

FACT SHEET

Cape Wind Energy Project

Draft Environmental Impact Statement

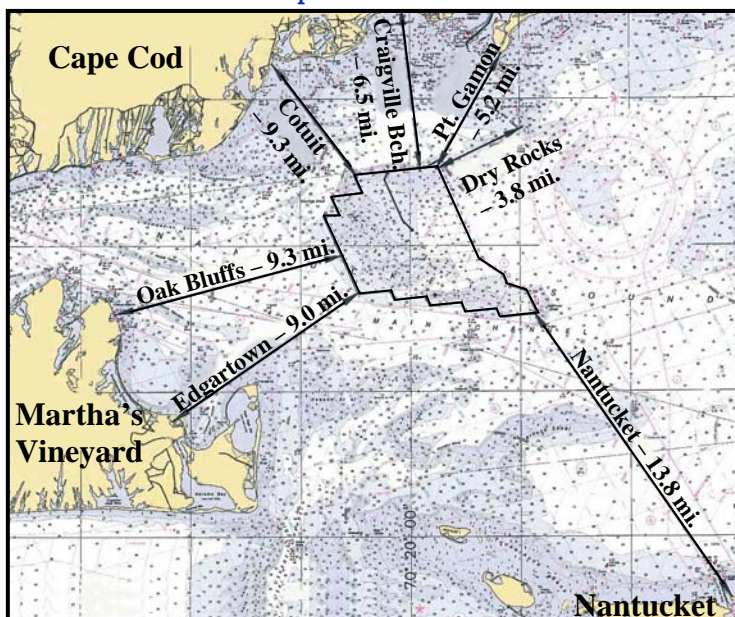
U.S. Department of the Interior
 Minerals Management Service
 381 Elden Street
 Herndon, VA 20170-4817



Project Overview

Cape Wind Associates, LLC, requests from the Department of the Interior, Minerals Management Service (MMS) a lease, easement, right-of-way, and any other related approvals necessary to authorize construction, operation and eventual decommissioning of the Cape Wind Energy Project. The project, proposed to be located in Nantucket Sound off the coast of Massachusetts (see figure below), would be comprised of 130 wind turbines that could generate a maximum electric output of 468 megawatts and an average output of 182.6 megawatts.

Proposed Action Location



Purpose and Need

The underlying purpose and need to which MMS is responding is to develop and operate an alternative energy facility that utilizes the unique wind resources in waters offshore of New England employing a technology that is currently available, technically feasible, and economically viable. If approved, the facility would interconnect with and deliver electricity to the New England Power Pool, 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.

The Massachusetts Energy Facility Siting Board found there was a need for at least 110 megawatts of new energy generation beginning in 2007 with a much greater need within the following years (Energy Facility Siting Board, Siting Decision 2004). The Massachusetts and regional Renewable Portfolio Standards mandate that a certain amount of electricity come from renewable energy sources, such as wind. Specifically, the Massachusetts Renewable Portfolio Standard requires that all retail electricity providers in the state utilize new renewable energy sources for at least 2.5 percent of their power supply in 2006, increasing this percentage to 4 percent by 2009. (<http://www.mass.gov/doer/rps/regs.htm>).

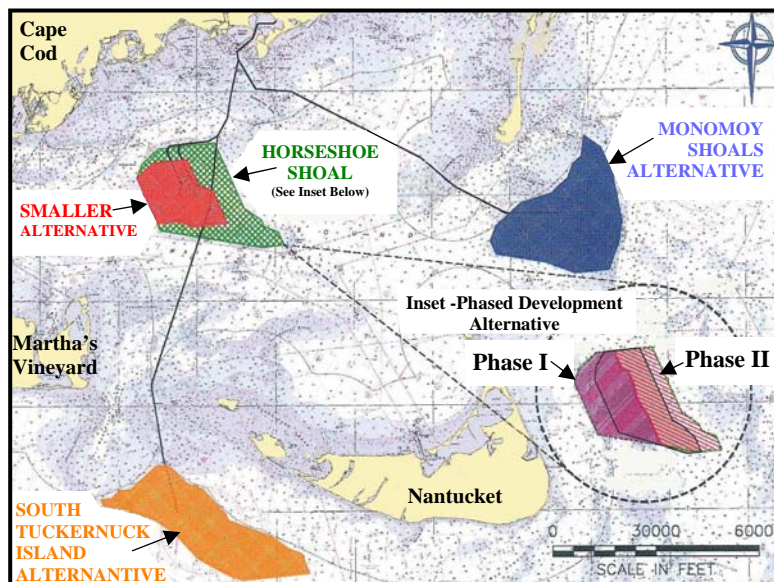
NEPA Policy Review

The proposed action requires environmental review for Federal approval under Subsection 8(p) of the Outer Continental Shelf Lands Act. The National Environmental Policy Act provides the framework under which Federal agencies perform environmental review of projects for which they would be authorizing, funding, or undertaking on their own behalf. In this instance, the proposed federal action resulting in the need for environmental review under the National Environmental Policy Act is the issuance of a lease, easement or right-of-way and related approvals by the Minerals Management Service for authorizing the construction, operation and eventual decommissioning of the Cape Wind Energy Project (the proposed action).

Draft Environmental Impact Statement

The Draft Environmental Impact Statement (DEIS) provides a detailed description of the proposed action, including the construction, operation and maintenance, and decommissioning phases. An explanation of the alternative screening analysis, the locations and descriptions of the considered alternatives, as well as a comparison of impacts between the alternatives and the proposed action is also provided. The existing conditions of the affected environment are described under the major categories of physical, biological, socioeconomic, navigation and transportation resources. A detailed analysis of the impacts on specific resources within these categories is presented relative to construction, operation and maintenance, and decommissioning phases. Cumulative impacts and commitment of resources are discussed. The concept of an Environmental Management System (EMS) is introduced. The EMS contains many of the mitigation measures and other commitments and requirements under which the proposed action would be authorized. As the MMS continues the environmental evaluation of the proposed action, additional mitigation, if determined to be necessary, will be incorporated into the EMS.

Alternative Locations Considered in Detail



Cape Wind DEIS Public Hearing Fact Sheet

Proposed Action Description Overview

The 130 wind turbine generators would be arranged in a grid pattern in the Horseshoe Shoal region of Nantucket Sound, Massachusetts. Each of the wind turbine generators would generate electricity independently of each other. For this area of Nantucket Sound, the wind power density analysis conducted by the applicant determined that orientation of the array in a northwest to southeast alignment provides optimal wind energy potential for the wind turbine generators. This alignment would position the wind turbine generators perpendicular to prevailing winds, which are generally from the northwest in the winter and from the southwest in the summer.

Solid dielectric submarine inner-array cables (33 kilovolt) from each wind turbine generator would interconnect within the grid and terminate on an electrical service platform. The electric service platform would serve as the common interconnection point for all of the wind turbine generators. The proposed submarine transmission cable system (115 kilovolt) is approximately 12.5 miles in length (7.6 miles within the Massachusetts 3-mile territorial line) from the electric service platform to the landfall location in Yarmouth. The submarine transmission cable system consists of two parallel cables that would travel north to northeast in Nantucket Sound into Lewis Bay past the westerly side of Egg Island, and then make landfall at New Hampshire Avenue. The proposed onshore transmission cable system route from the landfall area to its intersection with the NSTAR Electric right-of-way would be located entirely along existing paved right-of-ways where other underground utilities already exist. All of the roadways within Yarmouth and Barnstable in which the proposed transmission cable system would be placed are town owned and maintained roads with the exception of Routes 6 and 28, which are owned and maintained by the Massachusetts Highway Department. A portion of the onshore transmission cable system route would also be located underground within an existing maintained NSTAR Electric right-of-way. Major construction, decommissioning and large repair efforts will be staged out of Quonset, Rhode Island for offshore work.

It is anticipated that the main operation center would be located in the Town of Yarmouth. Here would be installed the remote monitoring and command center where all decisions concerning the operation of the offshore generating facility would be made. The service and maintenance vessels, supplies and personnel would be stationed at two additional onshore locations: a New Bedford location for parts storage and larger maintenance supply vessels and Falmouth for crew transport, since it is closer to the site.

Impact Analysis

In analyzing potential impacts of the project, consideration was given to a broad range of impact producing factors that could occur under routine or normal conditions as well as during unplanned, accidental, or emergency situations during the construction, operation and maintenance, and decommissioning phases of the proposed action. Many environmental resource characteristics from the marine, near shore, and on land portions of the proposed action have been considered and compared to these factors in order to assess potential direct, indirect, and cumulative impacts of the proposed project, as well as six other alternatives that were evaluated in detail.

MMS incorporated information into the DEIS from a number of sources, including studies undertaken by Cape Wind Associates, the scientific literature, data provided by agencies and other researchers, and prior evaluations of the proposed action. The DEIS includes a comprehensive alternatives analysis that includes a range of topics from the No Action Alternative and regional evaluation of offshore wind turbine sites to more local alternative sites and alternative configurations of the proposed action. The DEIS resource characterization and impact assessment is organized under four major categories, each with numerous sub-categories, including:

- **Physical Resources** – Geology and Sediments, Oceanography, Water Quality, Air and Climate, Noise, and Electric Magnetic Fields.
- **Biological Resources** – Avian and Bat Resources, Freshwater and Coastal Wetlands, Wildlife, Fisheries – Impacts to Commercial and Recreational Fishing’ Fisheries – Environmental Impacts, Benthos, Vegetation including eelgrass and macroalgae, and Threatened & Endangered Species.
- **Socioeconomic Resources and Land Uses** – Urban and Suburban Infrastructure, Population and Economic Background, Visual Resources, Cultural Resources, Recreation and Tourism, Competing Uses in the Vicinity of the Project.
- **Navigation and Transportation** – Overland Transportation Arteries, Airport Facilities, Port Facilities, Communications.

A full presentation of all resource impacts associated with each project phase is presented within the DEIS. In addition, a description of proposed mitigation measures under consideration are described.

Copies of the **Draft Environmental Impact Statement** are available in the following local libraries:

- Boston Public Library
- Edgartown Free Public Library
- Eldredge Public Library
- Falmouth Public Library
- Hyannis Public Library
- Nantucket Atheneum
- North Kingstown Free Library

Requests for additional information, electronic or hard copies of the **Draft Environmental Impact Statement** may be made by emailing the Minerals Management Service at capewind@mms.gov

Draft Environmental Impact Statement comments may be submitted online:

<http://occonnect.mms.gov/pcs-public/>

Please include the following information: Commentors Name, Address, Affiliation and List of Concerns

Comments may also be mailed to:	For Further Information Regarding
Rodney E. Cluck, Ph.D.,	This Statement, Contact:
Project Manager	James F. Bennett ,Chief
Alternative Energy Program	Branch of Environmental Assessment
Minerals Management Service	Minerals Management Service
U.S. Department of the Interior	U.S. Department of the Interior
381 Elden Street, Mail Stop 4080	381 Elden Street, Mail Stop 4042
Herndon VA 20170	Herndon, VA 20170