



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
PROGRAM PLANNING AND INTEGRATION
Silver Spring, Maryland 20910

Dr. Rodney E. Cluck, Ph.D.
Project Manager
Alternative Energy Program
Mineral Management Service
U.S. Department of the Interior
381 Elden Street; Mail Stop 4080
Herndon, Virginia 20170

APR 8 2008

Mr. Robert J. DeSista
Chief, Regulatory Division
U.S. Army Corps of Engineers
New England District
696 Virginia Road
Concord, Massachusetts 01742-2751

Dear Dr. Cluck and Mr. DeSista:

The National Oceanic and Atmospheric Administration (NOAA) has reviewed the Minerals Management Service's (MMS) Draft Environmental Impact Statement (DEIS) and the U.S. Army Corps of Engineers' (ACOE) Public Notice (NAE-2004-338-1) for the Cape Wind Energy Project. NOAA's National Marine Fisheries Service (NMFS) served as a cooperating federal agency in the development of this DEIS, and provided National Environmental Policy Act (NEPA) scoping comments to MMS on July 26, 2006. NMFS also served as a cooperating agency in the development of the ACOE's DEIS on the Cape Wind Energy Project in 2004, and provided comments on that DEIS in February 2005.

The purpose of this letter is to provide combined comments to both MMS and ACOE in accordance with their respective review processes and permitting responsibilities. The comments include two general themes that have some overlap: first, comments regarding additional information and analysis that MMS should include in the Final Environmental Impact Statement (FEIS) that may be helpful and necessary as MMS and ACOE complete their permitting and authorization processes, including their respective NEPA documents and second, comments and conservation recommendations relating to MMS and ACOE's consultation and authorization responsibilities under NOAA statutory authorities.

1) Additional Information and Analysis

In the first attachment, NOAA provides detailed comments on the information presented in the DEIS regarding impacts to fishery resources and impacts to species protected under the Marine Mammal Protection Act (MMPA), as well as significant comment on the underwater acoustics analysis.

2) Consultation and Authorization

In the second attachment, the NMFS Northeast Regional Office emphasizes two important issues with regard to MMS and ACOE consultation responsibilities:



- **Impacts to Essential Fish Habitat and Fishery Resources**

The attached letter provides the Magnuson-Stevens Fishery Conservation and Management Act (MSA) Essential Fish Habitat (EFH) conservation recommendations. We look forward to your response to our EFH conservation recommendations.

- **Impacts to Species Listed Under the Endangered Species Act**

As the lead federal agency for the Cape Wind project, MMS is responsible for determining whether the proposed action may affect any species listed under the Endangered Species Act (ESA), and for seeking consultation with NMFS for ESA-listed species under NMFS jurisdiction should that determination be made. MMS has indicated to NMFS that MMS will request initiation of formal consultation, pursuant to Section 7 of the ESA, in the spring of 2008. NOAA looks forward to working closely with MMS during Section 7 consultation.

We hope our comments will assist you. Thank you for giving us the opportunity to review this document.

Sincerely,



Rodney F. Weiher, Ph.D.
NEPA Coordinator

Attachments

cc:

Robert Varney, US Environmental Protection Agency
Michael Bartlett, US Fish and Wildlife Service
Secretary Ian A. Bowles, MA Executive Office of Energy and Environmental Affairs
Paul Diodati, MA Division of Marine Fisheries
Leslie-Ann McGee, MA Coastal Zone Management
Glenn Haas, MA Department of Environmental Protection
Paul Howard, New England Fishery Management Council
Dan Furlong, Mid-Atlantic Fishery Management Council
John V. Shea, Atlantic State Marine Fisheries Commission
Tom Bigford, F/HQ
Mary Colligan, PRD

Attachment 1

NOAA's Comments on the MMS Cape Wind Energy Project Draft Environmental Impact Statement; Cape Wind Associates, LLC Public Notice (NAE-2004-338-1)

Project Description

The proposed project would construct and operate 130 wind turbine generators (WTGs) in Nantucket Sound, Massachusetts to be connected by submarine cables to the shore at Yarmouth, Massachusetts for distribution to the existing power grid. The entire project would occupy an area of approximately 24 square miles. Cape Wind Associates proposes to build 130 WTGs on Horseshoe Shoal in Nantucket Sound. Each WTG would be mounted on a single 16.75 – 18 foot diameter monopole, and would be connected by a 33 kilovolt (kV) submarine cable to an electric service platform (ESP). The ESP would transform and transmit alternating current electricity to shore through two 115 kV submarine cables. The maximum potential electric output is expected to be 468 megawatts (MW) distributed to the power grid on shore.

Comments regarding additional information and analysis that should be included in the FEIS document

General

On page 2-2, 4th paragraph, the DEIS states that “water depths within Nantucket Sound range from 0.5 to 70 ft (0.3 to 21.3 m) MLLW.” There is an error; the text should be changed to “water depths within Nantucket Sound range from 0.5 to 70 ft (0.15 to 21.3 m) MLLW.”

Fishery Resources

Consideration of No-Fishing Buffer Zones

NOAA is interested in how the placement of the foundations would change fish community composition, distribution, abundance, and individual size in the general area. As the solid foundations are likely to act as an artificial reef, hence a fish attractant device, likely increases in fish abundance in the areas around the foundations may attract fishermen to these structures unless fishing restrictions in the area are enacted. For safety and security reasons, many oil platforms and liquefied natural gas facilities have no-fishing buffer zones adjacent to the facilities. The FEIS should state whether MMS has considered implementing no-fishing zones if the project goes forward. Chapter 9-3 addresses the artificial reef attractant concern, but concluded that many years of data must be collected in order to accurately assess this concern. NOAA recommends that areas around the foundations receive intensive fish monitoring.

Additional Details on the Applicant's Environmental Management System

The FEIS should provide additional details regarding the "Environmental Management System" and whether it will help quantify actual effects of the project's activities on benthic habitats and the associated living marine resources.

Temporary impacts from placement of cables within Lewis Bay and Nantucket Sound

The DEIS notes several areas of short and long period sand waves throughout the project area on Horseshoe Shoals. According to recent evaluations of fishing gear effects (Stevenson et al. 2004), the smoothing of sand ridges as a result of trawl gear can adversely affect fisheries habitat. Scup, red hake, and silver hake utilize biogenic depressions and sand wave troughs as shelter habitat (Steimle et al. 1999; Steimle et al 1999; Auster et al 2003; Lock and Packer 2004). The loss of sand ridge structure habitat can impact the forage base for predator fish. Section 5.3.2.5 and Table 5.3.2-2 of the DEIS note that the proposed project will result in approximately 809 acres (not including scour protection) of temporary impact on benthic habitats during construction. These temporary impacts result from installation of submarine cables, inner-array cables, the monopiles, and the ESP, as well as the associated anchors and anchor line sweeps.

NOAA remains concerned that these proposed temporary impacts may adversely impact sand wave habitat. Furthermore, the DEIS notes that due to material lost during the cable installation process, seabed scars of approximately 6.0 feet wide and 0.75 to 1.7 feet deep resulting from plowing activity would remain. The DEIS anticipates that the estimated recovery period would range from days on Horseshoe Shoal to many months or possibly years. While adverse impacts from cable installation and anchor line sweeps are expected to be temporary, MMS should consider providing a detailed monitoring and contingency plan for recovery of physical habitat in the FEIS.

Impacts associated with water withdrawals during jet plow operation

Section 5.3.2.8 of the DEIS and Section 5.2.3 of the EFH assessment notes that fish eggs and larvae that may be present within the project area would be impacted as a result of the water intake associated with jet plow operation. The document states that millions of fish eggs and larvae may be present in the withdrawn water, and would likely suffer 100 percent mortality. However, the DEIS does not describe the amount of water to be utilized, nor the anticipated impacts on fishery resources that result from water withdrawal. The FEIS should describe anticipated levels of water usage as well as anticipated impacts to fishery resources resulting from the proposed action.

Marine mammals

The FEIS should provide a more thorough cumulative impacts analysis of the potential adverse effects the proposed Cape Wind project would have on marine mammals. Specifically, the FEIS should analyze the potential additional adverse effects of the project as a result of increased vessel activity in an area during the construction phase and also during routine operations once the facility is constructed and becomes operational, at least from a ship strike perspective. The DEIS also failed to analyze other existing factors that might also impact marine mammals within Nantucket Sound, such as commercial and recreational fisheries, stranding events, pollution, and other human activities. The FEIS should include additional information on these impacts to marine mammals.

Underwater Acoustics Impacts Analysis

NOAA is concerned that the DEIS uses inappropriate acoustic terms to describe underwater sound and its impacts to marine mammals. Terms such as L_{eq} , L_{90} , and L_{max} are typically used to address airborne noises. All these terms address noise exposures over a given period of time, and disregard the sound pressure levels (SPLs) such as 0-peak, peak-peak, and root mean square (rms) levels that are commonly used to characterize impulse sound (such as impact pile driving) and its impact to marine mammals. Currently for marine mammals exposed to impulse noises, NMFS generally uses rms measurements to estimate the levels of impacts (e.g., 180 dB re 1 μ Pa rms as the onset of TTS for cetaceans). Therefore, the Level A harassment thresholds of 190 dB for pinnipeds and 180 dB for cetaceans, and the Level B harassment thresholds of 160 dB for cetacean mentioned on page 5-126 of the DEIS are all in fact rms measurements, which is not the same measurement as L_{max} used in the DEIS. For the same reason, for source and received levels of pile driving noise, the measurements should be consistent with marine mammal noise exposure criteria by using rms. Throughout the DEIS L_{eq} , L_{90} , and L_{max} are used in addressing underwater noise impacts to marine mammals and received level measurements for pile driving. These analyses do not reflect current scientific knowledge on the effects of underwater noise to marine species because the measurements used in the DEIS are different from standards and criteria used by NMFS to manage underwater noise impacts to marine mammals and other living marine resources. The FEIS should revise the analysis of acoustic impacts to make it consistent with current scientific knowledge and with the noise exposure measurements used by NMFS.

Although much is still unknown on the effects of anthropogenic sounds on marine organisms, scientific publications in this area are available as references to provide the basis for analyses on the potential impacts from pile driving and other activities to marine mammals in the proposed project area. However, the DEIS, especially in section 5.3.2.6 *Non-ESA Marine Mammals of Chapter 5.0 Environmental and Socioeconomic Consequences*, does not provide a thorough review of the existing scientific information. This section should be revised in the FEIS to incorporate many of the important findings in this field.

Furthermore, in section 4.1.2.1.2 *Below Water Noise*, and in section 5.3.2.6.1 *Construction/Decommission Impacts* (page 5-124), the FEIS analysis should clarify that the dB levels for underwater sounds are measured using the reference acoustic pressure level of 1 μ Pa. In addition, on page 4-12 the DEIS stated that typical ambient underwater sound levels in Nantucket Sound are from L_{eq} 95 to 115 dB for surface winds of five to 30 mph. The FEIS should provide the bandwidth for this measurement.

In section 5.3.2.6 *Non-ESA Marine Mammals*, the DEIS used the hearing threshold sound level (dB_{ht}) to analyze the potential for physical injury to seals from pile driving. The DEIS also uses the hearing threshold sound levels in the analysis of the zone of influence (e.g., annoyance) for marine mammals. However, the DEIS does not provide any scientific references to support the abovementioned analyses. Current NMFS noise exposure criteria for Level B harassment (behavioral harassment in which annoyance is included) for impulse noise are 160 dB re 1 μ Pa rms for cetaceans and 170 dB re 1 μ Pa rms for pinnipeds.

In addition, the DEIS did not address any potential noise impacts to marine mammals from installation of wind turbine generators and the electric service platform, and from laying submarine cables. Construction of these structures is presumed to be conducted from barges or tugs, and would probably require operation of the vessels' dynamic positioning (DP) systems to stay at one location. Operation of a vessels DP mechanism could generate high level continuous noise and ensonify a large area with sound levels above 120 dB re 1 μ Pa, which has the potential to cause Level B harassment to marine mammals exposed to such levels. MMS should address these issues in the FEIS.

As a component of the MMS cooperating agency role with NMFS, MMS is encouraged to coordinate with NMFS' Office of Protected Resources well in advance of FEIS publication to improve the acoustic analyses. Should MMS find that a potential for take of marine mammals exists incidental to construction or operation of the Cape Wind Energy Project, it is beneficial for MMS to initiate MMPA authorization discussions as early as practical to facilitate a NEPA process that satisfies both MMS' and NMFS' environmental review responsibilities.

References

- Auster PJ, Lindholm J, Schaub S, Funnell G, Kaufman LS, Valentine PC. 2003. Use of sand wave habitats by silver hake. *Journal of Fish Biology*: 62(1): 143-152.
- Lock MC, Packer DB. 2004. Essential Fish Habitat Source Document: Silver Hake, *Merluccius bilinearis*, life history and habitat characteristics. NOAA Technical Memorandum NMFS-NE-186. National Marine Fisheries Service, James J. Howard Marine Sciences Lab. Highlands, NJ.
- Steimle FW, Zetlin CA, Berrien PL, Johnson DL, Chang S. 1999. Essential Fish Habitat Source Document: Scup, *Stenotomus chrysops*, life history and habitat characteristics. NOAA Technical Memorandum NMFS-NE-149. National Marine Fisheries Service, James J. Howard Marine Sciences Lab. Highlands, NJ.
- Steimle FW, Morse WW, Berrien PL, Johnson DL. 1999. Essential Fish Habitat Source Document: Red Hake, *Urophycis chuss*, life history and habitat characteristics. NOAA Technical Memorandum NMFS-NE-133. National Marine Fisheries Service, James J. Howard Marine Sciences Lab. Highlands, NJ.

Attachment 2



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
NORTHEAST REGION
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Gloucester, MA 01930-2298

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Mr. Robert J. DeSista
Chief, Regulatory Division
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New England District
696 Virginia Road
Concord, Massachusetts 01742-2751

**Re: Cape Wind Energy Project Draft Environmental Impact Statement;
Cape Wind Associates, LLC Public Notice (NAE-2004-338-1)**

Dear Dr. Cluck and Mr. DeSista:

The National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NMFS) has reviewed the Minerals Management Service's (MMS) Draft Environmental Impact Statement (DEIS) and the US Army Corps of Engineers' (ACOE) Public Notice (NAE-2004-338-1) for the Cape Wind Energy Project. NMFS has served as a cooperating federal agency in the development of this DEIS, and provided National Environmental Policy Act (NEPA) scoping comments to MMS on July 26, 2006. NMFS also has served as a cooperating agency in the development of the ACOE's DEIS in 2004, and provided comments relating to that DEIS in February 2005.

The purpose of this letter is to provide combined comments to both the MMS and the ACOE in accordance with their respective review processes and permitting responsibilities. The comments relate to two general themes: first, comments relating to further potential analysis that may be helpful and/or necessary as MMS and ACOE complete their permitting process, including their respective NEPA documents; and second, comments and conservation recommendations relating to MMS and ACOE's consultative responsibilities under NMFS statutory authorities.

Project Description

The proposed project would construct and operate 130 wind turbine generators (WTGs) in Nantucket Sound, Massachusetts to be connected by submarine cables to the shore at Yarmouth, Massachusetts for distribution to the existing power grid. The entire project would occupy an area of approximately 24 square miles. Cape Wind Associates proposes to build 130 WTGs on Horseshoe Shoal in Nantucket Sound. Each WTG would be



mounted on a single 16.75 - 18 foot diameter monopole, and would be connected by a 33 kilovolt (kV) submarine cable to an electric service platform (ESP). The ESP would transform and transmit alternating current electricity to shore through two 115 kV submarine cables. The maximum potential electric output is expected to be 468 megawatts (MW) distributed to the power grid on shore.

The proposed project area within Nantucket Sound supports a large variety of finfish, and shellfish species as well as other benthic invertebrates living within or on the substrate. Sections 4.2.5, 4.2.7, and 4.2.8 of the DEIS describe the variety of living marine resources and habitats identified within the project area. The finfish data utilized for this project are from NMFS and Massachusetts Division of Marine Fisheries data sets, and are not based upon site-specific finfish sampling. As stated in our July 26, 2006 comments to MMS, in order to fully evaluate the proposed project and anticipated impacts on fishery resources the use of multi-year, site-specific fisheries sampling data is needed. Absent a site-specific resource survey, a conservative approach for inferring presence of fisheries resources must be taken for the proposed project site.

General Comments

Temporary impacts from placement of cables within Lewis Bay and Nantucket Sound

The DEIS notes several areas of short and long period sand waves throughout the project area on Horseshoe Shoals. According to recent evaluations of fishing gear effects (Stevenson et al. 2004), the smoothing of sand ridges as a result of trawl gear can adversely affect fisheries habitat. Scup, red hake, and silver hake utilize biogenic depressions and sand wave troughs as shelter habitat (Steimle et al. 1999; Steimle et al 1999; Auster et al 2003; Lock and Packer 2004). The loss of sand ridge structure habitat can impact the forage base for predator fish. Section 5.3.2.5 and Table 5.3.2-2 of the DEIS note that the proposed project will result in approximately 809 acres (not including scour protection) of temporary impact on benthic habitats during construction. These temporary impacts will be the result of the installation of submarine cables, inner-array cables, the monopiles, and the ESP, as well as the associated anchors and anchor line sweeps. NMFS remains concerned that the proposed temporary impacts may adversely impact sand wave habitat. Furthermore, the DEIS notes that due to material lost during the cable installation process, seabed scars of approximately 6.0 feet wide and 0.75 to 1.7 feet deep resulting from plowing activity would remain. The DEIS anticipates that the estimated recovery period would range from days on Horseshoe Shoal to many months or possibly years. While adverse impacts from cable installation and anchor line sweeps are expected to be temporary, a detailed monitoring and contingency plan for recovery of physical habitat should be presented within the FEIS.

Impacts associated with water withdrawals during jet plow operation

Section 5.3.2.8 of the DEIS and Section 5.2.3 of the EFH assessment notes that fish eggs and larvae that may be present within the project area would be impacted as a result of the water intake associated with jet plow operation. The documents state that millions of fish eggs and larvae may be present in the withdrawn water, and would likely suffer 100 percent mortality. However, the DEIS does not describe the amount of water to be utilized, nor the anticipated levels of impacts on fishery resources. The FEIS should describe anticipated levels of water usage as well as anticipated impacts resulting from the proposed action.

MMS and ACOE Consultative Responsibilities under the Endangered Species Act and the Magnuson-Stevens Act

NMFS is entrusted with stewardship for the Nation's living marine resources. Its statutory authorities include Congressional acts that mandate federal permitting agencies to consult with NMFS regarding these living marine resources. For example, projects involving essential fish habitat (EFH) must follow the consultation process in our EFH regulation at 50 CFR 600.905 as directed by the Magnuson-Stevens Fishery Conservation and Management Act (MSA) (16 USC 1801 *et seq.*); projects potentially involving ESA species must follow the consultation process in our ESA regulations at 50 CFR 402 as directed by the Endangered Species Act (ESA) (16 USC 1531 *et seq.*); and projects modifying a body of water must follow the consultation process directed by the Fish and Wildlife Coordination Act (16 USC 661 *et seq.*). NMFS believes that the proposed project, as outlined below, implicates the consultative requirements directed by all three statutes. The following comments and conservation recommendations are based on our NEPA comments in the above section, the DEIS, as well as information contained within the EFH assessment.

Impacts on winter flounder within Lewis Bay

The DEIS indicates that the submarine transmission cable will originate at the ESP in Nantucket Sound, transit Lewis Bay, and make landfall at New Hampshire Avenue in the town of Yarmouth, Massachusetts. At approximately 200 feet seaward of the mean low water (MLW) line, the cable will transition to horizontal directional drill (HDD) to avoid coastal resource areas. In order for this transition to occur, the applicant is proposing to excavate a pit with a cofferdam in Lewis Bay. NMFS considers the sediment types (i.e., sand and silt) and water depths (i.e., 2-16 feet) within Lewis Bay, as described in the DEIS, to be important for winter flounder spawning and juvenile development (Pereira et al. 1999). As a result, the proposed cofferdam could potentially exclude approximately 2,925 square feet of winter flounder spawning habitat if utilized during the spawning and juvenile development period.

As stated within the DEIS, the submarine cable transmission system includes two cables, each with a 4-6 foot wide jet-plow trench with a 20-foot separation between. Jet-plow activity seaward of the HDD exit point will continue through Lewis Bay for a distance of over one mile. As this trench will occur over at least one mile through winter flounder EFH, we anticipate that spawning and juvenile development will be disrupted over significant areas of bay bottom if the work occurs during these sensitive time periods.

The DEIS utilizes the suspended sediment modeling program (SSFATE) in order to predict suspended sediment concentrations and deposition rates associated with cable installation within Lewis Bay. We are particularly concerned about the anticipated depth of suspended sediment deposition resulting from the activity. According to the SSFATE modeling results, deposition of suspended sediment will range from depths of 20-46 mm adjacent to the trench down to 1.0-5.0 mm a few hundred yards from the trench. Winter flounder eggs range in size from 0.74-0.85 inch diameter (Pereira et al 1999). Studies have found that sediment deposition on eggs over 0.5 mm can decrease the hatching success and delay hatching, and burial to depths of 4 mm can cause eggs to not hatch (Berry et al. 2004).

The DEIS notes that Lewis Bay has weaker tidal currents and contains higher percentages of silt and clay sediments as compared with Nantucket Sound. As such, sediments in Lewis Bay can be expected to remain in the water column for longer periods of time than sandy sediments in Nantucket Sound, and impacts may extend out greater distances from the disturbance and increase the areal extent of impact on winter flounder eggs.

According to section 5.3.2.7 of the DEIS and section 6.0 of the EFH assessment, the applicant has committed to avoid in-water construction activity in Lewis Bay between January 15–May 31 of any year in order to protect sensitive life stages of winter flounder. While this commitment is reiterated in the Monitoring and Mitigation Section (9.0) of the DEIS, the dates differ from those stated above. The appropriate work restriction in order to protect winter flounder should be January 15 – May 31.

Eelgrass

As stated within the DEIS, an eelgrass bed has been identified near Egg Island within Lewis Bay. Eelgrass beds have been designated as EFH and a Habitat Area of Particular Concern (HAPC) for summer flounder by the Mid-Atlantic Fishery Management Council (MAFMC). In addition, eelgrass beds have been designated by the US Environmental Protection Agency as “special aquatic sites” pursuant to section 404(b)(1) of the Federal Clean Water Act, due to their important role in the marine ecosystem. While DEIS and SSFATE modeling states that impacts and deposition will be minimal, steps should be taken to ensure that adverse impacts on this area do not occur.

Impacts on benthic habitats resulting from scour protection alternatives

According to the DEIS, the applicant is considering whether to utilize scour mats or traditional rock armor as alternatives for WTG scour protection, with anticipated footprints of 2.5 acres and 41.8 acres, respectively. Based upon these analyses, the use of scour mats, rather than traditional rock armor, appears to be the least damaging, practicable alternative to accomplish scour protection for this project.

The DEIS identifies impacts resulting from scour mats as temporary due to the fact that mats would be anchored, and include synthetic fronds that mimic seafloor vegetation to trap sediment and become buried over time, therefore minimizing alterations to the soft-bottomed community. Although the DEIS indicates that the scour mats would become buried by sediments, NMFS believes that it is possible these mats could remain on the seafloor surface and permanently alter the soft-bottomed community. Consequently, it is our determination that an evaluation of the scour mats performance is needed.

Essential Fish Habitat Conservation Recommendations

As noted in the EFH assessment included within the DEIS, this portion of Nantucket Sound has been designated as EFH under the MSA for 18 federally managed species including, but not limited to, Atlantic cod (*Gadus morhua*), winter flounder (*Pseudopleuronectes americanus*), windowpane flounder (*Scophthalmus aquosus*), Atlantic butterfish (*Peprilus triacanthus*), summer flounder (*Paralichthys dentatus*), scup (*Stenotomus chrysops*), black sea bass (*Centropristus striata*), long finned squid (*Loligo pealei*), and short finned squid (*Illex illecebrosus*). Based upon the information available, we have concluded that the proposed project would have temporary and permanent adverse effects on EFH resulting from construction of the proposed wind park. In order to sequentially avoid, minimize, and mitigate for adverse impacts on EFH, NMFS

recommends pursuant to Section 305(b)(4)(A) of the MSA that the ACOE and the MMS adopt the following EFH conservation recommendations:

1. In order to minimize permanent impacts associated with the scour protection alternatives, scour mats should be utilized. In order to determine the success of the scour mats, a post-project monitoring plan should be developed and implemented. Should it be determined that scour mat burial does not sufficiently occur resulting in permanent benthic alteration, compensatory mitigation should be required.
2. In order to protect winter flounder spawning and juvenile development habitat within Lewis Bay, no in-water activities within Lewis Bay should occur from January 15–May 31 of any year.
3. In order to determine the recovery of sand wave habitat and soft bottomed communities from the installation of submarine cables, inner-array cables, the monopiles, the ESP, and associated anchors and anchor line sweeps, a detailed monitoring and contingency plan for recovery of physical habitat should be required. Prior to its implementation, this monitoring plan should be reviewed and approved by Federal and state resource agencies.

Please note that Section 305(b)(4)(B) of the MSA requires the federal action agency to provide NMFS with a detailed written response to these EFH conservation recommendations, including a description of measures adopted by the federal action agency for avoiding, mitigating, or offsetting the impact of the project on EFH. In the case of a response that is inconsistent with NMFS recommendations, Section 305(b)(4)(B) of the MSA also indicates that the federal action agency must explain its reasons for not following the recommendations. Included in such reasoning would be the scientific justification for any disagreements with NMFS over the anticipated effects of the proposed action and the measures needed to avoid, minimize, mitigate, or offset such effects pursuant to 50 CFR 600.920(k).

Please also note that a distinct and further EFH consultation must be reinitiated pursuant to 50 CFR 600.920(l) if new information becomes available or the project is revised in such a manner that affects the basis for the above EFH conservation recommendations. Specifically, should the FEIS include information that alters the basis for this EFH consultation, NMFS may issue additional EFH conservation recommendations, as necessary.

Endangered Species

Section 7(a)(2) of the ESA states that each federal agency shall, in consultation with the Secretary, insure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of designated critical habitat. Any discretionary federal action that may affect a listed species must undergo Section 7 consultation. As the lead federal agency for the Cape Wind project, MMS is responsible for determining whether the proposed action may affect any listed species, and for seeking the concurrence of NMFS with that determination. MMS has indicated to NMFS that MMS will request the initiation of formal consultation, pursuant to Section 7 of the ESA, in the spring of 2008.

It is our understanding that this consultation will be completed before an FEIS is issued. As such, these present comments will not include any conclusions regarding the likelihood of effects to listed species as it is appropriate to make such determination on effects in our Biological Opinion.

NMFS anticipates that the sections of the EIS dealing with potential impacts on endangered species will be updated to reflect the outcome of the consultation. Additionally, we expect that MMS will incorporate any Reasonable and Prudent Measures and/or Terms and Conditions included as part of an Incidental Take Statement, which may be issued accompanying NMFS Biological Opinion.

The discussion of the species listed under the ESA that may occur in the action area is complete and accurate. However, there are several areas where additional information will facilitate a more complete assessment of potential impacts on listed species.

The presence of whales and sea turtles in the action area is seasonal. As such, additional information on the proposed construction schedule, including the duration of each phase of the project (i.e., pile driving, cable laying, etc.) as well as any time of year constraints, will aid in determining the potential for the various phases of the project to impact these species. MMS should provide more information on the likely scenario for pile driving, such as the amount of time it will take to drive each pile, the number of piles to be driven each day, and how many piles are expected to be being driven at any one time.

The DEIS includes a discussion on likely impacts of pile driving on listed whales. However, the DEIS does not include a similar section for sea turtles. In order to determine if pile driving is likely to affect sea turtles, MMS should include an analysis on the likelihood of increased sound levels to cause injury or behavioral effects to sea turtles. Additionally, MMS should provide information on the distance from the piles where sound levels are likely to return to background levels.

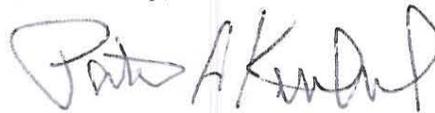
The DEIS contains information on sound levels measured during the construction of the Utgrunden project. In order to ensure that this information is relevant to the proposed project, MMS should clarify if the piles proposed for installation by Cape Wind are the same size as those at Utgrunden, as well as whether the installation techniques are the same. Information on the type of substrate and other characteristics that might influence sound levels associated with pile driving should also be included. This information will better allow a comparison of the Utgrunden project to the proposed project.

The DEIS concludes that the proposed project will have “no effect” on whales and sea turtles, with the exception of loggerhead sea turtles, for which MMS has concluded the proposed project “may affect, but is not likely to adversely affect.” The effects determination for whales and the other sea turtle species seems to be inconsistent with the body of the DEIS, which in several places discusses the likelihood of the project to affect

these species, particularly during construction. MMS should clarify their conclusions regarding likely impacts on these listed species, and ensure that the conclusions are consistent throughout the document.

We look forward to your response to our EFH conservation recommendations, as well as MMS' request for the initiation of formal consultation, pursuant to Section 7 of the ESA. Thank you for your continued coordination with NMFS regarding this project. Should you have further questions regarding these EFH comments, please contact Christopher Boelke at 978-281-9131. Questions regarding the ESA consultation process should be directed to Julie Crocker at 978-281-9328 x6530.

Sincerely,

A handwritten signature in black ink, appearing to read "Patricia A. Kurkul". The signature is written in a cursive, flowing style.

Patricia A. Kurkul
Regional Administrator

cc:

Robert Varney, US Environmental Protection Agency
Michael Bartlett, US Fish and Wildlife Service
Secretary Ian A. Bowles, MA Executive Office of Energy and Environmental Affairs
Paul Diodati, MA Division of Marine Fisheries
Leslie-Ann McGee, MA Coastal Zone Management
Glenn Haas, MA Department of Environmental Protection
Paul Howard, New England Fishery Management Council
Dan Furlong, Mid-Atlantic Fishery Management Council
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References

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