

**Memorandum**

TO:	California Energy Commission Dockets Office, MS-4 1516 Ninth Street Sacramento, CA 95814-5512
FROM:	Dallas Meggitt Sound & Sea Technology
DATE:	2 October 2012
SUBJECT:	Docket No. 12-EPIC-01 – Marine Renewable Resources

1. On behalf of Sound & Sea Technology (SST), I am writing to comment on the Electric Program Investment Charge Proposed 2012-2014 Triennial Investment Plan.
Our organization is involved with marine energy technologies on several levels. We are an ocean engineering consulting firm providing support to developers in marine hydro-kinetic (MHK) and offshore wind technology areas. We specialized in seafloor engineering, anchor and mooring analysis and design, hydrodynamic analysis, corrosion engineering, OA/OC support for fabrication, and offshore deployment/installation management and testing for renewable ocean energy devices.

We appreciate the inclusion within the Triennial Investment Plan of ocean wave energy and offshore wind energy, and support full funding for Strategic Objectives as stated: *S4 - Develop Emerging Utility-Scale Renewable Energy Generation Technologies and Strategies to increase power plant performance, reduce cost and expand the resource base; S4.4 – Proposed Funding Initiative – Investigate the Economic, Environmental and Technical Barriers to Offshore Wind in California; and S4.5 – Proposed Funding Initiative - Investigate the Economic, Environmental and Technical Barriers to Wave Energy Conversion in California.*

2. Along with many of our marine energy organizations, universities and research laboratories, we also fully support the funding for *S5.3 – Proposed Funding Initiative – Develop*

Analytical Tools and Technologies to Reduce Energy Stresses on Aquatic Resources and Improve Water-Energy Management. In this regard, the University of California and California State University systems have more than ten major coastal research facilities which can be utilized to support this research, including the planned City Dock #1 facility and wave tank at the Port of Los Angeles.

3. We particularly support the establishment of testing facilities for wave and offshore wind projects: *S10.2 – Proposed Funding Initiative – Support Demonstration Testing and Verification Centers to Accelerate the Deployment of Pre-Commercial Clean Energy Technologies* (page 104). Several other U.S. states, such as Oregon and Hawaii, already have such testing facilities in place, and the marine renewables industry is being drawn to those states for technology commercialization and manufacturing. Such facilities must be established in California in order for the state to be competitive in this major emerging industry. EPIC program funding levels should be programmed as an appropriate match for that of the U.S. Department of Energy, which is considering a major offshore wind project at Point Conception.
4. We are pleased that the U.S. Department of Defense is referenced as a participating organization in the EPIC program, (page 107) which has an ambitious renewable energy goal system-wide, including for ocean wave energy production. They are extremely supportive of the marine renewable sector, and have always been an active participant in our industry organization, the Ocean Renewable Energy Council (OREC).

We also support specific to military facilities, which require a high level of energy independence as a matter of homeland security, *S13.2 – Proposed Funding Initiative – Demonstrate Renewable Energy-Based Microgrids Capable of Sharing Resources Across the Larger Power Grid* would certainly be applicable for wave energy projects at California coastal military facilities, which are located in the high wave/wind areas of Monterey, Point Conception, Ventura, Seal Beach, San Nicolas Island, San Clemente Island, Camp Pendleton and San Diego.

The U.S. Navy's Naval Facilities Engineering Command (NAVFAC) Engineering Service Center at Port Hueneme, California, is also the primary ocean energy research center for the U.S. Navy worldwide. Their Hawaii Wave Energy Test Site (WETS), located at U.S. Marine Corps Base Hawaii, and managed in association with the U.S. Department of Energy Efficiency and Renewable Energy (EERE) is one of several highly successful models for marine energy demonstration facilities in California.

The Navy also has a strong relationship with the California Energy Commission, which discussed its joint biofuels programs with the Navy at Port Hueneme in a July 2012 CEC Press Release. This program should certainly be expanded to encompass wave energy and offshore wind.

5. We support the suggestion of an Advisory Group involving the marine energy sector, (Page 165), and feel that the Ocean Renewable Energy Council would be the correct organization to oversee the formation and management of this Advisory Group. This Advisory Group can be beneficial in support of *S.14 Strategic Objective under Market Facilitation, "Collaborate with Local Jurisdictions and Stakeholder Groups, etc.)* – (page 132).

Such coordination is an extremely important element in the success of wave energy and offshore wind projects. Such projects face complex multi-agency permitting jurisdictions and other challenges, which are both time consuming and expensive for individual technology companies to surmount. An Advisory Group with funding to assist on a project-by-project basis could significantly reduce permitting time for these projects and also help to convey a unified message to all stakeholders regarding these emerging sources of renewable energy.

6. An OREC-led marine renewable energy group will also help to further the implementation of *S.15 Strategic Objective – Strengthen the Clean Energy Workforce*" (page 143) by working closely with the California Community Colleges Centers for Applied Competitive Technologies (CACT) and other key programs of the Community Colleges. We will also actively participate throughout California in the establishment of *Innovation Clusters*, which have been identified as a priority under EPIC (Page 102). The Community Colleges and their workforce training programs are well located in each coastal innovation cluster for this purpose. For example, the Ventura and Santa Barbara areas are likely locations of U.S. Department of Energy offshore wind projects and the four Community Colleges – Santa Barbara, Ventura, Oxnard and Moorpark, would be available to support the growth of the emerging technology and industry in that area.
7. Please do not hesitate to contact me for support or further involvement in this vital program for our marine renewables industry.

Sincerely,

Dallas Meggitt
Sound & Sea Technology