BEFORE THE UNITED STATES DEPARTMENT OF INTERIOR
MINERAL MANAGEMENT SERVICE

Alternative Energy on the	**)**	**OCS EIS/EA**
Outer Continental Shelf	**)**	**MMS 2007-010**

COMMENTS OF THE OCEAN RENEWABLE ENERGY COALITION (OREC) ON MINERAL MANAGEMENT SERVICE'S DRAFT PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT (EIS) FOR ALTERNATE ENERGY DEVELOPMENT AND PRODUCTION AND ALTERNATE USE OF FACILITIES ON THE OUTER CONTINENTAL SHELF

The Ocean Renewable Energy Coalition (OREC), the national trade association for marine energy renewables, including wave, tidal, current, hydrokinetic, ocean thermal and offshore wind, submits these comments in response to the Mineral Management Service's (MMS) Draft Programmatic Environmental Impact Statement (EIS) for Alternative Energy Development and Production and Alternate Use of Facilities on the Outer Continental Shelf.

EXECUTIVE SUMMARY

OREC commends MMS for the comprehensive scope of the Programmatic DEIS, which will serve as a valuable resource for marine energy developers siting projects on the OCS. By identifying the universe of potential environmental effects of wave, current and offshore wind projects as well as ideas for mitigation, the DEIS can assist developers in making decisions about project design and siting. Part I of our comments briefly highlight the benefits of the Programmatic DEIS to the marine renewables industry.

At the same time, the DEIS overlooks many measures that will expedite siting of projects and accelerate commercialization of our nation's marine energy technologies

without compromising environmental concerns. Thus, Part II of OREC's comments focus on the following aspects of the DEIS that warrant further discussion:

1. The DEIS should discuss (and indeed approve) a categorical exclusion for test and demonstration facilities and facilities sited on decommissioned oil platforms, particularly in light of the DEIS' findings that impacts of these facilities will range from negligible to minor;

2. The DEIS should recognize and evaluate principles of adaptive management as potential mitigation for uncertain or unknown impacts;

3. The DEIS should clarify that project decommissioning will not be required until the project has operated for a period of 20-30 years and has fully recovered all costs.

4. The DEIS should incorporate principles of proportionality in permitting, by discussing the alternative of creating different regulations for different types of technologies (or at least for different stages of technology);

5. The DEIS should acknowledge not only the adverse impacts of development of marine energy resources, but beneficial effects such as potential increases in tourism, revitalization of economically depressed coastal communities and reduction of harmful greenhouse gas emissions.

The DEIS also raises the following legal and policy concerns, that we address in Part II of our comments:

1. The DEIS should clarify that the 5-7 year window for evaluation of impacts will (a) not prevent developers from applying for permits for technologies that are not covered by the DEIS and (b) will not prevent "phased in" development which might commence within the 5-7 year window, but will be completed outside the time frame of the DEIS window.

2. The DEIS should acknowledge that FERC believes its jurisdiction does apply on the OCS given that the DEIS' summary of applicable laws does not include the Federal Energy Regulatory Commission (FERC) or the Federal Power Act (FPA) as relevant statutes. And the DEIS should also explain that Section 404 of the Clean Water Act only applies in "navigable waters of the United

States," *i.e.*, those up to three miles offshore and not to the OCS, as the summary table suggests.

3. The DEIS does not discuss the implications of MMS' delay – now more than one year past the statutory deadline - in issuing regulations for alternate energy projects on the OCS. MMS' delay has stalled development of wave, current and offshore wind projects that can contribute to reduction of carbon emissions and generate significant economic benefits for coastal communities.

I. BENEFITS OF THE PROGRAMMATIC DEIS

OREC is the national trade association for the marine renewables industry. Our members include wave, tidal, current, OTEC and offshore wind development companies, as well as law firms, consultants, engineering firms, investment funds in the United States and overseas, with a shared goal of promoting and advancing the marine renewables technologies in the United States. OREC has participated extensively in the MMS process: we filed 88 pages of comments in response to MMS' Advanced Notice of Proposed Rulemaking (ANOPR) in February 2006, and OREC representatives attended at least four of the scoping sessions conducted nationally by MMS on the Programmatic EIS and provided oral and written testimony.

OREC commends MMS for completion of the Programmatic DEIS, particularly, for the comprehensive scope of the document and for the extensive opportunities afforded for public participation. In OREC's view, the scoping document identifies the universe of the potential environmental effects of marine renewable energy projects, which can guide marine renewable energy developers' siting decisions as they move ahead with study and development of projects. And identification of environmental effects early on gives newer technology developers (wave and current companies) an opportunity to take

effects into consideration at the design phase of the project. In addition, in many cases, the Programmatic DEIS notes that certain impacts are avoidable through careful site selection or consultation with appropriate agencies.

The DEIS serves as a valuable resource for developers and the public, by identifying those impacts that are likely to be negligible or moderate, and those which may be more significant. As such, the DEIS will assist developers in designing and siting projects to minimize environmental effects and can help the public gain a more accurate understanding of the predicted effects of marine renewable projects.

II. OMISSIONS FROM THE PROGRAMMATIC DEIS

A. The DEIS Must Include A Categorical Exclusion For Test and Demonstration Facilities And Facilities Located on Oil Platforms.

1. Impacts of siting test facilities and

The DEIS generally concludes that in most development scenarios, impacts of wind, wave and ocean current projects are expected to range from minor to moderate. *See, e.g.,* Summary Table 7.1.1-1 (summarizing impacts for wind, wave and ocean current projects). In particular, the DEIS found that effects of technology testing activities for wave and current projects are expected to be negligible.[1]

2. Need for categorical exclusion

Despite the negligible impacts associated with demonstration projects or test facilities, the DEIS does not explore the alternative of creating a "categorical exclusion" for these projects. Section 1508.4 of the CEQ regulations provide that a "categorical

[1] The DEIS assumed that because offshore wind is a mature technology, with a decade of operating experience gleaned from the European market, that most offshore wind developers will skip the demonstration and pilot phase and move directly to commercial operation. *See, e.g.,* Executive Summary at ES-5.

exclusion" means "a category of activities which do not individually or cumulatively have a significant effect on the human environment…and for which, therefore, neither an environmental assessment or environmental impact statement is required." Based on MMS' Programmatic DEIS, demonstration and test projects qualify for a categorical exclusion under the CEQ regulations.

Establishing a categorical exclusion for demonstration and test facilities will expedite development of wave and current projects on the OCS and accelerate commercialization of these technologies. At present, the emergence of marine renewables technologies, particularly wave, tidal and current, have been stalled because developers have been unable to get projects into the water. Exempting demonstration and pilot projects from a lengthy environmental review process through establishment of a categorical exclusion will cut significant time off the permitting process and will give developers an opportunity to generate data on technology efficiencies and environmental effects based on actual operating experience, rather than through hypothesis or tank test results.

A categorical exclusion for demonstration and pilot marine and current projects will not compromise the environment. As discussed, the Programmatic DEIS shows that impacts from testing are negligible. Moreover, MMS' Departmental Manual (516 DM 2.3A(3)) reserves MMS' ability to prepare an EA for categorically excluded projects where they may have significant adverse effects on public health or saety or have controversial environmental affects. Thus, even if a categorical exclusion is established, a backstop EA process is available if necessary.

B. The DEIS Should Recognize and Evaluate Principles of Adaptive Management As Potential Mitigation for Uncertain or Unknown Impacts.

Increasingly, marine renewables developers are incorporating principles of adaptive management. Adaptive management is an iterative process of decision making which addresses uncertainty about impacts through post-licensing monitoring and study, with operational modifications if necessary to minimize project effects.[2] In the context of marine renewables, adapative management is an important tool, because it allows development to move forward responsibly, even where uncertainty about impacts exists. In the absence of adaptive management, marine energy developers might be forced to study project effects for three or five years, merely to try to prove a negative, *i.e.*, that impacts will not result.

Increasingly, resource agencies and environmental decision makers are recognizing that adaptive management can be a useful tool for dealing with unknown impacts. But the DEIS does not identify adaptive management as a potential tool for siting or mitigating projects. The DEIS should include adaptive management as a potential mitigation technique and MMS should incorporate adaptive management principles where uncertainty about possible impacts exists.

C. The DEIS Should Clarify That Decommissioning Will Not Be Required Until Projects Have An Opportunity to Recover Their Costs

For offshore wind, wave and current projects, the DEIS examines the costs associated with decommissioning. OREC realizes that regulations regarding potential decommissioning have not yet been issued. However, we use this opportunity to emphasize that in the event that MMS includes a decommissioning requirement in leases

[2] *See also* www.en.wikipedia.org/wiki/Adaptive_management.

or rights of way issued for use of the OCS, MMS must do what it can to ensure that projects can operate at least for a sufficient period (typically 20-30 years) to meet obligations under power supply agreements and to fully recover costs, while recognizing, of course, the importance of considering data from Adaptive Management or other information about project environmental impacts. If MMS plans to require decommissioning any sooner than twenty years after a project is completed, marine energy developers will be significantly compromised in their ability to obtain financing, and indeed, requiring premature decommissioning may render financing impossible.

D. The DEIS Should Incorporate Principles of Proportionality in Permitting By Discussing the Alternative of Creating Different Regulations for Different Types, or Stages of Technology.

OREC's comments in response to the ANOPR emphasized the importance of proportionality in creating a regulatory process. As OREC explained, smaller and environmentally benign marine renewables projects should not be subjected to the same rigorous review or onerous litany of studies as mature technologies with major impacts.

The DEIS does not go far enough to reinforce the principles of proportionality. And in fact, the DEIS describes that MMS will not issue regulations specific to energy source, *i.e.* wind, wave and ocean current. *See* ES-2-4, Part 2.4.1. While OREC supports streamlined and efficient regulation for wind, wave and ocean current technology, offshore wind is a far more advanced and mature technology than wave and current. With ten years of operational data from Europe, as well as information from onshore wind operation, the potential impacts of offshore wind projects are more easily discernable than those related to wave and tidal. Thus, offshore wind energy developers

may be able to readily produce data on project effects that a wave or current developer could not because of lack of operational experience.

In developing regulations, MMS does not necessarily need to distinguish between types of energy sources. But MMS should keep in mind the size of a project and the maturity of the technology in developing its regulations.

E. The DEIS Should Acknowledge Not Only Adverse Impacts of Development of Marine Energy Resources But Beneficial Effects Such As Potential Increases In Tourism, Revitalization of Economically Depressed Coastal Communities and Reduction of Harmful Greenhouse Gas Emissions.

The DEIS describes that development of offshore wind, wave and current projects may have adverse effects on tourism. And the DEIS also suggests that construction of marine energy projects could (albeit briefly) contribute to an increase in greenhouse gas emissions.

Yet, while the DEIS points out potential adverse effects, it does not give due coverage to the benefits of marine renewable energy development. For example, a 2004 report, *Offshore Wind, Onshore Jobs*, (online at http://www.greenpeace.org.uk/media/reports/offshore-wind-onshore-jobs) describes how offshore wind creates jobs and can revitalize the economies of coastal communities. And development of wave and current technologies will similarly contribute to economic growth. In addition, many offshore windfarms, such as the Arklow project in Ireland, are tourist attractions, evidence that marine renewables project can increase tourism revenues in certain areas.

As for impact on air quality, the DEIS should emphasize the role that marine renewables play in contributing to reduction of carbon emissions. And the value of power from zero emissions technologies like offshore wind, wave and tidal will increase

further if a carbon tax, or carbon caps are imposed. The benefits of development of marine renewables on air quality outweight, or at least, substantially counterbalance the effects of siting projects. These offsetting benefits deserve more recognition in the DEIS.

III. LEGAL AND POLICY CONCERNS

A. The DIES Should Clarify That the Five to Seven Year Window Will Not Prevent Development of Technologies Not Addressed in the DEIS or That Fall Outside of the Timeframe Studied.

1. Discussion of what the DEIS covers.

The DEIS is focused on alternative energy technologies and areas on the OCS that the industry has the potential to develop or evaluate from 2007 to 2014. ES-1. The DEIS states that it expects that development will occur nearer to shore with maximum water depth of 100 m or less for wind and wave, and 500 m for ocean current technology. As such, the DEIS does not evaluate development of alternative energy around Hawaii, where the OCS steeply drops off beyond the 3 miles limit of the OCS. Nor does the DEIS examine alternative energy development on the OCS in the Alaska region because of the harsh environment and probability that projects will not be pursued in federal waters. ES-2.

The DEIS analyzes offshore wind, wave and ocean current technology in the DEIS because MMS anticipates receiving applications for development of these technologies on the OCS in the next seven years. But the DEIS does not evaluate offshore solar energy capture or hydrogen storage, because these technologies are not yet considered technologically and economically feasible in the marine environment. And

tidal power projects are excluded because these projects are expected to be developed close to shore outside MMS jurisdiction.

2. Exclusion from the DEIS should not preclude development

The DEIS does not discuss the implications for technologies that are not considered in the DEIS. However, OREC believes that exclusion of a technology from the DEIS should not preclude its development. The marine energy industry is rapidly advancing, with new innovation and discovery constantly taking place. Some technologies like offshore biomass or offshore solar may be ready for test deployment within five to seven years – and when they are, MMS should allow these companies to move forward with development, irrespective of whether they were studied in the Programmatic DEIS or not.

Likewise, many wave and current projects may proceed in phases, with an initial demonstration or pilot project developed in 5-7 years and plans to add additional units gradually, over the course of a ten year period. The later stages of development will fall outside the 5-7 year period covered by the DEIS. Does this mean that these phases of development will be stalled until another Programmatic DEIS is prepared?

As discussed in Part I, the Programmatic DEIS is a useful tool that aids developers and resources agencies alike. But in the absence of a crystal ball, MMS cannot accurately predict how the marine renewables energy industry will progress over the next seven years. For that reason, technologies omitted from the DEIS now, or development of technologies like offshore wind and wave, which are evaluated by the DEIS but which may extend beyond the seven year window should be permitted to move

ahead through a preparation of site specific environmental assessment, rather than deferred until a second Programmatic DEIS is completed.

B. The DEIS Should Clarify Whether MMS Takes the Position That FERC's Jurisdiction Does Not Apply on the OCS.

Table 1.6-1 of the DEIS lists certain agencies and federal statutes which have related jurisdiction or apply on the OCS. The DEIS does not include either the Federal Power Act (FPA) or the Federal Energy Regulatory Commission (FERC) in the list.

Right now, MMS and FERC are working on an MOU clarifying jurisdiction on the OCS. FERC claims that it has the authority to license projects on the OCS under the FPA and that Section 388 of the Energy Policy Act of 2005 preserves FERC's licensing authority. MMS argues that FERC's authority is limited to navigable waters, which extend only three miles offshore and do not encompass the OCS.

Resolution of the FERC/MMS jurisdictional conflict is critically important to wave and current companies, particularly those which seek to develop projects exclusively on the OCS, or which straddle MMS and FERC boundaries. The DEIS suggests that MMS does not regard believe that FERC jurisdiction applies on the OCS. The DEIS should acknowledge the cooperative efforts toward an MOU clarifying how MMS and FERC will work together and avoid duplicative jurisdiction on the OCS. The DEIS may want to discuss the effects that an additional level of regulation will have on the cost of project development.

D. The DEIS Must Address the Implications of MMS' Delay in Issuing Regulations for the OCS.

Section 388 of the EPAct of 2005 provides that not later than 270 days after the date of enactment of the Energy Policy Act of 2005 [August 9, 2005], the Secretary shall issue any necessary regulations to carry out this subsection. The deadline for compliance passed May 9, 2006, over a year ago.

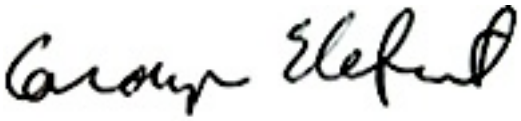
The delay in promulgating regulations for licensing projects on the OCS has stalled development of marine renewables projects. Offshore wind developers cannot site test towers in the absence of the regulation. Just a few weeks ago, the Delaware Public Service Commission selected Bluewater Wind's offshore wind energy project over a natural gas plant and a coal gasification plant in a competitive bid proceeding. The ability of a marine renewable project to compete with conventional power sources and prevail in a competitive bid process is virtually unprecedented – but if MMS does not move quickly to issue rules, the proposed Delaware offshore wind farm may never be constructed.

The lack of regulations has created confusion for marine energy developers as well. On the west coast, the wave resource is optimal in areas roughly 2 to 5 miles offshore. Several wave energy developers have proposed projects which straddle both state and federal waters. Although FERC will entertain permits to study and investigate the state waters components of these projects, developers cannot explore the entire project until MMS adopts regulations for siting on the OCS.

Delays carry a significant environmental cost. Each day of delay in developing marine energy projects means another day of carbon emissions and reliance on costly

foreign oil. Congress entrusted MMS to develop a regulatory process for alternate energy on the OCS so that our nation could begin to take advantage of the vast renewable energy potential that our oceans have to offer. MMS must act quickly to issue regulations so that we can realize this potential – especially within the narrow seven year time frame covered by the DEIS.

Respectfully submitted,



Carolyn Elefant, Counsel to OREC

Sean O'Neill /s/

President, OREC
Ocean Renewable Energy Coalition