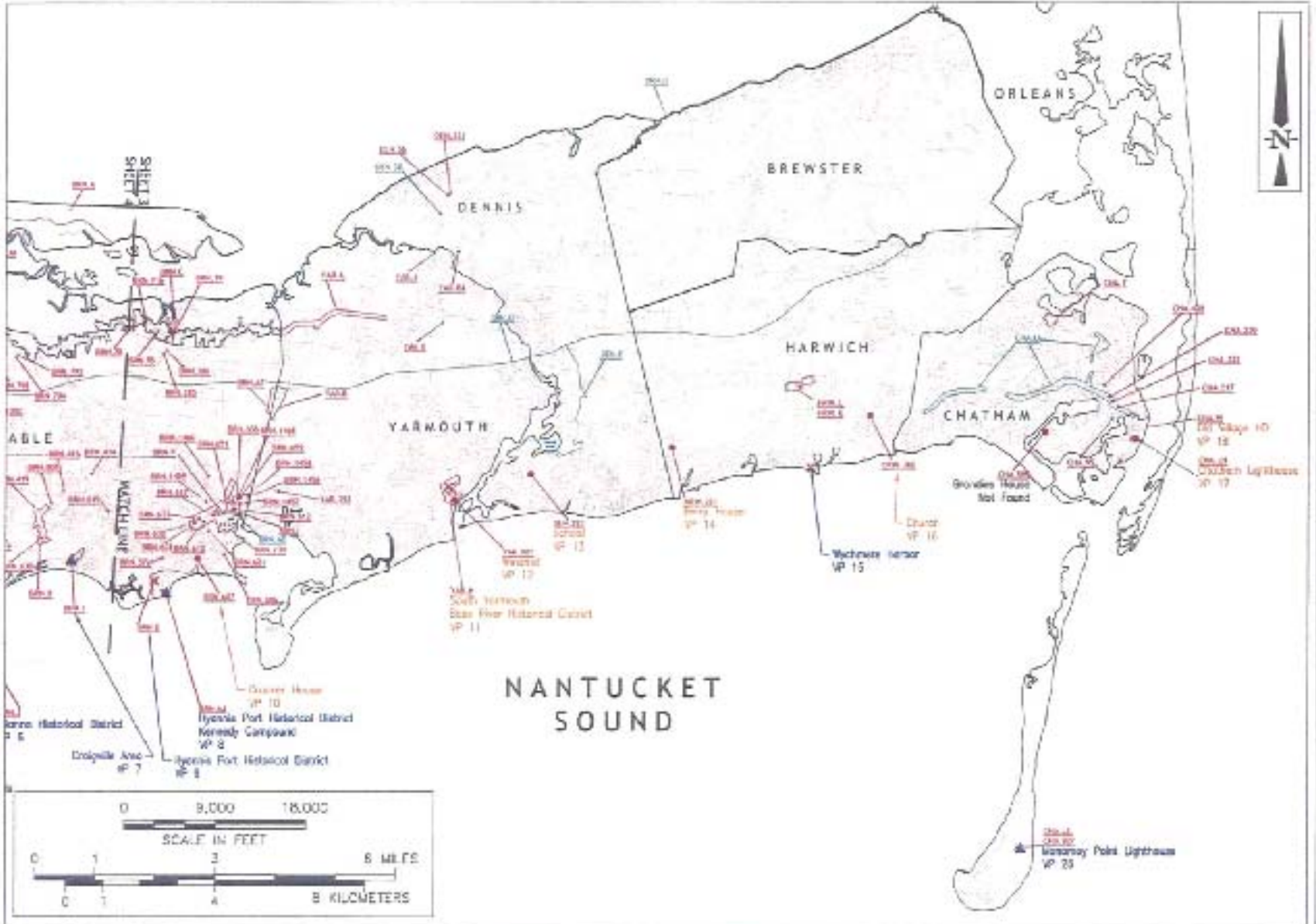


Figure 3.3. Map Depicting Location of View Points Used in Visual Simulations

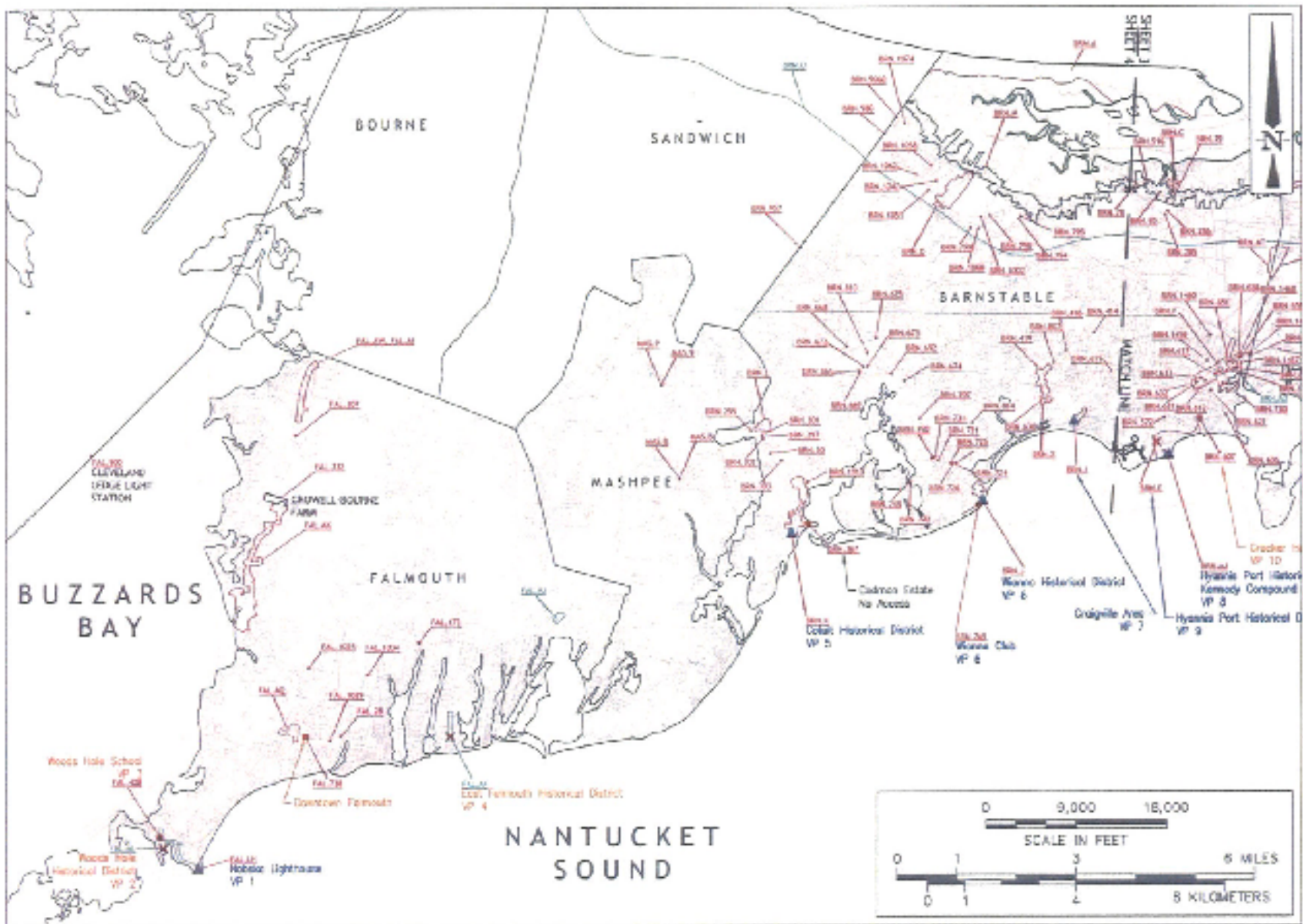


Figure 3.4. Map Depicting Location of View Points Used in Visual Simulations

3.1.2.2 Descriptions of the Twelve Visual Simulation Locations

In no particular order, narrative descriptions of the twelve locations chosen in consultation with the MEPA and MHC to support visual simulations are described below. The locations were chosen so that the visual simulations based upon the viewshed from the twelve locations represented the worst-case-scenario visual impact from the proposed project. All descriptions are compiled from data presented in Report 4.3.5-1 and in USDOJ MMS 2008.

Nobska Point Light Station, Woods Hole, Falmouth (VP-1 in Figures 3.1-3.4)

The Nobska Point Light Station complex dates from 1876, when the existing white cylindrical tower was constructed to replace a navigational light atop a keeper's dwelling that had operated since 1828. The light is a major navigational aid located on a rocky headland near the entrance to Woods Hole Harbor. The complex consists of the 12.2-m (40-ft) high light tower with entry porch (1876), two keeper's dwellings (1876, 1990) connected by a porch, a brick oil house (1876), paint lockers (1876), garage (1931) and a radio beacon building (1937). The light has been unmanned and automated since 1985.

The Light Station complex is listed on the NRHP as part of the Lighthouses of Massachusetts Thematic Group. The 8,538 m² (2.11-acre) site is largely bare of vegetation and the white tower can be seen clearly from all directions. According to MHC's Lighthouse Information Form (MHC, 1981) "the Light possesses integrity of location, design, setting, materials and workmanship as well as significant associations with the development of aids of navigation in Massachusetts. It is important for its scenic qualities, sited on a bluff overlooking Vineyard Sound, and for its strategic location. The complex meets criteria A and C of the NRHP on the state level."

Visitors to the historic lighthouse are presented with open views of Nantucket Sound from the southeast to the southwest, including views of Martha's Vineyard. The base of the light is publicly accessible, and a plaque provides historic information to visitors that park at a small adjacent lot. The area is generally characterized by low to medium-density residential land use, with commercial use in the village of Woods Hole to the northwest. Large homes are generally scattered along winding roads among low wooded hills. Views toward the water from most roads and residences are generally well screened by trees. Open views eastward toward the site of the proposed project are available from Fay Road, and are expected from the eastward- and southeastward-facing upper stories of area homes. Open views of the site of the proposed project were not found in Woods Hole village.

- *Other areas visited nearby that were not selected for simulation:*

The location of VP-2 was the only ground-level location found within this district that had some view of Nantucket Sound toward the site of the proposed project. The view is partially blocked by the point of land at Nobska Light and by Martha's Vineyard.

VP-3 at the Woods Hole School shows no view of Nantucket Sound at this interior historic property.

No ground-level views of Nantucket Sound toward the site of the proposed project were found from VP-4 in the locally designated East Falmouth Historic District.

Cotuit Historic District (VP-5 in Figures 3.1-3.4), Town of Barnstable

The Village of Cotuit Historic District is included in the Town of Barnstable Multiple Resource Area (MRA), which was listed on the NRHP on November 10, 1987. Other Barnstable MRAs in the viewshed of the site of the proposed project and described in this section include historic districts in Wianno, Craigville, Centerville, and Hyannis Port.

The Cotuit Historic District, westernmost of the villages in Barnstable, occupies a neck of land surrounded by Popponesset Bay to the west, Nantucket Sound to the south, and Osterville Harbor to the east. Most of the 107 buildings in the district are residential, although some commercial and institutional buildings have also been designated in the village's colonial center.

Public access to and views of the shoreline and to the south-southwest toward the site of the proposed project are limited. Street level views toward the water are generally broken or partially screened by vegetation and other structures. However, views in the direction of the site of the proposed project are likely available from many of the large homes situated along the shoreline, particularly from the upper stories.

The National Register Criteria Statement found the Cotuit Historic District significant as a major collection of 19th and early 20th century buildings related to the maritime industries and summer resort activities. The district was determined to possess integrity of location, design, setting, materials, workmanship, feeling and association, and to meet criteria A, B, and C of the NRHP (MHC, Village Summary Sheet: Cotuit, 1987).

Cotuit was first settled in the early 1700s in the interior Santuit area, near what is now Route 28, to utilize fertile lands and early transportation corridors. As local economies shifted from land-based activities to the maritime industries in the early 19th century, the settlement shifted to the shore along the west side of Cotuit Bay. Key maritime activities included oystering, fishing, shipbuilding, coastal trade, and salt making. Many of the houses in the district were built by ship captains, and reflected their wealth. As the maritime trades ebbed in the late 19th century, summer residents discovered the village. Federal and Greek Revival architectural styles represent the district's early seafaring heritage, while later Italianate, Second Empire, Gothic Revival, Queen Anne, and Colonial Revival structures reflect the area's later evolution into a quiet summer resort.

Most buildings are surrounded by mature wooded vegetation. Cotuit has retained a quiet, settled atmosphere due to its location several miles from busy main routes. Its small harbor offers moorings for many boats, and the village has an active local sailing program. The village is traditionally known for its oysters, which continue to be harvested in Cotuit Bay. Oyster Harbors, a gated community of large seasonal homes, is located across Cotuit Bay to the east and is not included in the Barnstable MRAs.

Wianno Historic District (VP-6 in Figures 3.1-3.4)

The Wianno Historic District in the Village of Osterville is comprised of 28 main buildings and 13 outbuildings on approximately 0.16 km² (40 acres) along Sea View Avenue and Wianno

Avenue. The lands were originally assembled in the late 19th century by a consortium of businessmen and developed as a summer colony. The large well-kept lots on either side of Sea View Avenue along Nantucket Sound contain grand Shingle Style and Colonial Revival style summer houses, most of which were constructed between the late 19th century and World War I.

The focal point of the Wianno Historic District is the Wianno Club on Sea View Avenue, a massive three-story shingled main building and two-story rear ell, both with mansard roofs. The Wianno Club was designed by architect Horace Frazer of Boston (who also designed a number of private residences in the district). The Club overlooks Nantucket Sound on almost 305 m (1,000 ft) of beach frontage. The building is described as architecturally extremely significant, as much of its original and interior detailing survives. The structure was individually listed in the NRHP in 1979, and was listed as a Barnstable MRA in 1987.

On the Sound side of Sea View Avenue, which runs parallel to the shore, the structures are regularly spaced with open well-maintained lawns and unobscured views toward the site of the proposed project to the south. Across Sea View Avenue, views toward the site of the proposed project are limited to areas between intervening structures. Mature trees and large hedges also would effectively screen views.

The National Register Criteria Statement found the Wianno Historic District in excellent condition, and possessing integrity of location, design, setting, materials, workmanship, feeling and association. It is significant as one of three well-preserved summer resort colonies developed in Barnstable in the late 19th century, and contains an extraordinary collection of Colonial Revival and Shingle Style architecture. The district is also significant for its association with a notable Boston architect and many prominent seasonal residents. The district meets criteria A, B, and C of the NRHP (MHC, Wianno Historic District Form B, 1986).

- *Other areas visited nearby that were not selected for simulation:*

No views toward the water to the south were found in the Village of Osterville.

Craigville, Town of Barnstable (VP-7 in Figures 3.1-3.4)

Craigville is located at the center of a large crescent-shaped, sandy beach system bordered on the west by headlands at Wianno in Osterville and on the east by Squaw Island in Hyannis Port. Open views of Nantucket Sound to the south are available from this large beach system. The busy shorefront area contains popular public, semi-private, and private beaches as well as associated parking areas. The most open and extensive southerly views toward the water and the site of the proposed project are from Craigville Beach, the bluff above the apex of Craigville Beach, and shorefront homes on Long Beach Road in Centerville.

The Craigville Historic District includes 33 buildings and one park within the larger village of Craigville. The southernmost boundary of the historic district is 0.4 km (0.25 miles) north and topographically low compared to the bluff overlooking Nantucket Sound, from which VP-7 was taken. The historic district is limited to the central core of the original development consisting of the earliest buildings associated with a camp meeting ground developed by the New England Convention of Christian Churches in the 1870s. Although most of the structures in the district are now privately owned summer homes, the Craigville Conference Center owns the Craigville Inn

and runs religious retreats. The district is within the interior portions of Craigville, does not extend to the bluff above Craigville Beach, is well vegetated and has no open views of Nantucket Sound. The structures on the bluff at VP-7 have not been determined eligible for listing on the NRHP.

The focus of the Craigville camp meeting ground was the Tabernacle, a simple wooden church constructed in 1887 at the head of a triangularly shaped park. The Craigville Historic District was determined to possess integrity of location, design, materials, workmanship and feeling, and meets criteria A and C of the NRHP. It was found to be significant for its association with the Christian camp meeting movement of the 19th century, and contains a well-preserved collection of associated buildings (MHC, 1985).

The religious campground settlement was similar to other earlier Methodist camp meetings in Eastham, Yarmouth, and Martha's Vineyard and drew lay people and ministers who journeyed by train and then carriage or barge for summer services. The architecture is very similar to the Yarmouth Camp Ground Historic District (MHC No. YAR.B), which is located in an interior wooded location just south of the mid-Cape Highway (Route 6) at Exit 7 and several miles north of Nantucket Sound. The Yarmouth Camp Ground Historic District also has no open views of Nantucket Sound.

- *Other areas visited nearby that were not selected for simulation:*

The Centerville Historic District, which contains 49 buildings and one object along Main Street, does not offer ground-level views of Nantucket Sound toward the site of the proposed project.

Hyannis Port, Town of Barnstable (VP-8 in Figures 3.1-3.4)

The summer community in the Hyannis Port Historic District is characterized by large, well-maintained colonial and shingled Victorian beach homes. The district contains 127 buildings on 4.0 km² (1,000 acres), and is roughly bounded by Massachusetts Avenue and Edgehill Road, Hyannis Avenue, Hyannis Harbor, and Scudder Avenue. Open views of the water to the south-southwest are available along the shorefront, and intervening structures and vegetation provide broken views from the road and near coastal locations. Public access to the shoreline is very limited.

The Kennedy Compound is located along the shore within the Hyannis Port Historic District and is also represented by VP-8. The Compound was listed as a National Historic Landmark in 1972. The Compound contains approximately 24,300 m² (6 acres) of waterfront property on Nantucket Sound, and includes the white clapboard residences that formerly housed Kennedy family patriarch Joseph P. Kennedy and his sons Robert F. Kennedy and John F. Kennedy (U.S. Department of the Interior (USDOI, 1972). The largest structure in the Compound is the Joseph P. Kennedy house, where the family summered starting in 1926, and where Rose Kennedy, the family matriarch, lived until her death in 1995. The smaller houses were purchased by the sons for their families, and together comprise the Kennedy Compound. The Compound was the base of John F. Kennedy's presidential campaign in 1960, and served as the Summer White House in 1961. Subsequent presidential summer stays were nearby at Squaw Island, which provided better security and privacy. Although the Compound itself was not visited during the field reconnaissance,

observations from adjacent locations indicate that open views of the site of the proposed project would be available from the Kennedy Compound.

- *Other areas visited nearby that were not selected for simulation:*

Other historic districts and properties were visited during field reconnaissance in Hyannis, Yarmouth, Dennis, Harwich, and Chatham. These locations either did not have open views of Nantucket Sound, or were not designated historic properties, and were therefore not selected for simulation.

Monomoy Point Lighthouse, Town of Chatham (VP-26 in Figures 3.1-3.4)

The Monomoy Point Lighthouse is located at the southern end of Monomoy Island, a coastal, barrier, beach island extending approximately 16.1 km (10 mi) south of the Cape's elbow at Chatham. The island is an uninhabited coastal dune and marsh complex, and comprises most of the Monomoy National Wildlife Refuge managed by the U. S. Fish and Wildlife Service. The island is accessible only by boat, and little human disturbance or development is evident except for footpaths and the historic lighthouse and its associated buildings. The land form is characterized by rolling dunes and bluffs with beach grass and sparse, scattered woody vegetation. Marshes and open water dominate views near the shoreline.

Wildlife such as gulls, terns, and seals are abundant and add to the remote and undeveloped character of the island. The island has been a federally designated Wilderness Area since 1970, although the parcel that contains the lighthouse is not included in that designation. The lighthouse has occupied the site since 1823, and the MAS has owned the parcel since 1977. The present lighthouse was constructed around 1871. The lighthouse complex is unmanned, and includes a brick light tower and a two-story keeper's house, both of which have deteriorated. The complex was determined significant in the areas of engineering, exploration and settlement, and transportation.

Oak Bluffs, Martha's Vineyard (VP-21 in Figures 3.1-3.4)

This island village area is characterized by fairly high-density residential and commercial land use. Topography is relatively flat, except for a steep shoreline bluff. The combination of a lack of topographic relief and abundant structures along the shoreline tend to screen views toward the water from the interior of the area. The most open easterly-northeasterly views toward the site of the proposed project are available along East Chop Avenue, Sea View Avenue and Ocean Avenue, as well as from residences along these roads, and from the East Chop Lighthouse. Ocean Park on Ocean Avenue (the selected viewpoint) also offers unobscured views toward the site of the proposed project.

The VP-21 is representative of open views from East Chop Lighthouse and the Dr. Harrison A. Tucker Cottage (hereinafter, Tucker Cottage) at 65 (formerly 42) Ocean Avenue in Oak Bluffs, both of which are listed on the NRHP.

The Tucker Cottage was originally built in the American Stick Style in 1872, and then was substantially altered into a large Queen Anne summer house in 1877. The house and carriage

house is part of the Ocean Park neighborhood of large, late 19th century summer homes, near the Methodist camp meeting ground at Wesleyan Grove (see Martha's Vineyard Campground Historic District, below).

The street pattern of Ocean Park is a curvilinear series of narrow streets around Ocean Park, a 0.03 km² (7 acre) semi-circular green space that faces Sea View Avenue and the Sound beyond. The Tucker Cottage overlooks the bandstand at Ocean Park on Ocean Avenue, the innermost crescent along the Park. The Tucker Cottage was determined to retain integrity of location, design, materials, workmanship, feeling, and association, and meets Criteria B and C of the NRHP (USDOJ, 1990).

The East Chop Lighthouse is located on the highest bluff on East Chop Avenue, on the east side of Vineyard Haven Harbor. The cast-iron lighthouse was constructed in 1878, to replace a private lighthouse that was destroyed by fire. Open views toward the site of the proposed project are available from this structure.

The West Chop Lighthouse, on the western side of Vineyard Haven Harbor, was originally constructed in 1817, replaced with the present brick tower in 1838, and was moved back from the sea in 1848 and 1891. Views toward the site of the proposed project are screened by a line of white pines along the roadside by the West Chop Light, which is posted private property. Ground level views from the property itself are expected to be screened by the trees, although open views from atop the lighthouse are anticipated. Both East Chop and West Chop lighthouses have guided mariners entering Vineyard Haven Harbor since Colonial times, and both are listed on the NRHP's multiple listing of lighthouses on Martha's Vineyard.

- *Other areas visited nearby VP-8 that were not selected for simulation:*

Several other historic properties or districts in Oak Bluffs have more limited views of Nantucket Sound in the direction of the site of the proposed project, due to screening provided by mature vegetation, such as shade trees, and intervening structures. These include the Martha's Vineyard Campground Historic District in Oak Bluffs (also called Wesleyan Grove), which contains 306 19th century cottages and 6 public buildings on 0.14 km² (34 acres). The district is located close to, but does not border, Nantucket Sound. No ground level views of Nantucket Sound were found within this district. The campground was founded in 1835 as a summer Methodist meeting area; the first participants stayed in tents that were later replaced by small cottages. The focal points of the camp are the iron Tabernacle and the Trinity Methodist Church, both located on Trinity Park near the center of the campground. The typical campground cottage is a simple 1.5-story rectangular structure, approximately 4.6 m (15 ft) wide by 6.1 m (20 ft) deep. Porches, typically late 19th century additions, are heavily ornamented with trim. Much of the historic district is shaded with mature trees and other vegetation. The Martha's Vineyard Campground is significant for its unique architecture, state of preservation, and its association with 19th century religious practices (USDOJ, 1978).

Religious activity in the 19th century caused the campground to grow rapidly. The original week-long religious meeting in August evolved as people began arriving earlier in the summer, sparking the resort development of the adjacent area. The resulting town of Cottage City was created in 1880, and was renamed Oak Bluffs in 1907.

The Oak Bluffs Christian Union Chapel (known as Union Chapel) is west of Ocean Park and close to the Methodist campground of Wesleyan Grove. The chapel was built in 1870 in the American Stick Style. The mature vegetation around the church partially obscures the chapel from contiguous streets, and fully screens the chapel from views of Nantucket Sound. The chapel exhibits integrity of location, design, materials, workmanship, feeling and association, and meets Criteria A and C of the NRHP (USDOJ, 1990).

The Flying Horses Carousel at 33 Oak Bluffs Avenue is located in the business district of Oak Bluffs. It is listed on the NRHP, and has also been listed as a National Historic Landmark since 1987. The carousel of 20 prancing horses and four chariots has operated at this location since 1889, and is indicative of the late 19th century interest in amusements and recreation at summer resorts such as Oak Bluffs. The Flying Horses Carousel possesses integrity of location (since 1889), design, material, workmanship and association, and is significant as the oldest platform carousel operating in the United States (USDOJ, 1979). No open views were available from this structure.

The Arcade at 31 (formerly 134) Circuit Avenue is a commercial building listed on the NRHP. No ground level views of the site of the proposed project are available from this building, which is surrounded by other commercial buildings and shops along this busy street in downtown Oak Bluffs.

Limited views to the north-northeast are available from West Chop, a residential area in Tisbury. Views toward the site of the proposed project are not generally available from the center of Vineyard Haven.

Edgartown, Martha's Vineyard (VP-20 in Figures 3.1-3.4)

This island colonial village area has relatively high-density residential and commercial land use, with well-maintained large homes, small shops, inns, and restaurants connected by narrow streets. Public views toward the water from the village area are generally partially or fully screened by intervening structures and vegetation. Views toward the site of the proposed project to the northeast are available from shoreline residences and associated private beaches. The only publicly accessible, open, northeasterly views are from Water Street and Lighthouse Beach. The selected viewpoint VP-20 is the most open view from a historic site (the Edgartown Lighthouse at the entrance to Edgartown Harbor). Almost all other views toward the site of the proposed project from Edgartown are partially blocked by Chappaquiddick Island.

The Edgartown Village Historic District comprises approximately 0.6 km² (150 acres) along the west side of Edgartown Harbor. The district contains approximately 500 contributing buildings (constructed pre-1933), consisting mostly of wood frame houses of the 19th and early 20th centuries. A smaller, locally designated district (the Edgartown Local Historic District) is contained within the NRHP District. The village's two major periods of significance relate to late 18th to 19th century whaling activities, and late 19th century to present day summer tourism. Architectural styles vary from First Period Colonial (circa 1650's to 1750), late Georgian and Federal sea captains' homes, Greek Revival, Victorian, and Colonial Revival. The boundaries of the historic district do not extend to Nantucket Sound except at Edgartown Light (also called the Harbor Light Lighthouse), but views of the Sound to the east and northeast are available from easternmost structures within the district.

The Edgartown Lighthouse is located on a rock breakwater off a spit along the northeastern side of Edgartown Harbor. The original lighthouse at the eastern end of the Harbor was built in 1828 and destroyed following the Hurricane of 1938. This structure was replaced by a cast-iron lighthouse that originally stood at Crane's Beach in Ipswich, and was disassembled and moved by barge to Edgartown in 1939. The structure is part of the Lighthouses of Massachusetts multiple listing on the NRHP, and is one of five lighthouses included on the listing within Martha's Vineyard.

Cape Poge, Edgartown, Martha's Vineyard (VP-19 in Figures 3.1-3.4)

This largely natural area on the north side of Chappaquiddick Island is protected by the Massachusetts Trustees of Reservations, a private land and property conservation organization. The area contains dunes and low coastal vegetation bordered in places by a steep 6.1 to 9.1 m (20 to 30 ft) high sandy bluff at the ocean shoreline. The area is undeveloped other than perhaps 5 to 10 large homes and several unimproved sand roads. Cape Poge offers expansive views at and near the shoreline. Once away from the shoreline, including at the base of the lighthouse discussed below, the dunes and dune vegetation effectively screen most views toward the water and the site of the proposed project.

The Cape Poge Lighthouse at VP-19 is one of the five lighthouses on Martha's Vineyard listed on the NRHP. Built in 1922 on the northeastern tip of Chappaquiddick, the present wood-shingled lighthouse replaced several earlier decaying towers, the earliest of which was constructed in 1802. Encircling the top of the tower is a simple cast iron balustrade. The windows and doorway are pedimented.

Nantucket Cliffs along Cliff Road, North of Nantucket Village Center (VP-22 in Figures 3.1-3.4)

Nantucket Village is a densely settled, classic colonial, New England maritime community on the western side of Nantucket Harbor. The entire island, including Muskeget and Tuckernuck islands to the west, comprises a property registered on the NRHP and was also designated as a National Historic Landmark in 1966. Muskeget Island was designated as a National Natural Landmark in 1980 as the only known locality where the Muskeget vole is found and the southernmost area where the gray seal breeds (National Registry of Natural Landmarks, 1999).

The historic character of the village is defined by the clean pious lines of the houses of former sailors, fishermen and clergy as well as the grand federal-style mansions of former ship captains and owners. These varied structures are linked by cobblestone streets and shaded with large trees along the street. Views of the northwest toward the site of the proposed project are not available at ground level within Nantucket village itself (although views may be available from the upper stories of some buildings) or from the docks and wharfs along the western side of Nantucket Harbor.

Upon leaving the village area and heading to the northwest, narrow roads traverse a landscape of rolling dunes and low-density residential development. The dunes and vegetation tend to block views toward the water. An open area atop the shore-facing bluff along Cliff Road (the selected VP-22) offers the first open views toward the site of the proposed project. The beach

below also offers unobscured views. The beach continues to the west to the Eel Point conservation area at Madaket. Homes located along the north shore and associated private beaches also have open views toward the site of the proposed project, as does the shorefront area off Cliff Road to the east to Jetties Beach at West Jetty. Public access to the north-facing beaches is generally limited, and as one moves inland, views of the water and toward the site of the proposed project quickly disappear.

Great Point, Nantucket (VP-23 in Figures 3.1-3.4)

Great Point is a unique undeveloped beach area that forms the northeastern most part of Nantucket, and separates the Atlantic Ocean to the east from Nantucket Sound to the west. Characterized by crashing surf, rolling sand dunes, low beach grass, and tidal marsh, the area is a remote and wild setting. The point is managed by the Trustees of Reservations, and is accessible only by four-wheel drive vehicle along a sandy track. The Nantucket Light (also called Great Point Light or Sandy Point Light) and the immediately surrounding land constitute the historic property. Lighthouses have operated at Great Point since 1789. The existing unmanned masonry structure was constructed in 1818, and is one of the oldest existing lighthouse structures in the state.

Great Point Light was determined to possess integrity of location, design, setting, materials and workmanship, as well as significant associations with the development of aids to Massachusetts navigation. The tower is the first landfall on Nantucket seen from the Atlantic Ocean, and meets criteria A and C of the NRHP.

The Nantucket Conservation Foundation protects areas of barrier beach south of the Great Point area. The area is remote and is characterized by ocean surf, sand dunes, and salt marshes. The area is largely undeveloped with only one or two private homes, a sand road, and the Great Point lighthouse, which is a visual focal point. Panoramic open views in all directions are available from many locations on Great Point, as well as along the sand access road, except for places screened by dunes. The viewpoint from Great Point is representative of open views toward the site of the proposed project from the Wauwinet area of Nantucket.

Tuckernuck Island (VP-24 in Figures 3.1-3.4)

Tuckernuck Island is roughly 3.2 km (2 mi) long and 1.6 km (1 mi) wide, and is located approximately 1.6 km (1 mi) west of Nantucket Island and 12.9 km (8 mi) east of Martha's Vineyard. This sparsely settled island off the western tip of Nantucket is accessible only by boat. The island is composed of moraine deposits (in the rocky northwestern portion of the island), sandy outwash plains along the south, and sand dunes.

The island contains about 30 to 40 seasonal cottages and larger homes, and a network of sand roads. The historic houses on Tuckernuck are clustered within two groupings, one around North Pond (on the northwest side of the island) and one around East Pond, and consist of wood-frame shingle-clad structures that generally reflect early fishing, hunting, and livestock grazing economies. Topography is generally flat and vegetation consists of low to medium height shoreline scrub. Vegetation is taller and denser in the interior of the island, and more open and sparse near the shoreline. As a result of the level topography and scrub vegetation, views toward the site of the proposed project are concentrated near the shoreline and from private residences.

3.1.2.3 Additional Properties Identified by MMS through the Section 106 Consultation Process

During the formal Section 106 consultation process, MMS requested that all consulting parties (see Appendix E) identify additional historic properties they believed the MMS should include in the analysis of potential adverse effects for the proposed project. As a result of this request, the consulting parties identified an additional 22 specific historic properties that had not yet been evaluated for National Register eligibility that were potentially within the visual APE of the proposed project. These properties are located in the communities of Falmouth, Yarmouth, Harwich, Chatham, Oak Bluffs, and Tisbury. MHC inventory forms for the identified properties were collected and reviewed, and site visits were conducted to view the existing conditions of each of the individual properties and districts, evaluate the National Register eligibility based on existing inventory information and exterior visual factors, and assess the visibility of the proposed project in Nantucket Sound. Of these, 18 were evaluated as eligible for inclusion in the NRHP. Each eligible property is described below, along with an assessment of the view from each property toward the site of the proposed project. The visual impact assessment found that twelve of the thirty properties identified by the consulting parties have a view towards the site of the proposed project and therefore have an adverse visual effect (PAL Technical Memorandum, November 14, 2008) (Appendix F).

Another 8 properties (5 of which lie within the South Yarmouth/Bass River National Register Historic District, and three of which have not yet been evaluated for National Register eligibility) were identified by the Town of Yarmouth as possibly having a view of the proposed project. Field visits were conducted for these properties, but none has a view of the project (PAL letter to MMS, November 24, 2008) (Appendix F). Therefore, because they are outside of the project's APE, they were not evaluated for NRHP eligibility. It was also determined that there was no vantage-point from which any property within the South Yarmouth/Bass River National Register Historic District had a view of the proposed project.

Falmouth Heights Historic District, Falmouth

The summer residential community of Falmouth Heights was the town's first planned summer resort community. Designed originally by noted Worcester architect Elbridge Boyden and developed between 1870 and 1930 on a high bluff, the district includes approximately 500 properties, curvilinear streets, parks, and broad views of Vineyard Sound. The Falmouth Heights Historic District is entered into the MHC inventory as FAL.I and was previously determined eligible for the NRHP by the MHC. The Falmouth Heights Historic District is eligible for listing in the NRHP and meets criteria A and C.

The views of Nantucket Sound and the site of the proposed project are unobstructed from the bluffs of the Falmouth Heights Historic District. It is approximately 5.6 km (3.5 mi) northeast of VP-1, closer to the site of the proposed project, so erected wind turbines would be more visible from this historic property than from VP-1.

Maravista Historic District, Falmouth (see Figures 3.1-3.4)

The Maravista (meaning “view of the sea”) area is defined by a cluster of approximately 25 well-preserved early 20th century summer cottages on Vineyard Sound that developed beginning in 1906 at one of the prime shoreline areas of Falmouth. The Maravista Historic District is entered into the MHC inventory as FAL.K, is potentially eligible for listing in the NRHP, and meets criteria A and C.

Maravista Historic District is approximately 6.4 km (4.0 mi) northeast of VP-1, so erected wind turbines would be more visible from this historic property than from VP-1. Views of Nantucket Sound and the site of the proposed project are unobstructed from the shoreline areas of the district.

Menahaunt Historic District, Falmouth (see Figures 3.1-3.4)

The Menahaunt (meaning “Island Place”) area consists of approximately 25 well-preserved summer cottages from the 1870s and 1880s surrounded by coastal ponds and Vineyard Sound. The Menahaunt Historic District is entered into the MHC inventory as FAL.J, is potentially eligible for listing in the NRHP, and meets criteria A and C.

Views of Nantucket Sound and the site of the proposed project are unobstructed from the shoreline areas of the Menahaunt Historic District. The district is located approximately 9.7 km (6.0 mi) northeast of VP-1; thus, erected wind turbines would appear larger on the horizon from this historic property than they would from VP-1.

Church Street Historic District, Falmouth (see Figures 3.1-3.4)

Located east of Little Harbor, the Church Street Historic District occupies the spit of land called Nobska Point, which contains Nobska Light (NRHP-Listed) at its highest point. The approximately 25 buildings range from the circa 1685 Abner Davis Tavern to the Church of the Messiah built in 1888, and include several large summer estates. The area was associated with 19th century shipping lanes and settlement at Woods Hole and later summer resort development. The Church Street Historic District is entered into the MHC inventory as FAL.M, is potentially eligible for listing in the NRHP, and meets criteria A and C.

Views of Nantucket Sound and the site of the proposed project are unobstructed from the Nobska Point bluff looking east, although most of the Church Street Historic District faces west towards Little Harbor. Views from this resource are represented by VP-1.

Stage Harbor Lighthouse, Chatham (see Figures 3.1-3.4)

Stage Harbor Lighthouse is located in low sand dunes and scrub growth at the southeast tip of Harding’s Beach at the entrance to Stage Harbor. The intact complex consists of the cast iron lighthouse, erected and commissioned in 1880, attached shingle-clad keeper’s house, boat shed, and outhouse in an undeveloped marine setting. The lantern and lens were removed when the lighthouse was decommissioned in 1935; otherwise, the Stage Harbor Light remains essentially intact from the 19th century. Stage Harbor Lighthouse is entered into the MHC inventory as

CHA.917 and was previously recommended as eligible for the NRHP. Stage Harbor Light is potentially eligible for listing in the NRHP and meets criteria A and C.

The Stage Harbor Lighthouse's location provides an unobstructed and panoramic view of Nantucket Sound and the location of the site of the proposed project. The Lighthouse is located approximately 6.4 km (4 mi) east of VP-15. Because reduced visibility increases with distance due to atmospheric interference, the views of the erected wind turbines would be smaller and less visible than those views found in VP-15.

Captain Joshua Nickerson House, 190 Bridge Street, Chatham (see Figures 3.1-3.4)

Set well back from the south side of Bridge Street on a knoll overlooking the Mitchell River, the Captain Joshua Nickerson House at 190 Bridge Street is a large and elegant two-story Federal period dwelling with a hip roof, rear wall chimneys, and a rear ell. The house was built about 1810 and has associations with 19th century Chatham's maritime history, starting with retired sea Captain Joshua Nickerson, and with summer resort activities in the 20th century. The Captain Joshua Nickerson House is entered into the MHC inventory as CHA.260 and was previously recommended as eligible for the NRHP. The Captain Joshua Nickerson House is potentially eligible for listing in the NRHP and meets criteria A and C.

The Captain Joshua Nickerson House façade faces south; however, the intervening land mass of Stage Island obstructs views toward the site of the proposed project.

Jonathan Higgins House, 300 Stage Neck Road, Chatham (see Figures 3.1-3.4)

The Deacon Jonathan Higgins House at 300 Stage Neck Road is a traditional five-bay Cape Cod dwelling that was originally erected in Wellfleet about 1760. It was dismantled and re-assembled at its current site overlooking Oyster Pond River in 1939, under the guidance of architect George Forsyth, to be the summer home of Chief Justice Louis Brandeis of the U.S. Supreme Court. The Deacon Jonathan Higgins House is entered into the MHC inventory as CHA.419. The house is potentially eligible for inclusion in the NRHP for its associations with the Colonial Revival period in the early 20th century and meets NRHP criteria A and C. In 1999, the MHC requested additional information in order to determine eligibility.

There are no views towards the site of the proposed project from the Deacon Jonathan Higgins House because the land mass of Harding's Beach lies between the house and Nantucket Sound.

Stage Harbor Road Historic District, Chatham (see Figures 3.1-3.4)

The Stage Harbor Road area extends from the Oyster Pond shoreline at Champlain Road northwards along Stage Harbor Road. A monument commemorates Samuel de Champlain's three week visit to Stage Harbor in 1606, which marked the first European exploration of the Chatham area. The approximately 50 properties in the area include Cape Cod cottages, Federal, Greek Revival, and Italianate style houses and barns that attest to the area's agricultural history, and more importantly, its connection to maritime industries and the sea in the 18th, 19th, and 20th centuries. The Stage Harbor Road area is entered into the MHC inventory as CHA.K and was previously

recommended as eligible for the NRHP. The Stage Harbor Road Historic District is potentially eligible for listing in the NRHP and meets criteria A and C.

Due to the configuration of the Stage Harbor Road Historic District extending away from the shore and the presence of Harding's Beach and the dike that create Stage Harbor, the visibility of the site of the proposed project is limited to a narrow view through the harbor mouth.

Champlain Road Historic District, Chatham (see Figures 3.1-3.4)

Approximately 25 historic Cape Cod and Greek Revival style cottages from the 18th through 20th centuries are positioned on a bluff along Champlain Road above Stage Harbor, where Samuel de Champlain anchored for three weeks in 1606. A yacht club and boatyard are set at the shoreline. The Champlain Road Historic District is entered into the MHC inventory as CHA.J. The Champlain Road Historic District is potentially eligible for listing in the NRHP and meets criteria A and C.

Views of Nantucket Sound and the site of the proposed project beyond the intervening land spits that frame the entrance to Stage Harbor are available from the Champlain Road Historic District due to its relatively high elevation. The district is located approximately 6.4 km (4 mi) east of VP-15 . Because reduced visibility increases with distance due to atmospheric interference, the views of erected wind turbines would be smaller and less visible than those views found in VP-15.

Hithe Cote, 32 Snow Inn Road, Harwich (see Figures 3.1-3.4)

Stewart Church, a doctor from Brooklyn New York, built this two-story frame summer residence about 1890. Hithe Cote occupies the crest of a prominent hill above Vineyard Sound near Wychmere Harbor that was developed by Church and others as a summer resort. Hithe Cote is entered into the MHC inventory as HAR.211. The house is potentially eligible for inclusion in the NRHP and meets NRHP criteria A and C.

Although a more recent house has been constructed nearby, Hithe Cote's location continues to provide an unobstructed and panoramic view of Vineyard Sound and the site of the proposed project. This view is represented by VP-15.

Ocean Grove Historic District, Harwich (see Figures 3.1-3.4)

Modestly-scaled and well-preserved Victorian cottages set along narrow streets characterize the Ocean Grove Historic District which began as a Spiritualist campground in the 1880s. In addition to approximately 100 houses, prominent topographical features include the Grove, which is formed in a natural bowl, and the Beach along Nantucket Sound. In the early 20th century use of the area shifted from spiritualist gatherings to summer recreation, which continues today. The Ocean Grove Historic District is entered into the MHC inventory as HAR.L and was previously evaluated as eligible for the NRHP by the MHC. The Ocean Grove Historic District is eligible for listing in the NRHP and meets criteria A and C.

Open views of Nantucket Sound and the site of the proposed project are present from the Ocean Grove Historic District properties and the beach along the shoreline. This resource is close to VP-15, so views to the project from this historic resource are represented by VP-15.

205 South Street, Yarmouth (see Figures 3.1-3.4)

The residence at 205 South Street is a three-quarter Cape Cod cottage built circa 1770. Its original site is unknown and it was apparently moved to its current location in the shore community near Bass River in the early to mid 20th century. Despite the move, which was not uncommon in that era, the house appears to be largely intact from the 18th century. 205 South Street is entered into the MHC inventory as YAR.365. The house is potentially eligible for inclusion in the NRHP and meets NRHP criteria A and C.

Views of Nantucket Sound and the site of the proposed project are obstructed from 205 South Street.

Park Avenue Historic District, Yarmouth (see Figures 3.1-3.4)

The Park Avenue area includes approximately 25 modest summer residences from the late 19th and early 20th centuries. The district runs parallel to the water in a Lewis Bay shoreline resort neighborhood just west of Hyannis Inner Harbor. The area was not previously entered into the MHC inventory. The Park Avenue Historic District is potentially eligible for inclusion in the NRHP and meets NRHP criteria A and C.

Views of Nantucket Sound and the site of the proposed project are present through the mouth of Lewis Bay. This resource is located approximately 4.0 km (2.5 mi) northeast of VP-8, which approximates the view one might have through the mouth of Lewis Bay.

Massachusetts Avenue Historic District, Yarmouth (see Figures 3.1-3.4)

The Massachusetts Avenue area extends from the Lewis Bay shoreline northward away from the water and encompasses approximately 25 modest summer residences from the late 19th and early 20th centuries. The area was not previously entered into the MHC inventory. The Massachusetts Avenue Historic District is potentially eligible for inclusion in the NRHP and meets NRHP criteria A and C.

There are no views of Nantucket Sound and the site of the proposed project due to the intervening presence of Great Island.

Cottage City Historic District, Oak Bluffs (see Figures 3.1-3.4)

Cottage City is a sprawling district of approximately 386 19th and 20th century summer cottages and houses, many of which are highly ornate, on the bluff overlooking Nantucket Sound. Two large focal parks, Central Park and Waban Park on the water, and several other parks are dispersed within the district. Cottage City is a local historic district and is entered into the MHC inventory on multiple area forms. The Cottage City Historic District is potentially eligible for inclusion in the NRHP and meets NRHP criteria A and C.

Views of Nantucket Sound and the site of the proposed project are unobstructed from Cottage City, and are represented by VP-21.

Vineyard Highlands, Oak Bluffs (see Figures 3.1-3.4)

Vineyard Highlands was the third major area developed on Oak Bluffs, and was an effort in 1870 to establish a new camp meeting area with a wharf, hotel, and residences. Although development was slow, the area did emerge as a popular tourist and summer residence center by 1900. Curved streets, small parks, and approximately 300 cottages with a curving road along the high bluff at Nantucket Sound are defining characteristics. The Vineyard Highlands Historic District is entered into the MHC inventory as OAK.B. The Vineyard Highlands Historic District is potentially eligible for inclusion in the NRHP and meets NRHP criteria A and C.

Views of Nantucket Sound and the site of the proposed project are unobstructed from the bluff of the Vineyard Highlands Historic District, and are represented by VP-21.

Seaman's Reading Room, Tisbury (see Figures 3.1-3.4)

The Seaman's Reading Room on West Chop Road/Main Street in Tisbury is a traditional Cape Cod cottage built about 1711 and is one of the oldest remaining houses on Martha's Vineyard. The house was moved from Hatch Road in 1918 and added on to in the 20th century. The Seaman's Reading Room is entered into the MHC inventory as TIS.135 and was determined eligible by consensus for individual listing in the NRHP.

There are no views of Nantucket Sound and the site of the proposed project from the Seaman's Reading Room due to intervening buildings.

West Chop Historic District, Tisbury (see Figures 3.1-3.4)

The West Chop Historic District, Tisbury, is an enclave of early 20th century Shingle style houses, club buildings, recreational facilities, and shoreline beaches at the northern tip of West Chop in Nantucket Sound. The West Chop Historic District is entered into the MHC inventory as TIS.D and was listed in the NRHP in 2008. The West Chop Historic District meets NRHP criteria A and C.

There are panoramic views from West Chop eastward in Nantucket Sound to the site of the proposed project. This resource is located approximately 2.5 miles northwest of VP-21, which provides a representative view from this district.

3.1.2.4 Summary

As a result of initial visual simulations, sixteen existing historic structures and districts listed, or eligible for listing on the NRHP, and that may suffer an adverse visual effect from the proposed project, were identified within the proposed project's APE on Cape Cod, Martha's Vineyard, and Nantucket (Report No. 4.3.5-1). As a result of comments from consulting parties during the Section 106 consultation process, an additional twelve properties not previously considered, nor previously evaluated for National Register eligibility, were identified as both being potentially eligible for the National Register and as having a view of the proposed project (see

Appendix B). Therefore, these 12 properties were added to the list of properties that may suffer an adverse visual effect from the proposed project. In total, therefore, twenty-eight existing historic structures and districts were identified as having an adverse effect due to the proposed introduction of visual elements that may constitute an alteration of the character, setting and viewshed of the historic property's significant features that make it eligible for listing on the National Register. These historic structures and the effect of the project on these properties are discussed below, in Section 4.

3.1.3 Prehistoric Archaeological Resources

Through consultation with the MHC, an archaeological survey was conducted to identify any prehistoric archaeological sites that may be located within the proposed project's APE along the onshore portion of the transmission cable route (Report No. 4.3.5-1). No onshore prehistoric archaeological sites were identified in the proposed project's APE. In a letter dated April 22, 2004, the MHC indicated their acceptance of the report findings and requested a copy of the final report (see Appendix B).

3.1.4 Traditional Cultural Properties

Section 106 and Government-to-Government consultation efforts have been made with various Native American Tribes within the general vicinity of the proposed project. Lands belonging to the Wampanoag Indians are located in the immediate vicinity of the proposed project: one in Aquinnah (Gay Head) on the western end of the island of Martha's Vineyard in Dukes County, and one in Mashpee, in Barnstable County, Massachusetts. As a result of these consultations, MMS has been made aware that an unobstructed view of the eastern horizon from the locations used for the practice of their traditional religious beliefs is sacred to the Wampanoag Tribes.

During the Section 106 consultation process, the MMS was made aware of a sacred historic site of the Mashpee Wampanoag, off tribal land, from which there would be a view of the proposed project. Visual simulations from this viewpoint show that the wind turbines would be visible along the eastern horizon from the site. According to the Mashpee, the altered view of the eastern horizon that would result from construction of the proposed project would be a significant adverse effect. This sacred site has been added to the list of historic properties that would suffer adverse visual effects from the proposed project.

3.2 Offshore Cultural Resources

A marine sensitivity assessment of approximately 62.15 km² (15,360 acres) of Nantucket Sound seafloor comprising the proposed project study area, as well as along the 115 kV transmission cable system route to the Yarmouth landfall, was conducted in 2003 (Report No. 4.3.5-2). Based on this assessment, a marine archaeological reconnaissance survey was conducted in the offshore study area in 2003 (Report No. 4.3.5-3). A follow-up marine archaeological reconnaissance survey was performed once the WTG array was revised (Report No. 4.3.5-4).

3.2.1 Historic

The Marine Archaeological Sensitivity Assessment conducted for the Cape Wind Energy Project by PAL (June 2003) indicated that there were 45 ships reported lost within the general vicinity of the project area. The dates of the vessels lost range from 1841 to 1963; however, 19 of the vessels had no date of loss given in the source databases used by PAL. The primary sources of shipwreck data used in the PAL analysis were the Massachusetts Board of Underwater Archaeological Research (MBUAR), the Northern Shipwreck Database, and the NOAA Automated Wreck and Obstruction Information System (AWOIS) database. A listing of these reported shipwrecks is found in PAL Report No. 4.3.5-2).

A subsequent compilation of reported shipwreck losses by J.F. Jenney (Jenney 2007) produced a list of 95 shipwrecks reported lost in the general vicinity of the project area; the dates of loss ranging from 1744 to 1990. The sources used by Jenney included those used by PAL, as well as local sources of information such as newspapers and family genealogical reports. Only thirteen vessels could be directly correlated by name between the PAL report and the list compiled by Jenney. This discrepancy is probably due in large part to the additional primary sources used in compiling Jenney's list. Compilation of shipwreck data is very problematic, and there are many additional reasons that such discrepancies may exist between shipwreck listings for a given area (e.g. the extent of the geographic area included in the search; uncertainty about the exact location of loss; multiple listings for the same ship with variations in the details given, including alternate spellings of the vessel name; listings indicated as unidentified vessel, or unidentified date of sinking; and listings of obstructions that may be shipwrecks, but which have not been verified). Other considerations in relating lists of shipwreck losses to actual shipwreck sites within a given geographic area are that some vessels were burned or otherwise destroyed, and many were salvaged with no record of the salvage having taken place.

A marine archaeological survey was completed in June and July 2003 by PAL in water depths greater than 0.9 m (3 ft) to locate any evidence of potential archaeological sites within the offshore portion of the proposed project area. This survey recorded 154 magnetic anomalies and 109 side-scan sonar contacts. Of the combined 263 magnetic anomalies and side-scan sonar contacts, all but 29 were determined to have a source that was non-cultural in nature or, based on their remote sensing signatures, were interpreted as isolated modern debris, and, therefore, were eliminated from further consideration. Survey data for the remaining 29 anomalies were post-processed and additional analyses were completed.

Analyses of the post-processed data associated with the 29 anomalies of interest and additional data collected during September 2003 produced three targets with moderate probability of representing historic period submerged cultural resources. All are in the vicinity of Horseshoe Shoal. Locations were provided to MHC and the Massachusetts MBUAR, but are not publicly distributed to protect the integrity of these potentially significant sites.

3.2.2 Prehistoric

The Marine Archaeological Sensitivity Assessment conducted for the Cape Wind Energy Project (Report No. 4.3.5-2)) states that much of the offshore project area would have been exposed and available for human habitation from about 12,500 to 7,000 B.P. As sea level

continued its post-glacial rise, the Sound would have become inundated, but with smaller areas of topographic highs remaining above sea level until as late as about 1,000 B.P. During these periods of lower sea level, the area that is now Nantucket Sound would have been dry land and available to aboriginal populations for habitation and subsistence activities.

A marine archaeological reconnaissance survey was conducted in March 2004 (Report No. 4.3.5-3) to locate any areas having potential for preserved prehistoric archaeological deposits within the offshore project area. Although the survey data indicate that the majority of the proposed project area has been extensively reworked and disturbed by marine transgressive processes, the subbottom profiler and vibracore data identified undisturbed deposits of organic material in limited areas within the easternmost portion of the WTG array. Subsequent laboratory analysis of these vibracores indicated that the organic material was from well-preserved terrestrial deposits indicative of former deciduous forest, freshwater wetland, and lake settings. These are types of environments that aboriginal populations would most likely have used for settlement and subsistence activities, and the state of preservation of these former terrestrial deposits also indicates that any archaeological remains present within these areas also would most likely still be preserved. No actual cultural material was identified within the vibracore samples; however, the turbine array of the proposed project has been adjusted to avoid these potential prehistoric aboriginal site areas.

4.0 Description of Affected Historic Properties

Two categories of cultural resources will be adversely affected by the proposed undertaking: the viewshed of twenty-eight above-ground historic properties and the ceremonial practices and the traditional cultural properties of the Gay Head/Aquinnah and Mashpee Wampanoag Tribes.

4.1 Above-Ground Historic Properties

The land area surrounding the site of the proposed project has a variety of historic properties that would be in view of the proposed project. There are both individual homes on and eligible for listing on the NRHP, and larger historic districts on the NRHP that would have a view of the proposed project, including the island of Nantucket which is designated a National Historic District. Based on visual simulations and reconnaissance survey, twenty eight properties in total will be adversely affected by the proposed undertaking. These properties are presented in Table 4.1, below.

4.2 Visual Resources Associated with Tribal Areas of Cultural and Religious Importance

The visual impact of the proposed project on the Wampanoag Tribe of Gay Head/Aquinnah and the Wampanoag Tribe of Mashpee was raised as a concern during Government-to-Government consultations proposed project between the MMS and the Tribal Historic Preservation Offices.

At the March 13, 2008, Cape Wind public hearing at the University of Massachusetts in Boston, the Chairwoman of the Wampanoag Tribe of Gay Head Aquinnah expressed concern that the right to practice their religious ceremony in the traditional manner will be forever denied by the proposed project. The Chairwoman stated *“as the People of the First Light, one of the most important aspects and fundamental components of their religious and cultural beliefs and practices is their ability to experience, embrace, and give ceremony and prayers of thanksgiving to the first light. These ceremonies and spiritual and religious practices are dependent upon maintaining the ability to view the first light, the eastern horizon vista and viewshed. Additionally, there will be other impacts, such as the celestial and solstice ceremonies, which will also be adversely impacted.”* In a subsequent Section 106 Consultation meeting with the Gay Head/Aquinnah and Mashpee Wampanoag Tribes, Bettina Washington, Tribal Historic Preservation Officer for the Gay Head/Aquinnah, stated that by the alteration of their tribal members’ ability to conduct their religious ceremonies with an unobstructed view of the rising sun on the eastern horizon, *“... you're asking me to give up my identity”*.

At the March 10, 2008, Cape Wind public hearing in West Yarmouth, the Tribal Historic Preservation Officer of the Mashpee Wampanoag Tribe, Mr. George “Chuckie” Green Jr., stated *“historical, cultural, religious values that we place on the Sound are immense. Our celestial ceremonies are held (on the Sound). The blocking of those views, of that sunrise, would be an issue to the tribe.”* In addition, in their letter of comment on the DEIS, Mr. Green states, *“The Mashpee*

are members of the Great Wampanoag Nation (the People of the First Light). Our name defines who we are..." The letter goes on to state that the Mashpee have a significant cultural and religious need to have a clear unobstructed view of the southeast horizon.

During the Section 106 consultation process, the MMS was made aware of a sacred historic site of the Mashpee Wampanoag, off tribal land, from which there would be a view of the proposed project. Visual simulations from this viewpoint show that the wind turbines would be visible along the eastern horizon from the site. According to the Mashpee, the altered view of the eastern horizon that would result from construction of the proposed project would be a significant adverse effect. This sacred site has been added to the list of historic properties that would suffer adverse visual effects from the proposed project.

Table 4.1: Historic properties determined to be adversely affected by the proposed project.

Town	Property Name	Property Type
Barnstable	Col. Charles Codman Estate	Individual Property
	Cotuit Historic District	Historic District
	Hyannis Port Historic District	Historic District
	Kennedy Compound	Historic Landmark
	Wianno Club	Individual Property
	Wianno Historic District	Historic District
Chatham	Champlain Road Historic District	Historic District
	Monomoy Point Lighthouse	Individual Property
	Stage Harbor Light	Individual Property
Edgartown	Cape Poge Light	Individual Property
	Edgartown Harbor Lighthouse	Individual Property
	Edgartown Village Historic District	Historic District
Falmouth	Church Street Historic District	Historic District
	Falmouth Heights Historic District	Historic District
	Maravista Historic District	Historic District
	Menahaunt Historic District	Historic District
	Nobska Point Light Station	Individual Property
Harwich	Hithe Cote	Individual Property
Nantucket	Nantucket (Great Point) Light	Individual Property
	Nantucket Historic District: Nantucket Cliffs	Historic Landmark
Oak Bluffs	Cottage City Historic District	Historic District
	Dr. Harrison A. Tucker Cottage	Individual Property
	East Chop Light	Individual Property
	Vineyard Highlands Historic District	Historic District
Ocean Grove	Ocean Grove Historic District	Historic District
Tisbury	West Chop Historic District	Historic District
	West Chop Light Station	Individual Property
Yarmouth	Park Avenue Historic District	Historic District
N/A	Mashpee Wampanoag Sacred Historic Site	Tribal Sacred Historic Site

5.0 Description of the Proposed Action's Effects on Historic Properties

5.1 Construction/Decommissioning Effects

5.1.1 Effects on Onshore Historic Properties

5.1.1.1 Historic Archaeological Resources

Based on the results of the terrestrial archaeologically-intensive survey, no significant historic archaeological resources have been identified within the Project's APE for ground disturbance along the onshore transmission cable system route. Therefore, the proposed project is expected to have no effects on onshore historic archaeological sites during construction and decommissioning.

5.1.1.2 Above-Ground Historic Resources

No known or designated historic structures or districts have been identified within the Project's APE for ground disturbance on land, which consists of paved roadway and cleared NSTAR ROW. Thus, there would be no physical effects to onshore historic structures and districts due to construction and decommissioning. As a result, to historic properties

Visual effects to historic properties associated with construction and decommissioning are minor as they are temporary and limited to construction equipment and partially built turbine structures, depending on the phase of construction.

5.1.1.3 Prehistoric Archaeological Resources

Based on the results of the terrestrial archaeologically-intensive survey, no significant prehistoric archaeological resources have been identified within the Project's APE for ground disturbance along the onshore transmission cable system route. Therefore, there should be no effects to prehistoric resources as a result of construction and decommissioning activities related to the proposed project.

5.1.2 Effects on Offshore Archaeological Resources

5.1.2.1 Historic Archaeological Resources

Three targets with moderate probability of representing historic shipwrecks were identified in the vicinity of Horseshoe Shoal. The MMS would require that these three potential shipwreck locations be avoided by all bottom-disturbing activities during all proposed project construction, maintenance, and decommissioning activities; therefore, the effects of construction and decommissioning activities to offshore historic archaeological resources are expected to be

negligible. If avoidance is not possible, the MMS would require further investigation of the potential shipwreck sites in consultation with MHC and MBUAR. The MBUAR and MHC concurred with these recommendations (see letters dated May 11, 2004 and May 19, 2004, respectively, Appendix B).

5.1.2.2 Prehistoric Archaeological Resources

The archaeological analysis of the subbottom profiler and vibracore data collected within the area of the proposed project identified organic material interpreted as paleosols (ancient land surfaces) in limited areas within the easternmost portion of the WTG array. The wind turbine array has been modified to avoid the areas where intact paleosols have been identified. No other areas having a high probability for prehistoric site occurrence were identified from marine remote sensing data collected within the site of the proposed project; therefore, impacts to prehistoric cultural resources from construction and decommissioning are expected to be negligible.

5.1.2.3 Tribal Areas of Traditional Cultural and Religious Importance

The Wampanoag consider the entirety of Nantucket Sound to be ancestral lands, based on their oral traditions which hold that the Wampanoag people have inhabited the land from the western shore of Narragansett Bay to the Neponset estuaries since time immemorial, even the land now called Horseshoe Shoals. The marine remote sensing survey data and vibracores that were collected to locate preserved prehistoric archaeological sites (discussed in the previous section) identified some limited areas within the easternmost portion of the WTG array where ancient land surfaces were still preserved. In areas where the ancient land surface has survived marine transgression relatively intact, there is also the possibility that prehistoric cultural material remains (i.e. sites of ancestral tribal activities) could be preserved in those areas. Analysis of the vibracores collected at these locations contained no evidence of material cultural remains. However, to minimize any possibility of impacting ancestral sites that might be present within these limited areas of preserved ancient land surface, the wind turbine array was modified to avoid these areas. The MMS also will include a “Chance Finds Clause” as a part of the lease document which requires the lessee to halt operations and notify the MMS if any unanticipated archaeological discovery is made during Lease activities. This clause is included in all MMS lease and permit documents.

In his letter of comment on the DEIS, George “Chuckie” Green, Jr., Tribal Historic Preservation Officer for the Mashpee Wampanoag, commented, “... *if remains were found in 20-60 feet of water, who would know? Between the depth and turbulence, who would see? Furthermore, who would care?*” The “Chance Finds Clause” is useful in providing a legal basis for prosecution if a lessee or permittee knowingly disturbs an archaeological site and does not report it; however, in practicality it is entirely possible that unanticipated archaeological sites (e.g. tribal ancestral sites) could be inadvertently disturbed during lease activities and it would neither be recognized nor reported. It is for this reason that the MMS takes a very conservative approach by requiring avoidance or further investigation of all areas that are determined to have any potential for archaeological resources when permitting OCS activities.

5.1.3 Summary

Based on cultural resource surveys conducted to date and through continued coordination with MBUAR and MHC, and compliance with any other future requests for further analysis and or mitigation, the effects of construction and decommissioning on historic properties and on Tribal areas of traditional cultural and religious importance are expected to be minor. MMS will require that all archaeologically sensitive areas identified during the surveys either be avoided or that additional investigations be conducted before the approval of any construction or decommissioning activities on the lease. If any archaeological resources are encountered during construction and decommissioning, MMS will require that operations be halted immediately within the area of the discovery and the discovery reported to the MMS Regional Director.

5.2 Operational Impacts

Operational impacts on onshore Above-Ground Historic Resources and on Tribal Areas of Traditional Cultural and Religious Importance will be limited to the visual effects of the wind turbine array.. The ocean is an important component of the setting for all of the historic properties within the APE since many of them were designed as seasonal resort communities to take advantage of the coastal setting, or lighthouses designed to warn watercraft of hazards. In cases where the setting of the property is affected in such a way as to diminish the integrity of the property's significant historic features, the proposed project is considered to have an adverse effect on the historic property.

5.2.1 Visual Impacts to Historic Structures during Operation

The visual alteration to the historic Nantucket Sound setting caused by the WTGs and related structures would constitute an alteration of the character, setting, and viewshed of the twenty-eight historic properties listed in Table 4.1.

5.2.2 Visual Impacts to Tribal Areas of Traditional Cultural and Religious Importance during Operation

Analysis of visual transects run from Gay Head/Aquinnah to the proposed project location indicates that no portions of the offshore turbines in the array would be visible to the viewers at Gay Head/Aquinnah. The MMS was made aware of a sacred site of the Mashpee Wampanoag, off tribal land, from which there would be a view of the proposed project. Visual simulations from this viewpoint show that the wind turbines would be visible along the eastern horizon from the site. According to the Mashpee, the altered view of the eastern horizon that would result from construction and operation of the proposed project would be a significant adverse effect to the Tribe's culture and to their traditional ceremonial and religious practices.

When the Indian tribes use areas beyond their tribal lands, such as along the eastern/northeastern shoreline of Martha's Vineyard, or the southern Cape Cod Shoreline near Mashpee, or even the waters of Nantucket Sound, itself, for their traditional ceremonial and religious practices, they would be able to see the proposed project, which would alter their view of

the eastern horizon. According to the Tribes, even if only temporary, this obstructed viewshed would prevent the performance of sacred ceremonies from that Traditional Cultural Property.

6.0 Application of the Criteria of Adverse Effect

The *Criteria of Adverse Effect* under Section 106 [36 CFR 800.5(a)(1)] states that an undertaking has an adverse effect on a historic property:

...when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association.... Adverse Effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative (36 CFR 800.5(a)(1).

According to regulation, Adverse Effects on historic properties include, but are not limited to (36 CFR 800.5(a)(2)):

- 1) Physical destruction, damage, or alteration of all or part of the property, including rehabilitation, repair, hazardous material remediation, provision of handicapped access or any other alteration not consistent with the Secretary's Standards for the treatment of Historic Properties (36 CFR 68);
- 2) Removal of a property from its historic location;
- 3) Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance;
- 4) Introduction of visual, audible, or atmospheric elements that are out of character with the property or alter its setting;
- 5) Neglect of a property resulting in its deterioration or destruction; and
- 6) Transfer, lease, or sale of property without legally enforceable preservation restrictions or conditions.

Two categories of cultural resources will be adversely affected by the proposed undertaking: the viewshed of twenty-eight above-ground historic properties and the ceremonial practices and the traditional cultural properties of the Gay Head/Aquinnah and Mashpee Wampanoag Tribes.

6.1 The Viewshed of Twenty-Eight Above-ground Historic Properties

The undertaking constitutes an adverse effect for twenty-eight above-ground historic properties (see Table 4.1) under conditions 3 and 4 above, in that the undertaking will change the

character of the properties' setting that contributes to their historic significance; and the undertaking introduces visual elements that are out of character with the properties. The adverse effects to the viewshed of the above-ground historic properties are considered unavoidable for reasons discussed below.

6.2 Ceremonial Practices and the Traditional Cultural Properties of the Gay Head/Aquinnah and Mashpee Wampanoag Tribes

The undertaking constitutes an adverse effect for the ceremonial practices and the traditional cultural properties of the Gay Head/Aquinnah and Mashpee Wampanoag Tribes under conditions 3 and 4 above, in that the undertaking will change the character of the property's physical features from a location where the southeastern horizon is unimpeded, to one in which the horizon is not clearly visible. Furthermore, the undertaking will introduce visual elements that are out of character with the ceremonial use of the property. The adverse effects to the ceremonial practices and the traditional cultural properties of the Gay Head/Aquinnah and Mashpee Wampanoag Tribes are considered unavoidable for reasons discussed below.

6.3 Actions to Avoid, Minimize, or Mitigate Adverse Effects

6.3.1 Project Mitigation to Ceremonial Practices and Traditional Cultural Properties

Mitigation on ceremonial practices and traditional cultural properties is ineffective, and the only avoidance of such impacts is relocation of the project. MMS evaluated nine alternative geographic locations along the coast from Maine to Rhode Island, three non-geographic alternatives and the proposed action, and the no action alternative. In addition, the MMS considered onshore, near shore and dispersed sites and other forms of alternative energy production. All alternatives, including the preferred alternative, were subject to screening criteria which included meeting the purpose and need statement, economic viability and technological feasibility. Technological feasibility was determined by MMS considering existing technology utilized successfully on a commercial scale. This was then used to describe the physical criteria within which a project can be constructed, operated and maintained. The application of technological feasibility eliminated seven alternative sites from further application to screening criteria and, in accordance with CEQ § 1502.14, were not subject to detail analysis within the EIS.

The geographical and non-geographical alternatives that met the described criteria were subjected to further detailed environmental analysis with the proposed project and no action alternative. Detailed results of these analyses are presented in the MMS Draft Environmental Impact Statement for the Cape Wind Energy Project (USDOI/MMS, 2008). Alternatives to the proposed action subject to detailed analysis in the FEIS were found to have comparable or greater environmental impacts than the proposed action, depending upon the resource category considered. In respect to Northern Right Whale Critical Habitat, the location of the Monomoy Shoals alternative resulted in a greater likelihood of construction, decommissioning, and operational impacts to right whales in this area, than in the area of the preferred alternative. In addition, this

alternative is located in proximity to Monomoy Island (including the Monomoy National Wildlife Refuge), which provides important resting, nesting and feeding habitat for migratory birds, and would therefore have greater potential impacts than the proposed action to terrestrial, coastal, and marine birds. The South of Tuckernuck Island Alternative would require a larger area (36 versus 25 square miles) than the preferred alternative and due to water depths, would require a higher capital outlay to install different types of turbine support structures. This alternative would also be located close to Nantucket and the east end of Martha's Vineyard and would have visual impact from those locations.

The results of the analysis of the project alternatives indicated that the proposed action is the preferred alternative when considering multiple environmental, technical, economic and social factors. MMS has taken every possible action to avoid and minimize adverse effects to historic resources through detailed planning carried out as part of the NEPA process. The adverse effects to the viewshed of twenty-eight historic properties and the ceremonial practices and the traditional cultural properties of the Gay Head/Aquinnah and Mashpee Wampanoag Tribes are considered unavoidable.

6.3.2 Historic/Archaeological Resources Mitigation

The following is a comprehensive summary of the proposed mitigation for potential impacts to historic properties and Tribal areas of traditional cultural and religious importance as a result of the Cape Wind Project.

- All areas identified during the marine archaeological remote-sensing and vibracore investigations of the proposed project area as having any potential for preserved prehistoric archaeological sites (i.e. aboriginal cultural sites and remains) have been avoided by redesign of the proposed project, including the relocation of eight WTGs and associated cable arrays. (Analysis of the vibracores collected at these locations contained no evidence of material cultural remains. However, to minimize any possibility of impacting ancestral sites that might be present within these limited areas of preserved ancient land surface, the wind turbine array was modified to avoid these areas.)
- MMS will apply a 30 m (100 ft) no-activity buffer zone around the three potential historic resources (i.e. potential shipwreck sites) identified during the marine archaeological remote-sensing survey of the proposed project area. The no-activity zones will be demarcated on project plans provided to contractors and detailed in construction specifications; compliance will be overseen by an environmental inspector. If the potential shipwreck sites cannot be avoided, the MMS will require additional investigations of the locations prior to the approval of any bottom-disturbing activities in the area to determine whether they are, in fact, shipwreck sites, and, if so, to evaluate their historic significance.
- The MMS will include a "Chance Finds Clause" as a part of the lease document which requires the lessee to halt operations and notify the MMS if any unanticipated archaeological discovery is made during Lease activities. This clause is included in all MMS lease and permit documents.

6.3.3 Visual Resources Mitigation

The following is a comprehensive summary of the proposed mitigation for adverse visual effects to historic properties and Tribal areas of Traditional Cultural and Religious importance that would result from the proposed project:

- Daytime FAA lighting on the WTGs has been omitted, unless the U.S Coast Guard decides that some “day beacons” would be required to ensure navigation safety.
- Potential nighttime visual impacts have been lessened by the reduction in FAA nighttime lighting.
- Revisions to the layout have narrowed the breadth of the visual impact as seen from certain areas around the Sound.
- The WTGs will be an off-white color, to reduce contrast with the sea and sky.
- The upland transmission route will be located entirely below ground within paved roads and existing utility ROWs to avoid visual impacts and impacts to potential unidentified archaeological resources.
- Further mitigation will be considered during the formal Section 106 consultation process to include the SHPO at MHC and will culminate in a final Memorandum of Agreement (MOA) spelling out the mitigation measures that the consulting parties and the signatories agree to. To comply with the NHPA, MMS will continue to consult in good-faith effort with the SHPO at MHC and other consulting parties to address and resolve issues concerning potential visual effects on historic properties,.

7.0 Summary of Consulting Parties' and Public Views

Public notice of availability of a Draft Environmental Impact Statement (DEIS) was presented in Federal Register Vol. 73, No. 13 on Friday, January 18, 2008. Comments from federal, state, and local government agencies as well as other interested parties were requested.

The main content of the consulting parties' comments concerns a previously applied distinction between the USACE's and MMS's approach to evaluating adverse visual effects to historic properties and the scope of historic properties considered in terms of their National Register status. That distinction has now been nullified as MMS has adopted the USACE's approach to assessing adverse visual effects and their findings, and used the USACE's consultant to conduct additional analysis on historic properties not previously considered but brought to MMS's attention through consultation. Consulting parties also expressed concerns regarding potential impacts to the viewshed of Tribal sacred ceremonial sites not located within Tribal grounds and to submerged ancestral sites within Nantucket Sound. All comments have been taken into consideration and efforts have been made to avoid, minimize, and mitigate against adverse effects.

A comment matrix summarizing the views presented by the consulting parties as a result of the Section 106 consultation process is presented as Appendix A; copies of these and other correspondence are provided as Appendices B – D. Contact information for the consulting parties is presented as Appendix E, and Appendix F presents internal technical memoranda between MMS and its consultants.

Appendix A:

Comment Matrix Summarizing Views Presented by the Consulting Parties to the Section 106 Process for the Cape Wind Energy Project

Consulting Party	Comment	MMS Response
Martha's Vineyard Commission	There are at least several hundreds, if not, thousands of historic properties which were not included in the TRC proposal	With the adoption of the specific historic property recommendations received in the written comments from the Section 106 consulting parties for the proposed Cape Wind Energy Project, the MMS believes that it has made a reasonable and good faith effort, as required under the Advisory Council on Historic Preservation's regulations at 36 CFR 800.4(b)(1), to identify historic properties that may be eligible, have been determined eligible, or that are on the National Register of Historic Places. MMS evaluated all properties that could be specifically identified from the written comments submitted by the section 106 consulting parties. General statements referring to hundreds, if not thousands, of historic properties which were not included in the original MMS analysis are not specific enough to be helpful to the process of identifying additional properties.
	The arbitrary and ambiguous choice of 9 miles for possible visual effects by the TRC analysis is not based on NHPA precedent or factual basis	Based on comments received from the Section 106 consulting parties, the MMS has used the same approach to assessing adverse visual effects that was employed by PAL in the original analysis completed for the U.S. Army Corps of Engineers when they were the lead Federal agency for the project. The PAL approach considered the visual effect to any historic property that had a view of the proposed project to be adverse because of the special historic qualities of the Nantucket Sound setting.
	"Percent affected" terminology applied to determining the impact of visual effects on historic properties does not comply with ACHP guidelines	Based on comments received from the Section 106 consulting parties, the MMS has used the same approach to assessing adverse visual effects that was employed by PAL in the original analysis completed for the U.S. Army Corps of Engineers when they were the lead Federal agency for the project. The PAL approach considered an adverse visual effect to any property within an historic district to be an adverse effect to the entire district.
	The overall setting is certainly one of the most significant aspects which needs greater professionalism in determining all factors in an unambiguous fashion, based on facts, precedent and without arbitrariness	Based on comments received from the Section 106 consulting parties, the MMS has used the same approach to assessing adverse visual effects that was employed by PAL in the original analysis completed for the U.S. Army Corps of Engineers when they were the lead Federal agency for the project. The PAL approach considered the visual effect to any historic property that had a view of the proposed project to be adverse because of the special historic qualities of the Nantucket Sound setting.

Consulting Party	Comment	MMS Response
Cape Cod Commission	Expressed concern with the flawed adverse effects analysis process to date on thousands of historic properties on the Cape and Islands	Based on comments received from the Section 106 consulting parties, the MMS has used the same approach to assessing adverse visual effects that was employed by PAL in the original analysis completed for the U.S. Army Corps of Engineers when they were the lead Federal agency for the project. The consulting parties have expressed unanimous agreement that the PAL approach to assessing adverse visual effects is an acceptable approach. MMS evaluated all properties that could be specifically identified from the written comments submitted by the section 106 consulting parties.
	Expressed concern with the ambiguity as to the process that MMS will follow for section 106 and National Environmental Policy Act (NEPA) compliance	The MMS will include the information from a revised Finding of Adverse Effect for the project in the FEIS. This revised Finding of Adverse Effect used the PAL approach to assessing adverse visual effects for the proposed project area, and reflects consideration and field evaluation of additional previously unevaluated historic properties brought to our attention by consulting parties during the Section 106 consultation process. The MMS will continue the Section 106 consultation process, independent of the NEPA document, to discuss measures to avoid, minimize, and/or mitigate adverse visual effects to historic properties that have been identified.
	Provide all of the consulting parties with a clear, detailed schedule of forthcoming meetings and provide advance notice as to the exact date and location of each meeting, as this affects the number of participants who are able to attend; insufficient notice was provided for the last meeting.	The Section 106 consultation process is an iterative process whereby the MMS, in listening to, and considering the comments of the consulting parties, is attempting to respond in as thorough and timely manner as possible. For the MMS to lay out an advance schedule of meetings would be to preempt the input of consulting parties at each step of the process. Our goal is to give as much advance notice as possible for each proposed consultation meeting.
	Encourage MMS to engage in outreach to each consulting party to maximize participation	The MMS has made an extensive effort to identify, contact, and invite all appropriate consulting parties to the Section 106 consultation meetings for the proposed Cape Wind project. We do not believe it is our responsibility to encourage invited parties to participate in the consultation process.
	The PAL approach adopted by the ACOE was not itself adequate for NHPA compliance. While it was not as flawed as the current MMS/TRC approach, it should not be assumed that simply adopting the PAL methodology will result in NRPA compliance.	The MMS has both used the PAL approach to assessing adverse visual effects for the proposed project and employed that approach to assess additional properties identified to us by the Section 106 consulting parties that had not yet been evaluated for National Register eligibility.
	The TRC criteria and methodology for consideration of effects on historic properties are seriously in error, and do not comply with the guidelines and regulations laid out by the ACHP for application to such projects.	Based on comments received from the Section 106 consulting parties, the MMS has used the same approach to assessing adverse visual effects that was employed by PAL in the original analysis completed for the U.S. Army Corps of Engineers when they were the lead Federal agency for the project. The consulting parties have expressed unanimous agreement that the PAL approach to assessing adverse visual effects is an acceptable approach.

Consulting Party	Comment	MMS Response
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Save Our Sound: Alliance to Protect Nantucket Sound</p>	<p>The choice of nine miles distance from the Cape Wind preferred site as the break point between possible visual effects was arbitrary, and is not supported by any NHPA precedent or factual basis.</p>	<p>Based on comments received from the Section 106 consulting parties, the MMS has used the same approach to assessing adverse visual effects that was employed by PAL in the original analysis completed for the U.S. Army Corps of Engineers when they were the lead Federal agency for the project. The PAL approach considered the visual effect to any historic property that had a view of the proposed project to be adverse because of the special historic qualities of the Nantucket Sound setting.</p>
	<p>A second critical error in the TRC methodology is the determination to use “percent affected” as a criterion for determining visual effects on historic properties. Arbitrarily choosing any particular percentage of historic properties within a historic district and judging the district to not be affected... is not compliant with ACHP guidance, or with precedent. The standard guidance from ACHP, affirmed in the September 9 meeting by the Massachusetts Historical Commission, with abundant precedential support, is that if any historic property within a historic district is adversely affected, then the district as a whole is adversely affected.</p>	<p>Based on comments received from the Section 106 consulting parties, the MMS has used the same approach to assessing adverse visual effects that was employed by PAL in the original analysis completed for the U.S. Army Corps of Engineers when they were the lead Federal agency for the project. The PAL approach considered an adverse visual effect to any property within an historic district to be an adverse effect to the entire district.</p>
	<p>MMS's efforts in identifying and determining impacts on historic properties have not been professionally conducted</p>	<p>Based on comments received from the Section 106 consulting parties, the MMS has used the same approach to assessing adverse visual effects that was employed by PAL in the original analysis completed for the U.S. Army Corps of Engineers when they were the lead Federal agency for the project. The consulting parties have expressed unanimous agreement that the PAL approach to assessing adverse visual effects is an acceptable approach.</p>

Consulting Party	Comment	MMS Response
	<p>APNS strongly urges that MMS re-initiate the entire visual effects analysis, incorporating all of the professional standards recommended by the ACHP, and covering all of the historic properties on the Cape and Islands, not just limiting the analysis to those properties already listed on the National Register of Historic Places. ACHP guidance to federal agencies certainly contemplates that each agency will thoroughly evaluate/inventory all of the historic properties that may be affected by federal undertakings or permits, and not just those already given recognition. (36 C.F.R. § 800.4).</p>	<p>Based on comments received from the Section 106 consulting parties, the MMS has used the same approach to assessing adverse visual effects that was employed by PAL in the original analysis completed for the U.S. Army Corps of Engineers when they were the lead Federal agency for the project. The consulting parties have expressed unanimous agreement that the PAL approach to assessing adverse visual effects is an acceptable approach. The MMS has employed the PAL approach in assessing adverse visual effects to additional previously unevaluated historic properties brought to our attention by consulting parties during the Section 106 consultation process. With the adoption of the specific historic property recommendations received in the written comments from the Section 106 consulting parties for the proposed project, the MMS believes that it has made a reasonable and good faith effort, as required under the Advisory Council on Historic Preservation's regulations at 36 CFR 800.4(b)(1), to identify historic properties that may be eligible, have been determined eligible, or that are on the National Register of Historic Places. MMS evaluated all properties that could be specifically identified from the written comments submitted by the section 106 consulting parties. General statements referring to hundreds, if not thousands, of historic properties which were not included in the original MMS analysis are not specific enough to be helpful to the process of identifying additional properties.</p>
	<p>It is the responsibility of MMS and its contractor to conduct a thorough inventory of historic properties as a first step, to evaluate their eligibility for National Register listing, and then to apply the appropriate, accepted criteria and standards to evaluate and assess effects.</p>	<p>Based on comments received from the Section 106 consulting parties, the MMS has used the same approach to assessing adverse visual effects that was employed by PAL in the original analysis completed for the U.S. Army Corps of Engineers when they were the lead Federal agency for the project. The consulting parties have expressed unanimous agreement that the PAL approach to assessing adverse visual effects is an acceptable approach. The MMS has employed the PAL approach in assessing adverse visual effects to additional previously unevaluated historic properties brought to our attention by consulting parties during the Section 106 consultation process. With the adoption of the specific historic property recommendations received in the written comments from the Section 106 consulting parties for the proposed project, the MMS believes that it has made a reasonable and good faith effort, as required under the Advisory Council on Historic Preservation's regulations at 36 CFR 800.4(b)(1), to identify historic properties that may be eligible, have been determined eligible, or that are on the National Register of Historic Places. MMS evaluated all properties that could be specifically identified from the written comments submitted by the section 106 consulting parties. General statements referring to hundreds, if not thousands, of historic properties which were not included in the original MMS analysis are not specific enough to be helpful to the process of identifying additional properties.</p>

Consulting Party	Comment	MMS Response
Save Our Sound: Alliance to Protect Nantucket Sound	<p>MMS must conduct a comprehensive analysis of all listed and eligible properties, as required under the NHPA and its regulations, using a contractor other than TRC.</p>	<p>Based on comments received from the Section 106 consulting parties, the MMS has used the same approach to assessing adverse visual effects that was employed by PAL in the original analysis completed for the U.S. Army Corps of Engineers when they were the lead Federal agency for the project. The consulting parties have expressed unanimous agreement that the PAL approach to assessing adverse visual effects is an acceptable approach. The MMS has employed the PAL approach in assessing adverse visual effects to additional previously unevaluated historic properties brought to our attention by consulting parties during the Section 106 consultation process. With the adoption of the specific historic property recommendations received in the written comments from the Section 106 consulting parties for the proposed project, the MMS believes that it has made a reasonable and good faith effort, as required under the Advisory Council on Historic Preservation's regulations at 36 CFR 800.4(b)(1), to identify historic properties that may be eligible, have been determined eligible, or that are on the National Register of Historic Places. MMS evaluated all properties that could be specifically identified from the written comments submitted by the section 106 consulting parties. General statements referring to hundreds, if not thousands, of historic properties which were not included in the original MMS analysis are not specific enough to be helpful to the process of identifying additional properties.</p>
	<p>The TRC assessment criteria were flawed, by failing to give appropriate consideration to the setting.</p>	<p>Based on comments received from the Section 106 consulting parties, the MMS has used the same approach to assessing adverse visual effects that was employed by PAL in the original analysis completed for the U.S. Army Corps of Engineers when they were the lead Federal agency for the project. The PAL approach considered the visual effect to any historic property that had a view of the proposed project to be adverse because of the special historic qualities of the Nantucket Sound setting.</p>
	<p>We continue to seek assurance from MMS that the agency's generic regulations covering all offshore energy development matters will be finalized before a Record of Decision is signed on Cape Wind, and fully applied to the review and analysis of the Cape Wind project following a supplemental comment period.</p>	<p>This comment is a general comment on the proposed project schedule that is not specific to historic properties or the Section 106 consultation process. It should be raised by the commenter in a more appropriate context.</p>

Consulting Party	Comment	MMS Response
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Save Our Sound: Alliance to Protect Nantucket Sound</p>	<p>NHPA section 106 compliance must be completed, and the findings applied, to the NEPA compliance analysis in the Final Environmental Impact Statement. The legal requirements to include a full analysis of impacts on historic properties, such as can only be achieved through completion of a comprehensive section 106 procedure, as is clear from NEPA, the NEPA regulations, and case law. It is not legally permissible to complete a sufficient EIS without the information developed pursuant to the section 106 process.</p>	<p>The ACHP regulations at 36 CFR 800.1(c) require that the Section 106 compliance process be completed prior to the approval of the expenditure of any Federal funds on the undertaking or prior to the issuance of any license. The regulations do not require that the Section 106 compliance process be completed prior to completion of the FEIS for the project. By identifying the potential adverse effects of the project on all historic properties within the Area of Potential Effect of the proposed project, the requirements of the NEPA process for a full analysis of impacts on historic properties are met.</p>
	<p>The entirety of Nantucket Sound - the seascape itself - is eligible for listing on the National Register, and is likely to be found nationally significant. A professionally conducted historic site inventory should consider and develop such a recommendation.</p>	<p>In response to this comment, the MMS consulted with Patrick Andrus of the NPS Office of the National Register, regarding the potential eligibility of Nantucket Sound for the National Register of Historic Places. Patrick was very clear that Nantucket Sound was not eligible for the National Register and he directed MMS to National Register Bulletin 15, How to Apply the National Register Criteria for Evaluation, Section IV, How to Define Categories of Historic Properties - Site (page 5), which states: <i>"A site may be a natural landmark strongly associated with significant prehistoric or historic events or patterns of events, if the significance of the natural feature is well documented through scholarly research. Generally, though, the National Register excludes from the definition of 'site' natural waterways or bodies of water that served as determinants in the location of communities or were significant in the locality's subsequent economic development. While they may have been 'avenues of exploration,' the features most appropriate to document this significance are the properties built in association with the waterways".</i></p>
	<p>Horseshoe Shoal is eligible for listing on the National Register of Historic Places under criteria 'a' and 'b', since both are- (a) ...associated with events that have made a significant contribution to the broad patterns of our history; or (b) ...associated with the lives of persons significant in our past." The Shoal is also a site where an important facet of European exploration occurred, and that may be likely to yield information important in history or prehistory.</p>	<p>In response to this comment, the MMS consulted with Patrick Andrus of the NPS Office of the National Register, regarding the potential eligibility of Nantucket Sound for the National Register of Historic Places. Patrick was very clear that Nantucket Sound was not eligible for the National Register and he directed MMS to National Register Bulletin 15, How to Apply the National Register Criteria for Evaluation, Section IV, How to Define Categories of Historic Properties - Site (page 5), which states: <i>"A site may be a natural landmark strongly associated with significant prehistoric or historic events or patterns of events, if the significance of the natural feature is well documented through scholarly research. Generally, though, the National Register excludes from the definition of 'site' natural waterways or bodies of water that served as determinants in the location of communities or were significant in the locality's subsequent economic development. While they may have been 'avenues of exploration,' the features most appropriate to document this significance are the properties built in association with the waterways".</i></p>

Neil Good

Consulting Party	Comment	MMS Response
Cape Cod Commission	Falmouth Heights in Falmouth is eligible for the NRHP, but not listed.	The MMS has added Falmouth Heights Historic District to the list of historic properties determined to have an adverse visual effect from the proposed project.
	Ocean Grove in Harwich is eligible for the NRHP, but not listed	The MMS has added Ocean Grove in Harwich to the list of historic properties determined to have an adverse visual effect from the proposed project.
	Contact consultants ttl-architects of Portland, Maine; they have been hired by the town of Barnstable to consider various undocumented historic resources in the town, and to consider the potential expansion of the Craigville National Historic District.	General statements referring to historic properties which were not included in the original MMS analysis are not specific enough to be helpful to the process of identifying additional properties.
	Gaps in information exist as there are likely numerous other properties along the south coast of Cape Cod that are eligible for listing on the NRHP that have not yet been inventoried. These must be taken into account.	General statements referring to historic properties which were not included in the original MMS analysis are not specific enough to be helpful to the process of identifying additional properties.
	Impacts on individual properties within historic districts should be considered.	Based on comments received from the Section 106 consulting parties, the MMS has used the same approach to assessing adverse visual effects that was employed by PAL in the original analysis completed for the U.S. Army Corps of Engineers when they were the lead Federal agency for the project. The PAL approach considered an adverse visual effect to any property within an historic district to be an adverse effect to the entire district.
	Setting should be considered, even if it is not specifically discussed in the nomination.	Based on comments received from the Section 106 consulting parties, the MMS has used the same approach to assessing adverse visual effects that was employed by PAL in the original analysis completed for the U.S. Army Corps of Engineers when they were the lead Federal agency for the project. The PAL approach considered the visual effect to any historic property that had a view of the proposed project to be adverse because of the special historic qualities of the Nantucket Sound setting.

Consulting Party	Comment	MMS Response
MHC (SHPO)	<p>Concerns remain with the contrast of MMS's identification of three adverse effects as opposed to the ACOE's identification.</p>	<p>Based on comments received from the Section 106 consulting parties, the MMS has used the same approach to assessing adverse visual effects that was employed by PAL in the original analysis completed for the U.S. Army Corps of Engineers when they were the lead Federal agency for the project. The consulting parties have expressed unanimous agreement that the PAL approach to assessing adverse visual effects is an acceptable approach.</p>
	<p>MHC believes that TRC has incorrectly applied the criteria of effect by defining a set radius for their analysis and by using percentages of buildings as a basis for determining effects. The MHC requests that MMS reexamine the methodology used to apply the criteria and again seek comments of consulting parties.</p>	<p>Based on comments received from the Section 106 consulting parties, the MMS has used the same approach to assessing adverse visual effects that was employed by PAL in the original analysis completed for the U.S. Army Corps of Engineers when they were the lead Federal agency for the project. The PAL approach considered the visual effect to any historic property that had a view of the proposed project to be adverse because of the special historic qualities of the Nantucket Sound setting. The PAL approach also considered an adverse visual effect to any property within an historic district to be an adverse effect to the entire district.</p>
	<p>Although the MHC originally concurred with the ACOE's methodology and findings, additional properties have been provided to MMS by APNS and should be subjected to additional visual analysis. Of particular interest is the Falmouth Heights District area, which MHC feels is eligible for listing on the NRHP.</p>	<p>The MMS has evaluated the additional historic properties identified to us by consulting parties, including those properties that had not been previously evaluated for National Register eligibility, using the approach to assessing adverse visual effects employed by PAL, and included another 12 historic properties and one specific Tribal sacred site on the list of historic properties determined to have an adverse visual effect from the proposed project. The Falmouth Heights Historic District is one of the properties that has been added to the list of historic properties determined to have an adverse visual effect from the proposed project.</p>

Consulting Party	Comment	MMS Response
National Trust for Historic Preservation	<p>MMS's approach to resources identification does not meet Section 106 standards, and the methodology used to assess effects misapplied National Register criteria, gravely undercounting adverse effects.</p>	<p>Based on comments received from the Section 106 consulting parties, the MMS has used the same approach to assessing adverse visual effects that was employed by PAL in the original analysis completed for the U.S. Army Corps of Engineers when they were the lead Federal agency for the project. The consulting parties have expressed unanimous agreement that the PAL approach to assessing adverse visual effects is an acceptable approach. The MMS has employed the PAL approach in assessing adverse visual effects to additional previously unevaluated historic properties brought to our attention by consulting parties during the Section 106 consultation process.</p>
	<p>MMS's efforts to identify resources should be expanded to evaluate information from existing historic resource surveys as well as specific information provided by the public, SHPO, THPOs, and interested Tribes. Additional properties reported by APNS should be evaluated for significance</p>	<p>The MMS has employed the PAL approach in assessing adverse visual effects to additional previously unevaluated historic properties brought to our attention by consulting parties during the Section 106 consultation process.</p>
	<p>The methodology used [by TRC] in the adverse effects assessment was flawed: quantitative measures were inappropriate and arbitrarily chosen and historic districts should have been treated as single entities rather than with percentages.</p>	<p>Based on comments received from the Section 106 consulting parties, the MMS has used the same approach to assessing adverse visual effects that was employed by PAL in the original analysis completed for the U.S. Army Corps of Engineers when they were the lead Federal agency for the project. The consulting parties have expressed unanimous agreement that the PAL approach to assessing adverse visual effects is an acceptable approach. The PAL approach considered the visual effect to any historic property that had a view of the proposed project to be adverse because of the special historic qualities of the Nantucket Sound setting. The PAL approach also considered an adverse visual effect to any property within an historic district to be an adverse effect to the entire district.</p>
	<p>Views toward as well as away from the historic property should be considered</p>	<p>By treating the entirety of Nantucket Sound as a special historic setting, and by issuing a finding of adverse visual effect to any historic property that has any view of the project, the MMS believes that the potential for adverse visual effects from the proposed project on historic properties surrounding Nantucket Sound has been adequately addressed.</p>

Consulting Party	Comment	MMS Response
National Trust for Historic Preservation	<p>Concerns linger as to the disparity between ACOE's number of affected properties and MMS's... [despite the presentation at September's meeting]. It is debatable whether the PAL list of adverse effects was complete, either, but certainly, MMs needs new visual analysis and reassessment to more accurately and completely determine which resources would be adversely affected by the project.</p>	<p>Based on comments received from the Section 106 consulting parties, the MMS has used the same approach to assessing adverse visual effects that was employed by PAL in the original analysis completed for the U.S. Army Corps of Engineers when they were the lead Federal agency for the project. The consulting parties have expressed unanimous agreement that the PAL approach to assessing adverse visual effects is an acceptable approach. The MMS has employed the PAL approach in assessing adverse visual effects to additional previously unevaluated historic properties brought to our attention by consulting parties during the Section 106 consultation process. With the adoption of the specific historic property recommendations received in the written comments from the Section 106 consulting parties for the proposed project, the MMS believes that it has made a reasonable and good faith effort, as required under the Advisory Council on Historic Preservation's regulations at 36 CFR 800.4(b)(1), to identify historic properties that may be eligible, have been determined eligible, or that are on the National Register of Historic Places.</p>
	<p>Incorporate an elevated level of consideration for the effects of the property on National Historic Landmarks, as required by Section 110 (f)</p>	<p>As required by 36 CFR 800.10, the MMS has invited the ACHP and the Secretary of Interior (represented by the NPS, National Historic Landmarks Program office in Philadelphia) to consult regarding potential adverse visual effects to National Historic Landmarks from the proposed project. By using the PAL approach to assessing adverse visual effects, the Finding of Adverse Effect for the project has been revised to include the Nantucket National Historic Landmark</p>
	<p>MMS should not allow the limits of their initial study areas or lack of alternative project application to constrain the meaningful consideration of reasonable alternatives as required by Sections 106 and 110.</p>	<p>The MMS assessed alternatives to the proposed project as part of the NEPA process, with full public participation. Many different resources and factors were considered in the assessment of project alternatives, including effects on historic properties.</p>

Consulting Party	Comment	MMS Response
Town of Yarmouth Board of Selectmen	<p>Raised concern that MMS' consideration of the historic resources of Yarmouth falls short, since evidence in the record indicates that consideration of these impacts is incomplete at best.</p>	<p>Based on comments received from the Section 106 consulting parties, the MMS has used the same approach to assessing adverse visual effects that was employed by PAL in the original analysis completed for the U.S. Army Corps of Engineers when they were the lead Federal agency for the project. The consulting parties have expressed unanimous agreement that the PAL approach to assessing adverse visual effects is an acceptable approach. The MMS has employed the PAL approach in assessing adverse visual effects to additional previously unevaluated historic properties brought to our attention by consulting parties during the Section 106 consultation process and has prepared a revised Finding of Adverse Effect reflecting the results of the assessment of these new properties. With the adoption of the specific historic property recommendations received in the written comments from the Section 106 consulting parties for the proposed project, the MMS believes that it has made a reasonable and good faith effort, as required under the Advisory Council on Historic Preservation's regulations at 36 CFR 800.4(b)(1), to identify historic properties that may be eligible, have been determined eligible, or that are on the National Register of Historic Places.</p>
	<p>Raised concern that adequate notice has not been given in advance of the consultation process meetings and request that one month's notice is given.</p>	<p>The Section 106 consultation process is an iterative process whereby the MMS, in listening to, and considering the comments of the consulting parties, is attempting to respond in as thorough and timely manner as possible. For the MMS to lay out an advance schedule of meetings would be to preempt the input of consulting parties at each step of the process. Our goal is to give as much advance notice as possible for each proposed consultation meeting.</p>
	<p>Ask that MMS fully explore above-ground historic resources of the Town of Yarmouth to determine if all eligible resources have been considered</p>	<p>With the adoption of the specific historic property recommendations received in the written comments from the Section 106 consulting parties for the proposed Cape Wind Energy Project, the MMS believes that it has made a reasonable and good faith effort, as required under the Advisory Council on Historic Preservation's regulations at 36 CFR 800.4(b)(1), to identify historic properties that may be eligible, have been determined eligible, or that are on the National Register of Historic Places. General statements referring to historic properties which may exist are not specific enough to be helpful to the process of identifying additional properties.</p>
	<p>Ask that MMS ensure that properties in Yarmouth eligible for inclusion in the National Register, but not necessarily identified or already listed, are considered.</p>	<p>The MMS has conducted additional analyses of the specific, previously unevaluated properties identified to us by Consulting Parties. With the adoption of the specific historic property recommendations received in the written comments from the Section 106 consulting parties for the proposed Cape Wind Energy Project, the MMS believes that it has made a reasonable and good faith effort, as required under the Advisory Council on Historic Preservation's regulations at 36 CFR 800.4(b)(1), to identify historic properties that may be eligible, have been determined eligible, or that are on the National Register of Historic Places.</p>

Consulting Party	Comment	MMS Response
Town of Yarmouth Board of Selectmen	<p>The methodological approach belies a bias toward communities that have undertaken a comprehensive evaluation and designation of NR properties.</p>	<p>The MMS has conducted additional analyses of the specific, previously unevaluated properties identified to us by Consulting Parties. With the adoption of the specific historic property recommendations received in the written comments from the Section 106 consulting parties for the proposed Cape Wind Energy Project, the MMS believes that it has made a reasonable and good faith effort, as required under the Advisory Council on Historic Preservation's regulations at 36 CFR 800.4(b)(1), to identify historic properties that may be eligible, have been determined eligible, or that are on the National Register of Historic Places.</p>
	<p>Provided a summary of potentially affected historic properties in Yarmouth that was developed in 2004 by the Yarmouth Historic Commission.</p>	<p>The specific unevaluated properties and districts identified to the MMS by the Town of Yarmouth have been evaluated by PAL using the same visual effects methodology as used in their original analysis of National Register and National Register eligible properties for the USACE. Only one of the properties, the Park Avenue Historic District in Yarmouth, was found to be both eligible for the National Register and to have a potential adverse visual effect from the proposed project. This property has been added to the revised MMS Finding of Adverse Effect for the proposed project.</p>
	<p>Ask that MMS revise its visual effects analysis so as to apply the standards recommended by the ACHP and include all of the areas and properties that should be considered for the town</p>	<p>Based on comments received from the Section 106 consulting parties, the MMS has used the same approach to assessing adverse visual effects that was employed by PAL in the original analysis completed for the U.S. Army Corps of Engineers when they were the lead Federal agency for the project. The consulting parties have expressed unanimous agreement that the PAL approach to assessing adverse visual effects is an acceptable approach. With the adoption of the specific historic property recommendations received in the written comments from the Section 106 consulting parties for the proposed Cape Wind Energy Project, the MMS believes that it has made a reasonable and good faith effort, as required under the Advisory Council on Historic Preservation's regulations at 36 CFR 800.4(b)(1), to identify historic properties that may be eligible, have been determined eligible, or that are on the National Register of Historic Places.</p>
	<p>Reminds MMS of its obligation to finalize the overall regulations covering all offshore energy development matters in a Record of Decision in advance of concluding the review of the Cape Wind project, and to fully apply these regulations to the Cape Wind project and set up a supplemental comment period.</p>	<p>This comment is a general comment on the proposed project schedule that is not specific to historic properties or the Section 106 consultation process. It should be raised by the commenter in a more appropriate context.</p>

Appendix B:

**Copies of Correspondence from Consulting Parties
During the Section 106 Process for the Cape Wind
Energy Project**



The Commonwealth of Massachusetts
William Francis Galvin, Secretary of the Commonwealth
Massachusetts Historical Commission

May 19, 2004

Christine A. Godfrey
Chief, Regulatory Division
US Army Corps of Engineers
696 Virginia Road
Concord, MA 01742-2751

ATTN.: Karen Kirk Adams

RE: Cape Wind Energy Project, Barnstable and Yarmouth, MA. MHC #RC.29785. COE #199902477.
EOEA #12643. PAL #1485.01.

Dear Ms. Godfrey:

Staff of the Massachusetts Historical Commission have reviewed the report, *Marine Archaeological Reconnaissance Survey, Cape Wind Energy Project, Nantucket Sound, Massachusetts*, prepared by the PAL. MHC looks forward to receiving from the PAL one (1) additional copy of the final report, and a diskette with the report bibliographic data and archaeological abstract. MHC has reviewed and concurs also with the conclusions and recommendations of the Massachusetts Board of Underwater Archaeological Resources (BUAR), as outlined in the BUAR's letter of May 11, 2004.

The archaeological investigations located areas within the project that appear to be preserved landforms of formerly exposed uplands at the edges of freshwater wetlands. If ancient cultural materials are located within these preserved landforms, it is likely that they would date to the Middle Archaic Period, ca. 7,500-5,500 years ago. Well-preserved organic material identified in vibratory cores include wood, plants, and insects; charcoal and stone fragments in these core samples cannot be conclusively identified as deriving from human activities. Yet, the environmental characteristics of these landforms suggest that these areas would have been highly attractive to resident Native American populations; if cultural resources are in fact present, the well-preserved organic materials would add a significant dimension to understanding the environments of ancient settlement and land use.

Three targets (PAL 03-01, 03-02, and 03-03) have the characteristics to likely represent historical period shipwrecks. It is not known what type or age of vessels might be present.

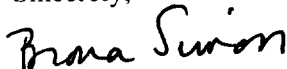
If the report recommendations, as also outlined with the BUAR's letter, can be implemented, then the Corps should develop a suitable proposal to implement the recommendations as part of the project planning documents to ensure that any National Register-eligible archaeological resources are not adversely affected.

220 Morrissey Boulevard, Boston, Massachusetts 02125
(617) 727-8470 • Fax: (617) 727-5128
www.state.ma.us/sec/mhc

MHC concurs with the report recommendations that further archaeological investigations are required if the archaeologically sensitive portions of the project impact areas cannot be avoided. MHC would at that time be willing to assist in developing an appropriate scope and methodology for further archaeological investigations, in consultation with the BUAR.

These comments are offered to assist in compliance with Section 106 of the National Historic Preservation Act of 1966 as amended (36 CFR 800), the Secretary of Interior's *Standards and Guidelines for Archeology and Historic Preservation* (48 Fed. Reg. 190 (1983)), MGL c. 9, ss. 26-27C (950 CMR 70-71), and MEPA (301 CMR 11). Please contact Edward L. Bell of my staff if you have any questions.

Sincerely,



Brona Simon
State Archaeologist
Deputy State Historic Preservation Officer
Massachusetts Historical Commission

xc:

Kathleen Atwood, USACOE-NED
Craig Olmstead, Cape Wind Associates
Sarah Faldetta, ESS Group Inc.
√ Deborah Cox, PAL
Victor Mastone, MBUAR
Secretary Ellen Roy Hetzfelder, EOE/MEPA Unit (Attn. Arthur Pugsley)



The Commonwealth of Massachusetts

Executive Office of Environmental Affairs

251 Causeway Street, Suite 900

Boston, Massachusetts 02114-2119

BOARD OF
UNDERWATER
ARCHAEOLOGICAL
RESOURCES

Tel. (617) 626-1000

Fax (617) 626-1181

<http://www.magnet.state.ma.us/envir>

May 11, 2004

Deborah C. Cox, President
Public Archaeology Laboratory, Inc.
210 Lonsdale Avenue
Pawtucket, RI 02860

Dear Ms. Cox:

The staff of the Massachusetts Board of Underwater Archaeological Resources has completed its review of the technical report entitled *Marine Archaeological Reconnaissance Survey, Cape Wind Energy Project, Nantucket Sound, Massachusetts* and offers the following comments on the report's findings and recommendations.

The Board is satisfied with the overall research design and methodology of the survey and the report's interpretation that the presence of heretofore undiscovered deposits of contextually intact paleosols, representing forest soils, fresh water wetlands and a shallow freshwater pond, suggests that ancient Native American submerged cultural resources could be present in several zones on the eastern side of the project study area. The Board concurs with the report's recommendation that the proposed locations of six WTGs (G3, G4, H9, 14, 15 and L4) and seven portions of the WTG-interconnect cable grid (between WTGs F7-G7, F9-G9, G2-G3, G3-G4, G4-G5, G9-H9, and I4-I5) should be redesigned as necessary to avoid construction activities where sub-bottom profiler reflectors were identified within the current project APE, buried less than 12 feet below the seafloor, in the vicinity of these identified paleosol deposits as defined by Figure 6-1. The Board concurs with the report's further recommendations that if avoidance of these archaeologically sensitive and potentially sensitive areas is not possible, then additional work should be conducted, including, but not limited to:

- vibratory coring of previously untested sub-bottom profiler reflectors within the area of high archaeological sensitivity, the project's area of potential impacts, and less than twelve (12) feet below the sea floor's surface to determine the presence or absence of archaeologically sensitive paleosols;

- analysis of paleosols in vibratory coring specimens to determine the presence or absence of ancient Native American cultural materials; and



-intensive marine archaeological survey, consisting of systematic subsurface testing using a methodology developed in consultation with the USACE and SHPO (including both the Board of Underwater Archaeological Resources and the Massachusetts Historical Commission), of the archaeologically sensitive areas with paleosols to determine the presence or absence of ancient Native American archaeological sites.

With respect to remote sensing targets 03-01, 03-02 and 03-03 detected through this survey, the Board is satisfied with the report's analysis that these anomalies exhibit moderate potential to represent historic submerged cultural resources (shipwrecks). The Board also concurs with the recommendation that the proposed WTGs and the WTG and WTG-ESP interconnect cables should be redesigned as necessary to avoid construction activities at the locations of these targets maintaining a minimum buffer zone of one hundred (100) feet in all directions around each target. If avoidance of these potentially archaeologically sensitive areas is not possible, the Board concurs with the report's recommendation that an intensive marine archaeological survey be conducted consisting of visual inspection, limited surface probing and testing by divers to determine the targets' sources and evaluate their potential historic significance.

The Board appreciates the opportunity to comment on this report. Should you have any questions regarding this letter, please do not hesitate to contact me at the address above, by telephone at (617) 626-1141 or by email at Victor.Mastone@state.ma.us.

Sincerely,



Victor T. Mastone
Director

VTM/dwt

Cc: Brona Simon, MHC
Karen Adams, USACE
Arthur Pugsley, MEPA
Alexander Strysky, CZM



The Commonwealth of Massachusetts
William Francis Galvin, Secretary of the Commonwealth
Massachusetts Historical Commission

April 22, 2004

Deborah C. Cox
PAL
210 Lonsdale Avenue
Pawtucket, RI 02860

RE: Cape Wind, Terrestrial Survey Barnstable & Yarmouth. MHC #RC.29785 PAL #1485.01.

Dear Deborah:

Thank you for providing a copy of the final report prepared for the project referenced above. Please submit one (1) copy of a corrected Table of Contents, punched for spiral binding.

Additionally, please submit the items checked off below:



Original MHC inventory form.



Second copy of the final report (with corrected Table of Contents).



Two copies of the final report.



A copy of the bibliographic entry and abstract on a 3½" diskette.

Please submit these items as soon as possible so that we may update our files and incorporate the results of your investigation into MHC's inventory. Thank you in advance for your consideration. These comments are offered to assist in compliance with 950 CMR 70.

If you have any questions, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Edward L. Bell".

Edward L. Bell
Senior Archaeologist
Massachusetts Historical Commission



The Commonwealth of Massachusetts
William Francis Galvin, Secretary of the Commonwealth
Massachusetts Historical Commission

July 10, 2003

Christine A. Godfrey
Chief, Regulatory Division
US Army Corps of Engineers
696 Virginia Road
Concord, MA 01742-2751

ATTN.: Karen Kirk Adams

RE: Cape Wind Energy Project, Yarmouth, MA. MHC #RC.29785. COE #199902477.

Dear Ms. Godfrey:

Staff of the Massachusetts Historical Commission have reviewed the report prepared by the PAL, *Marine Archaeological Sensitivity Assessment, Cape Wind Energy Project, Nantucket Sound, Massachusetts*, and received by the MHC on June 23, 2003. MHC has reviewed and taken into account the thoughtful comments of the Massachusetts Board of Underwater Archaeological Resources (BUAR) concerning the proposed identification effort.

MHC reviewed the results of the background research and analysis prepared by the PAL, and considered the PAL's recommendations with the summary memorandum prepared by ESS Group Inc., "Scope of Proposed Marine Archaeological Survey," dated May 28, 2003 and received by the MHC on June 4, 2003.

The proposed methods for the remote sensing survey appear to be adequate to meet the goals and purpose of the archaeological survey, provided however that the survey evaluates all the anticipated project-related impact areas. The BUAR noted in particular that the anchor spreads of the construction vessels should be considered along with all other project-related impacts. MHC looks forward to reviewing the results of the investigation along with the Corps' evaluation of the results of the identification effort.

These comments are offered to assist in compliance with Section 106 of the National Historic Preservation Act of 1966 as amended (36 CFR 800) and the Secretary of Interior's Standards and Guidelines for Archeology and Historic Preservation (48 Fed. Reg. 190 (1983)). Please contact Edward L. Bell of my staff if you have any questions.

Sincerely,

A handwritten signature in cursive script that reads "Brona Simon".

Brona Simon
State Archaeologist
Deputy State Historic Preservation Officer
Massachusetts Historical Commission

xc:

Kathleen Atwood, USACOE
Terry Orr, ESS Group Inc.
Victor Mastone, MBUAR
Deborah Cox, PAL

220 Morrissey Boulevard, Boston, Massachusetts 02125
(617) 727-8470 • Fax: (617) 727-5128
www.state.ma.us/sec/mhc



BOARD OF
UNDERWATER
ARCHAEOLOGICAL
RESOURCES

The Commonwealth of Massachusetts

Executive Office of Environmental Affairs

251 Causeway Street, Suite 900

Boston, Massachusetts 02114-2119

Rec'd 7/14/03

Tel. (617) 626-1000

Fax (617) 626-1181

<http://www.magnet.state.ma.us/envir>

July 10, 2003

Karen Kirk Adams
Regulatory Division
US Army Corps of Engineers
696 Virginia Road
Concord, MA 01742-2751

RE: Marine Archaeological Sensitivity Assessment
Cape Wind Energy Project
MHC # RC.29785; COE # 199902477; PAL # 1485

Dear Ms. Adams:

The staff of the Massachusetts Board of Underwater Archaeological Resources has completed its review of the technical report entitled *Marine Archaeological Sensitivity Assessment, Cape Wind Energy Project* and offers the following comments on the report's findings and recommendations pursuant to 36 CFR 800.4 (a) (3) and 800.4 (b) (1).

Concerning the potential of the study area to contain submerged prehistoric cultural resources, the Board concurs with the report's assessment that the majority of the area exhibits a low archaeological sensitivity due to the extensive disturbance of sediments by the marine transgression and subsequent modern wave and tidal energy. As the exception to this assessment appears to be that portion of the study area described in the report as the "basin-like feature" on the eastern side of the proposed wind turbine generators (WTG) array field, the Board supports the recommendation of additional geophysical survey of this area and requests that this area be delineated on a nautical chart and submitted for inclusion in the Board's records.

In recognition of the long history of maritime activity in Nantucket Sound, the numerous reported wrecks in the proposed project area and degree of danger to vessel traffic that has historically been associated with Horseshoe Shoal, the Board concurs with the report's assessment that the entire offshore study area exhibits potential to yield submerged historic cultural resources (shipwrecks). Therefore, the Board supports the recommendation that a marine archaeological remote sensing survey be conducted to

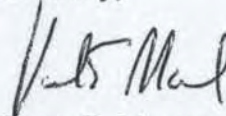


determine the presence or absence of potentially significant submerged historic cultural resources. Such a survey should include the use of a side scan sonar, a marine magnetometer, a sub-bottom profiler, DGPS and recording fathometer. The Board also concurs with the report's recommendation that survey track line spacing for those portions of the proposed project area in which construction will generate sub-surface impacts be no greater than fifty (50) feet. The Board requests that, in addition to those areas "where installation of the submarine electrical transmission cables, WTGs, and the ESP are proposed", the areas of anticipated impact be further defined to include the anchor spreads for vessels that will be utilized in the construction process.

The Board appreciates the opportunity to comment on this report and looks forward to reviewing the scope of work for future archaeological study relative to the proposed project.

Should you have any questions regarding the content of this letter, please do not hesitate to contact me at the address above, by telephone at (617) 626-1141 or by email at victor.mastone@state.ma.us.

Sincerely;



Victor T. Mastone
Director

VTM/dwt

Cc: Brona Simon, Massachusetts Historical Commission
Sarah K Faldetta, ESS Group, Inc.
Deborah Cox, PAL, Inc.



The Commonwealth of Massachusetts
William Francis Galvin, Secretary of the Commonwealth
Massachusetts Historical Commission

June 10, 2003

Christine A. Godfrey
Chief, Regulatory Division
US Army Corps of Engineers
696 Virginia Road
Concord, MA 01742-2751

ATTN.: Karen Kirk Adams

RE: Cape Wind Energy Project, Yarmouth, MA. MHC #RC.29785. COE #199902477.

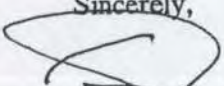
Dear Ms. Godfrey:

Staff of the Massachusetts Historical Commission have reviewed the memorandum prepared by ESS Group Inc., "Scope of Proposed Marine Archaeological Survey," dated May 28, 2003 and received by the MHC on June 4, 2003. The memorandum appears to be an abbreviated summary of a research design and methodology. It is not possible to review and comment on the proposed research design and methodology from this abbreviated memorandum.

Please submit to the MHC and to the Massachusetts Board of Underwater Archaeological Resources the archaeological research design and methodology prepared by the Principal Investigator at the PAL.

These comments are offered to assist in compliance with Section 106 of the National Historic Preservation Act of 1966 as amended (36 CFR 800) and the Secretary of Interior's Standards and Guidelines for Archeology and Historic Preservation (48 Fed. Reg. 190 (1983)). Please contact me if you have any questions.

Sincerely,


Edward L. Bell
Senior Archaeologist
Massachusetts Historical Commission

xc:
Kathleen Atwood, USACOE
Terry Orr, ESS Group Inc.
Victor Mastone, MBUAR
Deborah Cox, PAL

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(617) 727-8470 • Fax: (617) 727-5128
www.state.ma.us/sec/mhc



The Commonwealth of Massachusetts
William Francis Galvin, Secretary of the Commonwealth
Massachusetts Historical Commission

December 26, 2002

Christine A. Godfrey
Chief, Regulatory
US Army Corps of Engineers
696 Virginia Road
Concord, MA 01742-2751

RE: Cape Wind Energy Project, Yarmouth, MA. MHC #RC.29785. EOE A #12643. COE-NED-R File #199902477.

Dear Ms. Godfrey:

The Massachusetts Historical Commission is in receipt of correspondence from your office, transmitted via fax from Karen Kirk Adams of the Regulatory Division on December 19, 2002, concerning the proposed visual simulation locations and viewshed reconnaissance data for properties on the south side of Cape Cod.

The MHC concurs that the twelve vantage points will assist in assessment of effects, as stated in the correspondence from Karen Adams. Additionally, the proposed direction the Corps will provide to the proponent concerning the revision of the historic sites to be addressed is responsive to MHC's comment letter of December 13, 2002.

These comments are offered to assist in compliance with Section 106 of the National Historic Preservation Act of 1966 as amended (36 CFR 800), the National Environmental Policy Act, Massachusetts General Laws, Chapter 9, Sections 26-27C as amended by Chapter 254 of the Acts of 1988 (950 CMR 71), and MEPA (301 CMR 11). If you have any questions, please feel free to contact Ann M. Lattinville, Director of Architectural Review, at this office.

Sincerely,

A handwritten signature in cursive script that reads "Brona Simon".

Brona Simon
State Archaeologist
Deputy State Historic Preservation Officer
Massachusetts Historical Commission

xc: Don Klima, Advisory Council on Historic Preservation
Karen Kirk Adams, USACOE-NED-Regulatory
Kate Atwood, USACOE
Rebecca Watson, DOI/Land and Minerals
Conrad C. Lautenbacher, Jr. NOAA
Cape Wind Associates, LLC
Terry Orr, Environmental Science Services, Inc.
Deborah C. Cox, PAL
Secretary Bob Durand, EOE A
Victor Mastone, EOE A, Board of Underwater Archaeological Resources
Cape Cod Commission
Alliance to Protect Nantucket Sound
Yarmouth Historical Commission, Mashpee Historical Commission, Barnstable Historical Commission
Nantucket Historical Commission, Edgartown Historical Commission, Oak Bluffs Historical Commission
Chatham Historical Commission

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The Commonwealth of Massachusetts
William Francis Galvin, Secretary of the Commonwealth
Massachusetts Historical Commission

December 13, 2002

Christine A. Godfrey
Chief, Regulatory
US Army Corps of Engineers
696 Virginia Road
Concord, MA 01742-2751

RE: Cape Wind Energy Project, Yarmouth, MA. MHC #RC.29785. EOE A #12643. COE-NED-R File #199902477.

Dear Ms. Godfrey:

The Massachusetts Historical Commission is in receipt of information regarding proposed visual simulation locations and viewshed reconnaissance data for properties on the south side of Cape Cod. Information pertaining to this portion of the project was submitted in two parts, the final piece of which (photographs) was received at this office on November 20, 2002. After a review of MHC's files, including MHC's Inventory of Historic and Archaeological Assets of the Commonwealth, and the information submitted, MHC has the following comments.

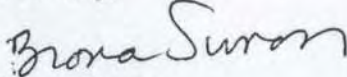
The proposed scope for the visual analysis does not adequately take into account historic properties in the project's area of potential effect. According to the data sheet and maps submitted, the analysis for the location of the viewshed points is based solely on the identification of State and National Register-listed properties (districts and individually listed properties). The analysis leaves out numerous additional properties included in MHC's Inventory of Historic and Archaeological Assets of the Commonwealth. It is essential that the scope include these properties, as many of them may be eligible for listing in the National Register of Historic Places (36 CFR 800.4). Many of the properties included in the Inventory are directly along the waterfront and MHC requests that these properties be taken into consideration in determining the representative locations for the viewshed analysis. The scope and determination of locations for the viewshed analysis should also take into account properties that may not be included in MHC's Inventory but may nonetheless be eligible for listing in the National Register of Historic Places.

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Additionally, the viewpoint analysis should include vantage points from Nantucket and Martha's Vineyard.

These comments are offered to assist in compliance with Section 106 of the National Historic Preservation Act of 1966 as amended (36 CFR 800), the National Environmental Policy Act, Massachusetts General Laws, Chapter 9, Sections 26-27C as amended by Chapter 254 of the Acts of 1988 (950 CMR 71), and MEPA (301 CMR 11). If you have any questions, please feel free to contact Ann M. Lattinville, Director of Architectural Review, at this office.

Sincerely,



Brona Simon
State Archaeologist
Deputy State Historic Preservation Officer
Massachusetts Historical Commission

xc: Don Klima, Advisory Council on Historic Preservation
Karen Kirk Adams, USACOE-NED-Regulatory
Kate Atwood, USACOE
Rebecca Watson, DOI/Land and Minerals
Conrad C. Lautenbacher, Jr. NOAA
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Secretary Bob Durand, EOE
Victor Mastone, EOE, Board of Underwater Archaeological Resources
Cape Cod Commission
Alliance to Protect Nantucket Sound
Yarmouth Historical Commission
Mashpee Historical Commission
Barnstable Historical Commission
Nantucket Historical Commission
Edgartown Historical Commission
Oak Bluffs Historical Commission
Chatham Historical Commission



June 25, 2002

The Commonwealth of Massachusetts

William Francis Galvin, Secretary of the Commonwealth

Heather Rafferty Heater
Environmental Science Services, Inc.
888 Worcester Street, Suite 240
Wellesley, MA 02482

RE: Cape Wind, Yarmouth, MA. MHC #RC.29785. BOEA #12643. ACOE File #199902477.

Dear Ms. Heater:

Thank you for your inquiry regarding the proposed project referenced above. Staff of the Massachusetts Historical Commission have reviewed the information and have the following comments.

The preferred overland cable route (New Hampshire Avenue route) falls within close proximity to three clusters of buildings that are included in MHC's Inventory of Historic and Archaeological Assets of the Commonwealth and near the Yarmouth Campground Historic District, a district that is listed in the State and National Registers of Historic Places. It is also in close proximity to two Ancient Native American archaeological sites (MHC site #s 19-BN-237, -238). The alternate route through Mashpee runs through or adjacent to an ancient Native American archaeological site (MHC #19-BN-29).

The MHC requests the opportunity to review current original photographs of the three clusters of buildings identified along the preferred overland cable route in order to determine National Register eligibility (36 CFR 60). Photographs should include images of the buildings themselves and context views of the buildings in their surroundings. Please label and key the photographs to sketch maps indicating the direction of the photographs. The MHC also requests more detailed drawings and plans showing existing and proposed conditions of any areas of the overland routes that are outside of the currently paved road.

Please note that in previous correspondence regarding the underwater portions of the project, including the proposed data tower, MHC requested the following information, which is subject to compliance with Section 106 of the National Historic Preservation Act of 1966 as amended (36 CFR 800).

The MHC requested a visual assessment study be conducted in order to evaluate the visual effects of the project on the character and setting of the historic resources referenced in our December 24, 2001 letter to Secretary Durand. At a minimum, the visual assessment study should include: a map that clearly indicates the location of the above listed historic resources relative to the proposed project area, including the distances from the project area to these historic resources. The MHC also requested that additional photographic simulations be taken from multiple locations within and at the edges of the above listed historic resources, showing both day and night and lighting conditions. Please also submit photographic simulations looking from within the project area to these land areas.

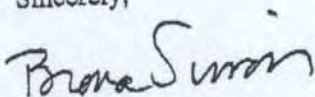
With regard to archaeology, the MHC also requested that an archaeological reconnaissance survey be conducted for the underwater portions of the project area. The purpose of the reconnaissance survey is to identify archaeologically sensitive areas within the project area that will require further testing to locate and identify any important archaeological resources that they may contain. The archaeological sensitivity of

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these areas are assessed on the basis of an in-depth study of land and water-use history, current conditions, proposed plans, and proximity to favorable environmental characteristics and known archaeological sites. Specific portions of the project area may be recommended for additional archaeological evaluation. MHC additionally recommended that the project proponent consult with a marine archaeologist, Massachusetts Board of Underwater Archaeological Resources, and the MHC to evaluate the underwater data already collected, determine if it is sufficient for the purposes of identifying significant underwater archaeological sensitivity, and conduct additional survey if necessary. We look forward to reviewing the proposed research design and methodology for the archaeological reconnaissance survey.

These comments are offered to assist in compliance with Section 106 of the National Historic Preservation Act of 1966 as amended (36 CFR 800), Massachusetts General Laws, Chapter 9, Sections 26-27C as amended by Chapter 254 of the Acts of 1988 (950 CMR 71), and MEPA (301 CMR 11). If you have any questions, please feel free to contact Margo Muhl Davis, Archaeologist/Preservation Planner, or Stacey Wetstein, Preservation Planner, at this office.

Sincerely,



Brona Simon
State Archaeologist
Deputy State Historic Preservation Officer
Massachusetts Historical Commission

xc: Crystal Gardner, Chief, USACOE-NED-Regulatory
Kate Atwood, USACOE
John Silva, FAA
USCG, Rhode Island Office
Secretary Bob Durand, BOEA, Attn.: Arthur Pugsley, MEPA Unit
DEP-SERO
MCZM
MHD-District 5
Phil Dascom, Cape Cod Commission
Victor Mastone, BOEA, Board of Underwater Archaeological Resources
Glen Marshall, Mashpee Wampanoag Tribal Council Inc.
Laurie Perry, Interim THPO, WTGHA
Yarmouth Historical Commission
Mashpee Historical Commission
Barnstable Historical Commission
Nantucket Historical Commission
Edgartown Historical Commission
Oak Bluffs Historical Commission
Chatham Historical Commission



The Commonwealth of Massachusetts

William Francis Galvin, Secretary of the Commonwealth
Massachusetts Historical Commission

June 20, 2002

Heather Rafferty Heater
Environmental Science Services, Inc.
888 Worcester Street, Suite 240
Wellesley, MA 02482

RE: Cape Wind, Yarmouth, MA. MHC #RC.29785. EOEA #12643. ACOE File #199902477.

Dear Ms. Heater:

Thank you for your inquiry regarding the proposed project referenced above. Staff of the Massachusetts Historical Commission have reviewed the information and have the following comments.

The preferred overland cable route (New Hampshire Avenue route) falls within close proximity to three clusters of buildings that are included in MHC's Inventory of Historic and Archaeological Assets of the Commonwealth and near the Yarmouth Campground Historic District, a district that is listed in the State and National Registers of Historic Places.

The MHC requests the opportunity to review current original photographs of the three clusters of buildings identified along the preferred overland cable route in order to determine National Register eligibility (36 CFR 60). Photographs should include images of the buildings themselves and context views of the buildings in their surroundings. Please label and key the photographs to sketch maps indicating the direction of the photographs. The MHC also requests more detailed drawings and plans of the proposed route.

Please note that in previous correspondence, MHC has also requested the following information, which is subject to compliance with Section 106 of the National Historic Preservation Act of 1966 as amended (36 CFR 800).

The MHC requested a visual assessment study be conducted in order to evaluate the visual effects of the project on the character and setting of the historic resources referenced in our December 24, 2001 letter to Secretary Durand. At a minimum, the visual assessment study should include: a map that clearly indicates the location of the above listed historic resources relative to the proposed project area, including the distances from the project area to these historic resources. The MHC also requested that additional photographic simulations be taken from multiple locations within and at the edges of the above listed historic resources, showing both day and night and lighting conditions. Please also submit photographic simulations looking from within the project area to these land areas.

With regard to archaeology, the MHC also requested that an archaeological reconnaissance survey be conducted for the underwater portions of the project area. The purpose of the reconnaissance survey is to identify archaeologically sensitive areas within the project area that will require further testing to locate and identify any important archaeological resources that they may contain. The archaeological sensitivity of these areas are assessed on the basis of an in-depth study of land and water-use history, current conditions,

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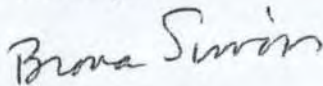
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proposed plans, and proximity to favorable environmental characteristics and known archaeological sites. Specific portions of the project area may be recommended for additional archaeological evaluation. MHC additionally recommended that the project proponent consult with a marine archaeologist, Massachusetts Board of Underwater Archaeological Resources, and the MHC to evaluate the underwater data already collected, determine if it is sufficient for the purposes of identifying significant underwater archaeological sensitivity, and conduct additional survey if necessary. We look forward to reviewing the proposed research design and methodology for the archaeological reconnaissance survey.

These comments are offered to assist in compliance with Section 106 of the National Historic Preservation Act of 1966 as amended (36 CFR 800), Massachusetts General Laws, Chapter 9, Sections 26-27C as amended by Chapter 254 of the Acts of 1988 (950 CMR 71), and MEPA (301 CMR 11). If you have any questions, please feel free to contact Margo Muhl Davis, Archaeologist/Preservation Planner, or Stacey Wetstein, Preservation Planner, at this office.

Sincerely,



Brona Simon
State Archaeologist
Deputy State Historic Preservation Officer
Massachusetts Historical Commission

xc: Crystal Gardner, Chief, USACOE-NED-Regulatory
Kate Atwood, USACOE
John Silva, FAA
USCG, Rhode Island Office
Secretary Bob Durand, EOE, Attn.: Arthur Pugsley, MEPA Unit
DEP-SERO
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Victor Mastone, EOE, Board of Underwater Archaeological Resources
Glen Marshall, Mashpee Wampanoag Tribal Council Inc.
Laurie Perry, Interim THPO, WTGHA
Yarmouth Historical Commission
Mashpee Historical Commission
Barnstable Historical Commission
Nantucket Historical Commission
Edgartown Historical Commission
Oak Bluffs Historical Commission
Chatham Historical Commission



BOARD OF
UNDERWATER
ARCHAEOLOGICAL
RESOURCES

The Commonwealth of Massachusetts
Executive Office of Environmental Affairs
251 Causeway Street, Suite 900
Boston, Massachusetts 02114-2119

January 4, 2002

Tel. (617) 626-1000
Fax (617) 626-1181
<http://www.mass.gov/ea>

Mr. Brian E. Valiton
Regulatory Division
U.S. Army Corps of Engineers
New England District
696 Virginia Road
Concord, MA 01742-2751

RE: File No. 199902477

Dear Mr. Valiton:

The Massachusetts Board of Underwater Archaeological Resources has reviewed the above referenced project's public notice.

The Board has conducted a preliminary review of its files and secondary literature sources to identify known and potential submerged cultural resources in the area of the proposed scientific measuring tower. Research suggests that in addition to several known shipwreck sites in Nantucket Sound and numerous reported vessel losses for which accurate locations are not readily determined, there exists a high probability that heretofore-unknown historic and prehistoric cultural resources are located in the proposed project vicinity. It is important to note that despite its numerous natural hazards to navigation, the proposed project area served as a significant route for vessel traffic particularly prior to the opening of the Cape Cod Canal. This fact, combined with the ambiguity of wreck locations in the historical record reinforces the appraisal of high sensitivity for possible shipwreck occurrence in the proposed project vicinity.

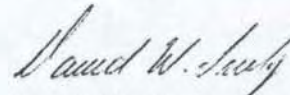
Further, the loss of earlier and smaller coastal vessels and the purposeful abandonment of obsolete or damaged vessels are generally not found in the documentary record. The level and diversity of maritime commerce, fishing, and recreational activities throughout the Cape Cod region, particularly along Nantucket Sound, may have resulted in the creation of a number of undocumented and anonymous underwater archaeological sites such as small craft, derelict vessels, or dumpsites. These possible site types represent classes of vessels of which our knowledge is severely limited and, thus, are potentially historically and archaeologically significant.

In addition to the high sensitivity of the proposed project area for possible shipwreck presence, the area of Horseshoe Shoal is considered to be an inundated land formation and as such there exists the strong possibility for the preservation of now submerged prehistoric cultural resources.

In summary, the Board takes this opportunity to express its concern that heretofore-unknown cultural resources, both historic and prehistoric, might be encountered during the course of work and hopes that the proposed project's sponsor will take the necessary steps to identify these resources and limit adverse affects. The Board requests that the project proponent secure the services of a qualified marine archaeologist in developing an adequate survey design and that this survey design be approved by the Board. Additionally, the Board requests that the project proponent notify the Board and the Massachusetts Historical Commission, as well as other appropriate agencies if historical or archaeological resources are identified.

Thank you for your consideration of these comments. If you should have any questions, please do not hesitate to contact me at the address above or by telephone at (617) 626-1032.

Sincerely yours,



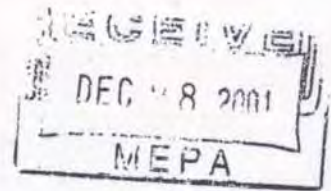
David W. Trubey
Deputy Director

For Victor T. Mastone
Director

VTM/dwt



AP



The Commonwealth of Massachusetts
William Francis Galvin, Secretary of the Commonwealth
Massachusetts Historical Commission

December 24, 2001

12-28-01 109:50 IN

Secretary Bob Durand
Attn.: MEPA Office
Executive Office of Environmental Affairs
251 Causeway Street, 9th Floor
Boston, MA 02114-2150

ATTN: Arthur Pugsley

RE: Cape Wind, Yarmouth, MA. MHC #RC.29785. EOEI #12643. ACOE File #199902477.

Dear Secretary Durand:

Staff of the Massachusetts Historical Commission have reviewed the expanded Environmental Notification Form (ENF) for the proposed project referenced above and have the following comments.

MHC understands that this project entails the installation of an array of 170 wind turbine generators on Horseshoe Shoal in Nantucket Sound, which will transmit electricity to the mainland via a submarine cable system that will interconnect with existing NSTAR electric transmission lines in Yarmouth, or alternatively in Barnstable or Mashpee. MHC also understands that prior to the construction of the wind park that the project proponent intends to build a pile-supported scientific measuring tower on Horseshoe Shoal.

Undisturbed portions of the preferred project area and project area alternatives are archaeologically sensitive and are likely to contain historic and archaeological sites associated with the ancient Native American and historic-period occupation of Yarmouth, Barnstable, and Mashpee. The areas' archaeological sensitivities are determined by their favorable environmental characteristics including areas of well-drained soils and relatively level terrain, proximity to natural features such as water bodies (e.g. Lewis Bay, Nantucket Sound, Popponset Bay), and cultural features such as known archaeological sites.

Underwater portions of the project area are also considered archaeologically sensitive. Both heretofore unknown shipwrecks and drowned ancient Native American sites may exist within the wind park and along the underwater cable routes. The Massachusetts Board of Underwater Archaeological Resources (MBUAR) has identified several shipwrecks in the general area, however the exact locations of shipwrecks are difficult to pinpoint without conducting underwater surveys. MHC understands that a marine geophysical survey was conducted within the turbine array location and along the proposed cable route during the summer of 2001. The project proponent should be aware that this data may not be sufficient as an underwater survey designed to locate archaeological resources. Such surveys are usually designed in consultation with a marine

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archaeologist before data is collected in order to ensure that adequate coverage is provided to discover any potentially significant archaeological resources.

MHC requests that an archaeological reconnaissance survey be conducted for the terrestrial and underwater portions of the project areas. The purpose of the reconnaissance survey is to identify archaeologically sensitive areas within the project area that will require further testing to locate and identify any important archaeological resources that they may contain. The archaeological sensitivity of these areas is assessed on the basis of an in-depth study of land and water-use history, current conditions, proposed plans, and proximity to favorable environmental characteristics and known archaeological sites. Specific portions of the project area may be recommended for archaeological testing. MHC additionally recommends that the project proponent consult with a marine archaeologist, MBUAR, and the MHC to plan additional underwater survey if the current data are determined to be insufficient for the purposes of identifying significant underwater archaeological sites. We look forward to seeing the results of the underwater survey in the reconnaissance report.

If they have not already done so, the project proponents should also contact the Wampanoag Tribe of Gay Head (Aquinnah), and the Mashpee Wampanoag Tribal Council, Inc.

The proposed project location is also within close proximity to the following historic resources that are listed in the State and National Registers of Historic Places: Cotuit, Wianno, Centerville, Craigville, Hyannis Port historic districts in Barnstable; South Yarmouth / Bass River Historic District in Yarmouth; Monomy Point Light in Chatham; Edgartown Village Historic District, Cape Pogue Light, and Edgartown Harbor Lighthouse in Edgartown, Martha's Vineyard; Martha's Vineyard Campground Historic District and East Chop Light in Oak Bluffs, Martha's Vineyard; Nantucket Island National Historic Landmark, including Nantucket Village, Crooked Record, Monomy and Wocuwinet areas and properties along the Nantucket Cliffs. In addition Tuckernuck Island is included in MHC's Inventory of Historic and Archaeological Assets of the Commonwealth and listed in the State Register of Historic Places.

The preferred overland cable route falls within close proximity to three clusters of buildings that are included in MHC's Inventory of Historic and Archaeological Assets of the Commonwealth and near the Yarmouth Campground Historic District, a district that is listed in the State and National Registers of Historic Places. The Hyannis alternate overland route is partially within the Hyannis Main Street Waterfront Historic District, a district that is listed in the State Register of Historic Places. The Cotuit alternate overland route follows Main Street within the Cotuit Historic District, a district listed in the State and National Registers of Historic Places.

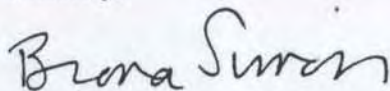
The MHC requests that a visual assessment study be conducted in order to evaluate the visual effects of the project on the character and setting of the historic resources referenced above. At a minimum, the visual assessment study should include: a map that clearly indicates the location of the above listed historic resources relative to the proposed project area, including the distances from the project area to these historic resources. The MHC also requests that additional photographic simulations be taken from multiple locations within and at the edges of the above listed historic resources, showing both day and night and lighting conditions. Please also submit photographic simulations looking from within the project area to these land areas.

In addition, the MHC requests the opportunity to review current original photographs of the three clusters of buildings identified along the preferred overland cable route in order to determine National Register eligibility (36 CFR 60). Photographs should include images of the buildings themselves and context

views of the buildings in their surroundings. Please label and key the photographs to sketch maps indicating the direction of the photographs.

These comments are offered to assist in compliance with Section 106 of the National Historic Preservation Act of 1966 as amended (36 CFR 800), Massachusetts General Laws, Chapter 9, Sections 26-27C as amended by Chapter 254 of the Acts of 1988 (950 CMR 71), and MEPA (301 CMR 11). If you have any questions, please feel free to contact Stacey Wetstein, Preservation Planner, or Margo Muhl Davis, Archaeologist/Preservation Planer, at this office.

Sincerely,



Brona Simon
State Archaeologist
Deputy State Historic Preservation Officer
Massachusetts Historical Commission

xc: Karen Kirk Adams, Chief, USACOE-NED-Regulatory
Kate Atwood, USACOE
John Silva, FAA
USCG, Rhode Island Office
DEP-SERO
MCZM
MHD-District 5
Phil Dascom, Cape Cod Commission
Victor Mastone, EOEA, Board of Underwater Archaeological Resources
Glen Marshall, Mashpee Wampanoag Tribal Council Inc.
Matthew Vanderhoop, THPO, WTGHA
Yarmouth Historical Commission
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Oak Bluffs Historical Commission
Chatham Historical Commission



The Commonwealth of Massachusetts

Executive Office of Environmental Affairs

251 Causeway Street, Suite 900

Boston, Massachusetts 02114-2119

BOARD OF
UNDERWATER
ARCHAEOLOGICAL
RESOURCES

MEMORANDUM

Tel. (617) 626-1000

Fax (617) 626-1181

<http://www.magnet.state.ma.us/envir>

TO: Bob Durand, Secretary, EOEА
ATTN: Mr. Arthur Pugsley, MEPA Unit
FROM: Victor T. Mastone, Director, Massachusetts Board of Underwater
Archaeological Resources
DATE: December 18, 2001
RE: EOEА No. 12643, Cape Wind Project

The Massachusetts Board of Underwater Archaeological Resources has reviewed the above referenced project's Environmental Notification Form in the *Environmental Monitor* and the project's Expanded Environmental Notification Form and Combined Cape Cod Commission Development of Regional Impact Review.

The Board has conducted a preliminary review of its files and secondary literature sources to identify known and potential submerged cultural resources in the proposed project area. Research suggests that in addition to several known shipwreck sites in Nantucket Sound and numerous reported vessel losses for which accurate locations are not readily determined, there exists a high probability that heretofore-unknown historic and prehistoric cultural resources are located in the proposed project vicinity.

It should be noted that the southern portion of the proposed project area and the proposed cable route are adjacent to and transect significant channels of both small and large vessel traffic prior to the opening of the Cape Cod Canal; up to that time, the majority of vessels traveled through Nantucket Sound (with its numerous and treacherous shoals including Horseshoe Shoal) rather than south of Martha's Vineyard and Nantucket Islands. This fact, and the ambiguity of wreck locations in the historical record reinforce the appraisal of high sensitivity for possible shipwreck occurrence in the project vicinity.

Further, the loss of earlier and smaller coastal vessels and the purposeful abandonment of obsolete or damaged vessels are generally not found in the documentary record. The level and diversity of maritime commerce, fishing, and recreational activities throughout the Cape Cod region, particularly along Nantucket Sound, may have resulted in the creation of a number of undocumented and anonymous underwater archaeological sites such as small craft, derelict vessels, or dumpsites. These possible site types represent classes of vessels of which our knowledge is severely limited and, thus, are potentially historically and archaeologically significant.

Although Section 7.8.2 of the Expanded Environmental Notification Form indicates, "a comprehensive marine geophysical survey was conducted" that included both side-scan sonar

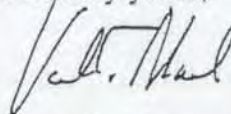
and magnetometer data collection, the parameters of the survey appear to be too broad and therefore inappropriate for this area. In particular, the Board is concerned that the lane spacing for this survey is too gross for the adequate detection of submerged archaeological sites. Additionally, the section states that any "potential cultural resources that cannot be avoided by Project routing or redesign will be evaluated for potential cultural significance by a qualified marine archaeologist, in consultation with the Massachusetts Board of Underwater Archaeological Resources." While such an evaluation is certainly significant, the Board feels strongly that consultation with a qualified marine archaeologist should have been part of the initial research and survey design as well, rather than solely subsequent to data acquisition. Thus, it is unclear that the research design adequately addresses the identification and protection of cultural resources.

In addition to the high sensitivity of the proposed project area for possible shipwreck presence, the area of Horseshoe Shoal is considered to be an inundated land formation and as such there exists the strong possibility for the preservation of now submerged prehistoric cultural resources. A regional model for the southern Gulf of Maine suggests the expected site frequency for the study area would be low for all site types dating prior to 6000 BP, but would increase from low-medium (habitation) to high (shell middens, habitations, camps) for the period 6000 to 3000 BP. While this model does not provide sufficient resolution to specifically identify potential site locations at the scale of the study area, it points to the need to consider the occurrence of prehistoric sites. Although Section 7.8 of the Expanded Environmental Notification Form acknowledges the need to research potential historic sites, there is no mention of prehistoric sites or how Cape Wind Associates, LLC proposes to ensure their identification, protection or mitigation.

In summary, the Board takes this opportunity to express its concern that heretofore-unknown cultural resources, both historic and prehistoric, might be encountered during the course of work and hopes that the proposed project's sponsor will take the necessary steps to identify these resources and limit adverse affects. The Board requests that the project proponent secure the services of a qualified marine archaeologist in developing an adequate survey design and that this survey design be approved by the Board. Additionally, the Board requests that the project proponent notify the Board and the Massachusetts Historical Commission, as well as other appropriate agencies if historical or archaeological resources are identified.

Thank you for your consideration of these comments. If you should have any questions, please do not hesitate to contact me at the address above or by telephone at (617) 626-1141.

Sincerely yours,



Victor T. Mastone
Director

VTM/dwt

Cc: Margo Muhl Davis, Massachusetts Historical Commission
Karen Kirk Adams, Chief of Permits Branch - MA, US Army Corps of Engineers,
Regulatory Division
Barbara Voulgaris, Naval Historical Center



December 15, 2003

The Commonwealth of Massachusetts

William Francis Galvin, Secretary of the Commonwealth
Massachusetts Historical Commission

Christine A. Godfrey
Chief, Regulatory Division
US Army Corps of Engineers
696 Virginia Road
Concord, MA 01742-2751

ATTN.: Karen Kirk Adams

RE: Cape Wind Energy Project, Barnstable and Yarmouth, MA. PAL #1485.01. MHC #RC.29785. COE #199902477.

Dear Ms. Godfrey:

Staff of the Massachusetts Historical Commission have reviewed the technical management memorandum prepared by the PAL, reporting on the results of the intensive (locational) archaeological survey of the terrestrial (overland) Cape Wind Alternative #1 route for the construction of underground utilities. Cape Wind Alternative #1 begins at Lewis Bay in Yarmouth, and then continues north and then west to the NSTAR Barnstable Switching Station in Barnstable. MHC looks forward to receiving from the PAL two (2) copies of the final report, an original MHC site form (D-PHST), and a diskette with the report bibliographic data and archaeological abstract.

The archaeological investigations located one ancient Native American archaeological site called the Pole #20 Site. The site consists of a low-density deposit of rhyolite chipping debris (the byproduct of stone tool manufacture or maintenance). Three of the four pieces of chipping debris were located in disturbed soils. These artifacts are not diagnostic of any particular time period or archaeological tradition. Because the archaeological site does not have integrity and lacks research value, it does not meet the Criteria of Eligibility (36 CFR 60) for listing in the National Register of Historic Places.

MHC concurs with the report recommendations that no further archaeological investigations of the terrestrial Cape Wind Alternative #1 utilities route, as it is presently planned, is required. If the project route changes, scaled project plans with the changes to the impact area highlighted should be submitted to the MHC for review and comment.

These comments are offered to assist in compliance with Section 106 of the National Historic Preservation Act of 1966 as amended (36 CFR 800), the Secretary of Interior's Standards and Guidelines for Archeology and Historic Preservation (48 Fed. Reg. 190 (1983)), MGL c. 9, ss. 26-27C (950 CMR 70-71), and MEPA (301 CMR 11). Please contact Edward L. Bell of my staff if you have any questions.

Sincerely,

A handwritten signature in cursive script that reads "Brona Simon".

Brona Simon
State Archaeologist
Deputy State Historic Preservation Officer
Massachusetts Historical Commission

xc:

Kathleen Atwood, USACOE
Terry Orr, ESS Group Inc.
Deborah Cox, PAL

220 Morrissey Boulevard, Boston, Massachusetts 02125
(617) 727-8470 • Fax: (617) 727-5128
www.state.ma.us/sec/mhc

Appendix C:

**Copies of Correspondence from MMS during the
Section 106 Process for the Cape Wind Energy Project**

June 25, 2008

John T. Eddins, Ph.D.
Historic Preservation Specialist/Archaeologist
Advisory Council on Historic Preservation
1100 Pennsylvania Avenue, NW, Suite 809
Washington, D.C. 20004

RE: Cape Wind Energy Project, Nantucket Sound, Massachusetts

Dear Dr. Eddins:

The Minerals Management Service (MMS) is proposing a meeting of Section 106 Consulting Parties for the Cape Wind Energy Project for July 23, 2008, from 10:00 am to 4:00 pm at the Saltonstal Building, 2nd floor Room C, 100 Cambridge Street, Boston, MA 02114. An agenda for the meeting will be sent in a subsequent notification to all consulting parties.

Background Information on the Project

In November 2004, a joint draft environmental document for the Cape Wind Energy Project (Draft Environmental Impact Statement (EIS)/Environmental Impact Report (EIR)/Development of Regional Impact Report (DRI)) was published by the U.S. Army Corps of Engineers (USACE), the State of Massachusetts, and the Cape Cod Commission.

In August 2005 with the passage of the Energy Bill, the Minerals Management Service (MMS) became the lead Federal agency for the Cape Wind Project. The MMS discussed with the State the option of becoming a partner in the preparation and publication of a Final EIS/EIR/DRI for the project but the State declined. At that point the MMS initiated its own Draft EIS effort.

In February 2007 the State of Massachusetts and the Cape Cod Commission went forward with publication of a Final EIR/DRI for the Cape Wind Project while the MMS Draft EIS was still in preparation. The visual impact analysis in the Final EIR/DRI concluded that the following historic properties would be subject to Adverse Visual Effects from the Cape Wind Project:

- Falmouth:
 - Nobska Point Light Station

- Barnstable:
 - Cotcuit Historic District
 - Col. Charles Codman Estate
 - Wianno Historic District
 - Wianno Club
 - Hyannis Port Historic District
 - Kennedy Compound (NHL)

- Chatham:
 - Montgomery Point Lighthouse
- Tisbury:
 - West Chop Light Station
- Oak Bluffs:
 - East Chop Light Station
 - Dr. Harrison A. Tucker Cottage
- Edgartown:
 - Edgartown Village Historic District
 - Edgartown Harbor Lighthouse
 - Cape Poge Light
- Nantucket:
 - Nantucket Great Point Light
 - Nantucket National Historic Landmark District

The MMS determination of effect was prepared using the same list of historic properties and visual simulations that were used to prepare the Determination of Effect published in the Final EIR/DRI for the State of Massachusetts (PAL, *Cape Wind Energy Project Visual Impact Assessment of Revised Layout on Multiple Historic Properties: Final Environment Impact Report*, September 2006). This report can be found online at: <http://www.capewind.org/downloads/feir/Appendix3.11-C.pdf>. Using the ACHP regulations for assessment of adverse effects found at 36 CFR 800.5, the MMS outlined a methodology and list of criteria for our DEIS contractor to use in assessing the visual effects of the project on historic properties within the project's Area of Potential Effect (*Enclosure 1: Procedures for Preparing the MMS Assessment of Effect for Visual Impacts to Onshore National Register or National Register-Eligible Properties*).

This analysis came to a finding of Adverse Visual Effects to the following properties:

- Barnstable:
 - Kennedy Compound (NHL)
 - Wianno Club
- Edgartown:
 - Cape Poge Light

The results of this visual analysis were published in sections 4.3.4 and 5.3.3.4 of the MMS DEIS for the Cape Wind Energy Project in January 2008. The MMS DEIS can be found online at: <http://www.mms.gov/offshore/AlternativeEnergy/CapeWindDEIS.htm>.

Additional Documents for the Section 106 Consultation Process

A series of marine archaeological surveys were conducted within the offshore project area by the Public Archaeology Laboratory (PAL), Pawtucket, Rhode Island. These reports include:

1. Marine Archaeological Sensitivity Assessment, Cape Wind Energy Project (June 2003)

2. Preliminary Marine Archaeological Sensitivity Assessment: Cape Wind Energy Project Alternatives: Horseshoe Shoal; Combination New Bedford/Buzzards Bay and Reduced Horseshoe Shoal; Monomoy and Handkerchief Shoals; Tuckernuck Shoal; and South of Tuckernuck Island, Massachusetts (January 2004)
3. Marine Archaeological Reconnaissance Survey: Cape Wind Energy Project (March 2004)
4. Cape Wind Terrestrial Alternative: Massachusetts Military Reservation, Bourne and Sandwich, Massachusetts (March 9, 2004)
5. Supplemental Marine Archaeological Reconnaissance Survey of Revised Layout Offshore Project Area (January 26, 2006)

These reports are available online at the following locations:

Report No. 1, 3, and 4: <http://www.nae.usace.army.mil/projects/ma/ccwf/app510c.pdf>

Report No. 2: <http://www.nae.usace.army.mil/projects/ma/ccwf/app3i.pdf>

Report No. 5: <http://www.capewind.org/downloads/feir/Appendix3.11-B.pdf>

The Cultural Resource sections of the MMS DEIS are found in section 4.3.5 (Description of the Affected Environment) and 5.3.3.5 (Environmental and Socioeconomic Consequences).

Section 106 Consultation: Issues for Discussion

Issues raised by the various 106 Consulting parties (*Enclosure 2: Cape Wind Energy Project, Section 106 Consulting Parties Contact List*) for the Cape Wind Energy Project include:

- The differing methodologies used in applying the ACHP regulations on assessment of adverse effects (36 CFR 800.5) which resulted in widely disparate findings between the USACE DEIS and State FEIR, and the MMS DEIS regarding which properties would be subject to adverse visual effects from the proposed project.
- The viewshed analysis prepared for the project focused on the views from specific historic properties but did not adequately consider the effect on the whole of Nantucket Sound from all vantage points.
- Two additional National Register-listed properties, both in Tisbury, have been identified that should be added to the visual effects studies:
 - William Street National Register Historic District
 - Ritter House
- Wampanoag Tribe of Gay Head (Aquinnah) and the Wampanoag Tribe of Massachusetts (Mashpee) consider the entire Nantucket Sound to be a sacred site and the unobstructed view of the eastern horizon to be sacred to their culture and religious practice.

If you need a hard copy of any of the online documents cited above, or if there are additional issues that should be included on the agenda for discussion at the July Section 106 Consultation Meeting, please provide them to:

Melanie Stright, MMS Federal Preservation Officer
Minerals Management Service
381 Elden Street
Herndon, VA 20170
Ph: 703-787-1736
FAX: 703-787-1026
melanie.stright@mms.gov

We look forward to working with all consulting parties to discuss the various issues of concern and hopefully come to agreement on ways to minimize, mitigate or avoid adverse effects to significant historic properties related to the proposed Cape Wind Energy Project.

Sincerely,

Rodney E. Cluck, Ph.D.
Cape Wind Project Manager
Minerals Management Service

Enclosures:
Procedures for Preparing the MMS Assessment of Effect
Cape Wind Project: Consulting Parties Contact List

Cape Wind Project:
**Procedures for Preparing the MMS Assessment of Effect for Visual Impacts to Onshore
National Register or National Register-Eligible Properties**

1. Define the Area of Potential Effects (APE) for those portions of the project which are under the direct permitting authority of MMS (i.e. those portions of the project on the Federal OCS).
2. For each property listed in Table 4.3.4-2 as having an “Adverse Effect”:
 - Select those properties that are:
 - on the National Register
 - that already have been formally determined to be eligible for listing on the National Register, and
 - National Historic Landmarks
 - Evaluate the remaining historic properties listed in the Table against the National Register criteria (36 CFR 60.4) and
 - identify those properties that may be eligible for listing on the National Register and
 - specify which of the criteria would make it eligible
 - Determine for all of the properties identified above, the following:
 - Do the visual simulations indicate that the wind park constitutes a significant visual intrusion to the property?
 - Does the visual intrusion detract from the values that are an integral part of making that property eligible for listing on the National Register?
 - What other visual intrusions already exist within the 360° viewshed of that property?
 - Do the conditions represented in the visual simulations (i.e. time of day, meteorological conditions) constitute a representative situation of what the prevailing conditions will be at the site, or do they represent a worst-case scenario?
 - Is there an “Adverse Effect” or is there “No Adverse Effect” to the property as a result of the MMS-permitted portions of the project?
 - Compile a revised table and supporting narrative which includes:
 - The name of the property
 - The National Register status of the property (i.e. listed, formally determined as eligible/not eligible, or assessed as being eligible/not eligible).
 - Location of the property
 - Distance/Direction to the wind park
 - Visual assessment simulation photo reference numbers
 - MMS “Finding of Effect” for each property

John T. Eddins, Ph.D.
Historic Preservation
Specialist/Archaeologist
**Advisory Council on Historic
Preservation**
1100 Pennsylvania Avenue, NW, Suite 809
Washington, D.C. 20004
Ph: 202-606-8553
Fax: 202-606-0321
jeddins@achp.gov

Brona Simon
**Deputy State Historic Preservation
Officer**
Acting Executive Director
Massachusetts Historical Commission
The MA Archives Building
220 Morrissey Boulevard
Boston, MA 02125
Ph: 617-727-8470
Staff contacts: Ann Lattinville or
Edward L. Bell

Bettina Washington
Tribal Historic Preservation Officer
Wampanoag Tribe of Gay Head (Aquinnah)
20 Black Brook Road
Aquinnah, MA 02535-9701
Ph: 508-645-9265

George (Chuckie) Green
Mashpee Wampanoag Tribe
P. O. Box 1048
Mashpee, MA 02649
Ph: 508-477-0208

Bill Bolger
National Park Service
Northeast Region
200 Chestnut Street, Room 370
Philadelphia, PA 19106
Ph: 215-597-1649
Bill_Bolger@nps.gov

Karen Adams
U.S. Army Corps of Engineers
New England District
696 Virginia Road
Concord, Massachusetts 01742-2751
Ph: 978-318-8828
Karen.K.Adams@nae02.usace.army.mil

Roberta Lane
Program Officer & Regional Attorney
**Northeast Office, National Trust for
Historic Preservation**
7 Faneuil Hall Marketplace, 4th Floor.
Boston, MA 02109
Ph: 617-523-0885
Fax: 617-523-1199
roberta_lane@nthp.org

Elizabeth Merritt
National Trust for Historic Preservation
785 Massachusetts Ave. NW
Washington DC 20036
Elizabeth_Merritt@nthp.org

Mr. Craig Olmsted
Project Manager
Cape Wind Associates, LLC.
75 Arlington Street
Boston, Massachusetts 02116

Sarah Korjeff
Cape Cod Commission
3225 Main St. PO BOX 226 - Barnstable,
MA 02630-0226
Ph: 508-362-3828
Fax: 508-362-3136
skorjeff@capecodcommission.org

Susan Nickerson
Executive Director/Nantucket Soundkeeper
Alliance to Protect Nantucket Sound
4 Barnstable Rd.
Hyannis, MA 02601
Ph: 508-775-9767
Fax: 508-775-9725
suenick1@saveoursound.org



United States Department of the Interior

MINERALS MANAGEMENT SERVICE
Washington, D.C. 20240



Dr. John T. Eddins, Ph.D.
Historic Preservation Specialist/Archaeologist
Advisory Council on Historic Preservation
1100 Pennsylvania Avenue, NW, Suite 809
Washington, D.C. 20004

AUG 26 2008

OFFICIAL
FILE COPY

RE: Cape Wind Energy Project, Nantucket Sound, Massachusetts

Dear Dr. Eddins:

The Minerals Management Service (MMS) is proposing a second Section 106 Consultation meeting for the Cape Wind Energy Project for September 9, 2008, from 10:00 a.m. to 2:00 p.m. at the Cape Cod – Hyannis Holiday Inn, 1127 Route 132, Hyannis, Massachusetts. An agenda for the meeting will be sent in a subsequent notification to all consulting parties. An updated list of consulting parties and other interested parties is enclosed.

If you have any questions about the upcoming meeting, please contact:

Dr. Melanie Stright, MMS Federal Preservation Officer
Minerals Management Service
381 Elden Street
Herndon, VA 20170
Ph: 703-787-1736
FAX: 703-787-1026
melanie.stright@mms.gov

We look forward to working with all consulting parties to continue our discussions of the various issues of concern and hopefully come to agreement on ways to avoid, minimize, or mitigate adverse effects to significant historic properties related to the proposed Cape Wind Energy Project.

Sincerely,

Rodney E. Cluck, Ph.D.
Cape Wind Project Manager

Enclosure

SURNAME	KAONTOE 8/27/08
SURNAME	M. Stright - 08/27/08
SURNAME	
SURNAME	
SURNAME	
SURNAME	

Identical letters were sent to the following people:

Ms. Brona Simon
State Historic Preservation Officer
Massachusetts Historical Commission
The MA Archives Building
220 Morrissey Boulevard
Boston, MA 02125

Ms. Bettina Washington
Tribal Historic Preservation Officer
Wampanoag Tribe of Gay Head (Aquinnah)
20 Black Brook Road
Aquinnah, MA 02535-9701

Mr. George (Chuckie) Green
Tribal Historic Preservation Officer
Mashpee Wampanoag Tribe
P.O. Box 1048
Mashpee, MA 02649

Mr. John Brown
Tribal Historic Preservation Officer
Narragansett Indian Tribe
P.O. Box 700
Wyoming, RI 02898

Mr. Bruce Bozsum, Chairman
Mohegan Indian Tribe
5 Crow Hill Road
Uncasville, CT 06382

Mr. Michael J. Thomas, Chairman
Mashantucket Pequot Tribe
P.O. Box 3060
Mashantucket, CT 06338

Mr. Bill Bolger
National Park Service
Northeast Region
200 Chestnut Street, Room 370
Philadelphia, PA 19106

Ms. Karen Adams
U.S. Army Corps of Engineers
New England District
696 Virginia Road
Concord, MA 01742-2751

Ms. Roberta Lane
Program Officer & Regional Attorney
Northeast Office, National Trust for Historic Preservation
7 Faneuil Hall Marketplace, 4th Floor.
Boston, MA 02109

Ms. Elizabeth Merritt
National Trust for Historic Preservation
785 Massachusetts Ave. NW
Washington DC 20036

Mr. Craig Olmsted
Project Manager
Cape Wind Associates, LLC.
75 Arlington Street
Boston, Massachusetts 02116

Ms. Sarah Korjeff
Cape Cod Commission
3225 Main St. PO BOX 226
Barnstable, MA 02630-0226

Mr. Jim Powell, Commissioner
Martha's Vineyard Commission
P.O. Box 1507
West Tisbury, MA 02575

Ms. Susan Nickerson
Executive Director/Nantucket Soundkeeper
Alliance to Protect Nantucket Sound
4 Barnstable Rd.
Hyannis, MA 02601

Ms. Patty Daley, Director, Growth Management
Town of Barnstable
Town Hall
367 Main Street
Hyannis, MA 02601

Mr. Carey Murphy, Selectman
Town of Falmouth
Town Hall
59 Town Hall Square
Falmouth, MA 02540

Mr. John J. Cahalane, Vice Chair/Selectman
Town of Mashpee
Town Hall
16 Great Neck North
Mashpee, MA 02649

Ms. E. Suzanne McAuliffe, Chair/Selectman
Town of Yarmouth
Town Hall
1146 Route 28
S. Yarmouth, MA 02664

Mr. Ronald Bergstrom, Selectman
Town of Chatham
Town Hall
549 Main Street
Chatham, MA 02633

Mr. James Merriam, Town Administrator
Town of Harwich
Town Hall
732 Main Street
Harwich, MA 02645

Mr. Robert Canevazzi, Town Administrator
Town of Dennis
Town Hall
P.O. Box 2060
South Dennis, MA 02660

Peter Bettencourt, Town Administrator
Town of Edgartown
Town Hall
70 Main Street
Edgartown, MA 02539

Roger Wey, Selectman
Town of Oak Bluffs
P.O. Box 1327
21 Wamsutta Avenue
Oak Bluffs, MA 02557

John R. Bugbee, Town Administrator
Town of Tisbury
Town Hall
P.O. Box 1239
Vineyard Haven, MA 02568

Mr. Andrew Vorce, Director
County of Nantucket
Nantucket Planning & Economic Development Commission
2 Fairgrounds Rd.
Nantucket, MA 02554

Ms. Libby Gibson, Town Manager
Town of Nantucket
Town Building
16 Broad Street, 1st Floor
Nantucket, MA 02554

Mr. Neil Good
56 Scituate Road
Mashpee, MA 02649



United States Department of the Interior

MINERALS MANAGEMENT SERVICE

Washington, DC 20240

MAR 16 2006



Massachusetts Historical Commission
The MA Archives Building
220 Morrissey Boulevard
Boston, Massachusetts 02125

Dear Sir or Madam:

The Energy Policy Act of 2005 (EPAct) provided the U.S. Department of the Interior, Minerals Management Service with regulatory authority over alternate energy-related uses on the Outer Continental Shelf. Presently, the MMS is the lead Agency reviewing the proposal by Cape Wind Associates for a wind turbine park on Nantucket Sound. After reviewing the Corps of Engineers' draft environmental impact statement (EIS), issued before the passage of the EPAct, MMS concluded that it must prepare its own draft EIS to address our broader authority granted under the EPAct.

The MMS has sent letters to each appropriate Federal agency requesting that they become cooperating agencies with MMS to complete the new draft EIS. As the lead state agency for historic and archaeological resources, we are seeking your assistance in the review and development of matters related to Section 106 of the National Historic Preservation Act of 1966.

Please contact Dr. Rodney E. Cluck (381 Elden Street, MS 4042, Herndon, Virginia 20170) in writing by April 14, 2006, to confirm your acceptance as a cooperating agency and to ask any questions you may have. Dr. Cluck's telephone number is (703) 787-1087. We look forward to your participation in the development of a more comprehensive draft EIS and Environmental Impact Report. With your assistance MMS will gain valuable insight that will be used to develop a more effective, environmentally sound and consistent process for alternate energy-related use of our Federal waters.

Sincerely,

Walter D. Cruickshank
Deputy Director

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IN AMERICA 



United States Department of the Interior

MINERALS MANAGEMENT SERVICE
Washington, DC 20240



JUL 08 2008

Jim Powell
Commissioner
Martha's Vineyard Commission
P. O. Box 1507
West Tisbury, Massachusetts 02575

RE: Cape Wind Energy Project, Nantucket Sound, Massachusetts

Dear Mr. Powell:

The Minerals Management Service (MMS) is proposing a meeting of Section 106 Consulting Parties for the Cape Wind Energy Project for July 23, 2008, from 10:00 am to 4:00 pm at the Saltonstal Building, 2nd floor Room C, 100 Cambridge Street, Boston, MA 02114. An agenda for the meeting will be sent in a subsequent notification to all consulting parties.

Background Information on the Project

In November 2004, a joint draft environmental document for the Cape Wind Energy Project (Draft Environmental Impact Statement (EIS)/Environmental Impact Report (EIR)/Development of Regional Impact Report (DRI)) was published by the U.S. Army Corps of Engineers (USACE), the State of Massachusetts, and the Cape Cod Commission.

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 - Wianno Historic District
 - Wianno Club
 - Hyannis Port Historic District
 - Kennedy Compound (NHL)

- Chatham:
 - Montgomery Point Lighthouse

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MMS official file copy ✓

- Tisbury:
 - West Chop Light Station
- Oak Bluffs:
 - East Chop Light Station
 - Dr. Harrison A. Tucker Cottage
- Edgartown:
 - Edgartown Village Historic District
 - Edgartown Harbor Lighthouse
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- Nantucket:
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Report No. 2: <http://www.nae.usace.army.mil/projects/ma/ccwf/app3i.pdf>

Report No. 5: <http://www.capewind.org/downloads/feir/Appendix3.11-B.pdf>

The Cultural Resource sections of the MMS DEIS are found in section 4.3.5 (Description of the Affected Environment) and 5.3.3.5 (Environmental and Socioeconomic Consequences).

Section 106 Consultation: Issues for Discussion

Issues raised by the various 106 Consulting parties (*Enclosure 2: Cape Wind Energy Project, Section 106 Consulting Parties Contact List*) for the Cape Wind Energy Project include:

- The differing methodologies used in applying the ACHP regulations on assessment of adverse effects (36 CFR 800.5) which resulted in widely disparate findings between the USACE DEIS and State FEIR, and the MMS DEIS regarding which properties would be subject to adverse visual effects from the proposed project.
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Melanie Stright, MMS Federal Preservation Officer
Minerals Management Service
381 Elden Street
Herndon, VA 20170
Ph: 703-787-1736
FAX: 703-787-1026
melanie.stright@mms.gov

We look forward to working with all consulting parties to discuss the various issues of concern and hopefully come to agreement on ways to minimize, mitigate or avoid adverse effects to significant historic properties related to the proposed Cape Wind Energy Project.

Sincerely,



Rodney E. Cluck, Ph.D.
Cape Wind Project Manager
Minerals Management Service

Enclosures:
Procedures for Preparing the MMS Assessment of Effect
Cape Wind Project: Consulting Parties Contact List

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Procedures for Preparing the MMS Assessment of Effect for Visual Impacts to Onshore National Register or National Register-Eligible Properties**

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Section 106 Consulting Parties Contact List

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Historic Preservation
Specialist/Archaeologist
**Advisory Council on Historic
Preservation**
1100 Pennsylvania Avenue, NW, Suite 809
Washington, D.C. 20004
Ph: 202-606-8553
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Brona Simon
**Deputy State Historic Preservation
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220 Morrissey Boulevard
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Staff contacts: Ann Lattinville or
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Mashpee Wampanoag Tribe
P. O. Box 1048
Mashpee, MA 02649
Ph: 508-477-0208

Bill Bolger
National Park Service
Northeast Region
200 Chestnut Street, Room 370
Philadelphia, PA 19106
Ph: 215-597-1649
Bill_Bolger@nps.gov

Karen Adams
U.S. Army Corps of Engineers
New England District
696 Virginia Road
Concord, Massachusetts 01742-2751
Ph: 978-318-8828
Karen.K.Adams@nae02.usace.army.mil

Roberta Lane
Program Officer & Regional Attorney
**Northeast Office, National Trust for
Historic Preservation**
7 Faneuil Hall Marketplace, 4th Floor.
Boston, MA 02109
Ph: 617-523-0885
Fax: 617-523-1199
roberta_lane@nthp.org

Elizabeth Merritt
National Trust for Historic Preservation
785 Massachusetts Ave. NW
Washington DC 20036
Elizabeth_Merritt@nthp.org

Mr. Craig Olmsted
Project Manager
Cape Wind Associates, LLC.
75 Arlington Street
Boston, Massachusetts 02116

Sarah Korjeff
Cape Cod Commission
3225 Main St. PO BOX 226 - Barnstable,
MA 02630-0226
Ph: 508-362-3828
Fax: 508-362-3136
skorjeff@capecodcommission.org
skorjeff@capecodcommission.org

Susan Nickerson
Executive Director/Nantucket Soundkeeper
Alliance to Protect Nantucket Sound
4 Barnstable Rd.
Hyannis, MA 02601
Ph: 508-775-9767
Fax: 508-775-9725
suenick1@saveoursound.org



United States Department of the Interior

MINERALS MANAGEMENT SERVICE
Washington, DC 20240



Mr. Michael J. Thomas
Chairman
Mashantucket Pequot Tribe
P. O. Box 3060
Mashantucket, Connecticut 06338

RE: Cape Wind Energy Project, Nantucket Sound, Massachusetts

Dear Mr. Thomas:

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- Tisbury:
 - West Chop Light Station
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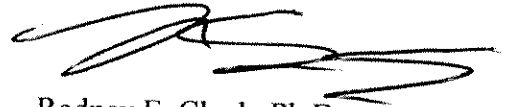
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809
Washington, D.C. 20004
Ph: 202-606-8553
Fax: 202-606-0321
jeddins@achp.gov

Brona Simon
State Historic Preservation Officer
Massachusetts Historical Commission
The MA Archives Building
220 Morrissey Boulevard
Boston, MA 02125
Ph: 617-727-8470
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20 Black Brook Road
Aquinnah, MA 02535-9701
Ph: 508-645-9265
bettina@wampanoagtribe.net

George (Chuckie) Green
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Mashpee Wampanoag Tribe
P.O. Box 1048
Mashpee, MA 02649
Ph: 508-477-0208
CGreen1@mwtribe.com

John Brown
Tribal Historic Preservation Officer
Narragansett Indian Tribe
P.O. Box 700
Wyoming, RI 02898
Ph: 401-364-9873
brwnjbb123@aol.com

Bruce Bozsum, Chairman
Mohegan Indian Tribe
5 Crow Hill Road
Uncasville, CT 06382
Ph: 860-862-6100
Fax: 860-862-6115
ctodd@moheganmail.com

Michael J. Thomas, Chairman
Mashantucket Pequot Tribe
P.O. Box 3060
Mashantucket, CT 06338
Ph: 860-396-6554
Fax: 860-396-6288
lciccarone@mptn.org

Bill Bolger
National Park Service
Northeast Region
200 Chestnut Street, Room 370
Philadelphia, PA 19106
Ph: 215-597-1649
Bill_Bolger@nps.gov

Karen Adams
U.S. Army Corps of Engineers
New England District
696 Virginia Road
Concord, Massachusetts 01742-2751
Ph: 978-318-8828
Karen.K.Adams@nae02.usace.army.mil

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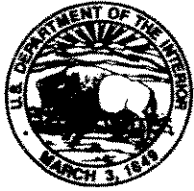
Roberta Lane
Program Officer & Regional Attorney
**Northeast Office, National Trust for
Historic Preservation**
7 Faneuil Hall Marketplace, 4th Floor.
Boston, MA 02109
Ph: 617-523-0885
Fax: 617-523-1199
roberta_lane@nthp.org

Elizabeth Merritt
**National Trust for Historic
Preservation**
785 Massachusetts Ave. NW
Washington DC 20036
Elizabeth_Merritt@nthp.org

Craig Olmsted
Project Manager
Cape Wind Associates, LLC.
75 Arlington Street
Boston, Massachusetts 02116
colmsted@capewind.org

Sarah Korjeff
Cape Cod Commission
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Barnstable, MA 02630-0226
Ph: 508-362-3828
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skorjeff@capecodcommission.org

Susan Nickerson
Executive Director/Nantucket
Soundkeeper
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Hyannis, MA 02601
Ph: 508-775-9767
Fax: 508-775-9725
suenick1@saveoursound.org



United States Department of the Interior



MINERALS MANAGEMENT SERVICE

Washington, D.C. 20240

JUN 30 2008

George (Chuckie) Green
Mashpee Wampanoag Tribe
P.O. Box 1048
Mashpee, Massachusetts 02649

OFFICIAL
FILE COPY

Dear Mr. Green:

I am sending this letter pursuant to Executive Order 13175, dated November 6, 2000, and the Executive Memorandum of April 29, 1994, on Government-to-Government Relations with Native American Tribal Governments. The Minerals Management Service (MMS) recognizes the right of Indian tribes to self-government, supports tribal sovereignty and self-determination and strives to work with federally recognized tribes whenever any of our proposed activities potentially affect a tribe, its treaty rights, sovereignty, or its members.

SURNAME
SURNAME
SURNAME
SURNAME
SURNAME
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Under the Outer Continental Shelf Lands Act, as amended by section 388 of the Energy Policy Act of 2005, MMS regulates alternative energy development on our Nation's Outer Continental Shelf. Through this authority, MMS is in the process of completing an environmental analysis of the Cape Wind Energy Project proposal offshore Massachusetts in Nantucket Sound, as required under the National Environmental Policy Act. As you know, our draft Environmental Impact Statement for the Cape Wind proposal was published in January 2008.

The MMS has held two previous Government-to-Government meetings with the Mashpee Wampanoag Tribe, on July 27, 2006, and July 25, 2007. As part of our continuing consultation process, I would like to request our third Government-to-Government meeting with the Wampanoag Tribe of Aquinnah, in Massachusetts, during the month of August. Please let me know a convenient time and location for our meeting.

The MMS looks forward to continuing its dialogue with the Wampanoag Tribe in a manner respectful of tribal sovereignty.

Sincerely,

Rodney Cluck, Ph.D.
Cape Wind Project Manager
Minerals Management Service

Similar letter sent to:
Bettina Washington
Tribal Historic Preservation Officer
Wampanoag Tribe of Aquinnah
20 Black Brook Road
Aquinnah, Massachusetts 02535-9701



United States Department of the Interior

MINERALS MANAGEMENT SERVICE
Washington, DC 20240



JUL 02 2008

Mr. Bruce Bozsum
Chairman
Mohegan Indian Tribe
5 Crow Hill Road
Uncasville, Connecticut 06382

RE: Cape Wind Energy Project, Nantucket Sound, Massachusetts

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Ph: 202-606-8553
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Narragansett Indian Tribe
P.O. Box 700
Wyoming, RI 02898
Ph: 401-364-9873
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Ph: 860-862-6100
Fax: 860-862-6115
ctodd@moheganmail.com

Michael J. Thomas, Chairman
Mashantucket Pequot Tribe
P.O. Box 3060
Mashantucket, CT 06338
Ph: 860-396-6554
Fax: 860-396-6288
lciccarone@mptn.org

Bill Bolger
National Park Service
Northeast Region
200 Chestnut Street, Room 370
Philadelphia, PA 19106
Ph: 215-597-1649
Bill_Bolger@nps.gov

Karen Adams
U.S. Army Corps of Engineers
New England District
696 Virginia Road
Concord, Massachusetts 01742-2751
Ph: 978-318-8828
Karen.K.Adams@nae02.usace.army.mil



United States Department of the Interior

MINERALS MANAGEMENT SERVICE
Washington, DC 20240



JUL 02 2008

Mr. John Brown
Tribal Historic Preservation Officer
Narragansett Indian Tribe
P. O. Box 700
Wyoming, Rhode Island 02898

RE: Cape Wind Energy Project, Nantucket Sound, Massachusetts

Dear Mr. Brown:

The Minerals Management Service (MMS) is proposing a meeting of Section 106 Consulting Parties for the Cape Wind Energy Project for July 23, 2008, from 10:00 am to 4:00 pm at the Saltonstal Building, 2nd floor Room C, 100 Cambridge Street, Boston, MA 02114. An agenda for the meeting will be sent in a subsequent notification to all consulting parties.

Background Information on the Project

In November 2004, a joint draft environmental document for the Cape Wind Energy Project (Draft Environmental Impact Statement (EIS)/Environmental Impact Report (EIR)/Development of Regional Impact Report (DRI)) was published by the U.S. Army Corps of Engineers (USACE), the State of Massachusetts, and the Cape Cod Commission.

In August 2005 with the passage of the Energy Bill, the Minerals Management Service (MMS) became the lead Federal agency for the Cape Wind Project. The MMS discussed with the State the option of becoming a partner in the preparation and publication of a Final EIS/EIR/DRI for the project but the State declined. At that point the MMS initiated its own Draft EIS effort.

In February 2007 the State of Massachusetts and the Cape Cod Commission went forward with publication of a Final EIR/DRI for the Cape Wind Project while the MMS Draft EIS was still in preparation. The visual impact analysis in the Final EIR/DRI concluded that the following historic properties would be subject to Adverse Visual Effects from the Cape Wind Project:

- Falmouth:
 - Nobska Point Light Station

- Barnstable:
 - Cotcuit Historic District
 - Col. Charles Codman Estate
 - Wianno Historic District
 - Wianno Club
 - Hyannis Port Historic District
 - Kennedy Compound (NHL)

- Chatham:
 - Montgomery Point Lighthouse

**TAKE PRIDE
IN AMERICA** 

- Tisbury:
 - West Chop Light Station
- Oak Bluffs:
 - East Chop Light Station
 - Dr. Harrison A. Tucker Cottage
- Edgartown:
 - Edgartown Village Historic District
 - Edgartown Harbor Lighthouse
 - Cape Poge Light
- Nantucket:
 - Nantucket Great Point Light
 - Nantucket National Historic Landmark District

The MMS determination of effect was prepared using the same list of historic properties and visual simulations that were used to prepare the Determination of Effect published in the Final EIR/DRI for the State of Massachusetts (PAL, *Cape Wind Energy Project Visual Impact Assessment of Revised Layout on Multiple Historic Properties: Final Environment Impact Report*, September 2006). This report can be found online at: <http://www.capewind.org/downloads/feir/Appendix3.11-C.pdf>. Using the ACHP regulations for assessment of adverse effects found at 36 CFR 800.5, the MMS outlined a methodology and list of criteria for our DEIS contractor to use in assessing the visual effects of the project on historic properties within the project's Area of Potential Effect (*Enclosure 1: Procedures for Preparing the MMS Assessment of Effect for Visual Impacts to Onshore National Register or National Register-Eligible Properties*).

This analysis came to a finding of Adverse Visual Effects to the following properties:

- Barnstable:
 - Kennedy Compound (NHL)
 - Wianno Club
- Edgartown:
 - Cape Poge Light

The results of this visual analysis were published in sections 4.3.4 and 5.3.3.4 of the MMS DEIS for the Cape Wind Energy Project in January 2008. The MMS DEIS can be found online at: <http://www.mms.gov/offshore/AlternativeEnergy/CapeWindDEIS.htm>.

Additional Documents for the Section 106 Consultation Process

A series of marine archaeological surveys were conducted within the offshore project area by the Public Archaeology Laboratory (PAL), Pawtucket, Rhode Island. These reports include:

1. Marine Archaeological Sensitivity Assessment, Cape Wind Energy Project (June 2003)

2. Preliminary Marine Archaeological Sensitivity Assessment: Cape Wind Energy Project Alternatives: Horseshoe Shoal; Combination New Bedford/Buzzards Bay and Reduced Horseshoe Shoal; Monomoy and Handkerchief Shoals; Tuckernuck Shoal; and South of Tuckernuck Island, Massachusetts (January 2004)
3. Marine Archaeological Reconnaissance Survey: Cape Wind Energy Project (March 2004)
4. Cape Wind Terrestrial Alternative: Massachusetts Military Reservation, Bourne and Sandwich, Massachusetts (March 9, 2004)
5. Supplemental Marine Archaeological Reconnaissance Survey of Revised Layout Offshore Project Area (January 26, 2006)

These reports are available online at the following locations:

Report No. 1, 3, and 4: <http://www.nae.usace.army.mil/projects/ma/ccwf/app510c.pdf>

Report No. 2: <http://www.nae.usace.army.mil/projects/ma/ccwf/app3i.pdf>

Report No. 5: <http://www.capewind.org/downloads/feir/Appendix3.11-B.pdf>

The Cultural Resource sections of the MMS DEIS are found in section 4.3.5 (Description of the Affected Environment) and 5.3.3.5 (Environmental and Socioeconomic Consequences).

Section 106 Consultation: Issues for Discussion

Issues raised by the various 106 Consulting parties (*Enclosure 2: Cape Wind Energy Project, Section 106 Consulting Parties Contact List*) for the Cape Wind Energy Project include:

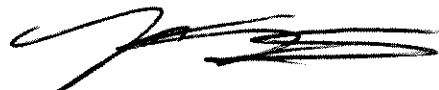
- The differing methodologies used in applying the ACHP regulations on assessment of adverse effects (36 CFR 800.5) which resulted in widely disparate findings between the USACE DEIS and State FEIR, and the MMS DEIS regarding which properties would be subject to adverse visual effects from the proposed project.
- The viewshed analysis prepared for the project focused on the views from specific historic properties but did not adequately consider the effect on the whole of Nantucket Sound from all vantage points.
- Two additional National Register-listed properties, both in Tisbury, have been identified that should be added to the visual effects studies:
 - William Street National Register Historic District
 - Ritter House
- Wampanoag Tribe of Gay Head (Aquinnah) and the Wampanoag Tribe of Massachusetts (Mashpee) consider the entire Nantucket Sound to be a sacred site and the unobstructed view of the eastern horizon to be sacred to their culture and religious practice.

If you need a hard copy of any of the online documents cited above, or if there are additional issues that should be included on the agenda for discussion at the July Section 106 Consultation Meeting, please provide them to:

Melanie Stright, MMS Federal Preservation Officer
Minerals Management Service
381 Elden Street
Herndon, VA 20170
Ph: 703-787-1736
FAX: 703-787-1026
melanie.stright@mms.gov

We look forward to working with all consulting parties to discuss the various issues of concern and hopefully come to agreement on ways to minimize, mitigate or avoid adverse effects to significant historic properties related to the proposed Cape Wind Energy Project.

Sincerely,



Rodney E. Cluck, Ph.D.
Cape Wind Project Manager
Minerals Management Service

Enclosures:
Procedures for Preparing the MMS Assessment of Effect
Cape Wind Project: Consulting Parties Contact List

**Cape Wind Project:
Procedures for Preparing the MMS Assessment of Effect for Visual Impacts to Onshore National Register or National Register-Eligible Properties**

1. Define the Area of Potential Effects (APE) for those portions of the project which are under the direct permitting authority of MMS (i.e. those portions of the project on the Federal OCS).
2. For each property listed in Table 4.3.4-2 as having an "Adverse Effect":
 - Select those properties that are:
 - on the National Register
 - that already have been formally determined to be eligible for listing on the National Register, and
 - National Historic Landmarks
 - Evaluate the remaining historic properties listed in the Table against the National Register criteria (36 CFR 60.4) and
 - identify those properties that may be eligible for listing on the National Register and
 - specify which of the criteria would make it eligible
 - Determine for all of the properties identified above, the following:
 - Do the visual simulations indicate that the wind park constitutes a significant visual intrusion to the property?
 - Does the visual intrusion detract from the values that are an integral part of making that property eligible for listing on the National Register?
 - What other visual intrusions already exist within the 360° viewshed of that property?
 - Do the conditions represented in the visual simulations (i.e. time of day, meteorological conditions) constitute a representative situation of what the prevailing conditions will be at the site, or do they represent a worst-case scenario?
 - Is there an "Adverse Effect" or is there "No Adverse Effect" to the property as a result of the MMS-permitted portions of the project?
 - Compile a revised table and supporting narrative which includes:
 - The name of the property
 - The National Register status of the property (i.e. listed, formally determined as eligible/not eligible, or assessed as being eligible/not eligible).
 - Location of the property
 - Distance/Direction to the wind park
 - Visual assessment simulation photo reference numbers
 - MMS "Finding of Effect" for each property



United States Department of the Interior

MINERALS MANAGEMENT SERVICE
Washington, DC 20240



JUL 30 2008

Ms. Susan Nickerson
Executive Director
Alliance to Protect Nantucket Sound
4 Barnstable Road
Hyannis, Massachusetts 02601

Dear Ms. Nickerson:

As you requested in your phone message of Friday, July 25, 2008, please find enclosed a CD containing the audio recording of the July 23, 2008, Minerals Management Service Initial Section 106 Consultation Meeting for the Cape Wind Energy Project.

Sincerely,

Melanie J. Stright
MMS Federal Preservation Officer

Enclosure

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IN AMERICA 

Appendix D:

**Copies of Letters of Comment on the DEIS Received
from Consulting Parties during the Section 106
Process for the Cape Wind Energy Project**

April 21, 2008

Ref: Cape Wind Energy Project, Nantucket Sound, MA.

The Advisory Council on Historic Preservation (ACHP) appreciates the opportunity to comment on the Minerals Management Service's (MMS) Environmental Impact Study (EIS) for the proposed Cape Wind Energy Project in Nantucket Sound, Massachusetts.

We want to take this opportunity to remind you that the MMS is obligated under Section 106 of the National Historic Preservation Act (NHPA) (16 U.S.C. 470f) to "take into account the effect of their undertakings on any district, site, building, structure, or object that is included in or eligible for inclusion in the National Register [of Historic Places (NRHP)]...[and]... afford [the ACHP] a reasonable opportunity to comment with regard to such undertaking." The granting of private access rights to the public lands of the Outer Continental Shelf (OCS), including leases, easements, and rights-of-way, is an undertaking (36 CFR 800.16(y)) that requires determinations by MMS in compliance with Section 106.

In response to a permit application filed in 2004 pursuant to Section 10 of the Rivers and Harbors Act (33 USC 403), the Corps of Engineers (Corps), New England District (NAE), determined that the proposed project would have an adverse effect on 16 historic properties and has the potential to have adverse effects on submerged prehistoric and historic cultural resources that may be eligible for the National Register of Historic Places (NRHP). The ACHP formally entered into the Section 106 consultation with NAE for the undertaking in March of 2005. Subsequently, other stakeholders have challenged the scope of the NAE efforts to identify historic properties that might be affected by the project because of their reliance on a set of regulations developed by the Corps, Processing Department of the Army Permits, Procedures for the Protection of Historic Properties (33 CFR Part 325, Appendix C), that do not meet and are not a legal substitute for the requirements set forth in 36 CFR 800, the ACHP's implementing regulations for Section 106 of the NHPA.

As a result of the Energy Policy Act of 2005, the MMS, as the Federal agency of record, has primary responsibility for environmental analysis and regulatory oversight for renewable energy projects on the OCS, including the referenced project. MMS should work to ensure a thorough and open Section 106 consultation for this undertaking, as set forth in regulations specified in 36 CFR 800.

In consultation with the Massachusetts State Historic Preservation Officer (SHPO), affected tribes, and other consulting parties, this process must include reasonable and good faith efforts to identify historic properties within the APE that might be affected by the undertaking. MMS must seek to identify consulting parties and invite their participation as stakeholders in the Section 106 process. MMS will need to seek and consider their views on the identification and evaluation of historic properties, on the assessment of effects for identified historic properties, and in negotiating the resolution of adverse effects. MMS must also provide the public with substantive information about the undertaking and its effects on historic properties and seek and consider public comment and input.

MMS has taken initial steps in this process in the publication of the DEIS and the solicitation of public comments. However, MMS should not seek to make final determinations about the identification of historic properties and effects without taking into account the concerns of the SHPO and other stakeholders. Based on our review of the process thus far, there are ongoing concerns that have been expressed by consulting parties, Federally Recognized Tribes, and

members of the public that will need to be resolved during the Section 106 process. We have noted above the concerns expressed about the scope of the NAE efforts to identify historic properties that might be affected by the project. However, in the conclusions for the DEIS, the MMS suggests that only three historic properties will be adversely affected by the undertaking. The Corps' previous conclusions in the Section 106 process included a determination that the preferred alternative for the Cape Wind project would have an adverse effect on numerous historic properties, including:

- the Nobska Point Light Station (Falmouth);
- the Cotuit Historic District, the Col. Charles Codman Estate, the Wianno Historic District, the Wianno Club, the Hyannis Port Historic District, and the Kennedy Compound (all in Barnstable);
- the Monomoy Point Lighthouse (Chatham); the West Chop Light Station (Tisbury);
- the East Chop Light Station and the Dr. Harrison A. Tucker Cottage (both in Oak Bluffs);
- the Edgartown Village Historic District, the Edgartown Harbor Lighthouse, and the Cape Poge Light (Edgartown);
- and the Nantucket Great Point Light and the Nantucket National Historic Landmark District (Nantucket).

The adverse effect on these properties includes at least the introduction of visual elements that are out of character with the historic properties and that alter the setting of the historic properties (36 CFR 800.5(a)(2)(iv and v)). The discrepancies between the determinations made by the Corps, the conclusions of the MMS' current DEIS, and the ongoing concerns of stakeholders will need to be addressed and resolved in consultation with the SHPO, the ACHP, and other consulting parties.

The ACHP looks forward to assisting the MMS during the Section 106 process for this undertaking. To facilitate our ongoing involvement, we request that we be copied on all documents and communications relating to the effects of this undertaking on historic properties and properties potentially eligible for inclusion on the NRHP. Should you have any questions or wish to discuss this matter further, please contact Dr. John T. Eddins at 202-606-8553, or by EMAIL at jeddins@achp.gov.



United States Department of the Interior

BUREAU OF INDIAN AFFAIRS

Eastern Regional Office

545 Marriott Drive, Suite 700

Nashville, TN 37214

APR 24 2008

Dr. Rodney E. Cluck
Minerals Management Service
Alternative Energy Program
381 Elden Street, Mail Stop 4080
Herndon, VA 20170

**RE: Draft Environmental Impact Statement
Cape Wind Associates, LLC, Cape Wind Energy Project**

Dear Dr. Cluck:

This letter is in response to your *Federal Register* notice of January 18, 2008 regarding the Notice of Availability of the draft Environmental Assessment (EA) for the Cape Wind Energy Project for which the Minerals Management Service (MMS) is the federal proponent. The draft EA refers to consultation with the Mashpee Wampanoag Indian Tribe and the Wampanoag Tribe of Gay Head (Aquinnah). However, it has come to our attention that at least the Mashpee Wampanoag feels that the MMS consultation, a single, apparently quickly arranged and brief, meeting held in July 2007 did not amount to adequate consultation as required in section 106 of the National Historic Preservation Act (NHPA). Enclosed is their Tribe's letter to the Bureau of Indian Affairs (BIA) and their tribal resolution. The BIA offers the following comments on the issue of section 106 consultation.

The Cape Wind Energy Project is located within an area to which the two Wampanoag Tribes, as well as possibly other Indian tribes, attach religious and cultural significance. Accordingly, pursuant to section 106 of NHPA, such tribes must be consulted and provided the opportunity to provide effective involvement in the analysis of the proposed Project as it concerns cultural resources affected by this Project, including consultations regarding the identification of cultural properties, to include traditional cultural properties; the appropriate scope of the area of potential effects (APE); and the development of the required Historic Properties Management Plan. Regulations implementing the NHPA state in relevant part:

The National Historic Preservation Act requires the Agency Official to consult with any Indian tribe . . . that attaches religious and cultural significance to historic properties that may be affected by an undertaking. Such Indian tribe . . . shall be a consulting party.

(A) The Agency Official shall ensure that consultation in the section 106 process provides the Indian tribe . . . a reasonable opportunity to identify its concerns about historic properties, advise on identification and evaluation of historic properties,

including those of traditional religious and cultural importance, articulate its views on the undertaking's effects on such properties, and participate in the resolution of adverse effects. It is the responsibility of the Agency Official to make a reasonable and good faith effort to identify Indian tribes. . .that shall be consulted in the section 106 process. Consultation should commence early in the planning process, in order to identify and discuss relevant preservation issues and resolve concerns about the confidentiality of information on historic properties.

(C) Consultation with an Indian tribe must recognize the government-to-government relationship between the Federal government and Indian tribes. The Agency Official shall consult with representatives designated or identified by the tribal government. . .Consultation with Indian tribes. . .should be conducted in a matter sensitive to the concerns and needs of the Indian tribe. . .

(D) When Indian tribes. . .attach religious and cultural significance to historic properties off tribal lands, section 101(d)(6)(B) of the Act requires Federal agencies to consult with such Indian tribes. . .in the section 106 process. Federal agencies should be aware that frequently historic properties of religious and cultural significance are located on ancestral, aboriginal or ceded lands of Indian tribes. . .and should consider that when complying with the procedures in this part. 36 C.F.R. § 800.2(c)(2)(B)(ii).

These regulations contemplate that Indian tribes be provided both a meaningful and early opportunity to participate in the section 106 planning process. The regulations further require that the agency make a reasonable and good faith effort to identify historic properties that may be affected by the undertaking and gather sufficient information to evaluate the eligibility of these properties for the National Register. 36 C.F.R. § 800.4(b). Consultation is identified as one component of such identification efforts, along with background research, oral history interviews, sample field investigation and field survey. 36 C.F.R. § 800.4(b)(1).

At this stage of environmental analysis, the BIA would like to remind MMS that several authorities suggest that more than an opportunity by the tribe is required to comply with section 106. For example, in Pueblo of Sandia v. United States, the Tenth Circuit held that sending letters to a tribe requesting specific information on religious sites did not constitute the reasonable effort section 106 requires. 50 F.3d 856 (10th Cir. 1995). Similarly, Executive Order 13,175 recognizes the unique legal relationship with Indian tribal governments and requires that each agency ensure meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications. Exec. Order No. 13,175, Sec. 5(a) (November 6, 2000). Pursuant to this Order, the BIA Government-to-Government Consultation Policy defines one component of consultation as having the input and recommendations of Indian Tribes on such proposed action fully considered by those officials responsible for the final decision. The BIA policy also states that consultation does not mean merely the right of tribal officials, as members of the general public, to be consulted, or to provide comments, under the Administrative Procedures Act or other Federal Law of general applicability. As the lead federal agency charged with carrying out the United States' relationship with Indian tribal governments, BIA's position on what constitutes appropriate consultation is particularly illustrative.

Additionally as an Agency of the Federal government, MMS has a trust responsibility to Indian tribes. Covelo Indian Cmty. v. FERC, 895 F.2d 581, 586 (9th Cir. 1990).

Accordingly, the BIA encourages MMS to engage the two Wampanoag Tribes in this process and to provide these Tribes a meaningful opportunity to consult directly on properties of religious and cultural significance that may be affected by the Cape Wind Energy Project. If you have any questions or need additional information regarding the section 106 issues, please contact Dr. Jim Kardatzke of the Bureau of Indian Affairs at (615) 564-6830.

Sincerely,


Acting Director, Eastern Region
James T. Kardatzke

Enclosure

CC: Honorable Cheryl Andrews-Maltais
Chairwoman, Wampanoag Tribe of Gay Head/Aquinnah
20 Black Brook Road
Aquinnah, MA 02535-1546

Honorable Shaun Hendricks
Chairman, Mashpee Wampanoag Tribal Council
P.O. Box 1048
Mashpee, MA 02649

Office of Project Review
Advisory Council on Historic Preservation
The Old Post Office Building
1100 Pennsylvania Ave NW, St 809
Washington, DC 20004-2501



Mashpee Wampanoag Tribe
483 Great Neck Rd. P.O. Box 1048 Mashpee, MA 02649
Phone (508) 477-0208 Fax (508) 477-1218

April 17, 2008

Mr. Franklin Keel, Regional Director
Eastern Regional Office
Bureau of Indian Affairs
545 Marriott Drive, Suite 700
Nashville, TN 37214

**RE: Draft Environmental Impact Statement
Cape Wind Associates, LLC., Cape Wind Energy Project**

Dear Mr. Keel:

I enclose a copy of a Resolution of the Mashpee Wampanoag Tribe and a comment letter regarding the Draft Environmental Impact Statement (DEIS) issued by Minerals Management Service (MMS) regarding the Wind Energy Project proposed by Cape Wind Associates, LLC. As you probably know, the project is located at Horseshoe Shoals within Nantucket Sound and is within the traditional homeland of the Mashpee Wampanoag Tribe. The Resolution requests that the MMS undertake a government-to-government consultation with the Mashpee Wampanoag Tribe regarding the historical, cultural, religious and other interests of the Tribe in the proposed project. The Tribe requests that the consultation include both formal and technical consultation with Tribal staff to ensure effective Tribal involvement in the agency's determination of the scope of its analysis regarding Tribal interests.

MMS did meet with the Tribe very briefly in July of 2007 but the hastily convened meeting did not amount to an adequate consultation. The DEIS is factually inaccurate with respect to details about the Tribe and addresses its interests almost in passing when it concludes that due to the distance of tribal land from the off shore proposed action site, no other source of environmental impacts on the area is associated with the proposed action. This conclusion by MMS fails to account for the spiritual and cultural connection of the Mashpee Wampanoag to Nantucket Sound generally and Horseshoe Shoals specifically.

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U.S. DEPARTMENT OF THE INTERIOR
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The lack of attention to the spiritual, cultural and economic interests of the Tribe is especially concerning where the EIS for Cape Wind represents MMS first review of a proposed project on the outer continental shelf and sets a dangerous precedent for future projects that might infringe on spiritual and cultural values of place held sacred by Indian tribes. The United States recognized the Mashpee Wampanoag as an Indian Tribe in February 2007. The Tribe succeeded in gaining recognition largely because of the tenacity of the Wampanoag people in preserving their religious, cultural and traditional beliefs and practices.

The Tribe requests you take all steps necessary to ensure that the Mineral Management Service meets its obligation to the Tribe and conducts a meaningful consultation with it regarding the Tribe's interest in the proposed project.

Thank you for your consideration.

Very Truly Yours,

A handwritten signature in black ink, appearing to read "Shawn W. Hendricks, Sr.", written in a cursive style.

Shawn W. Hendricks, Sr., Chairman
Mashpee Wampanoag Tribe



Mashpee Wampanoag Tribe
483 Great Neck Rd. P.O. Box 1048 Mashpee, MA 02649
Phone (508) 477-0208 Fax (508) 477-1218

2008-RES-011

WHEREAS, the Mashpee Wampanoag Tribe is federally recognized Tribe entitled to the immunities and privileges available to Indian tribes by virtue of their government-to-government relationship with the United States; and

WHEREAS, the Mashpee Wampanoag Tribe is a member tribe of the Great Wampanoag Nation, known as "The People of the First Light" and have since time immemorial occupied the lands and waters from Narragansett Bay to the Neponset estuaries and maintained a spiritual, cultural and traditional connection to the total ecosystem of their traditional homeland;

WHEREAS, a draft Environmental Impact Statement (DEIS) has been issued for the Cape Wind Associates, LLC, Cape Wind Energy Project by the Department of Interior's Minerals Management Service (MMS), which has authority over the proposed project and is the lead agency for the EIS; and

WHEREAS, the project would involve construction and operation of a wind farm off the shore of Cape Cod, Massachusetts; and

WHEREAS, the project is located in Horseshoe Shoals within Nantucket Sound and includes both upland and land under water within the traditional homeland of the Wampanoag containing natural, cultural and spiritual resources of significance to the Tribe;

WHEREAS, the MMS authority to authorize the development of alternative energy and alternative use program on the outer continental shelf was authorized under Section 388 of the Energy Policy Act of 2005; and

WHEREAS, the DEIS concludes that impacts on the Mashpee Wampanoag Tribe are expected to be negligible given the distance of Tribal land from proposed offshore site; and

WHEREAS, the MMS has a duty to consult with the Tribe on a government-to-government basis is charged with executing the United States trust responsibility to protect the Tribe's sovereignty; and

WHEREAS, the MMS consultation with the Tribe did not meet its obligation to meet with the Tribe to have a meaningful dialog designed to ensure the protection of tribal lands and resources; and

WHEREAS, MMS preparation of the draft EIS is inadequate because of its failure to properly execute the federal trust responsibility to the Mashpee Wampanoag Tribes by engaging in a meaningful consultation regarding the significant spiritual, cultural, economic and other interests of the Tribe.

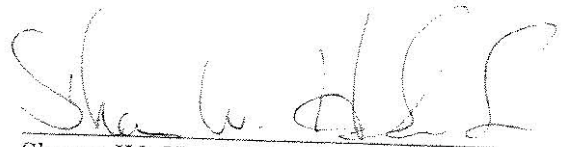
NOW THEREFORE, BE IT RESOLVED that the Mashpee Wampanoag Tribe requests MMS undertake a government-to-government consultation regarding the historical, cultural, religious, and other interests of the Mashpee Wampanoag Tribe in the proposed project, and

BE IT FURTHER RESOLVED that MMS engage in both formal and technical consultation with tribal staff to ensure effective tribal involvement in the agency's determination of the scope of its analysis of the historical, cultural, religious, and other interests of the Mashpee Wampanoag Tribe; and


BE IT FINALLY RESOVLED that the Tribe approves and submits the attached comments on the DEIS to the MMS.

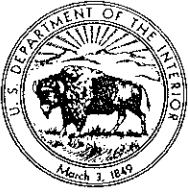
CERTIFICATION

Introduced, Read and Passes, this 15 day of April, 2008.


Shawn W. Hendricks, Sr., Chairman

ATTEST:


Desire Hendricks - Moreno, Secretary
Mashpee Wampanoag Tribe



United States Department of the Interior

BUREAU OF INDIAN AFFAIRS

Eastern Regional Office
545 Marriott Drive, Suite 700
Nashville, TN 37214

MAR 12 2008

Trust Services
Natural Resources

MMS Cape Wind Energy Project
TRC Environmental Corporation
Wannalancit Mills
650 Suffolk Street
Lowell, MA 01854

**RE: Notice of Availability of the Draft Environmental Impact Statement
for the Cape Wind Energy Project**

Dear Sir:

This letter is in response to the notice by the Minerals Management Service (MMS) of notice of availability of the Draft Environmental Impact Statement (DEIS) for the Cape Wind Energy Project issued on January 18, 2008. The Eastern Region, Bureau of Indian Affairs (BIA) offers the following comments on the issue of proper reference to tribes and to provide concerns as to the impacts of this Project on traditional cultural properties important to the Wampanoag Tribe of Gay Head (Aquinnah) and Mashpee Wampanoag Tribal Council (jointly hereafter referred to as the Wampanoag Tribe).

Appendix A of the DEIS consists of an index of interested agency, governmental, and nongovernmental organizations as well as individuals who have been contacted concerning this Project and have previously submitted comments on the Project. In this listing the Wampanoag Tribe is lumped in with local governments after state governmental agencies. This is contrary to established government-to-government relationship that Indian tribes have with the U.S. Government. The two Tribes that make up the Wampanoag Tribe should have been listed separately under a heading of **Federally-Recognized Tribes** that should appear immediately after the listing for Federal agencies.

Enclosed is United South and Eastern Tribes (USET) resolution No. 2008:030 which states the USET opposition to this Project in support of the Wampanoag Tribe of Gay Head (Aquinnah) opposition to this Project. The resolution eloquently states the spiritual and cultural importance of an unobstructed view-shed along the aboriginal territories of the Wampanoag Tribe.

While the DEIS appears to demonstrate that MMS has initiated and conducted consultation with the Wampanoag Tribe, the DEIS does not appear to give any weight to the cultural concerns of the Tribe for their right to "practice their religious ceremony in

the traditional manner.” The National Historic Preservation Act (NHPA) is specific in the need to consult with tribes on cultural and traditional religious sites that may be apart from the lands currently occupied by a tribe.

“When Indian tribes. . .attach religious and cultural significance to historic properties off tribal lands, section 101(d)(6)(B) of the Act requires Federal agencies to consult with such Indian tribes. . .in the section 106 process. Federal agencies should be aware that frequently historic properties of religious and cultural significance are located on ancestral, aboriginal or ceded lands of Indian tribes. . . and should consider that when complying with the procedures in this part” 36 C.F.R. § 800.2(c)(2)(B)(ii).

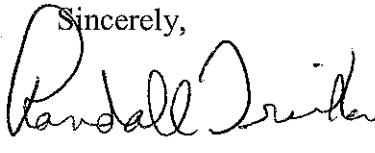
In the DEIS, there is little weight for these Wampanoag religious practices since the Project apparent will not be visible from the areas where the Wampanoag tribal members currently reside. Such an approach in the DEIS is in sharp contrast with the intent of the NHPA. At a minimum MMS should extend the comment period for this wide-ranging, significant DEIS and re-initiate consultation with the Wampanoag Tribe to ensure that the impacts of this action on the cultural and traditional religious practices of the Tribe are adequately addressed in the DEIS. This detailed analysis is lacking in the current DEIS.

The Eastern Region of the BIA request that the following individual be added to the mailing/service list for this project:

James T. Kardatzke, PhD
Eastern Region, Bureau of Indian Affairs
545 Marriott Dr., Suite 700
Nashville, TN 37214

If you have any questions or need additional information regarding these issues, please contact Dr Kardatzke at (615) 564-6830.

Sincerely,



ACTING Director, Eastern Region

Enclosure

CC: Honorable Cheryl Andrews-Maltais
Chairwoman, Wampanoag Tribe of Gay Head/Aquinnah
20 Black Brook Road
Aquinnah, MA 02535-1546

Honorable Shaun Hendricks
Chairman, Mashpee Wampanoag Tribal Council
P.O. Box 1048
Mashpee, MA 02649

Andrew Raddant
Regional Environmental Officer
Office of Environmental Policy & Compliance
408 Atlantic Avenue – Room 142
Boston, MA 02210-3334

Office of Project Review
Advisory Council on Historic Preservation
The Old Post Office Building
1100 Pennsylvania Ave NW, St 809
Washington, DC 20004-2501

Michael Cook
Executive Director
United South and Eastern Tribes. Inc.
711 Stewarts Ferry Pike, Suite 100
Nashville, TN 37214



UNITED SOUTH AND EASTERN TRIBES, INC.

USET Resolution No. 2008:030

OPPOSITION TO THE CAPE WINDS WIND FARM PROPOSAL HORSESHOE SHOAL, NANTUCKET SOUND MASSACHUSETTS

- WHEREAS,** United South and Eastern Tribes, Incorporated (USET) is an intertribal organization comprised of twenty-five (25) federally recognized Tribes; and
- WHEREAS,** the actions taken by the USET Board of Directors officially represent the intentions of each member Tribe, as the Board of Directors comprises delegates from the member Tribes' leadership; and
- WHEREAS,** the Wampanoag Tribe of Gay Head (Aquinnah) is a member Tribe of the Great Nation of Wampanoag People. They are known as "*The People of The First Light*". Their name defines who they are and differentiates them from all other Tribal Nations. Their name and it's definition are their Cultural and Spiritual identity, and the essence of who they are. Since time immemorial, the Wampanoag People have inhabited the area of the eastern most lands and waters, and have maintained their Traditional, Spiritual and Cultural connection to them; and
- WHEREAS,** as the People of the First Light; one of the most important aspects and fundamental components of their religious and cultural beliefs and practice is their ability to experience, embrace and give ceremony and prayers of thanksgiving to the first light. These ceremonies, spiritual and religious practices are dependant upon maintaining the ability to view the first light; the eastern horizon vista and view-shed without obstructions. Additionally, there are other impacts such as the celestial and solstice ceremonies, which will also be adversely impacted; and
- WHEREAS,** the right to practice their religious ceremony in the traditional manner will be forever denied by a proposed experimental wind farm consisting of 130+/- windmill turbines, with propeller blades reaching approximately 440' above the surface of the water, on about 25 square miles (about the size of Manhattan); slated to be located in the shallow waters of Horseshoe Shoal in Nantucket Sound, in the middle of the shores of Cape Cod, Martha's Vineyard and Nantucket, MA; and,
- WHEREAS,** the Wampanoag Tribe of Gay Head (Aquinnah), a Federally Recognized Tribal Nation and a USET member Tribe, most strenuously objects to this proposal and opposes the placement of this wind farm in their Traditional Wampanoag Waters of their Religious and Ceremonial Sanctuary; therefore, be it
- RESOLVED** the USET Board of Directors supports the Wampanoag Tribe of Gay Head (Aquinnah) and their position; to oppose the Cape Winds wind farm to be located in Horseshoe Shoal in Nantucket Sound, due to its devastating and destructive impact to the Traditional Spiritual, Religious and Cultural practices and freedoms of all Wampanoag People as well as the adverse effects this experimental project will have on the surrounding environment in its entirety and totality; and, be it further

"Because there is strength in Unity"

USET Resolution No.2008:030

RESOLVED the USET Board of Directors calls upon the Department of the Interior/ Minerals Management Service to respect the Traditional, Cultural, Spiritual and Religious beliefs of the Wampanoag People and preserve the spiritual integrity and sanctity of the Eastern Horizon, Vista and Horizon View-Shed; and to deny the permitting of such a devastatingly and destructive experiment which will adversely effect and destroy the essence of the tranquility, sanctity and spirituality of this Sacred Place for all time; and, be it further

RESOLVED that in order for other Tribes, and other Federal, State and Local Agencies as well as the General Public to fully evaluate and comment on the 2000 page Draft Environmental Impact Statement, the USET Board of Directors is also calling upon the Department of the Interior and the Minerals Management Service to extend the comment period an additional ninety (90) days in order to provide a more adequate and reasonable timeframe in which the Draft Environmental Impact Statement can be read, researched and knowledgeable commented upon.

CERTIFICATION

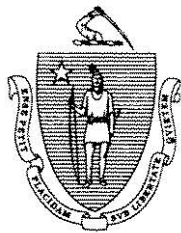
This resolution was duly passed at the USET Impact Week Meeting, at which a quorum was present, in Arlington, VA, on Thursday, February 14, 2008.



Brian Patterson, President
United South and Eastern Tribes, Inc.



Cheryl Downing, Secretary
United South and Eastern Tribes, Inc.



The Commonwealth of Massachusetts
William Francis Galvin, Secretary of the Commonwealth
Massachusetts Historical Commission

April 18, 2008

Rodney E. Cluck
Project Manager
Alternative Energy Program
Minerals Management Service
381 Elden Street
Mail Stop 4080
Herndon, VA 20170

RE: Cape Wind Energy Project, Nantucket Sound, MA. MHC #RC.29785.

Dear Mr. Cluck:

Staff of the Massachusetts Historical Commission (MHC) have reviewed the Draft Environmental Impact Statement (DEIS) prepared for the project referenced above and have the following comments.

The MHC, as the office of the State Historic Preservation Officer (MA SHPO), wishes to clarify the MHC's role in the consultation process. Page 7-23 of the DEIS erroneously refers to the SHPO as a cooperating state agency. The MHC is not a cooperating agency. MHC is not only a "state agency" but also the office of the State Historic Preservation Officer (MGL Chapter 9, Section 27B) is empowered by Federal law with particular duties in relation to Federal agencies under the National Historic Preservation Act of 1966 as amended (16 USC 470a(b)). Consultation with this agency is required under Section 106 of the act and its implementing regulations (36 CFR 800). As such, the SHPO is a consulting party in the Section 106 process and not a cooperating agency. The DEIS implies that the MHC has met with MMS concerning the proposed project. MHC wishes to clarify that this is not the case because the MHC has not met with MMS.. Furthermore, page 1-16 erroneously reports that the MHC requested to become a cooperating agency. This is incorrect. The MHC did not request to become a cooperating agency, and, in fact, submitted written comments to clarify MHC's role as a consulting party in the Section 106 process.

The DEIS (page 1-9) indicates that the Minerals Management Service has identified historic properties and made effect findings for historic properties in the Area of Potential Effect and will undertake consultation in compliance with 36 CFR 800. While the DEIS provides information regarding these findings, it is necessary for MMS to complete the consultation process under Section 106 of the National Historic Preservation Act of 1966 as amended (36 CFR 800). MHC notes that pages 5-198 and 5-199 describe the criteria of effect as defined by 36 CFR 800, but is concerned that MMS has only identified three adverse effects in contrast to all of the "adverse effects" which were previously identified by the United States Army Corps of Engineers (COE) when the COE was the lead federal agency for this project. Specifically, the MHC concurred with the COE's prior determination that the preferred alternative for the Cape Wind project would have an **adverse effect** on the following historic properties: the Nobska Point Light Station (Falmouth); the Cotuit Historic District, the Col. Charles Codman Estate, the Wianno Historic District, the Wianno Club, the Hyannis Port Historic District, and the Kennedy

Compound (all in Barnstable); the Monomoy Point Lighthouse (Chatham); the West Chop Light Station (Tisbury); the East Chop Light Station and the Dr. Harrison A. Tucker Cottage (both in Oak Bluffs); the Edgartown Village Historic District, the Edgartown Harbor Lighthouse, and the Cape Poge Light (Edgartown); and the Nantucket Great Point Light and the Nantucket National Historic Landmark District (Nantucket). The adverse effect includes the introduction of visual elements that are out of character with the historic properties and alteration of the setting of the historic properties (36 CFR 800.5(a)(2)(iv and v)).

The MHC is particularly concerned that the MMS has not included the Nantucket Historic District (Nantucket Island) in its adverse effect determinations. It should be noted that the entire island is a historic district that has been designated as a National Historic Landmark, not only for its historic villages, but for the integrity of its cultural landscape and scattered historic buildings. The Nantucket Historic District retains its character and maritime setting, and the introduction of the project into its setting is an adverse effect. The MHC believes that the effect to this National Historic Landmark, as evidenced by earlier visual analysis, is a direct adverse effect on the historic resource (36 CFR 800.5(a)(2)(iv and v)).

Additionally, there are additional National Register-listed properties within the project's area of potential effect that will be affected by the project. These properties include: the William Street National Register Historic District (Tisbury) and the Ritter House (Tisbury) and these should be added to the visual effect studies.

MHC notes that page 5-199 of the DEIS states that the MMS proposes to continue Section 106 consultation. MHC looks forward to the MMS's initial Section 106 submittal of additional project information and consultation with MMS and the additional consulting parties in the process.

These comments are offered to assist in compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (36 CFR 800). Please contact Ann Lattinville or Edward L. Bell of my staff if you have any questions.

Sincerely,



Brona Simon
State Historic Preservation Officer
Executive Director
Massachusetts Historical Commission

xc: see attached

xc:

Cape Wind Associates, LLC
Don Klima, Advisory Council on Historic Preservation
John Eddins, Advisory Council on Historic Preservation
Betsy Merritt, National Trust for Historic Preservation
Wendy Nicholas, National Trust for Historic Preservation
Rebecca Williams, National Trust for Historic Preservation
George Price, Superintendent, Cape Cod National Seashore
Caroline Hall, National Park Service
Bill Bolger, National Park Service
Secretary Ian A. Bowles, EEA, MEPA Unit
Conrad C. Lautenbacher, Jr. NOAA
Karen Kirk Adams, USACOE-NED-Regulatory
Kate Atwood, USACOE-NED
John S. Wilson USFW
Bettina Washington, Wampanoag Tribe of Gay Head (Aquinnah)
George Green, Jr., Mashpee Wampanoag Tribe
Massachusetts Coastal Zone Management
Victor Mastone, Board of Underwater Archaeological Resources
Massachusetts Commission on Indian Affairs
Sarah Korjeff, Cape Cod Commission
Falmouth Historical Commission
Yarmouth Historical Commission
Mashpee Historical Commission
Barnstable Historical Commission
Nantucket Historical Commission
Edgartown Historical Commission
Oak Bluffs Historical Commission
Chatham Historical Commission
Alliance to Protect Nantucket Sound
Clean Power Now



Mashpee Wampanoag Tribe
483 Great Neck Rd. P.O. Box 1048 Mashpee, MA 02649
Phone (508) 477-0208 Fax (508) 477-1218

April 2, 2008

Rodney E. Cluck
Minerals Management Service
U.S. Department of the Interior
31 Elden Street
Herndon, VA 02170

Dear Mr. Cluck,

I represent the Mashpee Wampanoag Tribe of Massachusetts, and we would like to comment on the DEIS for the Cape Wind Energy Project.

The Mashpee are members of the Great Wampanoag Nation (the People of the First Light). Our name defines who we are and one reason we must be heard on this project.

In your document you speak of "the land associated with the Wampanoag Tribe of Mashpee as well in land from the coast line and given the wooded vegetation and fairly level topography, there would not be a view from this location."

Well, with your limited communication with my tribe you don't understand the significant cultural and religious need for us to have a clear unobstructed view of the southeast horizon.

Under 800.5(A)(2)(V) we feel you must revisit this discussion in our 106 consultation.

The Wampanoag people have inhabited the land from the western shore of Narragansett Bay to the Neponset estuaries since time immemorial, even the land now called Horseshoe Shoals.

Our oral traditions tell us this land was walked and lived on by our ancestors. We find no mention of this in your document even though we came to Washington with this information.

The Vibracor-sampling information (4.1.1.1 and Figures 4.1.1-8 and 4.1.1-9) provide only enough data to support our oral history, but not enough samples to disprove it. A total of 87 borings over 24 square miles with sediment waves and changing topography are not enough.

We also would like to state that consultation should have been done **before** such an invasive process was undertaken (800.5(A)).

In the part of the document, Construction and Decommissioning 5.3.3.5.1, the conclusion states, "...should any archaeological resources be encountered during construction or decommissioning operations would be halted immediately." First, if remains were found in 20 – 60 feet of water, **who would know?** Between the depth and turbulence, **who would see?** **Furthermore, who would care?**

The next thing I would like to address is some inaccurate facts about our tribe. First, your numbers on our population are incorrect. We have 620 members living in Mashpee and an additional 402 throughout Barnstable County. This gives you 1,022 Wampanoag (People of the

First Light) directly affected by this project, and a potential of 3,104 total membership affected (per Patricia Oakley, Genealogist for the tribe).

Next, our land holdings within the boundaries of Mashpee are 130.06 acres. These numbers could have been easily confirmed by contact with our tribe (4.3.3.1.3, Paragraph 2).

I would also like to add that you have not looked at the plight of Horseshoe Crab. Increased fishing of the Horseshoe Crab for bait and biomedical use had increased pressure because of closure of the Delaware Fishery. Nantucket Sound is significant habitat and must be protected. If the proposed action costs one generation of juvenile crabs because of siltation, we will suffer, and the Red Not will suffer too. (**Please review Commonwealth of Massachusetts, Division of Marine Fisheries, Mass. 2007 Horseshoe Crab (*Limulus Polyphemus*) Compliance Report).

After spending a great amount of time with this report (DEIS), I have found a lot of the data is old and outdated, as is the technology of Cape Wind. I think before we devastate Horseshoe Shoals, we must look at all our options, such as Blue H USA's Deep Water Power Project, Tidal Power Projects and Land Based Wind Projects.

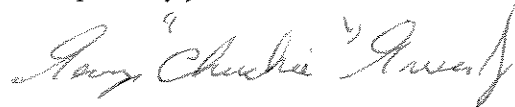
The Minerals Management Service mission describes in paragraph three, "The MMS strives to fulfill its responsibilities through the general guiding principles of: (1) being responsive to the public's concerns and interests by maintaining a dialogue with all potentially affected parties and (2) carrying out its programs with an emphasis on working to enhance the quality of life for all Americans...". Following these guidelines, MMS should consider the value of Nantucket Sound to all the People of Cape Cod, not just the project.

We, the People of the First Light, have always shared our resources since the beginning. We do not think it is fair (**again**) to give a shared historic, cultural, commercial and recreational resource to a private developer. We do not think it is fair to take a fishery resource away from life-long fishermen without looking at the options.

We pray you will not let our ancestors be disturbed when there are so many other solutions.

In closing my comments on the DEIS for the Cape Wind Energy Project, I hope Minerals Management Service goes back and reviews all of their data. I look forward to starting the 106 consultation soon.

Respectfully yours,



George "Chuckie" Green, Jr.



Mashpee Wampanoag Tribe
483 Great Neck Rd. P.O. Box 1048 Mashpee, MA 02649
Phone (508) 477-0208 Fax (508) 477-1218

2008-RES-011

WHEREAS, the Mashpee Wampanoag Tribe is federally recognized Tribe entitled to the immunities and privileges available to Indian tribes by virtue of their government-to-government relationship with the United States; and

WHEREAS, the Mashpee Wampanoag Tribe is a member tribe of the Great Wampanoag Nation, known as "The People of the First Light" and have since time immemorial occupied the lands and waters from Narragansett Bay to the Neponset estuaries and maintained a spiritual, cultural and traditional connection to the total ecosystem of their traditional homeland;

WHEREAS, a draft Environmental Impact Statement (DEIS) has been issued for the Cape Wind Associates, LLC, Cape Wind Energy Project by the Department of Interior's Minerals Management Service (MMS), which has authority over the proposed project and is the lead agency for the EIS; and

WHEREAS, the project would involve construction and operation of a wind farm off the shore of Cape Cod, Massachusetts; and

WHEREAS, the project is located in Horseshoe Shoals within Nantucket Sound and includes both upland and land under water within the traditional homeland of the Wampanoag containing natural, cultural and spiritual resources of significance to the Tribe;

WHEREAS, the MMS authority to authorize the development of alternative energy and alternative use program on the outer continental shelf was authorized under Section 388 of the Energy Policy Act of 2005; and

WHEREAS, the DEIS concludes that impacts on the Mashpee Wampanoag Tribe are expected to be negligible given the distance of Tribal land from proposed offshore site; and

WHEREAS, the MMS has a duty to consult with the Tribe on a government-to-government basis is charged with executing the United States trust responsibility to protect the Tribe's sovereignty; and

WHEREAS, the MMS consultation with the Tribe did not meet its obligation to meet with the Tribe to have a meaningful dialog designed to ensure the protection of tribal lands and resources; and

WHEREAS, MMS preparation of the draft EIS is inadequate because of its failure to properly execute the federal trust responsibility to the Mashpee Wampanoag Tribes by engaging in a meaningful consultation regarding the significant spiritual, cultural, economic and other interests of the Tribe.

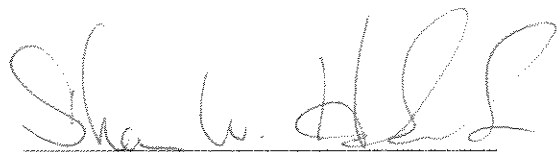
NOW THEREFORE, BE IT RESOLVED that the Mashpee Wampanoag Tribe requests MMS undertake a government-to-government consultation regarding the historical, cultural, religious, and other interests of the Mashpee Wampanoag Tribe in the proposed project, and

BE IT FURTHER RESOLVED that MMS engage in both formal and technical consultation with tribal staff to ensure effective tribal involvement in the agency's determination of the scope of its analysis of the historical, cultural, religious, and other interests of the Mashpee Wampanoag Tribe; and

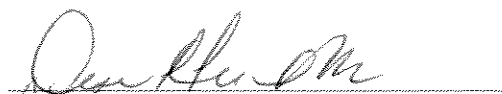
BE IT FINALLY RESOVLED that the Tribe approves and submits the attached comments on the DEIS to the MMS.

CERTIFICATION

Introduced, Read and Passes, this 15 day of April, 2008.


Shawn W. Hendricks, Sr., Chairman

ATTEST:


Desire Hendricks – Moreno, Secretary
Mashpee Wampanoag Tribe

Cluck, Rodney

From: Bennett, James F
Sent: Tuesday, March 18, 2008 10:41 AM
To: Cluck, Rodney; Obiol, Barry T
Subject: FW: Cape Wind Energy Project Draft Environmental Impact Statement DES 08/0001

James F. Bennett
Chief, Branch of Environmental Assessment
Minerals Management Service
U.S. Department of the Interior
381 Elden Street MS #4042
Herndon, Virginia 20170
Office: 703-787-1660
Cell: 571-230-9280
e-mail: jfbennett@mms.gov

From: Marvin Moriarty/R5/FWS/DOI@FWS@DOI **On Behalf Of** Marvin Moriarty/R5/FWS/DOI@DOI
Sent: Monday, March 17, 2008 2:26 PM
To: Dennis Reidenbach/PHILADELPHIA/NPS@NPS@NPSX
Cc: Brona.Simon@state.ma.us; Rozdilski, Claire; Bennett, James F
Subject: Re: Cape Wind Energy Project Draft Environmental Impact Statement DES 08/0001

Many thanks, Dennis ... I will forward this to my staff.

Marvin

Marvin Moriarty, Regional Director
U.S. Fish and Wildlife Service
Northeast Region
300 Westgate Center Drive
Hadley, MA 01035
413-253-8300 Office
413-253-8308 Fax

Dennis Reidenbach/PHILADELPHIA/NPS@NPS

Sent by: Claire Rozdilski@NPS

03/14/2008 04:18 PM

To

James F Bennett/MMS/DOI@MMS

cc

Brona.Simon@state.ma.us, Marvin Moriarty/R5/FWS/DOI@FWS

Subject

Cape Wind Energy Project Draft Environmental Impact

United States Department of the Interior

NATIONAL PARK SERVICE

Northeast Region

200 Chestnut Street

Philadelphia, PA 19106

ELECTRONIC TRANSMISSION - NO HARD COPY TO FOLLOW

IN REPLY REFER TO:

L7619 (NER-RD)

Mr. James F. Bennett
Environmental Assessment Branch
Minerals Management Service
381 Elden Street, Mail Stop 4042
Herndon, Virginia 20710

Ref: Cape Wind Energy Project Draft Environmental Impact Statement DES 08/0001

Dear Mr. Bennett:

This letter responds to the January 8, 2008 Notice of Availability of the Draft Environmental Impact Statement (DEIS) and Public Hearings for the Cape Wind Energy Project, Nantucket Sound, Massachusetts. The National Park Service (NPS), Northeast Region (NER), has reviewed the Draft EIS for the Cape Wind Energy Project and provides the following comments regarding NPS interests in the area potentially affected by the project. We note that the comments contained in this letter supplement NPS comments previously provided in the earlier stages of this project; specifically, a February 1, 2005 letter from Cape Cod National Seashore, and a March 2, 2005 Department of the Interior letter responding to the Army Corps of Engineers' November 2004 Draft Environmental Statement/Draft Environmental Report for the Cape Wind Energy Project.

General comments regarding impacts to cultural resources:

The DEIS discusses the potential effects of the proposed wind energy project on three National Historic Landmarks (NHLs) and in one case, makes a finding of adverse effect. In accordance with the provisions of

the National Historic Preservation Act (NHPA), as amended, and the implementing regulations for Section 106 of the NHPA, 800.10 Special Requirement for Protecting National Historic Landmarks, the lead agency shall notify the Secretary of the Interior of any consultation involving a NHL resultant to this project and invite the Secretary to participate in the consultation where there may be an adverse effect. As Minerals Management Service (MMS) is a bureau under the Department of the Interior, we request that MMS invite the NPS National Historic Landmark Program to be a consulting party in accordance with Section 106 on any matters involving NHLs within the area of potential effect of the Cape Wind Energy Project.

General comments regarding impacts to Cape Cod National Seashore, a unit of the national park system:

Cape Cod National Seashore encompasses approximately 44,000 acres on outer Cape Cod, including the entire ocean shore from the northern boundary of Monomoy National Wildlife Refuge to the western edge of the Town of Provincetown. This unit of the national park system is charged with preserving and protecting a diversity of sensitive cultural, historic, and natural resources for the enjoyment of present and future generations. Park resources of particular relevance to the analysis in the DEIS include:

Marine habitats: The park's boundary extends 0.25 miles off shore and thus includes marine ecosystems that support whales, seals, finfish, sea turtles, and pelagic birds. These taxa are important elements of the marine ecosystem, and are of high interest and value to park visitors. The individual animals of these taxa that traverse the project area may be impacted by construction and operation of the proposed wind farm.

Beach habitats: The park includes all of the outer Cape's outer beach, barrier beaches, and barrier islands. These habitats support nesting and migrating federally threatened piping plovers (*Charadrius melodus*), American oystercatchers (*Haematopus palliatus*), a Species of High Concern in the Fish and Wildlife Service's Shorebird Conservation Plan, and common terns (*Sterna hirundo*) and least terns (*Sterna antillarum*), both listed by the Commonwealth of Massachusetts as Species of Special Concern. The federally endangered roseate tern (*Sterna dougalli*) and numerous shorebird species use these habitats for roosting, feeding, and staging during migration. In furtherance of the NPS mission, and in accordance with the requirements of Section 7(a)(1) of the Endangered Species Act, the park dedicates significant staff time and fiscal resources to the protection and recovery of these species. The opportunity to view these sensitive species in the wild is one of the special visitor experiences offered by the park. These species may be impacted by construction and operation of the proposed wind farm as they migrate to and from their habitats within the park.

Estuarine habitats including sheltered waters, submerged aquatic vegetation, (SAV), mudflats, and saltmarshes: Portions of Pleasant Bay and Wellfleet Harbor are within the park, as are the entirety of Nauset Marsh, Hatches Harbor, West End Marsh, and East Harbor. Numerous wintering and migrating shorebirds, bay ducks, and sea ducks use these habitats for feeding and resting. The park and other partners dedicate significant time and effort to the protection and restoration of these systems and habitats. The opportunity to view these species is another of the wildlife-based visitor experiences offered by the park. These species may be impacted by construction and operation of the proposed wind farm as they migrate to and from their habitats within the park.

The wild beach: The park offers one of the few remaining opportunities in New England for visitors to experience a wild beach. As development and human use of the outer Cape intensify, fewer and fewer of the park's beaches can still offer the rare combination of solitude, sweeping ocean views, and the absence of human manipulation of the land and seascape - a prized visitor experience. South Beach in Chatham is one of the few beaches in

the park where a visitor can enjoy this type of experience most of the year. Implementation of the Monomoy Shoals alternative may impact this important resource.

Specific comments regarding Cape Cod National Seashore:

Section 1.22 - State Regulatory Permitting and Consistency

The Massachusetts Endangered Species Act and the Cape Cod Ocean Sanctuary were not noted among the laws and policies related to State regulatory permitting and consistency.

Section 1.4 - Agency Consultation and Cooperative Agency Status

The National Park Service, Cape Cod National Seashore was not listed among the agencies consulted via the agency consultation meetings held in Boston in 2006 and 2007. A representative of the Seashore was present at both meetings.

Section 3.3.3.4 - Nauset, Massachusetts (East of Nauset Beach)

The DEIS indicates that the Offshore Nauset Alternative did not meet all technological feasibility requirements and was therefore not selected for further environmental analysis. This section goes on to note that proximity to the Northern Right Whale Critical Habitat precautionary area was another concern for this alternative. We support the MMS's decision to remove this alternative from further consideration. In addition to the technological limitations and concerns for right whale habitat, we suspect that it would have been difficult to construct and maintain an onshore cable without adversely impacting park resources.

Chapter 4 - Description of the Affected Environment

The description of the affected environment presented in Chapter 4 appears to focus on the Horseshoe Shoal Alternative. For several elements of the affected environment, a broad scale is adequate to encompass the other alternatives evaluated. But for many elements where a higher-resolution scale is needed, the DEIS addresses only the environment affected by the Horseshoe Shoal alternative. This imbalance makes it difficult to comment on the adequacy of analysis of impacts associated with the other alternatives, particularly the two geographic alternatives. We recommend that the FEIS provide a description of the effected environment that provides thorough and adequate information for all alternatives evaluated.

Section 4.1.2.2 Regulatory Requirements

The use of an unweighted Leq for measuring existing environmental sound levels and the effects of WTG operations is specified on page 4-12. This practice is defended because "the hearing capabilities of marine animals vary widely." A minor technical point is that the spectral range of this "unweighted" summation should be specified. In addition, a major technical point is that the noise from WTG operations has an idiosyncratic distribution, which is very unlikely to span the full range of frequencies implied by the dBL metric. Comparisons between WTG noise levels and existing environmental sound levels will only be valid if the bandwidth of unweighted summation in the environment matches the bandwidth of the WTG noise. Environmental sound energy outside this range of frequencies is not pertinent to the analysis of potential impacts. These comments are supported by the next sentence in the DEIS, which immediately follows the sentence quoted above: "As with airborne sound, the frequency component of the underwater sound is important in this analysis."

Section 4.1.2.3. Existing Conditions

Measurements to determine existing conditions were only taken during the off-season months. For offshore locations, measurements were taken in October, while for onshore locations, measurements were taken in December. We can expect that sound level measurements would have been completely different if they were taken during the busy season months (May-August). The principal sounds heard during monitoring at the onshore locations were wind and ocean waves, periodic aircraft, and occasional passing ferryboats. If measurements were taken during the on-season, it is likely like that principal sounds would include more human-caused noise such as boats, jetskis, etc. It can be assumed that the L90 and Leq measurements would be much higher if taken during the summer when Cape Cod is

booming with tourists and visitors. A more accurate assessment of the existing conditions could be reached if measurements were taken during both the on and off seasons.

On page 4-13, it is stated that wave interaction with the hull of the measurement platform was a dominant signal during the offshore sound level measurements (aerial and underwater). That wave slap will substantially inflate the Leq values derived from these data. They also noted noise from aircraft and distant boat traffic in both the atmospheric and underwater noise measurements. Thus, even if the wave slap is removed, the sound levels will still be elevated by other anthropogenic sources. Inflated ambient measurements do not provide an appropriate basis for judging the impacts of WTG noise. The cumulative effects analysis of WTG noise, combined with all of the other noise sources, requires an estimate of what the natural ambient sound levels would have been in the absence of noise sources. It is unclear if a quantitative analysis of cumulative noise impacts was conducted. In the present analysis, the existence of other noise sources in the existing ambient measurements creates the illusion of diminished impacts from WTG. In no other analysis of pollution is the presence of other sources deemed to mitigate the effects of a new source.

Section 4.2 - Biological Resources

The scope of this section should be expanded to note that terns, American oystercatchers, and a significant population of piping plovers nest at Cape Cod National Seashore, and that these birds may be traversing the areas proposed under the Horseshoe Shoal and Monomoy Shoal Alternatives. A similar expansion of scope is recommended for those sections of this chapter addressing other shorebirds, sea and bay ducks, pelagic birds, whales, and other taxa as appropriate.

Section 4.3.4.2 - Visual Resources Associated With Recreational Areas

In light of our comment regarding the scope of Chapter 4, this section should be revised to include Cape Cod National Seashore.

Section 4.3.6 - Recreation and Tourism

All subsections should be revised to include Cape Cod National Seashore. In light of our comment regarding the scope of Chapter 4, Table 4.3.4-2 and Figure 4.3.4-3 should be revised in particular.

Chapter 5 – Environmental and Socioeconomic Consequences

In the introduction section to the “Environmental and Socioeconomic Consequences” section, there needs to be a better explanation of what “normal” and “non-routine” conditions are.

We have a general comment in terms of noise impacts. There should be some discussion of the impact thresholds for noise (e.g. negligible, minor, moderate, major) and how they are defined. General definitions are provided for physical, biological, socioeconomic resources, etc., in the Executive Summary, but it would be helpful to the reader if the thresholds were defined specifically for sound/noise in order to understand how it was concluded that an impact was negligible, minor, etc. Overall for this chapter, a conclusion on the level of impact (e.g. negligible, minor, moderate, major) is never mentioned for a majority of the sections. There are often statements explaining that the sound level will increase or decrease, but no final conclusion on what that means for the overall impact.

Section 5.1.1.1.8

On the top of page 5-5, it says, “Marine biota would be able to hear the vessel, but no physical harm or *behavioral effects* would occur.” It is difficult to be sure that noise will not have behavioral effects on marine biota. We would suggest changing the language to something like, “any behavioral effects would be with their natural range of variation.”

On page 5-5, it states, “the proposed action’s use of these areas would generate noise from the operation

of machinery, such as *vessel engines* as they arrive or depart, *cranes* used to load or unload equipment and construction materials and supplies, and other smaller pieces of machinery such as *fork lifts* or *delivery trucks*.” If possible, the sound levels of the listed machinery and equipment should be provided so that readers can get an idea of how much noise they will contribute to the existing ambient sound level. Perhaps the sound level data can be pulled from other sources (i.e. manufacturer information, other plans with construction component).

Section 5.1.2

Marine mammal biologists have documented changes in whale surfacing behavior when the observation aircraft is below 500 meters. Widely adopted protocols for marine mammal research now enforce this as a minimum altitude.

Section 5.1.3.5

Similar to the comment above, it would be helpful if the sound levels for maintenance equipment including cranes, davits, etc could be listed. This would help the reader to get a better idea of how much noise they will contribute to the existing ambient sound level.

In addition, this section states: “The proposed action would represent only a small incremental increase in these factors.” It is difficult to really understand exactly what a “small incremental increase” would have on the existing ambient. We understand the difficulty in determining the exact increase in sound level that would occur, but perhaps one could provide the X percent increase that might be expected. Also, if sound level data is known for some of the noise sources (i.e. construction equipment), might it be possible to estimate the overall change in sound level. Two noise sources producing equal dBA ratings at a given location will produce a combined noise level 3 dBA greater. Two noise sources differing by 10 dBA, will produce a combined noise level 0.4 dBA greater than the louder source alone. Perhaps this information can be used to give a quantifiable estimate of change in sound level.

With specific analysis related to the impact to the night time scenery as seen from Cape Cod National Seashore, the site at Horseshoe Shoals is at a distance from the Seashore that we would expect minimal nighttime visual intrusion provided mitigation measures in the DEIS are adhered to. In addition, though little specification or analysis is provided for the construction lighting, it is probable that light sources or scattered light would be easily visible under clear conditions from the National Seashore. This impact can be minimized by limiting hours of operation, limiting total lumen output of the lights, or directing construction lights within 45 degrees of nadir.

Section 5.1.5.6

Monopile and turbine blades could be painted to minimize contrast with clear skies, making the units less visible from a distance. These benefits would have to be weighed in relation to possible increases in hazards for aviators and flying animals.

Section 5.1.5.7

On page 5-15, the first full paragraph contains a discussion on foghorns which states that the foghorn will not be heard by people onshore; however, there is no mention of the sound level that will be heard offshore.

The third full paragraph of the same page states: “maximum operational sounds levels of 13 to 21 dBA are well below existing sound levels associated with cut-in to design wind speeds (46 to 60 dBA)...”, but does not identify the location/site that may be affected.

Regarding these statements, the operational sound levels of 40-45 dBA do not specify at what distance this specification applies. Further, A-weighted sound levels do not provide a basis for judging the

audibility of a noise source. A previous comment regarding Section 4.1.2.2 also applies here. The cited environmental noise figure of 60-65 dBA may incorporate sound energy from a wide range of frequencies that are not emitted by the wind turbines. For an "apples to apples" comparison, the environmental A-weighted figure should be limited to the same range of frequencies emitted by the WTG. This will provide a useful comparison, but assessment of audibility would (at minimum) require 1/3rd octave band analysis of the wind turbine noise and the environmental ambient sound levels. The most recent standard for wind turbine noise measurement (IEC 61400-11) specifies the use of 1/3rd octave measurements. 1/3rd octave band analyses of WTG noise in relation to environmental acoustic conditions could decisively address the audibility issues.

The same concern applies to the audibility of the foghorns on shore. If the foghorns are to be noticeable at 1/2 mile, they will very likely be audible at 5 miles when temperature inversion conditions exist. Temperature inversions will commonly co-occur with winter fog or fog on cool summer nights.

This same concern applies to the conclusion that underwater sounds will be largely inaudible to marine animals (page 5-15). Baleen whales have better low frequency hearing than humans, and the existing underwater sound levels are inflated by artifacts of the measurement conditions (wave slap, other anthropogenic noise) and the inclusion of sound energy from frequencies outside the frequency band of the noise source.

Section 5.1.6.7

There is no mention of any sound level measurements at all in this section. If similar equipment would be used in the decommissioning as would be used in construction, then those sound levels could be listed here, or a cross-reference could be provided to refer the reader back to where those sound levels were previously mentioned.

There is also the statement: "The biggest difference between construction and decommissioning noise and vibration is that during decommissioning there would be no pile driving noise, which avoids the higher intensity sound levels associated with pneumatic vibratory pile driving." This statement doesn't really give the reader a good idea of what the difference in noise level would be. It would be helpful to quantify the difference.

Section 5.3.1.2.1

On page 5-38, in the "Post Lease G&G Investigation", it mentions the use of a small gasoline motor and a truck mounted drill rig. Would it be possible to get quantifiable sound level measurements for this equipment?

On page 5-38, "Construction Impacts on Onshore Locations during HDD and Onshore Cable Laying", it does a great job at providing sound level measurements for HDD and cable laying impacts at various distances, locations, etc. It doesn't really explain what those sound level measurements mean in terms of impacts (i.e. negligible, minor, moderate, major).

On page 5-39, "Construction Impacts on Onshore Locations during HDD and Onshore Cable Laying", it explains that the maximum sound level at the two closest residences to the cofferdam is 79 dBA and then states that the cofferdam installation would only cause minimal and temporary underwater impacts. What would the 79 dBA sound level mean in terms of above-water impacts?

Section 5.3.2.6 Non-ESA Marine Mammals

The use of dBht to provide an index of potential effects of construction, transportation, and operational noise on marine mammals is reasonable, and has its parallels in community noise metrics for humans. However, vertebrates do not perceive sounds as aggregate pressure fluctuations; they perceive sound

energy in relation to pitch (frequency), with energy summation happening within critical bands that are a small fraction of their range of hearing. This general remark applies also to the following comment.

On page 5-136, the DEIS dismisses underwater noise from operation of the WTG, stating that it will not substantially increase sound levels above baseline. While this analysis may prove correct, the present text is too unclear to support this conclusion. Noise generated by the WTG will certainly increase as a function of wind speed, and its spectral distributions may change. Natural ambient sound levels increase as a function of wind speed, with relatively minor changes in spectral distribution. At what frequencies will the WTG noise exceed the ambient sound levels? By how much? How does this change with increasing wind speed? This analysis should pay particular attention to the lowest wind speed at which the turbines begin generating power.

The dB number cited in this section (107.2, 109.1) are not appropriately qualified. What distance to the source does the WTG figure reference? As noted earlier in Chapter 4 comments, these full spectrum values do not provide an appropriate basis for comparing WTG noise and existing ambient sound levels. An aggregate sound level index only has value when the sources being compared have similar spectral distributions. For this analysis, the existing environmental sound level should be limited to the same range of frequencies radiated by the WTG. Environmental sound energy outside the spectral range of the WTG source has very little bearing on its audibility or masking potential, and can be neglected entirely for the kind of first order approximations used in this DEIS analysis.

On page 5-138, the DEIS states that operational noise from the WTG would only be "slightly audible" to baleen whales at 20 m. This qualitative statement should be rephrased in terms of estimated dBht at 20 m. A figure that illustrates the WTG noise power spectrum at 20 m relative to the hearing thresholds of cetaceans and pinnepeds would greatly clarify this analysis.

Section 5.4.2 - Biological Resources

The analyses of impacts in this section should be revised as appropriate to reflect the revisions recommended for Section 4.2. We defer detailed comment on the adequacy of this section to the lead expert agencies for marine mammals, migratory birds, and threatened and endangered species: the National Marine Fisheries Service and the U. S. Fish and Wildlife Service. When revising this section to reflect any comments and recommendations that these expert agencies may provide, the FEIS should be sure to acknowledge that impacts to these species would or could also comprise impacts to the resources of Cape Cod National Seashore.

Sections 5.3.2.3, 5.3.2.4, and 5.3.2.9

These sections assess effects to aerial migrants such as bats, shorebirds including piping plovers, terns, seaducks, and other migratory birds. As noted above, we defer judgment regarding the adequacy of the impact assessment to the federal lead expert agencies. None the less, we did note that throughout these sections, the assessment of impact for each species or taxa group is based, in part, on the lack of known migration corridors through the Horseshoe Shoals area and/or the lack of observations of target species during boat and aerial surveys. This implies that there are known migration corridors elsewhere that are used by the bats and birds traversing the southern New England coast, and that surveys were capable of identification to species. However, the information provided in Chapter 4 and in these sections of Chapter 5 indicates that migration corridors in this region are unknown altogether, and that survey methods were inadequate to identify individual species. To provide some sense of the strength of information used to support the conclusions in these sections, we recommend that the FEIS describe any known migration corridors that may be used by the bats and birds using Nantucket and the outer Cape, or clarify that the migration corridors used by these species are largely or entirely unknown. Similarly, for those species or taxa groups that could not be identified by the surveys, we recommend that impact conclusions not be based on lack of detection. In section 5.3.2.9.1 the potential risk to piping plover

extends beyond collision and barrier, it also includes disorientation due to artificial lights. This is well-documented in sea birds and is likely to occur without adequate mitigation.

Section 5.3.4.2.2 lists the FAA guidance for wind turbine farms. While some of the guidelines specify the light color, no color is specified for Medium Intensity Lanterns. To minimize impact to the nighttime scenery, we recommend that these lights be red flashing also. Furthermore, research in the ecological impact of artificial lighting generally recommends that lights flash for very short duration (strobe or fraction of a second) as opposed to constantly illuminated or slow flashing. The proposed flashing cycle of 1 sec on, 2 sec off, will likely have a greater impact on sea birds than a shorter on cycle would have.

Section 5.4.2.2.1 - Regional Geologic Setting (Monomoy Shoals Alternative)

The discussion of the dynamics of the Nauset-Monomoy Barrier Beach system should be revised to note that Chatham South Beach and Monomoy joined in 2006, and that a new inlet to Pleasant Bay was formed in 2007.

Section 5.4.2.2.11 - Avifauna (Monomoy Shoals Alternative)

This section should be revised to reflect the comments above for section 5.4.2.

Section 5.4.2.2.16 - Threatened and Endangered Species (Monomoy Shoals Alternative)

This section should be revised to reflect the comments above for section 5.4.2.

Section 5.4.2.2.21 - Visual Resources (Monomoy Shoals Alternative)

This section should be revised to include impacts to Cape Cod National Seashore. This section concludes that this alternative would have fewer visual impacts than the Horseshoe Shoals Alternative because it is farther from the more populated area of the Cape. This logic

fails to take into account the setting and expectations of visitors to Monomoy NWR and this portion of Cape Cod National Seashore. As described in our general comment, this area provides a combination of solitude, sweeping ocean views, and the absence of human manipulation of the land and seascape. As depicted by the visual simulations in Sheets 5 and 6 of Figure 3.3.5-6, the Monomoy Shoals Alternative would be a major impact (as defined in Section 1.5.2) to this unique visitor experience.

While the DEIS notes that the Monomoy Shoals alternative would have visual impacts to tourists attracted by Cape Cod National Seashore (Section 3.3.5.3.3) there is no acknowledgement of the park nor evaluation of impacts to park resources elsewhere in the document. We recommend that the FEIS acknowledge and evaluate impacts to park resources where appropriate throughout the document, particularly in Chapter 4 and in Chapter 5.

We appreciate the opportunity to provide comments on the Cape Wind Energy Project and look forward to continued collaboration on this and future projects. If you have any questions or require any additional information, please contact Holly Salazer, 814-865-3100, or Jacki Katzmire, 215-597-1903.

Sincerely,

/s/ Michael T. Reynolds

for Dennis R. Reidenbach
Regional Director
Northeast Region

cc:

Regional Director, Region 5, U.S. Fish and Wildlife Service
Massachusetts State Historic Preservation Officer

April 21, 2008

SUBMITTED ELECTRONICALLY AND VIA FIRST-CLASS MAIL

Dr. Rodney E. Cluck
Minerals Management Service
U.S. Department of Interior
381 Elden Street
Mail Stop 4042
Herndon, Virginia 20170

RE: Comments on the Cape Wind Energy Project Draft Environmental Impact Statement

Dear Dr. Cluck:

The National Trust for Historic Preservation appreciates the opportunity to comment on the Cape Wind Energy Project Draft Environmental Impact Statement (DEIS). Cape Wind Associates, LLC seeks a lease to build 130 Wind Turbine Generators, each of which would be more than 400 feet tall, within a 24-square-mile area in Nantucket Sound, located 13.8 miles from Nantucket Island. While the National Trust recognizes the importance of and need for developing renewable energy resources, it is vital for federal agencies to fully consider the effects of these projects on our nation's irreplaceable cultural and historic resources, in accordance with the National Historic Preservation Act (NHPA) and the National Environmental Policy Act (NEPA). The Minerals Management Service (MMS) must provide for a comprehensive review and consulting process for locating, permitting, and operating the Cape Wind Energy Project.

We are concerned that MMS has not met the requirements of the NHPA, and the DEIS has several shortcomings that are not consistent with the requirements of NEPA. As the DEIS acknowledges, the proposed action would adversely affect at least three historic properties, including a National Historic Landmark (NHL). In light of these consequences, the National Trust urges the MMS to fully satisfy its NHPA and NEPA obligations without delay, i.e., to evaluate the significance of the effects, consult with the State Historic Preservation Office (SHPO), Indian tribes, and consulting parties, and develop and evaluate additional alternatives and modifications to the project that would avoid, minimize, or mitigate the adverse impacts on historic properties. We look forward to working with MMS toward these ends.

Interests of the National Trust. Congress chartered the National Trust in 1949 as a private nonprofit organization to "facilitate public participation" in historic preservation, and to further the purposes of federal historic preservation laws. 16 U.S.C. §§ 461, 468. With the strong support of our 287,000 members around the country, the National Trust works to protect significant historic sites and to advocate historic preservation as a fundamental value in programs and policies at all levels of government. In addition to our headquarters in Washington, D.C., we have nine regional and field offices throughout the country, including a

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Northeast Office in Boston, which is responsive to issues in Massachusetts. The National Trust also operates 30 historic sites open to the public.

The National Trust has long been engaged in preservation issues within the Nantucket Sound region. In addition to our interest in the Cape Wind Project, the National Trust publicized threats to the historic character of Nantucket from “teardowns” and “gut-rehabs” by including Nantucket on our list of *America’s 11 Most Endangered Historic Places* in 2000. In 1994, we also placed Cape Cod on our list of *11 Most Endangered Historic Places* to address the threat of incompatible development to the historic character of the Cape.

A. NATIONAL HISTORIC PRESERVATION ACT

Congress enacted the NHPA in part to ensure that future generations have a genuine opportunity to appreciate and enjoy the rich heritage of our Nation in the face of continued development and to preserve significant resources for future generations. 16 U.S.C. §§ 470(b)(4), (5). In this case, the important function of review under Section 106 of the NHPA is not to prevent the development of alternative energy resources, but rather, to ensure that MMS fully “takes into account” historic preservation issues before issuing a lease or easement for the proposed project. This review must include an evaluation of the consequences of the proposed project on Nantucket Sound’s historic resources and a thorough examination of measures to avoid, minimize and mitigate adverse effects.

1. MMS Has Not Demonstrated How It Intends to Comply with the Requirements of Section 106 of the NHPA.

The DEIS is unclear on how or when MMS plans to satisfy its obligations under Section 106 of the NHPA. We are reassured by a phone conversation that took place after the release of the DEIS, in which MMS confirmed that it plans to initiate Section 106 consultation in the coming weeks. However, the EIS should more explicitly and thoroughly detail plans for compliance with the Section 106 requirements.

Section 106 requires federal agencies to “take into account” the effects of their undertakings on historic properties “prior to” approving a project. *Id.* §§ 470f; 36 C.F.R. Part 800. In addition, the federal agency must afford the Advisory Council on Historic Preservation (ACHP) the opportunity to comment on the undertaking. *Id.* MMS recognizes that approval of the Cape Wind Project constitutes an undertaking requiring compliance with Section 106. *See* DEIS at 1-9. Further, MMS concludes that the project as proposed in the DEIS will have adverse visual effects on significant historic properties. *Id.* at 5-198 to 5-199 and 5-203 to 5-204. Unfortunately, MMS simply states that it will continue the Section 106 process. *Id.* at 5-199, 5-

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204. This approach, without more information, raises concerns about how MMS will meet its Section 106 procedural obligations. Moreover, resolving the adverse effects identified in the DEIS must occur through consultation, and must be memorialized in a memorandum of agreement prior to the issuance of the Record of Decision (ROD). 36 C.F.R. §§ 800.1(a), 800.6(c), 800.16(f).

The National Trust has several specific concerns regarding MMS's lack of compliance with Section 106 for the Cape Wind Project. First, we are concerned that MMS has not yet initiated the required consultation with interested parties to resolve effects on historic resources. The Section 106 regulations require federal agencies to initiate consultation "early in the undertaking's planning, so that a broad range of alternatives may be considered during the planning process for the undertaking." 36 C.F.R. § 800.1(c). In this case, MMS has not yet responded in writing to our consulting party request, which we submitted on May 1, 2006. Nor has the National Trust reviewed any material associated with the Section 106 process. (Thus we were surprised to see a statement in the DEIS that MMS has "worked with the National Trust to develop the methodology used in the Historic Properties analysis." DEIS at 1-9. This statement is not accurate.)

Second, we are concerned that the timing for undertaking the Section 106 process could unduly restrict the subsequent consideration of alternatives to avoid, minimize, and mitigate harm to historic properties. *Id.* § 800.1(c). Aside from general statements that MMS will "continue" to comply with Section 106, the DEIS does not describe how the MMS purports to have complied to this point, nor does it specify how or when MMS will integrate comments from consulting parties as required by Section 106. The DEIS specifies in Table 5.3.3-1 that three historic properties (the Wianno Club, the Kennedy Compound, and the Cape Poge Lighthouse) within the Cape Wind Project Visual Area of Potential Effect (APE) will be adversely affected. DEIS, Appendix B at B-397. Such a determination requires the agency to develop and evaluate alternatives or modifications to the project to avoid, minimize, or mitigate adverse effects through consultation with the SHPO, Indian tribes, the ACHP, and interested and consulting parties.

Third, we are concerned that MMS will not comply with Section 106 in time to adequately inform the NEPA process and the agency's final decision, i.e., that MMS will issue the ROD before completing the Section 106 process. The DEIS states that "if MMS determines there would be an adverse effect (due to visual impacts) MMS would direct a formal consultation process under the requirements of NHPA" DEIS at 9-16. This statement suggests that the review would be postponed until some later time. However, the MMS has **already** determined that there will be adverse effects, and therefore, the Section 106 consultation requirement should have already been triggered.

Finally, in general, there is not enough supporting documentation or information on which the proposed “no adverse effect” determinations for certain historic properties can be reviewed, and in several cases, we do not believe the determinations made are consistent with the criteria of effect as defined by 36 CFR 800. The National Trust questions the difference in the number of adversely affected historic resources previously identified by the U.S. Army Corps of Engineers versus the number in MMS’ DEIS, especially given that MMS provides no evidence to support the difference, nor has MMS begun the Section 106 process. In the DEIS, MMS identifies only (3) historic resources that would be adversely affected by the proposed installation, positing that the rest of the rich collection of historic resources in the vicinity would either not be affected or not adversely affected. However, when the US Army Corps of Engineers (COE) was lead agency on this project, SHPO concurred with Army Corps’ identification of a long list of historic resources that would be adversely affected by the same alternative analyzed by MMS. This difference is extremely troubling, particularly as it is not acknowledged or explained in the DEIS. MMS must resolve this issue in the context of the Section 106 consultation process, which should also be adequately analyzed and reflected in the NEPA documentation.

We are especially concerned that the Nantucket National Historic Landmark District is not included among MMS’ list of resources likely to be adversely affected, though the Army Corps acknowledged that it would be adversely affected in their analysis. In our view, the Nantucket National Historic Landmark District would be adversely affected.

MMS has included only limited analysis as to how it reached its determinations that certain activities will have no effect, no adverse effect, or an adverse effect. DEIS at 5-199. Other than including the regulatory definition of what constitutes an “adverse effect,” there is no discussion as to how MMS determined which properties fell into which categories – particularly since there has been no consultation with interested parties. The Section 106 regulations specifically require that any proposed “no adverse effect” determinations be reviewed by consulting parties. 36 C.F.R. § 800.5(c). That review has not yet occurred.

MMS makes several conclusory statements about anticipated visual impacts to the historic character of sites that may result from construction or operation of the wind turbines, the Electrical Service Platform, the transfer conduits at landfall, and powerline routing through existing Rights-of-Way (ROWs). However, these conclusory statements are apparently based on field investigations and simulations of visual impacts only as viewed *from* potentially affected properties. MMS fails to consider that the setting of an historic property includes more than views that focus away from the historic property. In this case, the Nantucket Sound is a significant part of the fabric of the entire historic setting and provides a critical context for many of the identified historic properties in the area. Therefore, MMS should

examine how the proposed wind farm will affect historic properties and districts looking **to** each property across Nantucket Sound and through the proposed wind farm, not just the view towards the wind farm **from** each historic property or district.

Recommendations: We recommend that MMS provide a clear plan as soon as possible for fully complying with Section 106 prior to making any decision as to whether or not to approve the Cape Wind project. More specifically, MMS must initiate consultation with all consulting parties to more adequately analyze direct and indirect effects, and to develop and evaluate alternatives or modifications to the project to avoid, minimize, or mitigate adverse effects. Timely initiation of Section 106 consultation will ensure that MMS considers a broad range of alternatives, guaranteeing that adverse effects may be avoided, minimized, or mitigated.

2. MMS Has Not Demonstrated Compliance with the Heightened Requirements for Minimizing Harm to National Historic Landmarks, Pursuant to Section 110(f) of the NHPA.

MMS has not adequately demonstrated compliance with the heightened requirements of Section 110(f) of the NHPA. Under Section 110(f), federal agencies have an increased responsibility to preserve and protect National Historic Landmarks “to the maximum extent possible, [and to] undertake such planning and actions as may be necessary to minimize harm to such landmark” 16 U.S.C. § 470h-2(f). MMS must meet this heightened obligation as part of its NHPA responsibilities prior to the approval of the proposed project.

In this case, MMS has identified one NHL – the Kennedy Compound – that will be adversely affected, but does not discuss with any particularity how it will plan or take necessary actions to minimize those adverse affects to the maximum extent possible. The Kennedy Compound, designated in 1972, comprises six acres of waterfront property with several summer and vacation residences, one of which served as President John F. Kennedy’s Summer White House. Because President Kennedy’s term was tragically short-lived, his activities at the Compound are of increased significance to the historic and visual character of the site and its setting. In addition, John F. Kennedy was the first president to have been actively covered by television. As a result, images of the Kennedy Compound and its setting are familiar and meaningful to millions of Americans.

As outlined above, we also believe that the preferred alternative would adversely affect the Nantucket National Historic Landmark District. Such a determination by MMS would require that MMS meet the heightened Section 110(f) requirements for preservation and protection of this district, as well.

Recommendations: We strongly recommend that MMS fully demonstrate how it intends to comply with the heightened obligations of Section 110(f) with respect to the proposed project's adverse effects on the Kennedy Compound NHL, and to the Nantucket NHL.

B. NATIONAL ENVIRONMENTAL POLICY ACT

Congress enacted NEPA to restore and maintain environmental quality, as well as to maintain aesthetically and culturally pleasing surroundings for the overall welfare of future generations. 42 U.S.C. § 4331. Included in this mandate is that federal agencies, to "improve and coordinate Federal plans," must use "all practicable means" to "preserve important historic, cultural, and natural aspects of our national heritage . . ." *Id.* § 4331(b). To accomplish NEPA's mandate, federal agencies must: (i) analyze a reasonable range of alternatives, 40 C.F.R. § 1502.14; (ii) provide an adequate baseline of potentially affected historic properties, *Id.* § 1502.15; (iii) take a "hard look" at the direct, indirect, and cumulative impacts to historic properties, *Id.* § 1508.25; and, (iv) examine measures to mitigate the potential adverse impacts to historic properties, *Id.* § 1502.14. We have several concerns about the DEIS with respect to NEPA's requirements.

1. The DEIS Does Not Adequately Analyze a Reasonable Range of Alternatives.

We are concerned that the DEIS analyzes an unreasonably narrow range of alternatives; those limited to alternatives within the Nantucket Sound region. Moreover, the DEIS only provides minimal consideration of the two non-preferred build alternatives – Monomoy Shoal and South of Tuckernuck Island. The purpose of the alternative requirement is to prevent the EIS from becoming a "foreordained formality." *City of New York v. Dept. of Transportation*, 715 F.2d 732, 743 (2d Cir. 1983). The alternatives requirement is the "heart of the environmental impact statement." 40 C.F.R. § 1502.14. Whether an alternative is reasonable or not turns on whether the alternative could accomplish the stated purpose of the project. *Custer County Action Ass'n v. Garvey*, 256 F.3d 1024, 1041 (10th Cir. 2001).

First, MMS limits its initial examination of possible alternatives to only nine locations, providing only limited information as to how the nine alternatives were selected. Cape Wind defines the purpose and need for the project as:

provid[ing] an alternative energy facility that utilizes the unique wind resources in waters offshore of New England using a technology that is currently available, technically feasible, and economically viable, that can interconnect with and deliver electricity to the New England Power Pool (NEPOOL), and make a substantial contribution to enhancing the region's electrical reliability

and achieving the renewable energy requirements under the Massachusetts and regional renewable portfolio standards (RPS).

DEIS at 1-1. MMS used several factors to examine the range of geographical locations, including but not limited to the physical, biological, socioeconomic, and human impacts of the proposed project. Seven geographical locations were not selected for continued analysis because they were deemed unsuitable for development. DEIS at E-4 to 5. The remaining locations were further examined in light of the alternative-sized options discussed in the DEIS.

The National Trust generally supports the purpose of this project and acknowledges New England's need to supply its own energy, diversify its energy mix, and rely less on neighboring power supplies for its needs. *Id.* at 1-1 to 1-2. However, it seems improbable that there is only one general location along the coastal waters from Maine to Rhode Island, i.e., the Nantucket Sound area,¹ that is feasible for a wind project. The Nantucket Sound area may well be a good location, but we remain skeptical that no other location along the coastline is at least feasible for NEPA's purpose of analyzing a reasonable range of alternatives.

Second, we are also concerned that the stated purpose and need narrowly focuses on the development of a certain percentage of electrical generating capacity by a specific number of wind turbines, unnecessarily limiting potential alternatives from consideration. This suggests that the stated purpose and need may be inappropriate to adequately address the range of alternatives available to generate the total projected regional energy needs. The purpose and need also does not support the conclusion as to why there must be 130 wind turbines constructed at one site. It appears that alternative geographic locations were considered and rejected based on a given area's ability to locate the facility in its entirety. A reasonable alternative to the proposed action could examine phased-construction of smaller configurations or variable-production capacity turbines sited at alternative locations. In addition to minimizing or avoiding the visual impacts to historic sites, a plan of this nature could provide MMS and other agencies opportunities to fully explore all NEPA implications associated with a project of this magnitude - without significantly impacting one specific area. We recognize that dividing up the wind turbines in this manner could impact construction costs and could pose difficulties with the siting of the Electrical Service Platform. However, these are alternatives that should be considered in a supplemental EIS, taking into account

¹ It is not clear from the DEIS whether the three build alternatives – Nantucket Shoals (Proposed Alternative), Monomoy Shoals, and South of Tuckernuck Island – are geographically diverse. The DEIS indicates that two out of the nine initial geographically diverse locations for a wind farm were selected for further environmental analysis. DEIS at E-4. However, Figure 3.3.5-1 of the DEIS seems to demonstrate that the three alternatives are in close proximity to one another, and all within the general vicinity of Nantucket Sound.

economic and environmental costs, as each alternative could serve to avoid adverse effects to the historic and other resources surrounding the proposed project area.

The DEIS also discounts the proposed “Smaller Project Alternative” as being unsuitable for projected generating capacity needs. However, left open for discussion is an alternative of spreading the wind turbines among the nine (or fewer) off-shore or other locations, whereby the total projected electrical generation capacity could still be produced. MMS also apparently discounted a number of scoping comments because they were considered only within the context of an array comprised of 130 turbines. DEIS at 7-3 to 7-4. Instead, MMS should examine and combine elements of the discounted comments to develop innovative alternatives that may avoid or minimize adverse effects to historic properties. Further, the DEIS does not explore the possibility of alternative geometric configurations that could avoid or reduce visual impacts. Each illustration and simulation included in the DEIS is based on a 130-turbine array that is formed in a rectilinear shape. Although the DEIS includes comments regarding alternative elliptical configurations used at European facilities, apparently no attempt has been made to explore that option here. *Id.*

Third, the DEIS includes comments regarding a phased-development alternative. Phasing has only been considered within the proposed project area and only examines one, two-stage phase-in of 50% of the total number of turbines. The sole option for the phased-development alternative appears to be at Horseshoe Shoals. With only one phased-development alternative examined, the DEIS suggests that additional phased-development alternatives may be unreasonable to explore further. Without the examination of alternative phased-developments, and without clarifying the purpose and need (i.e., 130 wind turbines versus equivalent electrical generating capacity), the DEIS suggests that the proposed project is simply a foreordained formality.²

Finally, we are concerned that the DEIS gives limited consideration to the “no build” alternative, which may be the most appropriate action in light of the impacts associated with the proposed alternatives and the current lack of available technology. As new technologies

² There is also a lack of discussion about the comprehensive energy cost analysis of the project as a whole, i.e., sustainability as a means of achieving some of New England’s energy goals. While the development of renewable energy resources has rightfully become a priority, it must be tempered with an examination of energy costs associated with construction, operation, and maintenance of the facility. Although technology makes the current proposed project feasible, the question remains whether the energy costs associated with this proposal make it a better alternative in light of other energy production methods. For example, what are the total emissions for construction, operations, maintenance, emergency operations, and decommissioning, as compared to those emitted from current coal or natural gas burning facilities?

develop, such as floating turbines or technology that would support turbines in increased water depths, e.g., the Beatrice Demonstrator Project or the proposed Blue H Project,³ MMS and wind energy proponents could propose and evaluate projects that would allow for a broader examination of alternatives, potentially leading to alternatives that are far less harmful to natural and cultural resources. Such an approach seems at least plausible as part of MMS's obligation to analyze a reasonable range of alternatives. At a minimum, MMS should provide a greater analysis of the no build alternative in order to adequately inform the public.

Recommendations: Although MMS is not required to identify and study every conceivable alternative that may be available, MMS must look at reasonable alternatives. The DEIS appears to ignore combinations of sites, alternative configurations, and differential electrical production at different locations. Given the potential impacts associated with the proposed alternative, we urge the MMS to fully explore a "reasonable range of alternatives," including the variations and alternative locations discussed above. Moreover, MMS should sufficiently explore the alternatives already identified within the DEIS. We especially urge MMS to explore alternative locations and configurations that could minimize harm to the historic setting and properties throughout Nantucket Sound.

2. The DEIS Provides Insufficient Baseline Documentation for Some Potentially Affected Historic Properties.

The establishment of a baseline of potentially affected historic properties is an essential requirement of the NEPA process. "[W]ithout establishing . . . baseline conditions . . . , there is no way to determine what effect [an action] will have on the environment, and consequently, no way to comply with NEPA." *Half Moon Bay Fisherman's Marketing Ass'n v. Carlucci*, 857 F.2d 505, 510 (9th Cir. 1988). There are several aspects of the baseline information described in the Affected Environment section of the DEIS that MMS should clarify.

a. *Identification of Archaeological Resources.*

The National Trust recognizes that MMS, expanding on the Army Corps of Engineers' DEIS, has identified additional historic and cultural resources potentially affected by the project. Whereas the Army Corps of Engineers' DEIS excluded historic properties that were merely eligible for the National Register, MMS has included eligible properties, as well as sites that are listed or eligible for the State Register of Historic Places. The DEIS also appears to adequately document baseline information for on-shore, terrestrial, subsurface evidence of prehistoric and historic archaeological resources within ROWs. However, no discussion exists

³ See <http://www.bluehgroup.com/>.

as to the presence or absence of historic resources or properties that could be negatively impacted by construction activities within the ROWs or the marine/terrestrial transition area.

The MMS should provide more information about off-shore archaeological resources. Archaeological information regarding the off-shore, marine environment is confusing; an adequate discussion as to the nature and extent of identified paleosols that required the location of the wind turbines to be adjusted along the eastern border is missing. This confusion is due in part to the statement that, "of the 87 core samples taken, three were for archaeological purposes." DEIS at 4-3. Fundamental archaeological survey methods, terrestrial and marine, require adequate core sampling to statistically represent the area surveyed. In this case, it is unclear as to whether all 87 core samples were for combined geological and archaeological investigations or, alternatively, whether only three core samples were taken for archaeological purposes. If only three cores were taken for archaeological purposes, it is unlikely that three core samples statistically represent the 24 square-mile project area. Further, it is unclear as to how paleosols were initially identified, or how and whether paleosol boundaries were determined. Without such information, the reader is unable to understand how archaeological determinations were made as to the existence, nature, and extent of the paleosols identified - determinations significant enough to require adjustment of wind turbine configuration.

Recommendations: We strongly suggest that MMS disclose additional archaeological information in a supplemental DEIS that the public can understand, including information with sufficient clarity and particularity as to the nature and extent of archaeological resources that may or may not be affected by the proposed project.

b. *Discussion of Visual Resources.*

Visual elements of historic resources and their setting can be significant in determining the integrity of the resources. Part of the criteria for inclusion on the National Register of Historic Places is the historic property's integrity of location and setting. 36 C.F.R. § 60.4. Historic properties are fundamental elements of many vistas and viewsheds within the setting of Nantucket Sound. Whether these vistas would be adversely affected by the project must be examined in the context of Section 106 consultation.

The DEIS acknowledges that "[v]isual alteration to the historic Nantucket Sound setting caused by the WTGs and related structures would affect both historic properties and recreational areas." DEIS at 5-197, 6-16. The DEIS also acknowledges that the project will be potentially visible to a number of historic properties, as well as multiple NHLs. *Id.* at B-342, Table 4.3.4-1. Unfortunately, the MMS has only focused on baseline perspectives that look

away from historic properties out onto the Sound, and not views *of* or *toward* historic properties, which may also be significant.⁴

Recommendations: We recommend that MMS examine wider perspectives that incorporate historic properties as part of current vistas that include the proposed project in its current location and configuration. This will ensure that MMS is able to fully comply with NEPA and its requirement to establish a baseline for measuring potential adverse affects.

3. The DEIS Does Not Take an Adequate “Hard Look” at Direct, Indirect, and Cumulative Effects to Historic Properties.

NEPA requires MMS to take a “hard look” at the direct, indirect, and cumulative effects of the proposed project on historic properties. 40 C.F.R. § 1508.25; *Dubois v. U.S. Dept. of Agriculture*, 102 F.3d 1273, 1284 (1st Cir. 1996). Direct effects are those that are caused by the action and occur at the same time and place. *Id.* § 1508.8(a). Indirect effects are foreseeable and caused by the action, but manifest themselves later in time or are farther removed in distance. *Id.* § 1508.8(b). Indirect effects may include, but are not limited to, growth-inducing effects, changes in land-use patterns, and related effects on natural systems. *Id.* Cumulative impacts result when the proposed project’s impacts are added to past, present, and reasonably foreseeable future actions. *Id.* § 1508.7. In this case, there are aspects of the DEIS that do not meet the environmental consequences analysis required by NEPA.

a. *Potential Flaws in the Analysis about Direct Effects.*

MMS examines the potential direct effects in the DEIS by purporting to utilize the criteria of adverse effects provided for in the Section 106 regulations, 36 C.F.R. § 800.5(a). DEIS at 5-198. Unfortunately, MMS has failed to follow the procedures required by the Section 106 regulations, and seems to misrepresent the extent to which the proposed alternative will directly impact the visual setting of historic properties within Nantucket Sound. The DEIS recognizes that many of the historic properties were originally designed with the viewshed of Nantucket Sound in mind, and that the Sound is therefore an “important component of the setting.” *Id.* However, the DEIS states that “being able to view the WTGs from these historic properties does not rise to the level of altering a qualifying characteristic of these historic

⁴ The DEIS does examine a visual baseline of vistas in their current state, as well as providing simulations of vistas showing wind turbines in their proposed location and configuration. Such information is provided to support the determination of the nature and extent to which visual impacts will occur from one’s vantage point looking *from* recreational areas and historic properties.

properties in most cases.”⁵ *Id.* Based on this premise, and with little or no input from consulting parties (in violation of the Section 106 regulations, 36 C.F.R. § 800.5(c)), the DEIS makes a sweeping conclusion that the proposed alternative will not have adverse visual effects on the vast majority of the identified historic properties, other than Wianno Club, Kennedy Compound NHL, and Cape Poge Lighthouse. See DEIS at 5-198 to 5-199. See also DEIS, Appendix B at B-342, B-347, Table 4.3.4-1 and Table 5.3.3-1.

The entire direct impacts analysis is flawed by MMS’s premise that outlines affected properties and the level of effect according to the flawed categorization discussed above. The conclusory determinations contained within Table 5.3.3-1 do not provide enough information to the reader to understand how the proposed effect determinations were made. *Id.* at B-397, Table 5.3.3-1. For example, MMS determined that the Cotuit Historic District will suffer no adverse visual impacts because “the wind park will be visible only from the rear of some properties” and would “entail only a minor impact to the setting of the overall historic district.” *Id.* This conclusory statement is simply not adequate to substantiate a no adverse effect determination for the visibility of the wind park from Cotuit Historic District. The DEIS provides a similar conclusion for the determination of no adverse effect on the Nantucket Historic District, where the conclusion is apparently based on a finding that views of the wind farm will be limited to the docks and wharfs along the western side of Nantucket Harbor, and the upper stories of historic buildings within the Village. *Id.* Finally, it is difficult to understand how direct impacts on visual aesthetics were determined considering that no apparent consultation with consulting parties has occurred. MMS appears to discount or minimize the scope and potential visual blight from the project on vistas and viewsheds within Nantucket Sound that are aesthetically and culturally significant.⁶ The Section 106 regulations specifically require that any determinations of “no adverse effect” be made only after consultation:

If the agency official proposes a finding of ***no adverse effect***, the agency official shall ***notify all consulting parties of the finding and provide them with the***

⁵ MMS’s subjective approach to visual impacts appears to contradict the Section 106 regulations, which define objective criteria to determine what constitutes an adverse effect, i.e., a “[c]hange of the character of the property’s use or of physical features within the property’s setting that contribute to its historic significance,” or the “[i]ntroduction of visual, atmospheric or audible elements that diminish the integrity of the property’s historic features.” 36 C.F.R. §§ 800.5(a)(2)(iv), (v) (emphasis added).

⁶ While we agree with the concession in the DEIS that “long-term impacts on scenic quality are expected as a result of the proposed action and the activities that are part of the cumulative scenario,” DEIS at 6-16, we strongly disagree with the MMS’s view that “[s]cenic quality is a highly subjective aesthetic characteristic.” *Id.* On the contrary, the Section 106 regulations have very specific criteria regarding adverse visual effects. 36 C.F.R. § 800.5(a)(2)(iv)-(v).

documentation specified in § 800.11(e). The SHPO/THPO shall have 30 days from receipt to review the finding.

36 C.F.R. § 800.5(c) (emphasis added). Notwithstanding this requirement, Table 5.3.3-1 includes a dozen determinations of “no adverse effect,” DEIS at B-397 to B-398, none of which was based on Section 106 consultation.

b. *Inadequate Discussion about Potential Indirect Effects.*

We are also concerned about the lack of discussion in the DEIS regarding indirect effects on historic properties. For example, even though the DEIS claims that navigation is possible within the proposed array of wind turbines, it is foreseeable that the array’s presence would lead to changes in fishing and passenger vessel traffic patterns or concentrations within Nantucket Sound. While indirect impacts may be limited, adequate consideration needs to be given to these impacts to ensure compliance with NEPA.

c. *Cumulative Effects.*

The DEIS identifies additional activities for the cumulative impact assessment, including offshore and onshore wind energy projects, offshore sand and gravel mining, tidal energy projects, marina development, and submarine cable and pipeline projects. MMS determined such activities would likely affect visual resources within the cumulative impact study areas and include other offshore and onshore wind energy projects, increased vessel traffic,⁷ and onshore development. *Id.* at 6-1, 6-15.

In both on-shore and offshore locations, the DEIS states that there is no other activity in the cumulative scenario with any more than a temporary presence in the project area. *Id.* at 6-16. However, there is no discussion as to how this determination was made. In any event, temporary activity can significantly contribute to cumulative effects. For example, although the presence of individual fishing or mining vessels may be temporary, their presence is ongoing and cumulative over time. Although the DEIS suggests that navigation is possible within the array, the mere presence of the wind turbines may discourage navigation within the array and concentrate vessel traffic in other areas of the Sound. With potentially reduced areas of operations, it is unclear how even a temporary impact would not be adverse to the offshore setting and vista, particularly since the proposed location and configuration would likely limit where future vessel activities could occur.

⁷ We assume that increased vessel traffic includes commissioning and decommissioning activities of wind energy projects, cable and pipeline projects, or sand and gravel mining.

Additionally, offshore submerged sand mining and pipeline activities are identified as potentially having cumulative impacts on cultural resources within the proposed project area. The DEIS states that, based on current archaeological information, future submarine sand mining and pipeline projects will likely be located to avoid or minimize adverse effects to submerged cultural resources. DEIS at 6-16. The fact that the presence of the wind turbines may further reduce available source areas for sand mining and pipeline routing appears to warrant further examination. Further, because there may be incomplete statistical data as to the nature and extent of interpreted paleosols (see above discussion), it is unclear how or where sand mining and pipeline activities could adjust their activities to avoid cumulative impacts upon submerged cultural or historic resources within Nantucket Sound. While the nature and extent of increased vessel activity and submarine mining and pipeline routing may be transitory in nature, MMS must examine in more detail the cumulative impacts from more intensive, localized activities resulting from the presence of the wind farm.

Recommendations: We strongly recommend that the MMS revise the DEIS to address the direct, indirect, and cumulative effects of the project more comprehensively. All determinations of No Adverse Effect in Table 5.3.3-1 are invalid, unless and until Section 106 consultation occurs pursuant to 36 C.F.R. § 800.5(c).

4. The DEIS Fails to Analyze Potential Mitigation Measures.

NEPA requires MMS to “[i]nclude [in the EIS] appropriate mitigation measures not already included in the proposed action or alternatives.” 40 C.F.R. § 1502.14. The analysis should include “a discussion of possible mitigation measures to avoid adverse environmental impacts . . . and must be reasonably complete in order to properly evaluate the severity of the adverse effects of a proposed project prior to making the final decision.” *Colorado Env'tl. Coalition v. Dombeck*, 185 F.3d 1162, 1173 (10th Cir. 1999) (internal citations omitted). The DEIS does not include all potential mitigation measures to ensure that impacts to historic properties will be reduced.

a. Mitigation Measures to Address Visual Impacts.

Some of MMS's proposed mitigation measures – such as reducing the lighting of the wind turbines, and requiring below-ground transmission within existing ROWs -- offer the ability to reduce the wind farm's visual impact upon historic properties. DEIS at 9-16; 5-197, 5-198. However, there is a lack of discussion about additional effects that could arise from the proposed mitigation measures.

Additionally, the DEIS states that the wind turbines would be an off-white color to reduce contrast with the sea and sky. However, the DEIS does not discuss how specific colors or shading could be employed to reduce visual impacts, nor did the visual simulations take into account various color schemes that could be employed to reduce visual impacts. Mitigation measures employing alternative coloring and shading schemes could have the potential to reduce adverse visual impacts to historic properties. MMS should further evaluate the effectiveness of variable color and shading schemes as a method to mitigate visual impacts to historic resources.

Lastly, as outlined in Section A above, we are concerned about how and whether future mitigation measures discussed in the Section 106 consultation process might be adequately integrated into the mitigation considered under NEPA. MMS states that it will direct a formal consultation process as required by the NHPA if it determines that there would be adverse visual impacts. The purpose of this consultation process is to help mitigate adverse impacts to historic properties. DEIS at 9-16. MMS's intended timing for meeting the obligations of Section 106 is unclear, especially given MMS's determination that at least one NHL (the Kennedy Compound), the Wianno Historic District, and the Poge Lighthouse will be adversely effected. DEIS, Appendix B at Table 5.3.3-1. As a means of informing the NEPA process, MMS should initiate the Section 106 consultation process immediately to resolve adverse effects.

b. *Mitigation Measures to Address Historical/Archaeological Resource Impacts.*

We are concerned about the lack of information in the DEIS to support MMS's position that all submerged, potentially sensitive, archaeological areas have been avoided. *Id.* at 9-16. MMS has proposed a 100' no-activity buffer zone surrounding the interpreted limits of three submerged potential historic resources on the seafloor within the project area. *Id.* Unfortunately, it is unclear how or whether these historic resources were identified after being located by side-scanning radar alone. It is also unclear as to whether vibracores have effectively determined the nature, extent, and delineation of prehistoric resources. As discussed above, additional but limited sampling could preclude the necessity of wind turbine relocation. More information on how paleosol delineations and potential historic sites were determined is needed to adequately understand whether, and what types of, avoidance and buffer zones would effectively mitigate all potential impacts.

Additionally, the inclusion of procedural requirements to guide unanticipated discoveries of cultural resources or human remains could also be an effective mitigation measure. This would not, however, obviate the value of active monitoring as an effective mitigation measure. Implementation of mitigation procedures after cultural resources or human remains

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are encountered may not be enough to guard against further damage or complete destruction of the unexpected remains. MMS must examine active monitoring of excavations, pile-driving activities, and terrestrial trenching within ROWs in addition to the creation of procedural requirements to ensure that construction activities can stop in time to adequately minimize adverse impacts to unexpected discoveries of sites. DEIS at 9-17.

Recommendations: We strongly suggest that MMS expand upon its discussion of mitigation measures in the DEIS. We encourage MMS to continue to investigate alternative mitigation measures and resultant impacts, and to seek and take into account the comments of Section 106 consulting parties on this issue. Lastly, MMS must examine the use of active monitoring during construction.

CONCLUSION

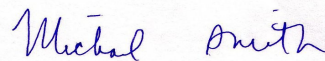
The National Trust recognizes and supports New England's attempts to supply its own energy, diversify its energy mix, and rely less on neighboring power supplies for its needs. However, we caution against a solution that would irreparably alter, damage, or destroy aspects of our national heritage without serious consideration of alternatives and/or modifications. In light of the significant historic properties potentially affected by the Cape Wind project, including the Kennedy Compound NHL, MMS's compliance with Sections 106 and 110(f) of the NHPA and the requirements of NEPA is critical. Prompt initiation of Section 106 consultation is needed, with the involvement of the National Trust and other parties, in order to allow consideration of a broad range of alternatives as required by law.

Again, the National Trust appreciates the opportunity to comment on the Cape Wind Project DEIS, and we look forward to working with MMS during the course of the Section 106 process. Please contact either one of us if you have any questions or comments.

Respectfully Submitted,



Roberta Lane
Program Officer & Regional Attorney
Northeast Office



Michael Smith
Assistant General Counsel
Washington DC Office

Cc: Melanie Stright, Archaeologist, Federal Preservation Officer,
Minerals Management Service

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Maureen Bornholdt, Program Manager, Renewable Energy/Alternate Use,
Minerals Management Service
Brona Simon, SHPO, Massachusetts Historical Commission
Bettina Washington, THPO, Wampanoag Tribe of Gay Head-Aquinnah
Don Klima, Advisory Council on Historic Preservation
John Eddins, Advisory Council on Historic Preservation
James Igoe, Executive Director, Preservation Massachusetts
Wendy Nicholas, Northeast Regional Director, NTHP
John Clark, Holland & Hart
Michael May, Nantucket Preservation Trust

Routing Slip for ODM-08-0145-- Appropriate Action --

Print Close

Control Information

Control #: ODM-08-0145	Control Type: AA	Control Date: 3/13/2008		
Rec/Int Date: 3/13/2008	Exec Sec #:	LM#:		
Resp Office: ADOMM	Surname:			
Corr. Date: 3/7/2008	Corr. Type: FAX	Corr. Source:		
<hr/>				
TO: Title/Organization: DIR., MMS	Last Name: LUTHI	First Name: RANDALL B.		
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THROUGH: Title/Organization:				
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FROM: Title/Organization: UNITED SOUTH EASTERN TRIBES, INC.	Last Name: COOK	First Name: MICHAEL		
<hr/>				
FOR SIGNATURE OF:	Title:	Organization:	Date Due:	Date Signed:
	N/A	ADOMM		
Subject:	OPPOSITION TO CAPE WINDS WIND FARM PROPOSAL HORSESHOE SHOAL, NANTUCKET SOUND MASSACHUSETTS			
Comments:				

Action Information



UNITED SOUTH AND EASTERN TRIBES, INC.
 711 Stewarts Ferry Pike • Suite 100 • Nashville, TN 37214
 Telephone: (615) 872-7900 • Fax: (615) 872-7417

March 7, 2008

Randall B. Luthi
 Director
 Minerals Management Service
 U.S. Department of the Interior
 1849 C Street, NW, Mail Stop 4230
 Washington, DC 20240

Via fax: 202-208-7242

Dear Mr. Luthi,

On behalf of United South and Eastern Tribes, Inc. (USET), the attached resolution is presented for your information and advocacy in support of our member tribes.

2008:030 Opposition to CapeWinds Wind Farm Proposal Horseshoe Shoal, Nantucket
 Sound Massachusetts

This resolution is one of many resolutions on various areas of Indian affairs policy approved by the USET Board of Directors at the recent 2007 USET Annual Meeting and is a public expression and stance on a specific issue affecting Indian Country.

USET is an intertribal organization comprised of 25 federally recognized Tribes from twelve states and we look forward to working with you to carry out the intent of this resolution. As appropriate, would you please provide acknowledgement of receipt of this resolution including actions that have been taken or planned on our behalf?

Please call the USET office at (615) 872-7900 if you have questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael Cook".

Michael Cook
 Executive Director

"Because there is strength in Unity"



UNITED SOUTH AND EASTERN TRIBES, INC.

USET Resolution No. 2008:030

OPPOSITION TO THE CAPE WINDS WIND FARM PROPOSAL HORSESHOE SHOAL, NANTUCKET SOUND MASSACHUSETTS

- WHEREAS,** United South and Eastern Tribes, Incorporated (USET) is an intertribal organization comprised of twenty-five (25) federally recognized Tribes; and
- WHEREAS,** the actions taken by the USET Board of Directors officially represent the intentions of each member Tribe, as the Board of Directors comprises delegates from the member Tribes' leadership; and
- WHEREAS,** the Wampanoag Tribe of Gay Head (Aquinnah) is a member Tribe of the Great Nation of Wampanoag People. They are known as "*The People of The First Light*". Their name defines who they are and differentiates them from all other Tribal Nations. Their name and it's definition are their Cultural and Spiritual identity, and the essence of who they are. Since time immemorial, the Wampanoag People have inhabited the area of the eastern most lands and waters, and have maintained their Traditional, Spiritual and Cultural connection to them; and
- WHEREAS,** as the People of the First Light; one of the most important aspects and fundamental components of their religious and cultural beliefs and practice is their ability to experience, embrace and give ceremony and prayers of thanksgiving to the first light. These ceremonies, spiritual and religious practices are dependant upon maintaining the ability to view the first light; the eastern horizon vista and view-shed without obstructions. Additionally, there are other impacts such as the celestial and solstice ceremonies, which will also be adversely impacted; and
- WHEREAS,** the right to practice their religious ceremony in the traditional manner will be forever denied by a proposed experimental wind farm consisting of 130+/- windmill turbines, with propeller blades reaching approximately 440' above the surface of the water, on about 25 square miles (about the size of Manhattan); slated to be located in the shallow waters of Horseshoe Shoal in Nantucket Sound, in the middle of the shores of Cape Cod, Martha's Vineyard and Nantucket, MA; and,
- WHEREAS,** the Wampanoag Tribe of Gay Head (Aquinnah), a Federally Recognized Tribal Nation and a USET member Tribe, most strenuously objects to this proposal and opposes the placement of this wind farm in their Traditional Wampanoag Waters of their Religious and Ceremonial Sanctuary; therefore, be it
- RESOLVED** the USET Board of Directors supports the Wampanoag Tribe of Gay Head (Aquinnah) and their position; to oppose the Cape Winds wind farm to be located in Horseshoe Shoal in Nantucket Sound, due to its devastating and destructive impact to the Traditional Spiritual, Religious and Cultural practices and freedoms of all Wampanoag People as well as the adverse effects this experimental project will have on the surrounding environment in its entirety and totality; and, be it further

"Because there is strength in Unity"


USET Resolution No.2008:030

RESOLVED the USET Board of Directors calls upon the Department of the Interior/ Minerals Management Service to respect the Traditional, Cultural, Spiritual and Religious beliefs of the Wampanoag People and preserve the spiritual integrity and sanctity of the Eastern Horizon, Vista and Horizon View-Shed; and to deny the permitting of such a devastatingly and destructive experiment which will adversely effect and destroy the essence of the tranquility, sanctity and spirituality of this Sacred Place for all time; and, be it further


RESOLVED that in order for other Tribes, and other Federal, State and Local Agencies as well as the General Public to fully evaluate and comment on the 2000 page Draft Environmental Impact Statement, the USET Board of Directors is also calling upon the Department of the Interior and the Minerals Management Service to extend the comment period an additional ninety (90) days in order to provide a more adequate and reasonable timeframe in which the Draft Environmental Impact Statement can be read, researched and knowledgeable commented upon.

CERTIFICATION

This resolution was duly passed at the USET Impact Week Meeting, at which a quorum was present, in Arlington, VA, on Thursday, February 14, 2008.



Brian Patterson, President
United South and Eastern Tribes, Inc.



Cheryl Downing, Secretary
United South and Eastern Tribes, Inc.

Appendix E:

Contact Information for Consulting Parties to the Section 106 Process for the Cape Wind Energy Project

Cape Wind Energy Project
Section 106 Consulting Parties Contact List
(Updated as of November 21, 2008)

John T. Eddins, Ph.D.
Historic Preservation
Specialist/Archaeologist
Advisory Council on Historic Preservation
1100 Pennsylvania Avenue, NW, Suite 809
Washington, D.C. 20004
Ph: 202-606-8553
Fax: 202-606-0321
jeddins@achp.gov

Brona Simon
State Historic Preservation Officer
Massachusetts Historical Commission
The MA Archives Building
220 Morrissey Boulevard
Boston, MA 02125
Ph: 617-727-8470
Brona.Simon@state.ma.us

Bettina Washington
Tribal Historic Preservation Officer
Wampanoag Tribe of Gay Head
(Aquinnah)
20 Black Brook Road
Aquinnah, MA 02535-9701
Ph: 508-645-9265
bettina@wampanoagtribe.net

George (Chuckie) Green
Tribal Historic Preservation Officer
Mashpee Wampanoag Tribe
P.O. Box 1048
Mashpee, MA 02649
Ph: 508-477-0208
CGreen1@mwtribe.com

Doug Harris
Senior Deputy Tribal Historic Preservation
Officer
Narragansett Indian Tribe
Narragansett Indian Longhouse
PO Box 700
Wyoming, RI 02898
Ph: 401-539-1190
dhnithpo@gmail.com

Bruce Bozsum, Chairman
Mohegan Indian Tribe
5 Crow Hill Road
Uncasville, CT 06382
Ph: 860-862-6100
Fax: 860-862-6115
ctodd@moheganmail.com

Michael J. Thomas, Chairman
Mashantucket Pequot Tribe
P.O. Box 3060
Mashantucket, CT 06338
Ph: 860-396-6554
Fax: 860-396-6288
lcicarone@mptn.org

David Saunders
Bureau of Indian Affairs
Eastern Regional Archaeologist
545 Marriott Dr., Suite 700
Nashville, TN 37214
Ph: 615 564 6840
Fax: 615 564 6571
david.saunders@bia.gov

Bill Bolger
National Park Service
Northeast Region
200 Chestnut Street, Room 370
Philadelphia, PA 19106
Ph: 215-597-1649
Bill_Bolger@nps.gov

Karen Adams
U.S. Army Corps of Engineers
New England District
696 Virginia Road
Concord, Massachusetts 01742-2751
Ph: 978-318-8828
Karen.K.Adams@nae02.usace.army.mil

Roberta Lane
Program Officer & Regional Attorney
**Northeast Office, National Trust for
Historic Preservation**
7 Faneuil Hall Marketplace, 4th Floor.
Boston, MA 02109
Ph: 617-523-0885
Fax: 617-523-1199
roberta_lane@nthp.org

Elizabeth Merritt
National Trust for Historic Preservation
785 Massachusetts Ave. NW
Washington DC 20036
Elizabeth_Merritt@nthp.org

Craig Olmsted
Project Manager
Cape Wind Associates, LLC.
75 Arlington Street
Boston, Massachusetts 02116
colmsted@capewind.org

Sarah Korjeff
Cape Cod Commission
3225 Main St. PO BOX 226
Barnstable, MA 02630-0226
Ph: 508-362-3828
Fax: 508-362-3136
skorjeff@capecodcommission.org

Jim Powell, Commissioner
Martha's Vineyard Commission
P.O. Box 1507
West Tisbury, MA 02575
Ph: 800-693-9960
OldMayhewFarm@gmail.com

Susan Nickerson
Executive Director/Nantucket Soundkeeper
Alliance to Protect Nantucket Sound
4 Barnstable Rd.
Hyannis, MA 02601
Ph: 508-775-9767
Fax: 508-775-9725
suenick1@saveoursound.org

Joann Buntich, Director, Growth
Management
Town of Barnstable
Town Hall
367 Main Street
Hyannis, MA 02601
Ph: 508-862-4678
joann.buntich@town.barnstable.ma.us

Carey Murphy, Selectman
Town of Falmouth
Town Hall
59 Town Hall Square
Falmouth, MA 02540
Ph: 508-495-7320
carey.murphy@almouthmass.us

John J. Cahalane, Vice Chair/Selectman
Town of Mashpee
Town Hall
16 Great Neck North
Mashpee, MA 02649
Ph: 508-539-1400
jcahalane@ci.mashpee.ma.us

E. Suzanne McAuliffe, Chair/Selectman

Town of Yarmouth

Town Hall
1146 Route 28
S. Yarmouth, MA 02664
Ph: 508-362-5250
smcauliffe@yarmouth.ma.us

Ronald Bergstrom, Selectman

Town of Chatham

Town Hall
549 Main Street
Chatham, MA 02633
Ph: 508-945-5100
ronbergstrom@comcast.net

James Merriam, Town Administrator

Town of Harwich

Town Hall
732 Main Street
Harwich, MA 02645
Ph: 508-430-7513
jmerriam@town.harwich.ma.us

Robert Canevazzi, Town Administrator

Town of Dennis

Town Hall
P.O. Box 2060
South Dennis, MA 02660
Ph: 508-760-6149
rcanevazzi@town.dennis.ma.us

Pam Dolby, Town Administrator

Town of Edgartown

Town Hall
70 Main Street
Edgartown, MA 02539
Ph: 508-627-6180
pdolby@edgartown-ma.us

Roger Wey, Selectman

Town of Oak Bluffs

P.O. Box 1327
21 Wamsutta Avenue
Oak Bluffs, MA 02557
Ph: 508-693-7887
rwey@ci.oak-bluffs.ma.us

John R. Bugbee, Town Administrator

Town of Tisbury

Town Hall
P.O. Box 1239
Vineyard Haven, MA 02568
Ph: 508-696-4203
jbugbee@ci.tisbury.ma.us

Mark Voigt

Nantucket Historic Commission

Town Building
16 Broad Street, 1st Floor
Nantucket, MA 02554
Ph: 508-228-7268
lgibson@nantucket-ma.gov

Interested Party

Neil Good
56 Scituate Road
Mashpee, MA 02649

Appendix F:

Technical Memoranda Resulting from the Section 106 Process for the Cape Wind Energy Project



MEMORANDUM

TO: Karen Kirk Adams, USACE
DATE: 5-28-03

FROM: Terry Orr, ESS Group, Inc.

SUBJECT: Cape Wind Project
PROJECT NO.: E159-4.9
Scope of Proposed Marine Archaeological
Reconnaissance Survey

COPY TO: Craig Olmsted, CWA
David Robinson and Deborah Cox, PAL

A marine archaeologist at Public Archaeology Laboratory, Inc. (PAL) has completed review of the preliminary geophysical and geological (46 vibracores and 3 borings) information collected in 2001 within the proposed Wind Park site on Horseshoe Shoal and nearshore Project Areas, as part of a marine archaeological sensitivity assessment. PAL concluded that the majority of the offshore study area has a low probability for containing submerged prehistoric archaeological resources. No evidence of shipwrecks was apparent in the preliminary geophysical or geotechnical data recorded in 2001, although the track line interval employed was not sufficiently spaced to rule out all potential targets. Since 2001, the turbine array has been reduced from 170 proposed turbines to 130, and the layout has been revised. PAL has recommended the following geophysical and geological scope of work for a marine archaeological reconnaissance survey within the revised direct Area of Potential Effect (APE) of the Wind Park and the 115 kV transmission line into the Yarmouth landfall on Lewis Bay, to identify potentially significant submerged cultural resources. The survey was designed to encompass the expected APEs of both construction and operational activities. The duration of the geophysical survey is estimated for 3.5 weeks, and is planned to commence in June 2003. The geological program will be conducted following review of the geophysical data. Your timely review and comment on the following geophysical program scope is appreciated.

At the location of each Wind Turbine Generator (WTG), intersecting geophysical tracklines will be run using the Full Instrumentation Suite (FIS), on centerlines shown on the attached figure. The FIS will include high resolution side-scan sonar, marine magnetometer, single-beam digital depth sounder, Chirp type subbottom profiling for the shallow subsurface and Boomer type subbottom profiling equipment for the deep subsurface. Each North-South centerline will be offset 50 feet on either side with a trackline using the Reduced Instrumentation Suite (RIS), resulting in 3 North-South survey tracklines. The RIS will consist of the FIS instrumentation, minus the Boomer type subbottom profiler. Use of the Chirp only will assist in meeting the objective of identifying the presence or absence of any potentially significant submerged cultural resources, which are relatively shallow. The deep Boomer is needed over the WTG locations only for geotechnical purposes. Intersecting tracklines using the RIS suite are shown on the attached figure.

The ESP Survey Area, where a large number of inner array cables converge, will be surveyed using a gridded approach to achieve 100 per cent coverage at 50-foot trackline spacing. Most lines will be RIS; FIS will be used over the ESP structure itself. Inner array cable routes and the 115 kV interconnection cable route to Yarmouth will be investigated using RIS

Addressee

 www.essgroup.com ate

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instrumentation in two survey lines, offset 25 feet and parallel to the route centerline. The 115 kV route has been re-routed slightly to the west of the previously proposed route, to avoid several reported shipwrecks on Bishops and Clerks Shoals.

The geophysical survey firm (Ocean Survey Inc.) and the marine archaeologist (PAL) will review the side-scan sonar and magnetometer anomalies to identify targets that may be potential cultural resources.

Also as recommended by PAL, additional vibratory coring will be conducted in a limited area to maximum depths of 15 feet below sea bottom. The purpose of the additional coring is to determine the origin (i.e. terrestrial or marine) and delimit the extent of an organic deposit identified in three previously-collected vibracores at depths between 8 to 10 feet below seabottom in the easternmost portion of the Wind Park Project Area. Up to 8 vibracores are planned, and will be inspected and logged to determine whether the organic zone could be a potential paleosol, or inundated former land surface, capable of supporting past human activities.

A marine reconnaissance survey report will be prepared by PAL, which will include background information, cultural contexts and findings of the geophysical and geological survey program. The report will be submitted to USACE, MHC and MBUAR for review.

Due to weather related restrictions, we would like to commence this field work as soon as possible, and we look forward to your comments.



PRESERVATION PLANNING
ARCHAEOLOGY
ARCHITECTURAL HISTORY
EDUCATION

November 24, 2008

Dr. Rodney E. Cluck
Chief, Environmental Sciences Branch
U.S. Department of the Interior
Minerals Management Service
381 Elden Street
Herndon, Virginia 20170

Re: Cape Wind Energy Project
Historic Properties Effect Evaluation

Dear Dr. Cluck:

In a letter dated September 30, 2008, the Town of Yarmouth requested that the Minerals Management Service consider the Cape Wind Energy Project's potential effects on properties in the Town that had not been part of PAL's previous analyses for the Army Corps of Engineers.

Eight properties, including five within the South Yarmouth/Bass River Historic District which is listed in the National Register of Historic Places, were identified by the Town as having a possible view of the wind park. The three individual properties are located at 92 Berry Avenue; 50 South Sea Avenue; and 185 South Sea Avenue. The five properties within the Historic District are at 21-4 Pleasant Street; 24 Frothingham Way; off-Pleasant Street; 170 Pleasant Street; and 149 River Street.

The property locations were visited on Monday, November 24, 2008. PAL is of the opinion that the wind farm will not be visible from any of the properties, including from any location within the Historic District. We are recommending that there will be no effect on these properties.

If you have any questions or need further information please do not hesitate to call me at your convenience.

Sincerely,

Deborah C. Cox, RPA
President

/bb

cc: M. Stright, MMS
C. Olmsted, Cape Wind Associates

Public
Archaeology
Laboratory

210 Lonsdale Avenue
Pawtucket, RI 02860
TEL 401.728.8780
FAX 401.728.8784



Technical Memorandum

Cape Wind Energy Project

Nantucket Sound - Cape Cod, Martha's Vineyard, and
Nantucket, MA

National Register of Historic Places Eligibility Evaluation and Visual Impact Assessment of Additional Properties

November 14, 2008

Submitted to:
Cape Wind LLC
75 Arlington Street
Boston, MA 02116

The Minerals Management Service (MMS) has issued a draft Environmental Impact Statement (DEIS) for the Cape Wind Energy Project (the Project) that is being proposed by Cape Wind LLC (Cape Wind). During a 30-day public comment period established by MMS in Fall 2008 as part of the Section 106 process, consulting parties identified 22 properties that may be eligible for listing in the National Register of Historic Places (National Register) and may be affected by the Project. These properties were additional to those previously evaluated during earlier studies. The specific type of effect under assessment is potential views from onshore historic architectural properties of the visible components of some or all of the Project's proposed 130 offshore wind turbines. The wind park will be located at least five miles offshore of the nearest landform. This Technical Memorandum presents the results of PAL's National Register eligibility evaluation and visual impact assessment, completed at the direction of MMS and Cape Wind.

The 22 properties consisted of 1 historic district recently listed in the National Register, 2 historic districts and 1 individual resource previously evaluated as eligible by the Massachusetts Historical Commission (MHC), and 18 properties that have not been previously evaluated by the MHC. Properties are located in the communities of Falmouth, Yarmouth, Harwich, Chatham, Oak Bluffs, and Tisbury, Massachusetts. The 22 properties are listed in Table 1.

PAL historic preservation staff collected and reviewed existing MHC inventory forms for the identified properties. Staff then conducted site visits to view the existing conditions of each of the individual properties and districts, evaluate National Register eligibility based on existing inventory information and exterior visual factors, and assess the visibility of the proposed wind park area in Nantucket Sound. All field work was conducted from public ways with the exception of the Corey House on Great Island, in Yarmouth (PAL staff was accompanied to that location). Digital photographs were taken of the properties and the views towards the wind park. The results are presented in the attached Table 1, Properties



Identified by Consulting Parties for National Register Evaluation and Visual Impact Assessment, Cape Wind Energy Project.

A total of 13 out of the 18 previously unevaluated properties were recommended as National Register eligible as a result of this evaluation. One additional property may be eligible, but was not visible from a public way and therefore was not viewed (the Jonathan Higgins House in Chatham). Nine of the 13 properties recommended as eligible were found to have open, or in one case limited, views of Nantucket Sound in the direction of the proposed wind park. Nantucket Sound was found to be an element of the setting at each of the nine properties. Four properties in Yarmouth were evaluated as not eligible, due to either extensive alterations or demolition.

Views of Nantucket Sound in the direction of the proposed wind park were classified as 1) open, 2) none to very limited, and 3) none. The visual impact assessment found that 12 of the 22 properties identified by the consulting parties as part of this evaluation have a view to the wind park location and therefore an adverse effect. The 12 properties include one National Register-listed historic district (West Chop in Tisbury), two historic districts previously evaluated as eligible by MHC (Falmouth Heights and Ocean Grove historic districts in Falmouth and Harwich, respectively), and nine properties recommended as eligible as part of this evaluation. The single property previously determined National Register eligible (Seaman's Reading Room in Tisbury) has no view and thus no effect. Eight properties recommended as National Register eligible have open, direct views to the wind park location and will be adversely affected. One property recommended as eligible has a very limited view to the wind park location and will not be adversely affected. Four properties recommended as eligible have no view and will not be affected by views of the proposed wind park.

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