SAVE OUR SOUND
alliance to protect nantucket sound

July 16, 2010

VIA FEDEX

Mr. Brendan McCahill
Environmental Engineer
U.S. Environmental Protection Agency – New England
5 Post Office Square
Suite 100, Attn: OEP-5-2
Boston, MA 02109-3912

Re: Cape Wind Project Outer Continental Shelf Air Permit Review

Dear Mr. Cahill:

The Alliance to Protect Nantucket Sound (APNS) hereby set forth their comments on the proposed Federal Outer Continental Shelf (OCS) Air Permit Approval (APA) for the proposed Cape Wind Project. We thank Region 1 of the Environmental Protection Agency (EPA) for your diligence with regard to the entire scope of the Cape Wind Project review, and the agency's extensive and thorough comments to and involvement with both the U.S. Army Corps of Engineers (Army Corps) and Minerals Management Service (MMS). Throughout the nearly ten-year process, your office has been a consistent voice of reason, and champion of a proper regulatory process and adherence to the requirements of statutes designed to balance interests and protect our natural resources. Now that EPA has its own decision to make on the project, we are confident that you will continue to demonstrate that same commitment to the OCS APA process. We are concerned, however, by several factors in the current OCS APA proposed permit. The purpose of these comments is to identify current deficiencies in the proposal and suggest appropriate ways of complying with existing statutory and regulatory duties.

Background

On December 17, 2008, Cape Wind Associates (CWA) submitted an OCS air permit application to EPA New England. The application is intended to cover emissions from the diesel compression ignition engine construction equipment to be used during the construction and operation of the Cape Wind project. The engines emit criteria pollutants including nitrogen oxides (NO_X), carbon monoxide (CO), particulate matter (PM), sulfur dioxide (SO_2), and volatile organic compounds (VOC). In the application, CWA provided the following information to support its statement that it will meet all air permit requirements codified in section 328(a) of the Clean Air Act (CAA) and 40 C.F.R. Part 55 and all other applicable federal requirements. According to the application, CWA will:

1. Apply Lowest Achievable Emission Rate (LAER) for NO_X emissions during the Cape Wind project construction phase (Phase 1);

2. Obtain NO_X emission reductions to offset the Phase 1 NO_X emissions;

3. Apply Best Available Control Technology (BACT) for all emissions during Phase 1 and the Cape Wind project operational phase (Phase 2);

4. Perform an air quality analysis to ensure that the emission increase from the project would not cause or contribute to a violation of any applicable National Ambient Air Quality Standards (NAAQS), which are maximum concentration "ceilings" measured in terms of total concentration of a pollutant in the atmosphere; and

5. Comply with all other state and federal regulations.

Under section 328(a) of the CAA, EPA must establish air pollution requirements for OCS sources located within 25 miles of States' seaward boundaries. These requirements and their implementing regulations at 40 C.F.R. Part 55 apply the same pollution control requirements to an OCS source that would apply to that source if it were located in the corresponding onshore area (COA), typically the onshore attainment or nonattainment area closest to the source.

On June 10, 2010, EPA issued a notice proposing to issue an OCS APA to CWA for the project's construction and operation periods (Phases 1 and 2). EPA is proposing that CWA control air emissions using the following emission control technologies and operations:

1. The use of newer low-NO_X engines installed with diesel oxidation catalysts that reduce NO_X, PM, CO, and VOC emissions; and

2. The use of ultra-low sulfur diesel (ULSD) for all construction equipment that reduces SO_2 and PM emissions.

EPA's proposal requires CWA to offset its Phase 1 NO_X emissions by purchasing 285 tons of NO_X emission reduction credits through the Massachusetts offsets trading bank. In an attempt to avoid permit revisions while allowing for necessary repair activities, EPA has proposed that CWA limit Phase 2 emissions to 49 tons per year or less.

CWA's own air quality analysis indicates that the proposed project's impacts will be below all applicable NAAQS.

Without EPA's approval of the OCS APA, the Cape Wind project cannot proceed. While MMS has issued a Record of Decision (ROD) to offer a lease to CWA for the proposed project, CWA may not proceed without obtaining other necessary federal and state permits, including the OCS APA from EPA. For the reasons discussed below, EPA must review the project again using appropriate and correct standards and completing additional public review.

Clean Air Act Issues

In general, we believe EPA has appropriately identified the non-propulsion engines on the construction vessels as the primary source of emissions and that, by virtue of section 328 of the CAA, these sources are subject to the LAER requirement and the requirement to offset criteria pollutant emissions.

That said, we see important deficiencies in the EPA analysis that prevented the proposed permit from meeting the statutory requirements of the CAA, and therefore prevent EPA from approving the permit in its current state. We discuss these deficiencies in turn below.

First, EPA admits that CWA must show it will meet all NAAQS (as required by the Massachusetts rules), while claiming that CWA will not cause an exceedance of any NAAQS. *See, Attachment I to the Fact Sheet*, email from B. Hennesey to I. McDonnell, *Modeling for Cape Wind's Local Impacts Relative to the National Ambient Air Quality Standards* (June 3, 2010).

However, EPA has not modeled CWA's compliance with the new NAAQS for NO_X issued in February 2010. 75 Fed. Reg. 6,474 (Feb. 9, 2010). As you know, EPA has issued specific guidance that a new NAAQS applies to permitting decisions from its effective date forward. While the EPA guidance applies specifically to federal Prevention of Significant Deterioration permitting decisions, its reasoning applies equally to permitting decisions required by State Implementation Plans such as that in force in Massachusetts.

As EPA knows, the failure to analyze whether CWA construction activities will result in exceedances of the new NO_X NAAQS is not academic. As recently as June 29 of this year, the EPA issued a 29 page guidance document discussing reports from stakeholders "indicating that some sources – both existing and proposed – are modeling potential violations of the 1-hour NO_2 standard." *See, Guidance Concerning the Implementation of the 1-hour NO_2 NAAQS for the Prevention of Significant Deterioration Program, to Regional Administrators from S. Page, Director, Office of Air Quality Planning and Standards* (June 29, 2010). EPA is required to determine whether such programs exist in the case of the Cape Wind permit, and may not proceed to issue a permit without undertaking such an analysis.

This month, EPA also issued a new short term NAAQS for sulfur oxides. EPA has likewise provided no analysis of whether the Cape Wind project will result in exceedances of the new SO_X standard. Given that the modeling analysis referred to by EPA shows that the emissions from construction will be at least 87 percent of the previous SO_X NAAQS, and that it can be expected to be more difficult to demonstrate attainment of the short term SO_X NAAQS, it is important that EPA undertake and provide an analysis of the short term SO_X concentrations associated with the proposed construction program. Once again, without such a demonstration the agency cannot proceed to issue the requested air permit.

In addition, the emissions analysis does not capture other impacts of the project. For example, the Federal Aviation Administration has proposed to restrict the airspace for the 25

square miles surrounding the proposed project. Planes will be required to circumnavigate the area, increasing emissions. Likewise, vessels traveling in the area will be required to alter and lengthen their courses in order to avoid the project, further increasing emission levels.

We would also like to use this opportunity to highlight three additional and related issues with the proposed project and EPA's federal permitting authority: inadequate analysis of project alternatives, failure to properly consult on issues of historic and cultural preservation, and failure to consult on impacts to threatened and endangered species.

Analysis of Project Alternatives.

Additionally, EPA has an obligation to conduct an independent analysis of project alternatives. EPA has consistently expressed concern over MMS's flawed analysis of alternatives under the National Environmental Policy Act (NEPA), 42 U.S.C. §§ 4321 *et seq*. Ironically, EPA has now taken the position that no analysis of alternatives needs to be performed under the agency's CAA authority for purposes of the OCS APA.

Under NEPA, agencies must consider a reasonable range of alternatives, including a no-action alternative, before taking any action, such as issuing a permit, that may significantly impact the quality of the human environment. The Council on Environmental Quality's (CEQ) regulations implementing NEPA at 40 C.F.R. § 1502.14 explain that a reasonable range of alternatives should be presented and compared in an Environmental Impact Statement (EIS) to allow for a "clear basis for choice among options by the decision maker and the public." CEQ guidance elaborates on this section, stating that "Section 1502.14 requires the [EIS] to examine all reasonable alternatives to the proposal. In determining the scope of alternatives to be considered, the emphasis is on what is 'reasonable' rather than on whether the proponent or applicant likes or is itself capable of carrying out a particular alternative. Reasonable alternatives include those that are practical or feasible from the technical and economic standpoint and using common sense, rather than simply desirable from the standpoint of the applicant." *Forty Most Frequently Asked Questions Concerning CEQ's National Environmental Policy Act Regulations,* 46 Fed. Reg. 18,026, #2a(A) (March 23, 1981).

In EPA's April 5, 2002, comments on the Army Corps' Notice of Scoping, the agency recommended broadening the purpose and need statement to allow for the proper inclusion and analysis of more alternatives, and criticized the information used to evaluate the alternatives included, stating "[a]t this point, the economics of the project are poorly understood and a greater level of information will be necessary to evaluate the proposed alternative as well as other alternatives that could achieve the project purpose." *Exhibit 1.* In April 2008, EPA commented that the MMS DEIS "did not provide enough information to fully characterize baseline environmental conditions and environmental impacts of the proposed project, and did not adequately consider alternatives to avoid or minimize impacts." *Exhibit 2. For additional discussion of MMS's failure to adequately consider and analyze alternatives to the proposed project, see comments submitted by APNS, Exhibits 3 - 5.* Neither CWA nor either of the project's lead agencies provided the requested information. Nor did MMS provide any additional analysis of alternatives.

APNS recognizes that under the Energy Supply and Environmental Coordination Act of 1974, 15 U.S.C. § 793(c)(1), CAA decisions are not considered "major federal actions" and are thus exempt from the NEPA requirement that an environmental impact statement be prepared for the proposed permit. However, nothing in that Act exempts EPA from its duty to conduct an alternatives analysis, which is a duty flowing from the CAA itself.. Under NEPA at section 4332(E), federal agencies must "study, develop, and describe appropriate alternatives to recommend courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources." This requirement for the analysis of alternatives exists wholly independent of the duty contained in section 4332(C) to prepare an EIS for "major federal actions significantly affecting the quality of the human environment." This independent statutory requirement applies to all agencies, including EPA, and nothing in section 793(c)(1) exempts the agency from its separate duty to evaluate alternatives. While, typically, the requirement imposed by section 4332(E) to analyze alternatives is satisfied through the preparation of an Environmental Assessment or EIS, here, given the exemption from the preparation of an EIS required by section 4332(C), EPA must prepare an independent alternatives analysis to support its permitting decision in order to meet the requirements of section 4332(E).

Section 173(a)(5) of the CAA underlines the existence of such a duty. It provides that in deciding whether to issue a nonattainment new source review permit – a requirement that is incorporated into the OCS APA at issue here – EPA must find that an analysis of alternative sites, sizes, production processes and environmental control techniques for such proposed source demonstrates that the benefits of the proposed source significantly outweigh the environmental and social costs imposed as a result of its location, construction, or modification. Clearly, this language is similar to NEPA, and in fact it is stronger than the language in NEPA because it requires substantive balancing and not just a discussion of the issues. APNS is aware of precedent to the effect that EPA can rely on NEPA statements from other agencies to satisfy this requirement. But clearly that reliance cannot extend to an analysis that EPA itself has found inadequate on numerous occasions.

Also, given EPA's prior comments on the adequacy of the alternatives analysis in the existing EIS prepared by MMS, it is clear that EPA cannot satisfy the requirements of section 4332(E) by simply adopting the alternatives analysis contained in that EIS. EPA should obtain the additional information needed to fully characterize the baseline environmental conditions and conduct its own independent analysis of a range of alternatives, rather than accept and rely on MMS's flawed findings.

Additionally, since the MMS ROD was issued on April 28, 2010, CWA has made significant changes to the proposed project that EPA must consider. According to recent testimony before the Massachusetts Department of Public Utilities by the Director of Wholesale Market Relations for the Energy Portfolio Management organization at National Grid (the utility with which CWA has entered into an MOU), CWA does not intend to implement a single-phase buildout project as described in the EIS and ROD. Instead, the developer intends to undertake a phased development in Nantucket Sound that is vastly more complex and segmented than even the phased alternative considered, and rejected as being too environmentally harmful, in the EIS.

Such an approach would deviate substantially from the proposed project as approved by MMS and from CWA's own representations to the federal government and the public. It would be remarkable if this did not result in an increase in the already substantial level of construction emissions. APNS has requested, on this basis, that the April 28 ROD be withdrawn, that the application be returned to CWA for revision to reflect the current proposal, and that should CWA intend to proceed with a phased approach, it submit a new application in accordance with 30 C.F.R. Part 285. *See Exhibit 6.*

EPA has an independent duty to consult under section 106 of the National Historic Preservation Act

EPA may not rely on the Department of the Interior for compliance with section 106 of the National Historic Preservation Act, 16 U.S.C. § 470f, and its implementing regulations, 36 C.F.R. Part 800. To date, EPA has inappropriately sought to adopt MMS's consultations to satisfy its own section 106 compliance obligations.

On December1, 2009, four months before MMS terminated section 106 review for the Cape Wind Project, EPA sought to designate MMS as the lead federal agency for compliance with section 106 in a letter to MMS. *Exhibit 7.* In that letter, EPA asked MMS to acknowledge and accept EPA's designation by signing the space provided at the end of the letter.

In its response to EPA in a letter dated December 15, 2009, *Exhibit 8*, MMS thanked EPA for its "letter dated December 1, 2009 requesting that the [EPA] be granted consulting party status in the [NHPA] process for the proposed Cape Wind Energy Project." Effective as of the date of the letter, MMS granted to EPA consulting party status under the authority provided to MMS in 36 C.F.R. § 800.3(f)(3). MMS invited "EPA to participate in any future Section 106 consultation meetings," which means that MMS acknowledged that EPA had its own section 106 responsibilities. But MMS never acknowledged or accepted EPA's attempted designation of MMS as the lead federal agency for section 106 of the Cape Wind project under the provisions of 36 C.F.R. § 800.2(a)(2). Therefore, by a belated and ineffective attempted designation, EPA may not rely on MMS's compliance with the requirements of section 106 to discharge its own responsibilities under that statute. Having failed in that designation, under the ACHP's rules, EPA, like other federal agencies that failed to designate a lead federal agency for the Cape Wind project, "remains individually responsible for their compliance with [the section 106 rules]." *Id.*

Therefore, EPA must independently consult with the Massachusetts State Historic Preservation Officer (SHPO) as well as with the Wampanoag Tribes. To our knowledge, EPA has not initiated the required consultation with the SHPO and Tribes under section 106. It also has the independent responsibility to respond to the recommendations of the Advisory Council on Historic Preservation (ACHP), which strongly recommended to MMS that, based on unavoidable and substantial adverse effects to Tribal and cultural resources, the Cape Wind application should be denied or the project relocated to a less damaging alternative site. MMS unfortunately did not follow the ACHP's recommendations, but EPA has its own obligation to consider and respond to the ACHP's comments.

It appears from recent correspondence between EPA and MMS that EPA has attempted to comply with section 800.2(a)(2). In its air permit documentation, EPA states that MMS was the lead agency for section 106 consultation and that EPA's obligations under section 106 were satisfied by MMS. On December 15, 2009, MMS sent a letter to EPA Region 1, *Exhibit 8*, in which it informed EPA that "it is the lead agency reviewing the Cape Wind project under Section 106 of the [NHPA]. To the extent that activities regulated by EPA as part of this project need to be addressed under section 106, EPA has attempted to rely on MMS's compliance with that law. *See Fact Sheet – Outer Continental Shelf Air Permit Approval: Cape Wind Energy Project*, at page 52. There is nothing in the record, however, to indicate that EPA complied with its duties as a consulting party during any part of the section 106 process.

By its own admission, EPA was not included as a consulting party until mid-December 2009 – eight years after the project review first began, three months before section 106 consultation was terminated, and only four months before a final decision was published. During that entire period, according to the fact sheet, EPA was passively involved, rather than truly working in cooperation with MMS to ensure that the proper process and consideration were being given to the section 106 consultation. Again, EPA has an independent responsibility to fulfill the consultation requirement set forth in section 106 of the NHPA and its implementing regulations. EPA must fulfill this requirement and, in doing so, should give proper consideration and deference to the ACHP's recommendation that the proposed project not be allowed to proceed.

Section 106 of the NHPA prohibits federal agencies from approving any federal "undertaking," including the issuance of any license, permit, or approval, without first considering the effects of the action on historic properties or cultural artifacts that are eligible for inclusion or are listed in the National Register of Historic Places (National Register). 16 U.S.C. §§ 470f, 470w(7). The goal of section 106 is to "identify historic properties potentially affected by the undertaking, assess its effects and seek ways to avoid, minimize or mitigate any adverse effects" in consultation with the SHPO, Native American tribes, and other parties with a demonstrated interest in the undertaking. 36 C.F.R. §§ 800.1(a), 800.2(a)(4). Federal agencies must also "seek and consider the views of the public" during the section 106 process and develop a plan for public involvement. *Id.* §§ 800.2(d), 800.3(e).

Under the rules promulgated by the ACHP that implement section 106, an agency must, prior to approving an undertaking: (1) identify the area of potential effects; (2) gather information from existing records, consulting parties, Indian tribes, and others likely to have relevant knowledge or concerns, and review existing information on historic properties within the undertaking's area of potential effects (including information on possible historic properties not yet identified); (3) make a reasonable and good faith effort to take the steps necessary to identify historic properties within the area of potential effects; (4) evaluate the undertaking's potential effects on historic properties; and (5) develop and evaluate alternatives or modifications to the undertaking that could avoid, minimize, or mitigate adverse effects. *Id.* §§ 800.3-800.7. Unless an agency terminates section 106 consultation and asks the ACHP to comment, an agency must document the measures developed and agreed-to for resolving an undertaking's adverse effects in either a Memorandum of Agreement or Programmatic Agreement. *Id.* §§ 800.6(c),

800.14(b). Alternatively, an agency may resolve adverse effects through an EIS and ROD appropriately coordinated and conditioned in accordance with the ACHP's rules and with prior notification to the SHPO and ACHP. *Id.* § 800.8(c), (c)(4).

NHPA review was first initiated during the Army Corps's review of the proposed project. While the Corps failed to comply with the NHPA through its failure to assess the visual effects on numerous properties, it nonetheless concluded that the proposed project would adversely affect 16 properties, including two National Historic Landmark properties. Following the passage of the Energy Policy Act of 2005, and as part of the 2008 DEIS, MMS undertook its own section 106 review.

After the January 2009 publication of the FEIS, the ACHP conducted a review of the proposed project. On April 22, 2010, the ACHP submitted its formal comments to Secretary of the Interior Salazar. The ACHP recommended that the Secretary not approve the proposed project, concluding that the proposed project will adversely affect 34 historic properties, including 16 historic districts and 12 individually significant historic properties on Cape Cod, Martha's Vineyard, and Nantucket Island, and six properties of religious and cultural significance to tribes, including Nantucket Sound itself. The ACHP also determined that alternatives were available that would not have adverse impacts on historic properties. On March 1, 2010, Secretary Salazar, on behalf of MMS, terminated section 106 consultation with ACHP, and requested that ACHP submit comments.

On April 28, 2010, concurrent with signing and releasing the Record of Decision, Secretary Salazar sent a letter taking the unusual step of rejecting the ACHP's comments in their entirety. MMS's revised Environmental Assessment/Finding of No New Significant Impact, posted on its website the same day, purported to address this issue, but did not adequately address the ACHP's findings and recommendations.

On June 25, 2010, numerous parties, including APNS, filed a lawsuit in federal district court, challenging MMS's decision to issue the lease on the basis of, among other things, its failure to properly identify historic properties, analyze the negative impacts of the proposed project on those properties, or afford parties such as ACHP an appropriate opportunity to comment and consult on those impacts, as well as MMS's termination of the consultation process prior to developing any means to avoid or mitigate that harm.

EPA may not simply rely on MMS and Secretary Salazar's decision not to follow the ACHP's recommendations. Rather, EPA must itself either acknowledge or expressly adopt Secretary Salazar's response, or issue its own response to the ACHP letter. The regulations at 36 C.F.R. § 800.7(a) provide that an agency official, the SHPO or tribal representative, or the ACHP may determine that further consultation will not be productive and terminate consultation. "Any party that terminates consultation shall notify the other consulting parties and provide them the reasons for terminating in writing." *Id.* However, the act of termination removes *only* the terminating party from the section 106 responsibility. Since EPA requested and was given status as a cooperating agency for purposes of section 106, it has a duty to continue the consultation process, or must itself terminate its involvement in the process.

This is especially true given that EPA has been involved in virtually none of the section 106 consultation process to this point. It did not properly designate MMS as lead agency for section 106 review, and avoided any section 106 compliance until the process was terminated and such compliance rendered moot. Because there was not a proper or adequate designation of MMS as lead agency for purposes of EPA's federal requirements, EPA is expressly responsible for completing its own section 106 review.

EPA has an independent duty to comply with the Endangered Species Act

EPA also has an independent duty to comply with the Endangered Species Act (ESA), 16 U.S.C. §§ 1531 *et seq.* The current ESA record does not apply to the EPA's OCS APA. This means that EPA must initiate ESA section 7 consultation for the effects of its actions on both bird and whale species.

The ESA was enacted to "provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved." *Id.* § 1531(b). The ESA defines the term "conservation" as the use of "all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided [by the ESA] are no longer necessary" – that is, to recover species so that they no longer need ESA protection. *Id.* § 1532(3). The ESA requires the Secretary of the Interior to issue regulations listing species as "threatened" or "endangered" based on the present or threatened destruction, modification, or curtailment of a species' habitat or range; overutilization for commercial, recreational, scientific, or educational purposes; disease or predation; inadequacy of existing regulatory mechanisms; or other natural or manmade factors affecting the species' continued existence. *Id.* § 1533(a)(1).

Once listed as threatened or endangered, a species receives a number of important protections. First, under the ESA and its implementing regulations, it is illegal for anyone to "take" an endangered or threatened species. *Id.* § 1538(a)(1); *see also* 50 C.F.R. §§ 17.21, 17.31. The term "take" is defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct." 16 U.S.C. § 1532(19). Second, under section 7(a)(1) of the ESA, each federal agency must "utilize [its] authorities in furtherance of the purposes" of the ESA, *id.* § 1536(a)(1), and under section 7(a)(2), "[e]ach federal agency shall, in consultation with and with the assistance of the Secretary, insure that any action authorized, funded, or carried out by such agency…is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species." *Id.* § 1536(a)(2). In fulfilling these requirements, "each agency shall use the best scientific and commercial data available." *Id.*

To ensure that the mandate of section 7 is carried out, Congress and federal officials charged with implementing the ESA have established a detailed consultation process that must be followed by federal agencies whose actions may affect endangered or threatened species. Under this process, "[e]ach Federal agency shall review its actions at the earliest possible time to determine whether any action may affect listed species or critical habitat." 50 C.F.R. § 402.14(a). If such a determination is made, the agency must, prior to making any final

determination, enter into "formal consultation" with the U.S. Fish and Wildlife Service (FWS) by requesting that FWS issue a "biological opinion as to whether the action, taken together with cumulative effects, is likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat." *Id.* § 402.14(g)(4); *see also* 16 U.S.C. § 1536(b).

When FWS concludes that agency action may result in incidental take that does not rise to the level of jeopardy to the entire species, FWS must issue a statement as part of a biological opinion that specifies the impact of the incidental take and sets forth the terms and conditions with which the action agency and private applicants must comply. *Id.* § 1536(b)(4).

The current ESA record does not cover this action by the EPA. EPA is correct in asserting that it is named a cooperating agency of sorts for purposes of the FWS Biological Opinion. *See*, *Fact Sheet – Outer Continental Shelf Air Permit Approval: Cape Wind Energy Project*, at page 51. However, neither the FWS Biological Opinion, nor the National Marine Fisheries Service (NMFS) Biological Opinion, both of which are included in Appendix J to the January 2009 FEIS, includes any discussion of EPA's OCS APA. While the FWS Biological Opinion purports to cover EPA, it does not reflect the actual subject of EPA's decision and need for consultation. The NMFS Biological Opinion does not reference EPA at all. Both Biological Opinions are solely and exclusively focused on the MMS determination of whether to offer an OCS lease, and are too narrow in scope to adequately consider the air quality factors critical to EPA's current decision that are necessary to meet the section 7 consultation requirement.

Moreover, both of the Biological Opinions are defective, and both MMS and FWS have been sued for their failure to comply with the ESA. MMS unlawfully allowed CWA to dictate the terms of the incidental take statement for impacts to birds. It did so by overruling the FWS's recommendation, relying instead on a flawed economic argument by CWA. Neither FWS nor MMS questioned CWA's erroneous and self-serving claim that the temporary project shutdown required to protect birds would destroy the viability of the proposed project. EPA should not allow CWA or political interference to perpetuate this error; rather, the ESA demands that the best available science control agency decisions. *Id.* § 1536(a)(2). EPA therefore must initiate, from the beginning, a new ESA section 7 compliance, which would require a new formal consultation with FWS and NMFS. This is particularly important because EPA's permit is necessary for the project to proceed. All species impacts are therefore attributable to EPA's decision whether to issue the OCS APA.

In the course of approving this project, MMS consulted with FWS on CWA's application to construct and operate the proposed project in federal waters traversed by federally endangered Roseate Terns and in close proximity to the beaches where threatened Piping Plovers nest. In its Biological Opinion, FWS determined that the wind power facility will kill at least 80 to 100 Roseate Terns and up to ten Piping Plovers over the first twenty years of the project. FWS estimated those expected levels of take based on the same data the agency had previously dismissed as insufficient to measure the proposed project's impacts on birds. In comments on MMS' DEIS for the project earlier that same year, FWS stated that the "paucity of site-specific information" on migratory birds prevented MMS from accurately characterizing the project's

environmental impact. Without collecting additional data, requiring the developer to do so, or adopting a precautionary approach and giving the benefit of the doubt to the federally listed species, FWS used the *same data* to project the levels of take that it determined did not rise to the level of jeopardy to the species under the ESA. Further, the agency ignored its own previously published interim guidance on avoiding and minimizing wildlife impacts from wind turbines. Finally, even though FWS had found that CWA should shut down the turbines on a temporary and seasonal basis to reduce bird kills, it did not require such mitigation as a term and condition of the incidental take authorization in the draft Biological Opinion because MMS and CWA rejected a shutdown as too costly. FWS never made an independent finding of whether a temporary shutdown would be reasonable and prudent under the circumstances, but rather outright rejected the measures in the final Biological Opinion based solely on the resistance of MMS and the lease applicant.

In short, the ESA section 7 consultation conducted between MMS and FWS was incomplete and faulty, and based on improper and inadequate data. It therefore cannot be used as the foundation for federal agency decision-making. Furthermore, while EPA claims that the OCS APA is covered by the consultation with MMS, the record indicates that this is not the case. At a minimum, EPA is under an obligation to contact FWS for a list of listed species potentially affected by the OCS APA, and must complete a Biological Assessment.

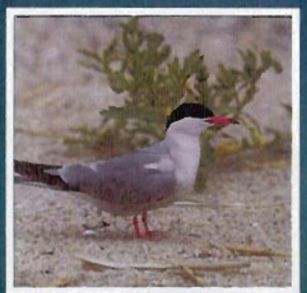
Thank you for your consideration of these comments.

Very truly yours,

Audra Parker
President and CEO

4 Barnstable Road, Hyannis, Massachusetts 02601
▫ 508-775-9767 ▫ Fax: 508-775-9725

www.saveoursound.org
a 501 (c)(3) tax-exempt organization



Alliance to Protect Nantucket Sound

Comments on the Cape Wind Project Outer Continental Shelf Air Permit Review

Submitted To:
Environmental Protection Agency Region 1

July 16, 2010

Alliance to Protect Nantucket Sound Comments on the Cape Wind Project Outer Continental Shelf Air Permit Review

Exhibit List

1. Letter from R. Varney, Environmental Protection Agency Regional Administrator, to Col. B. Osterndorf, U.S. Army Corps of Engineers (April 5, 2002).

2. Letter from R. Varney, Environmental Protection Agency Regional Administrator, to J. Bennett, Minerals Management Service (April 21, 2008).

3. Excerpts from Comments on the Cape Wind Draft Environmental Impact Statement from the Alliance to Protect Nantucket Sound, to the Minerals Management Service (April 21, 2008).

4. Comments on the Cape Wind Final Environmental Impact Statement Alternatives Analysis from the Alliance to Protect Nantucket Sound, to the Minerals Management Service (Sept. 24, 2009).

5. Comments on the Cape Wind Environmental Assessment and Finding of No Significant Impact from the Alliance to Protect Nantucket Sound, to the Minerals Management Service (April 7, 2010).

6. Letter from A. Parker, Alliance to Protect Nantucket Sound, to M. Bromwich, Bureau of Ocean Energy Management, Regulation and Enforcement (June 23, 2010).

7. Letter from S. Perkins, Environmental Protection Agency, to A. Krueger, Ph.D., Minerals Management Service (Dec. 1, 2009).

8. Letter from A. Krueger, Ph.D., Minerals Management Service, to S. Perkins, Environmental Protection Agency (Dec. 15, 2009).

April 5, 2002

Colonel Brian E. Osterndorf
District Engineer
United States Army Corps of Engineers
696 Virginia Road
Concord, Massachusetts 01742-2751

RE: Cape Wind Project Draft Environmental Impact Statement Scoping Comments

Dear Colonel Osterndorf:

EPA New England appreciates the opportunity to comment on the scope of analysis for the preparation of a Draft Environmental Impact Statement (DEIS) for the Cape Wind Associates, LLC (Cape Wind) proposal to construct a wind-powered electrical generation facility (wind farm) in Nantucket Sound off the coast of Cape Cod, Martha's Vineyard and Nantucket. Based on the applicant's information, we understand that the project will feature 170 wind turbines spread across 28 square miles of Nantucket Sound that would produce up to 420 megawatts of energy. The 426 foot tall turbines would produce energy that would be transmitted via submarine cables to an electrical service platform where it would be converted and transferred to Cape Cod via two 115KV submarine cables. While preparing these comments, EPA has reviewed applicant-generated information contained in its application to the Corps of Engineers (Corps) for Section 10 authorization and recent comments offered by a number of state and federal agencies, as well as the public. This letter sets forth our specific concerns about the scope of analysis for the DEIS.

EPA commends the Corps for deciding early on that an EIS should be prepared pursuant to the National Environmental Policy Act (NEPA) to support decision-making regarding the Cape Wind proposal to construct a wind farm in Nantucket Sound. That decision paves the way for a comprehensive analysis of this challenging and precedent-setting project. In addition, EPA fully supports the efforts of the Corps and the Massachusetts Executive Office of Environmental Affairs to integrate their respective reviews within a combined DEIS/DEIR under NEPA and Massachusetts Environmental Policy Act (MEPA). This joint review should improve the public review process and streamline the environmental review for the project.

The Corps-sponsored scoping sessions were well attended and featured a valuable transfer of questions, concerns and suggestions about both the project and the types of information that should be included in the DEIS/DEIR. Discussion at each meeting demonstrated significant public interest in a comprehensive evaluation. Continued interagency coordination across federal, state and local jurisdictions will be critical for ensuring that the DEIS/DEIR adequately informs the various regulatory reviews that will follow.

As you know, the generation of electricity from fossil fuels is the single largest industrial source of air pollution in New England. Because of these fossil-fuel power plant emissions, New England continues to experience too many days of unhealthy air and too much degradation of the

environment, including acidification of lakes and streams, mercury deposition, visibility impairment, greenhouse gas emissions, and excessive nitrogen loading to our ecosystems. In addition, apart from air emissions, fossil fuel burning power plants can cause environmental harm from their withdrawal of cooling water from, and their discharge of heated water to, the region's waterways. There are also many adverse environmental impacts associated with the extraction, refining and transportation of fossil fuels to be used in the New England market. Consequently, EPA New England strongly supports an increase in the amount of electricity generated in the region from renewable resources such as wind power. However, no shift to renewable energy, either through the development of this or any other project, can be made without a complete understanding of the environmental impacts and tradeoffs associated with each alternative.

EPA looks forward to coordinating with the Corps and other local, state and federal interests as work is done to determine the appropriate scope of analysis for the project and as specific investigations are developed to gauge the level of impact associated with each alternative under consideration. Off-shore wind farm operations, such as the one proposed by Cape Wind, raise a number of public policy concerns and environmental questions that must be carefully addressed. These issues are summarized below.

Determination of the Range of Alternatives

The Council on Environmental Quality's (CEQ's) regulations implementing NEPA at 40 CFR Part 1502.14 explain that a reasonable range of alternatives should be presented and compared in the DEIS to allow for a "clear basis for choice among options by the decision maker and the public." Moreover, CEQ's "Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations" explain that "Section 1502.14 requires the DEIS to examine all reasonable alternatives to the proposal. In determining the scope of alternatives to be considered, the emphasis is on what is 'reasonable' rather than on whether the proponent or applicant likes or is itself capable of carrying out a particular alternative. Reasonable alternatives include those that are practical or feasible from the technical and economic standpoint and using common sense, rather than simply desirable from the standpoint of the applicant."

Framing an appropriate purpose and need statement is a key element in the development of a range of alternatives for analysis, as the alternatives flow directly from it. The proponent's application states that the project's purpose is "to generate up to 420 MW of clean, renewable wind-generated energy that will be transmitted and distributed to the New England regional power grid, including Cape Cod and the Islands...." While we think the applicant's proposed purpose statement is a good starting point, we recommend it be modified to make it less constraining for the purposes of the NEPA analysis and determining the range of alternatives to be investigated in the DEIS/DEIR. As a starting point, we suggest that the purpose statement be modified by striking the words "clean" (as it is somewhat vague and open to interpretation) and "wind-generated" (too limiting) and the phrase "including Cape Cod and the Islands..." (as a geographic aspect is implied in the New England Power Grid component of the statement).

Finally, we suggest that specific reference to a particular size for the project be dropped from the purpose statement and that it be replaced with language descriptive of a commercially viable renewable energy facility. With these changes, the basic project purpose statement would read, "The project's purpose is to develop a commercially viable renewable energy facility that will generate electricity distributed to the New England regional power grid."

EPA looks forward to working with the Corps and other federal agencies in a cooperative fashion to establish an appropriate basic project purpose through the Highway Methodology Process. The characterization of need provided by the applicant should be fully supported by the analysis provided in the DEIS/DEIR. Following that step, the agencies should work closely to agree on an acceptable range of alternatives to be considered in the DEIS/DEIR. At this point the range of alternatives could include renewable energy generation from a number of sources of different sizes/generation capacities, both on and offshore, or combinations of sources/types of facilities, that would supply power to the New England power grid. The analysis should fully analyze the rate of development of new wind technology and the likelihood that currently infeasible alternatives may become feasible in the near future (e.g., placement of turbines in deeper waters). The alternatives list would also, of course, include the applicant's proposal as well as the No-Build scenario.

Analysis of Alternatives

Once a complete list of alternatives is identified, the Corps should consider developing an interagency work group (including federal and state participation) to develop screening criteria, tailored to this case and linked directly to the statement of purpose and need, that will support decisions to eliminate or retain alternatives for additional analysis in the DEIS/DEIR. As alternatives advance through the screening process we expect that increasing levels of information and analysis will be necessary to evaluate tradeoffs and to support decision-making.

The Corps' analysis of alternatives will require a thorough and independent examination of the applicant's claims regarding a number of factors including:

- project size and proposed site;
- project need;
- potential benefits;
- potential costs/impacts; and,
- renewable energy technology.

At this point, the economics of the project are poorly understood and a greater level of information will be necessary to evaluate the proposed alternative as well as other alternatives that could achieve the project purpose. The discussion of alternatives should include the impact on electricity rates in New England and a discussion of fuel diversity, and the potential for future supply constraints, reliability problems, and price increases associated with over-reliance on a particular fuel source.

A thorough assessment of the relative environmental tradeoffs of each alternative should be provided in the DEIS/DEIR. As you know, the record is brimming with a wide range of important and thoughtful comments offered by our federal and state colleagues as well as by industry groups and the public. Each of these comments must be carefully considered during the development of the scope for the DEIS/DEIR. At this point in the scoping process the list of potential impacts that should be addressed is lengthy. While we recognize that the consideration of impacts must be tailored for each alternative under consideration, it currently appears that the list of issues to be explored includes: avian impacts, marine impacts (to recreational and commercial fisheries, marine mammals, benthic habitat, circulation, physical conditions, and overall ecology), visual impacts, noise and vibration impacts, aviation impacts, impacts to communication/transmission networks, commercial and recreational navigation/use, and direct and secondary impacts to the local/regional economy (recreation, tourism, fishing, coastal property values, etc.).

The analysis should discuss the environmental benefits/avoided impacts of alternatives under consideration when compared to each other and to other forms of non-renewable energy production. For example, the discussion should include avoided upstream environmental impacts associated with the mining of coal, the drilling for oil and natural gas, the refining of petroleum, and the transportation of these materials to New England. Other issues that should be part of the comparison include hazardous material usage and storage, thermal loads associated with fossil fuel fired plants, and the potential for impacts such as impingement and entrainment of fish and larvae in cooling water intakes at fossil fuel-fired plants. In addition, the analysis should describe the situations where an alternative might displace other forms of energy generation and the relative impacts/benefits of such a shift in energy production.

The DEIS/DEIR should establish a baseline from which impacts of the project alternatives can be discerned and evaluated. The same baseline information should then also be used going forward to evaluate the impacts of any project that may be constructed. The tradeoff analysis should also consider emissions offsets from criteria pollutants and CO_2 and the relative environmental costs incurred and avoided from the development of various forms of renewable energy. The tradeoff analysis should also address the environmental and societal impacts of climate change on the ecosystems being studied in the course of developing the EIS, and the incremental role that each renewable carbon-neutral energy generation project can play in mitigating those impacts. During the course of a recent interagency discussion, the Corps suggested that "topic specific" working groups would help focus the discussion on particular issues as the DEIS/DEIR is developed. We think this idea has merit and should be pursued.

serious analysis of this private use of public trust resources for renewable energy development on the OCS. Several strategies to deal with the existing policy void are apparent:

- The Corps could proceed with the current DEIS/DEIR analysis in a manner that fully incorporates the results of ongoing decision-making of the interagency work group and/or subsequent legislative action;
- In recognition of the pressing need for clear public policy on this issue, and in view of the fact that multiple wind power proposals are under consideration for New England offshore waters, the Corps or another appropriate agency (e.g. the Department of the Interior) could develop a programmatic EIS that takes a comprehensive look at potential sites for offshore renewable energy development and provides information that can then be used for site specific applications for individual projects;
- The Corps could proceed with the DEIS for this project absent an external process to deal with the lack of clear policy–in this instance the Corps would conduct its own comprehensive investigation of public trust issues associated with the project and its alternatives.

We believe that an analysis with no consideration of public trust issues and absent any national policy/regulation that governs the use of OCS lands for renewable energy generation is not an appropriate option. EPA is concerned with the lack of policy/regulation and recommends that the agencies meet to discuss the various options to develop an appropriate strategy. We also recommend that the Corps consider coordinating with the Council on Environmental Quality on this challenging issue. EPA looks forward to reviewing the Corps' draft scope of work for the DEIS with particular attention to this fundamental issue and to future discussions about the merits of various approaches.

Coordination/Communication

Close interagency coordination throughout the preparation of the DEIS/DEIR is critical. To that end, EPA intends to work as a cooperating agency to help define the scope of analysis and to offer input on how specific issues should be addressed in the DEIS. We encourage the Corps to keep an open dialogue with local, state and federal agency representatives throughout the process, with particular attention to agencies such as the Cape Cod Commission that have a long history representing the interests of the resident population that feels it would be most impacted by the applicant's proposed project. The communication strategy should include updates on the DEIS at important milestones, as public policy around the use of the OCS evolves, and should consider the release of relevant study findings as they become available. The work by the Corps so far during the scoping process bodes well for an open public process.

Finally, we suggest that the Corps distribute a draft of the final scope for the DEIS to the interagency group to make sure that there is general consensus on the scope of alternatives and the impact analysis. We are willing to work with Corps staff to help facilitate this effort if necessary and we look forward to participating in upcoming interagency coordination meetings and reviewing draft documents as appropriate and as our resources allow. We hope that the

Corps will allocate sufficient resources to support a comprehensive analysis and independent review of applicant generated information/analysis that will be incorporated into the DEIS. Should you have any questions or wish to discuss our concerns, please contact me or Timothy Timmermann of EPA New England's Office of Environmental Review at 617/918-1025. Thank you for the opportunity to provide scoping comments.

Sincerely,

Robert W. Varney
Regional Administrator

cc:

The Honorable Edward M. Kennedy, U.S. Senate
The Honorable John F. Kerry, U.S. Senate
Representative William Delahunt
Secretary Robert Durand, Executive Office of Environmental Affairs
Margo Fenn, Cape Cod Commission
Michael J. Bartlett, United States Fish and Wildlife Service
Peter D. Colosi, National Marine Fisheries Service
Barry Drucker, United States Department of Interior
Albert Benson, United States Department of Energy
J. Mark Robinson, Federal Energy Regulatory Commission
Thomas W. Skinner, Massachusetts Office of Coastal Zone Management
Vincent Malkoski, Massachusetts Division of Marine Fisheries
Charles J. Natale, Jr., Environmental Science Services, Inc.
Len Fagan, Cape Wind Associates, LLC

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 1
1 CONGRESS STREET, SUITE 1100
BOSTON, MASSACHUSETTS 02114-2023

OFFICE OF THE
REGIONAL ADMINISTRATOR

April 21, 2008

James F. Bennett
Chief, Branch of Environmental Assessment
Minerals Management Service
U.S. Department of the Interior
381 Elden Street
Mail Stop 4042
Herndon, VA 20170

Re: Cape Wind Energy Project Draft Environmental Impact Statement, January 2008 (CEQ #20080019)

Dear Mr. Bennett:

In accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act, we have reviewed the Draft Environmental Impact Statement (DEIS) for the Cape Wind Energy project in Nantucket Sound off the coast of Massachusetts.

The DEIS details Cape Wind Associates, LLC's proposal to install a wind-powered generating facility in the Horseshoe Shoal region of Nantucket Sound consisting of 130 wind turbine generators (WTGs), an electrical service platform (ESP), and a 12.5 mile long submarine transmission cable system from the ESP to landfall in Yarmouth, Massachusetts. Each WTG will be 440 feet tall at its highest point and the steel framed ESP will have a footprint of approximately 100 feet by 200 feet and will be constructed approximately 39 feet above the water surface. The wind turbines and ESP will occupy 25 square miles of Nantucket Sound in an area known as Horseshoe Shoal and will be approximately 5.2 miles from the closest point of land--Point Gammon on Cape Cod. The bathymetry of Nantucket Sound is irregular with charted water depths ranging between one and 70 feet. According to the DEIS the project will be capable of producing an average generation capacity of approximately 182 megawatts (MW).

EPA has been involved in the review of the Cape Wind project since 2001 when the U.S. Army Corps of Engineers served as the lead federal agency with the responsibility for preparation of the EIS for the project. The passage of the Energy Policy Act of 2005 amended the Outer Continental Shelf Lands Act and established the Department of the Interior as the lead agency (through the Minerals Management Service (MMS)) for the review (under NEPA) of renewable energy sources. The purpose of the proposed project, as described in the DEIS, is to provide an alternative energy facility using wind resources

off the coast of New England to make a substantial contribution to enhancing the region's electrical reliability and achieving renewable energy goals under Massachusetts and regional renewable portfolio standards (RPS).

The focus of the DEIS on both the Massachusetts and regional RPS goals reflects changes that have occurred since the publication of the previous DEIS by the Corps. Namely, all six New England states now have enacted RPS programs to promote the development of renewable energy sources. Near-term projections by the Massachusetts Division of Energy Resources and others predict that there will be available supply to meet the RPS requirements in Massachusetts in 2008. However, in later years as mandated demand for renewables from other states in the region accelerates at an increasing rate, projections by state and regional energy officials indicate that the region will face shortages of renewable energy supplies. According to ISO New England's Regional System Plan for 2007, in order to meet the projected growth in RPSs of the New England states, the region needs significantly more renewable electricity projects than those which have currently applied for interconnection to the power grid. Specifically, in 2016 over 18% of New England's electricity supply will be required to come from a combination of renewable and energy efficiency resources. To date, if all projects that have applied for interconnection with ISO New England, including Cape Wind, are permitted and built, the region would be at about 14.5%.

There are a number of state policies and requirements in New England and the northeast that underscore the need for renewable energy. First, through their 2001 Climate Change Action Plan Agreement, the New England Governors and Eastern Canadian Premiers have set goals for reducing greenhouse gas emissions. Specifically, these goals call for reductions to be made to 1990 levels by 2010, and to 10% below 1990 levels by 2020. In the long-term, overall reductions of 75% to 80% below 2003 levels may be required.

In addition to the regional plan, Governors and state legislators have adopted state specific goals and timelines for reducing greenhouse gas emissions through a combination of energy efficiency, renewable energy, and cap and trade programs. Also, both the Clean Air Interstate Rule (CAIR) and the Regional Greenhouse Gas Initiative (RGGI) will be imposing regulatory schemes to limit NO_x and CO_2 emissions, respectively. Given these emission caps, new supplies of clean energy are critical for meeting the region's increasing demand for electricity. In addition, in March 2008, EPA issued a revision to the 8-hour ozone standard, creating a further need on the part of the Northeast states to reduce NOx emissions which contribute to the formation of ozone. These federal and state policies are combining to push further development of non-emitting electricity generation resources that either produce zero emissions or considerably lower emissions than the current fleet of power plants.

The Cape Wind project could make a substantial contribution to the significant need for additional renewable energy sources in the region. The massive scale of the project underscores the importance of a comprehensive consideration of alternatives, impacts and appropriate mitigation in the EIS. As you know, EPA submitted scoping comments asking MMS to incorporate and fully consider our previous comments on the Corps 2005

DEIS as well as the original scoping comments and comments we offered on the scope of work for the Corps EIS. Our comments on the Corps DEIS noted that it did not provide enough information to fully characterize baseline environmental conditions and environmental impacts of the proposed project, and did not adequately consider alternatives to avoid or minimize impacts. We reviewed the current DEIS with those comments in mind and continue to believe that it is critical for MMS to develop that information to support a decision of whether the project is environmentally acceptable and in the public interest. While the DEIS improves upon the Corps' DEIS, we believe additional work is needed, in close coordination with the cooperating agencies, between now and the issuance of the FEIS. Our detailed comments on the DEIS are provided in the attachment to this letter.

Based on our review of the DEIS, and for the reasons discussed in the attachment, EPA has rated this DEIS as "EC-2, Environmental Concerns—Insufficient Information" in accordance with EPA's national rating system, a description of which is attached to this letter. As required by the Council on Environmental Quality's NEPA regulations (40 CFR 1501.6) MMS should respond to specific comments and use proposals provided by EPA and other agencies with jurisdiction by law or special expertise. We strongly encourage MMS to work more closely with EPA and other agencies during the development of the FEIS. Please feel free to contact me or Timothy Timmermann of the Office of Environmental Review at 617/918-1025 if you wish to discuss these comments further.

Sincerely,

Robert W. Varney
Regional Administrator

Enclosure

cc:

Governor Deval Patrick
Senator Edward Kennedy
Senator John Kerry
Representative William Delahunt
Michael Bartlett, United States Fish and Wildlife Service
Patricia Kurkul, National Marine Fisheries Service-Northeast Region
Paul Niedzwiecki, Cape Cod Commission
Jim Gordon, Cape Wind

Summary of Rating Definitions and Follow-up Action

Environmental Impact of the Action

LO--Lack of Objections
The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC–Environmental Concerns
The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

EO–Environmental Objections
The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU–Environmentally Unsatisfactory
The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potentially unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the CEQ.

Adequacy of the Impact Statement

Category 1–Adequate
EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2–Insufficient Information
The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

Category 3–Inadequate
EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

Additional Detailed Comments
Minerals Management Service DEIS for the Cape Wind Energy Project

Alternatives

EPA's previous comments on the Corps' EIS as well as during scoping of this EIS recommended the consideration and analysis of smaller scale alternatives and a phased project alternative as it was not clear from the analysis provided at that time whether smaller projects could achieve the project purpose while also potentially reducing the overall impact of the project. While a smaller scale project would not provide as much renewable energy as the Cape Wind proposal, it could still contribute toward achieving the region's RPS requirements and thus is reasonable to consider in the analysis comparing the energy and environmental tradeoffs of alternatives. The MMS DEIS considers both a smaller scale alternative (at one half the size of the Cape Wind proposal) and a two phase alternative project, both of which would be constructed in the Horseshoe Shoal region of Nantucket Sound. Based on our review of the DEIS, it is not clear how the scale of the smaller Project was established and whether it was based on economic considerations (for example where up front project capital costs were expected to equal project revenues) or other factors. The FEIS should address this issue and whether this or another intermediate size alternative would perform substantially better economically or environmentally. We note that discussions about the economic viability of the smaller scale project are complex given statements in the DEIS that the proposed project and other sites are not economically viable at this point in time. In addition, the alternatives analysis should discuss the current research into and development of deepwater offshore wind technologies in light of the recent proposal by Blue H Technologies BV.

Establishment of Baseline Conditions and Projections of Project Impacts

We continue to believe that it is critical for project impacts to be compared to a comprehensive baseline. With such a baseline, the impacts of the project alternatives can be measured and mitigation and monitoring protocols developed. During scoping and in our previous comments on the Corps DEIS in 2005, EPA specifically requested that the DEIS clearly indicate what information was requested by expert agencies to establish baseline conditions, and, if those agencies' advice was not followed, explain the basis for such a decision. We continue to believe it is essential for MMS to directly address comments from federal agencies with expertise and jurisdiction over various aspects of the project, specifically the U.S. Fish and Wildlife Service and National Oceanic and Atmospheric Administration as required in the Council on Environmental Quality's (CEQ's) NEPA regulations (see 40 CFR 1501.6(a)(2) and 1502.9(a) and (b)). This is especially important on the critical issue of impacts to avian species.

The DEIS indicates that all previous comments on the Corps DEIS were incorporated as scoping comments. Lacking a specific comment/response summary it is difficult to determine how fully the agency/expert advice was incorporated into the analysis. It would have been helpful if the DEIS had included a comment response section that specifically addressed relative comments already on the record in response to the Corps

EIS for the project. The FEIS should specifically reference the comment or technical advice received in response to the DEIS and provide information to demonstrate how the comment/concern was addressed.

Marine Issues

Entrainment losses

The DEIS acknowledges that there will be entrainment mortality to ichthyoplankton from jetting operations and from the normal operation of vessels associated with the construction and maintenance of this project. The DEIS dismisses these losses as insignificant without any quantification of the water use or entrainment losses. At a minimum, the FEIS should provide an estimate of water volumes entrained by the jetting operations and vessels associated with the project. Ideally it would use these volume estimates in conjunction with site-specific ichthyoplankton data to estimate the losses of fish eggs and larvae.

Pollutant Discharges

EPA notes that a Clean Water Act National Pollutant Discharge Elimination System (NPDES) permit may be needed to authorize any discharges (including thermal discharges) and cooling water withdrawals by the jack-up construction barges when they are in jack-up mode. EPA looks forward to discussing this with MMS and the project proponent in the coming weeks. The FEIS should reflect the results of this coordination and should also fully characterize the operation of the jack-up construction barges. This characterization should explain how the equipment works in its different modes of operation, including a description of the type and amount of any pollutants that will be discharged or otherwise released to the water by the barges, and a description of the amount of water that the barges will withdraw from the ambient environment, if any, and an explanation of the purpose of any such water withdrawals.

Please also note that in section 5.1.1.1.2 one portion of the text appears to need editing. The last line in that section reads, ". . . avoid only deck drainage discharge . . .," but probably should say ". . . avoid any deck drainage discharge . . ."

Oil Spill Management

Under a Memorandum of Understanding cited in 40 CFR Part 112, Appendix B, the jurisdiction for oil spill incidents seaward of the coastline lies with the Department of the Interior. However, all agencies of the United States, including EPA, have a common interest in protecting these waters and shores. Therefore we offer the following suggestions and observations relative to oil spill management issues for the project.

The Department of Interior MMS regulations at 30 CFR 254, "Oil Spill Response Requirement for Facilities Located Seaward of the Coastline" require that an Oil Spill Response Plan be developed, and that the plan be submitted to MMS for approval prior to the facility beginning operation. The DEIS refers to these regulations and also states that a plan will be developed, but no plan was included in the DEIS.

In December 2005, a *Draft Oil Spill Response Plan* was prepared for the Corps' EIS. That plan is available on-line.[1] The December 2005 *Draft Oil Spill Response Plan* appears to closely follow the prescribed MMS format and appears to be adequately developed, given the status of the project at that time. We recommend that the FEIS contain a copy of the Oil Spill Response Plan for review and comment. Based on our review of the December 2005 plan we recommend that plan provide the following additional information:

- Information on the specific types and quantities petroleum products that will be used and stored at the various structures of the facility. This information is important because different products have different chemical and physical characteristics that may impact cleanup strategies and risk to the environment.

- A description of the specific strategies that will be used to respond to a spill into water. For example, will oil boom (containment or deflection) be used? If so, how many feet of boom are required to contain the worst case spill? Also, where will boom be deployed and how will it be anchored? Where will boom be stored and staged and how will it be deployed? If boom will not be used, what other mitigations are proposed?

- What are the sensitive areas to be protected?

- How are the sensitive areas prioritized? The FEIS should describe the decision making process used in determining these priorities.

Scour Control

EPA recommends the use of scour control mats over rock armoring around the WTG monopiles. The scour control mats have a significantly smaller footprint of direct impact and they more closely match the existing benthic conditions at each location. The FEIS should provide additional information on the long term durability of the scour control mats and discuss anticipated replacement/maintenance.

Fish Landscape Ecology

The DEIS concludes that the proposed WTGs would be placed too far apart to have anything more than localized effects on fish aggregation (DEIS page 5-149). The DEIS draws this conclusion based on a single citation from a commercial website. That website describes in very general terms artificial reef placement in the Gulf of Mexico and Florida, but it does not quantitatively analyze the effect of reef design and spacing on fish aggregation. With the implementation of marine reserves, there have been numerous scientific peer-reviewed papers published on the landscape ecology of marine fish. One key consideration is adjacent habitat types that may complement or serve as a conduit for species between reefs. Many papers have shown that adjacent seagrass habitat has a significant positive effect on fish abundance on reefs. As evidenced by Figure 4.2.2-1, Horseshoe Shoal has a diversity of benthic habitats onto which the turbines with associated scour control will be placed. As a result there will likely be some level of habitat connectivity between naturally occurring benthic habitats and the WTGs. In

[1] http://www.capewind.org/downloads/feir/Appendix2.0-C.pdf

addition, the planned distance between turbines (629 to 1,000 meters) is certainly within the normal foraging range for a wide variety of fish, marine mammals, and sea turtles. The FEIS should look to relevant research on marine reserves to better assess the landscape effects of placing the proposed structures on Horseshoe Shoals.

Sea Turtles

EPA agrees with the DEIS conclusion that the WTG monopiles have the potential to attract loggerhead and Kemp's ridley turtles (page 5-168). On page 5-206, the DEIS concludes that recreational fishing may be enhanced by the turbines and on page 5-209, the DEIS states that commercial trawling will still be possible in and around the turbines. EPA is concerned that turtles that are attracted to these areas may be at higher risk for injury or mortality due to vessel strikes or as a result of recreational or commercial fishing. The FEIS should explore this issue more fully.

Construction Noise

The FEIS should provide additional discussion of methods for minimizing pile driving noise impacts on marine organisms. For example, the FEIS should explain the tradeoffs (from an impacts and construction standpoint) of a modification to the construction schedule limiting construction impacts to one season (rather than two) by installing more than one WTG at a time. This analysis should incorporate the recommendations and expertise of NOAA.

The cumulative impacts subsection on noise (DEIS pages 6-17/18) makes seemingly contradictory statements about the impacts of pile driving noise on marine mammals. The subsection conclusion makes no mention of impacts to marine organisms even though Section 5.3.2.6 indicates that the proposed project may result in acoustical harassment of marine mammals. The FEIS should correct this discrepancy.

Decommissioning

The DEIS projects the anticipated lifespan of the WTGs at 20 years. The FEIS should identify the anticipated lifespan for the transmission cables and scour protection and whether this span will affect the overall lifespan of the project. Also, the FEIS should describe whether there would be any environmental advantage/disadvantage to removing the transmission cables and scour protection at the end of the project life versus leaving them in place.

Other Marine Specific Comments

1. DEIS page 5-3: The FEIS should derive a rough estimate of the volume of grey water/black water to be discharged by project vessels.
2. DEIS page 5-4: The FEIS should explain how floating debris and trash generated by the project and associated vessels will be minimized.
3. DEIS page 5-57: EPA strongly supports the use of freshwater as a drilling fluid in the Horizontal Directional Drill (HDD). In addition, EPA supports the currently described plans to isolate and recover any bentonite used in the drilling process.

4. DEIS page 5-75: EPA supports the pre-construction mapping of seagrass and believes that this is most appropriately done in July, the time of peak biomass for this latitude.
5. DEIS page 5-116,117: It has been EPA's experience with recent pipeline projects that full benthic recovery to a community similar to pre-construction condition may take longer than anticipated by current scientific literature. Monitoring of soft bottom benthos in Massachusetts Bay shows that even after 3+ years, the impact areas are statistically different from reference locations.
6. DEIS page 5-117: The FEIS should explain whether scour mats need maintenance/replacement. Also, the FEIS should explain whether the density of fronds on the scour mats optimized for sediment deposition and if it is anticipated that the scour mats will support a biological community similar to what is found in natural SAV meadows. The basis for any conclusions presented should be provided in the FEIS.
7. DEIS page 5-118: DEIS suggests that rock armoring will on average be buried over time by natural forces with sand. It has been EPA's experience with several recent projects that achieving precise elevations with rock is difficult and that it is reasonable to expect that there will be some exposed hard substrate at the end of construction.
8. The FEIS should explain the frequency of monitoring to determine if the cable is/remains properly buried and should describe the protocols that will be followed if a section or sections of the cable becomes exposed.
9. In general, the DEIS states that wind turbines will be spaced 629 to 1,000 meters apart. It would be helpful to know how far apart the hard substrates associated with the various scour control technologies will be as part of the discussion of the connectivity of benthic habitat.
10. DEIS page 6-10: The cumulative impact analysis should also consider water usage/entrainment losses associated with jetting and vessels within the project area.
11. DEIS page 6-11: The DEIS refers to environmental studies done at the Horns Rev and Nysted wind parks in supporting conclusions regarding impacts to fisheries. It would be helpful if the FEIS would explain the factors which make the data from those projects transferable to the proposed project (e.g., similar substrate, WTG spacing, number of WTG units, etc.).

Air Issues

In general, EPA noted some areas where the DEIS was incomplete with regard to the air issues. The following are general comments on additional analyses that MMS needs to undertake, and are followed by a series of specific comments and edits on a section by section basis.

In general, MMS needs to:

- Work with EPA to clarify whether and when different phases of the project are OCS sources under the Clean Air Act.
- Clarify what emissions from which phases of the project would be addressed by permit under the Clean Air Act.
- Conduct a conformity determination under the Clean Air Act that EPA and MMS can agree on, and that EPA can use to determine which emissions must be offset by General Conformity.
- Clarify what emissions from which phases of the project would be addressed by General Conformity under the Clean Air Act.

Given that these issues are not addressed in the DEIS, EPA offers the following specific comments on a section by section basis. Should MMS work with EPA to address the comments above prior to the issuance of a FEIS, many of the specific comments below will also be addressed.

Section 1.2.1 - Federal Review

The MMS needs conduct an air quality analysis and make a conformity determination for the project. The results of this work will determine the nature of the air permit to be developed by EPA. In several places, the DEIS discusses the likely outcome of EPA's OCS analysis under 40 C.F.R. Part 55. EPA has some limited information regarding the air quality impacts of the project from this DEIS and Cape Wind's December 7, 2007 Notice of Intent (NOI), some of which is contradictory. However, EPA has not received a permit application, and does not have sufficient information to determine which activities might constitute "OCS sources" and/or require air permits. With regard to conformity, once the air permit application has been received and the project emissions are clearly identified, EPA will be able to determine whether those emissions must be offset by General Conformity, or are otherwise covered by the OCS air permit.

Section 1.2.1.5 – Section 7627 of the Clean Air Act (CAA)

The last sentence on page 1-4 states that during the operational phase of the project, certain activities will constitute "OCS sources" and require permitting. In contrast the DEIS and Cape Wind's NOI state that the operational phase will not involve any OCS sources. See DEIS at 5-51; NOI at 2. EPA does not yet have sufficient information to make such judgments.

On page 1-5, we would suggest the following change to line 7 of the first paragraph: "whether air modeling or other information is required."

Section 2.4.3.3 – Major Repairs

Either in this section or under Section 5.2.1, please estimate, to the extent possible, the likelihood, frequency, and potential air emissions deriving from "major repairs."

Section 2.6.2 – ESP Fluid Containment
This section states that the electrical service platform will contain "emergency generators." The DEIS at page 5-61 note 2 states that while the applicant had initially planned emergency diesel generators, the current plan will not involve any emergency generators, but rather batteries, for backup power. The FEIS should resolve this inconsistency and state precisely which equipment will be on the electrical service platform, and whether any such equipment, when operated for its intended purpose, will have the potential to emit any air pollutants.

Section 4.1.5.1 - Existing Air Quality
Paragraph two of this section (DEIS page 4-23) identifies the General Conformity Regulations (40 CFR 93.150 through 93.160), which prohibit federal agencies from, in any way, supporting any activity that does not conform to an approved implementation plan. As stated on page E-1, "The applicant requests a lease, easement, right-of-way, and any other related approvals from the Department of the Interior, Minerals Management Service necessary to authorize construction, operation and eventual decommissioning of the proposed action." Thus, MMS is required to apply the General Conformity Regulations to its action.

We request that MMS clearly identify in the FEIS their obligation to evaluate General Conformity. As the DEIS indicates project emissions in the construction and decommissioning years will exceed the General Conformity *De minimis* thresholds[2], MMS should: (a) address its plans for developing the air quality conformity analysis; (b) address its plans for satisfying General Conformity (accounting for the emissions within the implementation plan or offsetting the emissions); (c) describe plans for releasing a draft general conformity determination and associated public participation process; and (d) describe plans for releasing Final General Conformity Determination.

Paragraph two (DEIS page 4-23) goes on to state, "Air emissions, within nonattainment areas, that are not covered by an air permit and that exceed the minimal levels require a conformity analysis." This statement should be revised to clarify that only air emissions covered by a "major source" air permit do not require a conformity determination.

Section 5.1.5.5 – Air Emissions
The FEIS should clarify whether the electrical service platform, not counting vessels, has any potential to emit any air pollutants. The discussion should include particular reference to emergency generators, transformers with oil/air heat exchangers, paints and paint thinners, etc. In addition, the FEIS should include a specific description of the air emissions attributable to construction of the WTGs, ESP, and cable installation.

We would also suggest that the third sentence of this section (DEIS page 5-14) be modified as follows: "The vessel emissions represent a mobile source except when

[2] The *De minimis* thresholds for a moderate 8-hour ozone nonattainment area (including Boston-Lawrence-Worcester (E. Mass), MA and Providence (all of RI), RI) is 50 tons per year of volatile organic compounds (VOC) and 100 tons per year of nitrogen oxides (NOx).

attached to the seabed and functioning as a stationary source, and are not predicted to result in a lowering of air quality ..."

Section 5.3.1.5 – Impacts on Air Quality
Under "**Regulatory Analysis**" on pages 5-50 and 5-51 we would suggest the following edits:

- First paragraph: "At the time of promulgation, ~~the regulations were intended to apply to~~ USEPA noted that the primary OCS activity was oil and gas development, ..."
- First paragraph: "However, some activities associated with the proposed action ~~are~~ may be considered an OCS source, ..."
- Add, at end of first paragraph: "On February 27, 2008, USEPA proposed a consistency update incorporating relevant Massachusetts regulations into Part 55. See 73 Fed. Reg. 10,406."
- Third paragraph: "The proposed action has at least three distinct time periods ..."
- Fourth paragraph: "The OCS equipment ~~sources~~ for the proposed action ~~would be~~ could include the vibracore . . . and the support vessels servicing ~~these OCS sources~~ the OCS source(s) ..."
- Fourth paragraph, item 1: "... ~~would~~ could be considered to be one or more OCS sources."
- Fourth paragraph, item 2: "During the two-year construction period, potential OCS sources may include the ... Potential OCS sources may include the ... Finally, potential OCS sources may include ..."
- Forth paragraph, item 3: "These barges and cranes and dredging equipment ~~would~~ could be considered one or more OCS sources."
- Fourth paragraph, item 4: "During construction and during decommissioning, or other times when an OCS source is present, emissions from ... en route to or from ~~these~~ any OCS source(s) ~~identified in items 1 through 3~~ would be counted towards the potential to emit of the OCS source(s) ~~also be regulated by the USEPA permit~~ when ..."

Construction/Decommissioning Impacts
As discussed in the DEIS, the project will result in air quality impacts offshore during the two years of construction and the two years of decommissioning. In both the Executive Summary (DEIS page E-12) and the Environmental Consequences chapter (DEIS page 5-53) the DEIS concludes that construction impacts on air quality would be minor. However, the DEIS does not present an analysis to support this conclusion and instead states that EPA, through any Clean Air Act permits that may be required, will determine whether and how air quality modeling will be conducted, and what limits and mitigation measures will be imposed. While we agree that EPA would make such determinations as part of any permit process, MMS nevertheless has an obligation under NEPA, in consultation with EPA as a cooperating agency and state environmental agencies, to analyze the project's impacts on air quality and alternative ways to minimize those impacts, and to present this analysis in the EIS for public review. We reiterate our offer to work with MMS to ensure that this obligation is met.

Section 5.3.1.5.2 – Operational Impacts

The DEIS at page 5-55 under the subheading "**Benefit Analysis for Air Quality**," moves between a discussion of capacity in New England (MW) and production (MWh). These two terms are not interchangeable, and the resulting discussion is confusing. EPA recommends that the FEIS present this information in a manner that clearly distinguishes between electricity produced in MWh, and installed generating capacity in MW.

MMS should examine the impact on air quality with regard to electricity production and the air pollution associated with that production. In particular, the second part of the first paragraph discussion on peak demand is confusing and inconsistent with the rest of the discussion since it focuses on capacity instead of production.

EPA recommends that the analysis focus on the number of MWh that Cape Wind is likely to produce–and the NO_x, and SO_2 emissions associated with other generation likely to be displaced. Given that production from Cape Wind is likely to be variable, it probably makes more sense for MMS to analyze average projected monthly production for Cape Wind and provide a range of projected average NO_x and SO_2 emission reductions. However, if MMS wants to do this analysis on a daily basis, MMS should look at average projected production per day of the Cape Wind project in MWh and compare that to the marginal emission rate for the power system. In addition, the analysis should be updated to reflect the most recent emission rates published by ISO New England. Furthermore, given the growing concern about climate change, and the state and regional goals (as noted in the cover letter), EPA recommends that the analysis address CO_2 emissions in addition to the pollutants discussed above.

Appendix B – Table 5.3.1-7, Potential Project Emissions by Major Activity

Table 5.3.1-7, Potential Project Emissions by Major Activity, should be revised to include project emissions associated with onshore activities. Additionally, the General Conformity air quality analyses must show the activities, duration/time, and emission factors used to develop the annual emissions in this table.

Appendix B – Table 5.3.1-8, Potential Project Emissions by Location

EPA appreciates Table 5.3.1-8, which attempts to quantify and categorize air emissions. However, the division into "State Waters–Rhode Island," "State Waters–Massachusetts," "OCS Covered By Permit," and "OCS Not Covered By Permit" is not entirely clear, and presumes certain judgments that EPA cannot evaluate with the present information. In addition, one entry ("Operations/OCS Covered by Permit") appears to contradict an earlier statement in the DEIS that the operation phase will not require an OCS permit.

We recommend that the air emissions be recategorized as follows:

- Onshore – Rhode Island
- Onshore – Massachusetts
- Transit – Massachusetts Waters, Beyond 25 Miles from Array Perimeter
- Transit – Rhode Island Waters, Beyond 25 Miles from Array Perimeter

- Transit – Massachusetts Waters, Within 25 Miles from Array Perimeter
- Transit – Rhode Island Waters, Within 25 Miles from Array Perimeter *(unless MMS can categorically state that no point 25 miles from the array perimeter lies within Rhode Island waters, in which case this category is unnecessary)*
- Transit – OCS Waters, Beyond 25 Miles from Array Perimeter
- Transit – OCS Waters, Within 25 Miles from Array Perimeter
- Stationary Activities – OCS or OCS Waters

Additionally, the General Conformity air quality analyses must show the activities, duration/time, and emission factors used to develop the annual emissions in this table.

Environmental Management System

We believe the concept of an Environmental Management System (EMS) for purposes of managing the mitigation measures for this project is a good one. The development of the mitigation measures and the EMS should proceed in earnest while the FEIS is being developed, not postponed until the NEPA process has concluded. In light of the importance of monitoring and mitigation for the range of impacts expected from the project, we strongly believe that MMS should establish an agency working group responsible for working with MMS to develop relevant aspects of the mitigation plan and the EMS. Many of the federal agencies are also cooperating agencies and a role in the development of the specific items to be incorporated into the mitigation plan and the EMS is a logical one for these agencies to assume. We anticipate that federal agencies work on the mitigation plan and EMS would include (but not be limited to) issues such as: monitoring and addressing air quality impacts during construction, maintenance and decommissioning; monitoring and addressing project related water quality issues; emergency response planning (including work related to spills); monitoring and addressing acoustic and other impacts to marine mammals; and evaluating/monitoring and addressing avian impacts. The results of the ongoing coordination on the EMS should be explicitly reported in the FEIS so that the EMS can be evaluated by interested members of the public.

COMMENTS OF THE

ALLIANCE TO PROTECT NANTUCKET SOUND

ON THE
DRAFT ENVIRONMENTAL IMPACT STATEMENT
FOR THE
PROPOSED CAPE WIND ENERGY PLANT

April 21, 2008

CONTENTS

be dropped from the purpose statement and that it be replaced with language descriptive of a commercially viable renewable energy facility."[207]

APNS is unaware of any discussion between the interagency team on this topic since MMS has taken over review of the project. What is clear is that MMS has ignored prior debate on this issue, has ignored FERC and NERC guidance regarding "commercial scale" operations, and has adopted an approach that unreasonably applies a standard appropriate perhaps for fossil fuel plants to renewables. Thus, MMS has improperly limited the DEIS scope to projects that are 200 MW or larger in size.[208] This approach does not comport with NEPA.

3. Recommended Purpose and Need Statement

In this case, to comply with NEPA, the purpose and need statement should read:

> The underlying purpose and need to which MMS is responding is to provide an alternative energy facility using a technology that is technically feasible and economically viable that can interconnect with NEPOOL and make a substantial contribution (20 MW or more) to the region's energy reliability and achieving the renewable energy requirements under the Massachusetts and Regional RPS.

This purpose and need statement omits a description of the proposed project itself, which is inherently limiting. It does not confine alternatives to offshore wind energy alternatives, because building an offshore wind energy facility is not the general goal of the action. The general goal is to develop a renewable energy facility that can deliver renewable power to New England, but does not have to be located in, or adjacent to, New England. The proposed revision would enable MMS to develop an EIS that comports with NEPA.

D. There Are Numerous Reasonable Alternatives that MMS Failed to Consider

Once an action agency defines an appropriate purpose and need statement, the next step is to define the range of reasonable alternatives. Many of the problems with this DEIS flow from the improperly defined purpose and need statement.

NEPA requires federal agencies to take a "hard look" at the impacts of their actions. "The sweep of NEPA is extraordinarily broad, compelling consideration of any and all types

---

[207] Ex. 54.

[208] NEPA also requires the consideration of "partial alternatives." Thus, even if 200 MW is the goal, it does not follow that such a project needs to be sited in one location. Smaller-scale projects can be used to meet this goal on a cumulative basis.

of environmental impact of federal action."[209] Special care and detailed analysis are particularly important where a new technology is involved: "NEPA thus stands as landmark legislation, requiring federal agencies to consider the environmental effects of major federal actions, empowering the public to scrutinize this consideration, and revealing a special concern about the environmental effects of a new technology."[210] Extra care is needed to "ensure that the bold words and vigorous spirit of NEPA are not similarly lost or misdirected in the brisk frontiers of science."[211]

At the "heart" of NEPA is the analysis of alternatives.[212] NEPA regulations require federal agencies to "[r]igorously explore and objectively evaluate all reasonable alternatives."[213] It is imperative that the consideration of alternatives "sharply defin[e] the issues and provide[e] a clear basis of choice among options by decision makers and the public."[214] Reasonable alternatives are "those that are *practical or feasible* from the technical and economic standpoint and using common sense, rather than simply desirable from the standpoint of the applicant."[215] An EIS "shall inform decision-makers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment."[216] As discussed below, the Corps has violated all of these principles in selecting the unduly narrow range of alternatives considered in this DEIS.

The NEPA review of this proposed action does not become meaningful until a proper purpose and need statement is developed. Once this is done, the review of the proposed action assumes its proper perspective, and a full range of NEPA alternatives that advance the clean energy goals of the project on a properly-defined regional basis becomes possible.

As discussed in the previous section, the proper purpose and need for this project is as follows:

---

[209] *Calvert Cliffs' Coordinating Comm., Inc. v. AEC*, 449 F.2d 1109, 1122 (D.C. Cir. 1971).

[210] *Found. on Econ. Trends v. Heckler*, 756 F.2d 143, 147 (D.C. Cir. 1985).

[211] *Id.* at 145.

[212] *Andrus v. Sierra Club*, 442 U.S. 347, 358 (1979).

[213] 40 C.F.R. §1502.14 (a).

[214] *Id.* § 1502.14.

[215] CEQ 40 Questions, 46 Fed. Reg. 18,026 (emphasis added).

[216] 40 C.F.R. § 1502.14.

> The underlying purpose and need to which MMS is responding is to provide an alternative energy facility using a technology that is technically feasible and economically viable that can interconnect with NEPOOL and make a substantial contribution (20 MW or more) to the region's energy reliability and achieving the renewable energy requirements under the Massachusetts and Regional RPS.

When this purpose and need statement is applied, a reasonable set of alternatives is identified. These alternatives are presented under the following categories: 1) offshore wind; 2) other offshore renewable; and 3) onshore renewable. Within the offshore wind category, specific consideration is given to the proposed project for Buzzard's Bay, the Blue H deepwater project, and the sites off the coast of Rhode Island now under formal consideration by the State of Rhode Island. These alternatives are discussed in the following section. In setting forth these alternatives, it is not the responsibility of APNS to provide a detailed analysis; that is the job of MMS. Instead, APNS need only demonstrate that these alternatives are reasonable.[217] APNS meets this obligation in the following discussion, and the burden shifts to MMS to consider these alternatives or explain why the agency has determined that each recommended option is not reasonable.

1. There Are Numerous Offshore Wind Energy Alternative Sites in New England and the Mid-Atlantic

a. The Helimax Report Identifies Numerous Locations for Viable Wind Energy Projects in New England

As detailed in the report by Helimax Energy Inc. (Appendix 21), there are a number of more suitable sites from Maine to Delaware. This assessment is based on technical feasibility studies and the existence of environmental and other factors that affect site suitability. In fact, Helimax took a very conservative approach by limiting its assessment to sites in waters of 20 meters or less, which, as discussed above, is not the current state of technology. Indeed, Helimax relied on more conservative standards than did MMS and still determined that there were numerous alternatives available.

Helimax began with identifying 112 sites, based on wind resource and bathymetry. However, after screening those sites for physical constraints, environmental constraints (reserves, sanctuaries, swimming, etc.), and a minimum capacity of 50 MW, Helimax narrowed the list to 32 sites. After performing a technical assessment and ranking of 32 potential offshore sites, Helimax determined that the majority of preferable sites are located

---

[217] *See, e.g., City of Angoon v. Hodel*, 803 F.2d 1016, 1022 (9th Cir. 1986); *Olmsted Citizens for a Better Community v. United States*, 793 F.2d 201, 209 (8th Cir. 1986); *River Rd. Alliance, Inc. v. Corps of Eng'rs of the U.S. Army*, 764 F.2d 445, 452-53 (7th Cir. 1985).

in New Jersey (16) and Massachusetts (8). Other sites also identified as viable were located in New York (6) and Delaware (2).

As noted above, more than half of the sites are located in New Jersey. Because of the state's long shoreline, relatively shallow bathymetry, and excellent wind resources, Helimax determined that the area was technically attractive for wind energy development. Likewise, Helimax found that the Nantucket and Martha's Vineyard region provided attractive development areas. In addition, Helimax identified 6 sites along the southern coastline of Long Island. Helimax ruled out Maine and New Hampshire on the basis of bathymetry, but as noted above, Helimax conservatively limited water depths to 20 meters.

After identifying viable sites, Helimax ranked the various options based on technical favorability and environmental favorability. After Helimax reviewed the sites from environmental and public interest perspectives, the proposed project was very poorly rated and considered a low-priorty site.[218] Near Massachusetts, projects located south of Nantucket, southeast of Nantucket, northeast of Nantucket and east of Monomoy were all environmentally preferable.[219] Similarly, most of the sites located off the coast of New Jersey and Long Island were considered environmentally preferable.[220] Indeed, the proposed project ranked quite poorly from an environmental perspective.

Regardless of its rankings, what is critical is that, even looking conservatively at waters less than 20 meters deep, there are numerous alternatives that MMS must consider as part of its DEIS. It has failed to do so. Consequently, its DEIS does not comport with NEPA requirements,

b. Buzzard's Bay Proposal

Patriot Renewables, LLC, the renewable energy affiliate of Jay Cashman, Inc. (JCI), is studying the feasibility of and planning to develop an offshore wind facility, called South Coast Wind, in Buzzards Bay. While APNS is strongly opposed to the proposed Blue H project, it is without question a reasonable alternative for NEPA purposes and must be considered as such in this DEIS.

JCI is a comprehensive construction company based in Massachusetts with experience within the marine, heavy civil, dredging, and environmental construction industries. JCI has vast experience in both civil and marine construction and is known for

---

[218] *See* Appendix 21, at 29. As poorly as the proposed project is rated when environmental factors are taken into account, it would be even more negatively classified if the study took into account the negative impact on fisheries now documented in the record of this DEIS.

[219] *Id.*

[220] *Id.*

working in rugged and geo-technically demanding environments. The company played a key role in many of the state's most prominent large-scale in-water and water's-edge construction projects including Boston's Deer Island Treatment Facility and the Central Artery Tunnel. Locally, JCI has worked on the Taunton Nemasket Bridge, the Wareham Bridge, the Brightman Street Bridge, and the Duxbury Beach Jetties. JCI clearly has more experience in the marine environment than does CWA.

The wind energy project would produce 300 MW of power using the "unique" offshore wind resources of New England. The project comprises 90-120 turbines, each producing 2.3-3.6 MW, spaced approximately ¼- to ½-mile apart. The turbines would be located approximately 1-3 miles from shore. The average wind speed in Buzzards Bay is approximately 18-20 mph – some of the best wind available in Massachusetts. Buzzards Bay is reasonably shallow and is sheltered from northeasterly storms. And as with the proposed project, the Buzzards Bay project is located near existing lines and transmission stations.

c. The Blue H Proposal

Blue H Technologies BV of the Netherlands holds patents for floating unit, two-blade wind turbines. The Blue H Technology U.S. subsidiary, Blue H USA LLC, has submitted a Nomination for Lease with MMS to install what it anticipates to be the first floating deepwater wind energy unit in the United States.[221] The Nomination for Lease is the initial phase of a 420 MW commercial wind energy project located 23 miles from Martha's Vineyard and 45 miles from New Bedford in a water depth of 51 meters (167 ft).

Blue H USA's proposed venture will involve exclusively United States facilities in the full cycle of construction, commissioning, and decommissioning of an actual wind energy unit and is the product of a 10-year development effort by Blue H Technologies BV. As mandated by MMS, the demonstration phase of this project will be non-operational.

In December 2007, Blue H Technologies BV launched the first-ever large-scale prototype Submerged Deepwater Platform (SDP) off the coast of Southern Italy. This event marked a world premiere in the offshore wind energy sector. Funding for this demonstration came from world-class investors such as Lehman Brothers and Royal Bank of Scotland. Blue H was featured in a *Forbes* article on deepwater dated February 25, 2008, which confirmed the availability of deepwater technology.

---

[221] MMS denied Blue H's Nomination for Lease on April 17, 2008, apparently because Blue H filed its application too late. Ex. 55. MMS's denial, however, is not sufficient reason to dismiss Blue H as a reasonable alternative under NEPA. *See* NEPA 40 Questions, #2b. CEQ regulations state that even a potential conflict with local or federal law does render an alternative unreasonable. If that is the case, simply having an alternative fail to meet an MMS deadline for initial consideration should have no impact on whether the alternative qualifies for consideration under NEPA.

The offshore wind energy market is projected to represent 50% of the installed capacity of the total wind energy market by 2030. In fact, offshore wind farms benefit from stronger and less turbulent winds, and can avoid logistical constraints due to problems of transportation of the turbines and their blades, as well as address to a large degree the concerns of visual impact of onshore wind farms.

However, with the commercially-available technology today, which requires wind turbine foundations to be installed into the seabed on monopiles or jackets or tripods, the cost of installation grows dramatically as the depth of water increases, limiting potential offshore sites to areas less than 50 meters in depth, greatly restricting the potentially available areas where wind farms can be constructed.

In contrast, Blue H has developed a new solution by adapting the concept of submerged tension-legged platforms developed by the oil industry for some of its offshore rigs, and designed a platform large and stable enough to support a tower and a wind turbine.

As explained by Martin Jakubowski, inventor of SDP technology and author of other Blue H patent applications, this innovative technology:

- **reduces significantly the overall weight** of the structure, a huge element in the cost component of offshore wind units (as an example, REpower's 5 MW units weigh approximately 2,100 tons each; Blue H expects its future deep sea wind energy units, at comparable installed capacity, to weigh less than 800 tons (1,500 tons - including the steel in the counterweight).

- **can be assembled onshore** and then towed out far offshore, at distances of 10 nautical miles or more and positioned in deep waters (50 meters or more in depth). Blue H does not use the heavy equipment needed to build structures into the sea bed; such heavy equipment is both expensive and in short supply – particularly crane ships and jack-up barges.

- **allows siting far enough from the coast** to benefit from stronger and more regular winds (thus reducing the cost per kWh), to overcome frequent environmentalist objections to onshore farms, and to address a fundamental problem of the wind energy industry today, that of being able to deploy larger and larger turbines (also reducing the cost per kWh); it can also often be placed in locations near heavy demand centers.

- **is more environmentally friendly** because it is easier to dismantle with no remnant infrastructure in the seabed.

For all these reasons, Blue H provides a cost-effective solution for the installation of offshore wind energy converters in deep waters. Blue H Skysaver Srl is now constructing Blue H's first commercial unit for an offshore wind farm off the coast of Puglia in Southern Italy. In January 2007, Blue H Skysaver obtained the final authorizations to install its large-scale prototype in the water and has now applied for the required authorizations to build a 90 MW Wind Energy Park in the same area, 20 kilometers from the coast in waters 100-120 meters in depth. The project has the strong support of the Regional Government of Puglia and the local population.[222]

d. The Rhode Island Proposal

The State of Rhode Island is currently seeking bids from private developers to construct, finance, and operate a proposed offshore wind farm that would generate at least 15 percent of the electricity consumed throughout Rhode Island, which is approximately 1.3 million MW annually.[223] The proposed wind farm would be comparable in size to the proposed project and would cost an estimated $1.25 billion.[224] The purpose of the State's offshore wind energy facility is to provide rate relief to the 1,000 residents of Block Island, who are currently paying about 40 cents per kWh, which is more than four times the rate paid by mainland Rhode Island residents.[225] Consequently, the Governor of Rhode Island has noted that the "preferred site" for the wind project would be off the south and western shores of Block Island. The proposed Block Island site was chosen by evaluating 11 possible sites, of which ten were offshore.[226] After a supplemental evaluation conducted by the consulting firm Applied Technology & Management, two locations off of Block Island were selected as producing the cheapest electricity: 1) a 13-square-mile site southwest of Block Island in federal waters; and 2) a 13.1-square-mile site south of Block Island in Rhode Island

---

[222] The availability of this technology always means that many sites are available as well. For example, MMS previously ruled out the East of Nauset Beach site on the grounds that the water was too deep. The Blue H technology demonstrates that such a site is feasible. Ex. 56.

[223] Timothy C. Barmann, *Wind Farm Gathers Steam*, Apr. 4, 2008, http://www.projo.com/business/content/bz_ri_wind_farm04_04-04-08_K19KRPD_v10.2a5e5a4.html, Ex. 57; Carcieri: *State Seeking Private Bids on Onshore Wind Farm Construction*, http://www.ri.gov/GOVERNOR/view.php?id=6172. Ex. 58.

[224] *Id.*

[225] *Id.*

[226] *Id. See also* Final Report RIWINDS Phase I: Wind Energy Siting Study 9April 2007) Ex. 59.

waters.[227] The State's proposed project is deemed to be economically viable, because according to the site selection study, the estimated cost to generate electricity from these two sites averaged over 20 years would be approximately $96/MWh, according to today's dollars.[228]

Recently, developers in Maine also expressed an interest in pursuing offshore wind energy development. Ex. 60. The interest in Rhode Island and Maine demonstrates that MMS has been far too restrictive in the sites it has identified. These other sites also confirm the need for the kind of regional site selection process APNS and others have long advocated, but that MMS has failed to undertake. Widespread regional offshore wind energy development has caught up with the proposed project, and MMS has no choice but comprehensively revise its NEPA approach to the proposed project.

e. Southern Coast of Long Island

As noted in the Helimax report, New Jersey and New York are attractive locations for wind energy development. In addition to the sites identified in that report, there are strong development proposals that must be considered. Included in that list is the project proposed by Winergy Power. Winergy Power submitted a new proposal to a state power agency to place a 940-megawatt wind project in the South Shore waters, south of Long Island. Ex. 61. The plan would involve between 190 and 260 turbines, depending on the turbine technology existing in 2012 when the project is proposed to start. The Long Island Power Authority has expressed interest in the proposed project, after rejecting the initial 300-megawatt proposal as economically unfeasible. Under the latest proposal, the turbines would be 12 to 15 miles off the coast. The 940-megawatt proposal is one of three that Winergy has proposed for the region. It has submitted plans for a separate 600-megawatt farm adjacent to the Long Island proposal that would include some 167 turbines and connect to a ConEd substation in Manhattan. Winergy has also begun a year-long radar-based study of birds and bats as part of a plan to install three test turbines in the waters off Plum Island. Based on these activities, it is clear that there are viable alternatives that MMS should have considered, but has failed to do so in the DEIS.

2. There are Offshore Hydrokinetic Projects

The DEIS fails to consider properly other offshore power generation technologies, such as wave and tidal generation projects that are currently undergoing permitting and study throughout the New England region. FERC has issued preliminary permits to over a dozen hydrokinetic projects in the New England area that have survived its "strict scrutiny"

---

[227] *Id.*

[228] *Id.*

assessment of commercial viability. MMS, however, failed to consider any of these alternative projects in its assessment of the proposed project.

"Hydrokinetic" generation is defined by FERC as a project that "generates electricity from waves or directly from the flow of water in ocean currents, tides, or inland waterways." There are currently over 20 hydrokinetic generating projects in the New England area that are undergoing study and preliminary testing. According to permits filed at FERC, projects in the New England area alone could result in between 300 MW and 1,090 MW of new renewable energy production resulting from offshore generation of power.

The hydrokinetic projects under development in the New England area have many similarities to the proposed project. Like the proposed project, most hydrokinetic technologies involve multiple small generating units of up to 2 MW deployed over a limited geographic area. As with a wind energy facility, the power generated by the individual hydrokinetic projects at a particular "wave farm" is collected on site and transmitted to an onshore substation. Individual projects currently under consideration by FERC include several that may result in wave farms of 200 to 300 MW of installed capacity. The generation from these projects would also qualify for participation in the Massachusetts RPS.

Hydrokinetic technologies represent a viable alternative to offshore renewable energy generation that cannot legally be ignored by MMS. In December 2007, FERC issued its first project license to a buoy generation system located in Malikah Bay, off the coast of Oregon. An analysis conducted by Virginia Tech concluded that there are dozens of hydrokinetic technologies currently undergoing field testing, including several mature technologies that are undergoing long-term *in situ* testing around the world.

Further, like wind energy facilties selecting between turbine manufacturers, once suitable environmental and wave energy studies are completed, offshore power developers will be able to choose from a variety of technologies, based on the characteristics of each site. Hydrokinetic technologies are in the active development stage, as are the 3.6 MW offshore GE turbines that CWA intends to use, which as noted above, are not going to be commercially available.

The hydrokinetic generation technologies currently under development include: underwater turbines (similar to an underwater wind turbine); hydraulic buoys that rely on the rise and fall of the tides to generate energy; floating buoys that generate energy based on the angle at which waves hit the shore; and many others. Several of these technologies are currently undergoing full-scale field testing in Europe, Australia, Korea, and other locations.

The sites currently under review that must be considered as alternatives under NEPA are set forth in the following table.

Project	Location	State	Name of Project	Company	Proposed Size (MW)
P-12794	Buzzards Bay and Cape Cod Bay	MA	Cape Cod Tidal Energy Project	Natural Currents Energy Services, LLC	1 – 10
P-13015	Nantucket Sound and Muskeget Channel	MA	Nantucket Tidal Energy Plant	Town of Edgartown	10
P-12810	Housatonic River	CT	Housatonic Tidal Energy Project	Natural Currents Energy Services, LLC	250 kW – 3 MW
P-12777	Bagaduce Narrows and Castine Harbor	ME	Tidal Energy Device Evaluation Center	Maine Maritime Academy	12
P-12711	Cobscook Bay	ME	Cobscook Bay	ORPC Maine	15 – 22
P-12680	Western Passage	ME	Cobscook Bay	Western Passage	12 - 19
P-12670	Vineyard Sound	MA	Cape and Sound	Oceana	25 – 300
P-12668	Penobscot River	ME	Penobscot Tidal Energy Project	Maine Tidal Energy Co. (Oceana)	50 – 200
P-12722	Piscataqua	NH	Piscataqua Tidal Energy Project	UEK Corporation	40
P-12664	Portsmouth and Piscataqua River	NH	Portsmouth Area Tidal Energy Project	New Hampshire Tidal Energy Co. (Oceana)	25 – 200
P-12704	Half Moon Cove	ME	Half-Moon Cove Tidal Power Project	Tidewalker Associates	13.5
DI05-3	Narangansett Bay	RI	Rhode Island Ocean Wave Energy Project	Greenwave	0.5 – 1
P-13144	Grand Manan Channel / Atlantic Ocean	ME	Grand Manan Channel Project	Manaook Associates	32 – 73
P-13140	Lubec Channel / Atlantic Ocean	ME	Quaddy Roads Project	Tidewalker Associates	38

P-13092	Mouth of the Sakonnet River	RI	Sakonnet River Bridge Project	Rhode Island Energy Group, LLC	0.5
P-13079	Sheepscot River / Westport	MA	Wiscasset Tidal Energy Plant	Natural Currents Energy Services, LLC	5 – 10
P-13045	Buzzards Bay / Acushent River	MA	New Bedford Tidal Energy Project	Natural Currents Energy Services, LLC	1 – 10
P-13046	St. Lawrence River / Tidal	NY	Alexandria Bay Hydroelectric Plant	Natural Currents Energy Services, LLC	1 – 10
P-12961	St. Lawrence River	NY/ONT	Ogdensburg Kinetic Energy	AER NY-Kinetics, LLC	10
P-12876	Lubec Narrows	ME	Maine 1 Project	Hydro Green Energy, LLC	5 – 37
P-12710	Cobscook Bay	ME	Western Passage and Cobscook Bay Tidal Hydrokinetic Project	Passamaquoddy Tribe / UEK Corporation	5
P-12674	Little Machias Bay	ME	Cutler	Tidewalker Associates	13.5
P-12666	Kennebec River	ME	Kennebec Tidal Energy Project	Maine Tidal Energy Company (Oceana)	25 - 100

3. New England Has Hundreds of Onshore Renewable and Clean Energy Projects of 20 MW or Larger that Are Reasonable Alternatives to the Proposed Project

Section 3.2.1.2 of the DEIS fails to consider onshore renewable projects as an alternative to the proposed project, even though hundreds of megawatts of onshore renewable generation are operating in the region and over 2,100 MW of new renewable generation is projected to come online and serve New England within the next few years. As shown below, renewable energy resources that currently qualify under the Massachusetts RPS include: onshore wind energy, biomass, landfill methane gas, anaerobic digestion, photovoltaic generation and others. Additionally, as a result of the February, 2008 ISONE Forward Capacity Market auction, New England will receive over 1,000 MW of new supply from demand response resources. The rapid growth of demand response resources illustrates

they are another viable and cost-effective option for providing low-cost, clean energy to New England consumers.

Further, the DEIS failure to consider any project alternatives located outside of Nantucket Sound is patently unreasonable. There is no rational basis for imposing this geographic constraint, particularly when the balance of the DEIS analysis considers the energy needs of Massachusetts and New England as a whole. At a minimum, the DEIS should consider any renewable resources capable of serving New England. This is the eligibility standard used in the Massachusetts RPS, as well as all other RPS programs in New England. As long as a renewable energy facility or demand side resource can deliver its electricity output to the ISONE grid, the power can be delivered to consumers located anywhere in New England.

There are hundreds of new, renewable energy projects either in the development, permitting, or construction phase in New England that are 20 MW or larger, and which should be considered as alternatives to the proposed project. Even from the wind sector alone the alternative supplies are impressive. As shown in Exhibit 7, the ISONE interconnection queue for renewable energy facilities includes over 2,100 MW of new renewable capacity seeking interconnection in New England. More than half of these megawatts are for new wind facilities (not including the proposed project).[229]

In addition to these proposed new renewable projects, there is substantial room for future growth. First, according to a Massachusetts Department of Energy Regulation analysis, the land-based wind industry has the capacity to produce 9,500 MW of wind generated power in New England.[230] Second, as illustrated by the following chart, proposed onshore wind projects in New England have the capability to supply a significant share of the region's total energy needs. Even a non-exhaustive list of pending onshore wind projects in New England, which are 20 MW or larger, have the potential to supply over 1,795 MW of new generation.[231] Even this estimate, however, is not representative of the total output from *all* proposed wind facilities in New England since it excludes all projects smaller than 20 MW.

---

[229] *See* Exs. 6 and 7. This data is extrapolated from the ISONE Interconnection Queue. ISO New England, ISONE Interconnection Request Queue 03-15-08 (Mar. 15, 2008), *available* at http://www.isone.org/genrtion_resrcs/nwgen_inter/status/interconnection_request_queue_%2003152008.xls.

[230] Catherine Williams, *DOER Chief: Land Based Wind Good Opportunity, Not Widespread*, State House News Service, Apr. 2, 2008.

[231] This estimate is not representative of the total output possible from all proposed wind farms in New England, merely those 20MWs or larger.

Non-Exhaustive List of Proposed Onshore Wind Projects in New England

Wind Farm	Status	Location	Capacity (MW)	Commercial Start Date
Horizon/Linekin Bay Energy	Development	Aroostook County, ME	~500	2007-2010
Marble River Wind Farm	Permitting	Linton and Ellenburg, NY	218	
Kibby Wind Project by TransCanada	Permitting	Kibby Mountain, ME	132	late 2008 or early 2009
Bliss Windpark proposed by Noble Environmental Power	Construction	Wyoming County, NY	100.5	
Clinton Windpark proposed by Noble Environmental Power	Construction	Clinton County, NY	100.5	
Granite Reliable Power Windpark proposed by Noble Environmental Power	Development	Coos County, NH	99	
Ellenburg Windpark proposed by Noble Environmental Power	Construction	Clinton County, NY	81	
Allegheny Ridge Wind Farm proposed by Gamesa/ First Energy Corp.	Construction	Cambria and Blair Counties, PA	80	Phase I in early 2007
Criterion Wind Project proposed by Clipper Wind Power	Development	Garrett County, MD	70	
Stetson Ridge Wind Project proposed by UPC Wind Management	Construction	ME	57	late 2009 or 2010
Maine Mountain Power	Permitting	Redington Township, ME	54	
Passamaquoddy Tribe Wind Farm	Proposed	Prentiss Township, ME	50	
Sheffield Wind Farm by UPC Wind Management, LLC	Permitting	Hardscrabble Mtn., Sheffield, VT	40	~2008
Synergics Wind Energy, Roth Rock Wind power Project	Construction	Garrett County, MD	40	NA
West Hill Wind Power (Sturbridge)	Construction	NY	39	Fall 2008

PMM (Deerfield Wind)	Permitting	Searsburg & Readsboro, VT	30-45	late 2008
Hoosac Wind Project by PPM Energy	Permitting	Florida & Monroe, MA	30	early 2008
CEI New Hampshire Wind, LLC and Community Energy, Inc.	Permitting	Lempster, NH	25-30	late 2008
First Energy Corp / DisGen	Proposed	Somerset County, PA	25	
Lempster Wind Project	Construction	Lempster, NH	24	~2008
Total Proposed MW			~1,795	

Sources:
www.eere.energy.gov/windandhydro/windpoweringamerica/ne_projects.asp
www.awea.org/projects/

In addition to the proposed wind projects, New England is developing other onshore renewable energy projects that should also be considered alternatives to the proposed project. The following chart lists the proposed, non-wind renewable energy projects in New England that are 20 MW or larger. Many of the proposed new projects are either biomass or landfill gas and are capable of providing substantial amounts of generation, as well as firm capacity. The proposed significant non-wind renewable energy projects in New England include:

Non-Exhaustive List of Proposed Onshore Renewable Projects In New England 20 MW Or Greater

Project Type	Location	Capacity (MW)[232]	Projected Commercial Operation Date
Somerset Unit 6 Biomass/Biodiesel	Somerset, MA	120	(conversion)
Biomass Project	Coos County, NH	67.5	6/1/2009
Biomass Project	Berkshire, NH	60	12/1/2010
Biomass Project	Hampden, MA	55	6/30/2009

[232] These estimates are based on winter net MW generation.

Biomass Project	Cheshire, NH	50	6/30/2010
Biomass Project	Hillsboro County, NH	45	2/25/2010
Biomass Project	Coos County, NH	41	5/31/2011
Biomass Project	Litchfield County, CT	40	1/1/2010
Landfill Gas Project	Providence, RI	38.4	12/1/2009
Biomass Project	Windham, CT	38.5	3/31/2010

Sources:
Div. of Energy Resources, Massachusetts Renewable Portfolio Standard Annual RPS Compliance Report for 2006 (2006), http://www.mass.gov/doer/rps/rps-2006annual-rpt.pdf.
ISO New England, ISONE Interconnection Request Queue 03-15-08 (Mar. 15, 2008), *available* at http://www.isone.org/genrtion_resrcs/nwgen_intcr/status/interconnection_request_queue_%2003152008.xls.

4. Demand Response Is a Cost-Efficient, Reasonable Alternative That Should Be Considered as an Alternative to the Proposed Project

In addition to onshore renewable energy projects, demand response resources are a viable and cost effective alternative to the proposed project that should be evaluated. Demand response is the implementation of measures at a customer's business facility that act to reduce the need for electricity and thereby reduce overall demand within the ISO system. These resources can have the most immediate and cost-effective impact on energy needs and costs because they take pressure off of the ISO system during periods of peak demand when energy is most needed and costs are highest. These resources act to reduce the overall need for energy and are an alternative to building additional generation facilities. Demand response has been recognized by FERC and ISONE as providing an important source of low-cost, reliable and environmentally beneficial electricity supply.

Demand response consists of many separate programs, including:

- Reliability-based programs, which include both voluntary and emergency programs that compensate market participants when they curtail their load use during emergency situations or compensate market participants that curtail their energy consumption during particular periods;[233]

[233] Federal Energy Regulatory Commission, 2006 State of the Markets Report 38 (2007), http://www.ferc.gov/market-oversight/st-mkt-ovr/som-rpt-2006.pdf. Ex 62.

- Economic programs that allow participants to submit load reduction bids into day-ahead and real-time markets;[234]

- Time-based rates, such as time-of-use rates and real-time pricing;[235]

- Legacy utility programs, such as interruptible tariffs or direct load control that contributes to system reliability;[236] and

- Calls for voluntary conservation that do not provide a direct economic benefit to the customer.[237]

Demand response plays an important role in meeting energy demand in New England and throughout the United States. According to FERC, demand response played an important role in reducing peak loads during the record demand levels that occurred in New England during the summer of 2006. For example, in Long Island and southwest Connecticut, two of the most electrically vulnerable areas in the country, demand response reduced peak load by approximately 4.6 percent and 6.1 percent, respectively, in the summer of 2006.[238] As shown below, demand response resources eliminated demand growth throughout the afternoon period when demand normally peaks.[239]

---

[234] *Id.* at 39.

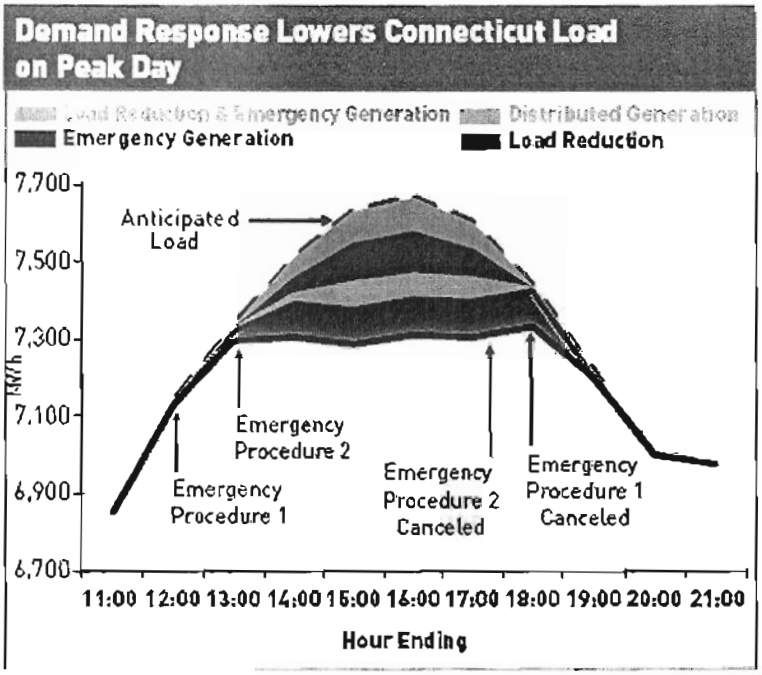
[235] *Id.*

[236] *Id.*

[237] *Id.*

[238] *Id.*

[239] Figure taken from the Federal Energy Regulatory Commission's State of the Markets Report for 2006, *id.at* 38.

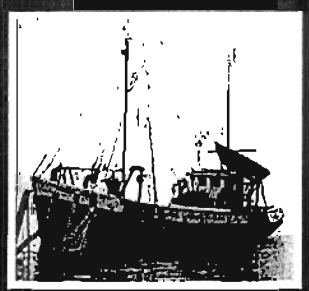


Demand response is an effective and economically sound alternative to the proposed project. Not only are demand response resources a cost-effective alternative to project, they have fewer adverse environmental effects.

As shown by the existing and proposed renewable energy generation mix in New England, and the success of demand response technology, there are many cost-effective and environmentally beneficial alternatives to the proposed project that are capable of meeting the current and future energy needs and RPS goals in Massachusetts and New England. Further, there is no rational basis for excluding these alternatives from the MMS analysis. These resources are a cost-effective and environmentally beneficial alternative to the proposed project.

E. Adaptive Management Is Not Appropriate for the Proposed Project and the DEIS Discussion of Adaptive Management Is Inadequate

Another serious problem in the DEIS is the mitigation discussion and the assumption in Chapter 9 that an effective Environmental Management System can be developed and implemented for the proposed project to address post-construction impacts to wildlife through an adaptive management approach. One APNS avian expert, Shawn K. Smallwood, with expertise on the impacts of wind energy projects on birds (Appendix 18), commented, "I have not seen any mitigation plan so briefly and so vaguely described for a wind power project as the one that appears in the DEIS for Cape Wind." Dr. Smallwood goes on to explain that adaptive management is infeasible for the proposed project because the proposal lacks adequate pre-project monitoring and research needed to formulate a reasonably sound



Alliance to Protect Nantucket Soun

Deficiencies in the Analysis of Alternatives in the January 16, 2009 Final EIS on the Cape Wind Project

Submitted to:
S. Elizabeth Birnbaum, Esq.
Director, Minerals Management Service
1849 C Street, NW
Washington, DC 20240

September 24, 2009

SAVE OUR SOUND
alliance to protect nantucket sound

September 24, 2009

S. Elizabeth Birnbaum, Esq.
Director, Minerals Management Service
1849 C Street, NW
Washington, DC 20240

RE: Deficiencies in the Analysis of Alternatives in the January 16, 2009, Final EIS on the Cape Wind Project and Request for Consensus Process

Dear Director Birnbaum:

On behalf of the Alliance to Protect Nantucket Sound (Alliance/APNS) and its 30,000 supporters, we extend our congratulations to you on your appointment to the position of Director at Minerals Management Service (MMS). Established as a nonprofit organization in 2002, the Alliance is a nonprofit environmental organization dedicated to the long-term preservation of Nantucket Sound. Our goal is to protect Nantucket Sound in perpetuity through conservation, environmental action, and opposition to inappropriate industrial or commercial development.

One of our primary objectives has been to promote a comprehensive ocean planning process, particularly for the location of offshore renewable energy resources. We are strongly opposed to the proposed location for the Cape Wind project in the middle of Nantucket Sound due to the many adverse impacts it would have on the public interest values of the Sound. The Alliance is willing to support, however, a decision-making process that locates the project in one of the many alternative sites currently available. The purpose of this letter and the enclosed report is to advance the alternative site relocation process and to bring new information to the attention of MMS. As has been the case for over seven years, the Alliance is ready to work cooperatively with MMS, the project applicant, and other stakeholders to achieve a consensus solution to the Cape Wind controversy. It appears consensus building has been utilized in Rhode Island and Delaware, where offshore wind energy projects are advancing without conflict. The Alliance is hopeful that the Cape Wind controversy can end with a win-win solution as well. Clearly, MMS and DOI leadership will be necessary to achieve this desirable result.

The Alliance has prepared the attached report on the deficiencies in the analysis of alternatives in the review of the proposed Cape Wind Project in Nantucket Sound in the Final Environmental Impact Statement (FEIS), released on the last business day of the Bush Administration. The National Environmental Policy Act (NEPA) clearly requires more than the current level of analysis. Because the purpose and need statement used is too restrictive, a number of reasonable and viable alternatives were impermissibly ruled out and need to be re-evaluated in order to

4 Barnstable Road, Hyannis, Massachusetts 02601
▫ **508-775-9767** ▫ **Fax: 508-775-9725**

www.saveoursound.org

a 501 (c)(3) tax-exempt organization

address the deficiencies in the Bush Administration FEIS. In addition, new project locations have been proposed with advanced technologies, and new information is available on existing alternatives that require a revised NEPA review. The law is clear that a supplemental NEPA review is required at this time. We respectfully ask the Director to specify that MMS produce a supplemental FEIS.

The Alliance notes that the East Coast states are forming a collaborative to promote the offshore industry by installing a backbone or spine underwater transmission line to reach multiple deepwater sites. The advancement of high-voltage transmission infrastructure that will be installed in federal waters surrounding Massachusetts and adjacent states will enable more alternative sites, as these will be interconnected to the New England Power Pool (NEPOOL). This spine will be a superhighway for offshore site connectivity that meets the criteria set forth by the MMS. To reinforce the point that these sites are valid alternatives, the announcement of the collaborative includes statements by Cape Wind developer, James Gordon, that an industry is advancing with some of the other developers referenced in this paper. This clearly means the alternate site analysis must be expanded to include the sites described in this report.

These new alternatives, combined with President Obama's June 12, 2009, National Ocean Policy Task Force initiative, provide the basis for a new approach to consensus-based decision making that both protects Nantucket Sound—making possible its long-overdue consideration for national marine sanctuary or national monument designation—and removes the controversy that stands in the way of the development of properly-sited offshore wind energy projects in New England. MMS now has the opportunity to show true leadership in ocean management planning and offshore energy development by expanding the consideration of alternatives in the Cape Wind review to achieve a consensus solution, and the Alliance stands ready to assist in that effort.

Thank you for your attention to this matter, and should you have any questions or comments please call me.

Sincerely,

Audra Parker, Executive Director

Enclosure

Cc: Representative William D. Delahunt
Senator John F. Kerry
Rodney E. Cluck, Ph.D., Project Manager, Minerals Management Service
Walter Cruikshank, Ph.D., Minerals Management Service
Andrew Krueger, Ph.D., Minerals Management Service, Alternative Energy Programs
Wyndy J. Rausenberger, Esq., Department of the Interior, Office of the Solicitor

4 Barnstable Road, Hyannis, Massachusetts 02601
▫ **508-775-9767** ▫ **Fax: 508-775-9725**

www.saveoursound.org

a 501 (c)(3) tax-exempt organization

TABLE OF CONTENTS

Introduction

The Minerals Management Service (MMS) has been tasked with reviewing the proposed Cape Wind Project in Nantucket Sound since 2005. Under the National Environmental Policy Act (NEPA), MMS released a Draft Environmental Impact Statement (DEIS) on January 18, 2008, and a Final Environmental Impact Statement (FEIS) on January 16, 2009, the last business day of the Bush Administration. Both EISs limited the review to the following alternatives: the applicant's preferred site at Horseshoe Shoal (HSS); a no-action alternative; a site south of Tuckernuck Island; Monomoy Shoals; and a series of smaller or phased projects on HSS. All of the alternatives are in the immediate geographic vicinity of the applicant's desired location.

NEPA requires more than the current level of analysis. Action agencies must take a hard look at the impacts of their actions, with the analysis of alternatives at the heart of the review.[1] NEPA regulations require federal agencies to "[r]igorously explore and objectively evaluate all reasonable alternatives,"[2] which are "those that are *practicable or feasible* from the technical and economic standpoint and using common sense, rather than simply [what is] desirable from the standpoint of the applicant."[3]

MMS did not follow this principle in reviewing the Cape Wind Project. A number of reasonable and viable alternatives were impermissibly ruled out because the purpose and need statement used in the DEIS and FEIS is too restrictive. As a result, there are a number of alternatives that must be evaluated to cure the deficiencies in the Bush Administration's FEIS. In addition, new information is now available that requires an expanded alternatives analysis.

Additional alternatives that must be considered include: the Blue H proposal for a floating deepwater commercial wind energy project located off Martha's Vineyard; the State of Rhode Island proposed two phased wind project in state waters; the Winergy Power proposal offshore of Long Island; preliminary permits issued by the Federal Energy Regulatory Commission (FERC) to over a dozen hydrokinetic, or tidal and wave energy, projects in the New England area; onshore renewable and clean energy projects that are reasonable alternatives to the proposed project; and the Commonwealth of Massachusetts' own proposed offshore wind sites in state waters, two sites that can incorporate 166 wind turbines generators (WTGs) with a capacity of 3.6 megawatts (MW). Additional discussion of these sites can be found below.

The law is clear that a supplemental NEPA review is required when significant new information becomes available. NEPA regulations require additional impact analysis whenever there are either substantial changes in the proposed action relevant to associated environmental concerns, or there are significant new circumstances or information relevant to environmental concerns and the proposed action or its impacts.[4] Courts have consistently held that agencies should apply a "rule of reason" when deciding whether supplemental NEPA documents are necessary and

---

[1] *Andrus v. Sierra Club*, 442 U.S. 347, 348 (1979).
[2] 40 C.F.R. § 1502.14(a).
[3] Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations, 46 Fed. Reg. 18,026 (Mar. 23, 1981) (emphasis added).
[4] 40 C.F.R. § 1502.9(c).

whether there are circumstances giving rise to the need for new NEPA analysis.[5] With regard to alternatives, "a viable but unexamined alternative renders an environmental impact statement inadequate."[6] As demonstrated by this report, these tests have all been met for purposes of renewable energy projects that are less controversial and harmful options than the Cape Wind Project, and MMS must now expand the EIS with additional alternatives and conduct further public review to comply with NEPA.[7]

Alternatives within New England

The basis for determining reasonable alternatives in an EIS is the purpose and need statement.[8] The 2008 DEIS and 2009 FEIS describe the purpose and need of the proposed project as follows:

> The underlying purpose and need to which MMS is responding is to provide an alternate energy facility that uses the unique wind resources in waters off of New England using a technology that is currently available, technically feasible, and economically viable, that can interconnect and deliver electricity to the New England Power Pool (NEPOOL), 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 (RPS).

The Alliance to Protect Nantucket Sound (APNS) has consistently expressed significant concerns over the impact that this narrow statement has had on the alternatives analysis in the NEPA review process. As we have demonstrated in our DEIS and FEIS comments, the purpose and need statement violates NEPA and has the impermissible effect of leaving no options other than the applicant's proposal. (Exhibit 1).

Even under the MMS purpose and need statement's qualifications, significant new developments call for reconsideration of previously rejected alternatives and the consideration of new sites. Proposed projects off the coast of Rhode Island, in Massachusetts State Waters, and off the coast of Maine should be considered as alternatives within New England. Additionally, the development of deepwater floating and jacketed WTG technology means that there are numerous potential deepwater locations that should be considered. In fact, on July 20, 2009, the Boston

---

[5] *Marsh v. Oregon Natural Res. Council*, 490 U.S. 360, 373-374 (1989); *Portland Audubon Soc'y v. Babbitt*, 998 F.2d 705, 708-709 (9th Cir. 1993).

[6] *Dubois v. U.S. Dep't of Agric.*, 102 F.3d 1273, 1289 (1st Cir. 1996), *cert. denied, Loon Mtn. Recreation Corp. v. Dubois*, 521 U.S. 1119 (1997).

[7] By letters of October 2, 2008APNS has already called some of this new information to the attention of MMS. In addition, an expanded alternatives analysis is necessary to comply with the National Historic Preservation Act (NHPA) as discussed in APNS letters of July 29, 2008 and December 30, 2008. A proper NEPA analysis under both NEPA and the NHPA would point the way to project sites that avoid the many negative impacts of the Horseshoe Shoal location and make possible a consensus outcome on the Cape Wind application.

[8] *Roosevelt Campobello Internat'l Park v. EPA*, 684 F.2d 1041, 1047-48 (1st Cir. 1982).

Globe published an article that called into question whether Cape Wind selected an obsolete technology.[9] (Exhibit 2).

Rhode Island

In the DEIS, MMS considered sites off of Rhode Island, such as Block Island, as alternatives to Cape Wind. It has rejected Block Island because of extreme storm waves and areas of rock or bedrock. For the reasons that follow, the rationale purportedly relied on by MMS for refusing to consider the Rhode Island locations is no longer valid. The site rejected by MMS has now been selected by Deepwater Wind for its project using a newer technology than the eight year-old Cape Wind system. The Deepwater Wind project came about through a well-structured offshore wind energy development plan directed by Rhode Island Governor Donald L. Carcieri. In a transparent bidding process, the Deepwater Project was selected against six other projects. Furthermore, the MMS evaluation of the Block Island cost of energy, 13.7 cents per kilowatt hour (kWh), is within ten percent of the 12.8 cents per kWh for the HSS site. The less than one cent difference, given the potential error in estimation, means the Block Island site compares favorably with the proposed site. These reasons dictate the need for MMS to re-evaluate the Block Island site and Deepwater project as a viable alternative. (Exhibit 3).

In spite of MMS' incorrect rejection of the Block Island alternative site due to extreme storm waves, the technology to develop offshore wind projects off Block Island does exist. This is evidenced by the proposed Deepwater Wind Project and the recent Horns Rev 2 Project off the coast of Denmark. The Horns Rev 2 Project, labeled as the world's largest offshore wind farm, is located 30 kilometers off the coast of Denmark and is slated to go into operation on September 17, 2009. The proposed wind farm will be spread over a 35-square kilometer area and has an overall capacity of approximately 209 MWs. (Exhibit 4). The Project will utilize turbines approximately 150 meters high, with 30-40 meters of the turbine below sea level. (Exhibit 5). The fact that the Project will be located almost 19 miles off the coast of Denmark in the extreme sea state and weather conditions of the North Sea is proof that technology does exist to build an offshore wind farm off of Block Island despite the potential for extreme storm waves and weather. As stated on the Project's website, the North Sea is known for its hazardous weather conditions and "waters which earlier in the Danish history have been known to swallow up many good men." (Exhibit 5). The FEIS similarly ruled out other alternative sites located off the coast of: Portland, Maine; Cape Ann, Massachusetts; Boston, Massachusetts; Nauset, Massachusetts; Nantucket Shoals, Massachusetts; and Phelps Bank, Massachusetts due to storm wave height. In light of the development of the Horns Rev 2 Project, MMS should reconsider the alternatives ruled out on account of alleged extreme storm wave height.

Furthermore, as indicated, Rhode Island's solicitation of projects resulted in selection of New Jersey-based Deepwater Wind for two major phases of wind development. Phase One, the Block Island project, will be a 20 MW project in state waters. It is expected that construction of Phase

[9] It is not surprising that technology has eclipsed Cape Wind's plan given the eight year review process. On March 3, 2009, the New York Times revealed that GE is no longer offering the 3.6 MW WTG relied on by the project applicant, thereby illuminating the fact that the monopile system in not cost effective.

One will begin in late 2010 and be completed in late June 2012. As a result of negotiations between the State and Deepwater Wind, the developer has revised the construction schedule to put the development on pace to be the first offshore wind project constructed in North America.

According to the analysis shown in Appendix F of the Cape Wind FEIS, the Block Island site's projected cost to produce electricity is comparable to that of Cape Wind. Deepwater Wind utilizes proven, state-of-the-art jacket foundation technology that allows wind turbines to be cost-effectively deployed in water depths up to 150 feet. Rhode Island has already evaluated the Block Island site as viable, and this site now clearly meets MMS' narrow purpose and need statement. The fact that companies are pursuing this site means that MMS is incorrect that the alleged storm wave height rules out the location for development. In the real world, the Rhode Island sites have proven to meet the NEPA test of being a "practicable and feasible" alternative and must now be reviewed in a Cape Wind EIS.

In Phase Two, Deepwater Wind will construct a utility-scale project in a separate location, capable of producing 1.3 million megawatt hours (MWh) annually – or 15 percent of the State's electric demand – within three years of approval of Deepwater Wind's application to MMS. This 385 MW project will be a 100-turbine deepwater wind plant 15 to 20 miles off the coast. The exact location of the Deepwater Project will be determined by the results of the ongoing Special Area Management Plan (SAMP) permitting process, spearheaded by the Rhode Island Coastal Resources Management Council and the University of Rhode Island's Graduate School of Oceanography. Given its utility-scale size and time frame, this project clearly should be viewed as a viable alternative to Cape Wind. Moreover, the offshore wind resource in the general area considered for this Phase Two project is sufficient to accommodate more than one utility-scale facility. Thus, in addition to the Deepwater Wind project serving as an alternative to Cape Wind itself, MMS also must consider simply moving Cape Wind to this location as well. (Exhibit 6). Walt Musial of the National Renewable Energy Lab has confirmed that the Rhode Island location is viable for 400 MWs of offshore wind power. (Exhibit 7).

Finally, Deepwater is in a better position than is Cape Wind to secure a Power Purchase Agreement (PPA) and, consequently, to obtain the necessary funding to finance its project. As a result, this project is far more "practicable and feasible" than Cape Wind. Since the issuance of the FEIS, Rhode Island signed legislation that requires National Grid, the state's largest electric utility, to buy power from renewable energy producers. Specifically, the legislation requires National Grid to make long-term contracts to buy 90 MWs of renewable power; a step that Rhode Island Governor Carcieri stated should help Deepwater Wind secure the $1.5 billion in funding it expects to need for the two offshore projects. (Exhibit 6).

Cape Wind, by contrast, has very poor prospects of obtaining a PPA. Massachusetts enacted the Green Communities Act that also calls for state retail utilities to solicit PPAs from renewable energy projects. Section 83 of the Green Communities Act calls for the PPAs to cover three percent of the state's total demand of electricity. The Draft Request for Proposal (RFP), issued by Massachusetts Department of Public Utilities (DPU) and Department of Energy Resources (DOER), shows that the four retail utilities might execute PPAs that, on a combined basis, would procure about 1.4 million MWh annually. Cape Wind claims it would produce 1.6 million MWh. This amount of demand (1.4 million MWh per year) falls short of Cape Wind's output, which means even if Cape Wind were able to contract for all the power, it would not be sufficient.

Also, it is unlikely that Cape Wind would receive any portion of the PPAs because it is common knowledge that a project such as Cape Wind would require a selling price of at least 21 cents per kWh, which is at least twice the market price for power.[10] Massachusetts, fortunately, has many renewable energy projects in the pipeline with costs much lower than Cape Wind. Finally, Cape Wind faces strong opposition because of its location. Any effort to award a PPA to Cape Wind will be vigorously opposed. At an alternative site, however, a PPA could be supported.

The availability of a PPA is critical to satisfying MMS's own purpose and need statement, which requires the project to be financially viable. As is clear from MMS' own Appendix F analysis, Cape Wind is not financially viable. The peer review notes that the cost of Cape Wind, including subsidies, is still more than double the regional market. Cape Wind would not be profitable. In fact, Cape Wind is less viable economically today than it was at the time of the FEIS release. The National Academy of Sciences issued a report indicating a project such as Cape Wind would now cost 21 cents per kWh.[11] The local market is less than ten cents per kWh. On this basis alone, MMS should have rejected Cape Wind under its own EIS criteria. In any case, the offshore Rhode Island sites have emerged not only as reasonable alternatives that must be considered, but as clearly preferable alternatives that render Cape Wind and HSS undesirable and a flawed choice for further federal action.

Massachusetts Federal Waters

South of Tuckernuck Island (STI) is a reasonable alternative to Cape Wind and is, in fact, superior to Cape Wind's preferred site on HSS in several areas, including tribal and cultural impacts, historic preservation, visual impacts, navigation, and oil spill risk. The FEIS, however, fails to identify STI as preferable to HSS.

The Mashpee Wampanoag Tribe, which opposes HSS because of impacts to Tribal cultural, ceremonial, and religious practices, has, since the issuance of the FEIS, expressed support for STI as a better alternative with fewer impacts. According to the Mashpee Wampanoag Tribal Historic Preservation Officer (THPO) at the section 106, June 16, 2009, meeting, STI is clearly a superior site. "The area -- I can be sure that the proposed project falls into the area that the Wampanoags use, I can be sure of that. I can be sure of -- that the visual resources that are being affected, like the 28 properties that have been determined to be affected, do not exist on the other side of Tuckernuck, that there are no historic resources that will be affected visually from that section from the Mashpee Wampanoag's point of view, okay?" The THPO further stated, "South of Tuckernuck is not visible from any of the historic district sites, it is closer to the island, but it's closer to the island and the island is ... I think it's 85 percent conservation lands, it is not in view of the historic district." (Exhibit 8).

The STI site also would significantly reduce the visual impact compared to HSS, which is surrounded by three landforms. STI would affect a smaller area and fewer people and would not be visible from the Cape Cod mainland. Considering the fact that 71 percent of the population of

[10] The National Academies recently released a report on renewable energy. The report shows that an offshore wind energy project requires a selling price of 20.95 cents per kWh. This is a most credible source of information. It corroborates the FEIS Appendix F findings that Cape Wind is not a profitable project.

[11] *Electricity from Renewable Resources*, National Academies Press, 112, table 4-2 (2009). The figure for offshore wind is $209 per MWh which is 21 cents per kWh.

Martha's Vineyard and almost the same percentage of the population of Nantucket are concentrated on the northern half of the respective islands, STI would be more directly visible for 7,726 people. In comparison, HSS would be more directly visible for more than 111,800 people if one takes into account the communities facing the shores of Nantucket Sound located on Cape Cod, Martha's Vineyard and Nantucket (Helimax Energy, "Independent Review of FEIR," March 2007, included as Appendix 21 in Alliance comments on DEIS).

STI would have fewer navigational impacts than would HSS. STI supports little to no commercial marine vessel traffic, its vicinity does not fall on or adjacent to any marine transportation route, it has no passenger ferry traffic, and the population of recreational boaters and fishing activity in the area is dramatically smaller than similar marine activity in Nantucket Sound. Furthermore, given the greater separation between towers, the lack of proximity to established channels and ferry routes, and significantly reduced marine traffic and activity, this alternative is less objectionable than the primary site on HSS. Greater separation would be potentially less hazardous to mobile gear fishermen.

A major release of oil due to a collision with an oil tanker vessel and a wind turbine generator (WTG) at the proposed HSS site is much more likely than at the STI site, as tanker vessels commonly ply the Main Channel adjacent to HSS and normally do not navigate Muskeget Channel north of the STI site. Therefore, the worst-case discharge at STI (approximately 41,000 gallons of transformer oil and diesel oil plus smaller amounts of oil and hazardous substances from each WTG) would be much smaller than a worst-case discharge from a tanker vessel collision with a WTG at the HSS site (41,000 gallons from ESP, small amounts from WTG plus up to approximately 1.3 million gallons of fuel oil from a tanker vessel). A significantly larger release from a tanker vessel allision at Horseshoe Shoal would likely result in substantially larger ecological impacts than a (relatively smaller, but still significant) release from only the ESP or WTG.

The HSS site is more susceptible to the impacts of sea ice than the STI alternative site location. Accordingly, the STI site is less susceptible to impacts and potential spillage of oil and hazardous substances from sea ice than the HSS location.

All of these factors argue strongly in favor of STI. Despite these significant public interest benefits, the incremental cost of STI over HSS is inconsequential. The FEIS calculates cost of generation at $128/MWh (after subsidies and tax credits) versus $143/MWh for STI (including MMS peer review adjustments). This represents an additional cost of just 12 percent for STI. While water depths, wave heights, and distance from shore may pose additional costs for STI, the wind is stronger, which offsets some of the additional capital costs. In addition, a larger footprint could be considered to further offset additional costs. Moreover, it has been assumed in the FEIS that all connection cables from STI will cross Nantucket Sound and pipe into the New England power grid where the alternative on HSS would make landfall. Cable connections from STI to the islands of Martha's Vineyard or Nantucket have not been considered.

It is clear that no offshore wind energy projects are capable of development without large public subsidies or loans. It, therefore, follows that projects like Cape Wind should not be considered or approved for highly controversial sites such as HSS, when other sites that have broad-based

public support are available. If taxpayers are to foot the bill for projects such as Cape Wind, it should be the desire of the applicant and the duty of the federal decision-maker to select the site that reduces controversy and conflict as the trade-off for large public subsidies. The applicant's narrow economic self-interest should not dictate a public-interest decision where not only will federal land be made available for development, but where many substantial public subsidies will be required to make the project feasible. STI meets this goal by minimizing public interest conflict; the applicant's preferred site at HSS maximizes conflict and controversy.

MMS has full authority to advise the applicant of the need to consider alternative sites. While it is not possible to require this project developer to select a different location, MMS has a duty under NEPA to identify the preferable site. By encouraging Cape Wind to seek an alternative site, such as Rhode Island or STI, rather than investing in the site that produces maximum conflict and significantly harms the public interest, MMS will pave the way for a consensus solution.

Massachusetts State Waters

On June 30, 2009, the Commonwealth of Massachusetts released its draft Ocean Management Plan (OMP). This plan identifies two areas in state waters that could accommodate utility-scale wind projects. As many as 166 wind turbines, generating enough electricity to power some 200,000 homes, could be built to the southwest of Martha's Vineyard: one on the far side of Noman's Land and the other off the Elizabeth Islands. The FEIS did not consider either of these alternatives, which have now become reasonable alternatives as a result of the Commonwealth's post-FEIS plan.

The above map shows the two areas west of Martha's Vineyard highlighted for wind energy.

This option would be 25 percent larger in numbers of turbines and almost 50 percent larger in generating capacity than Cape Wind. According to the state draft plan, the two areas southwest of the Vineyard presented the least conflicts. The plan stated that the area south of Noman's Land is unusual in that there are few other places in state waters that are three or four miles away from population centers and have relatively minor potential conflicts, such as with navigation or ecosystem values.

In addition, the Massachusetts plan also would authorize other areas of state waters that would still be available for small-scale community wind generation, subject to environmental vetting. The MMS EIS did not consider these sites, and they must now be considered as reasonable alternatives as a result of the State's June 30, 2009, draft plan.[12] Thus, the new state plan alternatives must be considered.

Maine

In another post-FEIS development, international energy companies are now looking seriously at Maine for massive wind turbines and support structures that would float in deepwater, out of sight of the coast and in line with the strongest breezes. The Maine Ocean Energy Task Force will identify up to five offshore demonstration sites before year's end.

Seattle-based Principle Power Inc. is seeking investors to finance a prototype of its patented WindFloat floating support structure. It is designed to handle a 400-ton tower and a 5 MW turbine, with a rotor up to 500 feet in diameter. At commercial scale, Principle anticipates a 30-turbine wind project that can generate 150 MWs. (Exhibit 9).

Maine is one of five sites worldwide – along with Portugal, the United Kingdom, Hawaii and Oregon – being considered by Principle. Maine is appealing because of its wind resources, nearness to population centers, and active wind energy research at the University of Maine. The company has already signed agreements with a Portuguese utility for a phased WindFloat development and has begun meetings in Oregon for a demonstration project ten miles offshore.

Maine's test sites may also attract a company like StatoilHydro, a Norwegian oil and gas firm that is expanding into worldwide energy ventures. StatoilHydro is monitoring the work of Maine's task force and plans to begin video conferences this summer with representatives from the University of Maine. Statoil officials have expressed interest in testing the Hywind WTG off the coast of Maine once sites are designated. Hywind is designed to extend more than 300 feet below the ocean, so it will be far enough from land to avoid most conflicts with existing uses. (Exhibit 9).

---

[12] Under NEPA, MMS cannot ignore alternatives simply because they do not fall under its jurisdiction. *See, e.g., NRDC v. Hodel*, 865 F.2d 288, 295-96 (D.C. Cir. 1988); *NRDC v. Morton*, 458 F.2d 827 (D.C. Cir. 1972); 40 C.F.R. § 1502.14(c).

Cape Wind has become a cautionary tale for Maine's task force. Representatives from lobstering, groundfishing, and aquaculture joined conservationists and recreational boaters to suggest how Maine can avoid the pitfalls of Cape Wind. Their overall message: Work closely from the start with coastal communities and interest groups to win support for Maine's test sites. Deepwater wind facilities create fewer human conflicts because the bulk of lobster fishing and boating takes place within three miles of the coast. Floating wind sites are likely to be at least 12 miles offshore. Researchers at the University of Maine are compiling databases that include whale sightings, bird migration, and shipping routes to identify the best sites. Recently, the University of Maine received a $4.6 million stimulus grant to create a deepwater wind research center. This is further confirmation that deepwater wind is the technology of the future, not the monopile WTG, which GE has abandoned and Cape Wind relies on.

Deepwater Alternatives

While MMS recognized the existence of floating foundation WTGs in the FEIS, it failed to consider any such sites as alternatives because it incorrectly assumed that the technology is not reasonably available. The technology for these facilities is more mature than MMS represents, and it is viable now for NEPA purposes.

Both Blue H and Hywind already have launched pilot projects, with Blue H's pilot completed and the site decommissioned. Deepwater floating turbine technology, therefore, is readily within the timeframe that is reasonable to be included as an alternative in the EIS. The recent article in *The Boston Globe* confirms that new technology and less-conflicted projects have already overtaken Cape Wind. (Exhibit 2). MMS must, therefore, revise its NEPA analysis to account for these new sites and technologies. A summary of current deepwater projects is set forth below.

Blue H has a deepwater project in Italy that is "shovel ready," fully permitted and supported by a PPA. From a commercialization standpoint, the Blue H deepwater project is well ahead of the Cape Wind proposal. On January 14, 2009, Blue H of the Netherlands announced delivery of a commercial 2.0 MW floating platform WTG for 2009. The 2.0 MW WTG is currently being manufactured and will be deployed off the coast of Puglia, Italy. (Exhibit 10). This represents the first of a planned 90 MW floating wind project to supply the power needs of 75,000 Italian homes. (Exhibit 10).

Blue H has also announced plans to develop a deepwater water wind energy project 23 miles southwest of Martha's Vineyard and has been ready, for over a year, to evaluate the site pending MMS approval. Blue H has an application before MMS to test its system and has support from the entire Massachusetts Congressional Delegation. (Exhibit 11). MMS only recently granted Blue H permission to secure the permit from the Army Corps of Engineers, and Blue H has submitted its application. Blue H hopes to moor the test platform off the coast by 2010 to collect vital data. The long-term goal is to have 120 turbines floating in 167 feet of water, generating 420 MWs. (Exhibit 11).

Siemens and energy company StatoilHydro have already installed what they call the first large-scale floating turbine. The Hywind, a 2.3 MW deepwater WTG built by Siemens, is sited off the coast of Norway and combines technologies from both the wind industry and the oil and gas

sectors. It will be tested off the coast of Norway over the next two years. The turbine has a 100-meter draft that is anchored to the seabed with cables that can be up to 700 meters long. The WTG has a ballast that is tied to the sea floor with cables. Wires will transfer the electricity produced to the mainland grid. The Hywind technology is suitable for depths of about 400 feet to more than 2,200 feet. The turbine in Norway is 7.4 miles offshore where the water is 721 feet deep. It is a utility-size turbine, with a hub height of about 100 feet, capable of generating 2.3 MWs of electricity. (Exhibit 12).

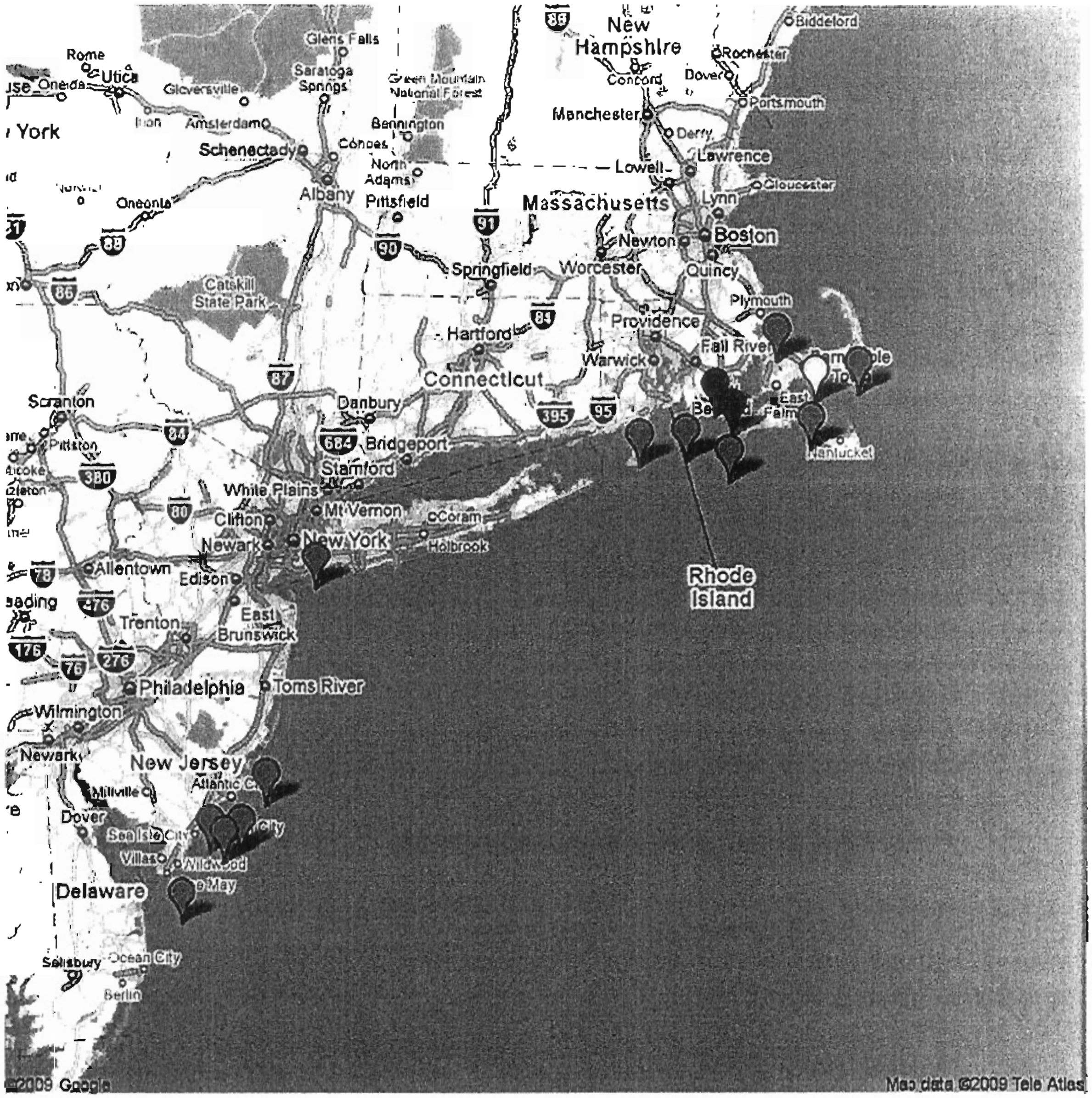
According to the June 4, 2009, MIT Technology Review, "The notion of floating wind turbines far offshore may have come a nautical mile closer to reality late last month, with the announcement of a collaboration between Norwegian oil and gas producer StatoilHydro and Germany's Siemens." (Exhibit 13).

The project planned by StatoilHydro and Siemens involves mature technologies being implemented by industrial giants. StatoilHydro's plan relies on a combination of well-tested components. A 165-meter-tall spar buoy, closely modeled after oil and gas production platforms used in the Gulf of Mexico and elsewhere, supports a standard, mass-produced Siemens 2.3 MW turbine. StatoilHydro plans to lower the price of the floating turbine by running it for two years and gathering the data needed to estimate the smallest anchor and buoy required to support a wind turbine. Some additional cost will be defrayed by more consistent winds that keep the turbines spinning more often and, thus, boosting the MWs of electricity generated by each turbine. These projects are, indeed, more viable than Cape Wind, which is designed to use a technology that is, in practical terms, unavailable (the 3.6 MW monopile WTG). MMS cannot look the other way on Cape Wind and claim that deepwater technologies cannot be considered as alternatives because they are not available.

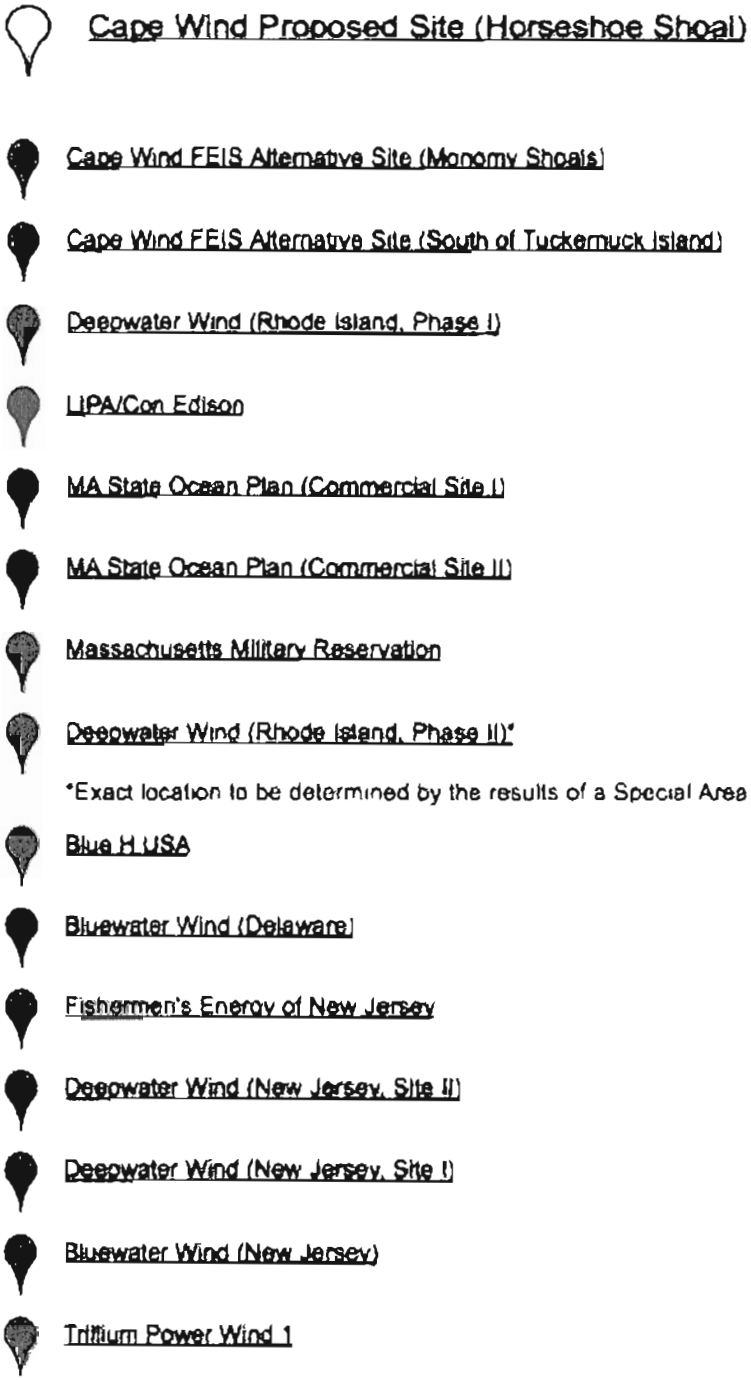
Offshore Alternatives within an Appropriate Geographic Range

In addition to alternatives within the narrowly (and unlawfully) defined area (waters off of New England) considered by MMS in the purpose and need statement, numerous viable and reasonable alternatives are found within a geographically appropriate range that would still provide renewable electricity to NEPOOL. (Exhibit 1). The viability and reasonableness of these alternatives has been recognized by MMS' recent decision to grant five exploratory leases in the waters of the Mid-Atlantic and the ongoing permitting activities of FERC and MMS for hydrokinetic projects in New England, New York, and New Jersey.

The following map shows a number of the alternatives that MMS needs to fully evaluate.


New Hampshire
Massachusetts
Connecticut
Rhode Island
New Jersey
Delaware
Boston
Providence
New York
Philadelphia
Hartford
Springfield
Worcester
Albany
Schenectady
Manchester
Lowell
Lawrence
Portsmouth
Plymouth
Fall River
Warwick
Newton
Quincy
Lynn
Danbury
Bridgeport
Stamford
White Plains
Mt Vernon
Newark
Edison
Trenton
East Brunswick
Toms River
Allentown
Scranton
Wilmington
Dover
Sea Isle City
Wildwood
Villas
Salisbury
Ocean City
Berlin
Nantucket
Catskill State Park
Oneonta
Rome
Utica
Glens Falls
Saratoga Springs
Pittsfield
Bennington
Concord
©2009 Google
Map data ©2009 Tele Atlas

The noted sites include:



Exploratory leases

The Department of the Interior (DOI) issued five exploratory leases for renewable wind energy production on the Outer Continental Shelf (OCS) off the coasts of New Jersey and Delaware on June 23, 2009. These post-FEIS leases were issued to Bluewater Wind New Jersey Energy, LLC;

Fishermen's Energy of New Jersey, LLC; Deepwater Wind, LLC; and Bluewater Wind Delaware, LLC. The leases authorize data-gathering activities, allowing for the construction of meteorological towers on the OCS from six to 18 miles offshore to collect site-specific data on wind speed, intensity, and direction.

The following companies are receiving the exploratory leases for meteorological towers:

State	Distance	Company
New Jersey	15 - 18 miles	Bluewater Wind New Jersey Energy
New Jersey	6 - 9 miles	Fishermen's Energy of New Jersey
New Jersey	15 - 18 miles	Deepwater Wind
New Jersey	12 - 15 miles	Deepwater Wind
Delaware	14 miles	Bluewater Wind Delaware

New York

Within the last several months, government agencies and utilities are gauging the interest of developers in building a massive wind project 13 miles off the coast of New York City. New York's dominant electricity company, Consolidated Edison Inc., and the Long Island and New York power authorities hope to build a 350 MW farm off Rockaway Peninsula in the Atlantic. The project could expand to 700 MWs, which would make it the largest offshore wind project in the United States. (Exhibit 14). Previous efforts by the Long Island Power Authority (LIPA) to build a 140 MW wind farm off the Long Island coast at Jones Beach faltered after cost estimates reached $800 million, double the initial projections. The LIPA project was rejected after an independent consulting report concluded that the project would increase electric bills. Most tellingly, LIPA had selected the GE 3.6 MW WTG for its project. This is most relevant information for MMS as it considers Cape Wind. The new sites off the coast of Long Island, however, are more promising because of the application of new technology. The FEIS failed to consider sites in New York because these were considered too far from the proposed action. That reason is not valid because these sites could connect to the New York Power Pool (NYPOOL) grid that is adjacent to NEPOOL. The Massachusetts RPS allows for renewable energy from adjacent power pools to qualify to satisfy RPS requirements.

New Jersey

On October 3, 2008, New Jersey regulators selected Garden State Offshore Energy (GSOE) to develop the state's first offshore wind farm project. GSOE, a joint venture between a unit of Public Service Enterprise Group and Deepwater Wind, was selected by the state Board of Public Utilities from five firms vying for state support and a grant of up to $19 million. The state program provides aid for up to 350 MWs. The project is slated to include 96 turbines that would be between 16 miles and 20 miles off the coast due east of Avalon. The joint venture will take $4 million of the $19 million grant offered by New Jersey. (Exhibit 15).

Once all permits have been issued, GSOE will commence with the construction of the project, which is estimated to require an investment in excess of $1 billion. It is anticipated that the wind farm will be built over a period of three years, with a target completion date of 2013. GSOE uses a proprietary technological solution – a wind turbine foundation adapted from technology that

has been used successfully over many years in the offshore oil and gas industries. GSOE's jacket foundation allows wind turbines to be installed in deep waters, far from the shore. The FEIS failed to consider the New Jersey sites because the distance is too great from New England. That rationale is no longer valid because the Obama plan for the SmartGrid to bring renewable power to New England must be considered. In addition, this site is not "too far" from New England, being less than 200 miles. Finally, the GSOE jacket technology confirms that deeper water sites in New England should not have been rejected and now must be reconsidered in a new EIS.

Delaware

Bluewater Wind Delaware, LLC, a subsidiary of Babcock & Brown, is well positioned to move forward. Delaware's Delmarva Power, a regulated electric utility that provides electricity to Delaware and the Eastern shore of Maryland, signed a 25-year PPA with Bluewater Wind for up to 200 MW in June 2008. The pact was ratified by the state in July 2008.

Bluewater Wind's offshore wind proposal has a 450 MW nameplate capacity and would be located approximately 11.5 nautical miles off the coast of Rehoboth Beach, Delaware. Delaware's average offshore winds have the potential to produce 5,286 MW, which would power between 1.2 and 1.5 million average homes.

In addition to its contract with Delmarva Power, Bluewater Wind has received legislative approval of changes to the state's RPS to allow for renewable energy credits (RECs) from the offshore wind farm to be credited to Delmarva Power's account at a rate of 350 percent (or 3.5 credits) per REC. One REC equals one MWh of electricity, which equals the average monthly amount of energy used by a Delaware household. (Exhibit 16).

All of these alternatives outside of New England should be considered as alternatives to Cape Wind. Although not in waters offshore of New England (an arbitrary and legally impermissible limitation imposed by MMS), their electricity could readily be made available to NEPOOL (also an arbitrary and legally impermissible limitation imposed by MMS). Contracts for renewable energy west of New England are contemplated. In fact, the proposed LIPA/Con Edison New York site is located less than 100 miles from "New England offshore waters" and cannot be excluded merely on the basis of geography.

Hydrokinetic projects

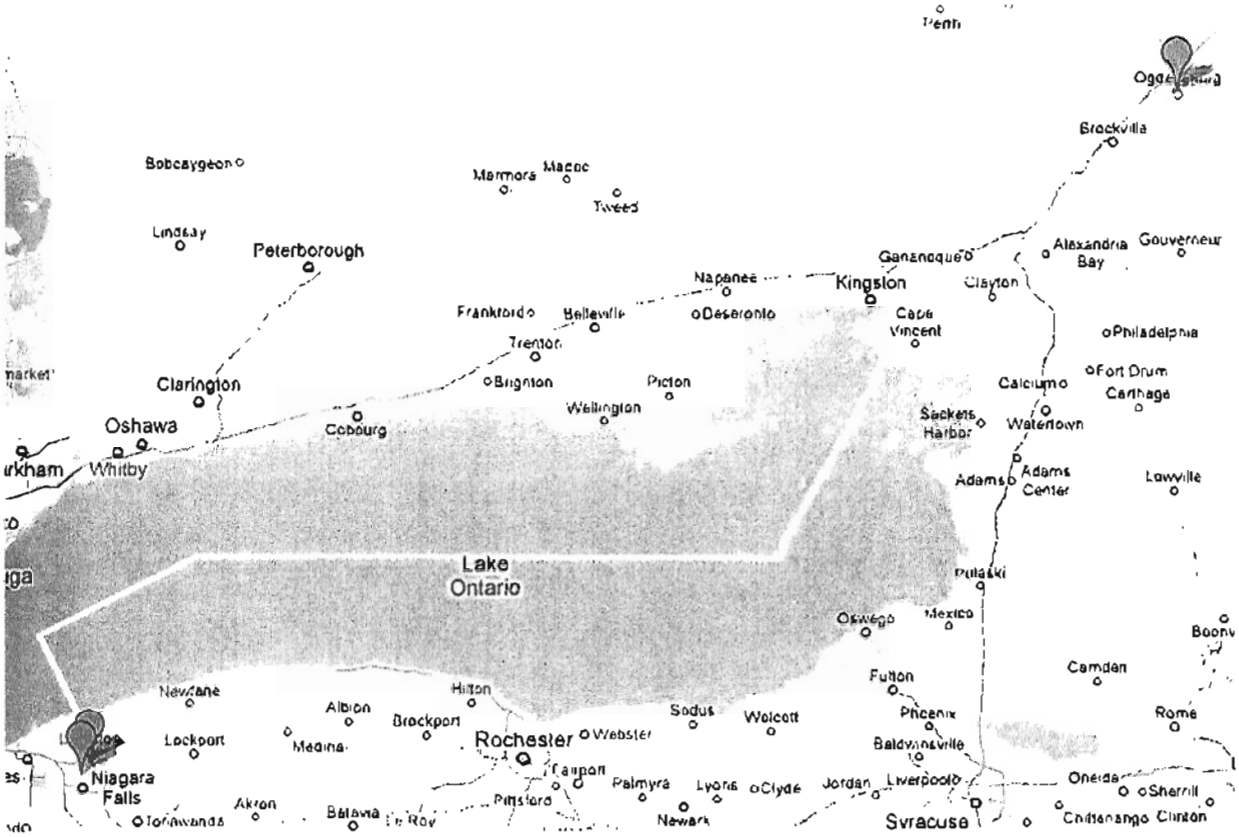
Furthermore, in the DEIS and FEIS, MMS failed to recognize a number of proposed hydrokinetic projects in New England, New York, and New Jersey that could serve as alternative sources of electricity due to MMS' conclusion that hydrokinetic projects did not meet the purpose and need statement of the proposed Cape Wind Project. Additionally, MMS improperly concluded that hydrokinetic projects were not a feasible alternative, claiming that hydrokinetic facilities capable of producing large amounts of electricity are not likely to be commercialized for several decades, and, thus, cannot provide a substantial contribution of renewable energy to the Massachusetts and regional RPS in the near future. MMS further ruled out hydrokinetic projects as an alternative due to the capital costs of constructing these facilities.

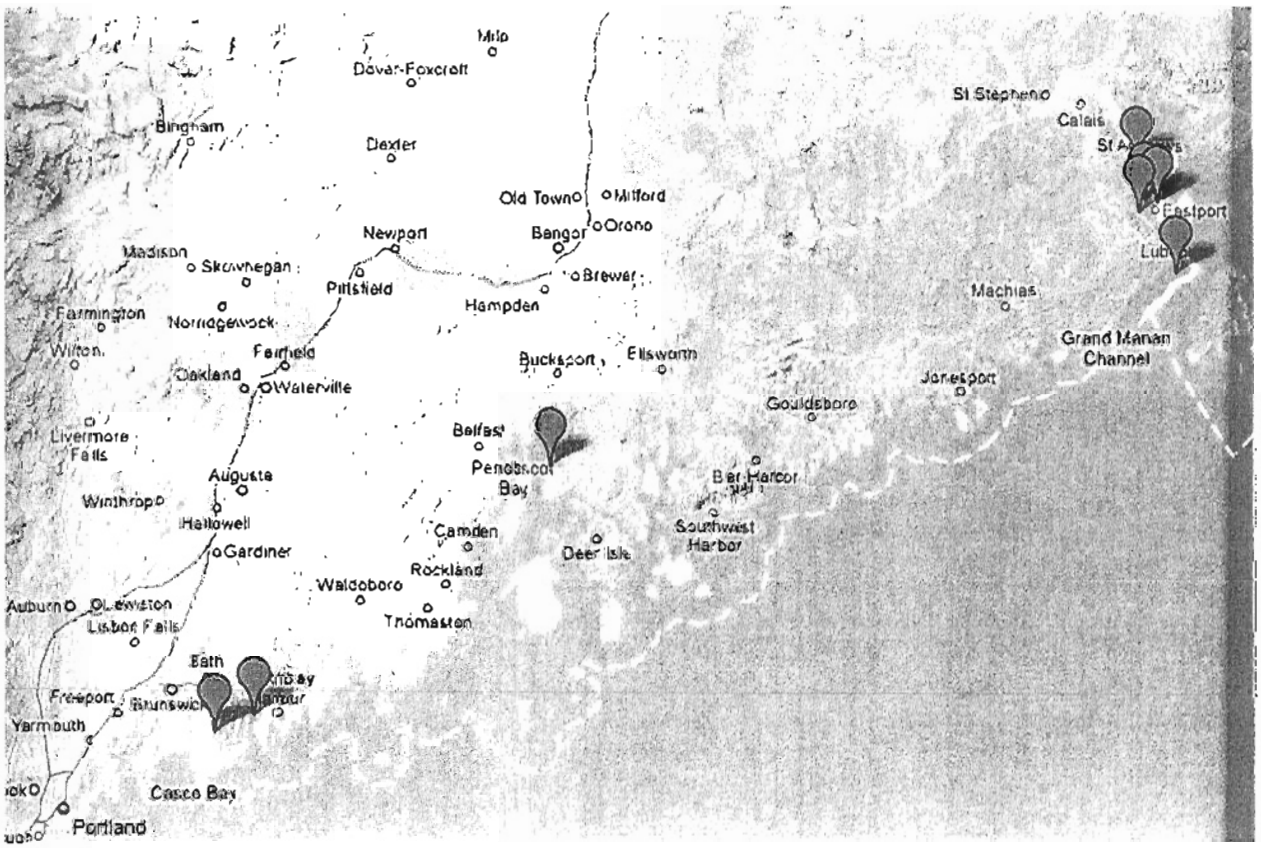
However, since the issuance of the DEIS and FEIS, there have been significant developments in hydrokinetic permitting and technologies. MMS and FERC have issued regulations governing the permitting and licensing of offshore hydrokinetic projects, which has spurred project development in this area. Just this past April, FERC and MMS issued a Memorandum of Understanding (MOU) regarding the permitting and licensing of offshore renewable energy projects. More recently, in August 2009, FERC and MMS also released guidance on this issue to further clarify the permitting and licensing process for hydrokinetic projects. Further, on August 19, 2009, FERC and the State of Maine signed an MOU to coordinate the procedures and schedules for reviews of tidal energy projects off the coast of Maine. The establishment of an MOU between FERC and the State of Maine will help ensure that all hydrokinetic projects licensed off the coast of Maine will be done in an environmentally sensitive manner and take into account economic and cultural concerns. Additionally, FERC and the State of Maine will agree on a schedule to ensure the processing of hydrokinetic project applications as early as possible. The entities will work to identify potential issues that may arise with proposed hydrokinetic projects to expedite their review and determine any additional studies that are needed.

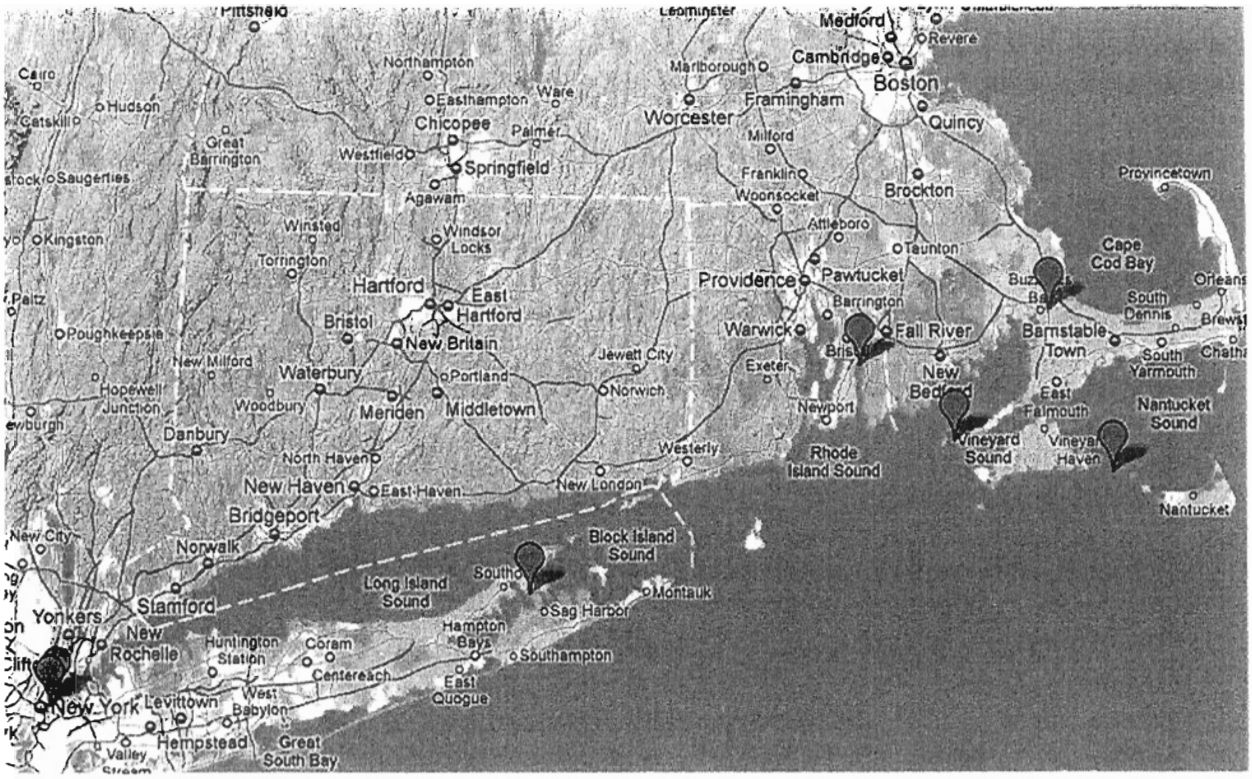
These recent advances have created a more streamlined and cohesive process by which the two agencies can license and regulate offshore hydrokinetic projects, thus accelerating the development of hydrokinetic projects in New England. In fact, there are currently 17 hydrokinetic projects pending in New England, New Jersey, and New York, which have all received preliminary permits from FERC and have the potential to produce approximately 763 MWs of electricity. These pending hydrokinetic projects in the region are rapidly moving forward and many have already submitted the required Notice of Intent to file an application and draft application with FERC, including the time frame for consulting with federal, state, and local agencies, tribes, non-governmental organizations, and any other interested entities. Holders of preliminary permits are required to file a Notice of Intent to file an application and draft application within one year of receiving a preliminary permit. Additionally, the licensees of these projects have submitted and continue to submit required periodic progress reports to FERC that document significant progress in the development of the projects.

There are currently 12 projects pending in New England alone that are capable of producing 175.8 MWs of electricity. Additionally, in states immediately adjacent to New England, there are six projects pending that have the potential to provide 587 MWs of electricity to the region.

The following maps illustrate these proposed hydrokinetic projects.


Brockville
Bobcaygeon
Marmora
Madoc
Tweed
Lindsay
Peterborough
Gananoque
Alexandria Bay
Gouverneur
Napanee
Kingston
Clayton
Frankford
Belleville
Deseronto
Cape Vincent
Philadelphia
Trenton
Clarington
Brighton
Picton
Fort Drum
Calcium
Carthage
Wellington
Oshawa
Cobourg
Sackets Harbor
Watertown
Whitby
Adams
Adams Center
Lowville
Lake Ontario
Pulaski
Oswego
Mexico
Fulton
Camden
Newfane
Hilton
Albion
Brockport
Sodus
Wolcott
Phoenix
Rome
Lockport
Medina
Rochester
Webster
Baldwinsville
Niagara Falls
Clyde
Jordan
Liverpool
Oneida
Sherrill
Akron
Batavia
Newark
Syracuse
Clinton


Milo
Dover-Foxcroft
St Stephens
Calais
Bingham
Dexter
Eastport
Old Town
Milford
Bangor
Orono
Newport
Madison
Skowhegan
Brewer
Pittsfield
Hampden
Machias
Farmington
Norridgewock
Fairfield
Grand Manan Channel
Wilton
Buckspor
Ellsworth
Oakland
Waterville
Jonesport
Gouldsboro
Livermore Falls
Belfast
Penobscot Bay
Bar Harbor
Augusta
Winthrop
Hallowell
Camden
Southwest Harbor
Gardiner
Deer Isle
Rockland
Auburn
Lewiston
Waldoboro
Lisbon Falls
Thomaston
Bath
Freeport
Brunswick
Yarmouth
Casco Bay
Portland



The noted sites include:

- Town of Wiscasset Tidal Resources Project
  Wiscasset, ME
- Shearwater Design Homeowner Tidal Power Project
  Kennebec River, ME
- AER NY-Kinetics Ogdensburg Kinetic Energy Project
  New York
- RI Energy Group Sakonnet River Project
  Sakonnet River, RI
- Hydro Green New York 1 Project
  On the Niagara River in Niagara County, NY
- Hydro Green New York 2 Project
  Niagara County, NY

Verdant Power RITE Project (New York, NY)
East River (E shore of Roosevelt Island)

Astoria Tidal Energy Project (New York, NY)
East River (N of the tip of Roosevelt Island)

ORPC Western Passage Tidal Project (Eastport, ME)
Western Passage

Half Moon Tidal Energy Project (Quoddy, ME)
Quoddy Village

Passamaquoddy Tribe Hydrokinetic Project
Perry, ME

ORPC Cobscook Bay Tidal Energy Project
Eastport, ME

Castine Harbor & Badaduce Narrows
Maine Maritime Academy (Atlantic Ocean)

Natural Currents Energy Ser, L.L.C.
Cape Cod Tidal Energy, Cape Cod MA

Natural Currents Cuttyhunk/Elizabeth Islands Tidal
Cuttyhunk/Elizabeth Island, MA

Natural Currents Shelter Island Tidal Project
Shelter Island, NY

Town of Edgartown Edgartown/Nantucket Tidal
Edgartown, MA

Mananook Associates Grand Manan Channel Project
Grand Manan Channel (Lubec, ME)

The federal government also appropriated funds in the American Recovery and Reinvestment Act of 2009 to boost development of renewable technologies, including hydrokinetic power. The inclusion of these funds in the American Recovery Reinvestment Act of 2009 has helped to secure the necessary funding needed to jumpstart many of these hydrokinetic projects. It is evident by the many pending hydrokinetic projects in the region that, since the issuance of the Cape Wind FEIS, many advancements have occurred that have spurred the development of hydrokinetic projects in New England, thus providing alternatives to the Cape Wind Project. These projects and technologies are now viable, and MMS has no legal justification for limiting its purpose and need statement to only wind projects when the stated goal is to provide an "alternate energy facility."

Onshore Alternatives

Finally, reasonable onshore alternatives for the production of renewable energy in the geographic area must also be considered, including the proposed construction of a wind project on the Massachusetts Military Reservation.

On June 11, 2009, after the publication of the FEIS, the Massachusetts National Guard announced a proposal to build a utility-scale wind project on the Massachusetts Military Reservation that would include up to 17 turbines, each 400 feet high. (Exhibit 17). As the first of many steps toward building the project at the 22,000 acre facility on Cape Cod, the National Guard has filed a site plan for review with the Federal Aviation Administration (FAA) and the Air Force Space Command. As a legal matter, MMS cannot fail to consider "onshore" sites, especially these located in the immediate vicinity of the Cape Wind proposal.

The plans require review by the FAA and the Air Force Space Command, which operates the PAVE PAWS radar station on the base. Both the FAA and the Air Force have already approved a 1.5 MW turbine for the base cleanup program. The National Guard proposal comes after a study released in February concluding that the Upper Cape base is a prime location for land-based wind turbines. That report, released by the state Executive Office of Energy and Environmental Affairs, said the base has the potential to host up to 46.5 MWs of electricity. (Exhibit 17). The Massachusetts Military Reservation site was not considered in the FEIS because at the time it was not available. That rationale is no longer valid, as a result of the Commonwealth's plan to now develop the site.

Conclusion

The Cape Wind EIS was defective from the outset due to its improperly narrow, result-oriented purpose and need statement, which led to an illegal alternatives analysis. Recent developments have confirmed that the EIS incorrectly precluded reasonable alternatives. In addition to the flaws that existed at the time the EIS was released, subsequent developments have created the need for a supplemental EIS and additional public review.

These new alternatives, combined with President Obama's June 12, 2009, national ocean policy and marine spatial planning directives, provide the basis for a new approach to consensus-based decision making that both protects Nantucket Sound (making possible its long-overdue consideration for national marine sanctuary designation) and remove the controversy that stands in the way of the development of properly sited offshore wind energy projects in New England. Now is the time for MMS to show true leadership in Northeast ocean management planning and offshore energy development by redirecting the Cape Wind review so that a win-win outcome can be achieved.

TABLE OF CONTENTS

INTRODUCTION

The following comments are submitted by the Alliance to Protect Nantucket Sound (APNS) on the Environmental Assessment and Finding of No New Significant Impact (EA/FONNSI) on the CWA Energy Project (Mar. 4, 2010). APNS's overall evaluation is that the limited analysis in the EA/FONNSI does not correct the substantial deficiencies in the Minerals Management Service's (MMS) Final Environmental Impact Statement (FEIS) for the Proposed Action, does not address a considerable amount of new information that was in MMS's possession prior to the release of the EA/FONNSI, and does not conduct a proper evaluation of the limited new information it considers. In short, the EA/FONNSI does not provide the basis for informed federal decision-making that is required under the National Environmental Policy Act (NEPA). A supplemental EIS (SEIS) is required.

I. Objectives of the Environmental Assessment

MMS has issued its 2010 EA/FONNSI purportedly to address new information "to determine if it is 'relevant to environmental concerns and bearing on the Proposed Action or its impacts.'" The EA/FONNSI indicates that MMS considered new information from the following sources:

1) MMS research and review of new scientific and technical information;
2) Comments received on the FEIS;
3) The Revised Finding, prepared in compliance with the National Historic Preservation Act (NHPA);
4) The January 28, 2010 DOI Inspector General Report (IG Report); and
5) Intergovernmental coordination and communications.[1]

It thus appears that MMS did not consider new information the APNS and numerous other parties submitted by letter over the course of the last year. Such action by MMS has resulted in a deficient administrative record and constitutes a violation of the Administrative Procedure Act. It also violates President Obama's directive for open and transparent decision-making and public involvement.[2] APNS hereby incorporates by reference all documents it has submitted to MMS

---

[1] EA/FONNSI, at 1.

[2] The Obama Administration has emphasized the importance of open governance. President Obama and Attorney General Holder, for example, announced the policy that Freedom of Information Act (FOIA) exemptions are narrow and not to be used to frustrate or impede full disclosure. In a January 21, 2009, memorandum, President Obama directed that "[a]ll agencies should adopt a presumption in favor of disclosure." 74 Fed. Reg. 4,683 (Jan. 26, 2009). The President specifically directed agencies to err on the side of document release. *Id.*

This presumption in favor of disclosure was reinforced by Attorney General Holder's March 19, 2009, memorandum to agency heads in which he "strongly encourages" agencies to make discretionary disclosures. He stated that FOIA denials will only be defended if: (1) the agency reasonably foresees that disclosure would harm an interest protected by one of the statutory exemptions; or (2) the disclosure is prohibited by law. Office of the Attorney General, Memorandum for Heads of Executive Departments and Agencies, "The Freedom of Information Act" (Mar. 19, 2009).

Secretary Salazar again affirmed the Administration's commitment in his July 2, 2009, memorandum to all DOI employees:

since the inception of the MMS's review of the Proposed Action in 2005. For the assistance of MMS, all such documents submitted subsequent to the FEIS are attached to these comments and listed in the Table 1 at the end of the comments. Additional attachments are also listed in Table 2.

In addition to failing to properly address the information provided by APNS over the course of the last year, the EA/FONNSI also fails to account for missing and incomplete information. The EA/FONNSI acknowledges that for several resources there is incomplete information available to analyze and disclose reasonably foreseeable environmental impacts. In each instance, the EA/FONNSI refuses to follow the requirements of the Council on Environmental Quality (CEQ) regulations which establish the process and procedure for addressing incomplete or unavailable information in a NEPA document.

The regulations governing the treatment of missing or incomplete information state:

> When an agency is evaluating reasonably foreseeable significant adverse effects on the human environment in an environmental impact statement and there is incomplete or unavailable information, the agency shall always make clear that such information is lacking.
>
> (a) If the incomplete information relevant to reasonably foreseeable significant adverse impacts is essential to a reasoned choice among alternatives and the overall costs of obtaining it are not exorbitant, the agency shall include the information in the environmental impact statement.
>
> (b) If the information relevant to reasonably foreseeable significant adverse impacts cannot be obtained because the overall costs of obtaining it are exorbitant or the means to obtain it are not known, the agency shall include within the environmental impact statement:
>
> 1. A statement that such information is incomplete or unavailable;
>
> 2. A statement of the relevance of the incomplete or unavailable information to evaluating reasonably foreseeable significant adverse impacts on the human environment;

> The President's memorandum and the Attorney General's guidelines do not change the requirements of the statute, but rather how we think about FOIA... The President's and Attorney General's messages extend beyond the boundaries of the FOIA. They call upon agencies to aggressively increase proactive disclosures of information that is of interest to the public... Our goal is to increase transparency.

In recognition of the vital role that the FOIA plays in our democracy in providing a means of accountability through transparency, these guidelines stress the need for all Executive Branch employees to be responsible for effective FOIA administration. Each of us must commit to making responses to FOIA requests a priority in order to fulfill both the letter and the spirit of the law...

Department of the Interior, "Freedom of Information Act Policy Guidance," (July 2, 2009).

3. A summary of existing credible scientific evidence which is relevant to evaluating the reasonably foreseeable significant adverse impacts on the human environment, and

4. The agency's evaluation of such impacts based upon theoretical approaches or research methods generally accepted in the scientific community. For the purposes of this section, "reasonably foreseeable" includes impacts which have catastrophic consequences, even if their probability of occurrence is low, provided that the analysis of the impacts is supported by credible scientific evidence, is not based on pure conjecture, and is within the rule of reason.[3]

The Department of Interior's regulations implementing NEPA state: "In circumstances where the provisions of 40 CFR 1502.22 apply, bureaus must consider all costs to obtain information."[4] Costs include "monetary costs as well as other non-monetized costs when appropriate, such as social costs, delays, opportunity costs, and non-fulfillment or non-timely fulfillment of statutory mandates."[5]

The EA/FONNSI fails to follow the requirements of either the CEQ regulation or the Department's regulation for dealing with incomplete or unavailable information relating to reasonably foreseeable adverse environmental impacts. For three different resource impacts, the EA/FONNSI establishes that there is missing information, which is relevant to the environmental issues and analysis, but that obtaining the information was either impractical (migratory bird baseline studies and avoidance of wind turbines by birds)[6], cost prohibitive (migratory bird baseline studies)[7], or simply not their responsibility to obtain (airport facilities)[8]. In each of these areas the MMS has failed to comply with the clear and simple requirements of the CEQ regulation.

Evaluating new information and developing needed information were critical. The FEIS failed to provide an adequate basis for decision-making, as stated by numerous parties. However, it is clear that MMS did not intend to actually provide the evaluation that was needed. Rather, it appears that MMS instead intended to cherry-pick information in an effort to produce a particular result – its FONNSI. The EA/FONNSI is consequently of poor quality and does not facilitate informed decision-making.

Further, the EA/FONNSI relies heavily on the January 28, 2010 Department of the Interior's Inspector General Report (IG Report). Its reliance is inappropriate. MMS is responsible for conducting its own independent analysis of environmental impacts under NEPA and other issues

---

[3] 40 C.F.R. § 1502.22.

[4] 43 C.F.R. § 46.125.

[5] *Id.*

[6] EA/FONNSI, at 11.

[7] *Id.*

[8] *Id.*, at 17-18.

as part of its Outer Continental Shelf Lands Act (OCSLA) decision-making responsibilities. MMS cannot simply abdicate its responsibility for evaluating issues to the IG, whose purpose in reviewing MMS's activities was not to determine NEPA compliance or satisfaction of OCSLA standards, but rather to respond to complaints from members of Congress and the public regarding how the review process itself was being conducted.

II. The Proposed Action and Alternatives

A. The Description of the Proposed Action Is Insufficient

The EA/FONNSI states that there have not been changes to the Proposed Action, or circumstances and information affecting the Proposed Action, that render any of the underlying assumptions for the Proposed Action or the range of alternatives invalid. Further, MMS claims that should the developer modify the proposed action by selecting a WTG with substantial differences in the specifications, MMS would review such proposed changes and determine whether additional NEPA analysis is likely.[9]

MMS's statement is incorrect. MMS should have obtained available information and evaluated it in the EA/FONNSI, rather than delaying review until after all of the comment periods have concluded. The current project description calls for the installation of 130 GE 3.6 MW WTGS, each with a maximum blade height of 440 feet. The EA/FONNSI states that MMS has received information suggesting that the GE 3.6 MW turbines are no longer available. The IG report on which the EA/FONNSI relies states that GE and European companies still manufacture a turbine with the capacity and dimension in the Proposed Action. Further, the EA/FONNSI states that if the applicant were to choose a different manufacturer, it is likely that the WTGs would be comparable in size and shape.

On March 31, 2010, the applicant announced that it had entered into an agreement with Siemens for 3.6 MW WTGs. There is no question that the height, shape and profile differ from that described in the EIS. For example, the rotor swept zone differs between the Siemens model and the GE model by 504 square meters. The rotor-swept zone of the GE turbine is 8,496 square meters, and the Siemens is listed as 9,000 square meters. This difference is obviously related to the different diameters in the rotors – Siemens is approximately 3 meters or 9.6 feet larger. If CWA intends to maintain the 75 foot clearance, which it stated through the FEIS – a measurement on which other impacts have been assessed – the towers would necessarily be higher, at least by almost 10 feet. While the applicant has stated that the Siemens turbines would be 440 feet in height, based on the Siemens-provided specifications, the clearance would necessarily be lower than 75 feet. Moreover, the larger rotor-swept zone will cause an increase in the risk to avian species by exposing a greater number of birds and bats to take. The EA/FONNSI fails to consider this impact.

Further, whether the turbine height would only be 10 feet higher remains to be seen. According to news coverage of the Greater Gabbard wind project in Europe, the Siemens 3.6

---

[9] *Id.*, at 1-2.

MW turbine height ranges up to 558 feet, 118 feet higher than that described in the FEIS.[10] Any significant change in height requires a new NEPA review, as well as new reviews by both the Federal Aviation Administration, the Department of Defense with respect to the PAVE PAWS system of military defense, and the U.S. Fish and Wildlife Service with respect to avian impacts. In addition, different and greater impacts would result under section 106 of the NHPA, necessitating renewed consultation and a new effects finding.

In any case, although the FEIS states that "the applicant may choose to use another manufacturer other than GE to produce similar WTGs depending on availability and other considerations,"[11] differences in turbine height, rotor-swept zones and other factors are important – sometimes critically important, such as in a heavy use area like Nantucket Sound, where turbine height poses substantial risks to commercial and general aviation and clearances are important for the heavy boating uses that take place on the water sheet. The EA/FONNSI does not adequately address the confusion regarding this issue, and MMS should have required the applicant to select an available turbine and provide the specifications needed before issuing this EA/FONNSI, instead of announcing its choice in the middle of the comment period. The applicant has known for some time that the GE turbine was not available. Yet MMS did not request specific information regarding this issue prior to releasing the EA/FONNSI. This approach does not provide the information needed to satisfy the informed decision-making requirement NEPA imposes. This EA/FONNSI, like the other documents released by MMS, is premature.

B. The EA/FONNSI Does Not Correct the Deficiencies in the Purpose and Need Statement or the Underlying Assumptions

The EA/FONNSI does not acknowledge any of the criticism regarding the purpose and need statement and does not reference or include updated information regarding the state of the New England energy market on which it based a number of assumptions to justify the Proposed Action.[12]

There are two core problems with the purpose and need statement, one of which is derived directly from the other. The first is that the purpose and need statement is not a statement of MMS's purpose and need, as required by NEPA and DOI's NEPA regulations. Instead, it is essentially the applicant's purpose and need for building the project. The statement has impermissibly narrowed the review by focusing not on the general region for which the facility is being proposed, but rather incorporating a number of Massachusetts-specific criteria such that virtually the only possible project to satisfy the purpose and need statement is the Proposed Action. Second, the information on which the FEIS relies regarding whether an alternative satisfies the purpose and need statement is substantially outdated. The applicant-specific information improperly included in the purpose and need statement is the same information that is out-dated and should have been addressed in this EA/FONNSI. Had MMS

---

[10] *See* http://74.125.45.132/search?q=cache:H7tV86R6rcAJ:www.mctbrattberg.se/NewsAndEvents/LatestNews/20091109-The-Greater-Gabbard-Offshore-Wind-Farm-Project.aspx+mctbrattberg.se/NewsAndEvents/LatestNews/20091109-The-Greater-Gabbard-Offshore-Wind-Farm-Project.aspx&cd=1&hl=en&ct=clnk&gl=us.

[11] FEIS, at 2-2.

[12] EA/FONNSI at 2-6.

updated the assumptions previously made about the New England energy market, it would have become clear that the Proposed Action will not meet the objectives included in the purpose and need statement. The EA/FONNSI, however, fails to address both issues.

1. The 2010 Perpetuates the Problems with the Purpose and Need Statement to Which Commentors Have Long Objected

The fundamental problem of the purpose and need statement continues to be that it focuses on the applicant's objectives and not those of the action agency. Because of the applicant-based focus, the FEIS, and now the EA/FONNSI (to the extent that it addresses any new information on the purpose and need and alternatives) excludes reasonable alternatives because those alternatives would not serve the applicant's goals (instead of the agency's) and includes assumptions that are inaccurate as a means of justifying the Proposed Action. This information has been called to the attention of MMS by APNS in post-FEIS correspondence. MMS apparently has ignored that correspondence and, as a result, the EA/FONNSI fails to include relevant information, resulting in an incorrect FONNSI and perpetuating the flaws in the FEIS.

a. The statement of purpose and need should be the agency's purpose and need, not the applicant's.

The purpose and need statement, which is derived from the agency's legal duties, should briefly indicate the underlying purpose and need to which the agency is responding.[13] The "purpose" of a proposed action should refer to the goal or objective that *the agency* is trying to achieve, and should be stated in terms of the agency's desired outcome.[14] When a private applicant is involved, the agency is to consider the needs and goals of the applicant, as well as the public interest, but the applicant's private objectives are not to be confused with, or to supplant, the *agency's* purpose.[15] As the Ninth Circuit has pointed out, "the Department of Interior has promulgated no regulations emphasizing the primacy of private interests."[16] The "need" for the proposed action is the underlying problem or opportunity that the agency is responding to with the action.[17]

In this case, the purpose and need statement impermissibly sets out four private objectives as defining characteristics of the Proposed Action. As the EA/FONNSI states, the purpose and need statement in the FEIS provides:

> The underlying purpose and need to which the agency is responding is to develop and operate an alternative energy facility that utilizes wind resources in waters offshore New England

---

[13] 40 C.F.R. § 1502.13; 43 C.F.R. § 46.420(a).

[14] See generally *National Parks & Conservation Ass'n v. Bureau of Land Management*, 586 F.3d 735, 746-48 (9th Cir. 2009) for in-depth discussion regarding BLM requirements for purpose and need statements.

[15] *Id.*

[16] *Id.*

[17] *See generally* 40 C.F.R. § 1502.13; 43 C.F.R. § 46.420(a).

> employing a technology that is currently available, technically feasible, and economically viable, that can interconnect with and deliver electricity to the New England Power Pool, and make a substantial contribution to enhancing the region's electrical reliability and regional renewable energy portfolio.

These private objectives – i.e., 1) waters offshore New England; 2) deliver electricity to New England grid on a "commercial" scale; 3) enhance the region's electrical reliability; and 4) enhance renewable energy portfolio – have nothing to do with the agency's objectives. While MMS has been directed to implement an offshore renewable energy facility, it has no mandate whatever to do so using New England winds. Nor has the task of delivering electricity to the New England Power Pool been assigned to MMS as one of its objectives. Simply stated, MMS has no particular responsibility or interest in enhancing New England's electrical reliability or regional renewable energy portfolio, or any of the other New England-specific objectives. Those are purely applicant-driven, and included for the specific purpose of advancing the applicant's private objectives.

The purpose and need statement referenced in the EA/FONNSI perpetuates existing flaws. It does nothing to address the objections regarding the applicant-focused approach.

b. The problems with the purpose and need statement stem from the applicant's inappropriate involvement in the process.

The applicant's obvious influence on the purpose and need statement has been a contentious issue since before the Corps released the DEIS. The applicant played a central role in shaping the Corps' purpose and need statement for the purpose of eliminating reasonable alternatives from consideration. Numerous comments have objected both to the purpose and need and to the applicant's involvement in devising the purpose and need statement, which was considerable.[18]

Comments provided by Roger Beers, Professor Mark Squillace, Mark Chertok, and Robert Dreher, peer reviewers of the Corps' EIS, provide substantial guidance regarding how a purpose and need statement should be devised and what the range of alternatives should look like. Similarly, Bill Futrell, Roy Clark, and Lois Schiffer published an article in the Cape Cod Times condemning the Corps's EIS. This is information that was in the Corps' CWA record, but was obviously not reviewed by MMS when the record was transferred over, and thus new information for MMS's purposes. All of the reviewers were critical of the purpose and need statement and the range of alternatives, which was in fact, substantially broader in the Corps' EIS.

Roger Beers, for example, stated that the alternatives analysis the Corps prepared – which was quite similar to MMS's – was "wholly inadequate and in violation of NEPA."[19] The analysis should consider "(1) other sites that will not affect the environment of the Nantucket Sound area, (2) smaller scale wind energy projects both within and outside of the Nantucket

[18] Attachment 39.

[19] Attachment 32.

Sound area that may pose less environmental impact than the proposed project, and (3) alternative sources of energy and conservation." Mr. Beers concluded that "NEPA does n ot allow the range of alternatives to be circumscribed by an artificially narrow definition of the project's needs and purposes – particularly, where it is driven, as it appears here, by a private applicant's self-interest."

Professor Squillace concluded that the Corps' EIS "ha[d] no heart" because the approach taken by the Corps (one that MMS has likewise followed) "cannot 'sharply defin[e] the issues and provid[e] a clear basis for choice among options' because it fails to present *any* options that can achieve that objective."[20] Mark Chertok's comments on the purpose and need statement and alternatives mirror Professor Squillace's and Mr. Beers's. Mr. Chertok explained:

> [W]hile the applicant's stated purpose and need is relevant to the determination of the proper range of alternatives that must be evaluated, it is not the sole, or even the most important, criterion. An agency is not obliged to accept an applicant's stated purpose at face value, particularly when it appears crafted to preclude the potential for a practicable alternative.[21]

Mr. Chertok concluded that the Corps should have rejected CWA's purpose and need statement because "it has improperly attempted to frame its project purpose so narrowly as to preclude the consideration of alternatives." "In essence, it appears that CWA has sought to artificially narrow its goals so that only the particular project and site it has selected would qualify."

Robert Dreher's evaluation differed little.[22] Mr. Dreher commented that "[b]road consideration of alternatives that might further the public need for electric energy, while better protecting the public interest in the waters of Nantucket Sound, is particularly appropriate given the public nature of the resources at issue, the novel character of the proposed project, and the potential for similar such proposals that may have cumulative effects on the resources of the United States continental shelf." He continued, "the Corps' evaluation of this proposal should reflect both the novel nature of the proposed wind power project, which may pose unique concerns for other public and private uses of these offshore lands and waters, an the fact that numerous similar wind power projects are being proposed or considered for other offshore locations along the United States' Atlantic coast." Mr. Dreher concluded that the Corps "is legally required to consider a broad range of alternatives to the Cape Wind project" including "alternative forms of energy generation that may serve the general public need for electric power, and alternative locations for wind power projects along the eastern coastline of the United States . . ."

In a Cape Cod Time article from 2005, Bill Futrell, Roy Clark, and Lois Schiffer commented that the Corps "has fallen woefully short in meeting its NEPA responsibilities for this project, and for offshore wind generally."[23] These NEPA experts objected that "[r]ather than

---

[20] Attachment 33 (emphasis in original).

[21] Attachment 34.

[22] Attachment 35.

[23] Attachment 36.

conducting the type of robust review needed for new energy development, or at the vey least a careful review of the single proposal, the Corps has instead adopted a limited review, looking only at 'alternatives' that are essentially the same project tin a slightly different location in Nantucket Sound."

These criticisms of the Corps' purpose and need statement and alternatives are equally applicable to that which MMS has prepared. Indeed, MMS's review was more restrictive than the Corps's. MMS considered only offshore wind projects, all of which are located in Nantucket Sound, except South of Tuckernuck. MMS considered Monomoy Shoals in the Sound, plus variations of the Proposed Action. In contrast, the Corps considered development at the Massachusetts Military Reservation; the proposed site, including the applicant's proposed alternative sub-site at Horseshoe Shoal, as well as two other sub-sites; South of Tuckernuck; and offshore New Bedford, Massachusetts, combined with a reduced footprint at Horseshoe Shoal.[24]

In addition, the IG's Counsel also determined that the purpose and need describe the applicable proposal, thereby conceding the NEPA violation.[25] The attorney stated it was within MMS's discretion to do so. Of course, MMS does not have discretion to violate NEPA. As the record before the Corps demonstrates, CWA convinced the Corps that it must defer to the applicant's economic goals in the purpose and need statement. Because the MMS purpose and need statement is even more seriously flawed than the Corps' statement, the comments of these NEPA experts confirm that the FEIS, and the EA/FONNSI, violate NEPA.

Despite this guidance, the Corps, and later MMS entirely failed to meet their legal obligations. The Corps's purpose and need statement, for example, very closely tracked the applicant's objectives.[26] Indeed, the purpose and need statement was so skewed in favor of the applicant that MMS has commented that the statement "reads like an advertisement for the Windfarm project. In fact, it almost sounds like an endorsement for the project. This is not the place to present a justification for putting a Windfarm in place." Indeed, numerous parties objected to this statement of purpose and need.[27]

Despite its criticism of the Corps's purpose and need statement, MMS's purpose and need is actually even more seriously flawed than the Corps' statement. Indeed, a quick reference to those same comments reveals why. MMS fundamentally misunderstands its duties in developing a purpose and need statement. MMS further stated that a purpose and need statement "should describe what the applicants want to do, why they want to do it offshore, and at least give some indication of the magnitude of the project."[28] MMS further explained that the "need should address what is seen as the need for the power generated by the proposal, either based on a shortfall in local supplies, or in the fact that power is expensive in the area and this would make it available to customers for less, or to more customers who can't afford it now."

---

[24] Corps's DEIS, at 1-3.

[25] IG Report, at 37.

[26] *See* APNS Comments on the Corps's DEIS, at 196-208, which are incorporated herein by reference.

[27] *See* Attachment 39.

[28] *See id.*

This, quite obviously, is not the legal standard to which MMS must adhere. Indeed, the approach that MMS describes is antithetical to NEPA regulations and DOI NEPA regulations. Council on Environmental Quality regulations state that a purpose and need statement "shall briefly specify the underlying purpose and need to which *the agency* is responding in proposing the alternatives including the proposed action."[29] DOI NEPA regulations explain:

> When a bureau is asked to approve an application or permit, the bureau should consider the needs and goals of the parties involved in the application or permit as well as the public interest. *The needs and goals of the parties involved in the application or permit may be described as background information.* However, this description must not be confused with the bureau's purpose and need for action. *It is the bureau's purpose and need for action that will determine the range of alternatives and provide a basis for the selection of an alternative in a decision.*[30]

It is no surprise that MMS perpetuated many of the same problems in its purpose and statement that the Corps's version suffered. The purpose and need statement in the Corps's DEIS read in part as follows:

> The purpose and need as independently determined by the USACE in accordance with NEPA requirements is: to provide a utility-scale renewable energy facility providing power to the New England grid. Renewable sources of energy are needed to provide additional power to meet demand and to reduce dependency on non-local, non-renewable energy sources. The proposed project would help to address the need for new renewable energy supplies to advance achievement of the Massachusetts Renewable Portfolio Standard (RPS); improve fuel source diversity of the power supply in Massachusetts; provide a new source of competitive market power to the New England region consistent with the goals of the Electric Industry Restructuring Act of 1997; and, help to buffer increases in retail energy costs to consumers resulting from existing and future fossil fuel price volatility.

Thus, the Corps included the following applicant-specific limitations: 1) supply power to New England grid; 2) advance achievement of the Massachusetts Renewable Portfolio Standard (RPS); 3) improve fuel source diversity of power supply in Massachusetts; 4) provide a new source of competitive market power to the New England region; and 5) help to buffer increases in retail energy costs to consumers resulting from existing and future fossil fuel price volatility

MMS's statement of purpose and need has not changed materially from that used by the Corps. The MMS DEIS identified the following project purpose and need:

---

[29] 40 C.F.R. § 1502.13.

[30] 43 C.F.R. § 46.420(a)(2) (emphasis added).

> The underlying purpose and need to which MMS is responding is to provide an alternative energy facility that utilizes the unique wind resources in waters offshore of New England using a technology that is currently available, technically feasible, and economically viable, that can interconnect with and deliver electricity to the New England Power Pool (NEPOOL), and make a substantial contribution to enhancing the region's electrical reliability and achieving the renewable energy requirements under Massachusetts and regional renewable portfolio standards (RPS).

Like the Corps, MMS has incorporated a number of the applicant's private goals, not as background as permitted under DOI's NEPA regulations, but as central components of its purpose and need statement – clearly prohibited under DOI NEPA regulations. The statement focuses on: 1) the waters offshore New England (compare the Corps's focus on New England); 2) the delivery of electricity to the New England grid on a "commercial" scale (compare the Corps's focus on New England); 3) enhancing the region's electrical reliability (compare the Corps' focus on diversity of power supply in Massachusetts); and 4) enhancing renewable energy portfolio (compare the Corps's focus on the Massachusetts RPS).

The incorporation of these private objectives is problematic for another reason. As discussed below, the information informing these requirements was out-dated when the FEIS was issued. More information regarding these issues was developed and available during the last year. Yet MMS failed to address any of this new information.

In addition, MMS developed a purpose and need that even more closely limits review to the applicant's proposal by requiring the NEPA review to be limited to: 1) offshore New England (the Corps considered onshore energy sources); 2) wind only (the Corps considered other forms of renewable energy); 3) rejecting any action not within MMS's own jurisdiction (a clear violation of NEPA); and 4) establishing a "currently available" test (rather than including technologies available in the near term with fewer impacts). The net effect of these changes was to limit the EIS review to the applicant's proposal, rather than the MMS mission, in clear violation of NEPA.

2. The EA/FONNSI Fails to Consider New Information Regarding New England's Energy Supply Forecast, Which Has Been Released Since Issuance of the Project's FEIS.

Despite the comments provided by APNS on the DEIS and the FEIS regarding the energy needs of New England and the assumptions made regarding the energy market, MMS has failed to address any of the information previously provided or new information that has become available in the last year. Moreover, during the last year, new information regarding the New England energy market has become available, demonstrating conclusively that the Proposed Action does not meet the purpose and need statement because the need identified in the statement is no longer accurate. MMS should have addressed this new information in this document.

In fact, the majority of information MMS cites to is four to five years old, despite the general "update" the EA/FONNSI purports to make. Since MMS determined the purpose and need for the proposed project and issued the DEIS and subsequent FEIS, there have been significant changes to the New England energy market and supply adequacy in the region that no longer warrants the construction of the Proposed Action, at least based on the justifications provided in the FEIS. Those justifications depended substantially on incorrect assumptions about the state of the energy market in New England. Yet despite the changed circumstances of New England's energy forecast, MMS entirely fails to address new information in the EA/FONNSI. The result is that the parameters established for the proposed project no longer apply.

Specifically, contrary to statements made in the FEIS, New England is not facing a shortage of energy resources. ISO New England (ISO NE), the regional system operator for New England, implemented the Forward Capacity Market in June 2006 to promote investment in additional generation in the region. This new market has proven to be an effective way for New England to ensure its long-term reliability of the region's power supply. New England has also recently experienced an influx of additional natural gas to the region via pipelines and liquefied natural gas (LNG) terminals.

In addition, the construction of new renewable energy projects in the region has increased the amount of available generation, while at the same time maintaining a clean source of energy for New England. Massachusetts has recently produced enough renewable generation to meet its renewable portfolio standard (RPS). Similarly, other New England states have seen large increases in renewable energy generation, thus making it easier for states to fulfill their RPS goals. Consequently, the Proposed Action is no longer needed to ensure that Massachusetts and the remainder of New England states will meet their aggressive RPS goals.

Contrary to the assertions of MMS in Section 1.1 of the FEIS and DEIS, the Proposed Action is not required to meet the energy needs of the New England region. Section 1.1 of the DEIS claims that the Massachusetts "EFSB [Energy Facilities Siting Board] found there was a need for at least 110 MW of energy resources beginning in 2007 with a much greater need within the following years."[31] Additionally, MMS claims that ISONE's 2005 Regional System Plan concluded that "in order to adequately supply operable capacity, New England will need to begin to supply its own resources and rely less heavily on neighboring systems for capacity during the 2009 to 2012 planning period."[32] The electricity generation landscape of New England has substantially changed since the Massachusetts Energy Facilities Siting Board and ISONE reached these conclusions and the DEIS and FEIS were issued. Nevertheless, MMS has failed to recognize and consider this new and critical information.

---

[31] FEIS at 1-2.

[32] *Id.*

a. ISONE's Current Energy Supply and Needs Assessment Illustrates That There Is No Shortage of Energy In New England.

In March 2010, ISO NE concluded that wholesale electricity prices and the annual demand for electricity in New England were at the lowest level since 2003.[33] Additionally, ISO NE released its *2009 System Regional Plan*, which forecasted that the region "is likely to have sufficient capacity to meet electricity demand through 2018."[34] This is a significant change from the outdated information in ISO NE's 2005 Regional System Plan, upon which MMS continues to rely. ISO NE also predicts that "consumer demand for electricity is expected to grow slowly over the next decade, reflecting the impacts of the economic downturn as well as the implementation of energy-efficiency standards."[35] Thus, it is evident that New England should have enough capacity for the foreseeable future to serve demand.

Additionally, as evidenced by the growth of ISO NE's interconnection queue, the number of new renewable facilities being built in New England has greatly increased. This is in part due to the availability of federal funding dollars provided through the American Recovery and Reinvestment Act of 2009 (ARRA), such as loan guarantees through the Department of Energy, as well as the Section 1603 Payment In Lieu of Tax Credit program being administered by the Department of Treasury. There are currently over a hundred new or expanded generation projects in the planning phase seeking interconnection to the ISO NE grid. These projects would provide a total of 26,310 MWs[36] of new generation to New England's energy supply. It is noteworthy that 4,937 MWs[37] of this generation is from new, renewable energy projects, including wind, biomass, and landfill gas.

The recent determinations by ISO NE, coupled with the increase in proposed generation in New England, illustrate that New England does not need the Proposed Action to maintain sufficient capacity to serve the region.

b. The Forward Capacity Market Implemented by ISO NE Has Alleviated the Need For Additional Generation in New England.

The implementation of the Forward Capacity Market (FCM) in ISONE has proven to be a successful tool in planning for the energy needs of the region and ensuring that future demand is adequately met. The purpose of the FCM is to promote investment in additional generation in the region by giving eligible electric generators established payments for the capacity and energy they commit and make available to meet the region's forecasted energy needs. Since its

---

[33] ISO NE, "ISO New England Reports 2009 Wholesale Electricity Demand Fell to Lowest Levels in Seven Years," at 1 (Mar. 1, 2010).

[34] ISO NE, "ISO New England Releases 10-Year Power System Plan," at 1 (Oct. 16, 2009).

[35] *Id.*

[36] This number was derived from the total summer peak MW capacity of all generation projects pending in the ISO NE Interconnection Queue as of March 1, 2010. This total does not include potential generation from the Proposed Action.

[37] This number reflects the total amount of generation in the ISO NE Interconnection Queue as of March 1, 2010 that would qualify as a renewable generation resource under the Massachusetts Renewable Portfolio Standard including, but not limited to, landfill gas, wind, and biomass.

inception, the FCM has successfully secured needed generation for the region at competitive prices. The FCM auction is designed to procure capacity approximately three years (40 months) in advance of the commitment period. As explained at greater length below, the response to ISO NE's new compensation structure has been noteworthy, with generators offering electricity supply far in excess of the region's forecasted energy needs. "The Forward Capacity Market is expected to provide the capacity needed to meet resource adequacy requirements. The new Installed Capacity Requirement (ICR) is expected to grow from 32,137 MW in 2010 to a representative value of 34,454 MW by 2018."[38]

Since the market commenced, ISO NE has conducted three separate auctions to procure energy for the 2010-2013 timeframe. The First FCM auction conducted on February 6, 2008 secured 32,205 MW of supply needed to meet New England's energy needs for the 2010 to 2011 period.[39] The final clearing price of the auction was $4.50 per kilowatt-month, well below the initial starting auction price of $15.00 per kilowatt-month. The significantly lower clearing price of the auction indicates the availability of a surplus of capacity in the region. Similarly, the second auction for the FCM for needed reliability for the 2011 to 2012 timeframe produced even better results. Bidding of the 42,777 MW of eligible resources began at $12.00 per kilowatt-month and settled at $3.60 per kilowatt-month. ISO NE successfully procured the needed 32,528 MW needed for reliability, in addition to an excess of 4,755 MW of power.[40] Gordon van Welie, President and CEO of ISO NE stated that these "auction results are indicative of this market's ability to attract demand-and-supply-side resources needed throughout New England."[41] If all the resources that cleared the second FCM are in commercial operation by the 2011/2012 period, New England will need no additional physical capacity to meet its forecasted load through the 2018/2019 period (see table below).[42]

---

[38] ISO NE, *2009 Regional System Plan*, at 4 (Oct. 15, 2009).

[39] ISO NE, Press Release: *ISO New England's First Forward Capacity Market Auction Completed Successfully*, at 1 (Feb. 6, 2008).

[40] ISO NE, Press Release: *New England's Second Power Resource Auction Produces Positive Outcomes for the Region*, at 1 (Dec. 23, 2008).

[41] *Id.*

[42] *Id.* at 45.

Actual and Representative Future New England Net Installed Capacity Requirements for 2010–2018 and Potential Surplus ICAP

Year	Forecast 50/50 Peak	Representative Future Net ICR[a]	Assumed Existing ICAP[b]	Potential Surplus ICAP[c]
2010/2011	28,160	32,137	34,021	1,884
2011/2012	28,575	32,528	37,021	4,493
2012/2013	29,020	31,965	37,021	5,056
2013/2014	29,365	32,411	35,091	2,680
2014/2015	29,750	32,901	35,091	2,190
2015/2016	30,116	33,370	35,091	1,721
2016/2017	30,415	33,757	35,091	1,334
2017/2018	30,695	34,120	35,091	971
2018/2019	30,960	34,454	35,091	637

Furthermore, the results of the third FCM Auction produced similar results. More than 40,995 MW of new and existing demand-and-supply-side resources competed to provide the 31,965 MW of capacity needed to maintain reliability in New England for the 2012 to 2013 period, thus providing an excess of 4,487 MW in supply.[43] The final clearing price of the auction was a competitive price of $2.95 kilowatt-month, $6.89 lower than the starting bid price of $9.84 kilowatt-month.

The three rounds of the FCM resulted in far more supply than demand for the region, demonstrating that contrary to the claims by MMS, New England is not facing a shortage in energy. The FCM has proven to be an effective way for ISO NE to achieve its goals of long-term reliability, and ISO NE currently has and will continue to maintain a sufficient supply of energy to meet the region's needs. This data, therefore, demonstrates that the proposed project is unnecessary to ensure resource adequacy in New England.

c. New England Currently Has an Abundance of Natural Gas Supplies to Support the Existing Natural Gas Needs of the Region and Continues to Further Expand This Supply.

MMS continues to claim that there is a need for the proposed project, in light of a "limited gas supply and delivery infrastructure" for natural gas in New England. *See* Section 1.1 of DEIS and FEIS. Contrary to the claims by MMS, this information relied upon by the agency remains inaccurate. Since the FEIS for the Proposed Action was issued, the natural gas market in New England has seen additional growth, including the expansion of existing pipelines, additional natural gas supplies, new storage, and an increase in the number of LNG terminals in New England. Nonetheless, MMS has neglected to address this new information in the EA/FONNSI or even in its comments that were filed with the FEIS responding to DEIS comments raised on this issue. In fact, MMS's response comments merely restate its claim from the DEIS and FEIS that the New England region has a limited supply and delivery infrastructure for natural gas, which warrant diversification of the region's energy needs. However, MMS's

[43] ISO NE, "ISO New England's Third Forward Capacity Market Auction Concludes Successfully," at 1 (Oct. 7, 2009).

response misses the mark.[44] U.S. production of natural gas has been on the rise, which is expected to continue, as resource estimates increase additional unconventional forms of natural gas (i.e. shale) are developed.[45]

There are presently six major companies in New England serving over 2,604 miles of interstate pipeline that have a combined capacity of over 11 billion cubic feet per day.[46] These companies include: Tennessee Gas Pipeline; Maritimes and Northeast Pipeline; Algonquin Gas Transmission; Granite State Transmission; Iroquois Gas Transmission; and Portland Natural Gas Transmission System.[47] In addition to the large pipeline systems serving New England, there are also numerous smaller pipelines interconnected to larger pipeline systems, which serve niche areas within the region, including the Granite State Transmission pipeline and the PNGTS/Maritimes and Northeast Pipeline system at the southern border of New Hampshire and Massachusetts.[48]

Several major, new and expansion pipeline projects were completed in 2009, bringing additional capacity to the pipeline system in New England. These projects included the following:[49]

- Maritimes & Northeast Phase IV, which facilitates the delivery of natural gas from the Canaport LNG terminal to markets in Massachusetts, Maine, New Hampshire and Atlantic Canada. This expansion project doubles the firm mainline capacity for Maritimes & Northeast Pipeline from 400 million cubic feet per day to 800 million cubic feet per day;[50]

- 08/09 Expansion, Phases II and III operated by Iroquois Gas Transmission, which will deliver another 200 million cubic feet of natural gas per day to New England;[51]

- J-2 Loop Project operated by Algonquin and Spectra Energy, which provides additional volume and pressure support to NSTAR gas company to help NSTAR meet current and future residential and commercial natural gas demand;[52]

---

[44] MMS, Cape Wind Final Environmental Impact Statement, Appx. L, Comment Summary and Response Table, at p.79 (Jan. 2009).

[45] Northeast Gas Association, *Regional Market Update* at p.5 (Dec. 2009).

[46] Northeast Gas Association, Northeast Market At a Glance (2009), http://www.northeastgas.org/pdf/mkt_snapshot_1209.pdf.

[47] Northeast Gas Association, *Regional Market Update* at p.5.

[48] *Id.*

[49] *Id.* at 10.

[50] Maritimes & Northeast Pipeline, Press Release, *Maritimes Delivers Major New Natural Gas Supply*, http://www.mnpp.com/us/node/91 (July 15, 2009).

[51] Iroquois Gas Transmission System, "Iroquois Announces Completion of 08/09 Expansion Project," http://www.iroquois.com/documents/Iroquois_08-09Expansion3IS_PR.pdf (Nov. 2, 2009).

- Concord Lateral Expansion operated by Tennessee Gas Pipeline and El Paso, which is an expansion project providing New England with an additional 30,000 Dth per day;[53]

- Sentinel Expansion Phase II operated by Transco and Williams, which expands firm transportation capacity in the Northeast by 102 Dth per day, and increases Transco's total system capacity to approximately 8.6 bcf per day;[54] and

- Northern Bridge operated by Texas Eastern and Spectra Energy, which can transport 150 million cubic feet per day of the new Rocky Mountain natural gas supplies to the Northeast. Texas Eastern has aggressively expanded its pipeline system in the Northeast corridor over the past seven years, now making the system able to transport 4.5 Bcf per day from Ohio to the Northeast.[55]

Additionally, natural gas imports from Canada continue to be a substantial source of natural gas for New England. In particular, the Sable Offshore Energy Project in Nova Scotia provides natural gas to New England that is shipped via the Maritimes & Northeast Pipeline. Deep Panuke is another offshore natural gas field that is currently under construction and will begin providing natural gas to New England in late 2010.[56] Finally, the McCully Field of Corridor Resources in New Brunswick, Canada presently provides the Maritimes & Northeast Pipeline with 35 million cubic feet of gas daily.[57]

Larger developments in natural gas production in the Northeast have occurred in the context of shale production and growth of LNG imports. The discovery of large amounts of shale in the Marcellus Shale basin in the Appalachian Basin that stretches from West Virginia into Ohio, Pennsylvania and New York holds the potential of producing anywhere between 50 and 250 trillion cubic feet of natural gas.[58] This Basin is located directly below the Northeast providing New England an untapped resource for additional natural gas.

On the other hand, New England is seeing rapid growth in the development of additional LNG terminals, which has substantially increased the amount of LNG imports to the region. In particular, in May 2008, the Northeast Gateway Deepwater Port, located offshore of Gloucester, MA near Cape Ann, began accepting commercial deliveries of LNG and can accommodate gas

---

[52] Spectra Energy, "Spectra Energy's Algonquin Gas Transmission Files FERC Application to Extend Its System In Greater Boston," http://investors.spectraenergy.com/phoenix.zhtml?c=204494&p=irol-newsArticle&ID=1137758&highlight=J-2 (Apr. 30, 2008).

[53] Tennessee Gas Pipeline, "Northeast Pipeline Project Updates," http://www.necanews.org/dev/documents/090922_mahan_russell__3.pdf, at p.10 (Sept. 22. 2009).

[54] "Williams Completes Transco Expansion in Northeast," *Energy Pipeline News*, http://energypipelinenews.blogspot.com/2009/11/williams-completes-transco-expansion-in.html (Nov. 24. 2009).

[55] Spectra Energy, "Spectra Energy Place Northern Bridge Project Into Service," http://www.spectraenergy.com/news/releases/2009/nov/20091102_01.asp (Nov. 2, 2009).

[56] Northeast Gas Association, *Regional Market Update* at 9.

[57] *Id.*

[58] *Id.* at 7.

deliveries of up to 800 million cubic feet per day.[59] Further, in 2009, the Canaport LNG Terminal, located in Saint John, New Brunswick, became operational. The Canaport LNG Terminal has the capability of regasifying approximately 1.2 Bcf per day and delivers natural gas to the New England market via the Maritimes & Northeast (M&NE) Pipeline at the Maine Border.[60] Also, another LNG project located offshore of Gloucester, MA, the Neptune LNG Facility, can deliver between 400 and 700 million cubic feet per day.[61] These are just the LNG terminals, which became operational in the past year and do not include any proposed projects. Currently, there are three proposed LNG terminals, the Quoddy Bay LNG terminal, Downeast LNG terminal, and the Calais LNG terminal that have the potential of transporting an additional 2 Bcf per day of natural gas to the region.[62]

Based on the aforementioned information, it is apparent that New England currently has sufficient pipeline capacity and natural gas supplies to support existing natural gas demand in New England. Thus, the DEIS and FEIS inaccurately conclude that the Proposed Action is needed to increase the "limited gas supply and delivery infrastructure"[63] of New England. MMS provides little to no evidence supporting its claim that gas supplies and pipeline capacity are inadequate in New England, either currently or in the future. To the contrary, the current natural gas outlook in the region and recent developments illustrate that the development of new natural gas supplies and infrastructure is proceeding at a rapid pace. In light of these new developments since the issuance of the FEIS, MMS should be required to consider this new information and reevaluate the proposed project's purpose and need.

3. The EA/FONNSI Ignores That the Proposed Project Is Not Needed to Meet the RPS Requirements of New England.

The EA/FONNSI fails to address that if the Proposed Action ever becomes operational, there is a strong likelihood that the Massachusetts RPS and neighboring states' RPS requirements may already be subscribed to by other sources of renewable generation. Footnote 1 of Section 1.1 of the FEIS and DEIS states that by delivering approximately 182.6 MWs to the regional transmission grid, the Proposed Action will fulfill 75 percent of the State's RPS requirement for 2009. However, despite new data assessing RPS compliance in the New England states that has been released since the FEIS was issued, MMS continues to rely on outdated information and incorrectly assumes that the generation from the Proposed Action will be needed, despite its above-market costs, to satisfy the Massachusetts RPS.

---

[59] Northeast Gas Association, "Description of Pipelines/LNG Import Facilities Serving the Northeast Market, at p. 1 (Dec. 2009).

[60] ISO NE, *2009 Regional System Plan*, at p. 64.

[61] Northeast Gas Association, "Proposed LNG Import Terminal Projects, Northeast U.S. & Eastern Canada," at p.3 (Nov. 9, 2009).

[62] *Id.* at 4.

[63] *See* FEIS, at Section 1.1.

a. Massachusetts Met Its RPS Requirement In 2007 and It Is Anticipated This Trend Will Continue.

In 2008, Massachusetts passed the Green Communities Act, which set an aggressive RPS standard of 20 percent by 2020 for the state.[64] This requirement has progressively increased half a percent annually up to 2009 when the standard reached 4 percent. The RPS annual increase thereafter will be one percent until 2015.[65] The most recent report issued by the Massachusetts Division of Energy Resources ("DOER") shows that the state saw an excess supply of qualified renewable generation to meet RPS compliance in 2007.[66] The total retail load for Massachusetts in 2007 was 50,978,101 MWh, for which the RPS obligation was 1,529,359 MWh, and the total supply of renewable energy credits (RECs) was 1,606,396 MWh.[67] This resulted in an excess of 87,957 MWh of RECs that can be "banked" and used toward future RPS compliance.[68]

Unlike past years, all but one retail electricity supplier complied with the required RPS obligation, with more than 99 percent of the compliance met by New Renewable Generation.[69] In fact, the amount of New Renewable Generation in 2007 increased by 660,761 MWh.[70] It is noteworthy that this generation is derived from renewable resources outside of Massachusetts, which shows the rapid growth of renewable generation in neighboring New England states. Nevertheless, there are currently 1256 MW of RPS-I qualified Renewable Generation Units in Massachusetts alone.[71] Because applicants seeking to have their renewable generation facility qualify for the Massachusetts RPS program must be approved by the Massachusetts DOER, these resources maintain their RPS eligibility indefinitely, unless revoked or suspended by DOER.[72] Consequently, these plants are likely to continue generating output capable of meeting RPS mandates for subsequent compliance years. As this list of eligible resources grows over

---

[64] ISO NE, *2009 Regional System Plan*, at p. 83. This goal encompasses the RPS target of 15 percent, plus an Alternative Portfolio Standard (APS) of 5 percent. The APS sets electric consumption targets for competitive retail electricity supplies (i.e. load serving entities), which must use alternative technologies (i.e., combined heat and power projects, flywheel storage, gasification with carbon sequestration, paper derived fuel, and efficient stream technology) to meet the minimum APS standard of their electricity consumption. *Id.* at 82.

[65] DIV. OF ENERGY RESOURCES, MASSACHUSETTS RENEWABLE PORTFOLIO STANDARD ANNUAL RPS COMPLIANCE REPORT FOR 2007 13 (2008), http://www.mass.gov/doer/rps/rps-2006annual-rpt.pdf [hereinafter DOER REPORT].

[66] *Id.* at 3.

[67] *Id.* at 5.

[68] *Id.* The Massachusetts RPS allows for a supplier to "bank" any excess RECs for use towards its RPS compliance in the following two years. A supplier may bank up to 30 percent of its RPS obligation for that year for use towards its RPS compliance in the following two years. *Id.*

[69] *Id.* at 6.

[70] The amount of New Renewable Generation in 2006 was 938,772 MWh, compared to 1,599,533 MWh in 2007. *See Id.*, Table Two, at 8.

[71] Massachusetts Department of Energy Resources, RPS Class I-Qualified Renewable Generation Units, http://www.mass.gov/?pageID=eoeeaterminal&L=4&L0=Home&L1=Energy,+Utilities+%26+Clean+Technologies&L2=Renewable+Energy&L3=Renewable+Portfolio+Standard&sid=Eoeea&b=terminalcontent&f=doer_rps_approved&csid=Eoeea (Nov. 19, 2009).

[72] *See* 225 C.M.R. 14.06 (1)-(4).

time it further reduces the need for Proposed Action's generation to satisfy the State's RPS requirements, even over the long-term.

Furthermore, the RPS obligation for Massachusetts in 2010, the proposed operational date for CWA Project, is already fulfilled. As noted, DOER has already approved 1256 MW of RPS-I Qualified Renewable Generation Units, which qualifies for RECs. This is *almost three times* more than the RPS obligation for Massachusetts in 2010. DOER anticipates that the trends of renewable energy growth and RPS compliance in 2007 will continue during 2008.[73] Thus, there is a strong likelihood that the State's RPS obligation for 2010 will already be fulfilled when and if the CWA Project becomes operational.

b. Contrary to Claims By MMS, the Proposed Cape Project Is Unlikely to Aid Neighboring States In Meeting Their RPS Goals.

As evidenced by the growth of renewable generation in Massachusetts, other New England states are seeing a substantial rise in the construction of qualified renewable generation that will help states meet their RPS obligations. According to DOER, "[a]lthough the quantity of electricity from renewable generation sources in Massachusetts continues to grow, that growth is exceeded by an accelerating increase in supplies from northern New England biomass plants and imports from wind farm and landfill gas projects in neighboring New York, Quebec, and the Maritime Provinces."[74] This means that because the REC market is regional in nature, any states that have excess qualified renewable generation are likely to sell their additional RECs to neighboring supplies. The proposed project may, therefore, not have a market in Massachusetts or in neighboring New England states that have RPS programs if any of the states are oversupplied with RECs.[75]

According to ISO NE, applicable loads in Massachusetts, Connecticut, and Maine have been complying with their states' RPS obligations for several years, and even Rhode Island saw its first year of RPS compliance in 2007.[76] Although RPS programs will require more renewable energy to be purchased each year (until the 2014 to 2020 timeframe), the projected supply of new renewable energy in New England is expected to exceed even these increased RPS obligations. For example, there is currently an additional 15,000 MW of wind generation on the horizon in New York and the Eastern Canadian Provinces, which would provide even more qualifying renewable generation to New England.[77] This is just one example of future renewable

---

[73] DOER REPORT at 13.

[74] *Id.* at 3.

[75] It is customary for renewable energy projects selling into New England to qualify in multiple New England RPS programs, as well as programs in Eastern Canadian Provinces, so in any year they can seek to sell their RECs into the state program offering the best prices and terms. ISO New England, *2009 Regional System Plan* at 83. It is noteworthy that Vermont has no formal RPS requirement, but has a general goal of 20 percent by 2017. ISO NE, *Update on New England Renewable Portfolio Standards (RPS) and Renewable Resources Outlook*, http://www.ripuc.org/eventsactions/docket/4050-ISO-Presentation(7-28-09).pdf at 5 (July 28, 2009).

[76] ISO NE, *2009 Regional System Plan* at 83. It is noteworthy that Vermont has no formal RPS requirement, but has a general goal of 20 percent by 2017. ISO NE, *Update on New England Renewable Portfolio Standards (RPS) and Renewable Resources Outlook* at 5.

[77] *Id.* at 23.

generation that will be developed in New England. Thus, there is a strong possibility that if this trend continues, the generation from CWA Project would not be needed in New England since the region would be meeting its RPS obligation, with a surplus remaining.

C. The Range of Alternatives Continues to be Inadequate

The EA/FONNSI perpetuates the fiction that there are no reasonable alternatives to the Proposed Action, except for those located in Nantucket Sound, and no new evidence that changes that assessment. Even with the inappropriate applicant-oriented purpose and need statement, that position is not credible. The position was not credible when the FEIS was released, and since that date, there has been considerable new activity that only underscores the implausibility of MMS's position. APNS has provided that information to MMS, but MMS elected to ignore it and, as a result, the EA/FONNSI is incorrect in claiming there is no new information requiring a supplemental EIS. No information is more important to an EIS than alternatives, and the very obvious failure of the FEIS and EA/FONNSI to consider clearly reasonable alternatives, even under the flawed purpose and need statement, renders the MMS alternatives analysis invalid.

1. A Consensus-Based Solution is Still Possible

Before addressing why the EA/FONNSI fails to correct the problems with the alternatives analysis in the FEIS, it is important to note that dozens of stakeholders and hundreds of individuals have been advocating for a consensus-based solution that would involve moving the proposed site from Horseshoe Shoal in Nantucket Sound to South of Tuckernuck Island (STI). There is no obstacle to pursuing this outcome, a fact recognized by the Advisory Council on Historic Preservation in its April 2 comments and recommendations to the Secretary. The EA/FONNSI clearly acknowledges that STI meets MMS's screening criteria and was subjected to detailed analysis: The EA/FONNSI states "[t]he alternatives that met the screening criteria, along with the Proposed Action and no action alternative were subject to detailed environmental analysis in the FEIS."[78] This supports the position of the Alliance and numerous stakeholders that it would not be necessary to reinitiate review of the STI alternative and that the proposed project in Horseshoe Shoal could be relocated with little additional effort.

Nonetheless, the EA/FONNSI makes critical errors with respect to STI as a means of justifying the Proposed Action. First, the EA/FONNSI mistakenly assumes that the foundation type required for STI is a mid-range depth technology structure.[79] At the same time, repeatedly throughout the document, there are statements that the monopile foundation which CWA proposes to use at Horseshoe Shoal is appropriate for depths up to 100 feet: "The monopile foundation technology currently available to commercial application typically limits the placement of wind energy facilities in waters less than 100 feet to ensure economic and technical feasibility."[80] The mid-range technology lattice structure refers to an overlapping area in the 65 to 147 foot range. Water depths at the STI alternative range from 15 to 100 feet. It is simply not

---

[78] EA/FONNSI, at 4.

[79] *Id.* at 5.

[80] *Id.* at 3. *See also id.* at 5.

demonstrated that STI would require lattice support structures, or that some combination of structures could not be implemented.[81] Even if lattice foundations are needed, the STI site is not unreasonable. The FEIS estimated the costs of STI to be only 12% greater, and the STI cost would be reduced to less than the proposed site if the Barnstable proposal for municipal-based financing for STI is adopted.

2. MMS Has Not Addressed Much of the New Information Provided by APNS This Year

Numerous commentors have long objected to MMS's impermissible exclusion of reasonable alternatives from review in the DEIS and the FEIS. Part of MMS's failure to address these alternatives is directly related to its improper statement of purpose and need. The EA/FONNSI does not correct these problems. The explanation provided for their exclusion was invalid when the FEIS was released, and in light of new information, is even more indefensible now. Based on new information ignored in the EA/FONNSI, but in the possession of MMS, a supplemental EIS is required.

The EA/FONNSI, for example, unreasonably focuses on monopile technology. The EA/FONNSI states that projects using monopile technology are typically located in areas that allow installation by vibratory hammer or driving ram, and that areas containing bedrock or hard substrate would require a different technology that would increase project costs.[82] But the analysis does not indicate what the increase would be, whether the increase would not be economically feasible, or what the state of the technology is. In other words, it provides no analysis. It simply states that other areas would require other technologies, which could affect project design. That fact certainly does not make an alternative infeasible.

Likewise, the EA/FONNSI discusses limitations on the distance of AC cables and HVDC cables, yet none of the alternatives eliminated exceed the distance limitations identified in the EA/FONNSI.[83] The EA/FONNSI does not address any information regarding the other factors on which it based its decision to eliminate alternatives, including wave height, or the composition of the substrate. The EA/FONNSI merely restates what is in the FEIS – that is, that Offshore Portland, Cape Ann, Boston, Nauset, and Block Island were eliminated due to a

---

[81] The FEIS concludes that STI will result in greater impacts to benthic resources. That unsupported conclusion is based on the mistaken assumption that a mid-range technology is needed for STI, rather than on differences in the benthos and benthic resources at the two sites. Differences in the benthos of the two sites are not known and thus require additional analysis. According to Richard S. LeGore, Ph.D., of LeGore Environmental Associates, the survey work that has been done makes it difficult or even possible impossible to know the impacts to these two sites.

In addition, Mr. Legore has stated that his greater concerns have been disregarded, as MMS is still relying on a wholly inadequate marine benthos survey. It is poorly conceived, poorly executed, and the data are poorly analyzed in order to arrive at the preconceived notion of unsubstantial benthic impact. To date, there has been no direct response by CWA, USACE, or MMS to any Mr. Legore's pages of commentary on the benthos studies. These comments have been disregarded and dismissed in reaching the finding of no significant impact, as MMS persists in their reliance on faulty information.

[82] EA/FONNSI, at 3.

[83] *Compare* EA/FONNSI, at 3, with FEIS, at 3-6 – 3-9.

combination of factors, none of which was addressed to determine whether there was any new information.

a. MMS Failed to Consider Reasonable Alternatives Within Its Jurisdiction

Block Island, in fact, should not have been excluded on the basis of these factors. A project that fits the purpose and need is in fact under active consideration at this time. The project, proposed by Deepwater Wind, has strong support from Rhode Island and was in fact chosen by the State in the request for proposals process. Deepwater Wind has already installed a meteorological tower and has done test borings of the ocean floor to determine optimal installations methods for the proposed project. On August 28, 2009, Deepwater Wind reported that it was conducting an array of environmental studies in and around Block Island. By the end of July, it had installed a 180-foot meteorological mast at the entrance to Great Salt Pond, a laser radar device at the other end of Block Island, and is using a temporary meteorological vessel moored about three miles off the coast of the island, all to be used to collect data to be used for measuring wind speed, strength and shear. The first phase of Deepwater's project is expected to start operations in 2013. Deepwater also plans to build a larger utility-scale offshore wind power project in federal waters, rated at 385 megawatts. Deepwater also is hoping to build a larger project in 2014 or 2015 and could grow it to 500 MW.

The viability of the Block Island development is clearly demonstrated in the attached studies by RIWINDS, a program launched by the State of Rhode Island in 2006 to promote wind development – both onshore and offshore – in the state. The scope of the attached study was to evaluate the most viable areas for wind energy development. The process screened and prioritized sites based on technical, environmental, financial and public acceptance issues. After extensive analysis, the study identified several onshore and offshore sites. The study clearly identifies two areas (areas J and K) in the waters adjacent to Block Island that not only meet the screening criteria (figure 3-18) but that are the least cost sites under evaluation (figure 6-1).

Table 6-6 shows that these identified Block Island sites – one in state waters and one in adjacent federal waters – would each support 200 MW of wind energy for a total of 400 MW.

The viability of Block Island is further confirmed by its analogue in Horns Rev 2, which is addressed in a September 24, 2009 letter sent by APNS to MMS regarding alternatives and the state of technology.[84] The North Sea is known for its hazardous weather conditions, yet will now be the site of a 209 MW facility. To the extent that MMS ruled out the other alternatives on this basis, it was in error doing so. The EA/FONNSI should have evaluated information regarding these criteria, but it failed to do so.

This alternative clearly meets the MMS screening criteria and should have been reviewed in the EIS. The recitation in the EA/FONNSI that Block Island was "eliminated from further consideration due to a combination of factors, including water depth, extreme storm wave height, and seabed substrate" does not resolve MMS's failure to address this alternative in the EIS. That

[84] Attachment 17.

site is now going forward under a State-approved process, and is clearly a reasonable alternative to the Proposed Action.

In fact, there is substantial new information regarding the state of the technology that MMS has simply failed to address, despite having such information submitted to it over the last year. APNS's September 24, 2009 letter to MMS regarding reasonable alternatives to the Proposed Action raises much of the latest information about offshore development.[85] Those comments outlined a number of reasonable alternatives that should be considered, including: the Blue H proposal for a floating deepwater commercial wind energy project located off Martha's Vineyard; the State of Rhode Island proposed two phased wind project in state waters; the Winergy Power proposal offshore of Long Island; preliminary permits issued by the Federal Energy Regulatory Commission (FERC) to over a dozen hydrokinetic, or tidal and wave energy, projects in the New England area; onshore renewable and clean energy projects; and the Commonwealth of Massachusetts' own proposed offshore wind sites in state waters, two sites that can incorporate 166 wind turbines generators (WTGs) with a capacity of 3.6 megawatts (MW). Yet, MMS addressed practically none of the information provided in that report.

The EA/FONNSI fails to consider all new information on deep water technology. The EA/FONNSI concludes that the new information regarding StatoilHydro's floating turbines, Blue H USA, and other projects demonstrate that the technology is still in the exploratory phases. The EA/FONNSI concludes that there is no new evidence to suggest that deepwater alternatives would be economically or technologically feasible.

The EA/FONNSI, however, is highly selective in the information that it considered. For example, APNS's September 24, 2009, letter regarding alternatives describes not just what Blue H has accomplished in the United States, but also what it is doing overseas. The EA/FONNSI totally ignores Blue H's installation of a prototype floating wind turbine in Italy in the summer of 2008 or that it is currently building a 2.4 MW operational floating turbine in the same location. This turbine is the first in the planned 90 MW Tricase offshore wind farm, located more than 20 kilometers distant from the coast line of Puglia. <http://www.bluehgroup.com/company-newsandpress-090312.php>.

Not only did the EA/FONNSI omit up-to-date information, the reasoning it employs in dismissing deepwater alternatives is inconsistent between the FEIS and the EA/FONNSI. The EA/FONNSI dismisses deepwater alternatives on the basis that they are not economically feasible. Yet, the FEIS states that the current range of alternatives including the Horseshoe Shoal site are also not economically viable at today's market prices. Furthermore, the availability of stimulus money equivalent to 30% of the capital cost of the project under the ARRA is also not evaluated with respect to deepwater alternatives and its effect on the economic viability of this technology.

Indeed, the EA/FONNSI is inconsistent with recent actions by MMS. Federal officials announced during a meeting in January 2010 that it planned to open up almost 4,000 square nautical miles of ocean near Martha's Vineyard for potential wind power generation.[86] As

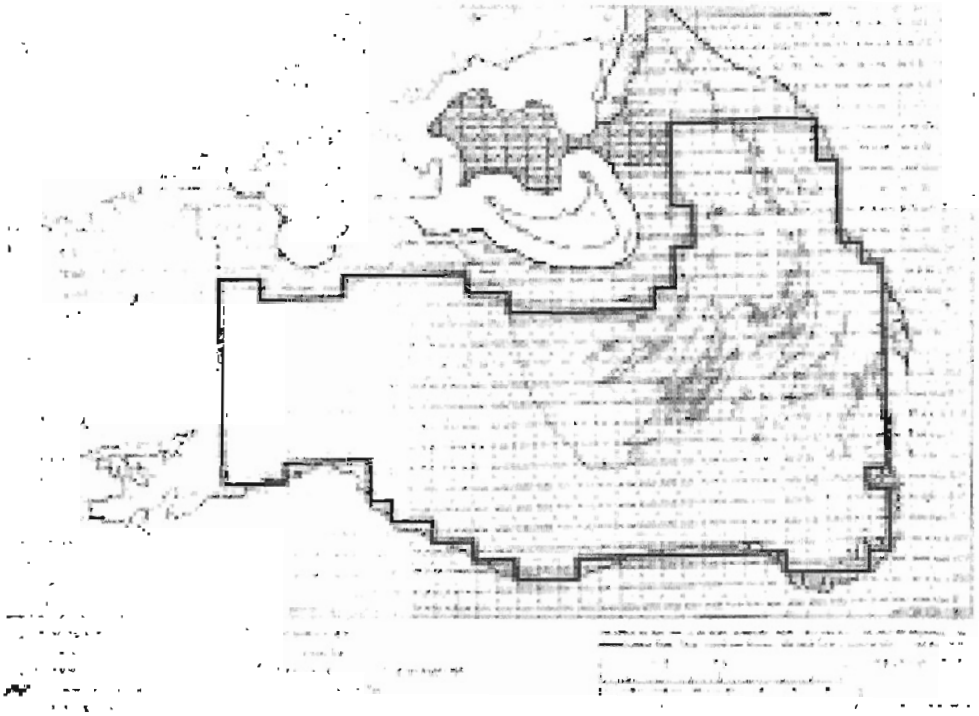
---

[85] Attachment 17.

[86] *See Federal Offshore Energy Plans Dwarf Cape Wind,* Vineyard Gazette (Jan. 29, 2010).

reported in the Vineyard Gazette, a draft Request for Interest (RFI) map presented to a renewable energy task force meeting of state, local and federal representatives on Wednesday identifies a vast arc of ocean, extending from the Rhode Island border, southwest of the Island, across to the south of the Vineyard and Nantucket, then running north and east to the entrance to Nantucket Sound.

The map, prepared by MMS comprises 448 blocks totaling 3,895 square nautical miles, for which wind power developers could bid. The boundaries of the area — which encroach about eight or nine miles from shore at their closest and extend out 22 to 50 miles — closely follow the contours of the underwater geography, between 30 and 60 meters (about 100 and 200 feet).



Clearly, based on MMS's presentation, the state of technology is more advanced than it suggests in the EA/FONNSI, given that the only parameter MMS considered was water depth. Further, MMS appears to have recognized the value of taking into account onshore effects, an issue it is assiduously ignoring despite recommendations by numerous commentors, including more recently the ACHP. Deerin Babb-Brott, Assistant Secretary of the State Office of Energy and Environmental Affairs, said that MMS and the State set a buffer zone at nine miles after consideration of developments in Europe. Such a distance helps to minimize the visual impacts of such development. It was additionally acknowledged that preference would be given to projects further from shore. Finally, it is notable that they excluded Nantucket Sound from areas of potential development.

b. Ocean Management Plan of Massachusetts

As APNS discussed in its September 29, 2009 letter to MMS, Massachusetts has been developing an Ocean Management Plan (OMP) to identify areas in state waters that could

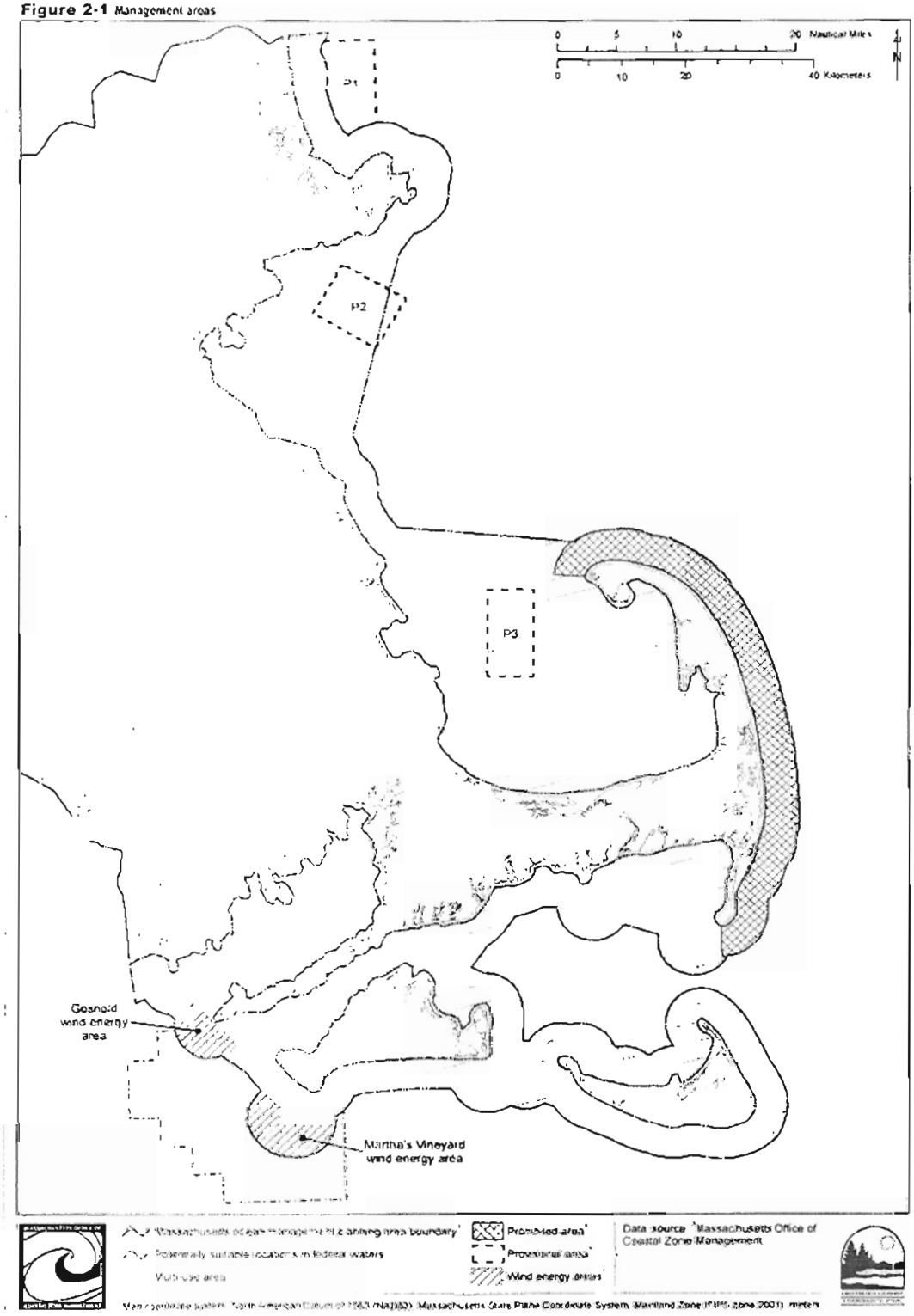
accommodate utility-scale wind projects.[87] The draft plan APNS raised with MMS included as many as 166 wind turbines, which would generate enough electricity to power some 200,000 homes, and could be built to the southwest of Martha's Vineyard: one on the far side of Noman's Land and the other off the Elizabeth Islands.

Despite raising it, MMS failed to address any of the plan in the EA/FONNSI. Since Massachusetts introduced the OMP in June, it has finalized its plan.[88] Massachusetts selected two Wind Energy Areas, based on the presence of a suitable wind resource and water depth, and the absence of conflict with other uses or sensitive resources. Massachusetts identified the Gosnold Wind Energy Area and the Martha's Vineyard Wind Energy Area for commercial development. The OMP also identifies three locations (one in federal waters adjacent to the planning area) for commercial-scale wind that are considered provisional sites. The figure below identifies projects areas.

[87] Draft Ocean Management Plan (June 30, 2009).

[88] *See* <http://www.mass.gov/?pageID=eoeeaterminal&L=3&L0=Home&L1=Ocean+%26+Coastal+Management&L2=Massachusetts+Ocean+Plan&sid=Eoeea&b=terminalcontent&f=eca_oceans_mop&csid=Eoeea>.

Figure 2-1 Management areas



Despite the considerable work the Commonwealth put into its OMP, which was released in December 2009, well before the EA/FONSSI was released, the EA/FONNSI entirely failed to address any of the project areas. These sites must be considered as alternative sites in a supplemental EIS.

c. There Are New Alternatives Outside of MMS's Jurisdiction that Should Have Been Considered in the EA/FONNSI

In addition, MMS did not consider, yet again, alternatives outside its jurisdiction. NEPA clearly requires an agency to consider alternatives that are not within the jurisdiction of the agency.[89] The requirement that an agency consider alternatives that are outside the agency's jurisdiction but meet purpose is confirmed in regulations issued by the Council on Environmental Quality (CEQ). CEQ clearly mandates that an agency consider alternatives outside the scope of its jurisdiction. In its regulations implementing NEPA, CEQ defined the scope of alternatives to be considered in an EIS as including "reasonable alternatives not within the jurisdiction of the lead agency."[90] In its later published "Forty Most Asked Questions,"[91] CEQ further explained the requirement to consider alternative outside an agency's legal jurisdiction.

> An alternative that is outside the legal jurisdiction of the lead agency must still be analyzed in the EIS if it is reasonable. A potential conflict with local or federal does not necessarily render an alternative unreasonable, although such conflicts must be considered. ... Alternative that are outside the scope of what Congress has approved or funded must still be evaluated in the EIS if they are reasonable, because the EIS may serve as the basis for modifying the Congressional approval or funding in light of NEPA's goals and policies.[92]

As noted in APNS's September 29, 2009 comments, on June 11, 2009, the Massachusetts National Guard announced a proposal to build a utility-scale wind project on the Massachusetts Military Reservation that would include up to 17 turbines, each 400 feet high. As the first of many steps toward building the project at the 22,000 acre facility on Cape Cod, the National Guard has filed a site plan for review with the Federal Aviation Administration (FAA) and the Air Force Space Command.

The plans require review by the FAA and the Air Force Space Command, which operates the PAVE PAWS radar station on the base. Both the FAA and the Air Force have already approved a 1.5 MW turbine for the base cleanup program. The National Guard proposal comes after a study released in February concluding that the Upper Cape base is a prime location for land-based wind turbines. That report, released by the state Executive Office of Energy and Environmental Affairs, said the base has the potential to host up to 46.5 MWs of electricity. (Exhibit 17). The Massachusetts Military Reservation site was not considered in the FEIS

---

[89] *Natural Resources Defense Council v. Morton,* 458 F. 2d 827, 836 (D.C. Cir. 1972).

[90] 40 C.F.R. § 1502.14(c).

[91] 46 Fed. Reg.18026 (1981).

[92] Forty Most Asked Questions, Question 2b. *See also Muckleshoot Indian Tribe v. Forest Service*, 177 F. 3d 800, 814 (9th Cir. 1999) (finding that the agency erred in refusing to consider direct purchase of land involved in a land exchange even though Congress had not appropriated money for such an exchange); *National Wildlife Federation v. National Marine Fisheries Service*, 235 F. Supp. 2d 1143, 1154 (W.D. Wa. 2002) (rejecting claim by defendant that consideration of a sediment reduction strategy for which no legislative authority exists is not required by NEPA).

because at the time it was not available. That rationale is no longer valid, as a result of the Commonwealth's plan to now develop the site.

Further, since the issuance of the FEIS, there have been significant developments in hydrokinetic permitting and technologies. MMS and FERC have issued regulations governing the permitting and licensing of offshore hydrokinetic projects, which has spurred project development in this area. Just this past April, FERC and MMS issued a MOU regarding the permitting and licensing of offshore renewable energy projects. More recently, in August 2009, FERC and MMS also released guidance on this issue to further clarify the permitting and licensing process for hydrokinetic projects. Further, on August 19, 2009, FERC and the State of Maine signed an MOU to coordinate the procedures and schedules for reviews of tidal energy projects off the coast of Maine.

In fact, there are currently 17 hydrokinetic projects pending in New England, New Jersey, and New York, which have all received preliminary permits from FERC and have the potential to produce approximately 763 MWs of electricity. These pending hydrokinetic projects in the region are rapidly moving forward and many have already submitted the required Notice of Intent to file an application and draft application with FERC, including the time frame for consulting with federal, state, and local agencies, tribes, non-governmental organizations, and any other interested entities. Holders of preliminary permits are required to file a Notice of Intent to file an application and draft application within one year of receiving a preliminary permit. Additionally, the licensees of these projects have submitted and continue to submit required periodic progress reports to FERC that document significant progress in the development of the projects.

APNS's September 29, 2009, comments present additional new information that MMS failed to address in the EA/FONNSI. Indeed, it appears that MMS failed entirely to read the document, if the information appearing in the EA/FONNSI is any indication. Had MMS done so, it would have been clear that many of the assumptions on which it determined to eliminate alternatives were no longer valid.

III. Cultural Resources

A. Approving the Proposed Action as Proposed Would Be Inconsistent with Both the NHPA and the Preserve America Executive Order 13287 in Light of MMS's Stewardship Responsibilities for Historic Properties On and Around its Managed Properties

The ACHP concluded that approving the Proposed Action as proposed, and allowing the development of a large-scale industrial facility in the waters of Nantucket Sound directly in the view shed of numerous historic districts, structures and traditional cultural properties (TCPs), including two National Historic Landmarks, would be inconsistent with the policies and admonitions of the National Historic Preservation Act (NHPA) and Executive Order 13287 – Preserve America. The EA/FONNSI fails to consider this information.

The ACHP noted that it is the policy of the federal government "to administer federally owned, administered, or controlled prehistoric and historic resources in a spirit of stewardship

for the inspiration and benefit of present and future generations."[93] Section 1 of Executive Order 13287 adds that the policy of the federal government is also "to provide leadership in preserving America's heritage by actively advancing the protection, enhancement, and contemporary use of the historic properties owned by the Federal Government, and by promoting intergovernmental cooperation and partnerships for the preservation and use of historic properties."

The Executive Order also provides that where appropriate, executive branch departments and agencies shall advance this policy "by pursuing partnerships with State and local governments, Indian tribes, and the private sector to promote the preservation of the unique cultural heritage of communities and of the Nation and to realize the economic benefit that these properties can provide."[94] The Executive Order requires federal agencies to improve federal stewardship of historic properties by ensuring that each agency "ensure that the management of historic properties in its ownership is conducted in a manner that promotes the long-term preservation and use of those properties as Federal assets and, where consistent with agency missions, governing law, and the nature of the properties, contributes to the local community and its economy."[95] Finally, the Executive Order requires agencies to "maximize efforts to integrate the policies, procedures, and practices of the NHPA and this order into their program activities in order to efficiently and effectively advance historic preservation objectives in the pursuit of their missions."[96]

The ACHP notes that the outer continental shelf (OCS) portion of Nantucket Sound, including the area of the preferred alternative for the Proposed Action, is federal property. Therefore, given its stewardship responsibility for this property as outlined above, MMS "must exercise great care when considering any development at Horseshoe Shoal."[97] MMS's approval of the Proposed Action at Horseshoe Shoal would breach its duty of care toward that historic property, and fail in its lawful responsibility to advance the "protection, enhancement, and contemporary use" of the historic properties that will be adversely affected by the development.

Under a separate submission, APNS has provided to MMS its comments to the ACHP, the Massachusetts Historical Commission testimony to the ACHP, and the ACHP comments and recommendations to the Secretary. This documentation confirms the newly declared status of the Sound as one of the pre-eminent historic and cultural sites in the country. It also confirms the extremely significant nature of the adverse impacts of the proposed project. This is new information not considered in the EA/FONNSI, which predates the ACHP record by nearly one month. This new information alone requires a supplemental EIS.

---

[93] 16 U.S.C. § 470-1(3).

[94] *Id.*

[95] Executive Order 13287 (2003) at Section 4.

[96] *Id.* at Section 1.

[97] ACHP Comments, at 4.

B. The MMS Violated Section 106 Rules by Failing to Initiate Section 106 Review Until Too Late in the Process to Allow Full and Fair Consideration of Alternative Locations

The ACHP's rules provide that "[t]he agency official shall ensure that the section 106 process is initiated early in the undertaking's planning, so that a broad range of alternatives may be considered during the planning process for the undertaking."[98] In its comments, the ACHP concluded that in this matter, in direct contravention of this requirement, the Corps and MMS initiated section 106 review late in the planning process.[99] Indeed, the ACHP expressly found that the late engagement of the section 106 process in this matter was "a fundamental impediment to the effective exploration of solutions that could allow CWA's project goals to be met in harmony with the historic values of the area."[100]

In connection with other environmental reviews, the ACHP's rules provide that the agency should coordinate the steps of the section 106 process, as appropriate, with any reviews required under other authorities, such as the National Environmental Policy Act ("NEPA"). In this matter, once again, the ACHP found that MMS and Corps had not initiated in earnest the section 106 review of the CWA project during the NEPA scoping process.[101] If the agencies had done so, the ACHP noted, they would have opened the section 106 process "prior to the investment of time, money, and extensive planning for the preferred location."[102]

In this case, however, the ACHP found that "[c]onsequently, when the Section 106 process advanced, it was primarily to develop mitigation measures for the Project's effects rather than to consider alternatives to the Project site that might avoid adverse effects to historic properties."[103] Therefore, the ACHP found that this particular violation of the section 106 rules again had a direct impact in frustrating productive consultation toward resolution of adverse effects on historic properties.

C. MMS Failed to Make the Required Reasonable and Good Faith Efforts to Identify Historic Properties Until Too Late in the Section 106 Review

The Section 106 rules provide that the responsible federal agency must, in consultation with the State Historic Preservation Officer (SHPO) and any Indian tribe that might attach religious and cultural significance to properties within the area of potential effects (APE), make a reasonable and good faith effort to identify historic properties within the project's APE.[104]

---

[98] 36 C.F.R. § 800.1(c) (2009).

[99] ACHP Comments, at 4.

[100] *Id.*, at 4.

[101] *Id.*, at 4.

[102] *Id.*

[103] *Id.*

[104] 36 C.F.R. §§ 800.4(b) and 800.4(b)((1)(2009).

As the ACHP noted in their comments, however, in the early review of the Proposed Action under the Corps' own "Appendix C" regulations implementing section 106, that agency did not recognize its responsibility to identify previously unidentified properties. In its review, the Corps only considered "designated "historic properties (those listed in the National Register, determined eligible for listing by the Keeper of the National Register, or those that appear to meet eligibility criteria in the opinion of the Corps and the SHPO).[105]

The NHPA makes no distinction between eligible properties and "determined eligible" properties. The NHPA requires federal agencies to assess effects from an undertaking to any property "included in or eligible for inclusion in the national Register."[106] Federal courts have held that "[t]he [NHPA] definition of 'eligible property' makes no distinction between determined eligible and property that may qualify," and have refused to enforce Corps regulations that maintained such a distinction.[107]

In their comments, the ACHP noted that as a result of the Corps' reliance on their own regulations, the Corps gave no serious consideration to the possible existence of TCPs that might be affected.[108] The ACHP further found that when MMS took over lead agency status for the Section 106 review, "MMS, following the Corps' focus on designated historic properties, was slow to respond to the assertions of the tribes and other consulting parties that there were other historic properties within the APE that warranted consideration."

The ACHP acknowledged that starting in early 2009, the Secretary of the Interior finally led the review to the actions that resolved many unresolved issues, but these successful outcomes on intermediate issues came too late to allow the parties to seek in good faith real avoidance and mitigation of adverse effects, because, as the ACHP concluded, by that late date in the process, "CWA's commitment to the preferred location frustrated serious consideration of avoidance alternatives."[109] Therefore, the ACHP identified yet another instance where MMS's tardy and insufficient compliance with the section 106 rules had real negative consequences for all the parties to the consultation, and most importantly, to the ability of the agency to adequately protect the historic properties in and around Nantucket Sound.

D. MMS Failed Properly to Consult with Indian Tribes Early Enough in the Section 106 Process to Be Able to Fully and Fairly Consider Alternative Project Locations

Section 101(d)(6)(B) of the NHPA requires the agency official to consult with any Indian tribe or Native Hawaiian organization that attaches religious and cultural significance to historic properties that may be affected by an undertaking. The ACHP's rules explain that the agency must ensure that consultation provides the Indian tribe "a reasonable opportunity to identify its concerns about historic properties, advise on the identification and evaluation of historic properties, including those of traditional religious and cultural importance, articulate its views on

---

[105] ACHP Comments, at 4. *See* 33 C.F.R. Part 325, Appendix C, §§ 1(a), 15. (2009)

[106] *See* 16 U.S.C. § 470f.

[107] *See Colorado River Indian Tribes v. Marsh*, 605 F. Supp. 1425, 1437 (C.D. Cal. 1985).

[108] ACHP Comments, at 4.

[109] *Id.*

the undertaking's effects on such properties, and participate in the resolution of adverse effects."[110]

In addition, the rules specifically provide that tribal consultation "should commence early in the planning process, in order to identify and discuss relevant preservation issues and resolve concerns about the confidentiality of information on historic properties."[111] The ACHP found that like the other rules noted above, MMS violated this provision also by the tribal consultation procedures it adopted, because MMS only initiated "earnest tribal consultation that made possible an open dialogue between the tribes and the federal agencies . . . late in the review process, after the applicant was committed to the preferred location."[112]

The ACHP also found that Corps's and MMS's early contacts with the tribes did not provide an adequate and confidential opportunity for the tribes to communicate concerns about historic properties," even though the Wampanoag tribes as early as 2004 clearly identified their concerns on the record about the effects of the CWA project on TCPs, about the importance of Nantucket Sound as a TCP, and the location of former aboriginal lands.[113]

It was a full five years later, in late 2009, that "MMS took steps to remedy deficiencies in the tribal consultation process by participating in site visits and consultation meetings on Cape Cod and the Islands." But as noted above, by that late date, the positions of the parties had completely hardened, CWA's commitment to the preferred location was unchangeable, and no further productive consultation was possible. Thus, MMS, following on the Corps' poor record of tribal consultation, also acted slowly and unresponsively, and ultimately failed in its tribal consultation obligations under the section 106 rules.

E. The Marine Archaeological Survey Work Relied on by MMS Was Insufficient for Purposes of Compliance with Section 106

In its comments on the adequacy of the underwater surveys to assess possible impacts to the sea bed from the construction of the CWA project, the ACHP concluded that, "[g]iven the limited intensity of the archaeological reconnaissance survey and the nature of construction in a marine setting, monitoring and mitigation proposals will not adequately address the potential for harm."[114]

The ACHP had found that the Marine Archaeological Sensitivity Assessment commissioned by CWA in 2003 indicated that much of Nantucket Sound would have been exposed and available for human habitation from about 12,500 to 7,000 B.P." And as late as

---

[110] 36 C.F.R. § 800.2(c)(2)(ii)(A) (2009).

[111] *Id.*

[112] ACHP Comments, at 4.

[113] *Id.*

[114] ACHP Comments, at 3.

about 1,000 B.P., "portions of the area that is now Nantucket Sound would have continued to be dry land and available to aboriginal populations for habitation and subsistence activities."[115]

The ACHP concluded that the underwater survey efforts undertaken for this project were inadequate to comply with section 106. The ACHP said: "[w]hile the marine survey effort appears to have been sufficient to assess the potential for archaeological resources in the Section 106 process, it does not provide adequate data to enable modifications to the Project, were it to be approved, to avoid adverse effects or to inform appropriate mitigation."[116] Specifically, the ACHP found that: "the coverage and spacing of the sub-bottom profiler and coring data and the depth and adequacy of coring is insufficient for locating archaeological sites and shipwrecks for mitigation purposes."[117]

Thus, MMS did not perform underwater archaeological studies sufficient to be able to know what submerged historic or prehistoric properties would be damaged or destroyed by construction of the CWA project. As the ACHP properly found, this limited survey work was insufficient to be able to know what historic properties might be destroyed, and since these effects would be "permanent, unavoidable and not subject to satisfactory mitigation," such adverse effects will be severe, and MMS has not complied with section 106 for this aspect of its review.

F. Precedent Supports Project Denial Based on Impacts to Cultural Resources

In rendering a decision in this matter, MMS should be guided by the decision made by their sister agency the Bureau of Land Management (BLM) in a very similar matter in 2001 involving the Glamis Imperial Gold Mine proposal. There, the Glamis Imperial Corporation submitted a proposal to the California State Office of the BLM pursuant to the Mining Act of 1872 seeking development of an open-pit gold mine on public lands in Imperial Valley, California. The proposed project consisted of: a 1,571-acre mine and processing area; 38 acres of water wells and utility corridors; and a 16-mile upgraded transmission line.

In October 1999, the ACHP issued formal comments asking the Secretary of Interior to deny approval of the Imperial Mine based on the ACHP's conclusion that the project would cause serious and irreparable degradation of the Indian Pass-Running man Area of Traditional Cultural Concern (ATCC), an area sacred and historic to the federally recognized Quechan Tribe. The ACHP described the Indian Pass-Running Man ATCC in terms strikingly similar to those used to describe the Nantucket Sound TCP, as follows:

> [The Indian Pass-Running Man ATCC] represents a concentration of archaeological remains indicative of ceremonial religious practices, including geoglyphs, petroglyphs, cleared circles, and trails linking this area to other areas of traditional cultural value. For the Quechan, this area represents a place of solitude, power, and a source knowledge where scenic qualities, such as an

---

[115] *Id.* at 5.

[116] *Id.*

[117] *Id.*

> unmarked landscape and unobstructed viewshed, contribute to the integrity of the historic resources and of the area's religious and cultural value.[118]

On January 17, 2001, Secretary Babbitt approved a Record of Decision (ROD) denying the requested permit and citing a number of grounds, including the ACHP's comments, in support of the decision. First among the reasons given for the denial, was that "the proposed project is located in an area determined to have nationally significant Native American values and historic properties and would cause unavoidable adverse impacts to these resources."[119] The second ground cited was that the project would "result in unavoidable adverse impacts to visual quality in this substantially undisturbed landscape.[120] An additional ground for denial was that "the identified unavoidable and adverse environmental impacts resulting from the project override the possible economic benefits that might be derived from the project."[121] All three of these grounds are very similar to the effects that would be caused by the Proposed Action if constructed at Horseshoe Shoals.

There is another parallel between the Imperial Mine and the Proposed Action that argues for similar regulatory treatment. The Imperial Mine project was to be located within the boundaries of the California Desert Conservation Area (CDCA), an area "designated by Congress in Section 601 of FLPMA [Federal Land Policy Management Act] as a region requiring special management due to its nationally significant resources."[122] The ROD concluded that the impacts of the proposed Imperial Mine project could not be mitigated to the point of meeting the statutory requirement in FLPMA that BLM must prevent "undue impairment" of the public lands in the CDCA.[123]

Similarly, in deciding on CWA's application, MMS must comply with the provisions of the Outer Continental Shelf Lands Act, Section 388 of the EPAct of 2005. That statute provides that in connection with leases, easements of rights-of-way for energy development or related purposes, "The Secretary shall ensure that any [such activity [. . .] is carried out in a manner that provides for-- . . . (B) protection of the environment; . . . (D) conservation of the natural resources of the Outer Continental Shelf; . . . and (K) public notice and comment on any proposal submitted for a lease, easement, or right-of-way . . ."[124]

The Secretary of the Interior should be guided by the regulatory action of his predecessor, applying very similar laws to a project with very similar destructive impacts to a unique area containing a high concentration of extraordinary and interrelated historic properties and

---

[118] Comment letter to Bruce Babbitt, Secretary of the Interior, from the Advisory Council on Historic Preservation, dated October 19, 1999, at 1.

[119] U.S. Department of the Interior, Bureau of Land Management, California Desert Division, "Record of Decision for the Imperial Project Gold Mine Proposal, Imperial County, California," January 17, 2001 (Imperial ROD), at 3.

[120] *Id.*

[121] *Id.*

[122] *Id.*

[123] *Id.*

[124] *Alternative Energy and Alternate Uses of Existing Facilities on the Outer Continental Shelf*, 73 Fed. Reg. 39,376, 39,387 (July 9, 2008)

traditional cultural properties of national significance and critical importance to living Indian communities, and applying very similar policy and legal imperatives, make the same ultimate decision.

G. In Light of the ACHP's Findings, the Proposed Action Does Not Survive Review Under the Corps's 404(b)(1) Guidelines

The April 2, 2010 comments filed by the ACHP setting forth the significant adverse impacts of the Proposed Action on historic properties, aesthetics, and other cultural resources further underscore why the Proposed Action fails to meet the U.S. Army Corps of Engineers' public interest test or the 404(b)(1) Guidelines. The EA/FONNSI is wholly inadequate to address the failure of the Proposed Action to meet these required regulatory tests; a Supplemental EIS is essential.

Specifically, in order to issue a Section 10 or Section 404 permit, the Corps must evaluate the impacts of the proposed activity and intended use on the public interest. The regulations provide that

> ... [a]ll factors which may be relevant to the proposal must be considered including the cumulative effects thereof: among those are ... aesthetics ... historic properties ... recreation ... considerations of property ownership and, in general, the needs and welfare of the people.[125]

As APNS has explained and documented in prior comments to both MMS and the Corps, the Proposed Action fails the public interest test and MMS has not considered this serious deficiency to date.

Similarly, under the Clean Water Act Section 404(b)(1) guidelines, the Corps is required to deny a Section 404 permit if, among other things, the proposed action will "cause or contribute to significant degradation of the waters of the United States."[126] The regulation further provides that findings of "significant degradation" must be based upon appropriate factual determinations and tests required by the regulations "with special emphasis on the persistence and permanence of the effects."[127] Under the Guidelines, among other things, effects contributing to significant degradation include significant adverse effects on recreational, aesthetic and economic values.[128] In determining whether a project has a significant adverse effect on aesthetics, the Corps must consider the following:

> (a) Aesthetics associated with the aquatic ecosystem consist of the perception of beauty by one or a combination of the senses of sight, hearing, touch, and smell. Aesthetics of

---

[125] 33 C.F.R. § 320.4(a).

[126] 33 C.F.R. § 220.10(c).

[127] *Id.*

[128] *Id.*

aquatic ecosystems apply to the quality of life enjoyed by the general public and property owners.

(b) Possible loss of values: The discharge of dredged or fill material can mar the beauty of natural aquatic ecosystems by degrading water quality, creating distracting disposal sites, inducing inappropriate development, encouraging unplanned and incompatible human access, and by destroying vital elements that contribute to the compositional harmony or unity, visual distinctiveness, or diversity of an area. The discharge of dredged or fill material can adversely affect the particular features, traits, or characteristics of an aquatic area which make it valuable to property owners. Activities which degrade water quality, disrupt natural substrate and vegetational characteristics, deny access to or visibility of the resource, or result in changes in odor, air quality, or noise levels may reduce the value of an aquatic area to private property owners.[129]

As the ACHP explains in its comments, the historic properties affected by the Proposed Action are "significant, extensive, and closely interrelated." The ACHP further states that these adverse effects "will be direct and indirect, cannot be avoided, and cannot be satisfactorily mitigated." The ACHP's comments, and their impact on the Corps' ability to issue the required permits, must be considered in a full Supplemental EIS.

IV. Air Quality

The EA/FONNSI states that the new information provided in the Clean Air Act Final General Conformity (FCD) Determination does not affect the validity of the air quality analysis in the FEIS and that the predicted emissions are lower than originally calculated.

In fact, the final FCD conforms to the Clean Air Act (CAA) neither in procedure nor in substance. Not only is in inadequate under the CAA, it is not a sound basis for concluding that the new information, such that it is, does not warrant additional review.

A. MMS Has Not Complied with Binding CAA Procedures

EPA regulations specify in precise and binding detail how to make conformity determinations.[130] Those regulations state that "[a] Federal agency must make a determination that a Federal action conforms to [CAA requirements] in accordance with the requirements of this subpart before the [approval] action is taken.[131]

---

[129] 33 C.F.R. § 230.53.

[130] *See* 40 C.F.R. § 93.150 *et seq.*

[131] 40 C.F.R. § 93.150(b)(emphasis added).

Those requirements include precisely described methods for providing public notice of a draft conformity determination (DCD) and soliciting comment on it. Most notably, the regulations require:

> (a) Upon request by any person regarding a specific Federal action, a Federal agency must make available for review its draft conformity determination ... with supporting materials which describe the analytical methods and conclusions relied upon in making the applicability analysis and draft conformity determination.
>
> (b) A Federal agency must make public its draft conformity determination ...by placing a notice by prominent advertisement in a daily newspaper of general circulation in the area affected by the action and by providing 30 days for written public comment prior to taking any formal action on the draft determination. This comment period may be concurrent with any other public involvement, such as occurs in the NEPA process.[132]

MMS cannot possibly defend the procedures by which the DCD was issued. EPA's regulations quite clearly contemplate a separate proceeding for making a conformity determination, a process that will not be the same as the EIS comment process though it may be "coordinated" with it. Turning to the specifics of the conformity rule, there has been no notice to interested parties of issuance of the DCD, no "prominent advertisement" in a newspaper of general circulation, and no disclosure of analytical assumptions and methods.

Although MMS published a DCD in November 2008 and later included it unaltered as an appendix to the FEIS in January 2009, MMS never gave the required newspaper notice to start the required regulatory comment period.

As a result, APNS lost rights that are important to it, rights, which when deprived, undermine public participation and informed decision-making. Since MMS made no attempt to meet the procedural requirements for a conformity determination when it appended the DCD to the DEIS, APNS understood its inclusion as a merely informational step, and determined that comment would be appropriate when public notice had been given in the required form. APNS raised the need for a conformity determination to be made according to the required procedures repeatedly and consistently in our comments over the last two years, most notably in our comments on the FEIS. APNS FEIS Comments, at 39. MMS never suggested that inclusion of the information in the FEIS was intended to satisfy CAA requirements.

Consequently, APNS, which has played a central role in the permit proceedings from the beginning, will lose fundamental procedural rights that are clearly important to it unless MMS changes its approach.

---

[132] 40 C.F.R. § 93.156(b).

B. The FCD Also Fails to Comply with Substantive Requirements of the CAA

The FCD also fails to comply in substance with applicable legal requirements, due in no small part to the failure to expose its assumptions to public comment and criticism. Three weaknesses in particular stand out.

1. What Level of Emissions will Constructing the Proposed Project Cause?

The DCD concluded that constructing the proposed project will produce nitrogen oxides (NOx) emissions in both Massachusetts and Rhode Island that exceed levels that require a conformity determination. But the FCD relies on emissions estimates dramatically lower than those in the DCD. The DCD found that construction-related NOx emissions caused by the Proposed Project within Massachusetts would be 129 tons. The FCD, on the basis of recalculations never made available for public comment, split these emissions between two years, and estimated them at 42 tons in year 1 and 18 tons in year 2, well below the 100 tons that trigger conformity. Accordingly, the Proposed Project will not be required to take any action to mitigate its Massachusetts emissions, even though it is clear that the area of the project still violates EPA's air quality standard for ozone, to which NOx emissions contribute.

This unpublicized reversal of a key technical judgment most strongly illustrates the legal error that MMS has committed in not inviting public comment on the DCD.

2. The FCD's Promise that Emissions will be "Offset" is Not Credible

The NOx emissions from constructing the proposed project attributable to Rhode Island would exceed 139 tons in the first year of construction even using the adjusted emissions estimates in the FCD. That would trigger conformity requirements for Rhode Island. The FCD admits that the Rhode Island air quality attainment plan does not currently provide for controlling these emissions. To correct that defect, and make the applicant's construction legally permissible, the FCD suggests that these emissions would be offset.

The conformity regulations do allow projects to use offsets to balance out their new emissions, but only under strict conditions. Conformity regulations provide that for purposes of the conformity program:

> *Emissions offsets* ... are emissions reductions which are quantifiable, consistent with the applicable SIP attainment and reasonable further progress demonstrations, surplus to reductions required by, and credited to, other applicable SIP provisions, enforceable at both the State and Federal levels, and permanent within the timeframe specified by the program.[133]

The FCD, like the DCD before it, makes no effort to show that these requirements have been met. It does refer to a pool of Rhode Island offsets on which the Proposed Project might draw. However, like the DCD, it contains literally no discussion of whether those offsets meet the specific requirements of the conformity regulations.

---

[133] 40 C.F.R. § 93.152.

3. The FCDs Projection of Reductions in Vessel Emissions is Not Credible

Despite the FCD's reliance on offsets, the FCD also admits that the required offsets might not be available. If they are not, the FCD suggests several options for reducing emissions from the vessels largely responsible for the NOx emissions. In neither case does it provide any detail to speak of about how this would be done. The FCD states:

> Assuming that Cape Wind is granted the lease for development of its wind energy project, the company will identify, negotiate for, secure, and purchase available [offsets] in Rhode Island. Concurrently with this process, Cape Wind will, if necessary, implement measures to reduce emissions from vessels and diesel engines used in the construction activities. Cape Wind identified the use of a NOx reducing catalyst ... and exhausts gas recirculation ... as potential control technologies. The NOx reductions that could be achieved range from 28 to 56 tons per year ... Cape Wind would have to procure services from companies that either operate equipment with one of these control technologies or agree to terms that include the retrofit of the engines.[134]

The FCD makes clear that the applicant has no idea how to achieve these reductions beyond a general sense that the technology is "potential[ly]" available. It leaves for future determination the type of technology, the vendor, the choice between renting vessels with the technology installed (if there are any) and retrofitting existing vessels, the emissions testing that will be required to verify performance before committing to a technology, and the monitoring requirements to determine in-use compliance.[135]

4. The FCD's Projection of Overall Emissions Reductions is not Credible and is too General to Support a Conformity Determination

Finally, the FCD leaves completely undetermined the extent to which emissions reductions will be obtained from offsets, and the extent to which they will be obtained by emission controls on vessels. Even the FCD concedes that only 56 tons of emissions reductions can be expected from vessel controls. Thus, it is entirely possible that Proposed Project may be unable to meet its conformity obligations if any significant number of the offsets the FCD has identified become unavailable or fail to meet regulatory requirements,

In short, the discussion in the FCD completely lacks the specificity one would expect in an actual compliance plan. It is more an outline for a conformity determination than the conformity determination itself.

Moreover, even if one were to overlook – and one should not – MMS's failure to invite public comment on the DCD, if the FCD is allowed to stand, it would exempt from public comment **all** the critical decisions on actual conformity compliance. The decisions on such

---

[134] FCD, at 9.

[135] FCD, at 9.

central points as whether emissions offsets met the established regulatory requirements, or vessel emission controls had been shown to work, or whether compliance procedures were adequate, would all be made by the regulators themselves without any public input.

This outcome is prohibited by the CAA. EPA's conformity regulations provide that:

> When necessary because of changed circumstances, mitigation measures may be modified so long as the new mitigation measures continue to support the conformity determination. Any proposed change in the mitigation measures is subject to ... reporting requirements ... and ... public participation requirements.[136]

The FCD violates these requirements because it is so generally worded that nothing that the applicant might do in the future would qualify as a "modification" to its terms. This is not a defensible reading of the legal requirements.

V. Avifauna

This document purports to summarize new information received by MMS since the issuance of the FEIS in January 2009, and concludes that the new information does not warrant further review. Not only does the document fail to address major deficiencies in the FEIS and FEIR, the response is also deficient.[137]

A. Migratory Birds Baseline Studies

The EA/FONNSI reaffirms MMS's previous conclusions that the type of radar capable of detecting birds has an inadequate range, would be cost-prohibitive and is incapable of detecting birds from the shore. The EA/FONNSI acknowledges that the migratory bird baseline study issues "investigated by the IG Report" were "relevant to environmental concerns and impacts of the Proposed Action...."[138] The EA/FONNSI claims that there was no reason to "revisit" the failure to conduct the migratory bird baseline studies requested by the FWS, because it had previously determined that the studies were impracticable, cost prohibitive and not likely to produce useful information...."[139]

This single conclusory statement fails to meet any of the requirements established under 40 C.F.R. § 1502.22(a). MMS has provided no support or justification in the EA/FONNSI (or in any other NEPA document related to this project) for its "conclusion" that the cost of obtaining the information would be cost prohibitive.[140] Indeed, given that the overall cost of the project is estimated to be in the range of $1.6-$2 billion, the EA/FONNSI fails to explain or provide any

---

[136] 40 C.F.R. § 93.160(e).

[137] Comments of Dr. Ian Nisbet (Mar. 24, 2010). Attachment 42.

[138] EA/FONNSI, at 11.

[139] *Id.* at 11.

[140] We note that the CEQ regulations uses the term "exorbitant" rather than "prohibitive" in describing how cost to obtain information will be analyzed in determining not to obtain the relevant information.

rationale for the statement. There is no estimate of the cost of the requested study[141] and no analysis of why the cost would be "prohibitive" in the context of this Proposed Action. Absent this information, the EA/FONNSI's conclusions are simply arbitrary and capricious.

Further, MMS ignores the fact that the applicant actually conducted and reported several months of radar studies, both from a jack-up barge on-site and from the nearby shore at Cape Poge. Consequently, additional studies are feasible and would **not** be cost-prohibitive. The applicant itself regarded the information on bird movements tracked from Cape Poge as valuable in providing surrogate information on bird movements over Nantucket Sound close to the proposed project site, including information on birds flying towards or away from the site that would have flown through it. Although the applicant's radar studies were inadequate in scope and reporting, they nevertheless yielded information that could have been extremely useful in assessing collision risks posed to birds by the proposed project. In particular, they clearly demonstrated that the applicant's estimates of the numbers of birds flying through the project area at rotor height were grossly underestimated. MMS's dismissal of these and all other findings from the radar studies was totally unjustified and constituted a fatal flaw in its assessment.

Further, MMS's conclusion that radar capable of detecting birds has an inadequate range and is cost-prohibitive is belied by the activities of other developers. In fact, several projects have conducted or are conducting substantial radar studies. For example, the Winergy Plum Island wind energy demonstration project has installed Plum Island Wind Park - Avian Radar System using the MERLIN system. The Plum Island Wind Park is a privately funded research, development and demonstration wind energy project. The project is located offshore over two miles east of Orient Point off the northeastern tip of Long Island, New York. The MERLIN system will collect one year of data from a shore location on bird activity near three turbines located near shore. The system will be installed onto an offshore met tower for collection of data the second year of the project with full remote system control and data collection.

Similarly, Long Island Offshore Wind Park - GMI used two MARS units to monitor avian activity and migration patterns in the study area. GMI biologists recorded avian observations during the fall and spring migrations. In addition to the onshore avian radar system, an offshore MARS unit collected horizontal and vertical data to study the passage rates, flight directions, altitudes, and area distribution of birds within the proposed wind park. Furthermore, a land based project in Texas, smaller than CWA Project with a 283 MW nameplate capacity, Gulf Wind I, has collected over 2 years of 24 hour data.

Further, even if the EA/FONNSI had satisfied the requirements of 40 C.F.R. § 1502.22(a), there is no attempt to satisfy the requirements of subsection 1502.22(b). The EA/FONNSI contains no summary of existing credible scientific evidence, as required by subsection 1502.22(b)(3) and no attempt to provide an evaluation of impacts based on theoretical

---

[141] The only reference to the cost of the study in the EA/FONNSI is a vague reference to language in the IG Report which "explained in further detail MMS's conclusions that the radar studies would be ... cost prohibitive." EA/FONNSI at 11. However, the only reference to cost of these studies in the IG report is a statement of an avian biologist who concluded that "multiple radars would need to be placed on the tower at a rental cost of 250,000 apiece, which does not include operation and maintenance costs to run the radar 24/7 over three years." IG Report at 13-14.

approaches or research methods generally accepted in the scientific community. The failure to provide any of the analysis and information required by section 1502.22 is a fatal flaw in MMS's conclusion that the studies are not likely to produce useful information. MMS should prepare a supplemental EIS which addresses this issue by fully complying with the requirements of 40 C.F.R. § 1502.22.

B. Avoidance of Wind Turbines by Birds

In its EA/FONNSI, MMS acknowledges that it failed to address the issue "of the sensitivity of the models used in the FEIS to small errors" and admits that such information is "relevant to the Proposed Action."[142] The EA/FONNSI also asserts that "currently available technology," which would provide accurate information exists, but it would be "impracticable, cost-prohibitive and unlikely to provide [more] reliable information ... than the studies discussed in the FEIS." Then, citing 40 C.F.R. 1502.22(a), the EA/FONNSI concludes that any the new information (i.e., the sensitivity of the modeling to small errors) would "not result in any significant changes to the conclusions in the FEIS about collision risk to birds."[143] There is no further information provided to support this bald conclusion. Even though the EA/FONNSI cites to 40 C.F.R. § 1502.22(a) as support for its conclusion, there is no attempt whatsoever to comply with the requirements of that regulation. Indeed, if MMS truly believes that section 1502.22(a) applies to this topic, then either the missing information would be supplied, or the requirements of section 1502.22(b) would be fulfilled. Given that the EA/FONNSI contains no summary of existing credible scientific evidence,[144] and no evaluation of impacts based on theoretical approaches or research methods generally accepted in the scientific community,[145] MMS's reliance on 40 C.F.R. 1502.22(a) is misplaced. MMS should delay any decision on the proposed project pending the preparation of a supplemental EIS which fully complies with the requirements of section.1502.22 on this issue.

C. Energy Demand by Birds

MMS cites new information on increased energy demands on birds that may be forced to divert around a wind power facility, but concludes that this new information indicates that energy demands may have been overestimated in the FEIS.[146] This conclusion is based on MMS's premise that "[b]ecause the Proposed Action project site is located more than 5 miles from shore, it is not located between breeding/nesting sites and offshore foraging sites." This assertion is illogical, incompetent and patently incorrect. The FEIS cited at length the applicant's own studies demonstrating that terns, including Roseate Terns, and other waterbird species commute through the project site on a regular basis. In my previous comments, I calculated that terns probably make more than 100,000 transits of the site each year. I also calculated from CWA's radar reports that hundreds of thousands of birds, including terns, transit

---

[142] EA/FONNSI, at 11.

[143] *Id.* at 12.

[144] 40 C.F.R. § 1502.22(b)(3).

[145] *Id.* § 1502.22(b)(4).

[146] Comments of Dr. Ian Nisbet (Mar. 24, 2010). Attachment 42.

the area each month. It is patently ridiculous for MMS to assert in this EA/FONNSI that birds would not pass through the area and hence are not subject to diversion.

D. MOU – MMW/FWS

The EA/FONNSI asserts that the June 4, 2009, FWS/MMS MOU on migratory birds "provides a new programmatic approach that will be applicable to future projects such as the Proposed Action, but does not raise issues, identify impacts or lead to conclusions different from those reached in the FEIS regarding the proposed impact of the Proposed Action on birds or the adequacy of the proposed mitigation and monitoring plan."[147]

The EA/FONNSI discussion of this issue is, in fact, incorrect and self-serving. In fact, the existence of the new "programmatic approach" (Study AT-10-01) under the MOU confirms that additional information on bird impacts is now available, and was available long before the EA/FONNSI was released. Under 40 C.F.R. 1502.22, the information that would be obtained through the MOU approach, an approach that MMS recommends, must be obtained and incorporated into the NEPA review. Rather than have no effect on the process for the record, the MOU therefore confirms that more work must be done before any decision other than lease denial can be issued.

The claim that the bird and bat monitoring plans are sufficient is divorced from the reality of the record. Multiple parties have criticized that plan as inadequate. Nothing has been done to cure these deficiencies. Moreover, even though the EA/FONNSI cites to the IG Report on the MOU, it conveniently ignores the IG Report's critical discussion of that plan.[148] In that Report, FWS confirmed that the Bush Administration's rush to complete the review process for the Proposed Action before the end of its term compromised the monitoring plan.[149] In particular, the FWS noted the serious flaws in the plan caused by the failure to obtain peer review. Because nothing has been done to cure theses defects, the monitoring plan cannot serve as a basis for providing the legally required level of protection to birds and bats.

With respect to the MOU itself, the EA/FONNSI overlooks the deficiencies in that agreement. The MOU purports to implement President Clinton's Executive Order on Migratory Birds, Number 13186. In fact, the MOU falls substantially short of meeting that requirement.

Executive Order (EO) 13186, *Responsibilities of Federal Agencies To Protect Migratory Birds*, was issued by President Clinton to further to purposes of the Migratory Bird Treaty Act[150], and to direct executive departments and agencies to take certain actions to implement the Act.[151] Under the EO, federal agencies are required to enter into a Memorandum of Understanding

---

[147] EA/FONNSI, at 13.

[148] This issue is discussed in greater detail in the Alliance's response to the IG's Report, submitted separately and hereby incorporated by reference.

[149] *See* IG's Report, at 9-17.

[150] 16 U.S.C. §§ 703 *et seq.*

[151] 66 Fed. Reg. 3,853 (Jan. 17, 2001).

(MOU) with the FWS outlining how the agency will promote the conservation of migratory birds. As discussed below, the FWS/MMS MOU fails to meet the standards of the Order.

EO 13186 was signed during the final days of the Clinton Administration. Under the EO, each federal agency taking actions that have, or are likely to have, a measurable negative effect on any migratory bird population, is directed to develop and implement, within 2 years, a MOU with FWS to promote the conservation of those populations. The EO directs agencies to establish protocols for implementation of the MOU and reporting accomplishments, and sets forth a series of specific orders for the agencies to employ, as practicable:

- Integrate bird conservation principles, measures, and practices into agency activities, and minimize to the extent practicable the impacts of agency actions on migratory bird resources;

- Restore and enhance migratory bird habitat;

- Prevent or abate the pollution or harmful alteration of the environment for the purpose of migratory bird protection;

- Design migratory bird habitat population conservation principles, measures, and practices, into agency plans and planning process, and coordinate with other agencies and non-federal partners;

- As possible, ensure that agency plans and actions promote the programs and recommendations of comprehensive migratory bird planning efforts;

- Ensure that environmental analyses of federal actions, such as those required by NEPA, evaluate the effects of agency actions and plans on migratory birds;

- Give FWS notice prior to conducting an action intended to take migratory birds, or report annually to FWS on the number of individuals of each species intentionally taken during any agency action;

- Minimize intentional take of species of concern;

- Within agency authority, control the import, export, and establishment in the wild of species that may harm migratory bird resources;

- Promote the exchange of resources and information related to the conservation of migratory bird resources;

- Provide training and information to appropriate agency employees on methods and means of avoiding or minimizing the take of migratory birds, and conserving and restoring migratory bird habitat;

- Promote migratory bird conservation in international activities;

- Recognize and promote the recreational values of birds; and

- Develop partnerships with non-federal entities to promote bird conservation.

Additionally, the EO outlines agency responsibilities with regard to incidental take, and how those responsibilities should be addressed in the MOU:

> [The agency should] identify where unintentional take reasonably attributable to agency actions is having, or is likely to have, a measurable negative effect on migratory bird populations, focusing first on species of concern, priority habitats, and key risk factors. With respect to those actions so identified, the agency shall develop and use principles, standards, and practices that will lessen the amount of unintentional take, developing any such conservation efforts in cooperation with the Service. These principles, standards, and practices shall be regularly evaluated and revised to ensure that they are effective in lessening the detrimental effect of agency actions on migratory bird populations. The agency also shall inventory and monitor bird habitat and populations within the agency's capabilities and authorities to the extent feasible to facilitate decisions about the need for, and effectiveness of, conservation efforts.

The MOU between FWS and MMS does not come close to meeting these standards. Responsibilities are broken down between mutual obligations, obligations of MMS, and obligations of FWS. Under the MOU, MMS has the responsibility to:

> 3. Expand the current MMS practice of including migratory birds in the scope of environmental review, with emphasis on species of concern. This includes reviewing, identifying, and evaluating the effects of proposed actions on migratory birds, including potential take and degradation of habitat. Consider designing, implementing, and supporting studies to assist in MMS environmental reviews and in planning the MMS studies program, to the extent practicable.
>
> a. Expand the current practice of evaluating reasonable alternatives in environmental reviews to avoid or minimize adverse effects to migratory birds or degradation of their habitats. This includes: 1) identifying information needs related to OCS renewable energy, oil, gas and other mineral development using the established planning and priority setting procedures established under the Environmental Studies Program. The MMS's Environmental Studies Program defines information needs and implements studies where feasible, designed to assess the effects of MMS-approved OCS activities on the human, marine, and coastal environments within MMS jurisdiction; 2)implementing studies to develop practices to avoid or minimize impacts to migratory birds; and 3) implementing studies to determine how to improve evaluation of impacts;

b. Assess and estimate the effects of proposed actions on migratory birds and their habitats, through the project planning process, including the NEPA. Use best available demographic, population, and habitat data in the assessment of effects upon migratory birds. If sufficient data are unavailable, acquire necessary data by working with Federal, State, and other partners (e.g., work with FWS to conduct offshore bird surveys);

c. Engage in early planning and scoping with the FWS to proactively address migratory bird conservation, and initiate appropriate actions to avoid or minimize impacts to migratory birds as a result of a proposed action. When developing the list of species to be considered in the planning process, it should be noted that current lists of species of concern are not necessarily inclusive nor accurate for many offshore birds because of the lack of information on their populations, distribution, and trends;

d. Inventory and monitor migratory birds and their habitat within the agency's capabilities and authorities to better understand the need for, and effectiveness of, conservation efforts tied to projects under the MMS authority;

e. Maintain and enhance efforts to prevent or abate the pollution and degradation of migratory bird habitats directly or indirectly resulting from MMS-regulated activities by including appropriate stipulations to leases, conditions on approvals, and compliance monitoring;

* * *

5. Identify, in coordination with the FWS, MMS-issued OCS leases and other areas for support facilities that have the potential to adversely affect migratory bird populations (range-wide or important regional/local populations), including breeding, migration, or wintering habitats. The MMS shall develop and implement, in cooperation with the FWS, reasonable and feasible conservation measures that would avoid or minimize adverse impacts to migratory birds or enhance the quality of habitat used by migratory birds.

a. With respect to those actions so identified to potentially have adverse effects on migratory bird populations (as described above), the MMS shall provide for sequential mitigation, as defined by 40 C.F.R. § 1508.20 and in accordance with Service Mitigation Policy (46 FR 7644). This may include an applicant or lessee establishing funds or other off-site mitigation for conservation to compensate adverse impacts to migratory birds through habitat restoration or enhancement. However, the appropriateness and practicality of

implementing any specific conservation measure will be determined on a case-by-case basis.

b. The effectiveness of measures considered necessary to minimize impacts to migratory birds will be monitored and reviewed on a regular basis. The MMS will incorporate new information regarding their efficacy and consider the need for modifications or additions to the measures. The MMS will seek the cooperation of the FWS in evaluating their effectiveness.

This list of actions does not measure up to the EO. Most important, while the MOU contains basic language regarding the incidental take of migratory birds, it falls well short of what is required. The EO requires agencies to, with respect to actions resulting in incidental take, "develop and use principles, standards, and practices that will lessen the amount of unintentional take." The MMS MOU offers a significant number of proposed studies, future coordination efforts, and other suggestions. However, it fails to offer a single concrete suggestion for the minimization of incidental take that agency project managers can use to apply to proposals. The MMS MOU does not develop or call for the use of a single principle, standard, or practice meant to address incidental take, and thus fails to properly implement the EO. It certainly fails to address enforcement. These deficiencies in the MOU, as they relate to violations of law that will result if the CWA project is granted a lease, are discussed in the 60-day letter that the Alliance has joined other groups in signing.[152]

Finally, the EA/FONNSI, the MOU, and the IG's Report beg the question of how MMS can take any action, other than lease denial, given the significant number of protected migratory birds that are likely to be taken illegally. This issue has been addressed in detail in the record. It is also summarized in the 60-day notice of intent to sue. Indeed, the FWS Deputy Division Chief for the Division of Migrating Bird Management concedes this point in the IG's Report, where he states that FWS could not legally provide such a release of liability to an agency because there is currently no regulatory framework in place that would allow FWS to "exempt" an agency from provisions of the MBTA.[153] As noted in the 60-day letter, MMS is not only violating the MBTA by failing to address the migratory bird incidental take problem, the issuance of a lease would violate the Administrative Procedure Act as well, a cause of action that can be brought by third parties.

In addition to its "drop back and punt" approach to incidental take, the MOU fails to address other important aspects of the Clinton EO. For example, the EO requires agencies pursuant to their individual MOUs to "restore and enhance the habitat of migratory birds" as practicable. Echoing the same failure to meaningfully address incidental take, the MOU merely provides that MMS and FWS collaborate at some unknown time to identify "best practices" for conserving and restoring bird habitats. And the only provision in the MOU arguably applicable to the EO's habitat obligations is equally weak: MMS promises to develop and implement "conservation measures" to "enhance the quality of habitat used by migratory birds." However,

---

[152] Attachments 27, 28, and 30.

[153] IG Report, at 20.

a careful reading reveals several flaws that underscore the MOU's overall non-compliance with the EO. First, MMS inappropriately restricts its "habitat restoration and enhancement" obligations under the EO by waiting until FWS is available to "collaborate." Second, the MOU fails to mention "restoration" at all for any resulting conservation measures. And third, even if such measures are developed, their implementation will be on a "case-by-case" basis. In sum, the MOU fails to provide any specific measures to comply with the EO, and even those that arguably touch upon its mandates are limited to unenforceable, ineffective, and illusory promises of migratory bird conservation. To say the MOU represents a "programmatic approach" to addressing impacts to migratory birds and their habitats is misleading and disingenuous.

E. The Failure to Require Project Shutdown to Protect Birds Is Based On Insufficient and Outdated Information

As discussed in detail in the record, MMS unlawfully dictated that FWS remove from the incidental take statement in its biological opinion the requirement for project shutdown during limited periods. It did so by accepting, without independent analysis, the applicant's superficial and qualitative assertion that to do so would impede or prevent CWA from obtaining financing. The unlawful action is addressed in a 60-day notice of intent to sue under the Endangered Species Act. In addition, the enclosed new information technical report from Dr. Jonathan Lesser exposes the fallacy of the applicant's argument and MMS's willingness to accept it. This new information requires NEPA review and the establishment of the shutdown requirements. The EA/FONNSI is completely silent on this issue, and thus the record remains deficient on this critically important requirement for protecting birds.

VI. Marine Mammals

The EA/FONNSI compounds the deficiencies in the FEIS in discussing the impact of the energy plant on marine mammals and other marine species.

As previously discussed in APNS comments, a lease cannot be issued until after the Marine Mammal Protection Act (MMPA) incidental take authorizations MMS concedes are necessary have been issued. The courts have confirmed that, when it is known that marine mammals will be taken by an action seeking federal approval, the underlying action cannot be approved until the MMPA take authorizations have been issued.[154] The form or level of take is irrelevant.

For the Proposed Action, MMS appears to take the position that the lease is all-encompassing and that no further authorizations are required (contrary to the shared approach dictated by the OCS renewable energy regulations) before the lease is issued. In this regard, the Proposed Action is very different than the approach used for oil and gas activities that result in incidental take of marine mammals, where separate requirements for approval of activities occur at the seismic, exploration and development stages. Each of those discrete approval steps is associated with separate marine mammal and ESA take authorizations. Because MMS asserts that the act of lease issuance is a sufficient basis for the applicant to proceed without further

---

[154] *Kokechik Fishermen's Ass'n v. Secretary of Commerce*, 839 F. 2d 795, 802 (D.C. Cir. 1988), *cert. denied sub nom., Verity v. Center for Envt'l Educ.*, 488 U.S. 1004 (1989).

government approval, the EA/FONNSI is legally incorrect in asserting that all that is necessary is that "a copy of the MMPA authorizations must be provided to MMS prior to commencement of any activities allowed under any MMS-issued lease..."[155] Until the applicant applies for and obtains a MMPA incidental take authorization, no lease can be issued.

In addition to this significant legal problem, the EA/FONNSI (and, by extension the FEIS and the NMFS biological opinion (BiOp)) are insufficient and flawed for their failure to consider relevant information and properly analyze impacts. Significant additional deficiencies in this regard are as follows:

A. Failure to adequately address exposure to risk of vessel collisions

The EA/FONNSI, and the NMFS BiOp, make the same mistake of asserting that "in general, right whales can be anticipated to be in Massachusetts waters from December through July"[156] This is an old characterization, and it is not based on the best available information. There are passive acoustic monitoring buoys in Cape Cod Bay, Stellwagen Bank and the Great South Channel that have recorded right whales year round.[157] These buoys are operated by Cornell University and are government funded. There is no monitoring south of Cape Cod (though there was some done in Long Island Sound). But right whales can be found here year round.

Both construction and work/maintenance vessels will be coming from Quonset Point RI, and the BiOp and MMS NEPA analysis state that "as explained throughout this document, whales are not expected to occur in the project footprint or along the cable route." If, however, vessels are coming from Quonset Point, they must cross the entrance to Buzzards Bay, and the record does not address the multiple sightings of right whales transiting the Cape Cod Canal (which can only be done by entering Buzzards Bay). Instead, MMS (and NMFS) mistakenly focus their analyses of sightings/exposure on the project site in the Sound (the "footprint").

The following reports have not been considered. First, the NMFS Sightings Advisory System (SAS) reports that in 2004, opportunistic sightings in Nantucket Sound; 2005 opportunistic sighting up against the inside of the Island of Nantucket; and 2006 opportunistic sightings along/near Rhode Island Route.[158],[159]

The NE Aquarium also states that there are sightings of whales in the Canal (including a mother /calf pair in 2005.[160] This is also cited in a "response to comments" section on the Mirant Power Plant in the Canal.[161] This report states that the Center for Coastal Studies

---

[155] EA/FONNSI, at 13-14.

[156] BiOp, at 71.

[157] <http://www.listenforwhales.org/netcommunity/Page.aspx?pid=430>.

[158] <http://rwhalesightings.nefsc.noaa.gov/>.

[159] *See also* <http://www.capecodonline.com/apps/pbcs.dll/article?AID=/20081204/NEWS/812040315/-1/rss01>.

[160] <http://adoptrightwhales.blogspot.com/2009/02/why-are-whales-missing.html>.

[161] *See* <http://www.epa.gov/ne/npdes/mirantcanal/pdfs/Canal-RTC-SectionXIII.pdf>.

estimates that the whales enter the Canal "once every few years." This section of the Mirant report also mentions other whale species.

The NMFS surveys for the sightings advisory system (SAS) do not go into the Sound and do not look at Buzzards Bay either. Further, the survey flights for the SAS only operate January – June, so no winter sightings (including that on 12/08 in the Canal) would be in the "official" NMFS reports. And the fact that there are no systematic surveys (and that there are opportunistic sightings) supports the position that reporting activities have not been adequate. The EA/FONNSI and BiOp also fail to consider the Dynamic Management Maps that are also available on the NMFS SAS website, and that include a few dynamic management areas that extend into the Sound. Indeed, in March of this year, NMFS designated a right whale dynamic management area for the Sound itself, and important indication of the potential presence of critically endangered right whales in Nantucket Sound.

The BiOp states that "as no whales are expected to occur along the routes where project vessels will transit or in the project footprint where construction and maintenance vessels will occur, increase in vessel traffic attributable to the proposed project will not increase the likelihood of a whale being struck by a vessel. As no whales are likely to occur where project vessels will be operating, NMFS has determined that the likelihood of an interaction between a project vessel and a whale is discountable."[162] Considering that neither NMFS nor MMS have thoroughly evaluated the sightings in the area from Quonset RI to Nantucket Sound (i.e., there is no discussion of non-systematic sightings and they have not tried acoustic monitoring), it seems premature to decide there is no likely increase in exposure to (and risk from vessels).

In addition, crew vessels will be running at 21 knots, which is faster than the 10 kts that NMFS recommends in areas of risk. Though they will have posted lookouts, these vessels may not be adequate to sight whales or turtles. For example, a Stellwagen Bank Sanctuary research vessel, of a similar design to a standard crew vessel and with more than one posted lookout, hit and seriously injured a right whale in 2009. Thus, the proposed mitigation plan is not adequate, particularly since speeds are supposed to be lower near Buzzards Bay in the spring and <60 foot crew vessels (like both the project's crew vessels and the Sanctuary vessel) are exempted from complying with these speed restrictions.

B. Noise Effects and Right Whales

The BiOp and EA/FONNSI purport to address sound levels. The BiOp, for example, states that noise will be over the 160dB threshold out to 3.4 miles. It also states that "the nearest whale sighting was approximately 18 km from the project site." But there is no citation provided for this conclusion and it appears, from the discussion provided above, to be wrong. Further, the noise will be audible at distances greater than 3.4 km (though at sound levels less than 160 dB) and these lower sound levels might still be enough to make whales want to re-route their travels to avoid continual noise even if the noise is not at a "startle" level of 160 dB. For example, bowheads have "deflected" their migrations at noise levels during seismic exploration that are below 160 dB and may begin to "deflect" at distances "on the order of 35km."[163] If right whales

---

[162] BiOp, at 82.

[163] *See* response to question 6, <http://www.nmfs.noaa.gov/pr/pdfs/permits/shell_openwater_iha_addendum1.pdf>.

move further offshore to avoid inshore noise in the Sound, they may be placed at greater risk of encountering ships or fishing activity that are documented to be further offshore. That may increase their risk and the possible negative impact of displacement of migration further offshore is not discussed. Neither the BiOp nor the EA/FONNSI address this important issue.

C. Other ESA-listed Whales

Other species have been through the Canal as well (thus going thru Buzzards Bay), including humpback whales.[164] The NMFS sightings database is biased against other species, thus surveys are for detecting right whales and do not generally include other species. NMFS survey effort is directed to determining where right whales are during the "high use" time and then directing dynamic management efforts (e.g., slowing ships) for any areas with aggregations of right whales. The presence of other endangered whales in the Sound is well documented, however, and neither the BiOp nor the EA/FONNSI account for this information.[165]

D. Sea Turtles

The EA/FONNSI and the BiOp need to be revised to reflect the recent proposal to uplist loggerhead turtles to endangered from threatened. Like right whales, this critically endangered species requires maximum protection. The EA/FONNSI, and the NMFS BiOp, fail to provide this level of protection, and do not even include the necessary information. In addition to the need for revision due to the proposed uplisting, it is insufficient to rely on 10-year old data on leatherback entanglement. Moreover, as noted previously, lookouts are not adequate to guard against collisions when boats are traveling as fast as 21 knots.

VII. Competing Uses in the Vicinity of the Proposed Action

A. Navigation Features

The EA/FONNSI improperly concluded that the information provided by the USCG and discussed in the IG Report is consistent with the analysis of navigation impacts in the FEIS; therefore, the information is not deemed significant and will not change or add to the discussion of environmental effects in the FEIS.[166] In fact, the drafters of the EA/FONNSI must not have

---

[164] *See* <http://www.epa.gov/ne/npdes/mirantcanal/pdfs/Canal-RTC-SectionXIII.pdf>.

[165] *See* <http://www.mvgazette.com/article.php?23128>; and <http://www.ccchfa.org/programs/documents/2009BOATERSGUIDEwebfinal.pdf>.

[166] The FEIS includes a "Report on the Effect of Radar Performance of the Proposed Cape Wind Project" and an "Advanced Copy of Findings and Mitigation" from USCG, *see* Appendix M, which concludes that the Proposed Action could result in moderate impacts on navigation safety, due to radar interference resulting from the proposed installation of WTGs. The study, commissioned by the USCG, documents the challenges for radar observers: USCG confirmed that it will be more difficult - though not unreasonably so - for vessels to distinguish targets within the wind farm. The radar study also points out that radar interference decreases with decreasing distance to the radar; in other words, the objects that a vessel operator would be most concerned with - those closest to his location - show up clearly on radar, while those objects further away and therefore of lesser concern are intermittently distorted. While there is disagreement over the severity of the interference, the radar study discussed in the FEIS concludes that interference is unavoidable, it is moderate, and it can be managed with prudent operation of any vessel in accordance with the collision regulations.

read the IG's analysis of the USCG process; it provides a devastating analysis of a process that ignored established rules for public safety, departed dramatically from past USCG practice, and fundamentally misconstrued the law. MMS can in no way rely on such a flawed USCG process.

While the EA/FONNSI confirms that the Proposed Project would cause radar interference for marine navigation, it incorrectly dismisses this as unavoidable and states that it can be managed with prudent vessel operation. It also mistakenly places the burden on marine users rather than on the developer through possible avoidance by relocation of the project to an alternative site. As has been stated by numerous marine stakeholders and is confirmed by the APNS correspondence with the USCG, the intent of section 414 was not to place the burden on mariners, but rather to impose terms and conditions for the wind energy facility operator. For example, a Passenger Vessel Association (PVA) 12-3-08 memo on the legislative history of section 414 of Public Law 109-214 states, "By enacting section 414, congress clearly expected the Coast Guard to mandate terms and conditions that will provide for safe navigational use. Section 414 does not require, anticipate, or allow a balancing act between navigational safety and project development." The PVA memo goes on to state that "the Coast Guard's mandate is to protect navigational uses, not allow project development at the expense of mariners." It concludes by stating that "the reasonable terms and conditions are to be imposed on and adhered to by the operator of the wind energy facility. Section 414 does not contemplate impositions on or requirements for the operators of ferries and other vessels." Thus, the conclusion that the risks posed to mariners from the proposed project could be managed with prudent vessel operation mistakes the Coast Guard's obligations.

Moreover, the new information on which the EA/FONNSI relies – that is, the information addressed in the IG's report and provided by the USCG – is inaccurate. The IG Report addressed complaints that MMS failed to adequately address impacts on navigation safety and was prepared to approve the Proposed Action prior to receipt of the USCG's terms and conditions to mitigate these impacts. On June 24, 2009, months after the release of the FEIS, the USCG officially informed MMS that the Proposed Action will: 1) have a moderate impact on navigation safety, but sufficient mitigation measures are available to reduce risk to an acceptable level; and 2) have negligible impacts to Coast Guard missions, and may in some circumstances facilitate the success of certain missions. These two conclusions are based on a flawed simulation and analysis, in that the traffic levels considered in the Coast Guard's model do not match the daily vessel population and activity in, and adjacent to, the footprint of the Proposed Action. In fact, based on review by radar experts, the probable effects on navigation radar are that the Proposed Action will increase the risk of collision for users of Nantucket Sound. There are no "significant mitigation measures" that will reduce risk to an acceptable level.

Furthermore, the EA/FONNSI fails to correct the IG report's complaints that MMS failed to adequately address impacts on navigation safety. The cover letter for the IG report clearly states that the concerns of all of the major transportation interests in the area of the proposed project have not been addressed. Her January 29, 2010, letter to Secretary Salazar confirms "that several transportation entities located in the CWA Project area, including all three local airports and the two major ferry operators, feel their concerns and comments about the impact of the project to the navigational safety of the area were not adequately considered by MMS." A supplemental EIS is necessary to address these complaints for entities transporting over 3 million

passengers per year through Nantucket Sound and operating 400,000 flights per year carrying millions of passengers over the Sound.

Finally, even if the approach adopted by MMS and the USCG were appropriate, the conclusions in the EA/FONNSI are inconsistent. The EA/FONNSI states that the USCG's final assessment determined that no specific mitigation measures are required beyond the terms and conditions submitted to MMS for the FEIS. However, in the absence of specific mitigation measures, there is no means of ensuring navigational safety and no opportunity for public review of these mitigation measures before they are put in place. Indeed, potential measures identified include: the creation of a specially marked channel through the turbine array, creation of routing measures such as the two-way route currently in use in Buzzards Bay, and/or creation of a Regulated Navigation Area to govern or manage vessel activity. The FEIS does not take into account the environmental impacts associated with these reasonably foreseeable measures. "Specially marked channels" and prescribed routing could alter historic ferry routes with the likelihood of increasing transit time, fuel use, and crew costs.[167] In the absence of project denial or relocation to a better site such as STI – which has the support of marine navigation interests including the ferry operators, commercial fishing organizations, and local marinas - it is the responsibility of MMS to ensure that mitigation measures are specified and evaluated for their environmental impacts.

B. Airport Facilities – FAA Hazard Determination

On February 13, 2009, the Federal Aviation Administration (FAA) issued a "Presumed Hazard Determination" (PHD) for the Proposed Action. The PHD determined that the Proposed Action creates a hazard to air navigation. FAA is in the process of conducting aeronautical studies to determine if the Proposed Action can be changed in order to eliminate the air hazard it currently poses. The EA/FONNSI acknowledges that the information concerning possible hazards to air navigation is relevant to the analysis of adverse effects to the human environment.[168] The EA/FONNSI also notes that the FAA is in the process of completing its study of the issues. However, despite acknowledging that the information that is relevant to the analysis of adverse environmental effects is missing, and that the information is obtainable (the EA/FONNSI admits that the FAA is currently in the process of conducting a study of adverse effects to air navigation and that it will be completed soon), the EA/FONNSI concludes that the information is not needed because "CWA could not begin construction under the proposed action until CEA's receipt of the FAA's final determination on whether a hazard exists and compliance with any resulting mitigation measures."

The EA/FONNSI's conclusion on the need to consider the information being developed by the FAA relating to adverse environmental impacts violates the primary premise of 40 C.F.R. 1502.22, i.e., if the information is "essential to a reasoned choice among alternatives, and the overall costs of obtaining it are not exorbitant, the agency **shall** include the information in the

---

[167] Of course, none of the above deals with the "taking" of 25 square miles of productive fishing grounds by making the area inaccessible to mobile gear fishermen.

[168] EA/FONNSI, at 18.

environmental impact statement."[169] Here, the MMS simply chooses to ignore the information based on an erroneous theory that by preventing any construction of the approved project until the results of the FAA study are factored into the final design of the project, MMS has somehow satisfied all requirements of NEPA, apparently including compliance with 40 C.F.R. 1502.22. However, the clear absence of finalized information on impacts to air navigation, and the express acknowledgement that the missing information is in the process of being developed by the FAA creates a prima facie example of the applicability of 40 C.F.R. 1502.22 to an agency's NEPA obligations. The only legally defensible course of action by the MMS in light of the clear lack of final information relating to hazards to air navigation resulting from the project is to wait the brief period of time until the FAA completes its study. Once FAA issues its final determination, MMS must then either deny the project if a final hazard determination is made, or prepare a supplemental EIS which addresses the impacts determined by the FAA study, together with any changes to the applicant's proposed project required mitigation measures developed by the FAA to avoid the creation of a hazard to air navigation.

The EA/FONNSI also misstates the information that was available to MMS at the time of the release of the FEIS. The EA/FONNSI states that at the time of publication of the FEIS, the FAA had not issued its final determination and therefore, there were no conclusive statements in the FEIS concerning impacts to aviation safety. This is false as a PHD had been issued. Furthermore the FEIS completely misrepresented the aviation safety issue by classifying impacts to aviation safety as minor to negligible and by including obsolete FAA information.

The FAA had provided its PHD to MMS prior to publication of the FEIS. Not only was the PHD ignored in the FEIS, an obsolete, no hazard determination was included. The IG Report states "it should be noted that MMS did include FAA's previous findings that the project would: 'have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities' in the final EIS that was published on January 16, 2009."

The FAA PHD was issued on February 13, 2009. The IG Report states that the FAA notified MMS of the PHD by phone on January 14th and by email on January 15th. Although the FEIS had already been delivered to EPA at this time, MMS stated in an interview in the IG Report that the EIS could be held back from publication in the Federal Register scheduled for January 16, 2009, and that after release of the FEIS, MMS could issue a supplemental EIS. Neither of these actions was taken despite a finding of radar interference to air traffic control and the resulting issuance of an actual PHD by the FAA. The IG report agent noted "the final ES was published in the Federal Register on January 16, 2009 without any indication that the FAA would be issuing a presumed Hazard Determination for the project."[170]

In addition to its failure to comply with 40 C.F.R. § 1502.22 in considering possible impacts to air navigation caused by the project, the MMS's conclusion that it need not wait for the results of the FAA's study of hazards to air navigation, and possible mitigation measures designed to eliminate the hazard, presents a fatal flaw in its NEPA analysis. The EA/FONNSI is

---

[169] 40 C.F.R. 1502.22(a)(emphasis added).

[170] IG Report, at 31.

remarkably candid in admitting that information about adverse impacts from the Proposed Action "to the safe and efficient use of navigable airspace by aircraft and on the operation of air navigation facilities" is relevant to MMS's decision on the proposed project.[171] The MMS is equally candid in disclosing that it has no expertise in assessing possible impacts on air navigation and must rely on the FAA to assess that issue.[172] However, in the EA/FONNSI, MMS states that no supplemental EIS is needed to consider the final results of FAA's assessment of impacts on air navigation because the FAA's hazard determination is "a presumption to preserve the status quo." This "presumption to preserve the status quo" leads MMS to conclude that none of the FAA's factual findings and determinations need to be disclosed as part of an EIS for the proposed project. As outlined below, MMS's fractured definition of preservation of status quo under NEPA, and its consistent refusal to consider impacts to air navigation based on a misplaced reliance on the FAA to consider environmental impacts of the proposed project caused by changes in air navigation patterns present two fatal flaws that can only be eliminated through a supplemental EIS after the FAA finalizes its air hazard analysis and determination.

1. The Status Quo is Only Preserved by Delaying any Decision on the CWA Application Until FAA Issues its Final Air Hazard Determination and MMS Publishes a Supplemental EIS Addressing the FAA's Determination

A foundational requirement of NEPA is that agencies should take no action to approve or undertake a proposed project until all reasonably foreseeable environmental impacts have been considered in an EIS or EA. Until all facts that are relevant to the analysis of environmental impacts are known, an agency may not proceed to a final decision. Under NEPA the "status quo" to be preserved in the absence of all relevant facts is no final agency action on a proposed project. Thus, the "status quo" for the Proposed Action is no action by MMS on the application. However, as indicated in the EA/FONNSI, MMS clearly intends to take final action on the Proposed Action, even though it has acknowledged that it will take that action without all of the relevant facts about hazards to air navigation and possible mitigation measures needed to eliminate hazards. The EA/FONNSI claims that the status quo is preserved because the applicant may not undertake construction until FAA has completed air hazard navigation process and has made mitigation recommendations. The only valid means to preserve the "status quo" under NEPA, when relevant facts remain unknown, is not to take final action on the Proposed Action.

In addition, the EA/FONNSI concludes that no supplemental EIS is necessary based on the mistaken belief that the "determination is a presumption serving to preserve the status quo until FAA completes their study" and thus, "the new information cannot be characterized as significant." This is wholly incorrect according to the IG Report. While the public notice issued on April 25, 2007, was a default finding while aeronautical studies were underway, the actual PHD issued on February 13, 2009, was the result of FAA review culminating in an actual finding of physical or electromagnetic interference. It is not a presumption; nor is the FAA conclusion insignificant. The February 13, 2009, PHD stated that the FAA found that each of the 130 structures "exceed obstruction standards and/or would have an adverse physical or

---

[171] EA/FONNSI, at 17.

[172] *See* IG Report, at 29.

electromagnetic effect upon navigable airspace or air navigation facilities." This new information alone requires a supplemental EIS.

2. Impacts to Safe Navigation of Airspace Determined by the FAA's Final Air Space Hazard Determination Must be Considered in a Supplemental EIS.

The need to delay a final decision pending a full analysis of FAA's final hazard determination (including mitigation measures required by that determination) in an EIS is bolstered by the fact that FAA does not subject its final air hazard determinations to any form of NEPA analysis. Yet, as MMS acknowledges, FAA's final air hazard determination may require CWA to change the footprint or height of the project in order to mitigate hazards to air navigation. The possible environmental impacts caused by changes to the physical layout and specifications of the project must be analyzed in a supplemental EIS before MMS makes a final determination. The possible mitigation measures may result in substantial changes to the project. For example, to reduce radar clutter, the FAA may require that the height of the turbines be reduced. To improve safety under visual flight rules, the FAA may require that turbine-free flight corridors be established within the footprint of the project in order to ensure that aircraft can safely operate between the airports in the vicinity of the project. Any of these changes to the project configuration would require additional analysis of environmental impacts of the reconfigured project, and that analysis must be factored into any final decision on the application.[173]

Another problem with the EA/FONNSI is that it is biased toward an ultimate determination of no hazard by the FAA. The EA/FONNSI states that if "the FAA concludes a hazard exists, it would then, if possible develop mitigation measures to reduce or eliminate such a hazard." It also states "the FAA will complete its study and if, required, develop mitigation measures if a hazard is found." These statements ignore the distinct option that no effective mitigation measures will be available and that the FAA will issue a final hazard determination on some or all of the proposed turbines. This scenario is totally lacking from the discussion in the EA/FONNSI.

MMS must delay taking any final action on the Proposed Action until the FAA's final air hazard determination is issued, and mitigation measures required by that determination are analyzed in a supplemental EIS.

---

[173] As noted earlier in Section II. A. of these comments, the applicant recently announced that it has entered into a contract for the purchase of wind turbines to be used for the project. Because the height, shape and profile of the contracts that have been purchased by the applicant differ substantially from the turbines described in the EIS, not only must a supplemental EIS be prepared that addressed the possible changes in environmental impacts caused by these new turbines, but the FAA must prepare a new air hazard determination based on the specifications of the new turbines. Because the FAA's current study assumes a height of 440 feet for the turbines, any increase in the height of the turbines caused by an increased length of the turbine rotors must be considered in determining whether the new turbines pose a hazard to air navigation.

3. By Issuing a Final Determination in Advance of Analysis of FAA's Final Air Hazard Determination, MMS Will be Violating its Own Regulation Governing the Consideration of Safety in Granting Applications for Off-Shore Energy Production Facilities

An integral part of MMS's responsibilities in issuing off-shore renewable energy leases is to ensure that the project is carried out in a manner that provides for safety.[174] MMS, before granting a lease, requires the operator to submit plans demonstrating that its facility does not compromise public safety, and that it conforms to all applicable laws, regulations and requirements. FAA's air hazard determination is a crucial element of the safety assessment of any off-shore wind turbine facility. Until the FAA completes its air hazard determination process, and the applicant can demonstrate that it has complied with all air hazard mitigation measures developed by the FAA, the MMS cannot make a final determination on the applicant's project. Given MMS's acknowledgement that it has no expertise in air safety, and that it relies on the judgment of the FAA in determining whether the project poses air safety issues,[175] MMS cannot proceed to a final determination until it receives a final air hazard determination from the FAA and obtains adequate assurances from the applicant that all of FAA's mitigation measures are incorporated into the design of the project and will function as designed by the FAA.

C. The Failure of the EIS to Consider Coastal and Marine Spatial Planning and to Take Consensus-Based Approach Violates General Guidance and Regulatory Requirements

The EA/FONNSI states that because the Interim Framework states that coastal and marine spatial planning is not meant to delay or halt existing or pending plans and projects, no additional analysis is needed to address and evaluate marine spatial planning specifically.

Any decision to approve the Proposed Action prior to completing at least an informal plan for ocean zoning and the shared use of ocean resources is premature. Regardless of whether the Interim Framework requires individual projects to be deferred or not, there is substantial authority necessitating some review of the issue in the EIS. Both the Pew Oceans Commission (in 2003) and U.S. Commission on Ocean Policy (in 2004) strongly recommended the development of coastal and marine spatial planning and consensus-based management. DOI's NEPA regulations, finalized on October 2008, before the release of the FEIS, calls for comprehensive consultations and consensus-based management approach to project planning and development. MMS's Alternative Energy regulations, finalized in July 2008, call for the same. The recent Presidential directive issued in June 2009 by President Obama, which mandates the development and implementation of a national system of coastal and marine spatial planning, simply re-emphasizes the need for consideration of these important issues, before federal decision-making takes place. Despite these clear directives, and regulatory requirements, MMS

---

[174] 30 C.F.R.§ 285.102(a)(1).

[175] IG Report, at 29.

has chosen to ignore these issues, as if the Proposed Action falls entirely outside of MMS's otherwise applicable regulatory requirements.[176]

APNS has consistently recommended that the Corps first, and then MMS employ a consensus-based management process under a comprehensive ocean policy. When all of the competing uses and values of Nantucket Sound are considered and all stakeholders heard, APNS has long argued that the conclusion would be that Horseshoe Shoal is not an appropriate location for the Proposed Action. In a January 22, 2009, letter to Secretary Salazar, APNS again asked that the Administration *first* establish a comprehensive offshore ocean policy and renewable energy program *before* considering individual projects. Almost seven years earlier (July 25, 2002), APNS provided written testimony to the House Resources Committee, commenting on the need for legislation to authorize offshore renewable energy development, and a marine spatial planning program to be developed and applied prior to any decision on the Proposed Action. APNS noted that any areas for development must be "balanced against other factors that would include competing resources and economic values in the area, the nature of federal or state protection of marine resources in the area, the opinions of the adjacent state and local governments, and other factors. Such a process is intended ultimately to make available for development areas that have high potential for energy production, but present few conflicts for enabling development to occur."

As noted in the January 22, 2009, letter as well as a November 9, 2005 letter sent to former Secretary Norton by over 20 national and local environmental groups, this principle finds its basis in the statement and recommendations of independent policy organizations. In 2003, the Pew Oceans Commission issued a report stating that "Congress and the President should begin by enacting a National Ocean Policy Act, significantly adjusting our nation's attitude toward the sea and establishing the standards and expectations necessary to achieve healthy, productive, and resilient marine ecosystems." The following year, the U.S. Commission on Ocean Policy echoed this theme: "A comprehensive offshore management regime is needed that enables us to realize the ocean's potential while safeguarding human and ecosystem health, minimizing conflicts among users, and fulfilling the government's obligation to manage the sea in a way that maximizes long-term benefits for all the nation's citizens." In 2005, over 200 leading marine scientists issued a *Scientific Consensus Statement on Marine Ecosystem-Based Management*, which stated: "The current state of the oceans requires immediate action and attention. Solutions based on the integrated ecosystem approach hold the greatest promise for delivering desired results."

The approach advocated by the two ocean reports was strengthened by the second source of authority – the recent Presidential directive on Ocean Policy calls for the development of a national ocean policy and coastal and marine spatial planning process. On June 12, 2009, President Obama released a directive on Ocean Policy. The directive established an Interagency Ocean Policy Task Force (Task Force), led by the Council on Environmental Quality (CEQ). The Task Force was charged with developing a recommendation for a national ocean policy ensuring the protection, maintenance, and restoration of oceans, coasts, and the Great Lakes. It has also been tasked with recommending a framework for improved stewardship and effective

---

[176] *See* EA/FONNSI, at 18 (stating that "the FEIS did not discuss and evaluate marine spatial planning specifically . . .").

coastal and marine spatial planning (CMSP). On September 10, 2009, the Task Force released an *Interim Report*, which contained recommendations and a brief overview of the suggested national ocean policy, policy coordination framework, and implementation strategy.

Under the directive, the Task Force issued the *Interim Framework for Effective Coastal and Marine Spatial Planning* on December 14, 2009. The *Interim Framework* recommends consideration of a new approach to planning and managing uses and activities in the coastal and marine environment. Under the *Interim Framework*, CMSP is envisioned as a regional process, developed cooperatively among federal, state, tribal, and local authorities, regional governance structures, and with significant stakeholder and public input. "In practical terms, CMSP provides a public policy process for society to better determine how the ocean, coasts, and Great Lakes are sustainably used and protected now and for future generations."[177]

As the EA/FONNSI notes, the framework "recommends consideration of a new approach to planning and managing uses and activities in the coastal and marine environment," including the development of regional CMSP involving cooperative development between Federal, state, tribal, and local authorities, regional governance structures, stakeholders, and the public.[178] The EA/FONNSI also states that "the FEIS did not discuss and evaluate marine spatial planning specifically," but excuses this omission because "the language in the Interim Framework itself states that [CMSP] is not meant to delay or halt existing or pending plans and projects such as the Proposed Action."[179]

CMSP has not yet been finalized, but the consensus-based approach it promotes is required under current law. Included with these comments are the numerous requests to MMS to be involved in this process, all of which have been ignored or rejected.[180] While MMS is correct in noting that the Task Force does not intend any projects to be held back until the CMSP Framework process has been completed, the agency improperly limits the consideration that it must give to the conservation objectives and policy goals identified by the Task Force thus far. As discussed above, the primary purpose of CMSP is not to provide a regulatory framework, but rather a process for input from different levels of government, tribes, stakeholders, and the public, in an effort to reach meaningful and appropriate consensus-based decisions.

APNS has continued to raise the issue of the development of a national ocean policy in the context of consensus-based management. On February 10, 2009, APNS sent a letter to Secretary Salazar praising the Secretary's comments in a press conference regarding a comprehensive energy plan for the OCS and requesting that "MMS be directed to take the necessary steps to place the CWA project on a track for full review *after* the implementation of your comprehensive OCS plan." This same theme has been echoed in comments submitted on July 21, 2009, to the Task Force, as well as written testimony submitted on November 4, 2009, to the U.S. Senate Subcommittee on Oceans, Atmosphere, Fisheries and Coast Guard in response to a hearing entitled *Future of Ocean Governance: Building Our National Ocean Policy.* As

---

[177] *Interim Framework* at 1.

[178] EA/FONNSI, at 18.

[179] *Id.*

[180] Attachments 1, 2, 13, 16, and 18.

recently as February 23, 2010, APNS submitted a letter to Undersecretary Hayes regarding a proposed consensus resolution for the dispute over the siting of the CWA project, noting again that the Obama Administration's proposal for marine spatial planning provides a process for avoiding the dispute caused by the current proposal.

Additionally, the goal of wide-ranging collaboration and participation at the core of CMSP has been captured, and is required under the DOI NEPA regulations at 43 C.F.R. § 46.110. The DOI NEPA regulations at 43 C.F.R. Part 46 were finalized on October 15, 2008.[181] The rule codifies the concept of consensus-based management, and requires the incorporation of "direct community involvement in consideration of bureau activities subject to NEPA analyses, from initial scoping to implementation of the bureau decision."[182] It "seeks to achieve agreement from diverse interests on the goals of, purposes of, and needs for bureau plans and activities, as well as the methods anticipated to carry out those plans and activities...In incorporating consensus-based management in the NEPA process, bureaus should consider any consensus-based alternative(s) put forth by those participating persons, organizations or communities who may be interested in or affected by the proposed action.... The Responsible Official must, whenever practicable, use a consensus-based management approach to the NEPA process."[183]

Finally, the idea of collaboration and consultation is firmly entrenched in the July 9, 2008, MMS regulations at 30 C.F.R. Part 285 governing the development of offshore alternative energy under section 8(p) of the Outer Continental Shelf Lands Act.[184] The regulations at section 285.203 direct MMS to coordinate with relevant federal agencies, state governors, local officials and tribal representatives that may be affected by renewable energy leases. Under the basic objectives of the regulations at section 285.102(e), MMS may invite those parties to participate in a joint task force or joint planning or coordination agreement to better facilitate widespread participation and collaboration. Project proponents are also urged to conduct preliminary outreach early in the project process by contacting interested and affected parties and stakeholders in order to promote project compatibility and consultation with those most directly impacted by the proposal.[185]

MMS has failed to take into account any of these policy guidelines and mandates, in spite of all of the strong and long-standing initiatives promoting the use of CMSP, and regulatory requirements to collaborate and use a consensus-based management approach when reviewing project proposals. These concepts are not new, and have been present for much of the period during which MMS has been reviewing the Proposed Action. There is no excuse for the MMS's systematic failure to take these initiatives into consideration and follow the requirements of its own regulations to better manage the competing uses and values of the marine resources in question.

---

[181] 73 Fed. Reg. 61,292 (Oct. 15, 2008).

[182] 43 C.F.R. § 43.110(a).

[183] *Id.* §§ 46.110(b)-(c).

[184] 73 Fed. Reg. 39376 (July 9, 2008).

[185] 30 C.F.R. § 285.203.

D. Nantucket Sound Now Meets the Formal Definition of a Marine Protected Area Under Executive Order 13158, Requiring Denial of the Project

Concurrent with the submission of these comments, APNS has filed with the Secretary and the Administrator of National Oceanic Atmospheric Administration a formal petition to designate Nantucket Sound as a marine protected area under Executive Order 13158.[186] This status is clearly required as a result of the keeper's determination of eligibility, the MHC's findings of the Sound as a traditional cultural proposal, the Tribe's similar determinations, and the confirmation of the unique historical status issued by the ACHP. These findings, and the APNS petition are new information that is nowhere considered in the EA/FONNSI and require evaluation at this time.

VIII. Cumulative Effects

A. The EA/FONNSI Fails to Consider the Exorbitant Costs of the Transmission Upgrades That Are Required to Connect the Proposed Project to the Grid and All Associated Environmental Impacts.

MMS has consistently neglected to consider the additional socioeconomic and environmental impacts that will be incurred as a consequence of integrating the proposed project's generation into the transmission grid. NEPA "places upon an agency the obligation to consider every significant impact of a proposed action" and "ensures that the agency will inform the public that it has indeed considered environmental concerns in its decision-making process."[187] Significant impacts include, but are not limited to, economic, ecological, aesthetic, historic, health and cultural effects.[188] In spite of this legal requirement, MMS has failed to consider in the EA/FONNSI, FEIS, and DEIS the socioeconomic costs associated with upgrading the transmission system, which will be socialized among the ratepayers of New England and Massachusetts in particular, as well as all resulting environmental impacts. MMS must be required to analyze these significant impacts prior to approving the proposed project.

There is little doubt that the proposed project will require substantial upgrades to the region's existing transmission system, thus resulting in environmental impacts to the surrounding area. However, MMS has yet to conduct an assessment of the costs of the required transmission upgrades and resulting environmental effects of this project, because this critical information is being withheld by the project developer and ISO NE. Nevertheless, since the issuance of the DEIS and FEIS, there have been numerous studies which have concluded that it will cost billions to expand the current transmission system in New England to meet reliability in the region and effectively integrate new wind generation. In addition, MMS has not considered the recently approved ongoing negotiation between Cape Wind and National Grid for a Power Purchase Agreement (PPA) which is likely to be an above market priced contract that would result in an additional burden to MA ratepayers.

---

[186] Attachment 31.

[187] *Baltimore Gas & Electric v. NRDC*, 462 U.S. 87, 97 (1983).

[188] 40 C.F.R. §1508.8 (2009).

ISO NE has estimated that it will cost $10 billion to build enough transmission to accommodate 8,500 MW of wind generation in New England.[189] In its 2030 Power System Study, ISO NE further broke down this cost estimate to reflect the addition of new onshore and offshore wind generation to New England. Based on this study, even the lowest estimates of the addition of 2,000 MW of offshore wind in New England will require the construction of another 1,015 miles of transmission line and would cost between $3.6 billion and $6.0 billion.[190] It is arguable that almost a quarter of this estimated generation (462 MW) would be due to the CWA project, thus making the proposed project responsible for transmission upgrades ranging from upwards of a billion dollars to $1.5 billion, which would be born by the ratepayers of Massachusetts. Because the amount of electricity demand in an area determines a state's proportionate share of upgrade costs, Massachusetts would be responsible for 45.5 percent of all related transmission costs.[191] This means that the ratepayers of Massachusetts, not the developer, will be burdened with billions in associated upgrade costs for the proposed CWA Project.

Additionally, ISO NE recently reported on the progress of transmission construction in Massachusetts in its *State of the States Report.* NSTAR has proposed a series of transmission upgrades for Southeast Massachusetts to improve flexibility and ease reliance on local generating resources for Cape Cod. The short-term upgrades include substation and transmission upgrades, costing an estimated $86.5 million, and the long-term upgrade of a new 345 kV line from Southeast Massachusetts to Cape Cod, which will cost approximately $110 million.[192] It is noteworthy that this is just one of many upgrades that will be required to integrate additional offshore wind into the grid.

Furthermore, in the Joint Coordinated System Plan, a study conducted by all of the regional independent system operators, the ISOs found that it would cost a minimum of $50 billion to expand the current transmission system of the Eastern Interconnection, which includes New York and New England, by 10,000 miles to support increased generation. This estimate is based on the assumption that the present renewable portfolio standard (RPS) requirements remain in effect for all states and 5 percent of all generation comes from relatively local, onshore sources of wind.[193] However, based on the aggressive RPS standards of states, a more realistic estimate of the costs of integrating 20 percent wind generation in the Eastern Interconnection would require the addition of 15,000 miles of transmission and would cost another $30 billion, for a total cost of $80 billion.[194]

---

[189] *Lack of Federal Policy Dogs New England*, Platts Megawatt Daily at 1 (Mar. 29, 2010)

[190] ISO NE, NEW ENGLAND 2030 POWER SYSTEM STUDY, at 23, available at http://www.iso-ne.com/committees/comm_wkgrps/othr/clg/mtrls/2010/feb22010/iso_eco_study_report_draft_sept_8.pdf (Sept. 2009).

[191] ISO New England, "EBC Energy Seminar: New England Transmission Update," at 8, available at http://www.ebcne.org/fileadmin/pres/Steve_Rourke.pdf (Apr. 2, 2009)

[192] ISO NE, ISO ON BACKGROUND, STATE OF THE STATES, at 44, available at http://www.iso-ne.com/nwsiss/pr/2010/final_2010_march_backgrounder_presentation.pdf (Mar. 2010).

[193] JOINT COORDINATED SYSTEM PLAN, *available at* http://www.jcspstudy.org/, at 8 (2008).

[194] *Id* at 9.

Thus, based on these reports, it is evident that on both a micro and a macro scale, the integration of additional offshore wind generation into the grid will cost billions and result in substantial environmental effects to the region. Consequently, MMS should be required to consider these adverse effects prior to approving the proposed project.

B. The EA/FONNSI Does Not Address New Information Regarding the Cumulative Effects of the Proposed Action

There are numerous project proposals in the region that should have been considered in the EA/FONNSI. Not only did MMS's FEIS fail to account properly for the cumulative impacts of the Proposed Action, MMS has perpetuated that failure in this EA/FONNSI.

1. Rhode Island

In the DEIS, MMS rejected Block Island because of extreme storm waves and areas of rock or bedrock. The site rejected by MMS has now been selected by Deepwater Wind for its project using a newer technology than the Proposed Action. The Deepwater Wind project came about through a well-structured offshore wind energy development plan directed by Rhode Island Governor Donald L. Carcieri. In a transparent bidding process, the Deepwater Project was selected against six other projects. Deepwater Wind entails two major phases of wind development: Phase One, the Block Island project, will be a 20 MW project in state waters. It is expected that construction of Phase One will begin in late 2010 and be completed in late June 2012. In Phase Two, Deepwater Wind will construct a utility-scale project in a separate location, capable of producing 1.3 million MWh annually. Not only is Block Island an alternative that should have been considered, MMS must also consider it in its cumulative impacts analysis. In addition, the other sites identified in the RIWINDS report should also be considered in the cumulative impacts analysis.

2. Massachusetts

As noted above, Massachusetts finalized its Ocean Management Plan in December 2009.This plan identifies areas suitable for renewable energy development, and initiates a five-year program of high-priority research. Unlike MMS's approach with respect to the Proposed Action, the final plan includes stronger and more detailed siting and performance standards associated with important environmental resources and revised management provisions for Regional Planning Authorities regarding wind energy development.

The OMP identifies two Wind Energy Areas designated for commercial-scale wind energy facilities based on the presence of a suitable wind resource and water depth, and the absence of conflict with other uses or sensitive resources. These areas—which constitute 2% percent of the planning area's 2,144.5 square miles—are anticipated to accommodate approximately 150 3.6 megawatt (MW) turbines at full build-out.

The Gosnold Wind Energy Area is designated for commercial wind energy development .Community-scale wind energy development is also allowed within the Gosnold Wind Energy Area. The Martha's Vineyard Wind Energy Area is designated for wind energy development at a scale to be determined by the Martha's Vineyard Commission. The OMP also identifies three locations (one in federal waters adjacent to the planning area) for commercial-scale wind that are

considered provisional sites. These areas passed the exclusionary screening process but appear to have potentially more significant technical limitations, cumulative impacts, and/or less suitability for wind energy. MMS should have considered the cumulative impacts of the OMP in the EA/FONNSI.

3. Maine

The Maine Ocean Energy Task Force submitted its final report to Governor Baldacci on December 31, 2009.[195] The Report includes recommendations that Maine:

- Make a major commitment to development of offshore wind, tidal, and wave power;
- Commit to a goal of installation of 5 gigawatts (5,000 megawatts) of offshore wind energy generating capacity in Maine's coastal waters and adjoining federal waters by 2030, and to a goal of timely and efficient development of tidal energy resources at optimal locations in Maine's coastal waters, including but not limited to those in the Passamaquoddy Bay region;
- Improve the siting, permitting and governance framework for renewable ocean energy development;
- Move aggressively to support strengthening Maine's current out-dated transmission and distribution infrastructure, incorporating smart-grid technologies, and explicitly recognize in law the need for new transmission and distribution capacity to achieve the State's wind power and energy conversion goals; and
- Support the financing and development of renewable energy goals by requiring the Maine Public Utilities to issue a Request for Proposal for renewable ocean energy generation where the rate impact is reasonable.

The EA/FONNSI fails to consider the cumulative impacts of Maine's new program.

4. Deepwater

Blue H has announced plans to develop a deepwater water wind energy project 23 miles southwest of Martha's Vineyard and has been ready, for over a year, to evaluate the site pending MMS approval. Blue H has an application before MMS to test its system and has support from the entire Massachusetts Congressional Delegation. MMS has granted Blue H permission to secure the permit from the Army Corps of Engineers, and Blue H has submitted its application. Blue H hopes to moor the test platform off the coast by 2010 to collect vital data. The long-term goal is to have 120 turbines floating in 167 feet of water, generating 420 MWs.

---

[195] <http://www.renewnewengland.com/2010/01/maine-ocean-energy-task-force-submits-final-report-.html>.

5. East Coast

Apex Wind Energy Corp., based in Charlottesville, and Seawind Renewable Energy Corp., near Richmond, submitted unsolicited proposals in August and September to federal regulators to lease space 12 to 25 miles off Virginia Beach for wind farms. MMS is looking at the two applications, but will eventually seek applications from other potential developers. As MMS is better aware, there are numerous other proposals that should have been addressed in the cumulative impacts analysis in the EA/FONNSI.

CONCLUSION

In summary, the EA/FONNSI does not address the serious deficiencies in the FEIS for the Proposed Action. Further, the review of new information is partial, at best, and inaccurate. MMS should deny the Proposed Action or prepare an SEIS or relocate the project to STI.

SAVE OUR SOUND
alliance to protect nantucket sound

June 23, 2010

Michael R. Bromwich
Director, Bureau of Ocean Energy Management,
Regulation and Enforcement
Department of the Interior
1849 C Street, NW
Washington, DC 20240

Re: Cape Wind Energy Project, MMS-2010-MM-0006-0105

Dear Director Bromwich:

In recognition of, and in response to, the serious deficiencies in the federal decisions on the proposed Cape Wind project, the Alliance to Protect Nantucket Sound has filed a Petition for Discretionary Review Under 14 C.F.R. § 77.37 of Case Nos. 2009-WTE-332-OE through 2009-WTE-461-OE, with the Federal Aviation Administration (FAA) on June 16, 2010. As demonstrated by the enclosed petition, the FAA is clearly in error and has placed the public's safety at risk in its May 17 Determinations on the proposed Cape Wind energy plant. To the extent the Minerals Management Service's (MMS) decision to offer a lease to Cape Wind is based on the FAA action, it is also a violation of federal law. The Alliance has documented this issue extensively in the record of the MMS review and by letter of March 16, 2010, under the Outer Continental Shelf Lands Act.

Pursuant to FAA Order 7400.2G ¶ 9-2-1(c), the filing of the Petition means that FAA's May 17, 2010 Determinations of No Hazard in Case Nos. 2009-WTE-332-OE through 2009-WTE-461-OE are not and "will not become final pending disposition of the petition." As the FAA stated in its May 17, 2010 Determinations of No Hazard to Air Navigation, at p. 2: "This determination becomes final on June 26, 2010 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition."

Because FAA's May 17, 2010 Determinations are not final determinations by operation of law as a result of our petition, Cape Wind may not begin construction of the Project, pursuant to the MMS Record of Decision. This prohibition applies to any action that would be deemed "construction" under the U.S. Department of Treasury, Payments for Specified Energy Property in Lieu of Tax Credits Under the ARRA (March, 2010). The Alliance requests that MMS enforce the "no construction of any kind" limitation against Cape Wind. Further, MMS may not proceed with any further actions that depend on receipt of FAA's determination of no hazard.

4 Barnstable Road, Hyannis, Massachusetts 02601
▫ 508-775-9767 ▫ Fax: 508-775-9725

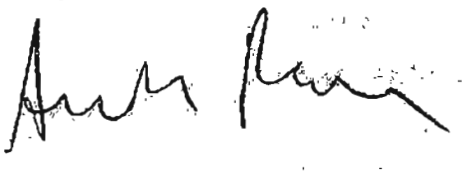
www.saveoursound.org

a 501 (c)(3) tax-exempt organization

The petition is now a part of the record of the Cape Wind proceeding. To the extent any further action will be taken related to the Cape Wind application, the Petition must be considered prior to taking such actions.

Thank you for your attention to this matter.

Sincerely,



Audra Parker
President and Chief Executive Officer

Enclosures

cc: Honorable David J. Hayes, Deputy Secretary of the Interior
Charles S. McLaughlin, Jr., Esquire

4 Barnstable Road, Hyannis, Massachusetts 02601
▫ **508-775-9767** ▫ **Fax: 508-775-9725**

www.saveoursound.org

a 501 (c)(3) tax-exempt organization

SAVE OUR SOUND
alliance to protect nantucket sound

June 15, 2010

Edith V. Parish
Manager, Airspace and Rules Division -- Room 423
Federal Aviation Administration
800 Independence Avenue, N.W.
Washington, DC 20591

RE: Petition for Discretionary Review of the Determination of No Hazard to Air Navigation, Aeronautical Study Nos. 2009-WTE-332-OE through 2009-WTE-461-OE (May 17, 2010)

Dear Ms. Parish:

The Alliance to Protect Nantucket Sound submits this Petition for Discretionary Review pursuant to 14 C.F.R. § 77.37, requesting that the Federal Aviation Administration (FAA) reverse the 130 individual Determinations of No Hazard to Air Navigation in FAA Aeronautical Study Nos. 2009 WTE-332-OE through 2009 WTW-461-OE issued on May 17, 2010, for Cape Wind Associates' proposal to construct 130 wind turbine generators in Nantucket Sound. This petition incorporates by reference the petition filed by the Town of Barnstable in this same matter, including all exhibits and supporting materials.

The 2010 Determinations must be reversed pursuant to 14 C.F.R. Part 77 and FAA Order No. 7400.2G because the proposed Cape Wind Project would create a substantial adverse effect on aviation by impairing the operation of existing FAA radar facilities, requiring a significant volume of VFR operations to change their regular course or altitude, having a substantial adverse impact on IFR operations, and derogating airport capacity/efficiency. This Petition is being filed within 30 days of the issuance of the 2010 Determinations.

The FAA must reverse the 130 Determinations of No Hazard to construct 130, 440-foot wind turbines within a 25 square mile area in Nantucket Sound under a highly travelled air corridor between the three airports in Barnstable, Martha's Vineyard, and Nantucket. The FAA has a duty to issue Determinations of Hazard for each proposed wind turbine in the Cape Wind Project because the structures will create a substantial adverse effect on air navigation.

The proposed Cape Wind Project is a hazard to air navigation because the evidence before the FAA demonstrates conclusively that the Cape Wind Project would have a substantial adverse effect by: (1) interfering with the operation of existing FAA radar facilities; (2) requiring changes to existing VFR and IFR routes, and forcing a significant volume of aeronautical operations to change their regular course and/or altitude; and, (3) limiting the capacity and efficiency of the

4 Barnstable Road, Hyannis, Massachusetts 02601
▫ 508-775-9767 ▫ Fax: 508-775-9725

www.saveoursound.org

a 501 (c)(3) tax-exempt organization

Barnstable Municipal Airport, the Nantucket Memorial Airport and the Martha's Vineyard Airport.

The Project would have a substantial adverse effect on existing FAA radars.
FAA has ample evidence, including the 2010 Determinations, which acknowledge that radar interference would occur. The proposed wind turbines would be in direct line-of-sight (LOS) of the three existing radars in the area surrounding Nantucket Sound and would, therefore, create a variety of adverse effects, including: shadowing, false targets, clutter, reduced probability of detection (PD), and track seduction. Moreover, FAA has identified no mitigation measures that are proven to be effective under the specific conditions in Nantucket Sound. In fact, the tiered approach to mitigation used in the Determinations (installation of a TDX 2000, then ASR 11 upgrade, then restricted airspace) confirms that the FAA understands that its technical mitigation measures may not resolve the radar interference issue. In addition, none of these scenarios addresses the impacts to VFR operations and, in fact, the last resort mitigation of restricting the airspace would only exacerbate the VFR issue.

Furthermore, allowing 130 hazards to be built before testing the efficacy of available mitigation measures has expressly been rejected by the federal courts. For example, the U.S. Court of Appeals for the District of Columbia Circuit recently vacated a series of FAA Determinations of No Hazard where the Agency had ultimately decided to defer the question of potential adverse effects until after the facilities were built (*Clark County v. FAA*, 2008).

Ultimately, unless FAA can identify a mitigation measure that it can *demonstrate* will be effective under the real world weather, fleet mix and air traffic conditions in Nantucket Sound, it must issue Determinations of Hazard. And at this point, the only proven mitigation for Line of Sight (LOS) interference is to avoid locating wind turbines in radar LOS. Therefore, FAA is obligated to issue Determinations of Hazard for each of the Project's wind turbines.

The Project would have a substantial adverse effect on VFR operations.
There are over 400,000 flights per year in the air corridor between Barnstable Municipal Airport, Nantucket Memorial Airport, and Martha's Vineyard Airport, with two-thirds concentrated in the summer season and many of the flights operating at low altitudes under VFR conditions. Flight data compiled by Harris Miller, Miller and Hanson (previously provided to FAA) show the volume of low altitude VFR traffic in the Project area and conclude that flights regularly and daily fly over the Project area at very low altitudes. Daily operations on the observed days ranged from 14 to 22 operations. That translates into thousands of affected flights annually. Any structure or group of structures that requires the rerouting of this many flights clearly creates a substantial adverse effect as defined by FAA, and must, therefore, be determined to be a hazard. In this case, the impacts to VFR traffic are clearly significant and adverse.

The Project area is an area of known marginal visibility particularly during peak summer months, averaging 22 days of fog each month and overcast over 40% of the time. VFR pilots must remain 500 feet below clouds, which often means flying at or below 500 feet above water. This would no longer be possible over the 25 square mile Project area. This problem is exacerbated over Nantucket Sound because weather conditions can change abruptly, often forcing pilots to descend rapidly to get under the fog, creating a clear risk of collision with the wind turbine generators.

The FAA's own Determinations have concluded that "some aircraft operating under (VFR) may have to alter their altitude or route of flight..." This conclusion alone establishes that the proposed turbines would create "adverse effects" to VFR operations. Under FAA's binding rules, a proposed structure would have a substantial adverse effect if there is a combination of adverse effect and a significant volume of aeronautical operations. In turn, a "significant volume" is defined as anything more than one aeronautical operation per day no matter the type of operation. The record before FAA clearly establishes that a "substantial" number of regularly occurring VFR operations would be forced to change course and/or altitude if the Project were built.

However, the FAA attempts to dismiss the ample evidence of impacts to VFR operations by relying on the faulty proposition that there cannot be an "adverse effect" because the turbines are not "obstructions." Regardless of their height, the turbines are hazards because they would cause a significant number of VFR operations to change regular flight course or altitude. The question of whether or not the turbines are also "obstructions" as defined by height is immaterial.

The FAA compounds their error in focusing on the 500-foot threshold because VFR aircraft are clearly permitted to operate below 500 feet AGL when operating over open water. The fact that aircraft are permitted to operate below 500 feet in the Cape Wind Project area, the frequent periods of marginal VFR weather in the Nantucket Sound, and the substantial volume of low-flying VFR traffic in the area, obligates the FAA to examine impacts of the proposed Project on VFR operations, regardless of the height of the Turbines, and conclude that the turbines constitute a hazard to air navigation.

The Project would have a substantial adverse effect on existing IFR operations.
There are also concerns specific to IFR traffic. There are two low altitude airways (Victor airways) over or adjacent to the proposed Project: V-141 and V-146. IFR traffic only uses cardinal altitudes starting with 2,000 feet and rising in 1,000-foot increments. The current minimum obstacle clearance (MOC) altitude is 1,200 feet plus 300 feet above the highest obstacle. With the proposed wind turbines at 440' ASL, the new MOC altitude would be 1940' (1200' + 440' + 300'), leaving only a 60' margin between the MOC and the lowest IFR altitude.

This would force the rerouting of aircraft into narrow, concentrated flight corridors, reduce air traffic dispersion horizontally and vertically, push more VFR aircraft into IFR corridors, and

reduce altitude separation for opposite direction traffic. This would tend to overload an already overburdened IFR system and would directly impact IFR operations.

Moreover, of the approximately 400,000 total annual operations in the Project area, approximately half are IFR operations. Thus, the adverse effects to IFR operations described above rise to the level of "substantial adverse effects" and FAA is, therefore, obligated to issue Determinations of Hazard for the Cape Wind Project.

The Project would have a substantial adverse effect on airport capacity/ efficiency.
As discussed above, the Project would force existing VFR traffic to change regularly used routes to avoid Cape Wind's turbines, compressing VFR traffic into already crowded IFR corridors. The degraded radar performance would further reduce the effective capacity of the IFR corridors by requiring greater separation to offset the reduced radar performance. In addition to the impact on both IFR and VFR operations, this would have the further effect of reducing the effective capacity of our airports by forcing different aircraft types with different speeds into a single corridor with in-trail spacing requirements, limiting airfield capacity to the capacity of the ATC system. The result would be increased cancellations and extremely long delays. This would have a substantial adverse effect on airport capacity/efficiency, which, by itself, is an independent basis upon which FAA must issue Determinations of Hazard.

Based on the previous discussion and incorporating by reference the petition filed by the Town of Barnstable, the FAA should grant this petition and terminate all 130 determinations of No Hazard to ensure compliance with FAA's statutory mandates. Thank you.

Sincerely,

Audra Parker
President and CEO

Cc: Senator Scott Brown
Congressman William Delahunt
Congressman James Oberstar

4 Barnstable Road, Hyannis, Massachusetts 02601
▫ 508-775-9767 ▫ Fax: 508-775-9725

www.saveoursound.org

a 501 (c)(3) tax-exempt organization

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 1
1 CONGRESS STREET, SUITE 1100
BOSTON, MASSACHUSETTS 02114-2023

December 1, 2009

Dr. Andrew D. Krueger
Alternative Energy Programs
U.S. Dept. of the Interior
Minerals Management Service
381 Elden Street, MS 4090
Herndon, VA 20170

Re: Cape Wind Energy Project

Dear Dr. Krueger:

As we have discussed, your signature below will confirm that the Mineral Management Service (MMS) will assume lead Federal agency status for the purpose of National Historic Preservation Act (NHPA) section 106 compliance for the Cape Wind Energy Project. Under the Advisory Council on Historic Preservation (ACHP) regulations at 36 CFR Part 800, the Cape Wind Energy Project is a Federal undertaking. More than one Federal agency is involved in this undertaking.

In accordance with 36 CFR § 800.2(a)(2), as the United States Environmental Protection Agency's (EPA) designee, MMS will identify the appropriate official to serve as the agency official to fulfill the collective responsibilities of EPA and the MMS under section 106. In addition, although EPA recognizes that as the lead Federal agency, MMS will take the lead on drafting relevant agreements as part of the NHPA section 106 process, EPA would appreciate the opportunity to review and, if appropriate, be a signatory to these documents.

We request that you sign this letter in the signature block provided below. By signing this letter, MMS acknowledges and accepts EPA's designation of MMS as the lead Federal agency for NHPA compliance in connection with the Cape Wind Energy Project. In addition, please return a signed copy of this letter to EPA.

Should you have any questions or concerns about this letter, please feel free to contact Ida McDonnell in my office at 617-918-1653, or LeAnn Jensen in the EPA Region 1 Office of Regional Counsel at 617-918-1072.

Sincerely,

Stephen Perkins, Director
Office of Ecosystem Protection

cc: John Eddins, Advisory Council on Historic Preservation
Brona Simon, Massachusetts Historical Commission
Karen Adams, Army Corps of Engineers
Bruce Bozum, Mohegan Indian Tribe
John Brown, Narragansett Indian Tribe
Michael Thomas, Mashantucket Pequot Tribe
Bettina Washington, Wampanoag Tribe of Gay Head (Aquinnah)
George Green, Mashpee Wampanoag Tribe
Brendan McCahill, EPA Region 1
LeAnn Jensen, EPA Region 1

Acknowledgement by the Mineral Management Service

_____ _____

Name: Date
Title:

rec'd 12/21/09

United States Department of the Interior

MINERALS MANAGEMENT SERVICE
Washington, DC 20240

DEC 15 2009

Mr. Stephen Perkins
Director, Office of Ecosystem Protection
U.S. Environmental Protection Agency
Region 1
1 Congress Street, Suite 1100
Boston, Massachusetts 02114

RE: Section 106 Consultation for Cape Wind Energy Project

Dear Mr. Perkins:

Thank you for your letter dated December 1, 2009, requesting that the U.S. Environmental Protection Agency (EPA) be granted consulting party status in the National Historic Preservation Act (NHPA) Section 106 consultation process for the proposed Cape Wind Energy Project.

The Energy Policy Act (EPAct) amendments to the Outer Continental Shelf Lands Act granted the Secretary of the Department of the Interior—and, through delegation, the Minerals Management Service (MMS)—the discretionary authority to grant leases, easements, or rights of way on the Outer Continental Shelf (OCS) for renewable energy activities. Pursuant to this authority, the MMS has conducted an independent and comprehensive environmental review of the proposed Cape Wind Energy Project and has issued both a draft environmental impact statement (EIS) and a final EIS.

The MMS is the lead agency reviewing the Cape Wind Energy Project proposal. Pursuant to 36 C.F.R. Section 800.3 (f)(3), the lead agency official may invite others to participate as consulting parties in the Section 106 process. The MMS recognizes that the EPA may have responsibilities to fulfill under Section 106 of the NHPA relating to the issuance of permits for this project (similarly, the U.S. Army Corps of Engineers (USACE) has responsibilities to fulfill in its issuance of a Section 10 permit). The MMS grants the request for the EPA to have consulting party status, effective the date of this letter, and invites the EPA to participate in any future Section 106 consultation meetings. The MMS recognizes that the EPA may adopt the findings and conclusions of this process to help fulfill its regulatory obligations under Section 106. We have provided the following background and references to get your office up to speed with the Section 106 consultation process.

Background Information on the Project

In November 2004, a joint draft environmental document for the Cape Wind Energy Project (Draft EIS/Environmental Impact Report (EIR)/Development of Regional Impact Report (DRI)) was published by the USACE, the State of Massachusetts, and the Cape Cod Commission. In

August 2005, with the passage of the Energy Policy Act, the MMS became the lead Federal agency for the Cape Wind Energy Project. In February 2007, the State of Massachusetts and the Cape Cod Commission published a final EIR/DRI for the Cape Wind Project while the MMS draft EIS was still in preparation. The visual impact analysis in the final EIR/DRI concluded that the following historic properties would be subject to adverse visual effects from the proposed project:

- Falmouth:
  - Nobska Point Light Station
- Barnstable:
  - Cotuit Historic District
  - Col. Charles Codman Estate
  - Wianno Historic District
  - Wianno Club
  - Hyannis Port Historic District
  - Kennedy Compound (NHL)
- Chatham:
  - Montgomery Point Lighthouse
- Tisbury:
  - West Chop Light Station
- Oak Bluffs:
  - East Chop Light Station
  - Dr. Harrison A. Tucker Cottage
- Edgartown:
  - Edgartown Village Historic District
  - Edgartown Harbor Lighthouse
  - Cape Poge Light
- Nantucket:
  - Nantucket Great Point Light
  - Nantucket National Historic Landmark District

The MMS analysis was prepared using the same list of historic properties and visual simulations that were used to prepare the Determination of Effect published in the final EIR/DRI for the State of Massachusetts (Public Archeological Laboratory (PAL), *Cape Wind Energy Project Visual Impact Assessment of Revised Layout on Multiple Historic Properties: Final Environment Impact Report*, September 2006). This report can be found online at: *http://www.capewind.org/downloads/feir/Appendix3.11-C.pdf*

Using the ACHP regulations for assessment of adverse effects found at 36 CFR 800.5, the MMS outlined a methodology and list of criteria to use in assessing the visual effects of the project on historic properties within the project's Area of Potential Effect. The results of this visual analysis were published on December 29, 2008, in the *Finding of Adverse Effect for the Cape Wind Energy Project*. The document can be found online at http://www.mms.gov/offshore/AlternativeEnergy/PDFs/FAE_Final.pdf. The MMS prepared this document after consideration of comments received during formal Section 106 consultation meetings and from written comments submitted on the draft EIS. In response to comments

received from the consulting parties, the MMS incorporated the following changes into the assessment of adverse visual effects for the project, including:

- Revising the methodology used to assess adverse visual effects to historic properties and Tribal areas of religious and cultural importance to conform to the methodology used in the original analysis completed by the USACE when they were lead Federal agency for the project.

- Evaluating 30 additional specific historic properties identified in writing by consulting parties, which had not previously been assessed nor evaluated for National Register eligibility.

- Including a specific sacred historic site identified by the Mashpee Wampanoag Tribe on the list of adversely affected properties.

The *Finding of Adverse Effect for the Cape Wind Energy Project* concludes that there will be an adverse visual effect on 28 historic and one Tribal properties resulting from the proposed project. The Finding includes all documentation required pursuant to 36 CFR 800.11(e), as well as a description of alternatives to the project that have already been considered or raised by the consulting parties, and proposed modifications already included in the design or included as proposed terms and conditions of approval that could avoid, minimize or mitigate the adverse effects. Please note that the Finding effectively concludes the portions of the consultation related to 36 CFR 800.4 and 800.5.

Additional Documents for the Section 106 Consultation Process

A series of marine archaeological reports and surveys were completed within the offshore project area by the Public Archaeology Laboratory (PAL), Pawtucket, Rhode Island. These reports include:

1. Marine Archaeological Sensitivity Assessment, Cape Wind Energy Project (June 2003)
2. Preliminary Marine Archaeological Sensitivity Assessment: Cape Wind Energy Project Alternatives: Horseshoe Shoal; Combination New Bedford/Buzzards Bay and Reduced Horseshoe Shoal; Monomoy and Handkerchief Shoals; Tuckernuck Shoal; and South of Tuckernuck Island, Massachusetts (January 2004)
3. Marine Archaeological Reconnaissance Survey: Cape Wind Energy Project (March 2004)
4. Cape Wind Terrestrial Alternative: Massachusetts Military Reservation, Bourne and Sandwich, Massachusetts (March 9, 2004)
5. Supplemental Marine Archaeological Reconnaissance Survey of Revised Layout Offshore Project Area (January 26, 2006)

The reports are available online at:

Report No. 1, 3, and 4: *http://www.nae.usace.army.mil/projects/ma/ccwf/app510c.pdf*
Report No. 2: *http://www.nae.usace.army.mil/projects/ma/ccwf/app3i.pdf*

Report No. 5: *http://www.capewind.org/downloads/feir/Appendix3.11-B.pdf*

The Cultural Resource sections of the Cape Wind Energy Project final EIS are Section 4.3.5 (Description of the Affected Environment) and Section 5.3.3.5 (Environmental and Socioeconomic Consequences). Additional reports from the EIS that may be useful include: (available online at http://www.mms.gov/offshore/RenewableEnergy/PDFs/FEIS/Section10.0Bibliography.pdf):

- **Report No. 4.3.4-1**. Public Archeological Laboratory (PAL). 2006. Cape Wind Energy Project Visual Impact Assessment of Revised Layout on Multiple Historic Properties: Final Environmental Impact Report. Nantucket Sound: Cape Cod, Martha's Vineyard, and Nantucket, Massachusetts. PAL Report No. 1485.05. Prepared for Cape Wind Associates, L.L.C., Boston, Mass. Pawtucket, R.I. September 2006.

- **Report No. 5.3.3-2**. Environmental Design & Research, P.C. 2003. Visual Simulation Methodology. Cape Wind Project. Cape Cod, Martha's Vineyard and Nantucket, Massachusetts. Prepared for Cape Wind Associates, L.L.C., Boston, Mass. Syracuse, N.Y. November, 2003.

Also, a list of Section 106 participants is enclosed with this letter.

Summary of Meetings

Recognizing that the proposed action could adversely affect historic and cultural properties, the MMS initiated formal consultation under Section 106 of the NHPA. To date the MMS has conducted seven separate meetings related to Section 106 consultations for the Cape Wind Energy Project, including:

- **July 23, 2008**-MMS held the first full Section 106 consultation meeting.
- **September 8, 2008**-MMS held the first separate Tribal Section 106 consultation meeting.
- **September 9, 2008**-Second full Section 106 consultation meeting.
- *December 29, 2008-MMS released its Finding of Adverse Effect (Finding) for the project.*
- **Jan 29, 2009**-Third full Section 106 consultation meeting to discuss the Finding Document and to begin discussions on possible mitigation of adverse effects, and steps towards reaching consensus on a Memorandum of Agreement (MOA).
- **April 28, 2009**-Fourth full Section 106 consultation meeting. The meeting was devoted to discussion of mitigation and steps towards reaching consensus on a MOA.
- **June 3, 2009**-MMS held the second separate Tribal Section 106 consultation meeting.
- **June 16, 2009**-Fifth full Section 106 consultation meeting to continue discussion on mitigation and steps towards reaching consensus on a MOA.

Meetings have been paused since June 2009 while the MMS is addressing important issues raised by the Advisory Council on Historic Preservation (ACHP) and the Massachusetts State Historic Preservation Officer (SHPO). Currently the MMS is in the final stages of addressing these issues, including the eligibility of Nantucket Sound for listing as a Traditional Cultural

Property (TCP) on the National Register of Historic Places (NRHP). We are working closely with the National Park Service (NPS), the ACHP, the SHPO, and all Section 106 consulting parties (including the Mashpee Wampanoag Tribe and the Wampanoag Tribe of Gay Head/ Aquinnah) to address these issues so that we can schedule the next meeting and bring the consultation to a conclusion. Once the Section 106 consultation process is concluded, the MMS will issue a record of decision on the project.

While the EPA is entering the process later than other consulting parties, the EPA may participate and express its views related to resolving the adverse effects pursuant to 800.6 at or before the next Section 106 consultation meeting, the date of which is yet to be determined. Additional details regarding the scheduling of the next meeting will be sent to all the consulting parties via a separate email.

We look forward to working with all consulting parties to reach consensus on a MOA for the proposed Cape Wind Energy Project. Should you have any questions about the Section 106 consultation process for the Cape Wind Energy Project, please feel free to contact our Federal Preservation Officer, Dr. Christopher Horrell, at 504-736-2796 or Christpher.Horrell@mms.gov.

Sincerely,

Andrew D. Krueger, Ph.D.
MMS Renewable Energy Program

Enclosure: Section 106 Consultation Participant List

cc: Brona Simon, Massachusetts State Historic Preservation Officer
Dr. John Eddins, Advisory Council for Historic Preservation

Cape Wind Energy Project
Section 106 Consulting Parties Contact List
(Updated as of November 21, 2008)

John T. Eddins, Ph.D.
Historic Preservation Specialist/Archaeologist
Advisory Council on Historic Preservation
1100 Pennsylvania Avenue, NW, Suite 809
Washington, D.C. 20004
Ph: 202-606-8553
Fax: 202-606-0321
jeddins@achp.gov

Brona Simon
State Historic Preservation Officer
Massachusetts Historical Commission
The MA Archives Building
220 Morrissey Boulevard
Boston, MA 02125
Ph: 617-727-8470
Brona.Simon@state.ma.us

Bettina Washington
Tribal Historic Preservation Officer
Wampanoag Tribe of Gay Head (Aquinnah)
20 Black Brook Road
Aquinnah, MA 02535-9701
Ph: 508-645-9265
bettina@wampanoagtribe.net

George (Chuckie) Green
Tribal Historic Preservation Officer
Mashpee Wampanoag Tribe
P.O. Box 1048
Mashpee, MA 02649
Ph: 508-477-0208
cgreen1@mwtribe.com

John Brown
Tribal Historic Preservation Officer
Narragansett Indian Tribe
Narragansett Indian Longhouse
PO Box 700
Wyoming, RI 02898
Ph: 401-376-1100
brwnjbb@aol.com

Bruce Bozsum, Chairman
Mohegan Indian Tribe
5 Crow Hill Road
Uncasville, CT 06382
Ph: 860-862-6100
Fax: 860-862-6115
cfodell@mohegan.nsn.us

Michael J. Thomas, Chairman
Mashantucket Pequot Tribe
P.O. Box 3060
Mashantucket, CT 06338
Ph: 860-396-6554
Fax: 860-396-6288
lciccarone@mptn.org

David Saunders
Bureau of Indian Affairs
Eastern Regional Archaeologist
545 Marriott Dr., Suite 700
Nashville, TN 37214
Ph: 615 564 6840
Fax: 615 564 6571
david.saunders@bia.gov

Bill Bolger
National Park Service
Northeast Region
200 Chestnut Street, Room 370
Philadelphia, PA 19106
Ph: 215-597-1649
Bill_Bolger@nps.gov

Karen Adams
U.S. Army Corps of Engineers
New England District
696 Virginia Road
Concord, Massachusetts 01742-2751
Ph: 978-318-8828
Karen.K.Adams@nae02.usace.army.mil

Ida McDonnell
Environmental Protection Agency, Region 1
Air Permits, Toxics and Indoor Air, Office of Ecosystem Protection
One Congress St, Suite 1100
Boston, MA 02114
PH: 617-918-1653
Mcdonnell.Ida@epamail.epa.gov

Roberta Lane
Program Officer & Regional Attorney
Northeast Office, National Trust for Historic Preservation
7 Faneuil Hall Marketplace, 4th Floor.
Boston, MA 02109
Ph: 617-523-0885
Fax: 617-523-1199
roberta_lane@nthp.org

Elizabeth Merritt
National Trust for Historic Preservation
785 Massachusetts Ave. NW
Washington DC 20036
Elizabeth_Merritt@[illegible]

Craig Olmsted
Project Manager
Cape Wind Associates, LLC.
75 Arlington Street
Boston, Massachusetts 02116
colmsted@capew[illegible]

Sarah Korjeff
Cape Cod Commission
3225 Main St. PO BOX 226
Barnstable, MA 02630-0226
Ph: 508-362-3828
Fax: 508-362-3136
skorjeff@capecodcommission.org

Jim Powell, Commissioner
Martha's Vineyard Commission
P.O. Box 1507
West Tisbury, MA 02575
Ph: 800-693-9960
OldMayhewFarm@[illegible]

Audra Parker
Alliance to Protect Nantucket Sound
4 Barnstable Rd.
Hyannis, MA 02601
Ph: 508-775-9767
Fax: 508-775-9725
audra@saveoursound.org

Joann Buntich, Director, Growth Management
Town of Barnstable
Town Hall
367 Main Street
Hyannis, MA 02601
Ph: 508-862-4678
joann.buntich@town.barnstable.ma.us

Carey Murphy, Selectman
Town of Falmouth
Town Hall
59 Town Hall Square
Falmouth, MA 02540
Ph: 508-495-7320
carey.murphy@falmouthmass.us

John J. Cahalane, Vice Chair/Selectman
Town of Mashpee
Town Hall
16 Great Neck North
Mashpee, MA 02649
Ph: 508-539-1400
jcahalane@ci.mashpee.ma.us

E. Suzanne McAuliffe, Chair/Selectman
Town of Yarmouth
Town Hall
1146 Route 28
S. Yarmouth, MA 02664
Ph: 508-362-5250
smcauliffe@yarmouth.ma.us

Ronald Bergstrom, Selectman
Town of Chatham
Town Hall
549 Main Street
Chatham, MA 02633
Ph: 508-945-5100
ronbergstrom@comcast.net

James Merriam, Town Administrator
Town of Harwich
Town Hall
732 Main Street
Harwich, MA 02645
Ph: 508-430-7513
jmerriam@town.harwich.ma.us

Robert Canevazzi, Town Administrator
Town of Dennis
Town Hall
P.O. Box 2060
South Dennis, MA 02660
Ph: 508-760-6149
rcanevazzi@town.dennis.ma.us

Pam Dolby, Town Administrator
Town of Edgartown
Town Hall
70 Main Street
Edgartown, MA 02539
Ph: 508-627-6180
pdolby@edgartown-ma.us

Roger Wey, Selectman
Town of Oak Bluffs
P.O. Box 1327
21 Wamsutta Avenue
Oak Bluffs, MA 02557
Ph: 508-693-7887
rwey@ci.oak-bluffs.ma.us

John R. Bugbee, Town Administrator
Town of Tisbury
Town Hall
P.O. Box 1239
Vineyard Haven, MA 02568
Ph: 508-696-4203
jbugbee@ci.tisbury.ma.us

Mark Voigt
Nantucket Historic Commission
Town Building
16 Broad Street, 1st Floor
Nantucket, MA 02554
Ph: 508-228-7268
[redacted]

Barbara Hill
Executive Director
Clean Power Now
569 Main Stree
PO Box 2717
Hyannis, MA 02601
Ph: 508-775-1196
[redacted]

Richard White, Town Manager
Town of Dennis
Town Hall
P.O. Box 2060
South Dennis, MA 02660

Interested Party

Neil Good
56 Scituate Road
Mashpee, MA 02649