Finally, while I understand that the careful development MMS' OCS alternative energy program takes time, I would urge that MMS issue its draft proposed regulations, release its final programmatic EIS, and complete individual project review as quickly as possible. States like the Commonwealth of Massachusetts urgently need to have this framework in place to address existing and new proposals for alternative energy facilities.

Sincerely,

Ian A. Bowles
Secretary

From: ocsenergywebmaster@anl.gov
To: mail_ocsenergyarchives; ocsenergywebmaster@anl.gov;
Subject: OCS Alternative Energy and Alternate Use Programmatic EIS Comment 80101
Date: Monday, May 21, 2007 4:51:35 PM
Attachments: Clean_Ocean_Actions_Comments_on_MMS_Draft_PEIS_May_2007_80101.pdf

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Thank you for your comment, Jennifer Samson, Ph.D..

The comment tracking number that has been assigned to your comment is 80101. Once the comment response document has been published, please refer to the comment tracking number to locate the response.

Comment Date: May 21, 2007 04:52:54PM CDT

OCS Alternative Energy and Alternate Use Programmatic EIS
Draft Comment: 80101

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Questions about submitting comments over the Web? Contact us at: ocsenergywebmaster@anl.gov or call the OCS Alternative Energy and Alternate Use Programmatic EIS Webmaster at (630)252-6182.

Clean Ocean Action www.CleanOceanAction.org

Ocean Advocacy Since 1984

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May 21, 2007

Maureen Bornholdt
Chief, MMS Marine Minerals Branch
MMS Alternative Energy & Alternate Use Programmatic EIS
Argonne National Laboratory EVS/900
9700 S. Cass Ave.
Argonne IL 60439

Dear Ms. Bornholdt and Whom it May Concern:

RE: Draft Programmatic Environmental Impact Statement for Alternative Energy Development and Production and Alternate Use of Facilities on the Outer Continental Shelf

SUBMITTED ONLINE VIA MMS WEBSITE
http://www.ocsenergy.anl.gov/involve/comments/index.cfm

Clean Ocean Action is a broad-based coalition of conservation, environmental, fishing, boating, diving, student, surfing, women's, business, service, and community groups. Our goal is to improve the degraded water quality of the marine waters off the New Jersey/New York coast. It is Clean Ocean Action's mission to investigate, review, and question proposals that may affect ocean water quality in the NY/NJ Bight. After many decades of abuse at the hands of polluters, these regional waters have successfully been defended to prevent ocean dumping and other adverse impacts.

The ocean and coastal waters of New York and New Jersey are an essential and unique resource. They provide recreational opportunities, support a vital commercial fishing industry, are home to a rich wildlife community, and are the foundation of one of the states' largest tourism industries. The NY/NJ Bight is an extremely fragile and vulnerable resource. A legacy of pollution and failure of stewardship for the NY/NJ Bight led to beach closures, massive fish kills, and economic crashes in the late 1980s. In response to these negative impacts, New Jersey strengthened its laws and regulations, and has learned to raise questions about using ocean and coastal resources and ensure the use of **the precautionary principle**, with full knowledge of the impacts and consequences. Moreover, two recent national studies by the Pew Oceans Commission and the US Commission on Ocean Policy highlight the dire condition of ocean resources.

To that end, MMS' implementation of this program must be as protective as possible of the marine and coastal environment and limit the potential economic impacts of industrial activities or pollution. Clean Ocean Action has carefully reviewed the Minerals Management Service's (MMS) Draft Programmatic Environmental Impact Statement for Alternative Energy Development and Production and Alternate Use of Facilities on the Outer

Continental Shelf (PEIS). The PEIS is a massive initiative contemplating the implementation of numerous technologies that are either untried on a commercial scale ***anywhere*** in the world, or that have only had limited experience around the world, such as offshore wind. In the US, there are no commercial experiences of these technologies. In fact, we commend MMS for being forthright about the current immature status of the offshore alternative energy industry in the introductory remarks at the public hearings MMS conducted on the draft PEIS: 80101-001

> *"It's basically unproven in U.S. waters, although wind farms have been sited offshore Europe. It's a nascent industry. It's an emerging industry. And there's uncertain viability associated with that.* [1]"

We emphasize the importance of utilizing the precautionary principle when developing the regulatory framework for these untested technologies.

We also strongly support the requirement that project specific Environmental Impact Statements must be conducted and we concur with the statement in the draft PEIS that *"The programmatic nature of the EIS requires that the examination of environmental consequences and potential mitigation measures be conducted at a higher scale than would be appropriate for site-specific projects. Therefore, additional environmental review pursuant to the National Environmental Policy Act (NEPA) will be required for all future site-specific projects on the OCS."* 80101-002

However, in general we found the PEIS to be flawed, incomplete, and lacking scientific justification for ecological impacts, assessments, and conclusions. MMS must address these deficiencies in the final PEIS to ensure this program moves forward based on good stewardship and governance of our precious ocean resources. We are concerned that a thorough and scientifically valid assessment that addresses these issues cannot be completed by the proposed August 2007 release date and we urge MMS to take as much time as is needed to conduct a complete PEIS that will form the backbone of an alternative energy program in the OCS. Clean Ocean Action submits the following comments on the MMS Draft PEIS:

Lack of Relevant Information

We strongly disagree with the statement in the draft PEIS that *"In general, impacts from all phases of development and production (i.e. technology testing, site characterization, construction, operation, and decommissioning) are expected to be negligible to minor if the proper siting and mitigation measures are followed."*

There is a dearth of information available on the impacts of offshore wind turbine facility on aquatic resources. Moreover, there are currently only 9 offshore wind turbine facilities in operation in the entire world that are over 3 miles offshore, the jurisdiction of this draft PEIS. Indeed, data have recently become available from the two largest offshore facilities located off the coast of Denmark that revealed some important adverse ecological effects on the behaviors of migrating birds and fish, including significant avoidance behavior of the submarine cable in flounder, and Atlantic cod during periods of high energy production at the turbines[2] and waterbird avoidance of areas in and around the 80101-003

[1] Maureen Bornholdt, Washington, D.C. Public Hearing on MINERALS MANAGEMENT SERVICE OCS ALTERNATIVE ENERGY AND ALTERNATE USE DRAFT PROGRAMMATIC EIS, April 16, 2007.
[2] Pedersen, J. & Leonhard, S.B. (2006) Electromagnetic Fields, Conference: Offshore Wind Farms and the Environment 2006. The Danish Monitoring Programme: Final Results, Helsingør, Denmark

two Danish offshore wind farms[3]. Though these limited data may not be relevant to the unique environment of the United States OCS, it raises concerns over potential impacts (especially cumulative impacts) of operations and therefore should not be considered negligible to minor.

An example of the lack of scientific support for impact assessment is seen in Chapter 5 of the Draft PEIS in reference to operational impacts on fish resources:

"Although individual organisms could be attracted to or avoid cables, the potential for population-level effects on fishes or invertebrates from such electromagnetic fields is largely unknown. However, it is likely that enough individuals would successfully pass over buried cables to preclude detectable population-level effects for sensitive species."

Submarine cables will run the distance between the offshore wind turbine facility and the onshore transmission facility, effectively creating up to a 100 meter barrier to fish that are unable or unwilling to cross the cable due to the presence of a magnetic field. It is inappropriate for MMS to assume that enough individuals will cross the cable. Instead, MMS has a responsibility to investigate the potential impacts of cable avoidance to feeding, mating and migration of fish resources. This is just one example of the failure of the Draft PEIS to adequately assess potential impacts.

Therefore, the final PIES must provide scientific rational and references used to determine environmental impacts of offshore wind turbines are "negligible to minor"

80101-003 (cont.)

Frequency of Maintenance Trips

The Draft PEIS states *"Human activity on the OCS related to a wind facility is relatively low, with only a few support vessels in operation at any one time during the highest activity period (construction)."*

Throughout the document, MMS refers to vessel traffic as "low-level" and uses this characterization to assess risk of vessel collision for marine mammals and sea turtles. The source of information on the number of vessels and maintenance trips needed to support construction and operations of an offshore wind facility is not provide in the Draft PEIS, but is cited as either one vessel per week per year per turbine or one vessel a day. Based on these estimates, MMS determined the potential for impacts to endangered marine mammals and sea turtles is considered moderate. The 40 Turbine Offshore Wind Facility proposed by the Long Island Power Authorities preliminarily estimated 400 maintenance trips annually or over 1 trip a day.[4] In reality, existing offshore wind turbine facilities have required an extremely high number of maintenance trips, including over 75,000 trips to Horns Rev off the coast of Denmark in just an 18-month period.[5] **The PEIS must utilize existing data and information on offshore facilities currently in operation to adequately assess the impacts of vessel traffic, emissions, noise, and general activity of marine resources.**

80101-004

The No-Action Alternative analysis

In analyzing the impacts of the No-Action Alternative, the Draft PEIS states *"...the impacts from coal, nuclear, and natural gas usage to satisfy expanding energy demand would be increased, and the potential increase in liquefied natural gas (LNG) imports would further U.S. dependence on foreign sources of energy."*

80101-005

[3] Fox, T., Christensen, T.K., Desholm, M., Kahlert, J. and Petersen, I.K. (2006) Final Results of the Avian Investigations at the Horns Rev and Nysted Offshore Wind Farms, Conference: Offshore Wind Farms and the Environment 2006. The Danish Monitoring Programme: Final Results, Helsingør, Denmark

[4] Long Island Offshore Wind Park, Application to the US Army Corps of Engineers NY District, April 26, 2005

[5] Staff Report, Renewables Technology, *Horns Rev Reveals the Real Hazards of Offshore Wind*, (October 2004).

From the goal of reducing green house emissions, if it were true, this statement would be encouraging for the development of these alternative energy sources. However, the Draft PEIS does not provide evidence for this statement. Nor does it clarify how alternative energy production in the OCS will function to reduce the impacts of coal, nuclear and natural gas usage in the U.S. or reduce our dependency on foreign sources of energy. **Therefore, the PEIS must include information on the projected percentage that offshore alternative energy will reduce the impacts of coal, nuclear and natural gas and our dependency on nonrenewable energy sources?**

The statement also implies that there are no other available alternative for reducing U.S. energy demand or the consumption of coal, nuclear and natural gas. Yet there are considerable data and resources available (which we will provide in our final comments) that shows substantial reductions in energy demand and reliance on foreign sources of energy can be achieved through efficiency and conservation measures. **Therefore, under the "No-Action Alternative" information must be provided on the potential for energy efficiency, and conservation methods, as well as onshore renewable energy technologies, to meet the needs of reducing U.S. energy demand and reliance on foreign sources of energy.**

80101-005 (cont.)

Cumulative Impacts

The Draft PEIS states *"At this time, the precise locations of potential new alternative energy facilities or alternate use program facilities are unknown. When such facilities or alternate uses of existing facilities are proposed, the cumulative impacts from all the facilities combined would be assessed in the environmental reviews for the proposed projects."*

One of the most important responsibilities of the PEIS is to evaluate the cumulative environmental and ecological impacts of multiple energy production facilities operating within the OCS. A "reasonably foreseeable future action" could include a significant number of alternative energy production facilities that utilize a vast percentage of offshore area. From an ecological perspective, the failure of the PEIS to consider alternative energy facilities in this assessment is scientifically flawed and leaving this responsibility to the Project-Specific EIS is inappropriate and irresponsible. It is critical that as the regulatory agency in charge of managing this program, MMS has failed to assess cumulative impacts. **Therefore, in the final PEIS, MMS must fully explore, quantify, describe and assess the cumulative environmental and ecological impacts of multiple alternative and traditional energy production facilities operating within the OCS to ensure good governance of our ocean resources.**

80101-006

Landside Impacts of Transmission requirements

The Draft PEIS states, *"Construction activities such as transmission cable installation could result in moderate impacts to coastal habitats (e.g., wetlands, barrier beaches). For example, the activities could interfere with forage habitat for birds, resulting in negligible to moderate impacts depending on the location and species. Onshore construction activities may result in minor to moderate air quality impacts, mainly from fugitive dust emissions, and moderate impacts to coastal habitats (e.g., wetlands, barrier beaches). Construction activities could interfere with nesting and forage habitat for birds, resulting in negligible to moderate impacts depending on location and species."*

The successful production of offshore wind power requires new and sophisticated high voltage and extra high voltage transmission lines in order to create the transmission capacities required to

80101-007

transport wind generated electricity.[6] **The PEIS fails to fully analyze all of the potential onshore impacts of alternative energy production in the OCS, including the construction of new transfer stations and transmission lines needed to transport generated power.**

80101-007 (cont.)

National Academy of Sciences Study

Finally, it is not clear how MMS plans to incorporate the information provided by the National Academy of Sciences ((hereinafter "NAS") completes the study required by Section 1833 of the Energy Policy Act. NAS has been tasked with providing information on offshore energy resource potential and recommendations on statutory and regulatory mechanisms for developing these resources.[7] **In the name of good governance, it is necessary to withhold regulations and final PEIS until these tasks are complete to ensure this essential information is incorporated. Upon completion of the study, MMS should review the conclusions and recommendations of the NAS report, take further public comment, and make any necessary changes to the Section 388 regulations.**

80101-008

In closing, Clean Ocean Action urges MMS to substantially improve the Draft PEIS by conducting a thorough scientific review of the potential impacts of alternative energy production facilities on aquatic resources, including the cumulative impacts of multiple facilities which may have far-reaching effects on migrating marine birds, mammals and sea turtles.

We thank you for the opportunity to submit comments and we look forward to reviewing the final PEIS.

Sincerely,

Cindy Zipf
Executive Director

Jennifer Samson, Ph.D.
Principal Scientist

[6] Wind Report 2004, E.ON Netz, pp.3.

[7] Energy Policy Act, Section 1833, Renewable Energy on Federal Land
(a) National Academy of Sciences Study- Not later than 90 days after the date of enactment of this Act, the Secretary of the Interior shall enter into a contract with the National Academy of Sciences under which the National Academy of Sciences shall--
(1) study the potential of developing wind, solar, and ocean energy resources (including tidal, wave, and thermal energy) on Federal land available for those uses under current law and the outer Continental Shelf;
(2) assess any Federal law (including regulations) relating to the development of those resources that is in existence on the date of enactment of this Act; and
(3) recommend statutory and regulatory mechanisms for developing those resources.
(b) Submission to Congress- Not later than 2 years after the date of enactment of this Act, the Secretary of the Interior shall submit to Congress the results of the study under subsection (a).

From: ocsenergywebmaster@anl.gov
To: mail_ocsenergyarchives; ocsenergywebmaster@anl.gov;
Subject: OCS Alternative Energy and Alternate Use Programmatic EIS Comment 80102
Date: Monday, May 21, 2007 4:52:20 PM
Attachments: Comment_Letter_to_MMS_052107_-_Final_80102.pdf

Thank you for your comment, Barry Rector.

The comment tracking number that has been assigned to your comment is 80102. Once the comment response document has been published, please refer to the comment tracking number to locate the response.

Comment Date: May 21, 2007 04:53:40PM CDT

OCS Alternative Energy and Alternate Use Programmatic EIS
Draft Comment: 80102

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Attachment: O:\NP&EDC\MMS Letters\Comment Letter to MMS 052107 - Final.pdf

Comment Submitted:
See attachment

Questions about submitting comments over the Web? Contact us at: ocsenergywebmaster@anl.gov or call the OCS Alternative Energy and Alternate Use Programmatic EIS Webmaster at (630)252-6182.

May 21, 2007

Maureen A. Bornholdt
Program Manager
MMS Alternative Energy and Alternate Use Programmatic EIS
Argonne National Laboratory
EVS/900
9700 S. Cass Avenue
Argonne, IL 60439

Dear Ms. Bornholdt:

I am writing to you as the Chairman of the Nantucket Planning and Economic Development Commission ("NP&EDC") regarding what I believe are the concerns of the residents of Nantucket as they pertain to the Draft Programmatic Environmental Impact Statement for Alternative Energy Development and Production and Alternate Use of Facilities on the Outer Continental Shelf ("Draft EIS"). The NP&EDC has been actively involved in the important issues surrounding the development of offshore energy resources, and I welcome the opportunity to submit these comments.[1] While I have not had the opportunity to fully evaluate every detail of the Draft, the following are of primary concern:

1. It would seem that the Energy Policy Act requirements substantially supersede the "no-action" alternative as outlined in the document (ES-3). 80102-001
2. The assumption that U.S. offshore wind "developers would likely skip the pilot or demonstration phase" should not translate to the presumption that scaled projects should not be proposed. Scaled projects serve the dual purpose of establishing commercial effectiveness, and monitoring actual impacts related to the siting of large-scale commercial projects over 100 MW in the U.S. (ES-5). We note, per the Draft, that "[I]t should be noted that cultural differences could affect the transferability of findings from other countries to the United States" (5-130). 80102-002
3. The MMS "did not want to limit the possibilities of development in federal waters by identifying locations" … or establishing "resource-specific development zones" or "no-development zones". It is recognized that substantial data and information is required to specify such ocean zones, but it could be argued that this is an area where the MMS is uniquely qualified, and this will ultimately lead to a greater and more efficient utilization of these offshore resources (2-4). It could also be argued that the MMS working in conjunction with state and/or local authorities should be proactive in identifying these preferred development locations. 80102-003
4. The Draft recognizes that "tourism and recreation are important activities for many communities on the Atlantic Coast", but then concludes "these activities do not make a significant contribution to overall [state level] employment or wages" (4-110). Our concern with this conclusion is that it understates the significant role that tourism and recreation play where these offshore energy projects may be cited. The Draft concludes that "Routine activities associated with Outer Continental Shelf developments might result in visual and auditory impacts on tourism and recreation…but "Except in extreme circumstances, however, impacts are expected to be minor or temporary." (5-133) It is not evident from the Draft that the basis for this conclusion is sufficient. 80102-004
5. Given the significant uncertainty related to the magnitude and distance of pile-driving noise impact on local populations, we highly recommend the MMS gather additional data from actual projects to support its conclusions (5-24). 80102-005
6. It is my understanding that the MMS has relied, in part, on an economic analysis for siting of offshore energy resources. As stakeholders in this process, I would strongly urge you to share this economic analysis and its underlying assumptions, so that this analysis may be understood and fully evaluated in this draft EIS process. 80101-006

Lastly, while not a direct response to the Draft EIS and to provide a constructive example, we would like to make the MMS aware that Nantucket, working in cooperation with Martha's Vineyard, will be proactively examining a site Southwest of Tuckernuck Island as a potential site for offshore wind development. The purpose of this investigation is to establish the commercial and environmental viability of this site, which I feel should be supported by the local community because it is not in close proximity to sensitive tourism and recreational resources and noise impacts to residents would be minimal. 80102-007

We sincerely appreciate your attention to our comments and concerns as the MMS moves forward with this important process for the development of offshore alternative energy resources.

Sincerely,

Mr. Barry G. Rector,
Chairman

[1]Comments are referenced according to the sections and page numbers of the Draft EIS, e.g., (2-4) to which they apply.

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Subject: OCS Alternative Energy and Alternate Use Programmatic EIS Comment 80103
Date: Monday, May 21, 2007 5:29:10 PM
Attachments: Winergy_Power_LLC_Comments_80103.pdf

Thank you for your comment, Dennis Quaranta.

The comment tracking number that has been assigned to your comment is 80103. Once the comment response document has been published, please refer to the comment tracking number to locate the response.

Comment Date: May 21, 2007 05:30:26PM CDT

OCS Alternative Energy and Alternate Use Programmatic EIS
Draft Comment: 80103

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Attachment: /Permits/MMS/NOPR/Notes and Comments/Winergy Power LLC Comments.pdf

Questions about submitting comments over the Web? Contact us at: ocsenergywebmaster@anl.gov or call the OCS Alternative Energy and Alternate Use Programmatic EIS Webmaster at (630)252-6182.

Winergy Power LLC Comments TO:
Minerals Management Service
Regarding: Comments on Draft Programmatic Environmental Impact Statement
May 21, 2007

The National Aquaculture Act of 1980 (amended 2002) was developed and signed into law to encourage development of an indigenous aquaculture industry in Federal waters. The law was intended to establish guidelines and clear path for domestic husbandry of seafood to replace diminishing natural stocks, offset imports of sea food, and to reduce energy usage by domestic fishing fleets that have been steadily traveling further offshore to find sufficient catch. A quarter of a century later, in 2007, no application has yet been filed for a commercial mariculture facility in Federal waters.

The definition of rules that ease the process does not guarantee the birth and growth of an industry.

Winergy Power commends MMS for their successful development of a DP GEIS to serve as a basis for guidelines for the development of renewable energy resources on the U.S. OCS. However, the NEPA process does exist, it works, and the Energy Policy Act of 2005 assigned to MMS the authority to issue leases, permits and rights of way for the development of renewable energy production facilities on the OCS. We recommend that MMS accept applications for site permits while the process of defining regulations is underway. In this year (2007), it appears that the earliest that offshore wind turbine installations could occur would be 2010. Each day of delay pushes the day the industry begins to deliver energy into the grid from the winds over OCS farther into the future. This was clearly not the intent of the Energy Policy Act of 2005.

It is our belief that the DP EIS and follow-on regulations must be further developed to not only guide, but to accelerate the development of renewable energy resources on the OCS. To attain this goal, the EIS and regulations should be developed along the model of the Nationwide Permit Program (NWP) as conducted by the U.S. Army Corps of Engineers (ACOE) (33CFR Ch. II Part 330).

The purpose of the NWP program is "to regulate with little, if any, delay or paperwork certain activities having minimal impacts." (Section 330.1(b)). While the installation of any offshore structure in Public Trust waters is a major federal action (NEPA, the Environmental Quality Improvement Act of 1970, as amended (42 U.S.C. 4371 et seq.), sec. 309 of the Clean Air Act, as amended (42 U.S.C. 7609), and E.O. 11514 (Mar. 5, 1970, as amended by E.O. 11991, May 24, 1977)), many aspects of the installation and operation of renewable energy equipment on the OCS are environmentally benign, as noted in many instances within the DP EIS.

80103-001

There are a number of reasons for MMS to immediately begin accepting applications for offshore renewable energy projects even if the regulations for those activities are not yet in place. In Section 2.2, MMS itself describes this as Option Number 2, where MMS will accept applications before regulations are written and issued. This document delineates the reasons for an immediate start to the application process, conditions under which applications can be accepted, and comments on possible improvements to the DP EIS.

The operation of a renewable energy production facility displaces the need to generate an equivalent amount of electricity from fossil fuel consumption. Renewable energy production

facilities therefore are inherently mitigation measures. They reduce air pollution, limit the effects of global warming, reduce the need to import fossil fuels (balance of trade benefits), and produce local employment opportunities. For offshore wind turbines, there is some evidence that in certain low-current locations the local biodiversity and biotic population levels increase.

Because of these fundamentally joined benefits and the absence of significant deleterious impacts, as has been demonstrated in numerous instances in the North, Irish and Baltic Seas since 1992, we recommend that MMS choose the second option as described in 2.2 CASE-BY-CASE ALTERNATIVE (Alternative Energy Draft Programmatic EIS March 2007).

The reasons for this choice are various:

- The pace of development of a regulatory regime is attenuating the competitiveness of the U.S. offshore wind industry by concentrating the attention of technology developers to match the conditions of Northern Europe waters
- Tens of millions of euros have been devoted to studies that have demonstrated that scaling up of offshore wind farms to nearly 100 wind turbines has mostly beneficial impacts on the environment
- Careful siting of offshore wind farms in barren areas has brought life to those areas, encouraging tourism and recreational fishing (Nysted Offshore Wind Park).
- The steady, sometimes precipitous decline of commercial fisheries in U.S. coastal waters suggests that the establishment of areas of the ocean where intensive, mechanized commercial fishing does not occur will yield overall benefits to the health and long-term fecundity of our coastal waters.
- In the absence of detailed data on the available resources, the applicant is best suited to map, assess and quantify the real world energy resource until remote instrumentation is available that would yield usable results over the vast area of the EEZ.

Such benefits will be more quickly made available to the U.S. if applications for sites are accepted now, rather than waiting for MMS to continue their unfunded effort to define a highly refined set of regulations before applications are accepted. The NEPA process is thorough. There is an ample historic basis to inform the process of issuing leases, easements and rights of way. There is an urgent national need to develop clean, renewable domestic energy resources.

The processes of identifying, filing an application, performing site due diligence, addressing all environmental data gathering, financing, construction, operation and decommissioning of offshore renewable energy facilities are costly. If certain restrictions on applications are codified, then it should be possible to immediately begin accepting applications for offshore renewable energy projects without defining a full set of highly specific regulations at this time. These application conditions would be:

- A single application would need to encompass sufficient site options to satisfy NEPA requirements for alternatives analysis.
- Performance requirements that the application demonstrably initiate baseline studies at all prospective sites for which an application has been received and accepted.

Comments on the DP EIS

The DP EIS would continue to be developed while all applicants begin their work in a manner that satisfies NEPA requirements.

80103-001 (cont.)

Several items within the EIS would foster the development of offshore renewable energy development, thus satisfying the intent of Section 388 of the Energy Policy Act of 2005, Public Law 109-58. The Act formalized the Federal government's recognition of the energy content of the movements of the ocean and the air above it as potential contributors to the nation's supply of secure, affordable and reliable energy.

The analyses of potential impacts presented in the DP EIS in a high majority of areas of focus led to conclusions that there would be negligible to minor impacts from offshore renewable energy project siting studies, installation, operation and decommissioning. These conclusions are borne out by accumulated evidence from numerous monitoring programs carried out in Northern European waters and cited in the DP EIS.

The analyses of existing activities in the OCS showed that already-permitted activities such as offshore oil and gas have far greater impacts that could ever be imagined for offshore renewable energy projects. An example is bird mortality in the Gulf of Mexico (DP EIS 7.5.2.9), where the annual avian mortality is estimated to be 200,000 birds per year for about 4,500 platforms. The worldwide total number of bird kills from wind turbines has been estimated to be about 29,000 per year, caused by collisions with approximately 75,000 wind turbines.[i] Overall, the percentage of avian deaths due to wind turbines is estimated to be 0.003% annually.[ii]

More than two billion birds have migrated past the Horns Rev and Nysted offshore wind farms, resulting in no more than six fatalities recorded in over four years of operation.

The return of formerly absent sea mammals (seals in the Baltic) and the diminishing of fears regarding habitat loss (the return of sea ducks to the Horns Rev site) have amply demonstrated that fears regarding short- and long-term negative impacts are unfounded.

Cumulative impacts of clusters of industrial scale offshore renewable energy production facilities are still unknown. At lower levels, however, no significant negative impacts have been observed.

80103-002

Correlative Rights and the DP EIS

The DP EIS did not address the "protection of correlative rights" as stated in Section 388 of EPAct 2005. Correlative rights may have environmental impacts that need to be considered in terms of cumulative effects, as well as socioeconomic impacts because of the use of areas of the ocean over the OCS by renewable energy production facilities and commercial fishing activities.

80103-003

Cumulative impacts may arise from the installation of a multitude of anchoring and cable systems, which may have minor to moderate impacts on benthic and demersal communities, as well as migratory pathways of pelagic and mammalian species. On the other hand, the presence of such fixed structures would mitigate against the practice of drag netting and thus also against the significant diminution of pelagic species in areas where such fishing technologies are used.

80103-004

Decommissioning

Section 5.2.1.5 Decommissioning indicates that it may be necessary to remove the bases of renewable energy conversion devices to a depth of up to 16 feet beneath the seabed.

80103-005

The Minerals Management Service (2001 Title 30 Volume 2 250.913) requires only verified removal of all obstructions to other activities in the area and the U.S. Coast Guard (33 CFR Part 245) requires either removal to eliminate a hazard to navigation or buoy marking if navigation and other activities will not be impaired.

Complete removal option usually entails cutting the structure to a depth of five (5) to (15) feet below the seabed (*An Assessment of Techniques for Removing Offshore Structures – Complete Removal Option*, National Academy of Sciences, Commission on Engineering and Technical Systems, 1996). 80103-005 (cont.)

It may be sufficient to require removal only to a depth of 5 or 6 feet. This option needs more thorough consideration.

Section 5.2.2.5 Decommissioning assumes a maximum usable lifetime of 25 years for an offshore wind farm. There is no historical basis for this assumption. Lifetimes of offshore equipment will increase rapidly with experience. We recommend issuance of leases with 40 year terms, which will allow adequate time for EIS and other permitting work, construction, machine lifetimes and decommissioning of more mature technologies. 80103-006

Marine Biomass

Any EIS discussion of potential negative impacts on marine wildlife, including finfish, shellfish, mammals, birds, reptiles and benthic and demersal organisms must also consider the inherent mitigative aspects of offshore renewable energy installations relative to commercial fishing operations. For example, the presence the offshore renewable energy facilities may inhibit drag netting in the project footprint, which will be small in the total expanse of the EEZ. Such an offset will allow a greater quantity of biomass to flourish. The electrical output of an offshore renewable energy conversion facility will improve air quality by offsetting the need to burn fossil fuels and will reduce the rate of acidification of the ocean from the fallout from burning fossil fuels. 80103-007

Going further, the construction of industrial-sized offshore renewable energy conversion power plants may preclude the need to construct onshore fossil- and/or nuclear-fueled power plants which require use of massive amounts of nursery-rich coastal waters,

Meteorological Towers

It is unlikely that more than two or three meteorological towers will ever be needed in a given region of the OCS waters. Even should MMS not request direct access to the data that is collected, MMS will still have validated data on the resource because metered performance data will reveal the resource of the area given the performance capabilities of the machines permitting for the project. 80103-008

Because so few met towers will be needed, and their impacts will be for the most part negligible at any one location in any region, a Nationwide Permit should easily meet and exceed NEPA requirements for this type of activity.

Regional Endangered Species Act (ESA)

The performance of regional ESA analyses would be greatly benefit all applicants in all regions because they would know what they need to examine in performance of their environmental studies. 80103-009

Such studies, performed by MMS, would eliminate the chance of "surprises" at the end of the permitting process. Also, applicants would know early on the mitigation measures that would be necessary to comply with the requirements of the ESA. Alternatively, they could identify alternative sites that do not have the same level of effects on endangered species.

Baseline Monitoring

No monitoring regime whatsoever was defined for environmental monitoring regimes in the DP EIS. Such regimes, although implicit in NEPA, should be defined in detail in concert with appropriate Federal agencies, e.g.: 80103-010

- Army Corps of Engineers
- Fish and Wildlife Service
- National Marine Fisheries
- Environment Protection Administration
- Federal Aviation Administration
- National Park Service
- Others

Conclusions

Experiences with offshore renewable projects to date elsewhere in the world, albeit almost exclusively in Northern Europe, have measurably shown (mostly with offshore wind projects) that few negative and a number of positive impacts can be expected. Even the negative impacts have been mild and confined to some base scouring (no scour mats around the turbines at Scroby Sands) and temporary habitat displacement (sea ducks at Horns Rev).

The applicability of such observations to U.S. coastal waters is not assured because there are no commercial offshore renewable energy parks in the U.S.

Common sense, whatever that may be, would suggest that the chances that those results are transferable are high. The degree of such assuredness cannot be overwhelming without actual data.

For this reason, we recommend, as stated at the outset of this commentary, that MMS immediately begin to accept applications so that data can be acquired as quickly as possible. It is mathematical, not political logic that indicates that electricity generated from a renewable resource will cause less pollution than electricity from a fossil fuel source. Similarly, a fuel with no cost is one that does not have to be imported at a rising cost.

The uniformity of results from projects in European waters, while not automatically transferable to U.S. expectations, are sufficiently indicative to encourage the acceleration of installation of

early stage projects in U.S. waters. Such demonstration projects would furnish the base data upon which regulations can be defined on a foundation of real world experience.

Because the observed effects have been so uniformly mild or even positive, we recommend that applicants for early stage projects be required to file thorough Environmental Assessments rather than full EIS process.

[i] Global Business Directory, www.medibix.com. Estimate based on Vestas having installed 26,000 wind turbines worldwide, representing an installed market share of 35%.
[ii] Environmental Impacts of Wind-Energy Projects, National Academy of Sciences, 2007

From: ocsenergywebmaster@anl.gov
To: mail_ocsenergyarchives; ocsenergywebmaster@anl.gov;
Subject: OCS Alternative Energy and Alternate Use Programmatic EIS Comment 80104
Date: Monday, May 21, 2007 5:30:26 PM
Attachments: NRDC_AERU_PEIS_comment_letter_5-21-07_80104.pdf

Thank you for your comment, Kate Wing.

The comment tracking number that has been assigned to your comment is 80104. Once the comment response document has been published, please refer to the comment tracking number to locate the response.

Comment Date: May 21, 2007 05:31:36PM CDT

OCS Alternative Energy and Alternate Use Programmatic EIS
Draft Comment: 80104

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Comment Submitted:
Attached, please find the comment letter from NRDC. Thank you for considering our input.

Questions about submitting comments over the Web? Contact us at: ocsenergywebmaster@anl.gov or call the OCS Alternative Energy and Alternate Use Programmatic EIS Webmaster at (630)252-6182.

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THE EARTH'S BEST DEFENSE

NATURAL RESOURCES DEFENSE COUNCIL

May 21, 2007

Maureen Bornholdt, Program Manager
Minerals Management Service
Alternative Energy and Alternate Use Programmatic EIS
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Re: Comments on the Draft Outer Continental Shelf Alternative Energy Programmatic Environmental Impact Statement

Dear Ms. Bornholdt:

On behalf of the Natural Resources Defense Council (NRDC) and our more than 1.2 million members and e-activists, we are providing these comments on the draft Programmatic Environmental Impact Statement (PEIS) regarding the development and implementation of the National Offshore Alternative Energy-Related Use (AERU) program on the Outer Continental Shelf (OCS). Combating global warming and protecting the marine environment are two of NRDC's top environmental priorities. The deployment of appropriately sited and environmentally sustainable renewable energy technologies in the United States is important to achieving both of these goals. If properly regulated, the AERU program could be a step in the right direction.

The scope of the draft PEIS is necessarily limited by the uncertainties associated with the nascent technologies considered. MMS characterizes the document as a "first look at the potential impacts" of the AERU program.[1] To engage in "early dialogue" with the public, MMS issued this draft PEIS for comments before program rules and regulations were published.[2] We appreciate the opportunity for early involvement. However, because the PEIS does not describe the regulatory framework that will be used to issue leases, easements, rights of way or other permits, it is difficult to assess how the AERU program will actually operate. We expect that MMS will continue to solicit public comment as rulemaking progresses and project-level environmental impact statements (EISs) are developed for each project approved under this program, and we look forward to continuing to participate in those public discussions. We expect to have future opportunities to comment on the general regulatory framework for the AERU program, as well as each project-level EISs. Our comments on various aspects of the draft PEIS appear below.

[1] PEIS p. 1-2.
[2] PEIS p. 1-2.

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1. This PEIS, on its own, does not create a sufficient opportunity for the public to comment on the AERU program and its impacts.

We understand that MMS intends this PEIS to function as a general exploration of potential programmatic impacts and the resources that might be affected.[3] However, several issues arise from taking such a broad focus, as described below.

a. The draft PEIS does not adequately describe the program or its regulations.

MMS states that the purpose of this action is to "develop a regulatory program implementing MMS's new authority pursuant to Subsection 8(p) of the OCSLA."[4] But as noted above, MMS has issued the draft PEIS before publication of the program's regulatory structure and requirements. It is impossible to tell what the rules might be from the PEIS. These limitations necessarily hamper MMS's ability to analyze potential environmental impacts of the program while also impeding the public's opportunity to make informed comments.

Although the draft PEIS describes some aspects of the planned program in general terms, the program has not yet been fully delineated and details are scarce. Some ambiguities and inconsistencies in the document also make it difficult to discern what the program's requirements will be. For example, the draft PEIS does not clearly specify the type of environmental review that each project will undergo. Similarly, the draft PEIS lists a number of mitigation possibilities available to address predicted impacts[5] and expects mitigation to "minimize impacts,"[6] but it does not indicate standards or criteria for selecting mitigation methods. In fact, Chapter 3, which describes the program, does not mention mitigation. Also, in some parts of the analysis, the draft PEIS suggests that structures will be removed at the end of the lease, while others leave open the possibility that structures will remain in place.[7]

80104-001

It is nearly impossible to predict the environmental impact of a program without knowing what the regulatory requirements and standards will be because these rules can dramatically affect the impacts. Including this information in the PEIS would allow MMS to analyze potential impacts more concretely and would give stakeholders a meaningful opportunity to provide feedback on the rules and regulatory structure at the programmatic level. Additionally, under Section 388 of the Energy Policy Act of 2005 (EPAct), MMS has certain obligations, such as providing for public notice and comment on the leases and requiring a form of security from leaseholders.[8] Without knowing what the rules will be, the public cannot assess whether MMS has satisfied these requirements.

We would expect to find the following information in a PEIS:

[3] PEIS pp. 1-4 to 1-9.
[4] PEIS p. 1-1.
[5] PEIS pp. 5-201 to 5-202.
[6] PEIS p. 7-44.
[7] Compare PEIS pp. 5-201 and 5-205 with p. 3-26.
[8] See Energy Policy Act of 2005, Pub. L. No. 109-58, § 388, 119 Stat. 594, 744-47 (2005).

- a clear and detailed description of the proposed program;
- regulatory standards that will apply, including those for project siting, project size, operation, mitigation, and acceptable/unacceptable environmental impacts;
- the potential locations of projects and any excluded or preferred development areas;
- a description of the permitting process and requirements;
- a description of an adaptive management policy including the types of impacts that would trigger adaptive management, the process for triggering an adaptive management requirement, and how the adaptations would be developed;
- the terms, conditions, and limitations of leases, easements, or rights of way;
- requirements for decommissioning and removing installations;
- research and data collection requirements;
- monitoring, oversight, and enforcement activities and standards;
- information on the size, location, and status of potentially impacted natural resources.

This list is not intended to be exhaustive. As noted in our comments below, the draft PEIS provides insufficient information on many of these points. MMS should improve the final PEIS by including more information on these topics, particularly any information that will clarify the regulatory rules and standards that will be applied to projects.

MMS should develop and analyze a regulatory program that protects environmental resources while also facilitating the development of alternative energy resources in this PEIS. Under the EPAct, MMS must ensure that any program activity is carried out in a manner that provides for "protection of the environment" and "conservation of the natural resources of the outer Continental Shelf."[9] The alternative energy technologies discussed in this draft PEIS have the potential to make a contribution to meeting the United States' energy needs and reduce our reliance on other sources of electricity, such as fossil fuels, which create substantial environmental and public health impacts. However, without proper environmental standards, these alternative energy technologies could also pose significant risks to natural resources, particularly since large scale projects may eventually be proposed to significantly offset other forms of power generation.[10] In addition, the proliferation of uses in the ocean and the lack of a comprehensive system of ocean governance heighten the risk of cumulative impacts from these projects. Such cumulative impacts could arise from the presence of multiple projects and uses in an area or from multiple installations associated with one project. MMS should take steps to account for the cumulative impacts of granting multiple leases or permits and take steps to prevent harmful cumulative impacts to the environment through steps such as adaptive management, the use of string environmental standards, and thorough NEPA review.

MMS must create a regulatory system that protects against these risks and ensures environmental sustainability in all phases of a project. It is crucial that MMS create concrete standards for permitting and mitigation at the program level to ensure consistency across projects and prevent unintended environmental impacts. These standards should address issues such as: What level of environmental impact would be deemed acceptable for a permit? What level of mitigation will be

80104-001 (cont.)

[9] See Energy Policy Act of 2005, Pub. L. No. 109-58, § 388, 119 Stat. 594, 744-47 (2005).
[10] See Cada, et al. (2007). "Potential impacts of hydrokinetic and wave energy conversion technologies on aquatic environments." Fisheries 32(4): 174-181.

required from projects? What type of potential impact could be subject to adaptive management requirements and how potential adaptations will be developed and triggered? What criteria should be considered when choosing an acceptable site? How will cumulative impacts be assessed?

The regulatory system should also provide for ongoing monitoring and enforcement of developer obligations. Adaptive management should be used carefully to allow projects to proceed only after the best efforts have been made to quantify the risks of impacts and mitigate them. Adaptive management should not be used as an excuse to avoid rigorous study and permitting requirements.

80104-001 (cont.)

b. MMS must specifically require future Environmental Impact Statements for each proposed project under the AERU program.

This PEIS does not, on its own, satisfy MMS's obligations under the National Environmental Policy Act (NEPA).[11] Rather, MMS must conduct a separate EIS for each project under this program so that each project can be examined individually. The project-level EISs must offer full NEPA review, including a complete impacts analysis for the proposed project, any reasonable alternatives, and cumulative impacts arising from the project. Project-level EISs must also provide an opportunity for public notice and comment, which coincides with MMS's obligation under Section 388 of the EPAct to provide for public notice and comment on every proposed project.

80104-002

The draft PEIS hints that AERU projects will undergo some type of future environmental review, but it fails to describe what that review will entail. For example, it promises "additional environmental review pursuant to [NEPA]" for all projects.[12] Elsewhere it states that some impacts will be evaluated in "site-specific environmental impact analyses."[13] The final PEIS should resolve this ambiguity by clearly requiring a full EIS for each project. If MMS does not plan to require a complete EIS for individual projects, it cannot rely on this inadequate PEIS to meet its legal obligations under NEPA.

c. MMS should not plan to rely on this PEIS rather than conducting substantive analysis in future project-level EISs.

We would also be concerned about any "tiering" between project-level EISs and the PEIS that compromised the completeness of environmental impact analysis in the project-level EISs.[14] Such "tiering" would be particularly troublesome because the draft PEIS focuses on "generic impacts from potential activities occurring in the environment,"[15] purposely deferring discussion of localized impacts and specific technology to subsequent analyses. A discussion of generic impacts cannot replace detailed analysis of environmental and other impacts on a proposed site,

80104-003

[11] NEPA requires federal agencies to prepare an environmental impact statement (EIS) for major federal actions. *See* 42 U.S.C. § 4332(2)(C).
[12] PEIS p. ES-2.
[13] PEIS p. 7-38.
[14] See 40 CFR §1502.20 and §1508.28 for a discussion of when tiering is permissible. *See also Or. Natural Res. Council v. U.S. Bureau Land Mgmt.*, 470 F.3d 818, 823 (9th Cir. 2006).
[15] PEIS p. 1-4.

so future project-level EISs may not simply refer back to the PEIS in lieu of analyzing the project's impacts.

80104-003 (cont.)

d. Parts of the analysis rely on assumptions that cannot be verified from the PEIS.

Another factor complicating the public's ability to understand and comment on the PEIS is that the document sometimes makes assumptions that cannot be verified in the text. One example of this occurs in the discussion of construction impacts on sea turtles. The analysis assumes that "habitats such as sea-grass beds and live-bottom areas commonly used by turtles for feeding or resting would be avoided during facility siting and cable placement."[16] But the PEIS includes no regulatory standards for choosing project and cable sites. Similarly, in summarizing impacts on some natural resources, MMS assumes that mitigation measures will be in place when determining that no population-level effects will occur.[17] However, the PEIS does not specify the standards that the mitigation measures must meet or describe how the possible mitigation measures will be chosen. Without knowing more, readers cannot properly evaluate these types of statements. Furthermore, if MMS fails to impose the standards it presupposes, the PEIS analysis would be inaccurate and larger impacts could be expected.

80104-004

80104-005

Additionally, the PEIS sometimes improperly assumes that effects will be minimal without substantiating these assumptions. In discussing the potential impacts of electromagnetic fields, the text states that "[a]lthough individual organisms could be attracted to or avoid cables, the potential for population-level effects on fishes or invertebrates from such electromagnetic fields is largely unknown."[18] It continues, "[h]owever, it is likely that enough individuals would successfully pass over buried cables to preclude detectable population-level effects for sensitive species."[19] The text does not provide any citation or support for this conclusion and could not, since it has just indicated that the effects are unknown.

80104-006

These assumptions also hurt the quality of the PEIS's environmental analysis. To the extent that MMS relies on unsupported assumptions, the PEIS fails to adequately analyze potential impacts. These assumptions also prevent MMS from properly considering alternatives. For example, where MMS assumes that mitigation or proper siting will occur, it does not analyze the effects of failing to require these efforts.

2. Because the many uncertainties associated with these alternative energy technologies could lead to unpredictable environmental impacts, MMS should adopt principles of adaptive management.

80104-007

It is critical that MMS adopt adaptive management techniques to address the uncertainties inherent in the AERU program.[20] As recognized in the draft PEIS, the types of technology that would be installed under this program are novel and rapidly evolving.[21] This makes it difficult to

[16] PEIS p. 5-198
[17] PEIS pp. 7-6, 7-8, and 7-9.
[18] PEIS pp. 5-62 to 5-63.
[19] PEIS pp. 5-62 to 5-63. *See also* PEIS pp. 5-314 and 5-287 for similar statements.
[20] See Cada, et al. (2007). "Potential impacts of hydrokinetic and wave energy conversion technologies on aquatic environments." Fisheries 32(4): 174-181.
[21] PEIS p. 1-2 (referring to technologies "still in their infancy" and "still in the testing phase").

predict what technologies will actually be installed offshore, much less what environmental impacts these technologies will have. Offshore wind energy has been implemented to some degree in other countries and a few demonstration projects exist for wind and ocean current technologies, but there is a dearth of information about how these technologies will interact with the environment once installed. For example, little is known about how marine life will respond to some foreseeable stressors associated with these projects.[22] Furthermore, MMS does not have much information on how many projects will be installed over the time period covered in the PEIS, how large the projects will be, or where they will be located. In light of these many uncertainties, unforeseen environmental impacts may arise because so much is unknown (and unknowable) about the interactions between these technologies and natural environments.

Adaptive management will give MMS flexibility to address unforeseeable environmental impacts by requiring ongoing monitoring to detect unexpected impacts and adjustment to ameliorate any impacts. In circumstances where impacts are severe and cannot be mitigated, adaptive management allows for immediate removal of projects.[23] In these cases and only for the first few projects, the government should help insure against developers' losses, so that the financial risk does not inhibit the development of innovative technologies. But adaptive management is no replacement for using all available information to predict and protect against environmental impacts that can be foreseen (for example, by comparison to analogous projects or technologies). Efforts to predict and avoid environmental impacts through collecting and sharing data must continue and be used to limit to the greatest extent possible the impacts that would trigger adaptive management requirements. This is critical both so that adaptive management does not become an excuse for incomplete analysis and also so that projects can still attract private sector finance. As part of adaptive management, MMS should also consider revisiting and revising this PEIS to perform a fuller analysis of the program's environmental impacts once more is known more about how these technologies function in natural environments.

80104-007 (cont.)

3. MMS should establish ongoing opportunities for cooperation and consultation with the relevant federal, state, and local agencies, as well as the public.

We encourage MMS to create a process for the AERU program that gives all relevant stakeholders an opportunity for ongoing involvement and participation in the program. Many stakeholders have interests in waters and lands that may be impacted by the AERU program, including local communities; tribes; nongovernmental groups; private individuals; and federal, state, and local agencies. A variety of state and federal agencies have authority over different uses of the ocean, and proposed projects will be subject to multiple levels of permitting and review. This fragmented system exacerbates the risk of cumulative environmental impacts and conflicting uses between different projects under the jurisdiction of different agencies.

80104-008

We suggest that MMS develop regional advisory groups with membership from states, other federal agencies, and the public. This would give MMS the ongoing benefit of the expertise and

[22] PEIS p. 5-63 (unknown potential for electromagnetic fields to have population-level effects on fishes or invertebrates) and p. 5-309 (unknown whether sea turtles would avoid moving turbine rotors).
[23] See Cada, et al. (2007). "Potential impacts of hydrokinetic and wave energy conversion technologies on aquatic environments." Fisheries 32(4): 174-181.

viewpoints of multiple stakeholders and could be especially helpful in implementing and managing novel projects.

MMS should also establish a coordinated federal review process with public comment. This would facilitate cooperation between federal agencies and streamline the multiple permit applications that projects will face, while still preserving a role for the public. At a minimum, MMS should regularly consult with other federal agencies with relevant expertise, such as NOAA, USFWS, and DOE, and with state and local governments.[24]

Additionally, we suggest that MMS periodically report on approved projects to the CEQ Committee on Ocean Policy to keep this body apprised of developments in the AERU program.

80104-008 (cont.)

4. MMS should require collection of baseline biological and ecological data at early stages of project development, and make these data available to the public.

    a. MMS should use the technology testing phase to collect information on how demonstration devices interact with the environment.

MMS intends to require wave and ocean current technologies to undergo technology testing before a commercial project could go forward.[25] MMS predicts that wind energy will probably not require technology testing because it has been demonstrated in Europe.[26] Rather than focusing solely on device engineering and feasibility, it would make sense for MMS to use the technology testing phase as an opportunity to gather information about how a device interacts with the environment. This would be particularly useful because so little is known about how many of these technologies affect the natural environment around them. Gathering baseline data prior to technology testing is all the more important when technology testing occurs before site characterization.

In order to make the most of the technology testing phase, MMS should require companies to collect biological and ecological data before installing demonstration devices as a baseline and to monitor any effects the devices have on natural resources. In addition to expanding the knowledge base, this would also identify some types of negative environmental impacts early. While previous implementation of wind may demonstrate the feasibility of offshore wind technology, these devices might interact with the OCS environment differently than with other environments. Therefore, some level of preliminary environmental testing for offshore wind projects would also be appropriate. MMS should make the results of technology testing available to the public so that developers can learn from previous projects and to spread awareness early about design elements that are environmentally harmful or environmentally precautionary.

80104-009

    b. MMS should require the collection of biological and ecological data during the site characterization phase of projects.

[24] Indeed, section 388 of the EPAct requires coordination and consultation with affected state and local governments.
[25] PEIS pp. 3-17.
[26] PEIS pp. 3-17 (new foundation technologies may be subject to demonstration projects).

NRDC comments on MMS AERU Programmatic EIS, May 21, 2007

The draft PEIS indicates that site characterization to collect various data about the proposed site would need to be conducted before installing a technology[27] but does not further specify what data should be assembled. It is crucial to gather a broad array of environmental data before any installation occurs.

We recommend that the baseline data collected during site characterization include, at a minimum:

- number and diversity of species in the affected area, including indicator species and endangered, threatened, or rare species
- habitat use patterns by key species
- water quality and ocean condition, including currents
- habitat composition, including benthic substrates and biogenic habitats, such as corals and sponges
- presence of any biologically important or unique uses of the affected area (e.g., migratory routes or feeding grounds)
- information about traditional and local uses of the area, including fishing activity and cultural resources.

80104-009 (cont.)

In addition to requiring collection of this data, MMS should centralize this information and make it available to the public as well as to future permit applicants. This will expedite development of offshore alternative energy because potential developers can access the information that others have collected and use it to plan their own projects. We also recommend that MMS commission independent studies of habitats and biological resources that are likely to be affected by alternative energy development on the OCS. These studies could be conducted in partnership with state and public research institutions and guiding by input from the regional advisory panels we recommend in comment #3.

We also understand that MMS is in the process of creating a coordinated OCS mapping initiative pursuant to Section 388 of the EPAct. We urge MMS to prioritize this effort, since such a map would prove invaluable to the AERU program and since Congress intended for the map to assist in siting decisions for renewable energy projects on the OCS.[28]

5. MMS should identify areas of high potential for preferential siting of projects in the future and should adopt a system of phased access rights.

MMS has decided not to map out the best areas for alternative energy development at this point because of its limited resources and information, as well as its reluctance to restrict the possibilities for development.[29] We understand these constraints, but we believe that developing information about areas with high potential for energy output is important to ensuring that AERU projects are as successful as possible. The draft PEIS suggests that MMS hopes to develop such information in cooperation with applicants and affected states in the future. We encourage MMS to prioritize this effort and emphasize that any standards that MMS adopts should minimize environmental impacts while also maximizing energy benefits from projects.

80104-010

[27] PEIS pp. 3-18.
[28] See §338(b)(1) of the EPAct, Pub. L. No. 109-58, 119 Stat. 594, 744-47 (2005).
[29] See PEIS p. 2-4.

By implementing a phased approach to access rights, MMS could encourage the protection of natural resources and the development of AERU projects in high-potential areas. A phased approach to access rights would first award rights for site characterization and data collection, and only grant access for further development if those steps demonstrated that the area was appropriate for development. MMS should make access for site characterization and data collection as simple and efficient as possible, while still establishing criteria to ensure that parties seeking access have serious, feasible, and financially viable projects. This will protect against speculative or undercapitalized exploration.

When considering whether to grant access rights for construction and operation purposes, MMS should evaluate the environmental impacts of all activities connected to that project, such as the construction of wind turbines and the laying of subsurface cables to transmit energy derived from those turbines to the grid. In addition, cumulative impacts of any newly proposed project in combination with pre-existing or already-approved projects must be considered, especially with respect to migratory species that are likely to encounter multiple facilities.

80104-010 (cont.)

6. MMS should impose rigorous standards for renewing leases, decommissioning and removal of AERU structures.

We are concerned at the suggestion in the draft PEIS that some structures from AERU projects may be left in place after the lease has expired. The omission of this possibility from the environmental impacts analysis is also disturbing. Allowing structures to remain in place should be the exception, rather than the rule. Otherwise, MMS risks sanctioning the creation of an ocean junkyard of discarded equipment that may continue to impact wildlife or ocean ecosystems and inhibit other productive uses of that ocean space. Any policy that allows structures to remain may also be difficult to reconcile with Section 388 of the EPAct, which obligates MMS to impose a surety bond or other security and require leaseholders to restore the lease at the end of the term.

80104-011

We support a policy of removal of all structures and equipment at the end of a lease in the least environmentally harmful way possible. We urge MMS to impose standards to guarantee that proper decommissioning and removal occurs, including reclamation bonds or some other type of security to ensure that structures are removed.

7. MMS must comply with NEPA in the PEIS.

As indicated above, we do not believe that the analysis in this draft PEIS, in itself, satisfies the requirements of NEPA.

MMS must analyze both direct and indirect environmental impacts of its proposed action under 40 CFR §1502.16, but has not sufficiently done so. The analysis of environmental impacts is necessarily general and superficial, since the draft PEIS considers no specific project sites. Furthermore, as explained above, the environmental impacts of the regulatory program cannot

80104-012

actually be analyzed because it has not been developed yet. What is offered as analysis is often merely a catalogue of possibilities.

80104-012 (cont.)

The cumulative impacts analysis is also inadequate. As defined in 40 CFR §1508.7, "cumulative impact" is defined as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency […] or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time." One limitation of the draft PEIS inheres in the impossibility of considering cumulative impacts when projects have not yet been proposed and MMS does not know how many proposals it will receive, how many units and how much area each proposal will encompass, or the proposed sites. The draft PEIS commits to analyzing the cumulative impacts of proposed projects at a later date;[30] these analyses must discuss all past, present, and future uses likely to impact the affected area.

80104-013

The frequent allusion to the contribution of alternative energy projects to a given impact in comparison to other contributors poses another problem with the cumulative impacts analysis. For example, in discussing cumulative impacts on marine mammals, the draft PEIS first lists impacts from alternative energy facilities and then from other uses. It then concludes that "[i]mpacts to marine mammals from alternative energy facilities are likely to contribute a minor proportion of the impacts."[31] But the pertinent (and here unanswered) question for cumulative impacts analysis under 40 CFR §1508.7 is not what proportion of the damage a proposed action contributes, but rather what the resulting overall environmental impact is.[32]

Under 40 CFR §1502.14, MMS must examine the environmental impacts of alternatives to the proposed action, rigorously evaluating all reasonable alternatives and devoting substantial treatment to each alternative considered in detail. The draft PEIS only provides a cursory discussion of two alternatives, case-by-case and no-action.[33] The identified environmental impacts for the alternatives are not fully examined. For example, the document lists four adverse impacts from the lack of consistency that could be created by the case-by-case alternative, including "possible inconsistent or inadequate mitigation stipulations for some projects, leading to adverse environmental impacts."[34] No effort is made to further delineate these impacts. Such an inadequate alternatives analysis section cannot meet NEPA requirements, and we urge MMS to more fully develop this section.

80104-014

Finally, we question MMS's finding that the impact to marine and biological resources would not constitute an irreversible and irretrievable commitment of resources.[35] As one example, to the extent that MMS decides to allow equipment to remain past the lease expiration, this would limit future options for use of a specific area of OCS and would seem to qualify as an irreversible

80104-015

[30] See PEIS 7-33: "At this time, the precise locations of potential new alternative energy facilities or alternate use program facilities are unknown. When such facilities are proposed, the cumulative impacts from all the facilities combined would be assessed in the environmental reviews for the proposed projects."
[31] PEIS p. 7-37.
[32] See e.g. *Grand Canyon Trust v. Fed. Aviation Admin.*, 290 F.3d 339, 343 (D.C. Cir. 2002).
[33] PEIS pp. 7-12 to 7-14.
[34] PEIS p. 7-13.
[35] PEIS p. 7-43.

commitment as defined on p. 7-43. Likewise, projects could have consequences that could fit within the definition of irretrievable commitment of resources (for example, an impact that reduces the population of an endangered species or causes a permanent loss of habitat).

80104-015 (cont.)

8. The PEIS should recognize the severity of potential harms that may be caused by AERU projects.

We are concerned that the tone and wording of the draft PEIS downplays some potential environmental impacts that could be quite serious. As one example, MMS defines "minor" impacts as those that could be avoided by mitigation or those for which the affected resource would recover without mitigation after the stressor was eliminated.[36] Thus, the label "minor" is assigned to impacts that could encompass significant damages.

Similarly, MMS frequently minimizes the impact of a stressor on species by assuming that the likelihood of such an event is low, ignoring the important instances where the rarity of the species makes the likelihood of the impact low, but its relative importance very large. For example, consider the following two excerpts from the draft PEIS:

> 1) As with wind and wave energy development, not all of the marine mammals that occur off the Atlantic coasts would be expected to be equally exposed to or affected by activities associated with the development of current energy in OCS waters. A number of species are extremely rare or considered extralimital, while others are very uncommon or very limited in their distributions. As a result, it is unlikely that these species would be regularly present, if at all, where current energy facilities may be implemented.[37]

80104-016

> 2) Current energy facilities may utilize mooring lines to secure the turbines to the ocean floor, and sea turtles swimming through a current energy facility may strike and become entangled in these lines, becoming injured or drowning. Because they are relatively slow swimming, sea turtles may be expected to detect and avoid mooring cables. Thus, impacts to sea turtles from entanglement with mooring cables may be expected to be negligible.[38]

These sections fail to recognize that these species are particularly sensitive because of their rarity. Even if the relative harm is small, the absolute harm may be large, especially for listed species. Thus, injury to only a few could be considered quite serious. We urge MMS to recognize the difference between the relative importance of an impact and its absolute scale (e.g., killing 1 percent of a population and one animal) and adopt a tone, and possibly a rating, more appropriate to the potential severity of any damage that projects may cause.

MMS should set standards for leases and access rights that are consistent with the Marine Mammal Protection Act and the Endangered Species Act, and offer real protection for these animals, rather than downplay the risks.

[36] PEIS p. 5-1
[37] PEIS p. 5-286
[38] PEIS p. 5-314

NRDC comments on MMS AERU Programmatic EIS, May 21, 2007

9. MMS should avoid granting access rights for projects that would negatively impact biologically unique or sensitive habitats.

Section 388 of the EPAct excludes areas on the OCS within the boundaries of any unit of the National Park System, National Wildlife Refuge System, National Marine Sanctuary System, or any National Monument from its grant of authority. However, the draft PEIS suggests that cables laid to serve AERU projects might be allowed to pass through areas of special concern, such as National Wildlife Refuges, with the permission of facility operators.[39] For MMS to countenance the laying of cable through an area specifically excluded in the EPAct is inconsistent with the statute. We urge MMS to reject any project that disturbs areas protected under EPAct.

MMS should also develop siting criteria that discourage or prohibit development in areas of the OCS designated as Marine Protected Areas (MPAs) under Executive Order 13158 (65 Fed. Reg. 34909 (May 26, 2000)) or in areas that contain biologically unique or sensitive marine habitats. Nor should projects be sited in areas where the construction, operation, or decommissioning of the facility could be anticipated to have a significant adverse impact on MPAs. Siting criteria should also be drafted to protect habitat of endangered and threatened species, as well as essential fish habitat. While the draft PEIS does list avoidance of MPAs as a potential mitigation measure, there is no guarantee that this mitigation method will be selected for any given project. The draft PEIS did suggest that "no development zones" might be identified in the future with cooperation from affected States.[40] We encourage MMS to act quickly on this issue and to define these zones to include MPAs and areas that contain biologically unique or sensitive marine habitats. In any case, the environmental impacts of project siting should be fully evaluated for each project.

80104-017

10. MMS should not consider lease or permit applications for aquaculture facilities until specifically authorized to do so as part of a national aquaculture policy.

With the introduction of H.R. 2010, the Administration has made clear its intent that offshore aquaculture should be managed by the Department of Commerce. Section 388(p)(c) of the EPAct states MMS may grant a lease for "other authorized marine-related purposes" but does not go on to expressly authorize aquaculture leases. We believe that without clear authorization from Congress, MMS does not currently have the authority to allow aquaculture as an alternative use for an oil and gas facility. Moreover, in the absence of a comprehensive national aquaculture policy, MMS would essentially be setting the default standards for offshore aquaculture with each permit, on a case by case basis, without clear regulatory authority to manage the nexus of water quality and potential biological impacts of offshore aquaculture. Section 6.3.2 of the PEIS is certainly not sufficient to support a regulatory framework governing offshore aquaculture.

80104-018

In Chapter 6, MMS should state that it will not allow conversion of structures to aquaculture facilities until specifically authorized to do so as part of a national aquaculture program. We strongly recommend that MMS include recommendations from the recent Woods Hole Marine

[39] PEIS pp. 5-89 and 5-215.
[40] PEIS p. 2-4.

Aquaculture Task Force report[41] on how to address impacts and siting concerns, which are more recent than many of the citations used in the PEIS. We would also caution against language that appears to promote aquaculture, rather than describes its potential impacts, costs or benefits, which would be appropriate factors for agency review. For example, the statement on p. 6-11 that "aquaculture supplements fishing" does not account for the high level of wild fish that are caught to feed farmed salmon, which can lead to a net loss of wild fish[42]. 80104-018 (cont.)

11. Section 6.2 wrongly and inappropriately promotes a policy of abandoning oil and gas facilities.

The EPAct does not supersede existing rules[43] governing the abandonment of oil rigs, yet Section 6.2 is written as though MMS intends to undertake a federal program to convert existing platforms to artificial reefs. In fact, p. 6-6 states that MMS "encourages" this type of "reuse," though it is not clear what the basis for this position is. In the absence of clear statutory language directing MMS to create such a program, we strongly object to the discussion and tone of this section.

Just as AERU projects should be subject to individual EISs, so should the use of individual oil platforms as artificial reefs. Decommissioning and full removal, consistent with the lease conditions, should be the default approach for these facilities. Only in very limited circumstances—after careful consideration of the environmental impacts, costs and benefits, and liabilities, and with consultation and input from the public, coastal states, and other federal agencies—should MMS permit partial structure removal or toppling in place. Such an approach is consistent with existing regulations and with the scientific literature, which has found that biological impacts and potential benefits vary widely from region to region and from platform to platform[44,45]. Indeed, much of the text on pp. 6-5 and 6-6 lacks citations to back up the sweeping statements made about the supposed universal benefits of oil and gas platforms.[46] 80104-019

12. MMS should use sound pressure levels to measure the impacts of sound on marine life in environmental impacts analysis.

The draft PEIS states on p. 4-29 that sound power levels are the appropriate measures of the overall impact of a sound on the environment. For environmental impacts analysis, how the sound affects marine life at the proposed site is an important question to be addressed. Sound 80104-020

[41] "Sustainable marine aquaculture: fulfilling the promise; managing the risks." Report of the Marine Aquaculture Task Force, January 2007. www.whoi.edu/cms/files/jmcdowell/2007/1/Sustainable_Marine_Aquaculture_final_1_02_07_17244_17263.pdf
[42] See Naylor et al, 2000. "Effect of aquaculture on world fish supplies." Nature (405) 1017-1024.
[43] 30 CFR §250.1730.
[44] Love, M. S., D. M. Schroeder, et al. (2006). "Potential use of offshore marine structures in rebuilding an overfished species, bocaccio (*Sebastes paucispinis*)." Fishery Bulletin 104: 383-390.
[45] Schroeder, D. M. and M. S. Love (2004). "Ecological and political issues surrounding decommissioning of oil facilities in the Southern California Bight." Ocean & Coastal Management 47: 21-48.
[46] For example, one of the main conclusions of Holbrook et al (2000) is that "There is not any sound evidence… to support the idea that platforms enhance (or reduce) regional stocks of marine species" in California. This is not noted under Sec. 6.2.2, which relies on the tropical work of Wilson et al, 2003. Many rigs in California prohibit fishing, both recreational and commercial, and were they to be opened to fishing it is not clear that they would continue to support their current fish populations, much less provide "fisheries enhancement."

pressure levels are better suited to measuring the impacts on marine life than sound power levels because they take into account what marine life is likely to actually experience, given the location of the noise source and the prevalence of nearby sensitive species. 80104-020 (cont.)

13. MMS must complete the rulemaking for the AERU program.

We also note that Section 388 of the EPAct requires MMS to issue any regulations necessary to carry out this section within 270 days from the date of enactment. This 270-day period expired on May 8, 2006, but MMS has not yet published draft regulations. MMS did publish an Advanced Notice of Proposed Rulemaking in 2006, and we encourage MMS to proceed in a more timely fashion with this rulemaking to avoid further delay in realizing the benefits of this promising program. We look forward to reviewing the proposed rules soon. 80104-021

14. The draft EIS should place more emphasis on the benefits of alternative energy.

Renewable energy can have significant benefits, particularly when compared to other types of power generation. MMS should fully analyze the economic, sociocultural, and environmental benefits of renewable energy in the PEIS, including a detailed consideration of positive effects on air and water quality, public health, and climate change. Examining the potential benefits of these technologies should provide a useful context in which to analyze their potential environmental impacts. 80104-022

Respectfully submitted,

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From: ocsenergywebmaster@anl.gov
To: mail_ocsenergyarchives; ocsenergywebmaster@anl.gov;
Subject: OCS Alternative Energy and Alternate Use Programmatic EIS Comment 80105
Date: Monday, May 21, 2007 5:46:45 PM
Attachments: APNS_Comments_on_Draft_PEIS_80105.pdf

Thank you for your comment, Sandra Young.

The comment tracking number that has been assigned to your comment is 80105. Once the comment response document has been published, please refer to the comment tracking number to locate the response.

Comment Date: May 21, 2007 05:47:53PM CDT

OCS Alternative Energy and Alternate Use Programmatic EIS
Draft Comment: 80105

First Name: Sandra
Last Name: Young
Organization: Alliance to Protect Nantucket Sound
Country: USA
Privacy Preference: Don't withhold name or address from public record
Attachment: C:\Documents and Settings\brezr\Desktop\APNS Comments on Draft PEIS.pdf

Questions about submitting comments over the Web? Contact us at: ocsenergywebmaster@anl.gov or call the OCS Alternative Energy and Alternate Use Programmatic EIS Webmaster at (630)252-6182.

SAVE OUR SOUND
alliance to protect nantucket sound

May 21, 2007

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Filed Electronically using MMS's on-line
commenting system at *http://ocsenergy.anl.gov/*

Re: Comments on the Draft Programmatic Environmental Impact Statement for Alternate Energy-Related Uses on the Outer Continental Shelf

Dear Project Manager,

On behalf of the Alliance to Protect Nantucket Sound (Alliance), I am writing to submit the enclosed comments for the record. On March 21, 2007, the Minerals Management Service's (MMS) published Notice of Availability (NOA) of Draft Programmatic Environmental Impact Statement (Draft PEIS) and Public Hearing regarding the Alternative Energy and Alternative Use Program under § 388 of the Energy Policy Act of 2005(EPAct). *See* 72 Fed. Reg. 13307-8 (Mar. 21, 2007). These comments are in response to the request in the NOA for comments regarding the Draft PEIS.

We agree with MMS's comments supporting the need for programmatic regulations and offer the enclosed points to help ensure that the final PEIS and the programmatic regulations are responsive to the need for a proactive, well-structured, comprehensive national program for the development of alternative energy on the Outer Continental Shelf. For the reasons discussed in the enclosed comments, the draft PEIS is insufficient for that purpose and requires significant revision if it is to serve as the basis for an effective offshore renewable energy program.

We look forward to contributing in anyway helpful as MMS moves forward in the development of the PEIS and the new programmatic regulations. Thank you for considering these comments, and please contact me if we can be of further assistance.

Sincerely,

Charles Vinick

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President & CEO

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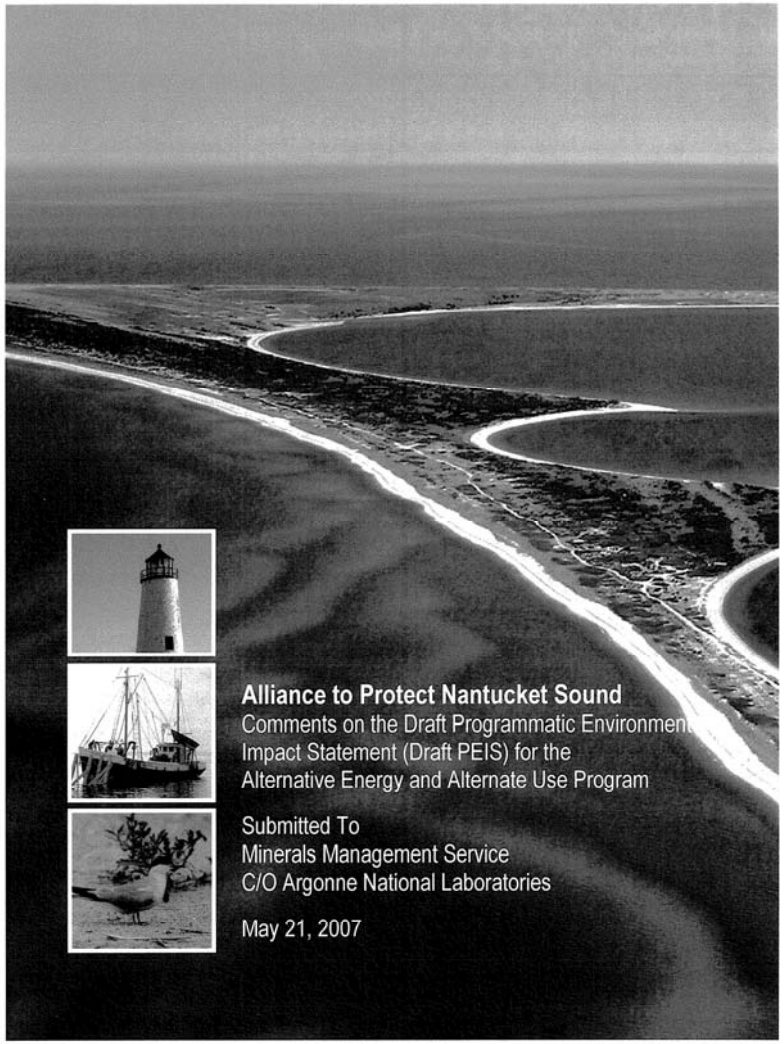
www.saveoursound.org
a 501(c)(3) tax-exempt organization

WATERKEEPER ALLIANCE



Comments on the Draft Programmatic Environmental Impact Statement for the Regulatory Program for Alternate Energy-Related Uses on the Outer Continental Shelf

Submitted to the Minerals Management Service

by

The Alliance to Protect Nantucket Sound

May 21, 2007

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INTRODUCTION

The Alliance to Protect Nantucket Sound (Alliance) respectfully submits these comments in response to the Notice of Availability (NOA) and request for comments regarding the Draft Programmatic Environmental Impact Statement (Draft PEIS) for the Alternative Energy and Alternative Use Program under the Energy Policy Act of 2005(EPAct) published by the Minerals Mangement Service (MMS) on March 21, 2007. *See* 72 Fed. Reg. 13307-308 (Mar. 21, 2007).

The Alliance is a nonprofit environmental organization dedicated to the long-term preservation of Nantucket Sound. Formed in 2002, its goal is to protect Nantucket Sound in perpetuity through conservation, environmental action, and opposition to inappropriate industrial or commercial development that would threaten or negatively alter the coastal ecosystem.

The Alliance has been involved in the effort to develop a comprehensive, national regulatory program to govern and regulate renewable energy on the Outer Continental Shelf (OCS) since the establishment of the organization. On February 26, 2006 the Alliance provided detailed comments in response to the Minerals Management Service's Advanced Notice of Proposed Rulemaking, and on July 5, 2006, the Alliance submitted comments in response to MMS's request regarding the scope of the Programmatic Environmental Impact Statement (PEIS). These two earlier submissions are also relevant to the Draft PEIS and are hereby incorporated into these comments by reference.

Our comments are intended to assist MMS by identifying shortcomings in the Draft PEIS and suggesting actions that MMS can take to correct them. The Alliance intends these remarks to aid MMS in meeting its ultimate goal of establishing a clear, efficient, environmentally responsible, and socially responsive alternative energy regulatory program on the OCS.

Section 388 of EPAct delegates authority over certain aspects of the development of alternative energy projects on the OCS to the Department of the Interior (DOI). Specifically, the EPAct gives DOI the authority to grant leases, easements, and rights-of-way for offshore alternative energy projects, requires the Secretary of the Interior to establish a payment structure for such uses, and directs DOI to develop regulations to manage the application process and project development.

DOI has in turn charged MMS with developing an OCS-wide program. MMS is now preparing programmatic regulations for the management of alternative energy projects across the OCS. In December 2005, MMS published an Advanced Notice of Proposed Rulemaking, 70 Fed. Reg. 77345-348 (Dec. 30, 2005) (ANPR), and requested public comments regarding the appropriate regulatory structure for implementing the offshore alternative energy development program. The publication of draft regulations for public review and comment is expected in Summer 2007.[1]

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[1] *See* MMS timeline showing target timeline for publication of Draft Rulemaking as Summer 2007. Last accessed on May 18, 2007, at http://www.mms.gov/offshore/CIAP/PDFs/Visio-3timelines040207A.pdf.

As part of the process of developing a national program, and to inform decisions regarding the promulgation of programmatic regulations, MMS is required to conduct a review of the environmental impacts of offshore alternative energy development under the National Environmental Policy Act (NEPA). Accordingly, on May 5, 2006, MMS published a Notice of Intent to prepare a PEIS and requested comments on the scope of the PEIS. 71 Fed. Reg. 26559 (May 5, 2006). Unfortunately, the Draft PEIS does not represent the kind of comprehensive review that is necessary to establish a national offshore renewable energy program. In addition, the Alliance is concerned that MMS is continuing to move forward with the review of two individual projects, Cape Wind and LIPA, even though no comprehensive review of the OCS has been completed.

The comments contained herein highlight the Alliance's concerns and outline the failures of the Draft PEIS. These include the failure to address the relevant inquiries under NEPA and to inform the decisions MMS is currently making regarding the development of national regulations. The first section discusses the need for a proactive programmatic structure, including the establishment of development and exclusion zones to encourage the development of alternative energy and protect the marine environment for future generations and other uses. The language of § 388, testimony during a recent Congressional Oversight hearing, and numerous national reports all suggest that this is the programmatic structure MMS needs to develop. The need and mandate for this proactive management mechanism forms the basis for the type of information that should be included in the Draft PEIS. If MMS is to respond successfully to the need and mandate for resource-based management of the OCS development, it will need the kind of thorough resource assessment and baseline scientific information obtained by other nations in the development of their regulations. This section also discusses the failure of the Draft PEIS to provide such information and makes suggestions as to how MMS should proceed. The comments then discuss specific shortfalls within the Draft PEIS, including its excessively narrow scope and the inadequacy of many of the assessments, in sections two and three.

Finally, in section four, the comments address the problems with proceeding with the review of individual projects before MMS has completed its programmatic EIS and promulgated program regulations. Proceeding with the review before completing the programmatic EIS and developing regulations could establish precedent that will constrain both processes, could undermine the success of the programmatic structure, and interferes with public participation, thereby subjecting the regulations to possible litigation.

The PEIS process provided MMS with the opportunity to ensure that it had the information needed to inform the development of a proactive, zone-based, programmatic development structure for the OCS. It provided an opportunity to release for public review and comment the information MMS will need to rely on as it makes decisions regarding the promulgation of specific national regulations, including: the necessary baseline scientific information; resource assessment studies; detailed descriptions of mitigation options and their effectiveness; and a detailed explanation of the technologies likely to be developed on the OCS and their potential impacts. Unfortunately, the Draft PEIS does not provide MMS or the public with this information. The Draft PEIS needs

to be rewritten or significantly supplemented to provide this information and to inform the decisions currently before MMS, as NEPA intended.

DISCUSSION

I. Failure of Draft PEIS to Inform Agency Decision Making

The draft PEIS does not address the environmental impacts of the specific regulations that are being proposed by the agency, nor does it provide the information needed to inform proactive decision making and resource management. Instead, the draft PEIS focuses almost exclusively on the question of whether there should be any national regulations. This is an obvious question, and not one that needs to be the subject of an entire EIS. The cost for this simplistic approach is the failure of MMS to address resource issues such as concentrations of renewable resources in specific locations suitable for development and the need for exclusion zones. In this regard, MMS has failed to follow the excellent example provided by European countries, where a comprehensive approach has been used and where exclusion zones are being established to avoid unnecessary conflict and unwarranted impacts.

A. Irrelevant NEPA analysis

The Draft PEIS correctly states that "the NEPA process is intended to help public officials make decisions based on an understanding of environmental consequences and take actions that protect, restore, and enhance the environment." Yet the Draft PEIS is focused on an inquiry that is not relevant to current decisions. It is focuses on whether or not there should be national regulations, and it attempts to address the environmental impacts of the three following alternatives:

1. The proposed action (the development of programmatic regulations);
2. A case-by-case scenario (the issuance of licenses or easements based on a project-level review only, without programmatic regulations); and
3. A no-action alternative (MMS would not issue any leases or easements for development, and alternative development on the OCS would not be permitted).

This inquiry is of little value. Section 388 of EPAct calls for the development of alternative energy on the OCS. It also implicitly mandates programmatic regulations by requiring resource-wide protection. In addition, it is clear that MMS has already made the determination that programmatic regulations are necessary, as the agency has published an ANPR, spent sixteen months developing such regulations, and is scheduled to publish draft regulations for comment and review this summer.[2] There is absolutely no reason to produce a PEIS on the need for regulations.

80105-001

[2] *See* MMS timeline showing target timeline for publication of Draft Rulemaking as Summer 2007. Last accessed on May 18, 2007, at http://www.mms.gov/offshore/CIAP/PDFs/Visio-3timelines040207A.pdf.

B. Failure to Inform Regulation Decisions Regarding Proactive Management of the OCS

Congressional testimony, national ocean policy reviews and federal law all speak to the character of the national regulations MMS is currently drafting. All concur that these regulations should reflect proactive and strategic management of the OCS, and must help guide development and streamline the development process. MMS cannot meet this obligation; it cannot make the necessary decisions about specific regulations needed to accomplish this vision without a thorough OCS-wide resource assessment and the necessary baseline scientific information to support a zoning structure for development. The information is accessible, yet these and other fundamental elements are missing from the current Draft PEIS.

1. The Need for Proactive National Regulations and the Information Needed to Inform their Development

The national regulations currently being developed by MMS need to form the basis of a proactive, OCS-wide (programmatic) strategic plan for alternative energy development and OCS resource protection. The plan should include the establishment of development and exclusion zones across the OCS. The current PEIS does not provide the information MMS will need to make informed decisions about specific regulations, including regulations establishing zones. Consequently, it will need to be redrafted or significantly supplemented.

Not only is the need for a proactive strategic plan outlined by the mandates of § 388, as discussed above, but the U.S. Ocean Commission also recognized in its final report the urgent need for a coordinated, integrated management regime for our oceans.[3] Recent Congressional testimony also called for such a plan. On April 24, 2007, after the publication of the Draft PEIS, two Subcommittees of the House Natural Resources Committee held an oversight hearing on alternative energy development and the OCS. In testimony before the subcommittees, numerous panelists addressed the ongoing need for more complete information and the need for a coordinated national policy, including the establishment of development and exclusion zones.

The need for an OCS-wide resource assessment was best described in two testimonies, the first by Ted Diers on behalf of the Coastal States Organization. He stated:

> [W]e lack much of the necessary information to make a thoughtful decision, especially as it pertains to natural resources and how they are impacted by new technology. We do not know if these turbines are a largely benign source of consistent, dependable energy, or have the potential to create a puree out of migrating fish…we do not have the information for project siting adjacent to shore; the difficulties 100 miles offshore are much greater. The key components of the information needs for OCS management include – mapping, observation, technology and assessment.

80105-002

Mr. Diers went on to reiterate, "Good information will allow us to be proactive and get ahead of the curve, instead of simply reacting to a permit when it comes in the door."[4] The second pertinent testimony was provided on behalf of Environmental Defense by Douglas Radar who noted:

> Our nation lags behind others in assessing, experimenting and investing in truly sustainable ocean energy technologies, and has fallen far short on investing in the science necessary to manage ocean ecosystems effectively. Basic information on the distribution, abundance and function of marine habitats is woefully inadequate…. Until we properly understand habitat function and oceanographic processes that support habitats and biodiversity, we will remain unable to adequately avoid impacts on important habitats, and mitigate for unavoidable impacts. Until we adequately understand the array of perspective technologies available, and their likely implications for marine ecosystems, it will remain difficult to plan for sustainable ocean energy.[5]

80105-002 (cont.)

The specific need to include exclusion and development zones was also addressed in the Oversight Hearing. When asked about the concept of zoning, an entire panel of experts ranging from environmental organizations and alternative energy industry representatives to fishing industry representatives and technical resource experts all agreed that zoning is useful for encouraging alternative energy and protecting environmental resources on the OCS, and that strategic zones should be implemented. The idea is also supported in the congressionally mandated report on wind energy by the National Research Council (NRC) which recommended that coordinated anticipatory planning be followed whenever possible to focus proposals on the sites most likely to be successful.[6]

The international regulatory community has also come to understand that zoning is an important component of programmatic regulation and that a system of development and exclusion zones can protect important economic, social, and environmental resources while at the same time streamlining development permitting and helping to focus industry resources. MMS has noted that there is a trend among nations experienced in strategic management of offshore alternative energy toward the establishment of exclusion zones and development zones and guidelines that move projects farther offshore in order to mitigate impacts.[7] Such an approach has obvious advantages for ensuring rational

[3] U.S. Commission on Ocean Policy, *An Ocean Blueprint for the 21st Century Final Report* (2004) (see Recommendations 6-1 and 6-2).

[4] Testimony of Ted Diers to at the Joint Oversight Hearing on Renewable Energy Opportunities and Issues on the Outer Continental Shelf, U.S. House of Representatives (Apr. 24, 2007).

[5] Testimony of Douglas N. Rader, Ph.D., Principal Scientist for Oceans and Estuaries, Environmental Defense, at the Joint Oversight Hearing on Renewable Energy Opportunities and Issues on the Outer Continental Shelf, U.S. House of Representatives (Apr. 24, 2007).

[6] *See* National Research Council, *Environmental Impacts of Wind-Energy Projects*, Summary p. 8 (May 2007). Last accessed on May 18, 2007 at http://www.eswr.com/latest/307/nrcwind.htm.

[7] Internal e-mail from Terry Scholten, MMS Staff member, to Rodney Cluck, MMS Project Manager (Dec. 10, 2005), stating: "Countries with a few years of wind farms under their belts (Denmark,

planning, avoiding areas of high conflict that will result in unnecessary delay and conflict, and saving time and cost for future site-specific projects on the basis of tiering. This approach would also coincide with the current emphasis on "ocean zoning" approaches and marine ecosystem-based management, as recommended by the U.S. Ocean Commission and the Pew Commission.

Protection of Nantucket Sound is a perfect example of why MMS needs to follow the lead of nations with robust offshore wind programs by conducting a similar national review of ocean resources and by developing development and exclusion zones. There is no question that if MMS were to conduct a national resource review, we would not be considering development in Nantucket Sound. There is no more dramatic example of an area that should be considered an exclusion zone than Nantucket Sound. Based on every conceivable factor for exclusion – ecological concerns, economic impacts on local communities, public safety, navigation, aviation, historic and cultural resources, recreation, aesthetics, fishing, and others – Nantucket Sound should be precluded from development. MMS still has the opportunity to avoid this mistake by developing a truly comprehensive national program that adequately protects unique marine ecosystems while promoting properly-sited projects under national standards.

80105-002 (cont.)

2. Failure of the Current Draft PEIS to include information needed for the development of necessary programmatic regulations

The current Draft PEIS does not provide the information MMS needs to respond to these calls for strategic management or to make decisions about how best to regulate the OCS at a programmatic level. Much of the resource-wide information provided is generic and unhelpful. It lacks a complete resource assessment; significant baseline information has not been included; and the studies necessary to inform the establishment of a zoning process are lacking.

The background material on OCS resources does not provide the depth of information needed to inform regulatory decisions. The regional maps show boundaries for water depth of 100ft and some of the major geophysical features of the ocean floor. MMS has also provided maps of the migratory bird routes and of protected reserves. This information is helpful as background material but is not sufficient. None of the maps shows technical resource data such as wind speeds along with shipping routes, fishing areas, or marine wildlife uses of the OCS.

80105-003

With regard to zoning information, the Draft PEIS is particularly inadequate. The current Draft PEIS explicitly states that MMS chose not undertake site characterization studies to delineate exclusion zones and development areas.[8] In part, MMS attempts to explain this decision by stating that it does not have (and cannot reasonably attain) the requisite information to "map out" the best areas for alternative energy project activity. That is not a defensible response. Already the University of Delaware has conducted a review of

Netherlands, Sweden, and the UK) are where…areas are being identified for wind farms and they are being pushed further offshore to minimize impacts."
[8] Draft PEIS, p. 2-5.

this nature for the Mid-Atlantic region, evaluating the available wind resource from Cape Cod to Cape Hatteras, taking into account exclusion zones. To the extent more information is needed, MMS has the authority and affirmative duty to conduct such a review. *See* Pub. L. No. 109-58, § 388(p)(4)(l) (requiring, among other things, that alternative energy management be carried out in a manner that provides for research). MMS has also commented that it has funds specifically for this type of research. The Draft PEIS states:

> in its efforts to promote environmentally sound decisions, the MMS devotes significant funding to environmental studies on the effects of OCS activities on marine, coastal, and human environments. The MMS's Environmental Studies Program is tasked with gathering and synthesizing the relevant environmental and social and economic science information. This information comes from sources such as research and compliance monitoring.[9]

MMS should focus its efforts and its "significant funding" to acquiring baseline resource data regarding avian and marine life as well as other environmental and resource data. These studies would benefit not only alternative energy project reviews but also the management of oil and gas facilities under MMS's jurisdiction.

80105-003 (cont.)

The Draft PEIS states that another reason MMS did not intend to pursue information needed for zoning was that it did not want to limit the possibilities of development in Federal waters by identifying locations with the best resources. This reasoning is also indefensible. Zoning not only enhances project management, it also helps to streamline project reviews and helps project developers in site selection. This was made clear by Mr. Jason Bak, CEO of the wave energy company, Finavera Renewables. When asked at the April 24 hearing by Congressman Inslee about the prospect of zoning, Mr. Bak stated that a zoning mechanism would help "considerably." The idea that zoning will benefit developers is also intuitive. Providing developers with resource and conflicting-use information will allow them to pursue projects in locations which are more likely to be viable and which run a lower risk of objections from local stakeholders. MMS has addressed this issue before. For years, the OCS program for oil and gas was mired in conflict, but the adoption of comparative and balanced standards for selecting lease sale areas and exclusion zones dramatically improved the acceptance and sustainability of that important energy program. The Department needs to follow that model for the development of its offshore renewable energy program.

Finally, the Draft PEIS suggests that zoning is important but that it is something that might be addressed in the future. It states that as additional resource information is obtained by the MMS, it may in the future establish "resource-specific development zones" or "no-development zones."[10] This, too, is an inadequate and indefensible response. MMS is charged with the active management of the OCS resource. Now is the optimal time to implement a zoning system, especially because MMS is proceeding with the review of specific projects. The slate is currently clean; there are no poorly regulated

[9] Draft PEIS, p. 1-10.
[10] Draft PEIS, p. 2-5.

or poorly sited alternative energy projects to interfere with a resource-wide management plan. The information needed can be obtained, and it is clear from the trends in Europe that zoning is an important impact mitigation measure. MMS should therefore actively pursue this measure. There is no reason why zoning should not be put in place and applied to the very first project. As Chairwoman Bodello stated in her opening remarks to the April 24 Oversight Hearing, "We have the opportunity to ensure that projects are planned appropriately and in a manner that promotes the sustainable use of our oceans." This opportunity is diminished if MMS does not proactively manage the OCS resource starting now. The Draft PEIS can and should include information to allow MMS to make decisions about the establishment of development zones.

The promulgation of national regulations requires NEPA analysis. Because the Draft PEIS addresses an irrelevant inquiry and does not provide sufficient information to inform the decisions currently before MMS regarding the specific programmatic regulations, it does not fulfill this requirement. MMS needs to significantly supplement the current Draft PEIS to address its information needs. In the interest of proper ocean management, environmental protection, and the efficient and timely development of offshore wind energy projects, as well as compliance with NEPA, the new PEIS information must focus on resource availability and comprehensive ocean planning. It must inform a rigorous and comprehensive national alternative energy management structure which directs where and how development should take place on the OCS. Because NEPA requires that agency decisions be informed, and because MMS lacks the information it needs to make an informed decision, the consideration of individual projects should not move forward until an adequate and relevant PEIS is conducted and national standards are developed.

80105-003 (cont.)

II. The Scope of the Draft PEIS is Unreasonably Limited

The scope of the PEIS inquiry is important because it determines the parameters of the information provided which, in turn, affects the amount of guidance given to the agency in making its decisions. The Draft PEIS has an excessively narrow scope. It is so unduly limited in the time period, technology, and geography it covers that it risks being out of date before it is finalized. MMS has further narrowed the scope of review by choosing not to explore technology-specific guidelines or to address the issue of cumulative impacts. These decisions remove from consideration important information relevant to the development of programmatic regulations.

80105-004

A. Unreasonable Time, Technology and Geographic Limitations

The Draft PEIS has limited its review to impacts from technologies and locations which industry has already shown an interest in and ability to develop over the next seven years.[11] This is excessively limited. The PEIS will be out of date almost immediately if it does not assess the impacts of resource development not yet announced by the alternative energy industry. As the Draft PEIS has noted, offshore alternative energy development is in its infancy.[12] The industry is likely to grow in leaps and bounds over short periods of time; particularly as market uncertainties are removed by the promulgation of regulations. As it is unlikely that a new PEIS and new programmatic regulations will be developed with each advancement in technology or each expansion of accessible resources, the PEIS should be more proactive. Rather than limiting the review to "near shore" areas already targeted for development, and technologies that are economically viable today, the PEIS should provide information about all available resources and all known technologies in anticipation of future development.

As MMS recognizes in the PEIS, regulations bring with them tremendous incentives for increased development:

> [R]egulations would also provide a road map for developers to follow during the permitting process, allowing developers to more adequately estimate the resources required for a proposed project. This would in turn result in fewer failed proposals, because developers would know the requirements before investing in projects or locations that would ultimately prove unacceptable because of unforeseen adverse impacts. Overall, it would also be anticipated that having regulations in place for permitting alternative energy activities on the OCS would result in decreased time to obtain permits, thereby facilitating faster development of the alternative energy industry on the OCS.[13]

80105-004 (cont.)

These incentives will no doubt have a positive impact on the number of project proposals and development locations once the regulations are developed. In fact, even without new regulations, the Draft PEIS acknowledges that "the number of inquiries regarding leases, easements, and rights-of-way for new alternative energy and alternate use projects on the OCS is increasing"[14] The continually increasing interest in the development of offshore alternative energy will undoubtedly translate into the development of resources previously considered technically or economically infeasible to develop. The evolution is already underway. In Germany, for example, two projects have been approved and construction is scheduled to commence in 2008 in waters 75-100 feet deep and in locations twenty miles or more from shore.[15] In addition, developments like the Beatrice project in Scotland have demonstrated that deepwater sites, previously considered impossible to develop, are now technologically feasible. It is therefore shortsighted to develop a program (or a PEIS) limited to addressing current levels of development.

[11] The Draft PEIS "focused on alternative energy technologies and areas about which industry has expressed a potential interest and ability to develop or evaluate from 2007–2014." Draft PEIS, p. 1-4.

[12] Draft PEIS, p. 1-2, stating that "this is a new program addressing technologies that in most cases are still in their infancy."

[13] Draft PEIS, p. ES-3.

[14] *Id*.

[15] The 400 MW Gode Wind Energy Project is approved in waters 90-100 feet deep and 20miles offshore. Also, the 720 MW Borkum Riffgrund Project is approved in waters 75-100 feet deep and 23 miles offshore. Construction for both is scheduled too commence in 2008. *See* Plambeck Neue Energien Core Business Windenergy Offshore document. Last accessed on May 18, 2007 at http://www.pne.de/cms/front_content.php?idcat=83.

It is not practical to assume that MMS will develop new programmatic regulations or NEPA review every time alternative technology evolves. MMS must provide guidance for future development if it does not want to interfere with or obstruct the evolution of alternative energy. As such, MMS should not limit the scope of review to the current level of technology or locations of interest. Rather, the scope of assessment should be defined by the location of energy sources. The PEIS must not just consider the impacts of the limited number of projects already proposed; it must address the impacts of development that are likely to occur after the establishment of regulations. The PEIS should include an assessment of locations where resources exist in recognition that, over time, technology may make development feasible both technically and financially.

B. Lack of Technology-Specific Guidelines

MMS has further limited the Draft PEIS by eliminating from consideration regulations specific to energy sources. MMS determined energy-specific regulations to be inefficient based on the belief that "the technologies shared sufficiently similar impacts and siting characteristics (impact on the sea bed from foundations, need for a cable etc.)." This reasoning seems contrary to MMS's information and the format of the Draft PEIS. The Draft PEIS presents the summary of impact in a chart in chapter seven. The chart categorizes impacts by technology type. As the chart demonstrates, some resources are impacted by all of the reviewed technologies in a similar way. But, there are other resources, such as bird populations, fish, and subaquatic marine life, that are uniquely impacted by the different technologies. These differences may well warrant technology-specific guidelines at the programmatic level. These guidelines could include requirements of best practices for mitigation of unique impacts or best available mitigation techniques or some other programmatic standard based on the technology. In addition, appropriate areas for wind development may be considerably different from those for wave technology. The Draft PEIS should provide sufficient technology-specific information for MMS to make those types of determinations and to set technology-specific regulations at the programmatic level.

80105-004 (cont.)

C. Failure to address Cumulative Impacts

As the testimony before Congress by Douglas N. Rader, Principal Scientist for Oceans and Estuaries at Environmental Defense, suggests, cumulative impacts are significant and need to be addressed:

> [M[any of the technologies available today have the very real potential for much greater cumulative impacts at larger scales. Little has been done to assess the consequences of commercial scale operations in the ocean, or to identify ways to minimize and mitigate those effects. For example, a small wave energy facility may have a negligible impact, but many such facilities or a very large scale facility could have adverse impacts on local circulation patterns that could be critical for maintaining transport of fish

80105-005

> larvae, sediment and nutrient delivery, and other important ecological processes and services.[16]

The Draft PEIS recognizes that cumulative impacts are of concern. In the Executive Summary of the Draft PEIS, MMS states: "Potential cumulative impacts from alternative energy facilities could be most significant for water quality, acoustic environment, marine mammals, marine and coastal birds, fish resources and essential fish habitat, sea turtles, coastal and seafloor habitats, commercial fisheries, and visual resources."[17] However, the Draft PEIS also declines to address the issue at the programmatic level. The Draft PEIS rationalizes this decision as follows: "At this time, the precise locations of potential new alternative energy facilities or alternate use program facilities are unknown. When such facilities or alternate uses of existing facilities are proposed, the cumulative impacts from all the facilities combined would be assessed in the environmental reviews for the proposed projects."

This approach does not allow for prevention of cumulative impacts or optimal use of the OCS. If the cumulative impact assessments occur only on a project-by-project basis, then only the impacts of prior projects will be considered. There will be no determination of potential impacts on future development. One of the main advantages of having a programmatic structure is that development can be strategic and not just responsive. This approach of ignoring cumulative impacts until proposals are presented undermines the strategic impact of programmatic regulations. MMS should develop a methodology for projecting, measuring, and modeling cumulative impacts across the OCS so that program-wide assessment can inform site selection and review at the project level.

80105-005 (cont.)

III. Inadequate Assessments

The assessment of impacts provided in the Draft PEIS is at times inconsistent, unexplained, superficial, and incomplete. The assessment of mitigation techniques, the impact-ranking mechanism, and discussions of specific impacts are all lacking. The assessment therefore falls short of what is needed for an adequate environmental review.

A. Inadequate Assessment of Mitigation Techniques

The Draft PEIS describes mitigation options in general terms. These descriptions are often incomplete. For example, the description of the mitigation technique for one of the "non-routine occurrences" includes the following: "Entanglement with undersea cables can be avoided by burying the cables." Draft PEIS, p. 6-13. The Draft PEIS does not address the possibility that sediment changes can unbury previously buried cables, thus rendering the mitigation effort ineffective. None of the discussions of mitigation techniques includes an assessment of the extent to which mitigation will affect impacts or the likelihood that the technique will be employed. The Draft PEIS does not include a hard-hitting assessment of mitigation options or evaluation of comments which might

80105-006

[16] Testimony of Douglas N. Rader, Ph.D., Principal Scientist for Oceans and Estuaries, Environmental Defense, at the Joint Oversight Hearing on Renewable Energy Opportunities and Issues on the Outer Continental Shelf, U.S. House of Representatives (Apr. 24, 2007).
[17] Draft PEIS, p. ES-14.

help MMS to establish minimum mitigation standards at the programmatic level. The Draft PEIS therefore should include more detailed information about mitigation options.

B. Inadequate Impact-Ranking Mechanism

The draft PEIS includes an "impact scale." The main categories for the degrees of potential harm are Negligible, Minor, Moderate, and Major. The use of these distinctions, however, is not always well explained. According to the draft PEIS, an oil spill from the project site is estimated as negligible to minor but an oil spill from a vessel collision "could be moderate or major." As facilities may carry as much as 50,000 gallons of fuel, the difference in assessment is not clearly explained.

In addition, the use of determinations does not seem consistent among technologies. Under the category of wave technology, MMS states that "[i]mpacts to threatened and endangered marine mammals would be minor to major if individuals were lost due to entanglement in moorings." However, under wind technology, marine mammal impacts from vessel strikes are characterized as, at most, "moderate,"[18] even though vessel strikes could also result in loss of individuals designated as protected species. The Draft PEIS also describes bird impacts from wind turbines as "minor to moderate." Again, there is no explanation as to why loss of endangered animals by wave technology is more of an impact than loss of such animals to wind technology.

These kinds of inconsistencies are not adequate for an environmental assessment of this size and importance. The PEIS must address these and all shortcomings in impact assessments.

80105-006 (cont.)

C. Incomplete Assessments of Specific Impacts

The Draft PEIS describes impacts only in the most general terms. It does not address data requirements or mitigation techniques. In many cases, the Draft PEIS does not even evaluate the degree of risk or the level of harm. MMS bases its impact determinations on assumptions of mitigation. For example, MMS deems adverse impacts to sediment to be "negligible" based on actions which "could" be taken to mitigate impacts. *See* Draft PEIS, sections 5-7, Mitigation Measures. The impact assessments are often incomplete and superficial.

A prime example of the inadequacy of the Draft PEIS assessments is the discussion of impacts from unconventional occurrences. Unconventional, or "non-routine," conditions include such things as: industrial accidents; collisions between marine vessels and either fixed components of the facilities or other vessels constructing, servicing, or maintaining the facilities; natural events, such as hurricanes and earthquakes; and sabotage or terrorism events. Draft PEIS, p. ES-13. In discussing impacts from non-routine occurrences, the Draft PEIS concludes: "[b]ecause there would generally be few personnel present at alternative energy facilities and alternate use facilities, the number of human casualties from these types of occurrences would be relatively low." Draft PEIS, p. ES-13. This is not a valid summation of the risk. Basing the risk assessment on the

[18] Draft PEIS, p. 6.

number of personnel at the facility does not account for or address the impacts that the facility could have on human lives on vessels in the water surrounding the facility, nor does it address any of the environmental impacts that could occur from lubricants and oil spills, or from dislodged turbine structures hitting the coast. It also ignores the costs associated with government cleanup after such occurrences. These are just some examples of the superficial analysis of impacts that pervades the entire Draft PEIS.

Currently, the federal government is legally responsible for the cleanup of hazardous spills or obstructions to navigable waterways. Current law does not mandate that a private developer in federal waters reimburse the government for such costs. As we have learned from Hurricane Katrina, the federal government assumes significant risks in allowing private developers to place infrastructure in federal waters that could be impacted by a large hurricane or other natural disaster. If a hurricane the scale of Katrina were to damage an offshore wind development, it appears that private developers would not be obligated to pay for the cleanup costs, leaving the United States alone responsible.

80105-006 (cont.)

The threat of a large-scale hurricane is more than just a threat to Virginia, Florida, the Carolinas, and the Gulf Coast region. In 1938, a category three hurricane decimated southern New England and produced storm tides of 14 to 18 feet across much of the coast, with 18 to 25 foot tides from New London east to Cape Cod. The full impacts of these types of non-routine occurrences need to be addressed in the Draft PEIS. The Draft PEIS should include a thorough assessment of the risks and costs involved so that programmatic regulations can address issues such as minimum insurance requirements, or other financial guarantees of reimbursement, in instances in which the developer's actions necessitate the expenditure of government resources on a cleanup effort. This is a resource-wide concern and should be addressed at the programmatic level.

The inadequacy of the non-routine occurrences assessment, however, is only one example of many in the Draft PEIS that have not been adequate. Other examples of inadequate assessments include the following:

1. Inadequate Assessment of Socio-Economic Impacts

The Draft PEIS discusses job creation but omits any consideration of negative impacts such as potential loss of tourism or fishing revenue. This provides an unbalanced perspective of the socio-economic impacts of alternative energy. In the case of the Cape Wind project, for example, the negative effects on the regional economy will greatly exceed any positive impacts, such as construction-related job creation.

80105-007

2. Inadequate Assessment of Transportation Impacts

The Draft PEIS discusses the port infrastructure and vessel needs of alternative energy projects. It fails, however, to address the problem of increased congestion from the addition of construction vessels including crew boats, tug boats, and barges. Also, the PEIS states that helicopters would be used in the construction and operation of alternative energy projects. It does not, however, discus the problem of interference with helicopter

80105-008

instruments from wind turbines, as discussed in the U.K. report on aviation impacts of wind farms. *See* Draft PEIS, p. 4-96.

80105-008 (cont.)

3. Inadequate Assessment of Ocean Surface and Sediment

80105-009

MMS includes no mandatory site characterization surveys. It lists only studies that "may" be included in a characterization. This is particularly problematic as MMS later determines that impacts to geological features and processes will be mitigated by using data obtained in the site characterization phase to avoid such features when siting turbines. See Draft PEIS, p. 5-6. MMS fails to address the impacts of trenching for cables on ocean sediment.

4. Inadequate Assessment of Air Quality

80105-010

MMS states that there are many project-specific variables associated with air quality assessments and that no data were available on site-specific and project-specific factors and that as a consequence "no emissions estimates were made, and no air quality modeling was done." Draft PEIS, p. 5-8. This is an inadequate response. As discussed earlier, MMS has the authority and the funding to obtain information that it needs to make an informed decision. MMS can study the subject or obtain the information from others. At a minimum, it must explain the significance of the missing information and its impact on decisions.

The Draft PEIS cannot adequately inform decision making if the assessments it includes are incomplete or unreliable due to inconsistent application. MMS needs to provide a more thorough and substantial discussion of mitigation techniques; it needs to be consistent in its ranking of impacts; and it needs to include a more comprehensive discussion of impacts. MMS should also make a concerted effort to obtain information currently lacking in the Draft PEIS. Only then will the PEIS sufficiently inform the promulgation of national regulations.

IV. Premature Project Review

80105-011

MMS is currently proceeding with the review of two large-scale projects – Cape Wind and LIPA. Cape Wind would be larger than any project currently installed in the world, and it is proposed for a very controversial location. The EPAct does not require these projects to proceed now,[19] and it is obvious that such significant projects – the first in the United States – should not be reviewed without the benefit of national resource assessment and baseline science in the final PEIS and without the underlying national regulations in place. Reviewing projects at this time has multiple detrimental consequences.

First, proceeding without regulations increases the risk that a poorly sited and inadequately regulated project will be approved. There are significant public safety issues raised by building industrial-sized energy complexes in close proximity to the shore, where there is substantial commercial shipping, recreational boating, commercial and recreational fishing, aviation, and other activities. This type of information needs to be incorporated into the programmatic regulations and inform the review of individual projects. The absence of such standards increases the likelihood that the MMS review will be incomplete and could result in approval of a poorly sited or insufficiently regulated project. Only by applying national review and programmatic standards to every project, including LIPA and Cape Wind, can MMS guarantee that development is carried out in a manner that ensures environmental and public safety protection, as is required under § 388 of EPAct.

Second, proceeding with individual projects will create exceptions to the rule before the rules are even developed and could seriously interfere with optimal management of the OCS resource. If projects reviewed and approved without the benefit of a national program are built, their presence may impact the success of a national program. Premature projects may prevent the development of other projects in more compatible locations in the future because of issues associated with cumulative impacts. The effectiveness of an OCS-wide policy is jeopardized by the review and approval of individual projects outside of the national regulatory program.

80105-011 (cont.)

Finally, such an approach deprives the public and other agencies of the opportunity to comment on these projects in a meaningful way. There is no way for interested parties to evaluate and comment on specific projects when the standards for approval do not even exist. MMS is proceeding in an arbitrary and capricious manner by reviewing and approving projects before standards are final and a subsequent comment opportunity has been provided.

It is inappropriate to allow large-scale projects such as Cape Wind to proceed with review before the standards are set and the programmatic environmental review is completed. Until the programmatic regulations are in place and an adequate PEIS is developed, MMS should suspend review of all offshore energy projects. Failure to do so will not only result in poor planning but also improper siting decisions.

[19] Although EPAct section 388 contains what is referred to as a savings provision, the purpose of that provision is narrow. Its effect is limited to exempting Cape Wind and LIPA only from resubmitting any documents that were previously submitted or from having to seek reauthorization of any action that was previously authorized. *See* § 388(d). Another provision in section 388 exempts Cape Wind from the competitive process for the grant of a lease or easement. *See* § 388(a)(3). Neither provision indicates any congressional intent to allow review of Cape Wind's proposal before rules are promulgated. In fact, a close reading of section 388 supports the view that Congress intended just the opposite – i.e., that all review would await promulgation of regulations. Section 388(a)(1)(D)(8) establishes an aggressive schedule for MMS to issue regulations: "Not later than 270 days after the date of enactment of the Energy Policy Act of 2005, the Secretary…shall issue any necessary regulations to carry out this subsection." Although MMS has missed that deadline, the short period that Congress selected supports the view that Congress intended for MMS to concentrate on developing regulations before initiating project review. Further, section 388's explicit exemptions from certain requirements applicable to all other projects strongly suggest that where no explicit exemption is referenced, Congress did not intend for one to be provided. When Congress intended an exemption for a specific project, it clearly provided one. The absence of an exemption for such an obvious issue indicates that Congress planned for all project review to await a regulatory regime.

CONCLUSION

The Alliance strongly supports the development of renewable energy on the OCS. We also support the call for concrete, proactive regulatory standards that guide the project review process while at the same time protecting our national interests in the environment, wildlife, and other human uses of the OCS.

As currently drafted, the Draft PEIS does not provide an adequate basis for establishing such a program. MMS should develop a new PEIS that is truly comprehensive in nature and serves as the basis for subsequent decisions. Only after such an approach is followed will MMS be in a position to proceed with site-specific decisions that adequately protect the environment and other public interest values of the OCS, while at the same time facilitating the development of offshore renewable energy projects in appropriate locations.

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Subject: OCS Alternative Energy and Alternate Use Programmatic EIS Comment 80106
Date: Monday, May 21, 2007 6:38:10 PM
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Thank you for your comment, Tom Luster.

The comment tracking number that has been assigned to your comment is 80106. Once the comment response document has been published, please refer to the comment tracking number to locate the response.

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OCS Alternative Energy and Alternate Use Programmatic EIS
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