



**Final Position on
*The Cape Wind Energy Project***

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Summary

Following nearly a decade of independent research and review, Mass Audubon has concluded that **the Cape Wind Energy Project (Cape Wind) will not pose an ecologically significant threat to the birds and associated marine habitat of Horseshoe Shoal and Nantucket Sound. As an important component of our support for responsible development of clean, renewable energy and to reduce the worst effects of climate change, we support this project.**

Our support is based on nine years of analyses of field data collected by Cape Wind and independent field work by Mass Audubon staff; review of state, federal, and regional environmental impact documents, including the US Fish and Wildlife Service (USFWS) Biological Opinion; independent scientific literature research; and consultation with ornithologists, scientists, and engineers, as well as state and federal agencies, including the US Department of the Interior (DOI) Minerals Management Service (MMS), the US Army Corps of Engineers (ACOE), and USFWS. Mass Audubon conducted meetings with organizations and individuals that both support and oppose the project. Mass Audubon also conducted a field visit to Denmark's offshore wind farms at Horns Rev and Nysted during the 2005 spring bird migration season in order to conduct our own observational research and meet with ornithologists with direct experience in avian interaction with offshore wind turbines.

Our analyses of the Cape Wind project have been both complex and time consuming. We have confined our analyses to those areas of expertise held by our staff and organization within the realms of conservation biology and public policy. Our technical review, public testimony, and support for Cape Wind are consistent with and help advance our mission of protecting the nature of Massachusetts for people and wildlife.

The following is a summarization of key elements of almost a decade of analyses, public testimony and reporting on Cape Wind by Mass Audubon. In this position statement, we also respond to our [Challenge](#) to the Cape Wind developer and permitting agencies to get the project right. In that *Challenge*, produced nearly halfway through our analyses, we called for the filling of key avian data gaps as well as robust mitigation and monitoring, adaptive management, and a high standard by which all other offshore wind farms in America would be measured. Mass Audubon indicated that we would support Cape Wind if our *Challenge* was met. After nearly [a decade of](#)

[independent research and review](#), Mass Audubon has concluded that the key conditions of the *Challenge* have been satisfied.

Summary of key elements of Mass Audubon's *Challenge Regarding Cape Wind Energy Project* and how they were addressed.

1. Mass Audubon requests new and additional avian studies.

The first Draft Environmental Impact Statement (DEIS) for Cape Wind was issued by ACOE under the National Environmental Policy Act (NEPA) in November, 2004. Mass Audubon subsequently reviewed the DEIS and testified at a public hearing (December 7 and 8, 2004); and submitted written testimony to ACOE (February 23, 2005) on that 3,000 page document.

Additionally, Mass Audubon requested (February 23, 2005) a Supplemental DEIS in order for state and federal permitting agencies and the public to consider new and additional avian and marine habitat information we thought necessary for full and adequate environmental impact analysis. Mass Audubon's request was satisfied when MMS issued a second DEIS 3 years later (January 2008.)

2. Mass Audubon requests for legal requirements

In August 2005, President Bush signed into law *The US Energy Policy Act (Public Law 109-58, Section 388)*. This federal statute satisfied our requests for:

- a. Criteria for wind farm planning and siting;
- b. Procedures for regulatory permitting for offshore renewable energy projects;
- c. Establishment of wind farm decommissioning protocols;
- d. National Outer Continental Shelf (OCS) leasing program; and
- e. Host state financial compensation program.

3. Mass Audubon requests for avian monitoring

Volume 1, Section 9 of the MMS Final Environmental Impact Statement (FEIS) (January 2009) addressed our repeated request for a comprehensive and rigorous avian monitoring plan. As with the second DEIS, the FEIS also contained data on avian studies conducted and funded independently by Mass Audubon, along with additional studies conducted with funding from MMS, and done in cooperation with staff scientists of the wildlife and biology division of the US Geological Survey.

4. Mass Audubon requests for additional bird data

Key avian data gaps were identified by Mass Audubon in our *Challenge* regarding:

- a. Nighttime distribution and behavior of long-tailed ducks in and around Horseshoe Shoal off of Nantucket Island;
- b. Movement of federally and state endangered roseate terns and federally threatened piping plovers during the late-summer to early-fall migration; and
- c. Abundance and distribution of migrating songbirds.

These data gaps were met through the results of additional studies required by the Massachusetts Executive Office of Energy and Environmental Affairs (EEA) through its Massachusetts Environmental Policy Act Certificate (April 22, 2002).

Additionally, our own independent field studies conducted on land, by boat, and by plane over three years helped fill our targeted data gaps. (http://www.massaudubon.org/wind/avian_research.php).

To further ensure compliance with the avian mitigation and monitoring obligations required of Cape Wind in the FEIS and the DOI Record of Decision (ROD, April 28, 2010), Mass Audubon recommended (May 13, 2010) that MMS require Cape Wind to employ an environmental management system (EMS) that includes an adaptive management component as a condition of the project's OCS commercial lease agreement. This request is necessary to further ensure and document statutory and regulatory compliance, and to formally establish the necessary details of the required monitoring and mitigation plan.

Context

The Cape Wind Energy Project is America's first offshore wind farm proposed on the federal OCS. It will be a facility involving 130 turbines arrayed in a grid over approximately 24 square nautical miles on Horseshoe Shoal in Nantucket Sound off the coast of Massachusetts. It also includes an electric service platform for collecting the generated electricity, and two underwater cables that will transmit the power to the mainland on Cape Cod. The maximum height of the structures (tip of turbine blade) would be approximately 440 feet above mean sea level. Average expected production will be 170 megawatts of clean renewable energy, which is roughly the equivalent of 75 percent of the electricity demand of the Cape and Islands.

Mass Audubon's review of the Cape Wind Project was conducted within the context of the threat of rapid climate warming, oil spills, strip mining, air pollution, and the push for nuclear power as a clean energy source. There is scientific consensus that the burning of fossil fuels, such as natural gas and oil, releases heat-trapping gases like carbon dioxide and methane that rapidly heat the earth. Burning of fossil fuels also results in the release of mercury that bioaccumulates in the environment, causing health problems for humans, especially pregnant women and children. Rising sea levels and severe coastal storms related to the earth's warming flood low-lying barrier beaches and islands that serve as critical habitat for coastal birds including the federally endangered roseate tern and federally threatened piping plover.

To reduce the worst effects of climate change, Mass Audubon supports increased energy conservation and efficiency as a first priority. Production of electricity from clean energy sources also needs to grow quickly to reduce the worst effects of rapid climate change. However, the growth of renewable energy must be done responsibly to minimize adverse environmental impacts. Of the renewable energy technologies available today, wind energy is the most cost-effective and reliable.

MMS calculated that, due to reduced need for fossil fuel-generated power to serve the region's needs, Cape Wind will reduce carbon dioxide (CO₂) emissions by nearly one million tons

per year. That is approximately one percent of current total heat-trapping emissions in Massachusetts generated from all sources. Cape Wind will play an important role in helping Massachusetts achieve the 10 to 25 percent reduction in carbon emissions by 2020 required by *The Massachusetts Global Warming Solutions Act (Chap. 298 of the Acts of 2008)*.

Mass Audubon's technical analyses and assessments have focused primarily on the project's impacts on birds and their habitat. Our review standard has always been that the project **should not pose an ecologically significant threat** to the living resources in and around Nantucket Sound. At this time, **we believe that standard to be met.**

Mass Audubon defines *ecologically significant threat* as that which reduces populations or jeopardizes populations of endangered and threatened species. This standard does not mean zero impact on those resources as we realize that this project, as with any production of energy, will always entail some level of environmental impact.

Mass Audubon acknowledges that there will be a certain level of risk to the living resources of Nantucket Sound posed by the construction, operation, and eventual dismantling of Cape Wind. Our premise, however, is that there is a substantial risk now to those resources posed by the unmitigated and continued use of fossil fuels. We also acknowledge that there will remain some uncertainty in the environmental impacts of this project as the first major offshore wind farm in America. However, we believe that resolvable uncertainties have been reduced and that remaining uncertainties can be managed through the EMS and an associated rigorous and robust monitoring plan – both during and post-construction. The EMS should be built on adaptive management principles that include enforceable mitigation in the event that environmental impacts exceed NEPA predictions.

We continue to believe that the ongoing review and monitoring of Cape Wind will set the standard for offshore wind energy projects in America, and it is therefore imperative that we as a nation get it right.

Chronology of Mass Audubon review

Mass Audubon's public testimony on Cape Wind is consistent with our common practice of reviewing and commenting on major development projects in Massachusetts. As with all projects of significant size, breadth, scope, and which may also have policy implications for the state and nation, we formed our position on Cape Wind at the conclusion of the formal public environmental review process (ROD, April 28, 2010.) Our position is therefore based on the best data and science available to us, the permitting agencies, and the public. The following is a chronological summary of our analysis and testimony on Cape Wind.

- **August 7, 2001:** Cape Wind approached Mass Audubon to provide an informal briefing and to seek an informal response on the proposed size, timing, and location of the Cape Wind Energy Project; Mass Audubon headquarters, Lincoln, MA. Mass Audubon provided brief verbal feedback.

- **January 3, 2002:** Letter to US Army Corps of Engineers, *File No. 199902477, Cape Wind Associates Scientific Measuring Tower*, requesting that avian monitoring be conducted at the tower in addition to meteorological monitoring.
- **December 7 - 8, 2004** (oral); and **February 23, 2005:** Thirty-seven page written public testimony to ACOE, New England District on the *DEIS/Draft Environmental Impact Report (DEIR)/Development of Regional Impact (DRI) for the Cape Wind Energy Project*, (NAE-2004-338-1).
- **February 23, 2005:** Written request to ACOE, New England District for a Supplemental DEIS for the *Cape Wind Energy Project* (Reference File No. NAE-2004-338-1) for new information relevant to environmental concerns and bearing on the proposed action and its environmental impacts.
- **March 27, 2006:** Mass Audubon issues *A Challenge Proposal Regarding the Cape Wind Energy Project*, in which we challenged the developer of Cape Wind and its federal and state permitting agencies to apply adaptive management principles and adopt comprehensive and rigorous avian and marine life monitoring and mitigation conditions that would reduce the threat to birds and other wildlife.
- **July 11, 2006:** Written public testimony to MMS on the *Notice of Intent to Prepare an EIS on the Cape Wind Project*.
- **March 27, 2007:** Written public testimony to Massachusetts EEA regarding the *Cape Wind Energy Project, Nantucket Sound Final Environmental Impact Statement/Report* (EOEA No. 12643); Cape Cod Commission Development of Regional Impact (DRI File No. JR#20084); and ACOE (File No. NAE-2004-338-1).
- **April 18, 2008:** Written public testimony to MMS on the *Cape Wind Energy Project Draft Environmental Impact Statement (II), January 2008*.
- **March 10, 2010:** Written public testimony to MMS on the *Cape Wind Energy Project, Environmental Assessment*.
- **May 13, 2010:** Written formal request to MMS to include adaptive management in the lease agreement and Section 10 permit.

In addition, Mass Audubon participated in each step of the public review and public testimony on MMS' programmatic rules for *Renewable Energy and Alternate Uses of Existing Facilities on the Outer Continental Shelf* (see MMS' citation of Mass Audubon participation at *19646 Federal Register / Vol. 74, No. 81 / Wednesday, April 29, 2009 / Rules and Regulations*.) These regulations implement *The US Energy Policy Act* and further satisfy our statutory and legal requirements request.

- **May 25, 2006:** Oral testimony was given to MMS at the Boston, Massachusetts Area Hearing on the *Renewable Energy & Alternate Use Programmatic EIS Scoping*.
- **December 21, 2006:** Written follow-up public testimony was submitted to MMS on the *Renewable Energy & Alternate Use Program on the Outer Continental Shelf EIS Scoping*.
- **January 11, 2007:** At the invitation of MMS, Mass Audubon participated in the regional stakeholder meeting in Boston, Massachusetts, on the development of the alternative energy and alternate use program on the OCS under Section 388 of *The Energy Policy Act*.
- **April 26, 2007:** Oral testimony was given to MMS on the *OCS Alternative Energy and Alternate Use Draft Programmatic EIS* in Newton, Massachusetts.

- **May 21, 2008:** Written testimony was given to MMS on the *OCS Alternative Energy and Alternate Use Draft Programmatic EIS*.
- **June 2 to 28, 2007:** At the invitation of MMS, Mass Audubon participated in the *Workshop to Identify Alternative Energy Environmental Information Needs* at MMS headquarters in Herndon, Virginia.
- **October 26, 2007:** US Secretary of the Interior Dirk Kempthorne appointed Mass Audubon and 21 other organizations to serve on a special *Wind Turbine Guidelines Advisory Committee*, formed under the *Federal Advisory Committee Act* to advise the Secretary and USFWS on measures to avoid or minimize impacts to wildlife and their habitats from land-based wind energy facilities.
- **February 13 - 15, 2008:** DOI invited Mass Audubon to present results of our satellite telemetry project (remote “webinar”) in a MMS Workshop on *Birds & Offshore Wind Development* at the USFWS’ National Conservation Training Center in Shepardstown, West Virginia.

Next Steps for Mass Audubon participation

Mass Audubon will continue to analyze and report on Cape Wind through:

1. MMS’ OCS lease arrangement;
2. ACOE Section 10 permit issued under the *US Rivers and Harbors Act*;
3. EMS adaptive management plan; and
4. Avian monitoring and mitigation plan implementation during the construction and three year post-construction phases of the project.

Conclusion

Mass Audubon recognizes climate change as the gravest threat to humans and to the nature of Massachusetts and the planet. Our positive and constructive engagement in the analyses of Cape Wind, which began as deep skepticism of the project, has resulted in overall support. Following extensive research and consideration, we conclude that Cape Wind will make a positive contribution to help reduce the worst effects of climate change with no significant ecological threat to the avian and marine life of Horseshoe Shoal and Nantucket Sound.

Mass Audubon works to protect the nature of Massachusetts for people and wildlife. Together with more than 100,000 members, we care for 34,000 acres of conservation land, provide educational programs for 225,000 children and adults annually, and advocate for sound environmental policies at local, state, and federal levels. Mass Audubon's mission and actions have expanded since our beginning in 1896 when our founders set out to stop the slaughter of birds for use on women's fashions. Today we are the largest conservation organization in New England. Our statewide network of wildlife sanctuaries, in 90 Massachusetts communities, welcomes visitors of all ages and serves as the base for our work. To support these important efforts, call 800-AUDUBON (283-8266) or visit www.massaudubon.org.