

**CALIFORNIA STATE UNIVERSITY, STANISLAUS**

PHYSICS, PHYSICAL SCIENCES, GEOLOGY

August 17, 2012

California Energy Commission  
Dockets Office, MS-4  
1516 Ninth Street  
Sacramento, CA 95814-5512

**Re: Docket No. 12-EPIC-01**

On behalf of California State University Stanislaus (CSUS) I am pleased to submit comments to the California Energy Commission on the development of the First Triennial Investment Plan for the Electric Program Investment Charge (EPIC) Program. CSUS applauds California's leadership in the development of clean energy technologies and approaches and believes the State can lead the way for clean energy strategies nationwide.

The California State University (CSU) is one of the largest, most diverse public university systems in the world. With 23 campuses and seven marine laboratories spanning the entire state of California, the CSU is uniquely positioned to support the development of marine and hydrokinetic (MHK) technology and the evaluation of its performance and environmental impacts. In 2008 the CSU established the Council on Ocean Affairs, Science and Technology (COAST), as the system-wide organization to integrate CSU marine resources and promote interdisciplinary multi-campus collaborations to advance our knowledge of California's natural coastal and marine resources and the processes that affect them. COAST provides a single point of access through which stakeholders can access the myriad resources of the entire CSU.

Much of the infrastructure necessary to carry out the vision of marine renewable energy projects is non-existent. This initiative provides an opportunity to reinvest in a re-invented waterfront, providing multi-use facilities, not only for the development and testing of MHK technologies, but for the development of the science necessary to understand the impacts of these systems, while training and educating a workforce capable of managing this new technology.

The CSU can play a vital role in the key phases of applied research, technology demonstration and deployment of marine renewable energy projects, and training and education of the future workforce. We envision the CSU's seven waterfront facilities as home to a series of robust marine renewable energy innovation clusters in which industry, government and universities collaboratively develop and test new MHK technologies. The CSU houses a wealth of intellectual expertise that can inform technological development and extensive infrastructure to support both laboratory and field-based testing. Our scientists have unparalleled knowledge of the biology, geology and physics of California's coastal ocean that can help inform all stages of development from R&D to technical validation in the

field. Our marine labs have piers, docks and oceanfront property for immediate water access, as well as vessels ranging from intermediate to large for offshore access, including transportation of large pieces of equipment. With sufficient funding, we can create “plug-and-play” facilities in a variety of wave, tidal and physical environments with all the necessary components for developers to test their prototypes *in-situ*. The clusters could work with industry and the regulators to facilitate the permitting process, allowing the developers to focus primarily on the science and technology. Only in this type of rich, collaborative, supportive environment will real progress be made toward MHK technologies that can support California’s clean energy goals. CSU is ready to help the State realize its clean energy goals.

The CSU is also uniquely positioned to support workforce development in clean energy technology. The CSU is the largest, most diverse and most affordable university and the largest baccalaureate degree-granting institution in the country. The CSU graduates almost 100,000 students annually who go on to live and work in California and throughout the nation. In fact, ten percent of California’s workforce is made up of CSU graduates. Involvement of both undergraduate and graduate students in the development of MHK technologies and its integration into California’s energy vision will ensure a highly skilled future workforce capable of addressing complex challenges and ensuring the sustainability of our way of life for generations to come.

In closing, the CSU is uniquely positioned to provide the intellectual expertise, infrastructure and workforce base necessary to support and advance the development of MHK technology in California. Through COAST, the California State University is committed to forging strong partnerships to develop innovative and sustainable solutions to the challenges we currently face. We look forward to working with the CEC to develop further the concepts outlined here.

Thank you for the opportunity of submitting these comments to the CEC.

Sincerely,

Prof. Horacio Ferriz, PhD  
Professor of Physical Oceanography