WDCS
Whale and Dolphin Conservation Society

Table 1. **Summary of 2004 and 2007 North Atlantic Right Whale Incidents**
Compiled using data obtained from by the National Marine Fisheries Service Office of Protected Resources' Marine Mammal Health and Stranding Response Program, Northeast Regional Office, and Southeast Regional Office with Assistance from the Provincetown Center for Coastal Studies, New England Aquarium and Woods Hole Oceanographic Institution. **Information Current as of April 2, 2007**

Summary Table:

	Sex	Date	*Location*	Alive or Dead	Cause of Death
1	Male (calf)	2/3/04	FL	Dead	Unknown
2	Female (adult; pregnant)	2/7/04	NC	Dead	Ship Strike suspected
3	Female (adult; pregnant)	11/24/04	NC	Dead	Ship Strike
4	Unknown	12/9/04	MA	Dead	Carcass not retrieved*
5	Female (adult)	1/9/05	MA	Dead	Carcass not retrieved*
6	Female (adult; pregnant)	1/12/05	GA	Dead	Infection from previous vessel strike
7	Female (adult)	3/3/05	VA	Dead	Entanglement
8	Female (adult)	3/10/05	GA	Injured Likely dead	Ship Strike
9	Female (9yrs old)	4/28/05	MA	Dead	Suspected ship strike
10	Unknown	7/13/05	MA	Alive-Strike	Vessel Strike
11	Male (calf)	01/10/06	FL	Dead	Ship strike
12	Calf	01/16/06	TX	Alive-Strike	Ship strike
13	Female (Calf)	1/22/06	FL	Dead	Fishing Gear Entanglement.
14	Juvenile	3/11/06	SE Region	Alive-Strike	Vessel strike- not resighted.
15	Female (sub adult)	5/18/06	NY	Dead	Carcass was not retrieved.*
16	Female (Calf of year)	7/24/06	NB (Canada)	Dead	Ship strike.
17	Female	9/03/06	NS (Canada)	Dead	Ship Strike.
18	Male (2005 calf)	12/30/06	GA	Dead	Ship Strike
19	Male (neonate)	1/25/07	FL	Dead	Neonate- possible birth trauma.
20	2 Year old	2/12/07	MA	Alive-Strike	Vessel strike
21	Male (1424 adult)	3/25/07	CAN	Dead	Carcass not retrieved.* Entangled since 2002.
22	Male (sub-adult)	3/31/07	NC	Dead	COD not determined but signs of entanglement were evident.

*Carcass not retrieved but ship strike can not be ruled out.

From: ocsenergywebmaster@anl.gov
To: mail_ocsenergyarchives;
Subject: OCS Alternative Energy and Alternate Use Programmatic EIS Comment 80091
Date: Monday, May 21, 2007 3:53:55 PM

Thank you for your comment, Thomas Vanderberg.

The comment tracking number that has been assigned to your comment is 80091. Once the comment response document has been published, please refer to the comment tracking number to locate the response.

Comment Date: May 21, 2007 03:55:05PM CDT

OCS Alternative Energy and Alternate Use Programmatic EIS
Draft Comment: 80091

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Comment Submitted:
The Draft PEIS for the OCS is a complete failure. It fails to give adequate, practical guidelines and best practices for assessing environmental impacts and complying with NEPA. It is improper for a PEIS to prejudge potential impact levels, as this draft PEIS does throughout, as "negligible" or "minor." That just sends the signal to the energy industry that MMS will not place any inconvenient hurdles in the way of ACS development, regardless of NEPA. The Draft PEIS ignored the point raised in my scoping comments od July 5, 2006, that there should be a presumption against any aesthetic impact upon national, state, and municipal parklands held in the public trust, or places listed in the National Registry of Historic Places. This presumption should make any site that would impact such places per se inapproprite.

80091-001

80091-002

From: ocsenergywebmaster@anl.gov
To: mail_ocsenergyarchives; ocsenergywebmaster@anl.gov;
Subject: OCS Alternative Energy and Alternate Use Programmatic EIS Comment 80092
Date: Monday, May 21, 2007 3:55:57 PM
Attachments: NHA"s_Comments_on_Draft_EIS_80092.pdf

Thank you for your comment, Linda Church Ciocci.

The comment tracking number that has been assigned to your comment is 80092. Once the comment response document has been published, please refer to the comment tracking number to locate the response.

Comment Date: May 21, 2007 03:57:04PM CDT

OCS Alternative Energy and Alternate Use Programmatic EIS
Draft Comment: 80092

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Attachment: H:\Jeff\Reg Committee\MMS ANOPR\NHA's Comments on Draft EIS.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.

UNITED STATES OF AMERICA
Before the
MINERALS MANAGEMENT SERVICE

Notice of Availability of the Draft Programmatic Environmental Impact Statement and Public Hearings	))))	**Alternative Energy and Alternate Use Program**

COMMENTS OF THE NATIONAL HYDROPOWER ASSOCIATION ON THE MARCH 21, 2007, NOTICE OF AVAILABILITY OF THE DRAFT ENVIRONMENTAL IMPACT STATEMENT AND PUBLIC HEARINGS

I. BACKGROUND AND INTRODUCTION

On March 21, 2007, the Minerals Management Service ("MMS" or the "Service") issued a "Notice of Availability ("NOA") of the Draft Programmatic Environmental Impact Statement ("EIS") in support of the proposed Alternative Energy and Alternate Use Program ("AEAU") and associated rulemaking authorized under Section 388 of the Energy Policy Act of 2005.[1] The primary objectives of the programmatic EIS were to analyze and document the potential environmental, social-cultural, and economic considerations associated with the establishment of an Outer Continental Shelf ("OCS") AEAU program and rules, including all foreseeable, potential monitoring, testing, construction, commercial development, operations, and decommissioning activities on the OCS.

The National Hydropower Association ("NHA") appreciates this opportunity to comment on the programmatic draft EIS on the AEAU program for the development of alternate energy technologies on the OCS. New technologies offer the promise of expanding the nation's base of

[1] 72 Fed. Reg. 13307 (Mar. 21, 2007).

clean, renewable energy. Ensuring that the regulatory process for these technologies is clear, flexible, and practical is a top concern for the association and its members.

NHA is a non-profit national association dedicated exclusively to advancing the interests of the U.S. hydropower industry, including the new water power technologies – ocean, tidal and instream hydrokinetic power. It seeks to secure hydropower's place as an emissions-free, renewable and reliable energy source that serves national environmental and energy policy objectives. Its membership consists of more than 140 organizations including; public utilities, investor owned utilities, independent power producers, equipment manufacturers, environmental and engineering consultants and attorneys.

Recently, NHA created a new council to address the emerging needs of the new water power technologies. NHA's Ocean, Tidal and New Technologies Council has nearly 30 member companies (developers, manufacturers, public and private utilities, and consulting/engineering firms). Many of these members have filed preliminary permits on proposed sites or are currently working on projects under development.

There remains great potential right here in the United States for these new forms of water power and NHA is working to support this nascent industry. As such, the Association has a particular interest in the outcome of the regulatory program implementing Section 388 of the Energy Policy Act of 2005 and the draft programmatic EIS.

II. COMMENTS

NHA and its members have been closely following the work of the MMS on its AEAU program, including participating in several of the Service's regional forums. As such, NHA submits the following comments on the draft programmatic EIS in support of the AEAU program:

1. Support for the Programmatic EIS Approach – The association supports and commends the Service for utilizing a programmatic EIS approach, which directs the process and provides guidance to developers with limited resources in the nascent ocean and tidal industries. 80092-001

2. Data Quality Control – The draft programmatic EIS highlights and describes many data sets and issues with regard to the development of offshore energy resources. NHA applauds MMS for the scope and breadth of its data collection efforts, compiling a large amount of information in a single document. With so much information contained in the EIS, NHA believes that future supplementation of the document may be appropriate to ensure data usefulness and applicability. For example, the results of some of the general studies reported in the EIS may not prove applicable once analyzed in conjunction with specific technologies, which may have widely varying characteristics and effects, and with specific project locations, where local site conditions vary.[2] 80092-002

3. Program Flexibility – The ocean and tidal industries utilize many different forms of technology with varied profiles and effects. Regulatory flexibility will be needed to accommodate the unique attributes of a particular technology as deployed at any particular site. Additionally, as the ocean and tidal technologies are so new, and the industries continue to advance and move forward, sufficient flexibility will be needed in the AEAU program to accommodate this innovation. 80092-004

4. Program Coordination – The MMS regulatory program should provide a streamlined, coordinated process that minimizes duplication of effort by other federal agencies and the states. A process that provides clarity and certainty is needed, particularly for new industries such as ocean and tidal energy development, which are only now establishing a foothold in the U.S. NHA supports MMS' efforts to work cooperatively with the Federal Energy Regulatory Commission toward a Memorandum of Understanding that will clarify jurisdiction and provide certainty for developers to achieve timely regulatory approvals. 80092-005

5. Beneficial Impacts – NHA supports the comment by the Ocean Renewable Energy Coalition ("OREC") in its filing that beneficial effects of offshore energy development, such as potential increases in tourism, revitalization of economically depressed coastal communities, and also reduction of greenhouse gas emissions, should be recognized as part of the analysis of these projects as well. 80092-006

6. Continued Industry Outreach – NHA encourages the MMS to continue its robust outreach efforts to all stakeholders in this process. The association and its members appreciate the opportunities the Service has provided thus far to give input and will continue to provide comment on the issues affecting developers of ocean and tidal energy in any future forums that are held.

[2] As a specific example of this, at page 5-151 the draft EIS describes a potential OCS commercial facility stating, "The facility would require 2500 mooring lines and anchors." The number of mooring lines is likely to vary by technology and this may be a high number for certain applications and for smaller sized projects. 80092-003

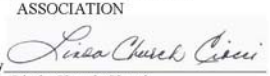
III. CONCLUSION

NHA again commends the Service for its work in preparing this draft programmatic EIS in support of its AEAU program. New technologies, such as ocean and tidal power, have an important role to play if the U.S. is to meet its goal of promoting new, clean, climate-friendly energy resources. A recent report by the Electric Power Research Institute (EPRI) concludes that there are as many as 10,000 MW of power available from ocean energy technologies by 2025.[3] Ensuring that an appropriate regulatory process is in place for these technologies is critical to seeing that potential realized.

Again, NHA appreciates this opportunity to present its comments on the draft EIS and would be pleased to provide further review and input into the EIS process. NHA's membership has much to contribute to the advancement of the collective knowledge of OCS renewable energy development and the design of practicable regulatory processes. We look forward to participating in any further MMS efforts to ensure the success of ocean and tidal technologies as an integral part of the Nation's energy policy.

Respectfully submitted,

NATIONAL HYDROPOWER ASSOCIATION

By 

Linda Church Ciocci
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[3] Assessment of Waterpower Potential and Development Needs (EPRI 2007).

From: ocsenergywebmaster@anl.gov
To: mail_ocsenergyarchives; ocsenergywebmaster@anl.gov;
Subject: OCS Alternative Energy and Alternate Use Programmatic EIS Comment 80093
Date: Monday, May 21, 2007 3:57:28 PM
Attachments: DEC_comments_5-21-07_80093.pdf

Thank you for your comment, Kevin Kispert.

The comment tracking number that has been assigned to your comment is 80093. Once the comment response document has been published, please refer to the comment tracking number to locate the response.

Comment Date: May 21, 2007 03:58:46PM CDT

OCS Alternative Energy and Alternate Use Programmatic EIS
Draft Comment: 80093

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Comment Submitted:
Please see attached letter from Jack Nasca.

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.

New York State Department of Environmental Conservation
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Alexander B. Grannis
Commissioner

Agency Comments on PGEIS

May 21, 2007

MMS Alternative Energy & Alternate Use Programmatic EIS
Argonne National Laboratory, EVS/900
9700 S. Cass ave.
Argonne IL 60439
Attn: Maureen A. Bornholdt, Project manager

Re: Minerals Management Service, Draft Programmatic EIS
Alternative Energy Development and Production and Alternative Use Facilities on the Outer Continental Shelf

Dear Ms. Bornholdt;

The New York State Department of Environmental Conservation (Department) is pleased to provide comments on the Draft Programmatic EIS (PEIS) for Alternative Energy Development and Production and Alternative Use Facilities on the Outer Continental Shelf (OSC). The Department had provided comments earlier on both the proposed OSC lease program and rule in a letter dated 2/28/07, and on the scope of the draft PEIS in a letter dated 7/5/07. As the primary agency responsible for the protection of natural resources and water quality for New York State, the Department is concerned with potential impacts on the marine habitat and resources on the OSC region, and will be responsible, along with other appropriate state and local agencies, for review of the portion of any project and associated facilities that will impact state managed waters.

In our previous letters and again herein, the Department recommends that MMS take a proactive approach and establish a program that promotes the siting of projects in areas where there would be the least amount of impact to natural resources. The Department is in agreement with MMS in that it is apparent that this goal is best served by the proposed action, the establishment of the MMS Alternative Energy and Alternate Use Program on the OSC and promulgation of associated regulations, as compared to the other alternatives (case-by-case and no action) evaluated in the PGEIS. 80093-001

The Department is also in agreement with the statement on page 7- 4 that the recommended mitigation in many cases is to avoid siting facilities in areas of special concern or in ecologically sensitive areas, and emphasizes that every effort should made to identify these areas in the Final EIS. The PGEIS defers to future environmental assessments to provide specific discussions of localized impacts and in fact some sensitive areas may not be evident 80093-002

until appropriate preconstruction studies are conducted in the area of a proposed project. However, the Department continues to urge MMS to make every effort to identify these areas while siting potential projects.

In a similar fashion, the Department would also urge MMS to consider the points made in our 2/28/07 letter regarding the identification of specific geographic areas of interest. That letter stated that prior to any competitive process for awarding access rights for research and assessment by private companies, MMS should compile baseline data for OCS resources that include factors such as:

1) Environmental sensitivity of the geographic area, including proximity to designated protected areas, fish and shellfish resources, coastal barrier resources, and important avian breeding areas and migration routes,
2) Competing uses such as shipping and fishing,
3) Compatibility with existing uses and regulations in state jurisdictional waters, and
4) Public perception and acceptance of potential development in these areas. 80092-002 (cont.)

The Department recommended that every effort should be made to identify areas where there will be the least potential for impacts to marine resources and that avoid conflicts with commercial and recreational activities.

Therefore, it is disappointing that MMS eliminated the alternative of identifying and analyzing specific areas in Federal Waters along the coast with the greatest resource potential as indicated in section 2.4.2, and that the PEIS does not provide discussion of a means to deal with competing uses in a given area. The Department has seen this conflict occur with Federal Energy Regulatory Commission (FERC) preliminary permits for Tidal Energy projects and FERC is currently considering comments received regarding an interim policy (Docket No. RM07-08-000
Notice of Inquiry and Interim Statement of Policy Permits for Wave, Current, and In stream New Technology Hydropower Projects) to address this issue. It would seem inevitable that similar conflicts could arise with projects on the OSC. 80092-003

Our 2/28/07 letter also recommended that financial assurance be required to cover the costs of decommissioning OSC projects. Although the methods for decommissioning are discussed extensively throughout the PEIS, it is not evident that the means (any sort of bond or other financial surety) received the same degree of attention. As indicated in our earlier letter, the Department recommends that MMS develop guidelines in cooperation with the state regarding acceptable practices for decommissioning. Management considerations for end-of-life and facility removal include release of contaminants during demolition, the life expectancy and long-term stability (physical and chemical) of the materials, whether the structures have become valuable habitat that should be preserved (at least at depths that do not preclude navigation) and whether the transmission lines should remain in place or be removed. In lower energy areas where the cable or pipelines are sufficiently buried, they should remain in place to avoid habitat disturbance, but in some near-shore areas where waves or currents may expose the transmission lines, removal to avoid conflicts with fishing activities or anchoring should be considered 80092-004

In conclusion, the Department appreciates the opportunity to comment on the PGEIS and looks forward to working with MMS throughout the PEIS and rulemaking process. If the you have any questions, please contact Kevin Kispert of my staff at (631) 444-0302.

Sincerely,

/s/

Jack A. Nasca, Chief
Energy Projects & Management
Division of Environmental Permits

cc: W. Little, Legal
J. Harmon, Minerals
A. Kascius, NYSDOS
A. Bauder, NYSOGS
D. May, NYSDPS
DEC Review Team

From: ocsenergywebmaster@anl.gov
To: mail_ocsenergyarchives; ocsenergywebmaster@anl.gov;
Subject: OCS Alternative Energy and Alternate Use Programmatic EIS Comment 80094
Date: Monday, May 21, 2007 3:58:29 PM
Attachments: MMS_AERU_PEIS_Comments_5-21-07_FINAL_80094.pdf

Thank you for your comment, Cynthia Liebman.

The comment tracking number that has been assigned to your comment is 80094. Once the comment response document has been published, please refer to the comment tracking number to locate the response.

Comment Date: May 21, 2007 03:59:41PM CDT

OCS Alternative Energy and Alternate Use Programmatic EIS
Draft Comment: 80094

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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.

May 21, 2007

Department of Interior
Minerals Management Service
Alternative Energy & Alternate Use Programmatic EIS
Argonne National Laboratory EVS/900
9700 S. Cass Ave.
Argonne IL 60439

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

The Conservation Law Foundation (CLF) is pleased to submit the following comments on the U.S. Department of Interior, Minerals Management Service's (MMS) Draft Programmatic Environmental Impact Statement for Alternative Energy-Related Uses on the Outer Continental Shelf (AERU). The Draft Programmatic Environmental Impact Statement (Programmatic EIS) was prepared by MMS to support the promulgation of regulations governing offshore alternative energy development on the Outer Continental Shelf (OCS) and re-use of exiting oil and gas platforms for alternative uses, as authorized by the Energy Policy Act of 2005. The Draft Programmatic EIS ("Draft") evaluates the potential impacts to the environment and to social and economic resources from alternative energy technologies that MMS predicts will be "commercially viable" within the next five to seven years.

Background and Introduction:

CLF is a nonprofit environmental advocacy organization that is actively involved in a range of public policy issues concerning natural resources in New England. For 40 years, CLF has led the fight to restore and protect the health of New England's marine environment. In 1978, CLF filed a landmark lawsuit that prevented oil and gas drilling on Georges Bank, New England's premier fishing grounds. Subsequently, CLF has litigated to end chronic overfishing and force the rebuilding of New England's fish population. CLF has also been involved in permitting proceedings related to submarine pipeline and cable proposals; in various commercial development projects proposed for location on the OCS; in marine research, habitat mapping, and protection initiatives; and in marine endangered species protection throughout New England.

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A representative of CLF served on the MMS policy advisory subcommittee that met while the Energy Policy Act of 2005 was being drafted and debated in Congress to consider the possibility that MMS would be given authority, by the final bill, over the uses that are the subject of the Draft EIS. That subcommittee developed the broad outlines of the regulations and a preliminary tentative scope for a possible Programmatic EIS.

The proposed AERU program is under consideration at a time when there is unprecedented attention being paid to national energy policy, in light of growing awareness of climate change. After the release of the Intergovernmental Panel on Climate Change (IPCC) Working Group reports in February, April, and May of 2007, there is no longer a basis for policy-makers to ignore this phenomenon or the associated overarching environmental, public health, energy, legal, social, and economic considerations.[1] Development of renewable energy on the Outer Continental Shelf, while unavoidably causing some impacts, will provide an important opportunity to meet the country's urgent need for sustainable energy. CLF made this observation during the preliminary process in 2005, based upon the science available at that time, and reiterates it even more emphatically now.

At the same time, increasing attention is being paid to the declining health of the world's oceans. Both the U. S. Commission on Ocean Policy (2004) and the Pew Oceans Commissions Commission (2003) have published well-researched reports documenting that our oceans, and the resources they support, are in trouble from coast to coast and in need of decisive action to restore their health and ensure that citizens across the nation continue to enjoy their many benefits. Perhaps nowhere is this need for change better demonstrated than in New England. The Gulf of Maine - one of the most biologically productive ecosystems in the world – is experiencing severe stress on nearly every aspect of its ecosystem. This is due to widespread coastal and ocean habitat degradation and loss, climate change due to increases in greenhouse gases resulting from our dependence on fossil fuels, resource depletion (most notably New England's famed complex of Atlantic cod and other species of groundfish), and pervasive point and non-point source pollution of marine waters.

From our vantage point, there is no question that we need to dramatically alter the course of U.S. coastal and ocean management policies to protect this invaluable natural resource for future generations, and that renewable energy projects on the OCS must be sited responsibly and carried out with the least possible impacts on the marine environment. CLF has taken a leadership role in articulating the need for developing this

80094-001

[1] See Intergovernmental Panel on Climate Change, Working Group I, *Climate Change 2007: The Physical Science Basis* (February, 2007); Intergovernmental Panel on Climate Change, Working Group II, *Climate Change 2007: Adaptation, Impacts and Vulnerability* (Apr., 2007); Intergovernmental Panel on Climate Change, Working Group III, *Climate Change 2007: Mitigation Of Climate Change* (Feb., 2007), *available at* http://www.IPCC.ch (last accessed 5/18/2007).

new paradigm for ocean management.[2] CLF has also been deeply involved in a mapping exercise that will provide a sound scientific basis for sound policy development.[3]

Summary of Comments:

The Draft Programmatic EIS is a useful catalog of issues that should be considered during review of all proposed alternative energy projects in federal waters on the Outer Continental Shelf (OCS), and CLF commends MMS for undertaking this detailed analysis of impacts to a wide range of resources. However, the Draft misses a number of key opportunities to create a robust national framework for consideration of offshore alternative energy siting and best practices.

CLF offers the following recommendations, discussed in more detail below:

(1) the Final Programmatic EIS should clarify that individual environmental and technical review will be conducted for all projects under the forthcoming MMS regulations governing Alternative Energy-Related Uses (AERU) on the OCS;

(2) the Final Programmatic EIS should identify a set of nationally-applicable Best Management Practices (BMPs) for environmental data collection and monitoring throughout the life cycle of a project; should establish criteria for mitigation of harm to the environment that cannot be avoided through siting and project design; and should establish Adaptive Management Protocols (AMPs) to address impacts discovered during operation.

(3) The Final Programmatic EIS should incorporate greater consideration of the effects of climate change, particularly in its discussion of the current state of marine ecosystems; and

(4) MMS should create a comprehensive framework for offshore energy siting to end the "first-come, first-served" approach to commercial development on the OCS, and should evaluate cumulative impacts of the AERU program in connection with comprehensive ocean management planning that includes federal and state governments and other stakeholders.

(5) MMS should require study and mitigation of environmental impacts for proposed reuse of existing oil and gas platforms. Because aquaculture presents a unique and serious set of threats to human health and the environment, it must be regulated with caution and additional data must be gathered before any offshore aquaculture project is permitted.

[2] See generally, Jennifer Atkinson, Priscilla M. Brooks, Anthony C. Chatwin, Peter Shelley, Conservation Law Foundation, *The Wild Sea: Saving Our Marine Heritage* (Aug., 2000) (First chapter available at http://www.clf.org).
[3] Conservation Law Foundation and WWF-Canada, *Marine Ecosystem Conservation for New England and Maritime Canada: A Science-Based Approach to the Identification of Priority Areas For Conservation* (2006)

1. Individual Environmental and Technical Review Should Be Required For All Projects

To underscore points made in CLF's scoping comments on the Programmatic EIS, this EIS should not replace individual, site-specific environmental impact review. Rather, given the urgent need for clean, renewable energy in the U.S., the analysis in the Programmatic EIS should be used to facilitate rapid, yet thorough, environmental review of individual project proposals.

Site-specific review is essential for offshore renewable energy projects and reuse of existing oil platforms, and should be the rule, not the exception given this legal requirement that every site receive individual attention. In the case of wind, the technologies used in construction and operation of the turbines have been commercially demonstrated at a number of sites in Europe, but their impacts will vary significantly depending on the particular bathymetric conditions and biota at and near the site (markedly so for avian species). In the cases of wave and ocean current energy, and alternative uses of existing energy platforms, not only will unique bathymetric conditions at each site generate unique impacts on the local ocean environment, but these technologies and uses, themselves, are still evolving and their impacts have not been fully tested in a variety of ecosystems. 80094-002

With a robust Programmatic EIS in place, environmental review of individual projects can be carried out efficiently, because Project proponents will be able to anticipate and address the entire range of potential impacts when submitting project proposals and environmental impact statements, and MMS and other reviewing agencies will have a framework against which to evaluate individual project proposals. Further, as described below, permitting can be expedited to the extent that a framework at the programmatic level establishes parameters for monitoring and adaptive management protocols applicable to all projects.

2. The Programmatic EIS Should Establish Best Management Practices For Data Collection and Post-Construction Adaptive Management

One particularly important function of the Programmatic EIS will be to give alternative energy project proponents reasonable certainty as to the types of pre-construction and post-construction studies, mitigation measures, and post-construction adaptive management measures that may be required. Proponents can then incorporate these considerations into their project design, schedule, and budget. To this end, CLF recommends that MMS strengthen provisions in the EIS addressing Best Management Practices for pre-and post-construction data collection and create a standard framework for post-construction adaptive management practices (AMP) across each category of alternative energy development covered in the EIS. 80094-003

a. Pre-construction data collection

Pre-construction data collection is essential to the successful siting and design of commercial renewable energy technology. As land-based wind energy projects have demonstrated, insufficient data on the presence and flight patterns of fauna (avian species, in particular) can result in devastating consequences to animal life that detract from the environmental benefits of wind as a source of clean, renewable energy.[4] MMS should utilize this opportunity to establish standard parameters for sufficient data collection for all commercial development projects authorized by the AERU program as well as requiring appropriate data collection on a site-specific basis.

A second reason to establish guidelines in the Programmatic EIS for pre-construction data collection is that conflict over data collection is likely to delay the environmental review processes for offshore renewable energy projects, absent a general expectation as to the types and duration of monitoring data that renewable energy project proponents will be expected to provide. For example, disagreement as to the adequacy of monitoring data for avian impacts (among other issues) has lengthened the environmental review and permitting processes for the Cape Wind project, a 454MW commercial wind farm proposed for Nantucket Sound, off the coast of Massachusetts.[5] MMS should utilize this opportunity to identify, in consultation with resource agencies and scientists expert in the field, best management practices and guidelines for the sufficiency of monitoring data for each type of natural resource. MMS should clarify that it retains the authority to require more stringent monitoring on a site-specific basis where necessary.

80094-004

b. Monitoring At All Stages

All of the technologies covered by the Programmatic EIS (wind, wave, ocean current, and alternative uses of oil platforms) require substantial ongoing monitoring to evaluate site-specific effects on the environment. In the case of wave energy and ocean current energy, this mandate is especially crucial because the mechanisms of operation and the effects of these technologies are, to a large degree, unknown. Environmental data collection and monitoring programs should be carried out at all stages of the project: pre-construction, during construction, during operation, during decommissioning, and after decommissioning, to determine whether there are lasting impacts.

80094-005

c. Mitigation Measures

Throughout the Draft, MMS identifies numerous mitigation measures for each type of resource. However, it is not clear from the Draft EIS to what degree these mitigation measures will actually be required as conditions of a lease, permit, or project

80094-006

[4] See *Environmental Impacts of Wind Energy Projects*, Committee on Environmental Impacts of Wind Energy Projects, National Research Council 48-95 (National Academies Press, 2007), *available at* www.nap.edu. (Pre-publication copy released May, 2007)
[5] See Ian Bowles, Secretary of the Commonwealth of Massachusetts Executive Office of Environmental Affairs, Certificate of the on the Final Environmental Impact Report: Cape Wind Project, at 11 (March 29, 2007).

approval. MMS should more clearly explain how it intends to determine which mitigation measures will be required and to ensure that they are implemented. The Massachusetts Secretary of the Executive Office of Environmental Affairs Certificate on the Cape Wind Final Environmental Impact Review provides a good model for the level of specificity that should be required in any permit or lease issued by MMS to renewable energy project or to a proponent of an alternative use of existing oil platforms.[6] For example: "[t]o minimize damage to rare species from noise, the proponent has committed to post an observer during the initial phases of construction, suspend activities if protected marine mammals are found within 500m of the site, and use a soft start-up during monopole installation [to allow mobile species to move away from the area]."[7]

80094-006 (cont.)

Mitigation of impacts to sea life will be essential in the case of wave energy technology or ocean-current turbines, as the technology designs described in Section 3 of the Draft Programmatic EIS present the potential for significant harm to fish, mammals, and sea turtles.

d. Adaptive Management Practices

Even with Best Management Practices in place on a program-wide basis that require preconstruction studies and certain standard mitigation measures, there will be unknowns specific to each project during construction, operation, and decommissioning. In order to ensure the proper level of environmental consideration while also allowing new offshore renewable energy projects to move forward at an economically viable pace, CLF suggests that the regulations rely on a rigorous adaptive management protocol to address the inevitable unknown factors that will come with these new technologies. An expanded discussion of Adaptive Management should be added to Section 7.6.4, Mitigation of Adverse Impacts, in which specific criteria are set forth for the type of Adaptive Management Plan that must be in place for all projects under the AERU program.

80094-007

Adaptive management, in the context of energy siting, is a process by which data collected on an ongoing basis informs real changes in practices to abate unanticipated environmental consequences and compensate for truly unavoidable impacts.[8] "Adaptive management is not a trial and error approach.[9] Rather, an adaptive management plan should be agreed on and put in place *before the facility begins operation*. A good adaptive management plan must be predicated on an appropriate plan for ongoing monitoring during operation of the facility to detect unexpected harm to the environment or unexpected conflicts with other uses. An example that highlights the importance of an

[6] Ian Bowles, Secretary of the Commonwealth of Massachusetts Executive Office of Environmental Affairs, Certificate of the on the Final Environmental Impact Report: Cape Wind Project, at 12 (March 29, 2007).
[7] Id., at 12.
[8] See Shawn Smallwood and Linda Spiegel, California Energy Commission, *Assessment To Support An Adaptive Management Plan For The APWRA*, (January 19, 2005), *available at* http://www.biologicaldiversity.org/swcbd/Programs/bdes/altamont/CEC-assessment-mitigation-plan.pdf (last accessed 5/14/07).
[9] Id., at 2.

Adaptive Management Plan is the unfortunate case of Altamont Pass, where for decades raptors have been killed at the rate of hundreds per year.[10] The severity of the impacts has been attributed to the location of the turbines in canyons and on a ridgeline in the hills of central California.[11]

The Adaptive Management Plan should include provisions for: (1) additional data collection by the project owner/operator in the event that a harmful impact is detected or suspected; (2) a mechanism by which the owner/operator will report back results of monitoring data collection and make such data publicly available; (3) a threshold over which the facility will take action to mitigate/eliminate harms; (4) a plan specifying the types of actions facility will take in the event of each category of environmental impact; and (5) provisions for monitoring to assess whether the adaptive measures are effective at remedying the impact, and a re-evaluation of goals if it is determined that the prescribed actions are not working.[12] Another provision that may be useful to include in an AMP is a statement of the conditions under which the permitting agency will convene and independent scientific panel to evaluate the effectiveness of mitigation measures or recommend additional mitigation. Finally, MMS should retain the authority to require a project to modify its operations for a portion or all of the facility if post-construction monitoring data reveals that the project's environmental impacts are disproportionate to its benefits.

80094-007 (cont.)

3. Consideration of Climate Change Should Be Expanded

Climate change should be better discussed and factored into the EIS analysis, both in describing the current state of marine and coastal environments, and in analyzing the impacts of the proposed alternatives.

80094-008

Scientists and policymakers are now aware that our oceans are exhibiting significant physical, chemical, and biological changes as a result of climate change. These changes include acidification of ocean water, particularly near the surface; sea level rise; changes in water temperature and salinity; even alteration of ocean currents.[13] The ultimate effects of these changes are unknown but predicted to include changes in the

[10] See C.G. Thelander, K.S. Smallwood, and L Rugge, National Renewable Energy Laboratory, *Bird Risk Behaviors and Fatalities* (2003), *available at* http://www.nrel.gov/docs/fy04osti/33829.pdf (last accessed 5/15/2007); Letter from Center for Biological Diversity to Alameda County Board of Zoning Adjustments, *available at* http://www.biologicaldiversity.org/swcbd/Programs/bdes/altamont/2-04-Appeal.pdf. (Describing need for significant changes in operation and closure of certain turbines as a condition of zoning permit renewal of the Altamont Pass Wind Resources Area).

[11] See Id.

[12] Shawn Smallwood and Linda Spiegel, California Energy Commission, *Assessment To Support An Adaptive Management Plan For The APWRA*, (January 19, 2005), *available at* http://www.biologicaldiversity.org/swcbd/Programs/bdes/altamont/CEC-assessment-mitigation-plan.pdf (last accessed 5/14/07).

[13] Pew Oceans Commission, *America's Living Oceans: Charting a Course for Sea Change* 4, 5-7, 70, 83-87 (2003); Ivanna Bandura and Beverly Vuscon, Conservation Law Foundation, *Oceans in Peril: Global Warming and the New England Marine Environment* 6-11 (2006), *available at* http://www.clf.org/uploadedFiles/CLF/General/Publications/Oceans%20in%20Peril%20Final%20Proof(2).pdf.

life cycle, range and abundance of certain species of plankton and fish, which will cause ripple effects in the web of ocean life.[14] The effects on each regional ocean ecosystem may be unique.[15]

MMS should augment Chapter 4 of DEIS to better reflect what is known about how climate has affected each regional ecosystem to date, and explain the changes that scientists expect to see in the next 5-7 years (the timeframe in which MMS anticipates receiving applications) and in the next 30 years (the anticipated term of permits under the leasing program).

Having explained the current and potential impacts of climate change on the environment, the Programmatic EIS should then include these impacts in the discussion of the alternatives. For example, Chapter 7.4 of the Draft Programmatic EIS, Impacts of Other Energy Sources, appropriately discusses the negative environmental impacts from fossil-fuel based energy sources, but the Programmatic EIS should more clearly highlight the climate-related environmental impacts of CO_2 emissions from coal, oil, gas, and biomass power plants and the benefits of replacing such plants with clean, renewable energy. This discussion would be especially appropriate in Chapter Section 7.5, Cumulative Impacts, and 7.6.2, the analysis of short-and long-term benefits.

80094-008 (cont.)

Additionally, the effects of climate change on the ocean environment should be considered as part of the design of any pre-construction study and in establishing plans for mitigation and adaptive management on a programmatic and site-specific basis.

4. Comprehensive Evaluation of Uses of the Outer Continental Shelf is Necessary

Our nation's coastal regions, including offshore federal waters, are under extreme stress not only from climate change, and pollution attributable to land-based sources, but from intensifying human activities in the marine environment such as fishing and boating, mineral extraction, oil and gas extraction, commercial shipping, cable transmission lines, defense activities, and aquaculture.[16] The cumulative, detrimental environmental impacts of these activities on all of our nation's coastal ecosystems are increasingly well-documented. Yet no comprehensive analysis has been conducted to determine suitable locations for, or to establish parameters for, future permitting of commercial activities on the OCS.

80094-009

[14] Bandura and Vuscon, above, note 12, at 7-9.

[15] See Bandura and Vuscon, above, note 12 (highlighting effects on Gulf of Maine).

[16] Dana Beach, Pew Oceans Commission, *Coastal Sprawl: The Effect of Urban Design on Aquatic Ecosystems in the United States* 12-16 (2002), *available at* http://www.pewtrusts.com/pdf/env_pew_oceans_sprawl.pdf (last accessed 5/15/2007); Donald Boesch et al, Pew Oceans Commission, *Marine Pollution in the United States* (2001), *available at* http://www.pewtrusts.com/pdf/env_pew_oceans_pollution.pdf (last accessed 5/15/2007); Bandura and Vuscon, (2006); Pew Oceans Commission, *America's Living Oceans: Charting a Course for Sea Change* (2003).

To address the serious issues facing our oceans, both the U. S. Commission on Ocean Policy (2004) and the Pew Oceans Commissions Commission (2003) have called for a comprehensive national policy on oceans and coasts, and an overhaul of the currently fragmented management system to create a much more coordinated and effective management structure. The Commonwealth of Massachusetts also recognized the need to overhaul state ocean resource management and created the Ocean Management Task Force to review state ocean policy and make recommendations for improvements. In March 2004, the Ocean Management Task Force released its report to the Secretary of Environmental Affairs along with a suite of recommendations -- the cornerstone of which was a call for comprehensive ocean resource management planning legislation to reverse the state's "first come, first served" *ad hoc* approach to ocean resource development.

As the agency tasked with regulating development of a number of uses of offshore waters which have significant negative environmental impacts, MMS has a responsibility to conduct a comprehensive analysis of the cumulative impacts of the technologies and projects under its jurisdiction, in connection with its partner resource management agencies. MMS is in a unique position to spearhead this evaluation because of its extensive expertise in the technologies deployed in the OCS (both established and in development).

80094-009
(cont.)

At a minimum, this comprehensive analysis should include: oil and gas development; renewable energy; alternative uses of existing oil platforms; sand and gravel mining; other mineral extraction; and any other uses within MMS jurisdiction, and should be completed prior to promulgation of the Notice of Proposed Rulemaking for the 5-year plan for oil and gas development in 2012. The analysis should be conducted in consultation with FWS, NMFS, NOAA, and state Coastal Zone Management offices.

Alternative energy projects will inevitably interact with shipping, fishing, aquaculture, recreational boating, and other uses. In view of the recommendations of the U.S. ocean commissions and of the Massachusetts Ocean Management Task Force recommendations, and the discussion of the regional issues above, projects authorized under the AERU program should be sited as part of a comprehensive planning effort for our ocean resources. The Massachusetts legislature is now considering such legislation in the form of An Act Relative to Oceans (Senate No. 529), now pending before the Committee on Environment, Natural Resources and Agriculture. However, no federal legislation is needed for MMS to look at the cumulative impacts of the various uses of the OCS and use the PEIS process to move forward comprehensive planning – indeed such a review is required by NEPA.

5. **Aquaculture Presents Unique Threats and Would Require Additional Study and Mitigation**

80094-010

Because aquaculture presents a unique and serious set of threats to human health and the environment, it must be regulated with caution and additional data must be

gathered before any offshore aquaculture project is permitted. These threats, well outlined in The Pew Oceans Commission Scientific Report on Aquaculture, include biological pollution (genetic alteration of wild fish stocks, diseases, and parasites); chemical pollution (from antibiotics and pesticides used to prevent disease in farmed stocks); nutrient loading and eutrophication (from concentrated wastes of farmed fish); and habitat modification (obstacles to natural fish feeding, spawning or migration created by aquaculture facilities and attraction of predators); and reductions in populations of "feeder fish" that provide food for wild fish populations.[17] CLF would also like to point MMS to the discussion concerning aquaculture in comments submitted by the Natural Resources Defense Council (NRDC) on scoping of the AERU Programmatic EIS and/or the Draft Programmatic EIS.

80094-010
(cont.)

CLF appreciates this opportunity to comment and looks forward to future correspondence with MMS in connection with the AERU Rulemaking.

Sincerely,

Cynthia E. Liebman
Staff Attorney

[17] Rebecca J. Goldburg, Matthew S. Eliot, and Rosamond L. Naylor, Pew Oceans Commission, *Marine Aquaculture in the United States: Environmental Impacts and Policy Options* 14-18 (2005), *available at* http://www.pewtrusts.com/pdf/env_pew_oceans_aquaculture.pdf. (Last accessed 5/21/2007).

From: ocsenergywebmaster@anl.gov
To: mail_ocsenergyarchives; ocsenergywebmaster@anl.gov;
Subject: OCS Alternative Energy and Alternate Use Programmatic EIS Comment 80095
Date: Monday, May 21, 2007 4:04:47 PM
Attachments: SAFMCEnergyPolicyFinal05_80095.pdf

Thank you for your comment, Roger Pugliese.

The comment tracking number that has been assigned to your comment is 80095. Once the comment response document has been published, please refer to the comment tracking number to locate the response.

Comment Date: May 21, 2007 04:05:56PM CDT

OCS Alternative Energy and Alternate Use Programmatic EIS
Draft Comment: 80095

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Comment Submitted:
Please accept the attached SAFMC Energy Policy Statement as our comments on the DEIS. 80095-001

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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(JUNE 2005)
POLICIES FOR THE PROTECTION AND RESTORATION OF ESSENTIAL FISH HABITATS FROM ENERGY EXPLORATION, DEVELOPMENT TRANSPORTATION AND HYDROPOWER RE-LICENSING

Policy Context

This document establishes the policies of the South Atlantic Fishery Management Council (SAFMC) regarding protection of Essential Fish Habitat (EFH) and Essential Fish Habitat - Habitat Areas of Particular Concern (EFH-HAPCs) from threats associated with energy exploration, development, transportation and hydropower re-licensing. The policies are designed to be consistent with the overall habitat protection policies of the SAFMC as formulated and adopted in the Habitat Plan (SAFMC 1998a), the Comprehensive EFH Amendment (SAFMC 1998b) and the various Fishery Management Plans (FMPs) of the Council.

The findings presented below assess the threats to EFH potentially posed by activities related to energy development and hydropower re-licensing in offshore and coastal waters, riverine systems, and adjacent wetland habitats, and the processes whereby those resources are placed at risk. The policies established in this document are designed to avoid, minimize, and offset damage caused by these activities, in accordance with the general habitat policies of the SAFMC as mandated by law. To address any future energy projects in the South Atlantic region, the SAFMC reserves the right to revise this policy when more information becomes available.

EFH At Risk from Energy Exploration, Development Transportation and Hydropower Re-licensing Activities

The SAFMC finds:

1. That oil or gas drilling for exploration or development on or closely associated with EFH including – but not limited to – coral, coral reefs, and live/hardbottom habitat at all depths in the Exclusive Economic Zone (EEZ), EFH-HAPCs, or other special biological resources essential to commercial and recreational fisheries under SAFMC jurisdiction, be prohibited.

2. That all facilities associated with oil and gas exploration, development, and transportation be designed to avoid impacts on coastal ecosystems and sand sharing systems.

3. That adequate spill containment and cleanup equipment be maintained for all development and transportation facilities and, that the equipment be available on-site or located so as to be on-site within the landing time trajectory. An environmental bond should be required to assure that adequate resources will be available for unanticipated environmental impacts, spill response, clean-up and environmental impact assessment.

4. That exploration and development activities should be scheduled to avoid migratory patterns, breeding and nesting seasons of endangered and threatened species, including – but not limited to – northern right whales in coastal waters off the southeastern United States.

5. That the Environmental Impact Statement (EIS) for any Lease Sale address impacts from activities specifically related to natural gas production, safety precautions required in the event of the discovery of "sour gas" or hydrogen sulfide reserves and the potential for transport of hydrocarbons to nearshore and inshore estuarine habitats resulting from the cross-shelf transport by Gulf Stream spin-off eddies. The EIS should also address the development of contingency plans to be implemented if problems arise due to oceanographic conditions or bottom topography, the need for and availability of onshore support facilities in coastal areas, and an analysis of existing facilities and community services in light of existing major coastal developments.

6. That EISs prepared for liquefied natural gas (LNG) pipeline projects or other energy-related projects must fully describe direct and cumulative impacts to EFH, including deepwater coral communities. Impact evaluations should include quantitative assessments for each habitat based on recent scientific studies pertinent to that habitat, and the best available information.

7. That construction and operation of open-loop (flow-through) LNG processing facilities be prohibited in areas that support EFH.

8. That hydropower project prescriptions include measures that ensure that the amount and timing of flows mimic natural conditions. In addition, the best available technologies that allow for fish passage should be integrated into the project design.

9. That projects requiring expanded EFH consultation provide a full range of alternatives, along with assessments of the relative impacts of each on each type of EFH, EFH-HAPC and state-designated Critical Habitat Areas (CHAs).

10. That energy development activities have the potential to cause impacts to a variety of habitats across the shelf and to nearshore, estuarine, and riverine systems and wetlands, including:

    a) waters and benthic habitats in or near drilling and disposal sites, including those potentially affected by sediment movement and by physical disturbance associated with drilling activities and site development;
    b) waters and benthic habitats in or near LNG processing facilities or other energy development or transportation sites,
    c) exposed hardbottom (e.g. reefs and live bottom) in shallow and deep waters,
    d) coastal wetlands and
    e) riverine systems and associated wetlands.

11. That certain offshore, nearshore and riverine habitats are particularly important to the long-term viability of commercial and recreational fisheries under SAFMC management, and potentially threatened by oil and gas and other energy exploration, development, transportation, and hydropower re-licensing activities:

    a) coral, coral reef and live/hardbottom habitat, including deepwater coral communities,
    b) marine and estuarine waters,
    c) estuarine wetlands, including mangroves and marshes,
    d) submersed aquatic vegetation,
    e) waters that support diadromous fishes, and
    f) waters hydrologically connected to waters that support EFH.

12. That siting and design of onshore receiving, holding, and transport facilities could have impacts on wetlands and endangered species' habitats if they are not properly located.

13. Sections of South Atlantic waters potentially affected by these projects, both individually and collectively, have been identified as EFH or EFH-HAPC by the SAFMC. Potentially affected species and their EFH under federal management include (SAFMC, 1998b):

    a) summer flounder (various nearshore waters, including the surf zone and inlets; certain offshore waters),
    b) bluefish (various nearshore waters, including the surf zone and inlets),
    c) red drum (ocean high-salinity surf zones and unconsolidated bottoms in the nearshore),
    d) many snapper and grouper species (live hardbottom from shore to 600 feet, and – for estuarine-dependent species (e.g., gag grouper and gray snapper) – unconsolidated bottoms and live hardbottoms to the 100 foot contour),
    e) black sea bass (various nearshore waters, including unconsolidated bottom and live hardbottom to 100 feet, and hardbottoms to 600 feet),

f) penaeid shrimp (offshore habitats used for spawning and growth to maturity, and waters connecting to inshore nursery areas, including the surf zone and inlets),
g) coastal migratory pelagics (e.g., king mackerel, Spanish mackerel) (sandy shoals of capes and bars, barrier island ocean-side waters from the surf zone to the shelf break inshore of the Gulf Stream; all coastal inlets),
h) corals of various types and associated organisms (on hard substrates in shallow, mid-shelf, and deepwater),
i) muddy, silt bottoms from the subtidal to the shelf break, deepwater corals and associated communities),
j) areas identified as EFH for Highly Migratory Species managed by the Secretary of Commerce (e.g., sharks: inlets and nearshore waters, including pupping and nursery grounds), and
k) riverine areas that support diadromous fishes, including important prey species such as shad and herring, in addition to shortnose and Atlantic sturgeon.

14. Many of the habitats potentially affected by these activities have been identified as EFH-HAPCs by the SAFMC. Each habitat, type of activity posing a potential threat and FMP is provided as follows:

a) all nearshore hardbottom areas – exploration, transportation and development (SAFMC snapper grouper);
b) all coastal inlets – transportation and development (SAFMC penaeid shrimp, red drum, and snapper grouper);
c) nearshore spawning sites – transportation and development (SAFMC penaeid shrimps and red drum);
d) benthic Sargassum – exploration, transportation and development (SAFMC snapper grouper);
e) from shore to the ends of the sandy shoals of Cape Lookout, Cape Fear, and Cape Hatteras, North Carolina; Hurl Rocks, South Carolina; and *Phragmatopoma* (worm reefs) reefs off the central coast of Florida and near shore hardbottom south of Cape Canaveral – transportation and development (SAFMC coastal migratory pelagics);
f) Atlantic coast estuaries with high numbers of Spanish mackerel and cobia from ELMR, to include Bogue Sound, New River, North Carolina; Broad River, South Carolina – transportation and development (SAFMC coastal migratory pelagics);
g) Florida Bay, Biscayne Bay, Card Sound, and coral hardbottom habitat from Jupiter Inlet through the Dry Tortugas, Florida – exploration, transportation and development (SAFMC spiny lobster);
h) Hurl Rocks (South Carolina); The *Phragmatopoma* (worm reefs) off central east coast of Florida; nearshore (0-4 meters; 0-12 feet) hardbottom off the east coast of Florida from Cape Canaveral to Broward County; offshore (5-30 meters; 15-90 feet) hardbottom off the east coast of Florida from Palm Beach County to Fowey Rocks; Biscayne Bay, Florida; Biscayne National Park, Florida; and the Florida Keys National Marine Sanctuary – transportation and development (SAFMC Coral, Coral Reefs and Live Hardbottom Habitat); and

i) EFH-HAPCs designated for HMS species (e.g., sharks) in the South Atlantic region – exploration, transportation and development (NMFS Highly Migratory Species).

15. Habitats likely to be affected by oil and gas exploration, development and transportation, and hydropower re-licensing activities include many recognised in state level fishery management plans. Examples of these habitats include Critical Habitat Areas (CHAs) established by the North Carolina Marine Fisheries Commission, either in FMPs or in Coastal Habitat Protection Plans.

16. Scientists in east Florida have documented exceptionally important habitat values for nearshore hardbottom used by over 500 species of fishes and invertebrates, including juveniles of many reef fishes. Equivalent scientific work is just beginning in other South Atlantic states, but life histories suggest that similar habitat use patterns will be found.

Threats to Marine and Estuarine Resources from Energy Exploration, Development, Transportation and Hydropower Re-licensing Activities

The SAFMC finds that energy exploration, development, transportation and hydropower re-licensing activities threaten or potentially threaten EFH through the following mechanisms:

1. Direct mortality and displacement of organisms at and near drilling, dredging, and/or trenching sites,

2. Deposition of fine sediments (sedimentation) and drilling muds down-current from drilling, dredging, trenching, and/or backfilling sites,

3. Chronic elevated turbidity in and near drilling, dredging, trenching, and/or backfilling sites,

4. Direct mortality of larvae, post-larvae, juveniles and adults of marine and estuarine organisms occurring from spills from pipelines or from vessels in transit near or close to inlet areas,

5. Alteration of long-term shoreline migration patterns (with complex, often indeterminable, ecological consequences),

6. Burial of sensitive coral resources and associated habitat resulting from "frac-outs" associated with horizontal directional drilling,

7. Permanent conversion of soft bottom habitat to artificial hardbottom habitat through installing a hard linear structure (i.e., a pipe covered in articulated concrete mats),

8. Impacts to benthic resources from placement and shifting of pipelines and cables, and from other types of direct mechanical damage,

9. Alterations in amount and timing of streamflow and significant reductions in fish passage resulting from damming or diverting rivers, and

10. Alteration of community diversity, composition, food webs and energy flow due to addition of structure.

In addition, the interactions between cumulative and direct (lethal and sub-lethal) effects among the above-listed can affect the magnitude of the overall impacts. Such interactions may result in a scale of effect that is multiplicative rather than additive. Those effects are at present nearly completely unstudied.

SAFMC Policies for Energy Exploration, Development, Transportation and Hydropower Re-licensing Activities

The SAFMC establishes the following general policies related to energy exploration, development, transportation, and hydropower re-licensing activities and related projects, to clarify and augment the general policies already adopted in the Habitat Plan and Comprehensive Habitat Amendment (SAFMC, 1998a; SAFMC, 1998b):

1. Projects should avoid, minimize, and – where possible – offset damage to EFH and EFH-HAPCs. This should be accomplished, in part, by integrating the best available and least impactive technologies into the construction design.

2. Agencies with oversight authority should require expanded EFH consultation for projects with the potential to significantly damage EFH. Projects requiring expanded EFH consultation should include detailed analyses for a full range of alternatives of possible impacts to each type of EFH, each EFH-HAPC and each CHA, including short and long-term effects and cumulative impacts at local, population and ecosystem scales. These analyses should utilize resource-protective assumptions and the best available science.

3. Projects should utilize the alternative that minimizes total impact EFH, EFH-HAPCs, and CHAs.

4. Projects should include detailed assessments of potentially unavoidable damage to EFH and other marine resources associated with the preferred or selected alternative and cumulative impacts, using conservative assumptions and the best available science.

5. Compensatory mitigation should not be considered until avoidance and minimization measures have been duly demonstrated. Compensatory mitigation should be required to offset losses to EFH, including losses associated with temporary impacts, and should take into account uncertainty and the risk of the

chosen mitigation measures inadequately offsetting the impacts. Mitigation should be local, "up-front," and "in-kind," and include long-term monitoring to assess and ensure the efficacy of the mitigation program selected.

6. Projects should include pre-project, project-related, and post-project monitoring adequate to document pre-project conditions and the initial, long-term and cumulative impacts of the project on EFH.

7. All EFH assessments should be based upon the best available science, be conservative, and follow precautionary principles as developed for various Federal and State policies.

8. All EFH assessments should document the cumulative impacts associated with all natural and anthropogenic stressors on EFH, including other energy exploration, development, transportation, and re-licensing projects that are geographically and ecologically related.

9. Projects should comply with existing standards and requirements regulating domestic and international transportation of energy products including regulated waste disposal and emissions which are intended to minimize negative impacts on and preserve the quality of the marine environment.

10. Open-loop LNG processing facilities should be avoided in favor of closed-loop systems.

11. The re-licensing of hydropower projects should provide for adequate amount and timing of water flow, in addition to fish passage.

12. Third party environmental inspectors should be required on all projects to provide for independent monitoring and permit compliance.

13. Resource sensitivity training modules should be developed specific to each project, construction procedures and habitat types found within the project impact area. This training should be provided to all contractors and sub-contractors that are anticipated to work in or adjacent to areas that support sensitive habitats.

The SAFMC recommends the following specific concerns and issues be addressed by the Federal Energy Regulatory Commission, Minerals Management Service, and/or the U.S. Army Corps of Engineers prior to approval of any license, application, or permit.

A. The following requirements should apply to any permit to drill any exploratory well or wells in any Lease Sale with the potential to affect EFH in the SAFMC's jurisdiction. These concerns and issues should also be included in a new EIS for any future Outer Continental Shelf (OCS) Leasing Plan:

1. Identification of the on-site fisheries resources, including both pelagic and benthic communities, that inhabit, spawn, or migrate through the lease sites with special

focus on those specific lease blocks where industry has expressed specific interest in the pre-lease phases of the leasing process. Particular attention should be given to critical life history stages (i.e. eggs and larvae) that are most sensitive to oil spills and seismic exploration.

2. Identification of on-site or potentially affected state or federally-listed species (e.g. endangered, threatened, special concern, etc.), marine mammals, pelagic birds, diadromous fishes, and all species regulated under federal fishery management plans.

3. Determination of impacts of all exploratory and development activities on the fisheries resources prior to MMS approval of any applications for permits to drill in the Exploratory Unit area, including effects of seismic survey signals on fish behavior, eggs and larvae.

4. Identification of commercial and recreational fishing activities in the vicinity of the lease or Exploratory Unit area, their season of occurrence and intensity, and any impacts whether temporary or permanent on the potential to continue those activities associated with the project or activity.

5. Determination of the physical and chemical oceanographic and meteorological characteristics of the area through field studies by MMS or the applicant, including on-site direction and velocity of currents and tides, sea states, temperature, salinity, water quality, wind storms frequencies, and intensities and icing conditions. Such studies must be required prior to approval of any exploration plan submitted in order to have adequate information upon which to base decisions related to site-specific proposed activities. Studies should include detailed characterization of seasonal surface currents and likely spill trajectories.

6. Description of required monitoring activities to be used to evaluate environmental conditions, and assess the impacts of exploration activities in the lease area or the Exploratory Unit.

7. Identification of the quantity, composition, and method of disposal of solid and liquid wastes and pollutants likely to be generated by offshore, onshore, and transportation operations associated with oil and gas exploration development and transportation.

8. Development of an oil spill contingency plan which includes oil spill trajectory analyses specific to the area of operations, dispersant-use plan including a summary of toxicity data for each dispersant, identification of response equipment and strategies, establishment of procedures for early detection and timely notification of an oil spill, and "chain-of-command" and notification procedures inclusive of all local, state and federal agencies and agency personnel to be notified when an oil spill is discovered, as well as defined and specific actions to be taken after discovery of an oil spill.

9. Mapping of environmentally sensitive areas (e.g., spawning aggregations of snappers and groupers); coral resources and other significant benthic habitats (e.g., tilefish mudflats) along the edge of the continental shelf (including the upper slope); calico scallop, royal red shrimp, and other productive benthic fishing grounds; other special biological resources; and northern right whale calving grounds and migratory routes, and subsequent deletion from inclusion in the respective lease block(s).

10. Planning for oil and gas product transport should be done to determine methods of transport, pipeline corridors, and onshore facilities.

11. The applicant, or MMS, must provide an analysis of biological community dynamics, and pathways and flows of energy, to ascertain accumulation of toxins and impacts on biological communities.

12. Due to the critical nature of canyons and steep relief to important fisheries (e.g. billfishes, swordfish and tunas) an evaluation of shelf-edge and down-slope dynamics, and a resource assessment to determine transport and fate of contaminants should be required.

13. Discussion of the potential adverse impacts upon fisheries resources of the discharges of all drill cuttings and all drilling muds that may be approved for use in the lease area or the Exploration Unit, as well as discharges associated with production activities (i.e. produced waters). This should include: physical and chemical effects upon pelagic and benthic species and communities, including spawning behavior, effects on eggs and larval stages; effects upon sight-feeding species of fish; and analysis of methods and assumptions underlying the model used to predict the dispersion of discharged muds and cuttings from exploration activities.

14. Discussion of secondary impacts affecting fishery resources associated with onshore oil and gas related development such as storage and processing facilities, dredging and dredged material disposal, roads and rail lines, fuel and electrical transmission line routes, waste disposal, and others.

B. The following requirements should apply to any permit or license to construct LNG gas pipelines and related facilities with the potential to affect EFH in the SAFMC's jurisdiction:

1. The least damaging construction method for traversing reef tracts and deepwater corals should be integrated into the project design.

2. Hydrotest chemicals that may be harmful to fish and wildlife resources shall not be discharged into waters of the United States.

3. Geotechnical studies shall be completed to ensure that the geology of the area is appropriate for the construction method and that geological risks are appropriately mitigated.

4. All work vessels associated with construction that traverses any reef system should be equipped with standard navigation aids, safety lighting and communication equipment. A vessel monitoring system with global positioning system will be employed to continuously monitor all vessel movements and locations in real time.

5. Any anchor placement should completely avoid corals and be diver verified. In addition, measures to avoid anchor sweep should be developed and implemented.

6. Appropriate exclusion zones should be designated around sensitive marine habitats.

7. Pre- and post-project monitoring should be completed in addition to monitoring during construction. The pre-project monitoring should establish pre-project conditions; project monitoring should examine if unanticipated impacts are occurring and if corrective actions are needed; and post-project (immediate and long-term) monitoring should document impacts to resources resulting from the project, and any recovery from those impacts.

8. All feasible avoidance and minimization measures must be used to protect deepwater coral communities. Those measures must be fully described in detail prior to authorization of any permit or license.

9. A contingency plan should be required to address catastrophic blowouts or more chronic material losses from LNG facilities, including trajectory and other impact analyses and remediation measures and responsibilities.

10. Periodic long-term monitoring of pipelines and nearby deepwater resources should be conducted to evaluate the environmental effects of these installations on deepwater marine communities.

11. Appropriate mitigation should be developed in concert with the NMFS Habitat Conservation Division to offset unavoidable impacts.

C. The requirement listed below should apply to any relevant permit or license to construct windfarms or hydroturbine energy producing facilities with the potential to affect EFH in the SAFMC jurisdiction. To date, such projects are conceptual, yet reasonably foreseeable as future proposed actions. Given the existing information, it is reasonable to conclude that such projects may have an impact on EFH. However, at this time sufficient information is not available to make general project-type recommendations.

1. Submarine cables should be placed in a manner that avoids impacts to EFH. The best available technologies should be used to install such cables to avoid and minimize temporary and long-term impacts to EFH. If placed on the seabed, cables should be anchored and/or stabilized, and stability analyses should be conducted to ensure that the cable can withstand a 100-year storm event in appropriate water depths.

2. Many of the areas designated as EFH are important to protected resources (e.g., endangered and threatened species and marine mammals) in the region. Direct and indirect impacts may result from noise, electromagnetic fields, vessel traffic, pollutants/water quality issues, alteration of the benthos and habitat degradation or habitat exclusion. The degree of impact can depend on the species, the type of turbine, the method of installation, site characteristics and the layout and size of the facility. Therefore, any EIS prepared for the construction, operation or decommissioning of a wind energy generating facility should include maps of species' ranges, migratory pathways, and use of habitat as part of an evaluation of direct and cumulative impacts to protected resources.

D. The following requirements should apply to the re-licensing of hydropower plants on rivers draining to waters under SAFMC jurisdiction:

1. The construction of fish ladders or other measures to should be implemented into the project design to provide for the safe and effective passage of fish to and from vital upstream habitats.

2. Instream flows prescriptions should ensure adequate quality, timing, and amount of water flow.

SAFMC Policy and Position on Previous Oil and Gas Exploration Proposals

The SAFMC urged the Secretary of Commerce to uphold the 1988 coastal zone inconsistency determination of the State of Florida for the respective plans of exploration filed with MMS by Mobil Exploration and Producing North America, Inc. for Lease OCS-G6520 (Pulley Ridge Block 799) and by Union Oil Company of California for Lease OCS-G6491/6492 (Pulley Ridge Blocks 629 & 630). Both plans of exploration involved lease blocks lying within the lease area comprising the offshore area encompassed by Part 2 of Lease Sale 116, and south of 26° North latitude. The Council's objection to the proposed exploration activities was based on the potential degradation or loss of extensive live bottom and other habitat essential to fisheries under Council jurisdiction.

The SAFMC also supported North Carolina's determination that the plans of exploration filed with MMS by Mobil Exploration and Producing North America, Inc. for Lease OCS

Manteo Unit are not consistent with North Carolina's Coastal Zone Management program.

The Council has expressed concern to the Outer Continental Shelf Leasing and Development Task Force about the proposed area and recommended that no further exploration or production activity be allowed in the areas subject to Presidential Task Force Review (the section of Sale 116 south of 26° N latitude).

The following section addresses the recommendations, concerns and issues expressed by the South Atlantic Council (Source: Memorandum to Regional Director, U.S. Fish and Wildlife Service, Atlanta, Georgia from Regional Director, Gulf of Mexico OCS Region dated October 27, 1995):

"The MMS, North Carolina, and Mobil entered into an innovative Memorandum of Understanding on July 12, 1990, in which the MMS agreed to prepare an Environmental Report (ER) on proposed drilling offshore North Carolina. The scope of the ER prepared by the MMS was more comprehensive than an EIS would be. The normal scoping process used in preparation of a NEPA-type document would not only 'identify significant environmental issues deserving of study' but also 'de-emphasize insignificant issues, narrowing the scope' (40 CFR 1500.4) by scoping out issues not ripe for decisions.

Of particular interest to North Carolina are not the transient effects of exploration, but rather the downstream and potentially broader, long-term effects of production and development. The potential effects associated with production and development would normally be "scoped out" of the (EIS-type) document and would be the subject of extensive NEPA analysis only after the exploration phase proves successful, and the submittal of a full-scale production and development program has been received for review and analysis. The ER addressed three alternatives: the proposed Mobil plan to drill a single exploratory well, the no-action alternative and the alternative that the MMS approve the Mobil plan with specific restrictions (monitoring programs and restrictions on discharges). The ER also analyzes possible future activities, such as development and production, and the long-term environmental and socioeconomic effects associated with such activities. The MMS assured North Carolina that all of the State's comments and concerns would be addressed in the Final ER (USDOI 1990).

The MMS also funded a Literature Synthesis study (USDOI MMS 1993a) and a Physical Oceanography study (USDOI MMS 1994), both recommended by the Physical Oceanography Panel and the Environmental Sciences Review Panel (ESRP). Mobil also submitted a draft report to the MMS titled *Characterization of Currents at Manteo Block 467 off Cape Hatteras, North Carolina*. The MMS also had a Cooperative Agreement with the Virginia Institute of Marine Science to fund a study titled *Seafloor Survey in the Vicinity of the Manteo Prospect Offshore North Carolina* (USDOI MMS 1993b). The MMS had a Cooperative Agreement with East Carolina University to conduct a study titled *Coastal North Carolina Socioeconomic Study* (USDOI MMS 1993c). The above-

mentioned studies were responsive to the ESRP's recommendations as well as those of the SAFMC and the State of North Carolina."

Copies of these studies can be acquired from the address below:
Minerals Management Service, Technical Communication Services
MS 4530 381 Elden Street
Herndon, VA 22070-4897 (703) 787-1080

In addition, by letter dated November 21, 2003, the SAFMC provided the following recommendations on the AES Ocean Express LNG pipeline project:

- The deepwater touch down route should be pre-inspected by ROV and the pipeline right of way shall be clear of all deepwater resources;
- Adjust deepwater touchdown position to maintain an appropriate buffer from any such deepwater resources;
- Require deepwater resources, other EFH and the deepwater touchdown position be mapped by ROV to confirm the resource position in relation to the installed pipeline;
- Conduct pre-installation video surveys to select the route that maximizes avoidance of these deepwater coral and live bottom habitats; and
- Monitor pipelines and nearby deepwater resources after installation to evaluate the environmental effects of these installations on deepwater marine communities.

References

SAFMC. 1998a. Final Habitat Plan for the South Atlantic region: Essential Fish Habitat requirements for fishery management plans of the South Atlantic Fishery Management Council. South Atlantic Fishery Management Council, 1 Southpark Cir., Ste 306, Charleston, SC 29407-4699. 457 pp. plus appendices.

SAFMC. 1998b. Final Comprehensive Amendment Addressing Essential Fish Habitat in Fishery Management Plans of the South Atlantic Region. Including a Final Environmental Impact Statement /Supplemental Environmental Impact Statement, Initial Regulatory Flexibility Analysis, Regulatory Impact Review, and Social Impact Assessment/Fishery Impact Statement. South Atlantic Fishery Management Council, 1 Southpark Cir., Ste 306, Charleston, SC 29407-4699. 136pp.

USDOI, MMS. 1990. Atlantic Outer Continental Shelf, Final Environmental Report on Proposed Exploratory Drilling Offshore North Carolina, Vols. I-III.

USDOI, MMS. 1993a. North Carolina Physical Oceanography Literature Study. Contract No. 14-35- 0001-30594.

USDOI, MMS. 1993b. Benthic Study of the Continental Slope Off Cape Hatteras, North Carolina. Vols. I-III. MMS 93-0014, -0015, -0016.

USDOI, MMS. 1993c. Coastal North Carolina Socioeconomic Study. Vols. I-V. MMS 93-0052, -0053, -0054, -0055, and -0056.

USDOI, MMS. 1994. North Carolina Physical Oceanographic Field Study. MMS 94-0047.

From: ocsenergywebmaster@anl.gov
To: mail_ocsenergyarchives; ocsenergywebmaster@anl.gov;
Subject: OCS Alternative Energy and Alternate Use Programmatic EIS Comment 80096
Date: Monday, May 21, 2007 4:24:14 PM
Attachments: FAU_Response_80096.doc

Thank you for your comment, Frederick Driscoll.

The comment tracking number that has been assigned to your comment is 80096. Once the comment response document has been published, please refer to the comment tracking number to locate the response.

Comment Date: May 21, 2007 04:25:25PM CDT

OCS Alternative Energy and Alternate Use Programmatic EIS
Draft Comment: 80096

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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.

Following is the response to the Programmatic Environmental Impact Statement for Alternative Energy Development and Production and Alterative Use of Facilities on the Outer Continental Shelf by Florida Atlantic University's Center of Excellence in Ocean Energy Technology.

First, let us commend the MMS for their excellent document. It is extremely thorough and well thought out. It is the first document that we have seen that is sufficiently comprehensive and provides the necessary framework to develop rules for ocean energy harvesting on the OCS.

FAU, in partnership with other academic institutes, commercial entities, and government agencies, are researching the areas of ocean current energy, ocean thermal energy, fresh water generation using ocean energy, and underwater hydrogen development. We thus have focused the following responses on ocean current energy sections, not on the wave and wind sections.

Response 1:
We feel that the proposed action is the logical action because it will create a consistent framework and regulation set that will assist the community in rapidly and efficiently harnessing the ocean energy resource in a manner that best meets the public's interest. However, because ocean current energy technology is still new and remains untested, its impacts are unknown. Thus, initially, a case-by-case assessment needs to be performed within the framework and rules of the proposed action. This should continue until a sufficient understanding of the environmental impacts is achieved to develop a final set of regulations. As well, the ocean environment can change significantly from site to site and within a site in both the horizontal and vertical directions. As such, a case-by-case assessment within a general framework would help to understand the local impacts on unique environments. 80096-001

To review proposed development on solely a case-by-case basis may make sense for the very initial endeavors, but we agree with the MMS's assessment, and view this as a less desirable alternative. Also, the no action alternative, in our opinion, should not be considered. The MMS has extensive experience with the offshore oil and gas industry and it is the best agency suited to lead the rule development.

Response 2
Page ES-2, second paragraph, and in other areas of the document, "Hydrogen energy storage technologies are considered unlikely to be demonstrated or developed in the offshore marine environment in the 5- to 7-year time frame based on the current available market for the product and technological considerations for development on the OCS." 80096-002

FAU's Center plans on developing fresh water generation systems and hydrogen generation systems. Although commercial plants are unlikely within 5-7 years, test plants may be developed and installed. Thus, MMS should consider these areas within its rules.

Response 3
In several areas of the EIS, the following is stated "for the technologies being assessed within the time horizon for this EIS, development is expected to occur nearer to shore where maximum water depth would be 100 m or less for wind and wave technologies and 500 m for ocean current technology (the only OCS area where ocean current technology is feasible for development is in the Florida current, located off the eastern coast of North America)." 80096-003

The depth offshore South Florida can exceed 1000 m in places. FAU's Center of Excellence and its partners may install test turbines and commercial grade turbines in depths greater than 500 m. 80096-003 (cont.)

Response 4
In several areas of the EIS, ocean currents are characterized as "relatively constant and flow in one direction only." The Florida Current in the Straits of Florida is somewhat constant in volumetric flow rate and predominantly flows in one direction. Because of meandering, vortex shedding, instabilities, and the influence of tides, the flow and fixed locations can vary significantly in magnitude and direction. Outside of the Straits of Florida, these fluctuations increase. FAU has performed a two year study that measured the Florida Current offshore Fort Lauderdale, FL. We can make this report available to the MMS. 80096-004

Response 5
The EIS states that "extraction of energy from ocean currents requires a location that has strong, steady currents." While the best location to develop ocean current energy technology is in the Florida Current because it is the most energy dense and steady current in the world, the technology is applicable to other currents that may not be characterized as steady or strong. As technology is advanced and the cost per kWh decreases, slower currents may be developed. 80096-005

Response 6
The EIS only considers Florida for the development of Ocean Current Turbines: "The only known ocean current that has these characteristics on the OCS is the Florida Current, located off the eastern coast of North America. Discussion of impacts associated with the use of ocean current technologies in this programmatic EIS is, therefore, limited to these types of facilities being constructed in the area of the Florida Current." It is unclear if this includes the Gulf Stream offshore Northern Florida, Georgia, South Carolina, and North Carolina. Before 2014, test and or commercial turbines may be installed in some of these locations, although it is somewhat unlikely. Thus, these areas should be considered. 80096-006

Response 7
Under the various construction sections, explosive embedment anchors should be considered for installing the sea floor mooring points. 80096-007

Response 8
The Florida Straits are a main transit route for not only commercial, pleasure, and military ships, but it is also a transit route for submarines. The impact on submarine routes should be considered. 80096-008

Response 9
In Section 4.2, it is unclear if the geology within the Straits of Florida is reviewed. Is the geology within the Straits of Florida the same as in the South Atlantic Region? 80096-009

Response 10
In the site characterization sections, autonomous underwater vehicles and manned submersibles should be considered as a platform that will be used. Operating with a cabled instrument in a high shear environment can be difficult and problematic. Experience has shown that both AUVs and manned submersibles are excellent platforms for operating in the Straits of Florida. As well, AUVs are now being used extensively as survey vehicles in the oil industry and military. 80096-010

Response 11
Page 4-22, the description of the Gulf Stream needs to include that vorticity plays a dominant roll in Western Intensification. 80096-011

Response 12
Page 5-266, "After a technology has been tested, site-specific characterization would need to be conducted to collect data on ocean-bottom characteristics …" It is not clear what testing means. If testing of a turbine on site is included in the definition, should site-specific characterization occur before or during testing? 80096-012

Response 13
Section 5.4.3.4 overviews the loss of energy and resulting local and global environmental impacts. The ending sentence states "These impacts and their associated uncertainties would be quantified in appropriate, site specific EISs." We believe that an independent and comprehensive review must be conducted that investigates the local and basin wide impact of extracting ocean energy. This should be conducted by an independent and impartial entity with the necessary expertise. This would help to lead to a global plan for siting and cumulative energy extraction. 80096-013

Response 14
Although electromagnetic and magnetic fields may be localized, they need to be considered in depth with sufficient studies. For example, sharks have shown a propensity to bite cables with and without electricity. 80096-014

Response 15
The EIS states that "At most, only a small number of fish would be subject to impingement, entrainment, entrapment, or turbine strikes regardless of the unit design, and there would be no detectable changes in population levels as a result." We disagree with this statement, even at testing levels. There are many commercially important and arguably rare or declining fish that transit the Straits of Florida alone or in schools. Collisions with turbine blades by pelagic fish, mammal, and turtles represent a significant concern and no research exists (as far as we are aware) that quantifies this issue in the Straits of Florida in a practical manner. We believe that small test turbines need to be installed offshore and be increased incrementally in size to quantify the issue prior to the deployment of any full scale commercial platform. This is a very serious site specific issue and needs to be addressed thoroughly. 80096-015

Response 16
It is unclear in the EIS if the fish attraction to the turbine platform is considered. Pelagic fish tend to concentrate around any structure in the water column and this could significantly increase fish strike. As well, any lights on the structure, maintenance vessels/equipment, or surface structure will attract fish and invertebrates at night. 80096-016

Response 17
Section 5.4.8.4.3 details the entanglement with mooring lines of marine life. These mooring lines are likely to be very taught and entanglement may not be an issue. However, collision with these lines may result in severe injury and large animals may become trapped against mooring lines by the forces of the current. As well, the vibration of the mooring lines needs to be considered in the EIS. 80096-017

Response 18
Long term studies with test systems are needed to identify and characterize the impact on potentially sensitive habitats. 80096-018

From: ocsenergywebmaster@anl.gov
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Subject: OCS Alternative Energy and Alternate Use Programmatic EIS Comment 80098
Date: Monday, May 21, 2007 4:44:03 PM
Attachments: NASCA_Comments_on_MMS_PEIS_(21_May_2007)_80098.pdf

Thank you for your comment, Kent Bressie.

The comment tracking number that has been assigned to your comment is 80098. Once the comment response document has been published, please refer to the comment tracking number to locate the response.

Comment Date: May 21, 2007 04:45:24PM CDT

OCS Alternative Energy and Alternate Use Programmatic EIS
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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.

Before the
MINERALS MANAGEMENT SERVICE
U.S. DEPARTMENT OF THE INTERIOR
Washington, D.C.

In the Matter of

Programmatic Environmental Impact Statement for Outer Continental Shelf Alternative Energy and Alternate Use Program

COMMENTS OF
THE NORTH AMERICAN SUBMARINE CABLE ASSOCIATION

The North American Submarine Cable Association ("NASCA") urges the Minerals Management Service ("MMS") to revise its draft programmatic environmental impact statement for the Outer Continental Shelf Alternative Energy and Alternate Use Program ("Draft PEIS") to address the domestic and international legal regimes governing undersea telecommunications cables and to reflect accurately the environmental impact of such cables in the marine environment.[1] *First*, MMS should clarify that its proposals to regulate offshore energy development from sources other than oil and gas, and to regulate alternate uses of existing facilities, do not extend to undersea telecommunications cables, and that the domestic and

80098-001

[1] *See* Minerals Management Service, Alternative Energy and Alternate Use Program, Notice of Availability of the Draft Programmatic Environmental Impact Statement (EIS) and Public

[Footnote continued on next page]

international legal frameworks for undersea telecommunications cables would preclude MMS from doing so. *Second*, consistent with current scientific and regulatory findings, MMS should delete from the PEIS unsubstantiated assertions regarding the environmental impact of undersea telecommunications cables. NASCA reserves the right to supplement these comments as necessary to ensure MMS has a complete record before it. 80098-001 (cont.) 80098-002

NASCA is a non-profit association of submarine cable owners, submarine cable maintenance authorities, and prime contractors for submarine cable systems.[2] NASCA and its members have a strong interest in protecting the marine environment without unduly limiting undersea cable infrastructure necessitated by consumer demand for bandwidth capacity. For decades, NASCA's members have worked with federal, state, and local government agencies, as well as other concerned parties—such as commercial fishermen and private environmental organizations—to ensure that submarine cables do not harm the marine environment or unreasonably constrain the operations of others in that environment.

[Footnote continued from previous page]
Hearings, 72 Fed. Reg. 13,307 (Mar. 21, 2007).

[2] NASCA's members include: Alaska United Fiber System Partnership; Alcatel-Lucent Submarine Networks; Apollo Submarine Cable System Ltd.; AT&T, Inc.; Brasil Telecom of America, Inc. / GlobeNet; Global Crossing Ltd.; Global Marine Systems Limited; Hibernia Atlantic; Level 3 Communications, LLC; New World Network, USA, Inc.; Southern Cross Cables Limited; Sprint Nextel Corp.; Tyco Telecommunications (US) Inc; Verizon Communications, Inc.; and VSNL International, Inc.

I. MMS Should Acknowledge the Statutory and Treaty-Based Limits on U.S. Regulation of Undersea Telecommunications Cables on the Outer Continental Shelf

For the reasons stated in NASCA's comments on the ANPRM (appended to these comments and incorporated by reference),[3] MMS must acknowledge the statutory and treaty-based limits on U.S. regulation of undersea telecommunications cables on the outer Continental Shelf. As with the ANPRM, some of MMS's statements in the Draft PEIS could be construed to suggest that the U.S. Government exercises permitting jurisdiction over undersea telecommunications cables on the outer Continental Shelf, when in fact U.S. laws and treaty obligations preclude such exercises of permitting jurisdiction. Permitting jurisdiction under the Outer Continental Shelf Lands Act—whether exercised by the Secretary of the Interior or the Secretary of the Army—is limited to activities connected with the exploration and exploitation of mineral resources on the outer Continental Shelf.[4] 80098-003

Consistent with this jurisdictional analysis, NASCA believes that MMS should revise the Draft PEIS to reflect the limits of U.S. jurisdiction. Specifically:

- MMS should acknowledge in Draft PEIS Section 1.2 ("Recommended Action") and Section 1.3.2 ("Scope of the Programmatic EIS") that MMS jurisdiction does not encompass regulation of undersea telecommunications cables on the outer Continental

[3] *See* Alternate Energy-Related Uses on the Outer Continental Shelf, Advanced Notice of Proposed Rulemaking, 70 Fed. Reg. 77,345 (Dec. 30, 2005) ("ANPRM"); NASCA Comments on ANPRM (filed Feb. 28, 2006).

[4] *See* Pub. L. No. 83-212, 67 Stat. 462 (Aug. 7, 1953) ("OCSLA 1953"), Pub. L. No. 93-627, 88 Stat. 2146 (Jan. 3, 1975) ("OCSLA 1975 Amendments"), Pub. L. No. 95-372, 92 Stat. 635 (Sept. 18, 1978) ("OCSLA 1978 Amendments") *codified at* 43 U.S.C. § 1331 *et seq.* (collectively, "OCSLA").

Shelf, as both the Outer Shelf Continental Lands Act and the relevant international treaties limit regulation to energy-related infrastructure.

- Consistent with the recommended acknowledgments of jurisdictional limits in Draft PEIS Sections 1.2 and 1.3.2, MMS should explain in more detail in Draft PEIS Section 1.6 ("OCS Regulatory Framework") the domestic and international legal frameworks governing undersea telecommunications cables.

80098-003 (cont.)

II. MMS Should Delete Unsubstantiated Assertions Regarding the Environmental Impact of Undersea Telecommunications Cables

NASCA urges MMS to revise its environmental analyses to eliminate unsubstantiated assertions regarding the environmental impacts of undersea telecommunications cables. As presently drafted, the Draft PEIS makes internally inconsistent assertions regarding undersea telecommunications cables and electromagnetic fields. Draft PEIS Section 4.2.7, which covers electromagnetic fields in the Atlantic region, states that the region is home to a "large set of submarine cables used for communications . . . but [it] generates negligible EMF fields." This statement contrasts sharply with Draft PEIS Section 7.5.2.14, which states that "[undersea telecommunications] structures and activities can adversely affect benthic organisms by occupying their habitat and/or injuring them. EM fields can also disorient some ray and shark species." At the very least, MMS should delete these sentences in Draft PEIS Section 7.5.2.14 as unsupported in the text and inconsistent with well-known scientific analyses considering such issues.

80098-004

In fact, submarine cables are environmentally benign both in terms of the processes used to install, maintain, and repair them and in terms of the materials of which they are composed. The FCC has long taken this view. In implementing NEPA, the FCC decided to exclude

categorically all submarine cable landing license applications from its environmental processing rules, which implement NEPA.[5] In implementing NEPA, the FCC found:

> Although laying transoceanic cable obviously involves considerable activity over vast distances, the environmental consequences for the ocean, the ocean floor, and the land are negligible. In shallow water, the cable is trenched and immediately covered; in deep water, it is simply laid on the ocean floor. In the landing area, it is trenched for short distance between the water's edge and a modest building housing facilities.[6]

But the FCC is not unique in its conclusions, and has merely summarized what numerous other federal and state agencies have concluded over the years.

Of the recent commercial submarine cable projects for which environmental studies were completed, *all* have been deemed by the reviewing government agencies either to have no significant impact at the outset or to have no significant impact taking mitigation activities into account. These documents include environmental assessments, environmental impact reports, mitigated negative declarations, and essential fish habitat assessments (collectively, "studies") that were certified, approved, and/or adopted by the relevant federal, state, or local government permitting agencies with respect to numerous cable systems.

Specifically, the studies—which are incorporated into these comments by reference[7]—demonstrate the following about submarine cables in the marine environment:

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[5] *Implementation of the National Environmental Policy Act of 1969, Report & Order*, 49 FCC.2d 1313, 1321 (1974).

[6] *Id.*; *1998 Biennial Regulatory Review—Review of International Common Carrier Regulations, Report & Order*, 14 FCC Rcd. 4909, 4938 (1999).

[7] *See, e.g.*, Final Environmental Impact Report/Environmental Impact Statement for the Monterey Accelerated Research System Cabled Observatory (2005), *available at* http://www.montereybay.noaa.gov/new/2005/031505marseir.html; TyCom Pacific Fiber-Optic Cable and Hermosa Beach Landing, Draft Environmental Impact Report prepared by

[Footnote continued on next page]

1. Impacts on biological resources would not be significant, as:
   - Neither threatened nor endangered species would be adversely affected;
   - The cable-laying process will not threaten marine mammals;
   - Prior monitoring confirmed no adverse effects of cable-laying on sea otters watching the operation;
   - There is no significant risk of whale entanglement from the proposed cables; 80098-005
   - The impact of plow burial on benthic organisms will be so limited and temporary as to not be significant;
   - There will be no significant impacts from laying cable across hard-bottom areas (either because the project avoids those areas or because the impacts of such crossing will be less than significant); and
   - There will be no significant impacts on managed fish and invertebrate species or Essential Fish Habitat.
2. Air emission impacts will not be significant or will be so short-term and localized as to be acceptable to the local jurisdiction; 80098-006
3. Water quality impacts will not be significant. 80098-007
4. The risk of significant impacts to cultural resources can be avoided by pre-installation seafloor surveys and minor route adjustments if necessary. 80098-008
5. Impacts on the commercial interests of fishermen could be mitigated so as to be less than significant through measures such as burial and/or route selection or adjustment based on discussions with those affected, and compensation for lost fishing gear. 80098-009

[Footnote continued from previous page]
Ecology and Environment Inc. (2001); AT&T China - U.S. Cable Network. Draft Environmental Impact Report prepared by Science Applications International Corporation (2000); Draft Mitigated Negative Declaration for the Consideration of a New Lease for Submarine Telecommunications Systems, Grover Beach, California, Report by Ecology and Environment Inc. for Pacific Crossing Landing Corporation & Pan-American Crossing Landing Corporation, as filed with California State Lands Commission (2000).

6. These conclusions hold true equally even when the cumulative impacts were considered of pre-existing cables plus new cables in the same area.

Any MMS statements about the environmental impact of undersea telecommunications cables must therefore account for these findings.

The benign nature of submarine cable materials is further confirmed by their use in artificial reefs. Obsolete submarine cables have been used in numerous artificial reef projects, including the Great Eastern Artificial Reef (off the Maryland coast) and numerous artificial reefs off the coast of New Jersey. These deployments of obsolete submarine telecommunications cables have been approved by federal and state permitting authorities including, among others, the Army Corps and the New Jersey Department of Environmental Protection. Such use of submarine cables has also been encouraged by non-profit organizations, based on compatibility with the marine environment.[8]

[8] *See* Ocean City Reef Foundation: Statement of Purpose (noting that materials such as "former underwater communications cable" are used to form artificial reefs because they are non-toxic, durable, and stable), *available at* <http://www.ocreeffoundation.com/about.html>.

CONCLUSION

For the reasons stated above, the North American Submarine Cable Association urges MMS to revise the Draft PEIS to address the domestic and international legal regimes governing undersea telecommunications cables and to reflect accurately the environmental impact of such cables in the marine environment.

Respectfully submitted,

THE NORTH AMERICAN
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21 May 2007

APPENDIX

Before the
MINERALS MANAGEMENT SERVICE
U.S. DEPARTMENT OF THE INTERIOR
Washington, D.C.

In the Matter of Alternate Energy-Related Uses on the Outer Continental Shelf	RIN 1010-AD30

COMMENTS OF
THE NORTH AMERICAN SUBMARINE CABLE ASSOCIATION

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28 February 2006

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MINERALS MANAGEMENT SERVICE
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Washington, D.C.

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COMMENTS OF
THE NORTH AMERICAN SUBMARINE CABLE ASSOCIATION

The North American Submarine Cable Association ("NASCA") urges the Minerals Management Service ("MMS") to clarify how its proposals to implement Section 388(a) of the Energy Policy Act will impact undersea telecommunications cables.[1] *First*, MMS should clarify that its proposals to regulate offshore energy development from sources other than oil and gas, and to regulate alternate uses of existing facilities, do not extend to undersea telecommunications cables. Some of MMS's statements in its ANRPM could be construed to suggest that the U.S. Government exercises permitting jurisdiction over undersea telecommunications cables on the outer Continental Shelf, when in fact U.S. laws and treaty obligations preclude such exercises of permitting jurisdiction. Permitting jurisdiction under the Outer Continental Shelf Lands Act—whether exercised by the Secretary of the Interior or the Secretary of the Army—is limited to activities connected with the exploration and exploitation of mineral resources on the outer Continental Shelf.[2] *Second*, MMS should clarify how it intends to coordinate energy-related activities for which it issues, or intends to issue, leases, easements, or rights of way with installation and maintenance activities by undersea telecommunications cable operators.

NASCA is a non-profit association of submarine cable owners, submarine cable maintenance authorities, and prime contractors for submarine cable systems.[3] NASCA and its members have a strong interest in protecting the marine environment without unduly limiting undersea cable infrastructure necessitated by consumer demand for bandwidth capacity. For decades, NASCA's members have worked with federal, state, and local government agencies, as well as other concerned parties—such as commercial fishermen and private environmental organizations—to ensure that submarine cables do not harm the marine environment or unreasonably constrain the operations of others in that environment.

[1] *See* Alternate Energy-Related Uses on the Outer Continental Shelf, Advanced Notice of Proposed Rulemaking, 70 Fed. Reg. 77,345 (Dec. 30, 2005) ("ANPRM"); Section 388(a) of the Energy Policy Act, Pub. L. No. 109-58, *codified at* 43 U.S.C. § 1337(p) ("Section 388(a)").

[2] *See* Pub. L. No. 83-212, 67 Stat. 462 (Aug. 7, 1953) ("OCSLA 1953"), Pub. L. No. 93-627, 88 Stat. 2146 (Jan. 3, 1975) ("OCSLA 1975 Amendments"), Pub. L. No. 95-372, 92 Stat. 635 (Sept. 18, 1978) ("OCSLA 1978 Amendments") *codified at* 43 U.S.C. § 1331 *et seq.* (collectively, "OCSLA").

[3] NASCA's members include: Alaska United Fiber System Partnership; Alcatel Submarine Networks; Apollo Submarine Cable System Ltd.; AT&T, Inc.; Brasil Telecom of America, Inc. / GlobeNet; Global Crossing Ltd.; Global Marine Systems Limited; Hibernia Atlantic; Level 3 Communications, LLC; New World Network, USA, Inc.; Southern Cross Cables Limited; Sprint Nextel Corp.; Tyco Telecommunications (US) Inc; Verizon Communications, Inc.; and VSNL International, Inc.

NASCA's comments on MMS's ANPRM consist of two parts. *First*, NASCA explains that the United States lacks permitting jurisdiction over undersea telecommunications cables on the outer Continental Shelf. *Second*, NASCA addresses the need for better understanding of undersea telecommunications cable operations and coordination with other operations on the outer Continental Shelf.

I. MMS Should Clarify that Its Proposals to Regulate Certain Activities Pursuant to Section 388(a) Do Not Extend to Undersea Telecommunications Cables on the Outer Continental Shelf, As Such Cables Lie Beyond the Permitting Jurisdiction of Any Federal Agency

MMS should clarify that its proposals to regulate certain activities pursuant to Section 388(a) do not extend to undersea telecommunications cables on the outer Continental Shelf, as such cables lie beyond the permitting jurisdiction of any federal agency. *First*, MMS has proposed to issue leases, easements, and rights of way for activities that "[u]se, for energy-related purposes or other authorized marine-related purposes, facilities currently or previously used for activities authorized under the OCSLA."[4] *Second*, MMS has specifically identified "telecommunications facilities" as "[a]lternate uses of existing facilities."[5] These statements suggest that MMS may be considering direct regulation of undersea telecommunications cables or, more indirectly, endorsing illegal and extraterritorial assertions of permitting jurisdiction by the U.S. Army Corps of Engineers ("Army Corps"). As discussed below, federal law and U.S. treaty obligations preclude MMS or the Army Corps from asserting such regulatory jurisdiction over undersea telecommunications cables.

[4] ANPRM, 70 Fed. Reg. at 77,346.

[5] *Id.*

A. OCSLA's Plain and Unambiguous Language Provides Neither MMS Nor Any Other Federal Agency with Regulatory Jurisdiction over Submarine Telecommunications Cables on the Outer Continental Shelf

OCSLA's plain and unambiguous language grants no federal agency regulatory jurisdiction over undersea telecommunications cables on the outer Continental Shelf. By its terms, OCSLA pertains to the "exploration, development, and production of the minerals of the outer Continental Shelf."[6] More specifically, OCSLA grants the Secretary of the Interior the authority to grant and regulate offshore leases, easements, and rights of way pertaining to minerals exploration and exploitation. OCSLA grants the Secretary of the Army—and by delegation, the Army Corps—limited jurisdiction over two specified classes of activities: (1) artificial islands, installations, and other devices attached to the seabed and intended for exploring for, developing, or producing mineral resources, and (2) installations or devices intended for transporting mineral resources—classes of activities that plainly exclude submarine telecommunications cables. Neither of these grants of regulatory authority covers activities connected with the installation, maintenance, or repair of undersea telecommunications cables.

[6] 43 U.S.C. § 1332(4). *See also* H.R. Rep. No. 83-413, at 2-3 (1953), *reprinted in* 1953 U.S.C.C.A.N. 2177 (noting that the Outer Continental Shelf Lands Act was passed to regulate the "leasing and development . . . of the oil potential of the Continental Shelf.").

1. OCSLA Permits Regulation of the Exploration, Development, and Production of the Outer Continental Shelf's Minerals Resources—Classes of Activities that Plainly Exclude Submarine Telecommunications Cables

In a section titled "Laws and regulations governing lands,"[7] OCSLA explicitly extended federal jurisdiction—of any agency, not just the Army Corps—and of certain enumerated laws to the outer Continental Shelf only with respect to regulation of a specific class of activities:

> The Constitution and laws and civil and political jurisdiction of the United States are extended to the subsoil and seabed of the outer Continental Shelf and to all artificial islands, and all installations and other devices permanently or temporarily attached to the seabed, which may be erected thereon *for the purpose of exploring for, developing, or producing resources therefrom*, or any such installation or other device (other than a ship or vessel) *for the purpose of transporting such resources*, to the same extent as if the outer Continental Shelf were an area of exclusive Federal jurisdiction located within a State.[8]

Thus, Section 1333(a)(1) provides that U.S. jurisdiction extends not over all artificial islands, installations, and other devices on the outer Continental Shelf, but only to two subsets of artificial islands, installations, and other devices: (1) those attached to the seabed and intended for exploring for, developing, or producing mineral resources, and (2) those intended for transporting mineral resources.

Section 1333(a)(1) establishes the jurisdictional scope of Section 1333. And it forms the basis for a coherent statutory scheme that consistently limits the grants of regulatory jurisdiction to other agencies and the applicability of other laws in other subsections of Section 1333. Thus, Section 1333(a)(1) clearly provides that no U.S. Government agency or department—including

[7] 43 U.S.C. § 1333 ("Section 1333").

[8] 43 U.S.C. § 1333(a)(1) ("Section 1333(a)(1)") (emphasis added).

the Coast Guard[9] and the Army Corps[10]—has any jurisdiction or permitting authority on the outer Continental Shelf except with respect to two enumerated subsets of artificial islands, installations, and other devices intended for mineral resource-related activities. Section 1333(a)(1) further provides that National Labor Relations Act applies only with respect to two enumerated subsets of artificial islands, installations, and devices intended for mineral resource-related activities,[11] and that the application of Section 1333 with respect to artificial islands, installations, and devices intended for mineral resource-related activities is non-exclusive.[12]

Undersea telecommunications cables are neither seabed nor subsoil of the outer Continental Shelf, nor are they artificial islands, installations, or devices erected for the purpose of exploring for, developing, producing, or transporting mineral resources. Consequently, undersea telecommunications cables on the outer Continental Shelf fall outside the permitting jurisdiction of the U.S. Government.

[9] 43 U.S.C. § 1333(d)(1) (granting authority to the Coast Guard with respect to "lights and other warning devices, safety equipment, and other matters relating to the promotion of safety of life and property on the *artificial islands, installations, and other devices referred to in subsection (a)* of this section or on the waters adjacent thereto" (emphasis added)).

[10] 43 U.S.C. § 1333(e).

[11] 43 U.S.C. § 1333(c) (providing that the National Labor Relations Act applies to "any unfair labor practice, as defined in such Act, occurring upon any *artificial island, installation, or other device referred to in subsection (a)* of this section" (emphasis added)).

[12] 43 U.S.C. § 1333(f) (providing that the specific application of certain provisions of law to "the *artificial islands, installations, and other devices referred to in subsection (a)* of this section or to acts or offenses occurring or committed thereon shall not give rise to any inference that the application to such islands and structures, acts, or offenses of any other provision of law is not intended" (emphasis added)).

2. OCSLA Authorizes the Secretary of the Interior to Regulate Energy-Related Activities and Alternate Uses of Energy-Related Facilities

OCSLA authorizes the Secretary of the Interior—and by delegation, MMS—to regulate energy-related activities and alternate uses of energy-related facilities, but not undersea telecommunications cables. Specifically, OCSLA directs the Secretary of the Interior to grant oil and gas leases to the highest qualified responsible bidder on the basis of sealed competitive bids and to develop regulations necessary to carry out such provisions of OCSLA.[13] Section 388(a) expanded the Secretary of the Interior's regulatory authority to include leases, easements, and rights of way for activities that "produce or support production, transportation, or transmission of energy from sources other than oil and gas," *e.g.*, wind power.[14]

Section 388(a) also provides that the Secretary of the Interior:

> may grant a lease, easement, or right-of-way on the outer Continental Shelf for Activities not otherwise authorized in this Act [or certain other laws not relevant here] if those activities—
>
> (D) use, for energy-related purposes or for other authorized purposes, facilities currently or previously used for activities authorized under this Act.[15]

Thus, Section 388(a) gives the Secretary of the Interior authority to regulate new uses—whether energy-oriented or not—of facilities originally authorized and constructed under the authority of OCSLA, *i.e.*, those dedicated to minerals exploration and exploitation.[16] Neither this authority to

[13] 43 U.S.C. §§ 1334-38.

[14] 43 U.S.C. § 1337(p)(1).

[15] *Id.*

[16] *See* 43 U.S.C. § 1333(a).

regulate new uses of energy-related facilities, nor the authority to regulate energy activities other oil and gas-related activities, extends to undersea telecommunications cables.

3. The Army Corps Lacks a Statutory Mandate to Regulate All Artificial Islands, Installations, and Other Devices in the Subsoil or on the Seabed of the Outer Continental Shelf and—by Extension—Undersea Telecommunications Cables

Notwithstanding its claims to the contrary, the Army Corps lacks a statutory mandate to regulate all artificial islands, installations, and other devices in the subsoil or on the seabed of the U.S. outer Continental Shelf and—by extension—undersea telecommunications cables. Instead, OCSLA grants the Secretary of the Army (who has delegated this authority to the Army Corps) limited jurisdiction over two specified classes of activities: (1) artificial islands, installations, and other devices attached to the seabed and intended for exploring for, developing, or producing mineral resources, and (2) installations or devices intended for transporting mineral resources.

OCSLA granted to the Secretary of the Army limited authority to prevent obstruction of navigable waters by activities relating to exploration for, development, production and transportation of mineral resources of the outer Continental Shelf.

> The authority of the Secretary of the Army to prevent obstruction to navigation in the navigable waters of the United States is extended to the artificial islands, installations, and other devices *referred to in subsection (a) of this section*.[17]

Thus, OCSLA grants the Army Corps jurisdiction only over a specified class of activities—those specified in Section 1333(a)(1)—to the extent they may obstruct navigation. By its own terms, Section 1333(e) does not extend to a class of activities beyond those enumerated in Section

[17] OCSLA § 4(f), *codified as amended at* 43 U.S.C. § 1333(e) ("Section 1333(e)") (emphasis added).

1333(a)(1). Nowhere does OCSLA suggest or provide for any possibility of the Army Corps asserting jurisdiction over *all* artificial islands, installations, and other devices attached to the seabed.

Regardless of whether undersea telecommunications cables are artificial islands, installations, or other devices attached to the seabed—and NASCA maintains that they are none of these things—they are not used for exploring for, developing, producing, or transporting mineral resources. Undersea telecommunications cables use coaxial cable or fiber-optics to transmit voice, fax, data, and Internet traffic between domestic and international points. As such, they remain outside the general jurisdictional scope of OCSLA (as defined in Section 1333(a)(1)) and outside the specific regulatory jurisdiction of the Army Corps under OCSLA (as defined in Section 1333(e)).

The statutory language of the OCSLA 1978 Amendments clarified that Congress granted the Army Corps only limited jurisdiction. In those amendments, Congress revised the language of Section 1333(e), striking out "artificial islands and fixed structures located on the outer Continental Shelf" and replacing it with "the artificial islands, installations, and other devices referred to in subsection (a)." Of course, Subsection (a)—*i.e.*, Section 1333(a)(1)—limits the scope of any grant of agency regulatory jurisdiction or applicability of enumerated laws, as provided in Section 1333's various subsections, to artificial islands, installations, and devices intended for mineral resource-related activities.

Notwithstanding OCSLA's clear language, federal appellate courts have managed to disagree on the scope of federal authority over the outer Continental Shelf. The Fifth Circuit takes the view that:

> '[T]the Continental Shelf Act was enacted for the purpose, primarily, of asserting ownership of and jurisdiction over the minerals in and under the Continental Shelf.' The structure of the Act itself, which is basically a guide to the administration and leasing of offshore mineral-producing properties, reinforces this conclusion. The Act consists almost exclusively of specific measures to facilitate exploitation of natural resources on the continental shelf. In addition, 43 U.S.C. § 1332(b) provides that the Act 'shall be construed in such manner that the character as high seas of the waters above the outer Continental Shelf and the right to navigation and fishing therein shall not be affected.' As the court below noted, an extension of jurisdiction for purposes of controlling the exploitation of the natural resources of the continental shelf is not necessarily an extension of sovereignty.
>
> We believe that a limited construction of the Act comports with the primary purpose of resolving competing claims to ownership of the natural resources of the offshore seabed and subsoil. So read, the Act is consistent with Article 2 of the Convention on the Continental Shelf.[18]

Thus, the Fifth Circuit found OCSLA's statutory language and the relevant treaty provisions dispositive on the question of the Army Corps' jurisdiction.

By contrast, the First Circuit takes a more expansive view of the Army Corps' authority under OCSLA, and in direct opposition to the Fifth Circuit. In *Alliance to Protect Nantucket Sound, Inc. v. U.S. Department of the Army*, the First Circuit held that OCSLA gave the Army

[18] *Treasure Salvors, Inc. v. Unidentified Wrecked & Abandoned Sailing Vessel*, 569 F.2d 330, 340 (5th Cir. 1978) (holding that the United States did not have title under OCSLA over a wrecked and abandoned vessel on the outer Continental Shelf because OCSLA was not a general extension of U.S. sovereignty, quoting *Guess v. Read*, 290 F.2d 622, 625 (1961), *cert. denied* 368 U.S. 957 (1962)), *aff'd in part and rev'd in part on other grounds sub nom. Florida Dep't of State v. Treasure Salvors, Inc.*, 458 U.S. 670 (1982). *See also Laredo Offshore Constructors, Inc. v. Hunt Oil Co.*, 754 F.2d 1223, 1227 n.4 (5th Cir. 1985) (reiterating that "[i]n *Treasure Salvors*, we were faced with the question whether the United States had title under the OCSLA over a wrecked and abandoned vessel lying on the bottom of the ocean on the Outer Continental Shelf. We held that the OCSLA was not a general extension of United States sovereignty but must be construed to comport with its limited purpose of controlling the exploration of natural resources on the Continental Shelf."). Regarding the Convention on the Continental Shelf, see part I.B below.

Corps authority to issue a permit for a scientific measurement device station to be erected in connection with an offshore "wind farm" project, as the statutory language of Section 1333 was ambiguous and the "exceptional clarity" of the legislative history evidenced congressional intent not to limit the Army Corps's permitting jurisdiction to structures related to minerals extraction.[19] In NASCA's view, the First Circuit found OCSLA ambiguous only because it failed to quote Section 1331(a)(1) in full, and it ignored the Convention on the Continental Shelf.[20] Moreover, NASCA believes that the legislative history of Section 1333 is internally inconsistent and appears to conflict with the text of Section 1333, thereby providing no clear sense of congressional intent.[21]

Absent resolution of this "circuit split" by the U.S. Supreme Court, the Army Corps continues to interpret its jurisdiction expansively, issuing permits which include conditions extending to the edge of the Continental shelf. For example, the Army Corps has affirmatively

[19] 398 F.3d 105, 109 (2005).

[20] *See id.* (omitting the phrase "which may be erected thereon for the purpose of exploring for, developing, or producing resources therefrom, or any such installation or other device (other than a ship or vessel) for the purpose of transporting such resources").

[21] *See Joint Explanatory Statement of the Committee of Conference*, H.R. Conf. Rep. No. 95-1474, at 81 (1978) ("*Explanatory Statement*") (stating that "[u]nder section 4(a)(1) of the conference report, Federal laws and 'civil and political jurisdiction of the United States' are applicable to the subsoil and seabed of the OCS, to all artificial islands and 'all installations and other devices permanently or temporarily attached to the seabed, which may be erected thereon' to explore, develop, produce or transport OCS mineral resources"), *reprinted in* 1978 U.S.C.C.A.N. 1674, 1679. But see *Explanatory Statement* at 81 (stating that "these changes were technical only and there was no intent to change present law. The existing authority of the Corps of Engineers, in subsection 4(f), applies to all artificial islands and fixed structures on the Outer Continental Shelf, whether or not they are erected for the purpose of exploring for, developing, removing, and transporting resources therefrom."). These conflicting statements appear on the same page of the same report.

asserted that its jurisdiction extends to the edge of the Continental Shelf in the following cases:

- ***Hibernia Cable Permit***: The Army Corps' New England District (Concord Office) issued this permit to Worldwide Telecom, Inc. (now known as Hibernia Atlantic) pursuant to Section 4(f) of the Outer Continental Shelf Lands Act of 1953.[22] The permit imposes general burial requirements with respect to submerged aquatic vegetation and marine mammals.

- ***Japan-U.S. Cable Network Permit***: The Army Corps' San Francisco District Office issued this permit to Brunghardt Honomichl & Company on behalf of AT&T under the Army Corps' Nationwide Permit 12, pursuant to Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act, and "as extended by Section 4(f) of the Outer Continental Shelf Lands Act of 1953, as amended (43 U.S.C. 1333(e))."[23] The permit claims that "Section 10 regulates structures, other installations, and work, including excavation, dredging, and discharges of dredged or fill material in navigable waters, extending from mean high water *to the seaward limit of the outer continental shelf*."[24] Special Condition 5 imposes burial and reburial conditions "[w]ithin the seaward limits of the outer continental shelf."[25]

In other cases, the Army Corps has adopted conditions—requiring cable burial out to a particular depth or compliance with state regulatory requirements, which often extend far into the outer Continental Shelf, notwithstanding statutory and judicial limitations on state jurisdictional assertion—that effectively extend its jurisdiction to the outer Continental Shelf.[26] None of these conditions has any proper statutory basis.

[22] *See* Permit No. 199902369, at p. 4, Special Conditions 2 & 4 (Apr. 6, 2000). As the permit document reveals, this citation appears to have been pasted in over the standard form's citation to Section 10 of the Rivers and Harbors Act of 1899.

[23] *See* Letter from Calvin C. Fong, Chief, Regulatory Branch, San Francisco District, Army Corps, to Chris Brungardt, Brungardt Honomichl & Company, File No. 2S0030N, at p. 2 (Sept. 22, 2000).

[24] *Id.* (emphasis added).

[25] *Id.*

[26] *See, e.g.*, Permit 2000-01196, at p. 2, Special Condition B (Jan. 12, 2001) (imposing general burial requirements to a depth of 1,000 meters in a permit issued to TyCom Networks (US) Inc. by the Army Corps' New York District (New York Office)).

B. MMS Must Read OCSLA Consistent with U.S. Treaty Obligations, Which Afford Special Protections to Undersea Telecommunications Cables

MMS must read OCSLA consistent with U.S. treaty obligations, which afford special protections to undersea telecommunications cables. These treaty obligations are binding on the United States, and supercede earlier conflicting federal statutes.[27]

1. Various International Treaties, to Which the United States is a Party, Guarantee Unique Freedoms to Undersea Telecommunications Cables

Various international treaties dating back to 1884—all to which the United States is a party—guarantee unique freedoms to undersea telecommunications cables.[28] In coastal areas, these treaty obligations include the freedom to lay submarine cables on continental shelves—notwithstanding any claim of a 200-nautical-mile Exclusive Economic Zone ("EEZ")[29]—and to repair existing cables without prejudice.[30] Although these treaties permit coastal sovereign

[27] *See* U.S. Constitution, art. VI, § 2 (stating that "all treaties made, or which shall be made, under the authority of the United States, shall be the supreme law of the land").

[28] *See* International Convention for the Protection of Submarine Cables, March 14, 1884, 24 Stat. 989, 25 Stat. 1424, T.S. 380 (entered into force definitively for the United States on May 1, 1888) (guaranteeing the freedom to lay undersea telecommunications cables on the bed of high seas); Geneva Convention on the High Seas, arts. 2, 26.1 & 26.2, April 29, 1958, 13 U.S.T. 2312, T.I.A.S. 5200, 450 U.N.T.S. 82 (entered into force definitively for the United States on Sept. 30, 1962) (guaranteeing the freedom to lay and maintain undersea telecommunications cables on the bed of high seas).

[29] *See* Convention on the Continental Shelf, art. 4, April 29, 1958, 15 U.S.T. 471, T.I.A.S. 5578, 499 U.N.T.S. 311 (entered into force definitively for the United States on June 10, 1964) ("Continental Shelf Convention"); United Nations Law of the Sea Convention, arts. 58.1, 79.2, Dec. 10, 1982, 1833 U.N.T.S. 397 (entered into force on Nov. 16, 1994) ("UNCLOS"). Although UNCLOS has not yet been ratified by the Senate, the United States has taken the position that UNCLOS reflects customary international law to which the United States adheres. *See* 19 Weekly Comp. Pres. Doc. 383 (March 10, 1983).

[30] *See id.*, art. 79.5.

nations to take reasonable measures respecting natural resource exploitation on the Continental Shelf, they bar nations from taking such measures with respect to submarine telecommunications cables, the construction and repair of which are not undertaken for natural resource exploration or exploitation.[31]

These treaty provisions are reflected in the official position of the United Nations' Office of Legal Affairs of the Division for Ocean Affairs and the Law of the Sea, which states that:

> beyond the outer limits of the 12 nm territorial sea, the coastal State may not (and should not) impede the laying or maintenance of cables, even though the delineation of the course for the laying of pipelines [but not submarine cables] on the continental shelf is subject to its consent. The coastal State has jurisdiction only over cables constructed or used in connection with the exploration of its continental shelf or exploitation of its resources or the operations of artificial islands, installations and structures under its jurisdiction.[32]

Thus, according to the United Nations, a coastal nation must forbear from imposing any restrictions on the installation or maintenance of submarine cables unless those submarine cables themselves are used for natural resource exploration or exploitation.

[31] UNCLOS, art. 79.2; Continental Shelf Convention, art. 4. By Presidential Proclamation, Presidents Reagan and Clinton expressly stated that the establishments of an EEZ and a contiguous zone, respectively, did not infringe on the high-seas freedoms to lay and repair submarine cables. *See* Presidential Proclamation No. 5030 (Mar. 10, 1983), 48 Fed. Reg. 10,605 (1983) (establishing the U.S. EEZ); Presidential Proclamation No. 7219 (Aug. 2, 1999), 48 Fed. Reg. 48,701 (1999) (establishing the U.S. contiguous zone).

[32] "Maritime Space: Maritime Zones and Maritime Delimitations—Frequently Asked Questions" (Office of Legal Affairs, DOALS, U.N. Secretariat) (responding to Question #7, "What regime applies to cables and pipelines?"), *available at* <http://www.un.org/Depts/los/LEGISLATIONANDTREATIES/frequently_asked_questions.htm>.

2. The Convention on the Continental Shelf Does Not Grant the United States Sovereignty Over the Seabed and Subsoil of the Outer Continental Shelf, But Instead Only the Jurisdiction Necessary for and Connected with the Exploration and Exploitation of Mineral Resources

The Convention on the Continental Shelf, which the United States has signed and ratified, does not grant the United States sovereignty over the seabed or subsoil of the outer Continental Shelf, but instead only the jurisdiction necessary for and connect with the exploration and exploitation of mineral resources. MMS must therefore construe OCSLA (originally enacted in 1953) consistent with the superseding 1958 Convention on the Continental Shelf, which the United States has signed and ratified:

> The Convention on the Continental Shelf became effective as law in the United States eleven years after passage of the Outer Continental Shelf Lands Act and superseded any incompatible terminology in the domestic statute.[33]

The court in *Treasure Salvors* affirmed the trial court's finding that the United States had no claim to an abandoned vessel situated on the outer Continental Shelf because the vessel constituted "non-resource-related material in the shelf area."[34] The court found that the drafters of the Continental Shelf Convention were:

> . . . unwilling to accept the sovereignty of the coastal State over the seabed and subsoil of the continental shelf. . . . the text as now adopted leaves no doubt that the rights conferred upon the coastal state cover all rights necessary for and connected with the exploration and exploitation of the natural resources of the continental shelf.[35]

[33] *Treasure Salvors*, 569 F.2d at 340. *See also* Continental Shelf Convention, art. 4.

[34] *Treasure Salvors*, 569 F.2d at 340.

[35] *Id.* quoting 11 U.S. GAOR, Supp. 9 at 42, U.N. Doc. A/3159 (1956) (noting that the International Law Commission, which drafted the Continental Shelf Convention, "accepted the idea that the coastal State may exercise control and jurisdiction over the continental shelf, with the proviso that such control and jurisdiction shall be exercised *solely for the purpose of*

[Footnote continued on next page]

On those grounds, it rejected the U.S. Government's claim under OCSLA to a wrecked and abandoned vessel lying on the outer Continental Shelf.[36]

In implementing Section 388(a), MMS should therefore decline to assert permitting jurisdiction over undersea telecommunications cables and decline to endorse the Army Corps' illegal and extraterritorial assertions of permitting jurisdiction. Such exercises of jurisdiction would be inconsistent with OCSLA and U.S. treaty obligations.

II. MMS Should Clarify How It Intends to Coordinate Energy-Related Activities (for Which It Issues, Or Intends to Issue, Leases, Easements, or Rights of Way) With Installation and Maintenance Activities by Undersea Telecommunications Cable Operators

MMS should clarify how it intends to coordinate energy-related activities for which it issues, or intends to issue, leases, easements, or rights of way with installation and maintenance activities by undersea telecommunications cable operators. With additional activities contemplated for the outer Continental Shelf, NASCA believes that federal agencies and private entities operating on the outer Continental Shelf need a better understanding of the activities of undersea telecommunications cable operators on the outer Continental Shelf, in order to minimize conflict among parties operating on the outer Continental Shelf.

[Footnote continued from previous page]
exploiting its resources; and it rejected any claim to sovereignty or jurisdiction over the superjacent waters." (emphasis added)).

[36] *Treasure Salvors*, 569 F.2d at 340.

A. MMS Coordination Efforts Should Account for the Particular Requirements of Undersea Telecommunications Cable Installations and Repairs

MMS must account for the nature of cable installation and repair operations above and below the ocean surface, and the consequent industry standards that have been developed over many decades to facilitate those operations. These standards minimize the risk of damage to neighboring cables during installation and maintenance operations and ensure access to a damaged cable with both a cable ship and other equipment to be used on the sea floor.

The submarine cable industry has developed cable spacing standards to ensure that installation and maintenance operations do not jeopardize other submarine cables.[37] These spacing requirements are consistent with international treaties granting to submarine cable operators without limitation various rights and freedoms to lay submarine cables.

1. Minimum Cable Separation Distances

Cables can be placed only so close to each other until they endanger other cables during installation and maintenance, or until they impede access for installation and maintenance—particularly if there are multiple installation and maintenance companies operating in the same vicinity above or below the ocean surface. The submarine cable industry therefore developed the following minimum cable separation distances. First, two parallel cables are to be separated by a distance equal to the lesser of three (3) times the depth of water or nine (9) kilometers.[38] Second, if both operators of parallel cables agree, those two cables may be separated by a distance equal to the lesser of two (2) times the depth of water, or (6) six kilometers.[39] For example, a cable in 100 meters of water should be placed no closer than 300 meters to any other cable for any significant parallel length.

While the submarine cable operators may agree to place the cables as little as 200 meters apart—either because the length of the parallel is short or the probability of damage and repair is low—most operators take a more conservative approach to cable separation distances. The "three-times-the-depth-of-water" standard allows the repair ship to lay the repaired cable back flat on the seabed without laying it over the adjacent cable.

Submarine cable operators also use this standard as a minimum separation distance from other obstacles, such as seamounts, canyons, wrecks, and fish havens. Where the obstacles are manmade and actively used—such as the anchorages and dredging and dumping areas of third parties—submarine cable operators actively seek even greater separation distances.

2. Cable Crossing Standards

Notwithstanding these minimum separation distances, cables are generally not placed along parallel tracks for long distances. Submarine cable installers and operators prefer to have the cables cross so that they may achieve greater separation distances for greater lengths of the cables, with the cables in close proximity only where they cross. As described above, they do this to minimize the risk of damage to other cables during installation and maintenance operations, and also to ensure route diversity across a number of cables. This route diversity preserves connectivity between domestic or international points—for a single cable system, or across systems in a region.

[37] Each installation and maintenance company also has more specific methods for handling cable per each cable manufacturer's recommendations.

[38] *See* International Cable Protection Committee Recommendation No. 2, at 10, available from the International Cable Protection Committee at http://www.iscpc.org/.

[39] *See id.*

The submarine cable industry has therefore developed the following cable crossing standard: when cables must cross, they should do so at 90-degree angles in order to minimize the length of cable that is immediately adjacent to another cable.[40] Observance of this standard means that in the area of a crossing, the amount of lateral space required for two cables is the equivalent of what would otherwise be sufficient for three cables.

Where cables parallel each other in close proximity, the degree of complexity for any repair operation is increased. It is standard procedure for cable operators to consult with each other when planning a crossing, and to seek permission for a crossing.[41] Although permission is generally granted, there have been instances where the crossing company assumes liability for damage of the crossed cable if the crossing is planned in a congested area or in proximity to a repeater or other underwater body.

B. MMS Should Explain How It Intends to Implement the Outer Continental Shelf Mapping Provisions of Section 388(b) of the Energy Policy Act of 2005

MMS should explain how it intends to implement the outer Continental Shelf mapping provisions of Section 388(b) of the Energy Policy Act of 2005 ("Section 388(b)"). Section 388(b) directs the Secretary of the Interior to establish an interagency comprehensive digital mapping initiative for the outer Continental Shelf, including indications of the locations on the outer Continental Shelf of all federally-permitted activities, obstructions to navigation, submerged cultural resources, undersea cables, offshore aquaculture projects, and areas designated for the purpose of safety, national security, environmental protection, or conservation

[40] *Id.*, at 5.

[41] *Id.*, at 4.

and management of living marine resources. Such an initiative could foster greater awareness of activities on the outer Continental Shelf and minimize conflict among parties operating on the outer Continental Shelf.

CONCLUSION

For the reasons stated above, the North American Submarine Cable Association urges MMS to clarify how its proposals to implement Section 388(a) of the Energy Policy Act will impact undersea telecommunications cables.

Respectfully submitted,

THE NORTH AMERICAN
SUBMARINE CABLE ASSOCIATION

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28 February 2006

From: ocsenergywebmaster@anl.gov
To: mail_ocsenergyarchives; ocsenergywebmaster@anl.gov;
Subject: OCS Alternative Energy and Alternate Use Programmatic EIS Comment 80099
Date: Monday, May 21, 2007 4:45:04 PM
Attachments: MMS_PDEIS_Comments.05-21-07_80099.pdf

Thank you for your comment, Michael Smith.

The comment tracking number that has been assigned to your comment is 80099. Once the comment response document has been published, please refer to the comment tracking number to locate the response.

Comment Date: May 21, 2007 04:46:21PM CDT

OCS Alternative Energy and Alternate Use Programmatic EIS
Draft Comment: 80099

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May 21, 2007

VIA ELECTRONIC FILING

Ms. Maureen A. Bornholdt
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RE: Comments on the MMS Draft Programmatic Environmental Impact Statement on Outer Continental Shelf Alternative Energy & Alternative Use

Dear Ms. Bornholdt:

On behalf of the National Trust for Historic Preservation (National Trust), we appreciate the opportunity to comment on the Minerals Management Service's Draft Programmatic Environmental Impact Statement (Draft PEIS) on Outer Continental Shelf (OCS) Alternative Energy and Alternative Use. This letter raises several concerns with the Draft PEIS, including inadequate guidance and discussion about the role and requirements of the NHPA in the context of contemplated project-specific reviews. The Minerals Management Service (MMS) should address our concerns prior to finalizing the PEIS.

The PEIS proposes a program for the issuance of leases, easements, or right-of-ways on the OCS for offshore alternative energy development, such as wind, wave, or ocean technologies. The National Trust generally supports efforts to create renewable energy, and we commend MMS for making a proactive effort to design a programmatic process for offshore alternative energy development. However, in preparing the PEIS, it is critical that MMS consider how granting certain rights for future OCS energy projects will affect our nation's irreplaceable cultural resources, in accordance with the National Historic Preservation Act (NHPA) and the National Environmental Policy Act (NEPA).

Interests of the National Trust

The National Trust is a private nonprofit organization chartered by Congress in 1949 to promote public participation in the preservation of our nation's heritage, and to further the historic

preservation policy of the United States. *See* 16 U.S.C. § 468. With the strong support of more than 274,000 members, the National Trust works to protect significant historic sites and to advocate historic preservation as a fundamental value in programs and policies at all levels of government. In addition to our headquarters in Washington, D.C., the National Trust operates 28 historic sites open to the public and eight regional and field offices throughout the country.

1. Inadequate Discussion about Compliance with Section 106 of the National Historic Preservation Act

The Draft PEIS does not provide adequate information and guidance regarding the application of the NHPA. Section 106 of the NHPA requires federal agencies, "prior to" approving or funding a project, to "take into account the effect of the undertaking on any district, site, building, structure, or object that is included in or eligible for inclusion in the National Register," and to provide the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment on the undertaking.[1] 16 U.S.C. § 470f. Federal agencies must initiate Section 106 review *early* in the planning process to ensure that a broad range of alternatives are considered. *Id.* § 800.1(c). In this case, it is not clear how or when MMS will satisfy the requirements of Section 106 of the NHPA.

It is understood that the Draft PEIS is programmatic providing for only a generic scope and purpose, and that the provisions of the NHPA will apply broadly to the proposed program in ways that relate directly to and intersect with the other laws, standards and considerations detailed in the draft. MMS makes some reference to the standards of Section 106 of the NHPA at Section 5.2.19 (potential impacts to archaeological resources) and Section 5.2.21 (potential impacts to visual resources), as well as cursorily in a few other sections. Unfortunately, the Draft PEIS makes no attempt to outline how the proposed program would comply with Section 106 consultation and procedural requirements. Specifically, how will MMS satisfy the requirements of Section 106 of the NHPA *prior* to the issuance of leases, easements, or right-of-ways on the OCS for offshore alternative energy development, such wind, wave, or ocean technologies?

This issue is important because MMS's grant of private access rights to federal lands of the OCS, including leases, easements, or rights-of-way is considered an "undertakings" under Section 106. *See* 36 C.F.R. §§ 800.16(y), 800.5(a)(2)(vii). *See Montana Wilderness Association v. Fry*, 310 F. Supp. 2d 1127, 1152 (D. Mont. 2004). As the lead Federal agency under the Department of Interior, MMS must comply with Section 106 of the NHPA and consider what effects the undertakings will have on historic and archaeological properties. The Section 106 regulations

80099-001

[1] The Section 106 regulations require an agency to: (1) "make a reasonable and good faith effort" to identify historic properties, 36 C.F.R. § 800.4(b)(1); (2) determine the eligibility of historic properties for the National Register of Historic Places, *id.* § 800.4(c); (3) assess any effects the undertaking may have on historic properties, *id.* 800.5; and (4) if the effects are adverse, develop and evaluate alternatives or modifications to the project in order to avoid, minimize, or mitigate the adverse effects, based on consultation with the SHPO, Indian tribes, the ACHP, and other consulting and interested parties, *id.* § 800.6(a).

mandate initiation early on in the planning stages.[2] 36 C.F.R. § 800.1(c). It is clear that MMS must complete the Section 106 process *prior* to issuing leases, easements, or rights-of-way.

Further, although NEPA and NHPA reviews can run concurrently and coordinate in many respects, *see id.* §§ 800.3(b), 800.8, NEPA review alone cannot satisfy the review and consultation required under NHPA. *Id.* §§ 800.8(c)(1)(i), (iv). With such broad potential to affect historic, cultural, and archaeological resources, the program proposed by MMS should acknowledge and detail in the Final PEIS the unique review and consultation steps that NHPA will require for site-specific projects. The text summarizing the NHPA and related laws at Table 1.6-1 of the Draft PEIS, in particular, should be revised to add a reference to the consultation and public process requirements of the NHPA. In our view, the Final EIS should also indicate how consulting and interested parties will be determined and how direct notification and consultation is proposed to occur, consistent with the requirements of 36 C.F.R. Part 800.

80099-001 (cont.)

2. Inadequate Analysis of Impacts to Historic and Archaeological Resources and Measures to Mitigate the Potential Impacts

In our view, the analysis of potential impacts to historic and archaeological resources in the Draft PEIS is insufficient. Under NEPA and Section 106 of the NHPA, prior to approving projects proposed under the contemplated OCS Alternative Energy Development program, MMS must closely consider the adverse effects on resources eligible for or listed on the National Register of Historic Places. Such consideration will rely upon the information or lack of information outlined in this PEIS. Therefore, an adequate discussion of potential impacts in the PEIS is critical to the ability of MMS to understand the consequences of future actions prior to making irretrievable decisions affecting resources.

In the Draft PEIS, substantive discussion of potential impacts on historic resources and relevant mitigation is divided between Section 5.2.19 (Archaeological Resources) and Section 5.2.21 (Visual Resources) of the draft. The analysis for archaeological resources subsumes the overall analysis for historic resources, resulting in an incomplete analysis of potential impacts and mitigation measures for historic resources. This structure does not allow for adequate analysis of non-visual impacts to non-archaeological historic resources. The Final PEIS should address potential adverse effects to historic resources from the introduction of audible elements related to the program, an analysis not included in the draft.[3]

80099-002

[2] The Section 106 review process "seeks to accommodate historic preservation concerns with the needs of Federal undertakings through consultation among agency officials and other parties with an interest in the effects of the undertaking on historic properties, commencing at the *early stages* of project planning." 36 § 800.1(a) (emphasis added). "The goal of consultation is to identify historic properties potentially affected by the undertaking, assess its effects and seek ways to avoid, minimize or mitigate any adverse effects on historic properties." *Id.*

[3] Potential adverse effects can include the "[i]ntroduction of visual, atmospheric or audible elements that diminish the integrity of the property's significant historic features. . . ." 36 C.F.R. § 800.5(a)(2)(v).

The Draft PEIS acknowledges MMS's obligation to include "heretofore unidentified" historic and archaeological resources in the assessment of adverse effects. At Section 5.2.19.2, it provides guidance on the necessary depth and manner for archaeological survey to identify significant resources. The only mention of the parallel need for historic resources survey is included parenthetically in that section. A more thorough discussion dedicated to this vital element of the historic resources review, including the need for coordination with the appropriate State Historic Preservation Officer and/or Tribal Historic Preservation Officer, should be included in the Final PEIS.

80099-002 (cont.)

The characterization of visual impact levels on historic properties in the Draft PEIS is inconsistent with the standard for assessment of such indirect adverse impacts on historic properties.[4] At Section 5.2.19.2, the Draft PEIS discusses the potential for wind turbines on the OCS to "result in a visual impact on historic properties." The Draft PEIS continues "[t]he level of impact could be considered moderate or even major if the setting of the property is considered a principal element of the property's significance. If the visual setting was not considered as part of the property's significance, the visual impact would be negligible." Draft PEIS at 5. The impact level characterization for visual impacts on historic resources should be revised to be consistent with the provisions for assessment of adverse effects in the ACHP regulations implementing Section 106, 36 C.F.R. § 800.5(a).

In addition to specifically listing setting as one of the fundamental qualities of a historic property to be considered in an adverse effect assessment, the regulations state that, in determining adverse effects, "[c]onsideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for the National Register." *Id.* Such language defining circumstances in which a visual impact on a historic resource would be found to be negligible is inappropriately ambiguous. It could be read to suggest that a review proceeding under the proposed program could not engage in an evaluation of the contribution the setting makes to a historic property's significance if the property was once listed or determined eligible for the National Register without clearly establishing the significance of the setting. This interpretation would not allow for adequate review of resources with incomplete past documentation, and would be inconsistent with the regulations governing review of adverse effects on historic resources.

80099-003

While project-specific evaluations of the degree of visual impact to historic properties will be a necessary part of the program, this evaluation does not appear to align with the impact levels evaluation as it is set forth in 5.1.2. It seems clear that the basic level of avoidability on which the level of impacts distinctions depend, will be similar no matter the degree of sensitivity of the resource. For this reason, the Final PEIS should clarify the relationship between the impact levels, the evaluation of the degree of impact, and the significance of a resource or resource element to

[4] The Section 106 regulations define an adverse effect as any undertaking that "may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association." 36 C.F.R. § 800.5(a)(1).

prevent interpretations that would create inappropriately pit the evaluation of the overall significance of a resource against its sensitivity and the separate issue of the ease of mitigation or avoidance.

80099-003 (cont.)

3. Consultation with the Advisory Council on Historic Preservation

At Section 8.3, Consultation and Coordination, we are encouraged to read that MMS is conferring closely with several pertinent agencies in developing this PEIS. However, the National Trust encourages MMS to consult with the ACHP as well. The ACHP is authorized to "review the policies and programs of Federal agencies and recommend to such agencies methods to improve the effectiveness, coordination, and consistency of those policies and programs with the policies and programs carried out under [the NHPA]." 16 U.S.C. § 470j(a)(6).

80099-004

Conclusion

The National Trust does support the need for and advancement of renewable energy technology. The preparation of a programmatic EIS to authorize a program to advance wind, wave, and ocean technologies on the OCS should make every effort to consider the potential adverse effects to historic and archaeological resources, and should clearly outline MMS's proposed method of satisfying the requirements of NHPA. We appreciate the opportunity to comment on the Draft PEIS. Please do not hesitate to contact us if you have any questions.

Respectfully submitted,

Roberta Lane

Roberta Lane
Program Officer & Regional Attorney,
Northeast Office

Michael Smith

Michael Smith
Assistant General Counsel

cc: Melanie Stright, Archaeologist, Federal Preservation Officer, MMS
Laura Dean, Advisory Council on Historic Preservation

From: ocsenergywebmaster@anl.gov
To: mail_ocsenergyarchives; ocsenergywebmaster@anl.gov;
Subject: OCS Alternative Energy and Alternate Use Programmatic EIS Comment 80100
Date: Monday, May 21, 2007 4:47:49 PM
Attachments: Final_DPEIS_comment_letter_80100.pdf

Thank you for your comment, Ian Bowles.

The comment tracking number that has been assigned to your comment is 80100. Once the comment response document has been published, please refer to the comment tracking number to locate the response.

Comment Date: May 21, 2007 04:49:00PM CDT

OCS Alternative Energy and Alternate Use Programmatic EIS
Draft Comment: 80100

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May 21, 2007

MMS Renewable Energy and Alternate Use Programmatic EIS
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Re: Draft Programmatic Environmental Impact Statement

Dear Sir or Madam:

Thank you for this opportunity to comment on Mineral Management Services' (MMS) Draft Programmatic Environmental Impact Statement (EIS) for alternative energy development and production and alternate use of facilities on the Outer Continental Shelf (OCS). The Patrick Administration believes that an ambitious program of renewable energy development is in the interest of the citizens of Massachusetts and the United States, and that the Commonwealth has an obligation to do its share to promote development of our renewable energy resources. As I explained when I issued the Massachusetts Environmental Policy Act certificate approving the final environmental impact report for the proposed Cape Wind project on Horseshoe Shoals, global climate change, sea level rise, dependence on foreign oil, and the health impacts of local and regional air pollution create an urgent need for sustainable alternatives to energy produced from fossil fuel combustion. The development of renewable energy facilities will significantly advance the Commonwealth's energy policy goals and will provide immediate and significant benefits to air quality and energy reliability in Massachusetts and the Northeast.

I believe that the proposed program set forth in the EIS to establish regulations for the issuance of leases, easements, and/or rights-of-ways for alternative energy facilities will allow thorough and comprehensive review of renewable energy facilities on the OCS, and thereby reduce environmental impacts, allow for a more predictable and transparent process, and achieve important efficiencies in time and resources. The alternative for MMS not creating an alternative energy program and addressing each new alternative energy facility project on a case-by-case basis is not preferable.

80100-001