



Comments of
Natural Resources Defense Council, Inc.
on the
Cape Wind Energy Project
Draft Environmental Impact Statement
U.S. Department of the Interior, Mineral Management Service
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INTRODUCTION

The Natural Resources Defense Council, Inc. (“NRDC”) respectfully submits these comments on the Draft Environment Impact Statement (“DEIS”) from the proposal by Cape Wind Associates LLC (“Cape Wind”) to construct, operate, and eventually decommission the Cape Wind Energy Project (“Project”), a 130 turbine offshore wind project proposed in federal waters in Nantucket Sound off Cape Cod, Martha’s Vineyard and Nantucket, Massachusetts. NRDC is a national environmental advocacy organization headquartered in New York City, and has over 1.2 million members and e-activists nationally. NRDC uses law, science and the support of our members and online activists to protect the planet’s wildlife and wild places and to ensure a safe and healthy environment for all living things. Combating global warming and protecting the marine environment are two of NRDC’s highest priorities.

NRDC has long been a strong supporter of increased use of wind energy. The technology for producing electricity from wind energy has improved greatly over the past twenty years, and wind—on and offshore—now represents one of the most promising sources of emissions free electricity. According to the U.S. Department of Energy, National Renewable Energy Laboratory, to date more than 16,500 megawatts (“MW”) of wind power capacity has been installed on land in the United States,¹ most of it in the West, and in the process much has been learned about siting and designing wind generation to minimize environmental damage. Recent proposals for offshore wind farms—most prominently the Cape Wind Energy Project—have focused attention on the benefits and impacts of offshore wind. The Project and other offshore proposals for wind

¹ <http://www.eere.energy.gov/windandhydro/windpoweringamerica/> (data as of 12/31/2007).

electricity generating facilities off the East Coast present an opportunity to boost significantly the amount of energy produced from renewable sources in the eastern United States. Indeed, offshore wind power is probably the region's largest untapped renewable energy resource. Developing this resource is essential to help reduce local, regional and global air pollution that threatens public health, critical habitat, and the very sustainability of the planet.

The potential benefits of the Project are undeniable. The Project would produce a maximum electric output of 468 MW and an average daily output of 182.6 WM free of air and water pollution.² In addition to the local and regional air pollutants, such as NOx and SO₂, that the Project would avoid, the Project would reduce emissions of carbon dioxide (CO₂)—the pollutant most responsible for global warming—by 0.88 million tons per year.³

Based on our review of the MMS DEIS, the information in the U.S. Army Corps of Engineers DEIS and other analyses that have been done on the project NRDC has concluded that the project's environmental benefits will far outweigh its impacts. However, no energy project is without its potential environmental impacts. NRDC remains concerned about marine mammals, birds, and the need for an effective adaptive management program to monitor and mitigate impacts that arise during Project construction and operation. NRDC strongly recommends that the Final Environmental Impact Statement ("FEIS") and conditions for any lease, easement, and right-of-way for the Project include specific monitoring and mitigation measures to protect the coastal and marine environments.

² DEIS at E-1.

³ DEIS at 3-36, 5-49, and 5-271.

In NRDC's detailed comments of February 24, 2005, on the DEIS prepared by the U.S. Army Corps of Engineers ("Corps") for the Project, which we incorporate by reference here, we raised concerns regarding the following: 1) the need for more discussion in the DEIS of the substantial air pollution and public health benefits of the Project; 2) the need for a corrected, expanded and improved analysis in the DEIS of potential acoustic impacts of the Project on marine mammals and sea turtles and the need for additional mitigation measures to minimize the potential for any marine mammal impacts; 3) the need for a more comprehensive analysis in the DEIS of the potential impacts of the Project on avifauna, and particularly the endangered Roseate Tern, and the need for additional surveys in order to remove as much uncertainty as possible regarding potential impacts to federally listed threatened and endangered species; and 4) the need for an effective adaptive management program that will ensure that post-operational impacts are monitored and mitigated.

According to the DEIS, comments submitted in response to the Corps DEIS were available to MMS and were "treated ... as scoping comments in the Mineral Management Service's preparation of [its DEIS]."⁴ Some of NRDC's comments on the Corps DEIS were addressed by MMS, such as the need for the DEIS to distinguish between discussion of above and below water sound, and the need to address some inaccuracies in the Corps DEIS's treatment of underwater sound. However, many of our earlier comments were not discussed by MMS in its DEIS, let alone addressed. NRDC urges MMS to address these issues in the FEIS. In particular, it is important that the FEIS 1) contain an effective adaptive management program to deal with unintended and

⁴ DEIS at E-4 and 7-1.

unanticipated environmental and biological impacts, 2) that it contain a comprehensive underwater acoustic monitoring system that not only measures the levels of underwater noise but that detects the approach of marine species into the safety zone around the turbines, 3) that construction activity be scheduled so as to avoid periods of peak abundance of threatened or endangered species, 4) that additional surveys be conducted to reduce remaining uncertainty regarding the threat of impacts to the federally endangered Roseate Tern, and 5) that the FEIS, in addition to addressing the environmental impacts that the Project may pose, contain a more extensive discussion of the environmental benefits that the Project is likely to provide.

Overall, NRDC believes that the proposed Project's benefits would be significant and far outweigh the Project's adverse impacts and that these adverse impacts can be minimized if careful mitigation measures are adopted. For these reasons, we encourage MMS to finalize the EIS and permit the project expeditiously, while ensuring that detailed and comprehensive mitigation measures are included as conditions of any lease, easement, and right-of-way that MMS issues to Cape Wind.

I. THE PUBLIC HEALTH AND ENVIRONMENTAL BENEFITS OF THE CAPE WIND PROJECT

In NRDC's comments to the Corps DEIS, we discussed the substantial air pollution and public health benefits of the Project, noting that these were areas where the DEIS's discussion needed to be amplified. We commented that the FEIS should provide a greater discussion of the importance of renewable energy generally, and of the Project in particular. Also, while NRDC noted that the Corps DEIS discussed the expected air

pollution emissions reductions associated with the Project, as calculated by La Capra Associates, hired by Cape Wind, we suggested that all of the Project's benefits should be brought together in one section that allows for a clear presentation of its benefits.

Our earlier comments provided a detailed assessment of the Project's local and regional health and environmental benefits, resulting from reductions in the amount of particulate matter (especially fine particulate matter), secondary sulfate and nitrate particles, mercury and other toxics (such as formaldehyde, nickel and dioxins), and NO_x and SO₂, emitted from the Project as compared with existing plants, particularly fossil fuel burning plants. Our comments also detailed some of the local consequences of global warming, which despite being one of the greatest environmental threats facing the world today, received only passing mention in the Corps DEIS, with virtually no discussion of its already mounting impacts on public health, wildlife, habitats and the economics of the world, including New England and Cape Cod. NRDC requested that the FEIS contain a much more detailed discussion of the importance of the potential CO₂ emissions reductions, their benefits and the context in which the Project's emissions reductions would occur.

Moreover, NRDC noted that the discussion in the Corps DEIS of the No-Action Alternative gave only passing mention to the broad benefits of reduced reliance on fossil fuels that the Project offers. NRDC commented that the FEIS should discuss the benefits of potentially reducing fish kills from oil spills and once-through water cooling systems as existing plants are displaced by renewable energy plants like the Project, although the FEIS should also acknowledge the difficulty of quantifying these benefits. Lastly, NRDC commented that while the Corps DEIS contained a technically sufficient discussion of the

environmental justice impacts of the Project, there was no acknowledgement in the Corps DEIS that if the Project were not built, existing environmental justice impacts would continue unabated, and might even increase. NRDC suggested that the FEIS should explicitly acknowledge that by reducing air pollution across New England and reducing the need for new power plants and displacing existing plants, the Project will help to reduce disproportionate public health impacts on poor communities and communities of color.

Unfortunately, NRDC's comments with respect to the environmental benefits of the Project do not appear to have been addressed at all. If anything, there appears to be even less discussion in the MMS DEIS of the Project's environmental benefits than there was in the Corps DEIS. In Section 3, where the DEIS describes the No-Action Alternative, MMS gives only passing reference to reductions in NO_x, SO₂, CO₂ and particulate matter that would occur with the Project as compared with continued use of fossil fuel plants.⁵ There is effectively no discussion of the environmental or health benefits from reduction in these emissions. Similarly, Section 5.4.6, which provides an assessment of the No-Action Alternative and compares it with the proposed Project, also only makes passing reference to the emissions reductions and their environmental and health benefits.⁶

While the DEIS does calculate the expected reduction in CO₂ emissions that the Project will allow (~0.88 million tons per year), there is no discussion about how such reductions will benefit efforts to reduce global warming. In fact, the phrase "global warming" only appears where the DEIS summarizes comments previously submitted to

⁵ DEIS at 3-36.

⁶ DEIS at 5-273 – 5-275.

the Corps DEIS.⁷ However, nowhere in the DEIS does MMS respond to or address these comments regarding global warming. Furthermore, as noted in the comments of the Union of Concerned Scientists, the DEIS mistakenly calculates the potential contribution of the Project to reducing the region's growth in power sector CO₂ emissions. Avoiding the marginal emissions rate for power, the Project would actually reduce the growth in emissions from the power sector by about nine percent rather than the one percent mentioned in the DEIS.⁸

Moreover, not only has the MMS DEIS failed to address NRDC's earlier concerns, it appears to have removed the discussion of the expected emissions reductions determined by La Capra Associates, previously included in the Corps DEIS. The removal of this section is somewhat perplexing, since it at least provided some quantifiable measure of the expected environmental improvements of the Project.

The DEIS does briefly mention the risks of oil spills and use of once-through water cooling systems for cooling existing power plants, but does not provide any discussion of the environmental consequences of such actions, nor the benefits achievable by replacing fossil fuel facilities with renewable energy facilities like the Project. Also, while the MMS DEIS, like the Corps DEIS, contains a discussion of environmental justice, it appears that MMS has not addressed NRDC's request that the DEIS more explicitly incorporate into the environmental justice analysis the reduction in air pollution anticipated from the Project.

The Cape Wind Project has the potential to serve as a model and a catalyst for future renewable energy projects, particularly wind energy, and as such, NRDC urges

⁷ DEIS at E-7 and 7-9.

⁸ DEIS at 5-49.

that the FEIS contain a substantial discussion of the environmental benefits of the Project. Currently the DEIS devotes only two to three pages (out of a 1400 page EIS) to this important issue. In addition, NRDC supports the comments on this issue submitted by the Union of Concerned Scientists on the MMS DEIS, and encourages MMS to address these requests in the FEIS.

II. ACOUSTIC IMPACTS

In response to the Corp's DEIS, NRDC provided a comprehensive set of specific comments regarding acoustic impacts on marine mammals, whose physiological health and well being can be damaged by harmful noise levels. NRDC called for the analysis of the Project's acoustic impacts to be corrected, expanded and improved, and for a more robust framework for monitoring and mitigation to be included in the FEIS. While MMS has addressed some of NRDC's comments with respect to how noise is discussed generally throughout the DEIS (e.g. distinguishing between discussions of above and below water sound and use of actual physical measures rather than using the term "loudness"), NRDC's more substantive concerns, relating to monitoring and mitigation of acoustic impacts, remain unaddressed. We urge MMS to address these concerns in its FEIS.

A. General Discussion of Noise: Clarity of Discussion and Terminology Used

NRDC requested that the Corps DEIS be revised to focus on the forms of noise that are harmful to animals in closest proximity to the turbines rather than examined through an anthropocentric perspective of noise impacts on humans. Specially, NRDC

stated that when discussing noise likely to be generated by the Project, the FEIS analysis should not discuss “loudness,” a psychological concept of what humans perceive, but should instead discuss the actual physical measures, such as intensity, energy flux density and pressure. Moreover, whenever measures of noise are provided, NRDC requested the FEIS be “crystal clear and consistent” in terms of whether those measures are in-air or in-water.

MMS has addressed these specific concerns of NRDC. The DEIS now distinguishes between above and below water sound, providing descriptions of sound production, propagation and measurement in both these mediums, and supplying measurements of sound in decibels and frequency in hertz.⁹

B. Underwater Noise Analysis

NRDC commented that the Corps DEIS treatment of underwater sound was incomplete and included some inaccuracies that required correction. We further requested that instead of using subjective reports from human divers to characterize the sounds that the jet plows will generate during constructions, the DEIS should rely on descriptions of underwater acoustic characteristics from construction that can be found in the FEIS and subsequent technical reports from the BP Exploration (Alaska) Inc. Northstar project.

Section 5 of the MMS DEIS better characterizes the various underwater noises and their sources expected during construction, operation and decommissioning of the

⁹ See “Noise and Vibration” and “Noise” subsections throughout Section 5 of the DEIS.

Project.¹⁰ A noticeable improvement over the Corps DEIS is reliance upon data provided by GE Wind Energy from recent tests at the Utgrunden and Gotland Projects in Sweden, which the DEIS states have similar environmental conditions to Nantucket Sound.¹¹ However, with respect to noise generated by jet plow embedment for laying the offshore transmission cable system circuits and inner array cables, the MMS DEIS continues to rely upon subjective reports from divers. The DEIS states “according to divers experienced in jet plow installations, the jet plow itself produces no audible noises other than the sound of water exiting the nozzles.”¹² NRDC encourages MMS to instead rely upon actual measurements of the noise produced from the jet plows from use in past projects, rather than anecdotal accounts from divers.

C. Acoustic Impacts on Marine Mammals: Need for Monitoring and Mitigation

In our comments to the Corps DEIS, NRDC stated that the FEIS must include strong, viable mechanisms that will require the Project to monitor for acoustic events that might put animals at risk from both damage and harassment, and that the Project must have effective mechanisms in place to mitigate should the monitoring system detect/predict the approach of an unacceptable level of risk. NRDC specifically requested that the FEIS include:

- 1) Appropriate characterization of underwater acoustic signals, including ultrasound;

¹⁰ See “Noise and Vibration” and “Noise” subsections throughout Section 5 of the DEIS.

¹¹ DEIS at 5-10, 5-38, 5-39, 5-111, 5-125, 5-158, and 5-169.

¹² DEIS at 5-39 and 5-125.

- 2) Use of a robust system of both acoustic and visual surveillance for marine mammals and sea turtles during construction, including
 - a. Use of four rather than just one qualified on-site National Marine Fisheries Service (“NMFS”) spotters to monitor for marine animals of concern within the 500 m safety radius,
 - b. Use of an underwater acoustic monitoring system for detection of marine mammal sounds and for monitoring intensity of sounds during construction, and
 - c. A mitigation protocol for ensuring intense noise production is halted rapidly if and when marine animals enter the radius;
- 3) Scheduling the time of construction activity so as to avoid periods of peak abundance for endangered species such as right whales; and
- 4) A monitoring plan that will provide ongoing data on possible impacts for use in adaptive management (specifically, NRDC noted that it would be beneficial for the Project to install, maintain and utilize a network of in-air and underwater sensors to monitor noise associated with Project activities).

Unfortunately, these requests have largely been ignored. While the MMS DEIS appears to characterize the underwater acoustic signals, relying upon what it calls a model “using standard methods for representing how sound waves spread out underwater (spherical wave spreading) and diminish in intensity,” MMS provides no citations to scientific authorities to support this modeling approach.¹³ Moreover, MMS claims that research has shown that the method it relies upon provides a reasonable fit to measured

¹³ DEIS at 5-125.

underwater sound levels under a wide variety of conditions, but again, no citations are provided to support this statement.¹⁴ Further, although MMS appears to calculate hearing threshold sound levels for various marine species in order to determine whether various noise generating activities pose any threat to these species, the DEIS often makes conclusory statements regarding potential impacts. For example, the DEIS states, “If seals are in the proposed action construction area, they are likely to temporarily avoid a given area around the construction.”¹⁵ No citations are provided for such statements. Also, absent in the DEIS’s characterization of the underwater acoustic signals is any mention of ultrasound.

The MMS DEIS makes little reference to mitigation of noise. It makes no mention of NRDC’s request for the use of four, rather than one, trained spotters to ensure construction activities halt when protected species enter the safety radius, nor is any mention made of use of an underwater sound monitoring system for detection of marine mammals entering the area of the safety radius. Also not discussed is NRDC’s request that a mitigation protocol exist for ensuring cessation of intense noise production when marine animals do enter the safety radius. While the DEIS mentions scheduling construction activity so as to minimize certain *onshore* noise (specifically construction noise from laying of the Onshore Transmission Line),¹⁶ it does not mention scheduling *offshore* construction activity so as to minimize noise impacts on marine life, for example by avoiding periods of peak abundance for endangered species (birds and marine mammals).

¹⁴ DEIS at 5-125.

¹⁵ DEIS at 5-127.

¹⁶ DEIS at 9-17.

In Section 5 the DEIS states that mitigation measures being considered include use of underwater sound monitoring to confirm pile driving noise levels, the use of an NOAA Fisheries approved observer, and soft start of pile driving.¹⁷ In Section 9, entitled “Monitoring and Mitigation,” the DEIS again refers to these three measures, but does not provide further elaboration.¹⁸ Nowhere is the extent of the proposed underwater sound monitoring discussed, nor is any explanation given as to why one observer, as opposed to the requested four observers, is sufficient. The DEIS states that “soft start pile driving is a low energy start that will allow fish to move away from the construction area in response to construction sound,”¹⁹ but does not indicate how this method will benefit, if at all, marine mammals and sea turtles. More discussion must be given to these proposed mitigation methods than the current single sentence in Section 5 and three bullet points in Section 9.

The FEIS needs to include strong, viable mechanisms that will require the Project 1) to effectively monitor for acoustic events that might put animals at risk from both damage and harassment (as defined by the NMFS), 2) to schedule construction to avoid periods of peak abundance for endangered and threatened species, and 3) to halt intense noise production should the monitoring system detect/predict the approach of vulnerable marine animals. We strongly encourage MMS to include in the FEIS effective mitigation and monitoring programs to protect marine species from harmful acoustic impacts.

¹⁷ DEIS at 5-40.

¹⁸ DEIS at 9-14.

¹⁹ DEIS at 5-160.

III. AVIAN IMPACTS

As NRDC previously noted in our comments to the Corps DEIS, the Project's potential for avian impacts raises the most challenging and complex issues presented in the DEIS. Our comments emphasized the need to have a full understanding of the Project's impact on the numerous and important bird populations that are found in Nantucket Sound, particularly the endangered Roseate Tern, and to ensure that the Project will not jeopardize these populations. We noted in our prior comments that the Corps DEIS appeared to contain data gaps and conflicting data and/or different expert opinions. We also noted that the extent to which Roseate Terns regularly traverse the Project site and the height to which they fly were not adequately addressed.

NRDC questioned whether these issues could be addressed by reexamining existing data, or whether additional monitoring and data collection were required. NRDC also emphasized the importance of having an adaptive management program in place for post-permit monitoring of impacts to the bird populations. NRDC further recommended that a group of independent scientists be convened, with input from the developer and other interested stake holders and their respective science advisors, to consider the issues NRDC identified with respect to the Roseate Tern and other bird populations in the Nantucket Sound area, and that this group should provide recommendations on what additional steps need to be taken to resolve these issues prior to issuance of an FEIS.

Overall, Section 4 of the MMS DEIS provides an accounting of observations from the various surveys conducted by Cape Wind, and the Massachusetts Audubon Society ("MAS"), describing the abundance of various bird species in and around Nantucket Sound, and particularly within the proposed Project site, and provides estimates of bird

heights from some surveys.²⁰ It appears that some additional surveys may have been conducted since the time of the Corps DEIS, but the number and type of those surveys are not clearly articulated.²¹ While MMS has addressed many of our concerns with respect to birds in general, even MMS acknowledges the limitations associated with the available data, which do not include observations at night or during inclement weather, when birds are more likely to collide with the wind turbines.²² While the DEIS suggests, for example, that Roseate Terns “are not expected to frequent the area of the proposed action during ... periods of inclement weather or at night, ...” MMS admits that “surveys have not been conducted under these conditions and therefore the potential for collision under these conditions cannot be ruled out.”²³ As such, even if some of the data gaps have been addressed, others clearly remain. Moreover, no mention was made in the DEIS of NRDC’s request for use of a group of independent scientists to make recommendations for what additional steps should be taken to resolve outstanding issues pertaining to impacts from the Project to avifauna.

NRDC remains particularly concerned over impacts to the Roseate Tern, a federally listed endangered species. We support the MAS’s recommendations, which include: 1) reducing uncertainty in passage rates through Horseshoe Shoal (the Project site) by ensuring that basic information about flight heights and passage rates be collected during stationary boat surveys within the Project area at dawn and dusk during spring migration and during the staging period prior to fall migration, and that these additional

²⁰ *E.g.* DEIS at 4-47 – 4-48.

²¹ *See* DEIS at 4-47 – 4-48 (discussing the various surveys conducted since 2002, but not clearly articulating those surveys conducted since the Corps DEIS was issued).

²² DEIS at 5-85, 5-86, 5-90, 5-99, 5-100, 5-104, and 5-106.

²³ DEIS at 5-106.

data be incorporated into collision risk assessments; 2) ensuring that the Population Viability Analysis (“PVA”) and the collision risk model be peer-reviewed and the recommendations of the peer-review be incorporated into a revised risk assessment; and 3) conducting a detailed sensitivity analysis with the existing PVA. Additionally, NRDC encourages MMS to adopt NRDC’s earlier request for use of an independent group of scientists to help address these concerns with respect to potential impacts from the Project to the bird populations.

IV. MONITORING AND ADAPTIVE MANAGEMENT

As NRDC commented in response to the Corps DEIS, a well-developed environmental monitoring and adaptive management program will be critical to the success of the Project, the first offshore wind farm in the U.S., and should be included in the FEIS. Given the lack of experience with offshore wind projects in this country, there is the possibility that the scale of certain impacts will only become clear over time. Only through deployment of a well-developed monitoring program during operation of the turbines can the actual impacts be fully understood, and mitigated.

In our comments to the Corps DEIS, NRDC provided an extensive set of detailed steps that should be required of Cape Wind in terms of monitoring and mitigation, particularly with respect to unforeseen impacts, as part of an adaptive management scheme. Unfortunately, the overwhelming majority of NRDC’s recommendations do not appear to have been adopted by MMS. Instead Section 9 of the MMS DEIS discusses

use of an Environmental Management System (“EMS”),²⁴ and makes only passing reference to incorporation of “an adaptive management approach in dealing with environmental impacts” as they arise.²⁵ Many of the criteria MMS enumerates in its EMS have little, if anything to do with ongoing monitoring and mitigation of unintended and unanticipated impacts. While components 4, 5 and 6 hint at such monitoring and mitigation, their language is overly general, and no further elaboration is provided in the DEIS to flesh out how the proposed EMS will operate.

We call on MMS to include in the FEIS and as a condition of any lease, easement, or right-of-way it issues to Cape Wind, a detailed and comprehensive adaptive management program for monitoring and mitigation of potential impacts associated with Project construction, operation, and decommissioning. Requiring Cape Wind to implement an effective adaptive management program is in accord with MMS’s interim policies and Best Management Practices, issued as part of its Alternative Energy and Alternate Use (AEAU) Program, under which any lease, easement, or right-of-way for the Cape Wind Project would be issued. These interim policies and Best Management Practices require MMS and lessees and grantees “to adopt adaptive management strategies that will include monitoring of activities to ensure that potential adverse impacts of Outer Continental Shelf alternative energy development are avoided (if

²⁴ DEIS at 9-1 – 9-2. The DEIS sets forth seven requirements for an EMS: 1) considering policies and regulations applicable to an action; 2) planning how to undertake the action in compliance with the applicable regulations; 3) implementing the action according to a plan; 4) monitoring and measuring the effects of the action; 5) reviewing the effectiveness of the plan with respect to applicable requirements; 6) where warranted, revising plans to reflect the reality of what is occurring during the implementation of the action; and 7) documenting the applicant’s environmental policy, key responsibilities, and procedures to carry out and report the results of numbers 1-6.

²⁵ DEIS at 9-1.

possible), minimized, or mitigated.”²⁶ MMS should follow its own interim policies and Best Management Practices, and include an effective adaptive management program as part of the FEIS and as a condition for issuing any lease, easement or right-of-way.

Regardless of whether MMS chooses to refer to the comprehensive monitoring and mitigation program as an Environmental Management System or as an adaptive management program, what is important is that the program that is ultimately incorporated into the FEIS, and the lease, easement, or right-of-way, meets the following goals:

- Be guided by a panel of government and academic scientists
- Include specific adaptive responses for environmental impacts judged to be reasonable possibilities
- Include a framework that prevents abuse of the program and which also protects the economic interest of Cape Wind by establishing a reasonable budget for implementation costs and mitigation measures, including possible short-term shutdowns
- Require monitoring during both construction and operation
- Require that all data collected by made available to the public, in electronic form, in real-time when possible.

We urge MMS to adopt these elements of an adaptive management program in its FEIS and as conditions in the lease, easement, or right-of-way it issues to Cape Wind.

²⁶ U.S. Department of the Interior, Mineral Management Service, Record of Decision, Establishment of an OCS Alternative Energy and Alternate Use Program, at 11 (December 2007).

CONCLUSION

The urgency of stopping global warming increases regularly as the drumbeat of scientific studies about the quickening pace of climate change continues. The Cape Wind Project will make an important contribution to the fight against global warming both through its immediate displacement of fossil fuels and by paving the way for great use of offshore wind.

The precedential nature of the Cape Wind Project makes it all the more important that the Project strive to avoid and minimize any environmental impacts. Requiring better monitoring and mitigation to protect marine mammals, conducting additional pre-construction surveys to reduce as much remaining uncertainty as possible with respect to bird population passage rates through the Project site, and building the Environmental Management System into a true adaptive management program will help make Cape Wind the best possible project.

MMS should adopt our recommendations, finalize the EIS, and permit the project with accompanying detailed, comprehensive mitigation measures.

Respectfully Submitted,

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