

# SANCTUARY ADVISORY COUNCIL



**Dr. Terrie Klinger, Chair**  
**Bob Bohlman, Vice-Chair**  
**Martha Hurd, Secretary**

March 22, 2007

## *Representation*

*Citizen-At-Large*  
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*Commercial Fishing*  
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*Washington State:*  
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*Dept. of Fish and Wildlife*  
*Dept. of Natural Resources*  
*Olympic National Park*  
*U.S. Fish and Wildlife Service*  
*NOAA Fisheries*  
*U.S. Coast Guard*  
*U.S. Navy*  
*Northwest Straits Commission*

*Artwork: David Sones*

Carol Bernthal, Superintendent  
Olympic Coast National Marine Sanctuary  
115 East Railroad Ave, Suite 301  
Port Angeles, WA 98362

Re: Comments on AquaEnergy Group, Ltd. License Application  
for the Makah Bay Offshore Wave Energy Pilot Project Project No.  
12751-000

Dear Ms. Bernthal,

At the March 16<sup>th</sup>, 2007 meeting of the Olympic Coast National Marine Sanctuary Advisory Council (council), a quorum of members unanimously adopted the following comments on the Preliminary Draft Environmental Assessment (PDEA) of AquaEnergy's Makah Bay Offshore Wave Energy Pilot Project (project) and request that you forward these comments to the Federal Energy Regulatory Commission (FERC) as part of its considerations of the AquaEnergy FERC license application.

The comments were developed by a working group created by the council at the November, 2006 meeting. The council agreed with the guidance provided by the working group that the comments are specific to the pilot project and that the impacts considered were limited to the four buoy proposal as outlined in the PDEA.

After weighing the small scale of the project, the considerations for an economically successful outcome, and the potential for unforeseen environmental impacts given the novel design of the project, the council agrees with the working group that recommendations for monitoring become extremely important if the project is licensed.

**OLYMPIC COAST NATIONAL MARINE SANCTUARY**  
115 East Railroad Ave., Suite 301 Port Angeles, WA 98362  
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<http://ocnms.nos.noaa.gov/>

In light of this, the council adopts the working group recommendations for the AquaEnergy PDEA as follows

**Resource monitoring and assessment:**

A comprehensive monitoring plan should be developed. The plan should be flexible enough to allow for varying schedules for the many parameters that require monitoring. The council agreed with the conclusion that 2 to 5 visits per year to the buoys, as described in the PDEA, is insufficient and recommends the following:

- 1) Visits to the buoys at intervals of no more than every sixty days.
- 2) Monitor the anchoring system, hub cables and transmission cable by Remotely Operated Vehicle (ROV) or SCUBA diver to assess project integrity as well as potential entanglement of fishing gear or marine mammals.
- 3) Initial monitoring for both atmospheric and aquatic noise following project deployment.
- 4) Conduct an initial baseline survey of the project area benthos, water column and surface organisms (crabs, finfish, marine mammals, seabirds, and species listed under Endangered Species Act (ESA) to establish pre-project conditions. Follow this up with an identical survey intermediate in the project timeline as well as at project completion. If a permitting agency has jurisdiction to require this type of survey, the council would like to encourage the agency to do so.
- 5) As this area is utilized by gray whales as well as other marine mammals, the project should monitor marine mammal activities in the project area.
- 6) Provide in the PDEA a more comprehensive summary of research on the effects of direct current electro-magnetism. If impacts of this project on biota are uncertain, then monitor, record and report the electromagnetic field strength at various distances from the transmission cables to a distance where levels are below detection. If this is not possible, then completion of item 4 (above) is imperative.
- 7) A map depicting marine habitats of the area should be provided. as part of the PDEA.
- 8) More information is required to analyze potential water quality impacts of horizontal direct drilling, including potential exchange of lubricant water and flushing of the system.
- 9) The project proposes to lay the transmission cable on the surface of the seafloor. The PDEA should include an analysis of impacts from the surface laid method and the impacts of transmission cable burial and removal at the end of the project. Both alternatives (surface laid and burial) should be discussed.

**Safety:**

Exploring a temporary (life of project) exclusion zone within the project footprint with tribal and non-tribal fishermen, and other potential users of the area is recommended. Surface buoys or floats should be installed to mark the extreme corners of the project. This zone could potentially benefit the project, fishermen, and natural resources in the project vicinity.

**Engineering:**

More information is needed on the area to be occupied by the project. The buoy moorings, anchoring as well as the transmission cable physical features should be described and represented on a navigation chart of the area. The PDEA needs to clearly distinguish between the different types of cables: buoy anchor mooring system, the inter-buoy hub cables and the transmission cable to shore.

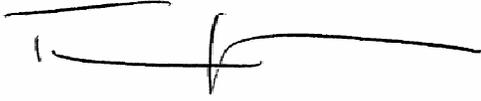
**Administrative:**

In all instances where other authorities have jurisdiction to impose certain project conditions that would bind the project to more certainty, (such as monitoring plans, specific project timelines, project removal upon completion, requirement for a bond to ensure the ability to remove the project) the council would like to encourage those authorities to use those conditions.

- 1) Clear information should be provided about AquaEnergy's planned project duration and intentions at the end of the project.
- 2) Repeated reference to communications with Steve Jeffries, Washington Department of Fish and Wildlife, should be replaced with more formal analysis and consultation on marine mammal impacts. At a minimum the monitoring of gray whale migration in the project area should be undertaken. The migration corridor off Washington State has not been characterized well by monitoring, which could be conducted before project deployment but definitely while the project is in place. Migration data will provide information to support risk analysis for entanglement and other management concerns, including the potential impacts of a larger scale project. A large number of gray whales migrate past Makah Bay and a much smaller number use the area during the summer, so entanglement during migration is of greater concern.
- 3) The project proponents should consider funding a standing committee dedicated to continued open dialog focused on this type of project. If this pilot project is successful and further development of this technology is in our future, a committee consisting of fishermen, tribes and other stakeholders would help educate area users and project proponents of potential impacts (reduced fishing areas, enhanced aids to navigation etc.).

The advisory council is an advisory body only. The opinions and findings of this publication do not necessarily reflect the position of the Olympic Coast National Marine Sanctuary and the National Oceanic and Atmospheric Administration.

Sincerely,

A handwritten signature in black ink, appearing to read 'Terrie Klinger', with a long horizontal stroke extending to the right.

Terrie Klinger, Chair  
Olympic Coast National Marine Sanctuary Advisory Council

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