



Pacific Fishery Management Council

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Dorothy M. Lowman, Chair | Donald O. McIsaac, Executive Director

July 8, 2014

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission (FERC)
888 First Street, NE
Washington, D.C. 20426
<http://www.ferc.gov/docs-filing/efiling.asp>

Belinda Batten
Oregon State University
350 Batcheller Hall, Corvallis, OR 97331
Belinda.Batten@oregonstate.edu

Re: [Docket No. P-14616] Pacific Marine Energy Center South Energy Test Site Project

Dear Ms. Bose and Ms. Batten:

The Pacific Fishery Management Council (Council) has an interest in commenting on the proposal by Oregon State University's Northwest National Renewable Energy Center to build a grid-connected offshore wave energy test site, known as the Pacific Marine Energy Center South Energy Test Site (PMEC-SETS), and located approximately six nautical miles southwest of Newport, Oregon. The Council is particularly interested in actions that could have negative consequences for essential fish habitat (EFH) of Council-managed species.

As this proposal is the first offshore wave energy site to test connectivity to the electric utility grid via subsea transmission cable and therefore sets a precedent for all future projects, the cable route and its placement must be considered during project siting, scoping, impact assessment, and permitting. To our knowledge, this important aspect of the PMEC-SETS project is not well-addressed in the proponent's Preliminary Application Document (PAD) or Scoping Document 1 (SD1). The cable route of the PMEC-SETS project is of greatest concern to the Council and the focus of this letter. Additionally we offer comments from the wider perspective of strategic coastal and marine spatial planning at the regional scale.

To put our interests into context, the Council is one of eight Regional Fishery Management Councils established by the Magnuson-Stevens Fishery Conservation and Management Act (MSA), and recommends management actions for Federal fisheries off Washington, Oregon, and California. The MSA includes provisions to identify, conserve, and enhance EFH for species managed under a Council's fishery management plan. Each Council is authorized under the MSA to comment on any Federal or state activity that may affect the habitat, including EFH, of a fishery resource under its authority.

The MSA defines EFH as “those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity.” Within the broader EFH designation, specific types or areas of habitat may be designated as habitat areas of particular concern (HAPCs). HAPCs are high priority areas for conservation, management, and research because they are rare, sensitive, stressed by development, or important to ecosystem function. The HAPC designation helps to prioritize and focus conservation efforts. Rocky reefs, estuaries, canopy kelp, seagrass, and a number of unique geological structures such as seamounts and canyons are designated as HAPCs for Council-managed groundfish species.¹

As proposed, the P MEC-SETS is to be located approximately six nautical miles offshore of South Beach, Oregon, about 1.5 miles seaward of a large rocky reef, known locally as Seal Rock Reef. The reef is comprised of two massive (12 square miles) contiguous rocky benches with striking parallel high-relief bedrock ridges. The two rock benches are separated by a 200-400 m wide ancient riverbed channel running perpendicular to shore. The reef complex is a unique formation on the central Oregon coast, and supports an abundance of nearshore rocky reef species. Visual observation surveys have demonstrated that rocky reef fish species often aggregate along habitat interfaces, such as the large interface created by the ancient riverbed channel and rocky bench. Seal Rock Reef supports the highest fishing effort in the recreational groundfish fishery in Oregon (ODFW, Ocean Recreational Boat Survey data). This fishery has been Oregon’s largest recreational fishery since the mid-1990s.

While options are still being considered for routing the transmission cable to shore, the Council is concerned with any option that intersects the rocky reef environment. The PAD identified three potential cable routes, two of which would be installed in an ancient river channel that runs through the center of Seal Rock Reef (with one of these also engaging the shoreward edge of the reef). The PAD proposes that these two cable routes would “bypass rock” (implying no impact to the reef) because the cable would be installed in the channel, however, the channel is part of this reef environment and fish species are known to aggregate along habitat interfaces. Trenching and other cable-related issues may have negative consequences to reef habitats and associated species. The third route (i.e., the “Driftwood” route), would pass around the southern end of an area of Seal Rock Reef; however, no high-resolution data are available for this nearshore area and it is not known if other rocky habitat occurs along the route. The Council strongly recommends that the project use this southern cable route option because it avoids the reef entirely and removes all risk to the reef.

The Council’s concerns are for both short- and long-term impacts, such as the direct destruction of habitat features, disturbance of species during construction and subsequent cable maintenance, scouring and plume caused by seafloor trenching and transmission cable burial, electromagnetic fields emitted by the cable during transmission, changes in bottom currents and wave energy on marine habitats, physical vibration generated by subterranean drilling in shallow waters, project noise/vibration altering the behavior of Council-managed fishes, and potential restrictions imposed on fishing.

¹ Likewise, the state of Oregon also considers many of these features as habitats of particular ecological importance which are classified as Conservation Areas under Oregon’s Statewide Planning Goal, Goal 19.

Authorizing such actions with unknown consequence in habitats formally designated as sensitive and valuable sets a precedent that is incompatible with the conservation goals of EFH/HAPC designation and undermines Council actions to protect groundfish EFH from fishing and non-fishing activities. Rocky reef habitats are a finite resource, comprising less than 10 percent of Oregon's nearshore environment. The Council urges FERC to adopt a precautionary approach in this regard by establishing "no development" buffer zones encompassing rocky reef, canopy kelp, and seagrass HAPCs for both wave energy infrastructure lease sites and transmission cable routes.

If FERC does not require that the applicant avoid rocky reef HAPC, in particular Seal Rock Reef by using the southern route, the Council strongly recommends that FERC require that the Environmental Assessment include focused studies (noting the concerns mentioned above) to determine the effects of installing and operating transmission cables in a rocky reef environment and on associated fish species. The studies should emphasize the effects on electromagnetic frequency- (EMF) sensing species that transit the lease area and reef. This would include gathering adequate baseline data on the distribution and relative abundance of fish species and habitats in the vicinity of the cable routes to support impact studies. Additionally, socio-economic analyses should be conducted for the cable routes as well as the test site. Listed below are research questions for EMF impacts that the Council provided in response to the Department of Energy's request for research topics from offshore energy impacts, and are applicable to the PMEC-SETS Project (letter attached, May 2013).

Electromagnetic Frequency (EMF) Questions

- What EMF signatures (frequency and amplitude) from cables or other project components are emitted and possibly sensed by federally-managed fish species and their prey (particularly elasmobranchs, salmonids, and other electro-sensitive species (e.g., sturgeon) during construction? During operation? And at what spatial distances?
- How can EMF signals be dampened to minimize detection by, and responses from, these fish species?
- In addition to behavioral responses of fishes to EMF emissions, what are their physiological responses (e.g., injury, stress responses)? What are the broader consequences that should be measured (e.g., increased exposure to predation, effects on prey base)?

In the Council's recent letter (April 2014) to Bureau of Ocean Energy Management (BOEM) regarding the PMEC-SETS lease, we suggested that from the broader perspective of marine spatial planning and future energy development within the California Current Ecosystem, BOEM should embrace the science-based approach of National Oceanic and Atmospheric Administration's Coastal and Marine Spatial Planning process guided by the President's National Ocean Policy Implementation Plan. The Council strongly urges FERC do so as well. Currently, the approach for ocean energy siting in Federal waters is dependent on developer/project-initiated interest in a location. In contrast, we suggest an approach that prioritizes areas for development at the regional scale, and prior to soliciting interest from developers. This approach

would be consistent with the nation's spatial planning standard that would take into account multiple coastal and marine ecological resources (including important fish habitats), ocean uses, and oceanographic conditions. Ideally, BOEM and FERC would conduct such a coastwide spatial analysis planning effort *prior to* the proposal process of site selection and leasing.

The Council is very interested to stay abreast of the PMEC-SETS project as it develops and will provide additional comments as opportunities arise. Please note that the Council's meeting schedule and opportunities for its advisory bodies to inform the Council do not necessarily align with public comment periods of other public processes. Please accommodate our Council meetings when you design public comment periods (see [link](#)), to the extent practicable. We appreciate your consideration of our comments if issues should arise outside the public comment window.

We look forward to assisting FERC and the Northwest National Marine Renewable Energy Center in finding development options that avoid and minimize impacts to important ecological and fisheries resources and in achieving the long-term goal of responsible development of this new and promising industry.

Thank you for considering our comments.



D. O. McIsaac, Ph.D.
Executive Director

JDG:kma

cc: Council Members
Habitat Committee Members



Pacific Fishery Management Council

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Dan Wolford, Chairman | Donald O. McIsaac, Executive Director

May 1, 2013

Bureau of Ocean Energy Management
1849 C Street, NW
Washington, D.C. 20240

SUBJECT: Researching the Environmental Effects of Offshore Wind at the First U.S. Facilities (Pacific Fishery Management Council)

To Whom it May Concern:

The Pacific Fishery Management Council (Council) welcomes the opportunity to provide comments on the environmental effects of offshore wind as part of your Request for Information DE-FOA-0000911-Environmental Research and Observations at the First U.S. Offshore Wind Facilities. As you may know, the Council is one of eight regional fishery management councils established by the Magnuson-Stevens Fishery Conservation and Management Act of 1976 (MSA), and recommends management actions for Federal fisheries off Washington, Oregon, and California. The MSA includes provisions to identify, conserve, and enhance essential fish habitat (EFH) for species regulated under a Council fisheries management plan. Each council is authorized under MSA to comment on any Federal or state activity that may affect the habitat, including EFH, of a fishery resource under its authority.

The environment impact of offshore wind development is very important to the Council. However, given the Council's meeting schedule, we will not be able to provide comments to Bureau of Ocean Energy Management (BOEM) by the May 30 deadline. Therefore, we request that either the deadline be extended 45 days to allow for development of comments at our June 20-25 meeting, or that BOEM accept comments from the Council after the deadline has passed.

We look forward to working with you in the future.

Sincerely,

A handwritten signature in blue ink, appearing to read "Donald McIsaac", with a long horizontal flourish extending to the right.

Donald McIsaac
Executive Director

JDG: kam

Cc: Council Members
Habitat Committee Members