

**BEFORE THE UNITED STATES DEPARTMENT OF INTERIOR  
MINERAL MANAGEMENT SERVICE**

**RESPONSE OF THE OCEAN RENEWABLE ENERGY COALITION (OREC)  
ON MINERAL MANAGEMENT SERVICE'S REQUEST FOR INFORMATION  
AND NOMINATIONS OF AREAS FOR LEASES AUTHORIZING TESTING  
ACTIVITIES FOR ALTERNATIVE ENERGY DEVELOPMENT ON THE  
OUTER CONTINENTAL SHELF**

**I. OVERVIEW**

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) Request for Information and Nominations of Areas for Leases Authorizing Alternative Energy Resource Assessment and Technology Testing Activities on the Outer Continental Shelf.

In this response, OREC describes the views of its members regarding MMS' interim proposal for testing on the OCS. Generally, OREC appreciates MMS' introduction of an interim policy to allow siting of test facilities on the OCS. Unfortunately, most of OREC's members are not likely to avail themselves of the interim policy as proposed for the following reasons:

- **Protection for Proprietary Information** - The MMS proposal requires developers who have invested money in evaluating prospective locations to publicly identify them as part of the nominations process, thereby inviting competition from other companies that would not have otherwise learned of these locations.

- **Opportunity for Build Out** - Developers who deploy a test project would be required to decommission it within a short period, without any opportunity to build out a successful project.

- **Power Sale Option Required** -The MMS rules do not explicitly allow developers to sell power during a the term of an interim lease; indeed, they do not even

guarantee that developers will have the ability to lay a transmission line to shore to deliver power. Generation of revenue during the lease term is critical as it will allow developers to apply those revenues, albeit minimal, to ongoing test and monitoring efforts.

● **Proposed Rental Fee Too Costly** - MMS' current \$3/acre annual leasing fee will prove burdensome to marine energy developers, particularly if MMS allocates leases through its designated numbered block system. The designated blocks measure 2.5 x 2.5 miles, or a total rental charge of \$12,000 annually (2.5 x 2.5 x 640 acres/mile x \$3/acre). Because of the nascent state of the marine renewables industry, developers lack the ability to self-fund test facilities or to attract venture capital. As a result, an added \$12,000 annual rental fee (and possibly more depending upon whether developers would need an added block) will present a significant deterrent to development of test facilities.

● **Broad Definition of Test Facility** - MMS should adopt a liberal definition of "test facility" for wave and tidal projects. In contrast to offshore wind, which has proven commercial viability in Europe, wave and tidal technologies are still in their nascent phase. In fact, as of this writing, there are only two commercial wave energy projects, both of which are shore-based projects. As such, MMS should classify all wave and tidal projects as test facilities, at least for the next five to ten years.

● **Streamlined Expedited Environmental Review** - MMS should describe the process by which it will conduct environmental assessments for siting test facilities, and consider creating a "categorical exclusion" category for facilities with minor or negligible effects. Also, any environmental review should be streamlined and proportionate, recognizing that projects will have minimal effects and are subject to removal. Following the initial five year period, MMS to conduct additional environmental review if a developer wanted to enlarge the project further.

● **No Applicability to Tests Which Do Not Require Fixtures** - At present, many developers survey wave and tidal resources through use of equipped boats rather than mounted facilities. The MMS proposal, however suggests that it will apply to initial resource surveys. Because MMS' authority under the Outer Continental Shelf Lands Act applies only to structures and permanent facilities on the OCS, we ask MMS to clarify that its Interim Testing proposal will likewise apply to only to tests that use fixed facilities and not to those conducted from boats or devices not permanently, or even semi-permanently affixed to the OCS. Of course, developers who wish to run preliminary tests using boats would have the option of seeking a lease to preserve rights to site a facility – but a lease would not be required for this category of preliminary tests and assessments.

● **Resolve MMS and FERC Conflicts** MMS' test program has the potential to conflict with certain aspects of the Federal Energy Regulatory Commission's Policy Statements, such as the Policy Statement on Preliminary Permits for Wave Tidal and

Hydrokinetic Projects,<sup>1</sup> FERC's Pilot Project License Proposal (*see* White Paper at FERC Website, [www.ferc.gov](http://www.ferc.gov)) and the more recently announced Policy Statement on Conditional Licenses for Hydrokinetic Projects.<sup>2</sup> OREC urges FERC and MMS to resolve the jurisdictional disputes over marine energy projects on the OCS.<sup>3</sup>

In addition to the above comments which are discussed in Part II below, Part III responds to MMS' specific questions regarding the possibility of joint ventures, and appropriate lease size and rental fees.

## II. COMMENTS

### A. Request for Nomination of Sites

Based on an informal poll of our members, OREC has determined that while there is general interest in obtaining the ability to site test facilities, most members would not avail themselves of the MMS interim policy as proposed. For starters, those developers that have preliminarily identified sites for nomination are reluctant to provide that information to MMS without any safeguard in place to prevent companies that did not "do their homework" from competing for the site.<sup>4</sup> These fears are not unfounded, either. For example, in 2006, following a report by the Electric Power Research Institute (EPRI) identifying a number of tidal sites (in state waters) with development potential, several companies without any technology plans filed with FERC multiple preliminary

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<sup>1</sup> Docket No. RM07-08 (February 15, 2007).

<sup>2</sup> 121 FERC ¶ 61,221 (November 30, 2007).

<sup>3</sup> We note that the jurisdictional conflicts do not affect offshore wind projects which are not subject to FERC's permit authority under Part I of the Federal Power Act.

<sup>4</sup> OREC understands that MMS has a statutory mandate to lease sites through a competitive process. And we have no issue with a competitive process, providing that it is between bonafide companies that have invested money to identify sites. However, as discussed in more detail in the text, OREC fears a competition between a bonafide marine renewables developer and a well funded speculator that stakes a claim to site with an intent to "flip" it later to another bidder.

permits for many of these promising locations. As a result, FERC has since altered its preliminary permit policy to minimize the ability of a company without any development plans from snatching up optimal sites.

The MMS process, as proposed, does not have any safeguards in place to protect a developer who identifies a site, then loses it to another company that would not have learned of the location but for the submission of information in the nominations process. As OREC understands, MMS uses the nominations process as part of its oil and gas leasing model, and resolves disputes between competing applicants by awarding the site to the applicant that pays the highest bonus bid. This system, however, does not work for fledgling marine renewables technology developers who barely have the resources to construct a demonstration project, let alone pay a bonus bid to wrest the site from a well funded interloper.

As an alternative, we ask MMS to hold confidential all information submitted as part of the nominating process. Or alternatively, MMS could give priority over later competitors to those bonafide entities that identify a test site and submit an appropriate development plan.

### **B. Need for Opportunity To Build Out Test Facilities**

MMS' interim policy contemplates a lease term of five years, with an opportunity to extend the test period. However, "authorization for commercial facilities would be processed independently, in accordance with subsection 8(p) of the OCS Lands Act." Sites originally tested by developers under the interim process would then be subject to a competitive bid process and potentially, a competitive auction.

Without some ability to build out test projects, developers will never be able to attract the private capital necessary to finance them. Investors fund new technologies such as marine renewables for one reason only: to get in on the ground floor of a potentially lucrative industry and generate a substantial return on investment. Investors have no interest in funding pure R&D; they are willing to do so only where research will lead to a commercial project.

But here, even where a technology operates successfully at a site, investors will not receive a return on their investment. This is because under the MMS proposal, the developer is required to decommission and remove the test facility. And even where the test facility operated successfully, the developer does not have the ability to capitalize on its success and build the project to commercial scale where it can sell power and begin to generate revenue. Marine renewables developers already face enough hurdles in attracting private investment for projects. The MMS policy will drive private investment away entirely.

### **C. Power Sale Option Required**

The MMS regulations do not explicitly provide that wave and tidal developers can sell power during the term of an interim lease. Many wave and tidal developers' business models rely on their ability to sell power and take advantage of the benefits that accompany power sales such as production tax credits (if allowed) and renewable energy credits (RECs). Moreover, developers would not profit from sales, but would return any revenue generated from the sales to monitor project effects and gather data.

#### **D. Streamlined Expedited Environmental Review for Test Facilities**

The MMS notice does not elaborate on the permitting requirements (if any) for siting a test facility on the OCS. For example, Section 4(f) of the OCSLA extends the Corps of Engineers authority under the Rivers and Harbors Act to issue a permit for a structure on the OCS. Will a Corp permit be required as a pre-requisite for obtaining a lease? For siting a facility? Or will the MMS process cover all necessary permits for the facility.

OREC assumes that MMS will not have jurisdiction over any transmission lines from the shore to land because these would be located on state submerged lands, off the OCS. However, MMS, to the extent possible, should coordinate with states for issuance of necessary authorizations to lay a transmission line so that project can generate and sell power.

Moreover, OREC stresses that most of these test facilities will be initially small in size, and therefore, will have negligible effects. Accordingly, any environmental review and permit requirements should be proportionate to the anticipated impact. Further, if developers are limited to a five year interim lease, any permit process must be streamlined. Developers should not be required to endure a five year, or even one year permit process for a lease that may only last for five years. To the extent that streamlined permitting is not feasible, MMS should consider extending the duration of the interim leases to compensate for time spent on permitting.

#### **E. No Applicability to Tests That Do Not Require Fixtures**

At present, many developers survey wave and tidal resources through use of equipped boats rather than mounted facilities. The MMS proposal, however suggests that

it will apply to initial resource surveys. Because MMS' authority under the Outer Continental Shelf Lands Act applies only to structures and permanent facilities on the OCS, we ask MMS to clarify that its Interim Testing proposal will likewise apply to only to tests that use fixed facilities and not to those conducted from boats or devices not permanently, or even semi-permanently affixed to the OCS. Of course, developers who wish to run preliminary tests using boats would have the option of seeking a lease to preserve rights to site a facility – but a lease would not be required for this category of preliminary tests and assessments.

**F. FERC v. MMS Jurisdictional Issues**

Right now, the ongoing dispute between FERC and MMS regarding lead agency jurisdiction on the OCS poses one of the most significant deterrents to development of wave, tidal or current projects on the OCS.<sup>5</sup> MMS' test program has the potential to conflict with certain aspects of the Federal Energy Regulatory Commission's Policy Statements, such as the Policy Statement on Preliminary Permits for Wave Tidal and Hydrokinetic Projects,<sup>6</sup> FERC's Pilot Project License Proposal (*see* White Paper at FERC Website, [www.ferc.gov](http://www.ferc.gov)) and the more recently announced Policy Statement on Conditional Licenses for Hydrokinetic Projects.<sup>7</sup> FERC's preliminary permit process allows developers to apply for preliminary permits, under which developers obtain a three year term to exclusive rights to study a site, as well as priority in the subsequent

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<sup>5</sup> Wind developers are not affected by the conflict since they are not subject to FERC permitting regulation under Part I of the Federal Power Act.

<sup>6</sup> Docket No. RM07-08 (February 15, 2007).

<sup>7</sup> 121 FERC ¶ 61,221 (November 30, 2007).

license application process. And the Pilot License Process would result in a streamlined pilot license application for demonstration projects. FERC is still considering comments on its pilot license proposal, including whether developers can build out a project beyond the original description in the pilot license following a successful demonstration run.

Now, MMS has also proposed an interim testing policy as well. The MMS policy may clash with the FERC process, since FERC may allow build out of facilities, whereas the MMS policy as proposed does not. The FERC's rules governing selection also differ from MMS; FERC generally resolves competition between applicants either on the merits of the proposals, or, if the proposals are essentially equal, FERC breaks the tie with a preference for the first filed application. By contrast, the MMS policy refers to a competitive auction to resolve disputes.

Developers need certainty as to which agency's rules will apply before they will take the risk of moving forward with a test facility. OREC urges MMS and FERC to resolve this dispute and clarify which agency has jurisdiction and what rules apply.

### **III. RESPONSE TO SPECIFIC QUESTIONS**

#### **A. Collaboration or Joint Ventures**

OREC members would consider the possibility of collaboration or joint ventures, depending upon the specifics of the arrangements. In the past, many developers have collaborated and exchanged information on monitoring protocols, project impacts and technology components. And in the FERC process, several developers have resolved competition for access to a site through their own private agreements.

Any collaboration or joint ventures must come through the initiative of developers, however. OREC would not advocate a process where developers that do not wish to collaborate are nonetheless forced to co-exist at sites.

### **B. Appropriate Lease Term**

A five year lease term is an appropriate starting point for an initial lease term, so long as there are opportunities to extend the lease, where, for example, delays are caused by a developer's inability to obtain necessary authorizations from other participating agencies (*e.g.*, where a developer seeks to lay a transmission line to shore). MMS should also monitor developers' progress under a lease term to avoid the possibility of site banking. Specifically, MMS should require developers to demonstrate reasonable evidence of progress and should have authority to revoke a lease where a developer sits on its rights to advance a project. OREC will comment on this matter further in our comments on MMS' recently issued Proposed Draft Lease (comments due February 12, 2008).

### **C. Appropriate Rental Rate**

Ideally, OREC does not believe that a rental rate of any kind is appropriate for test projects. Marine renewables developers already spend thousands of private dollars to develop new energy technologies that benefit the entire nation by helping to achieve energy independence, reduce greenhouse gas emissions and build an offshore renewable energy industry that will create jobs and economic growth. And because most new test technologies will not generate any profit for many years, rental payments present an added financial burden.

Moreover, MMS' current \$3/acre annual leasing fee will prove burdensome to

marine energy developers, particularly if MMS allocates leases through its designated numbered block system. The designated blocks measure 2.5 x 2.5 miles, or a total rental charge of \$12,000 annually (2.5 x 2.5 x 640 acres/mile x \$3/acre). Because of the nascent state of the marine renewables industry, developers lack the ability to self-fund test facilities or to attract venture capital. As a result, an added \$12,000 annual rental fee (and possibly more depending upon whether developers would need an added block) will present a significant deterrent to development of test facilities.

Initially developers may need to reserve several blocks to identify optimal locations for projects. However, once an optimal area is identified, developers' actual acreage needs will be limited. For example, according to the recent Finavera license issued by FERC,<sup>8</sup> the proposed 1 MW, 4 buoy Makah Bay Project will occupy 28.3 acres of land. If a developer only requires a small plot, will it be required to lease, and pay for a large tract? MMS should provide additional clarification here as well.

#### **D. Amount of Acreage Required**

Marine energy developers' needs will vary with respect to acreage required for test facilities. As mentioned earlier, Finavera's four buoy, Makah Bay Pilot Project will occupy a scant 28.3 acres. But likely, most projects will require more acreage for testing purposes. Among other things, developers may first need to conduct additional site-specific wave resource assessments and seismological studies to identify the optimal site for the project. Thus, a developer may seek a larger area at the outset, and narrow the project's footprint based on emergence of test results. MMS should not impose strict

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<sup>8</sup> *Finavera*, 121 FERC ¶ 61,288 (2007).

limits on acreage available for testing, but instead, should allow developers to request a certain amount of acreage, along with a justification of the amount selected.

#### **E. Definition of Technology Testing**

At this point, only two shore based, commercial wave projects (on Isle of Islay in Scotland and Azores in Portugal) are in operation. No offshore commercial wave projects are in existence, though two projects have been proposed for Spain (through an arrangement with OPT and Iberdola) and Portugal (by Pelamis Wave Energy Company, formerly OPD). Even the one MW Makah Pilot Project is described as a demonstration project in the recently issued FERC demonstration license, though it will sell power to the local municipal utility.

Given the nascent state of the wave and tidal industry, OREC believes that *all* wave and tidal projects sited on the OCS fall within the demonstration of “technology testing activities.” The first generation of wave, tidal and current projects will provide important data on environmental affects, navigation, materials durability and operational efficiency. Based on this data, developers can modify and improve project design to optimize energy production and minimize any adverse affects.

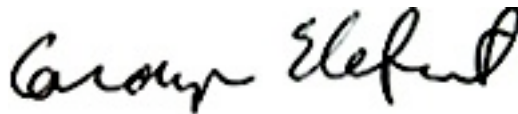
OREC urges MMS to reject any definition of “technology testing” that would exclude a marine renewables project that connects to the power grid and makes commercial power. Among other things, both developers and their utility-customers require an opportunity to evaluate how wave, tidal or current power will interact with a utility’s power system -. As discussed earlier, grid connection offers the only way to determine how marine renewables will perform in a real-world environment and how they will be integrated into a utility’s power system. Moreover, revenue from power

sales could help companies self-fund continued studies and monitoring during the test period. To the extent that it is able, MMS should coordinate with states and do what it can to enable developers to lay transmission lines to carry power from marine renewables to shore.

#### IV. CONCLUSION

OREC appreciates the time, effort and resources that MMS has devoted to the process of implementing its new authority under Section 388 of the Energy Policy Act of 2005 to issue leases for alternative energy on the OCS. ORC is committed to working with MMS to put in place a policy that will help move the marine renewables industry to commercialization without compromising the environment or other ocean uses.

Respectfully submitted,



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