Background

Under the Energy Policy Act of 2005, the Minerals Management Service of the Department of the Interior (MMS) must determine whether to approve a permit application from Cape Wind Associates, LLC (CWA) to construct a wind energy project on Horseshoe Shoal in Nantucket Sound. The Cape Wind project (Project) would include the construction, operation, and decommissioning of 130 wind turbine generators (WTG) in a grid pattern within a 24-square-mile area on Horseshoe Shoal. The Project also includes a 66.5-mile buried submarine transmission cable system, a centrally located electric service platform (ESP), and two 115-kilovolt lines (totaling 25 miles) connecting to the mainland power grid.

MMS consulted with the Massachusetts Historical Commission/Massachusetts State Historic Preservation Officer (SHPO), the Wampanoag Tribe of Gay Head (Aquinnah), the Mashpee Wampanoag Tribe (Mashpee), the Advisory Council on Historic Preservation (ACHP), and interested organizations and individuals about the potential effects of the Project on historic properties. At issue are adverse effects to 28 historic districts and individual historic structures and six properties of religious and cultural significance to Indian tribes, including Nantucket Sound. Two of the historic districts are National Historic Landmarks (NHLs).

The ACHP entered Section 106 consultation in April 2005, when the Corps of Engineers (Corps) was the lead agency because of its review of a Section 404 Clean Water Act permit for the undertaking. MMS became the lead agency after assuming responsibility for alternative energy projects on the Outer Continental Shelf (OCS) as the Energy Policy Act of 2005 required. MMS formally started its Section 106 consultation process in June 2008.

On March 1, 2010, the Secretary of the Interior terminated consultation and requested the comments of the ACHP. In accordance with Section 800.7 of the ACHP regulations, the ACHP chairman appointed a panel of five ACHP members to consider the case. The panelists received documents compiled from the Section 106 review. On March 22, 2010, the panelists conducted a site visit and public meeting and received testimony from public officials, organizations, and individuals, including MMS, the Massachusetts SHPO, CWA, and representatives of the Aquinnah and Mashpee. Afterwards, the panel prepared these comments for consideration by the Secretary in reaching his final decision on the undertaking.

Findings

The historic properties affected by the Project are significant, extensive, and closely interrelated. The Project will adversely affect 34 historic properties including 16 historic districts and 12 individually
significant historic properties on Cape Cod, Martha’s Vineyard, and Nantucket Island, and six properties of religious and cultural significance to tribes, including Nantucket Sound itself. These districts and standing structures reflect the broad array of properties that represent the rich and unique architectural, social, and cultural history of Cape Cod and the Islands.

Two of the historic districts within the area of potential effect (APE) are NHLs: the Nantucket Historic District and the Kennedy Compound. The Nantucket Historic District is nationally significant both for its association with the American whaling industry and for its remarkable concentration of well-preserved, whaling-industry related architecture. The island’s principal historic village, Nantucket Town, remains one of the finest surviving architectural and environmental examples of an early 19th century seaport town in New England. The Nantucket Historic District includes the entire island of Nantucket (30,000 acres and some 75 miles of coastline). The Kennedy Compound, a six-acre family enclave in Hyannis Port, which fronts the northern side of Nantucket Sound, is nationally significant for its association with the Kennedy family and includes homes that Joseph P. Kennedy, John F. Kennedy, and Robert F. Kennedy once owned.

Five properties having traditional religious and cultural importance to the tribes are eligible for inclusion in the National Register and are located within the APE. Three of the properties are located on Cape Cod and are associated with the Mashpee. Two are located on Martha’s Vineyard and are associated with the Aquinnah. At the request of the tribes, details about the specific nature or location of these sites have been withheld from the public record to preserve confidentiality.

The Keeper of the National Register determined that Nantucket Sound is eligible for inclusion in the National Register as a traditional cultural property (TCP), as a historic and archeological property that has yielded and has the potential to yield important information about the Native American exploration and settlement of Cape Cod and the Islands, and as an integral, contributing feature of a larger, culturally significant landscape treasured by the Wampanoag tribes and inseparably associated with their history and traditional cultural practices and beliefs. The Keeper acknowledged the importance of Nantucket Sound seabed as former aboriginal lands of the Wampanoags and the potential location for intact archaeological sites.

These historic districts and structures on the Cape and the Islands surrounding Nantucket Sound create a unique context, setting, and identity focused on the Sound and its subsistence, commercial fishing, shipping, and recreational uses. Similarly, according to the Keeper’s determination, the TCPs, including and focusing on Nantucket Sound itself, form part of a larger, culturally significant landscape that should include other eligible archaeological, historic, and traditional cultural sites and properties in proximity of the Sound. Because of its setting and unique identity, the Nantucket Sound has long been the focus of cultural identity and practices of the tribes as well as heritage and recreational tourism for the general population. As evidenced by the Keeper’s determination, the written record, and the public testimony, Nantucket Sound has been for thousands of years and remains still an area of prime national, regional, and local importance because of its substantial economic, recreational, social, cultural, and traditional cultural benefits and attributes.

**Adverse effects on historic properties will be direct and indirect, cannot be avoided, and cannot be satisfactorily mitigated.** The Project will adversely affect the viewsheds of all 28 above-ground historic properties (districts or individual properties) and six TCPs of the Aquinnah and the Mashpee. Construction of the Project will have an additional direct adverse effect on the Nantucket Sound seabed.

The Project will introduce visual elements that are out of character with the properties and will change the character of the historic properties’ setting that inextricably contributes to their historic significance. These adverse effects would result from the visual intrusions of a high concentration of large-scale
modern WTGs within the historic viewsheds. In its comments on the effects of the Project on the two NHLs, the National Park Service (NPS) concluded that the adverse effect of the undertaking would be indirect, because the adverse effects are visual only, limited in overall scope, and do not diminish the core significance of either NHL. According to the NPS, in both cases the adverse effects stem from the partial obstruction of long-distance, open-to-the-horizon views historically associated with the resources.

The altered view of the eastern horizon across Nantucket Sound that would result from the Project will have a significant adverse effect to the Wampanoag tribes’ traditional cultural practices as carried out in relation to six eligible TCPs. The Wampanoag tribes have stated that an uninterrupted view across Nantucket Sound of the rising eastern sun for religious purposes is a defining feature of Wampanoag tribal culture and history.

The Project would result in physical destruction, damage, and alteration of part of the seabed of Nantucket Sound. The direct physical effects of drilling and construction activities have the potential to disturb and destroy archaeological resources and would diminish the integrity of the elements of feeling and association. Additionally, the Wampanoag consider the entirety of Nantucket Sound to be ancestral lands, based on traditions that hold that the Wampanoag people have inhabited the land from the western shore of Narragansett Bay to the Neponset estuaries since time immemorial, including the submerged lands now called Horseshoe Shoal. In the view of the tribes, the construction of the Project would constitute a direct physical intrusion therefore adversely affecting the integrity of Nantucket Sound. Even though the Project would be decommissioned, some of these adverse effects would be permanent, unavoidable, and not subject to satisfactory mitigation.

Nantucket Sound has been found eligible for listing in the National Register not only as a TCP but as a historic and archaeological property. Nantucket Sound is associated with, has yielded, and has the potential to yield important information about the Native American exploration and settlement of Cape Cod and the Islands. There is the potential for undiscovered submerged archaeological sites and archaeobotanical materials. Construction of the Project and interconnective cabling presents a high potential for encountering and damaging or destroying potentially significant historic or archaeological resources. Given the limited intensity of the archaeological reconnaissance survey and the nature of construction in a marine setting, monitoring and mitigation proposals will not adequately address the potential for harm.

CWA has proposed steps to minimize and mitigate potential adverse effects, but they are insufficient given the number and importance of the resources at issue and the nature and scope of the Project’s effects on them. During the consultation, CWA proposed a number of modifications to the Project to minimize the adverse visual effects, including a reduction of the number of WTGs, revision of the footprint of the WTG array, reduced lighting, and painting the turbines an off-white color to reduce the contrast with sea and sky. Nonetheless, the Project remains a large-scale industrial development that would introduce a significant and discordant element into the general setting of the affected historic properties, radically changing features of the setting that are vital to defining the character of the places. There is also a fundamental incompatibility between the use of Nantucket Sound for this industrial facility and the traditional use of the area for cultural practices and the marine-focused subsistence, commercial fishing, shipping, and recreational purposes that have contributed to the core identity of the unique setting in historic times.

In sum, Nantucket Sound and the surrounding land areas are a rich and unique tapestry of American prehistory, history, and culture. With Wampanoag ancestral habitation and the fabric of historic communities and landmarks surrounding Nantucket Sound, these properties mark the evolution of the area from Native American and then English settlement through the recent past, creating a collective historic resource that is greater than the sum of its parts. The continued vitality of the Wampanoags’
traditional religious and cultural practices and their integral relation to Nantucket Sound add a rare additional dimension of significance to this special place.

The Project’s effects on this broad range of properties should not be viewed in isolation or labeled only as indirect or direct. Rather, because of their concentration and interrelation, they must also be considered together. In their totality, these effects are significant, adverse, and cannot be adequately mitigated.

**MMS has stewardship responsibilities for historic properties on the OCS.** As the federal management agency for the OCS, MMS has responsibilities to foster the long-term preservation and use of historic properties under its control, pursuant to the National Historic Preservation Act (NHPA) and Executive Order 13287. Section 2 of the NHPA declares it to be the policy of the federal government to “administer federally owned, administered, or controlled prehistoric and historic resources in a spirit of stewardship for the inspiration and benefit of present and future generations.” The Executive Order especially emphasizes cooperation with local communities to increase opportunities for public benefit from, and access to, federally owned historic properties, and promotion of preservation through heritage tourism. Section 5(a) of the Executive Order recommends that agencies assist states, tribes, and local communities in promoting the use of historic properties for heritage tourism and related economic development in a manner that contributes to the long-term preservation and productive use of those properties. The OCS portion of Nantucket Sound, which includes the area of the Project, is federal property. MMS, given its stewardship responsibilities for this property, must exercise great care when considering any development at Horseshoe Shoal. Approving the development of a large scale industrial facility as proposed is inconsistent with the policies and admonitions of the NHPA and Executive Order 13287.

**Section 106 was initiated late in the planning process.** A fundamental impediment to the effective exploration of solutions that could allow CWA’s project goals to be met in harmony with the historic values of the area was the late engagement of the Section 106 review process. The Section 106 review was not initiated in earnest during the scoping process for National Environmental Policy Act (NEPA) compliance, prior to the investment of time, money, and extensive planning for the preferred location. Consequently, when the Section 106 process advanced, it was primarily to develop mitigation measures for the Project’s effects rather than to consider alternatives to the Project site that might avoid adverse effects to historic properties.

In its initial investigation of historic properties potentially affected by the Project, the Corps limited its review only to “designated” historic properties—those already listed or determined eligible for listing in the National Register. As a result, the Corps gave no serious consideration to the possible existence of TCPs that might be affected. When it took over lead agency status for the purposes of Section 106, MMS, following the Corps’ focus on designated historic properties, was slow to respond to the assertions of the tribes and other consulting parties that there were other historic properties within the APE that warranted consideration. MMS did not resolve the eligibility status of potential historic properties such as Nantucket Sound until late in the Section 106 process. Commencing in early 2009, the Secretary’s unprecedented attention to the Project and the review process resulted in these important issues being properly resolved, but at a time when CWA’s commitment to the preferred location frustrated serious consideration of avoidance alternatives.

**Tribal consultation under Section 106 as conducted by the Corps and by MMS was tentative, inconsistent, and late.** Earnest tribal consultation that made possible an open dialogue between the tribes and the federal agencies started late in the review process, after the applicant was committed to the preferred location. Early contacts with the tribes did not provide an adequate and confidential opportunity for the tribes to communicate concerns about historic properties. In spite of that, the record shows that the tribes clearly identified their concerns about the effects of the undertaking on TCPs and about the importance of Nantucket Sound as a TCP and the location of former aboriginal lands in 2004. In 2009,
MMS took steps to remedy deficiencies in the tribal consultation process by participating in site visits and consultation meetings on Cape Cod and the Islands.

The marine archaeological survey work to determine the potential for the presence of intact archaeological sites is limited and the feasibility of any post-review discovery protocols is uncertain. The Marine Archaeological Sensitivity Assessment reported in 2003 indicates that much of Nantucket Sound would have been exposed and available for human habitation from about 12,500 to 7,000 B.P. As sea levels rose, the Sound would have become inundated, but with smaller areas remaining above sea level until as late as about 1,000 B.P. During this period, portions of the area that is now Nantucket Sound would have continued to be dry land and available to aboriginal populations for habitation and subsistence activities.

Although the footprint of the WTG array has been altered to avoid areas where the potential for undisturbed deposits remains, the coverage and spacing of the sub-bottom profiler and coring data and the depth and adequacy of coring is insufficient for locating archaeological sites and shipwrecks for mitigation purposes. While the survey effort appears to have been sufficient to assess the potential for archaeological resources in the Section 106 process, it does not provide adequate data to enable modifications to the Project, were it to be approved, to avoid adverse effects or to inform appropriate mitigation.

PROJECT-SPECIFIC RECOMMENDATIONS

The ACHP recommends that the Secretary not approve the Project. The indirect and direct effects of the Project on the collection of historic properties would be pervasive, destructive, and, in the instance of seabed construction, permanent. By their nature and scope, the effects cannot be adequately mitigated at the proposed site.

The development of renewable energy projects is not inherently incompatible with protection of historic resources, so long as full consideration is given to historic properties early in the identification of potential locations. The ACHP believes that wind energy production on the OCS in the vicinity of the current project area could proceed in a manner that would be consistent with protecting Nantucket Sound and the surrounding historic properties. It appears that the selection of nearby alternatives might result in far fewer adverse effects to historic properties, and holds the possibility that those effects could be acceptably minimized or mitigated.

GENERAL RECOMMENDATIONS

The development of alternative energy resources is an important national policy goal that historic preservation concerns need not impede. The nature of the potential effects to historic properties, though, warrants further consideration by the Department of the Interior and other federal agencies involved in energy development to minimize circumstances for conflict.

The ACHP’s review of this Project has highlighted the need for broader coordination among federal agencies, states, Indian tribes, industry, consulting parties, and the public to address these challenges.

I. Tribal consultation: The Department should review and update agency protocols for tribal consultation regarding energy projects and other undertakings.

   a. The Secretary should ensure that all Department agencies engage in effective tribal consultation early in the project planning and review process to enable full
understanding and appreciation of tribal views on energy development and its potential to affect properties of religious and cultural significance to them. In light of the President’s memorandum of November 5, 2009, DOI agencies should ensure that adequate provisions are incorporated in their Tribal Consultation Plans to achieve this goal. It is critical that the tribal consultation requirements of the Section 106 process be properly integrated into those plans and in a manner that ensures tribal views on historic resource impacts are addressed in a timely fashion in broader environmental reviews.

b. These Tribal Consultation Plans should establish procedures that ensure consultation meetings with Indian tribes are conducted in settings and conditions that provide for the consideration of confidential information about properties of religious and cultural significance and associated beliefs and practices.

c. In accordance with Section 36 CFR 800.4(c)(1) of the Section 106 regulations, agencies of the Department should take further steps to acknowledge the “special expertise” of Indian tribes in “assessing the eligibility of historic properties that may possess religious and cultural significance to them.” Due deference should be given to the views of an Indian tribe regarding the impact on historic properties that are integral to the cultural and religious identity of the tribe before deciding to approve an undertaking that will have an adverse effect on such sites.

II. Site selection process and analysis of alternatives: MMS should improve the planning process for the identification of preferred locations for energy development on the OCS. Consideration of the presence of historic properties and the likelihood and nature of impacts from potential projects should be factored into decisions regarding the availability of federal lands for energy development.

a. MMS should pursue strategies for the early identification of historic properties on the OCS to meet its responsibilities under Section 106 and to integrate Section 106 compliance effectively and in a timely manner with broader environmental reviews under NEPA.

b. MMS should work with and provide guidance to applicants to ensure that the Section 106 process is initiated early enough in the project planning and review process so it can realistically affect consideration of alternatives and selection of a preferred alternative project site.

c. In the review of alternative site locations, MMS should provide adequate weight to effects on historic properties in assessing the viability of an alternative. MMS should always maintain the option of withholding a permit or other authorization whenever the effects on historic properties of a specific alternative preferred by an applicant are found to be too great.
III. **Improving the coordination between energy development and historic preservation:** The ACHP and the Department, working in coordination with other agencies and stakeholders, should recommend policies and provide guidance on the key issues regarding historic preservation and energy development.

a. The ACHP should work with the Council on Environmental Quality to finalize guidance on the appropriate coordination of the Section 106 review process and the NEPA review process.

b. The ACHP and the NPS should develop guidance to assist federal agencies in determining and addressing the effects of energy projects, especially wind and solar projects, on historic properties that comprise large areas with indefinite boundaries. Particular attention should be given to properties of religious and cultural importance to tribes and cultural landscapes. This effort should draw on the experience of other nations in addressing this subject.

c. The ACHP and the NPS should assist agencies and applicants by sharing information on innovative and cost-effective strategies and techniques to identify all types of historic properties potentially affected by energy projects, not just standing structures and archaeological sites.

d. The ACHP should clarify the distinction between direct and indirect effects to historic properties and when visual effects may constitute direct effects.

e. The MMS should coordinate with the NPS, the ACHP, the National Conference of State Historic Preservation Officers, other agencies and stakeholders, and the professional marine archaeology community to develop guidelines specifying the methodologies and technologies that should be used in marine settings to assess the potential for the presence of archaeological sites and shipwreck sites. The guidelines should indicate the level of investigation that would represent a reasonable and good faith effort to identify historic properties for the projects on the OCS.

IV. **Creating a useful comprehensive database of historic properties.** The Department should revive the proposal of the 2006 Preserve America Summit that was endorsed by the ACHP to develop a comprehensive and accessible national inventory of historic properties to assist in the identification of historic properties during the federal project planning process. Priority should be given to those areas under federal jurisdiction or control that have high potential for both traditional and alternative energy development.