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Market Announcements Platform  
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### **STONEHENGE JOINS MAJOR CALIFORNIAN OCEAN ENERGY TEAM FOR INVITED U.S. DEPT. OF ENERGY FUNDING APPLICATION**

- Stonehenge to join world leading Wave Energy team - California Polytechnic University (**Cal Poly**)
- The Cal Poly Team is invited by the Dept. of Energy to apply for a potential \$US 1.5m award
- The funding is to support the next phase of the CalWave initiative which is already funded by the DOE
- The affiliation with Cal Poly introduces and raises awareness of Stonehenge and Protean to the major proponents of wave energy in California in a leadership position.

Stonehenge Metals Limited (**Stonehenge**, or the **Company**) advises that the Company has been asked to join the California Polytechnic University at San Luis Obispo (**Cal Poly**) team to support their application for a US\$1.5m award offered by the U.S. Department of Energy (**DOE**).

The **Cal Poly** team has answered a specific request by the **DOE** for an application responding to its letter, "Pending Fiscal Year 2015 DOE funding for Cal Poly Corporation, Project Titled: California Wave Energy Test Center (**CalWave**), Award Number: DE-EE0006S17 for a potential \$US 1.5 million award."

This US\$1.5m award is targeted by DOE to support the next phase of the CalWave initiative which has to date been funded by the DOE through an initial US\$750,000 funding award. Other members of the CalWave team include: Pacific Gas & Electric (**PG&E**) – California's largest power utility, Vandenberg Air Force Base – purchaser of wave test centre generated power and the California Natural Resources Agency – a cabinet-level policy and regulatory body of the State of California.

Stonehenge is positioned to serve as a contributing wave energy converter technology proponent on the team. To that end, Stonehenge has provided a Letter of Commitment to Cal Poly for the contributed management advisory services of the President of its US subsidiary (Protean Wave Energy Inc.), Mr. William Toman, as in-kind cost share supporting this potential award over a period of 12 months from the time of the award and subject to any regulatory requirements placed on Stonehenge.

Stonehenge MD, Bruce Lane said: *"We are delighted to be included in the CalWave team and to get the chance to work alongside some of California's leading institutions. This is a unique opportunity for Stonehenge, backed by Sean Moore and the Protean wave energy converter technology, to take up a technology leadership position with a top tier team operating at the forefront of wave energy development in the US."*

For further information see [www.stonehengemetals.com.au](http://www.stonehengemetals.com.au), [www.proteanwaveenergy.com.au](http://www.proteanwaveenergy.com.au) or contact:

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## ABOUT CALWAVE

CalWave is one of a number of projects created under the auspices of the [Institute for Advanced Technology and Public Policy](#) (IATPP) at California Polytechnic University at San Luis Obispo (**Cal Poly**). The mission of the Institute is to develop and promote practical solutions to real-world problems by informing and driving public policy through advanced technology. Interdisciplinary teams of students, faculty, industry leaders, State and Federal governments and policy experts adept at removing barriers apply technology to craft practical yet transformative solutions ripe for implementation.

The CalWave project was originally created partly in response to the U.S. Department of Energy's (DOE) indication of its intention to accelerate the development of wave-energy technologies in the United States and to construct a world-class National Wave Energy Testing Facility where technology manufacturers can pilot their devices in a true commercial, grid connected marine setting. In June 2014, Cal Poly's IATPP received a \$750,000 grant (**CalWave**) from DOE to assess the feasibility of siting the planned National Wave Energy Test Facility in California. A map of the CalWave Feasibility Study project area showing five candidate sites can be accessed [here](#).

As part of the Feasibility Study, the project team is assessing preliminary facility design, determining the environmental studies and permitting requirements, and developing a public stakeholder engagement plan for project implementation, in anticipation of the next phase being funded by DOE.

The CalWave grant awarded to IATPP at Cal Poly, combined with other cost share matching funds, is being used to estimate the costs, schedule and stakeholder impacts related to the development, construction and operation of the National Wave Energy Testing Facility.

The DOE has now requested that Cal Poly apply for a further non-competitive funding round of US\$1.5m to extend the CalWave project for another 12 months.

### **The CalWave leadership team includes:**

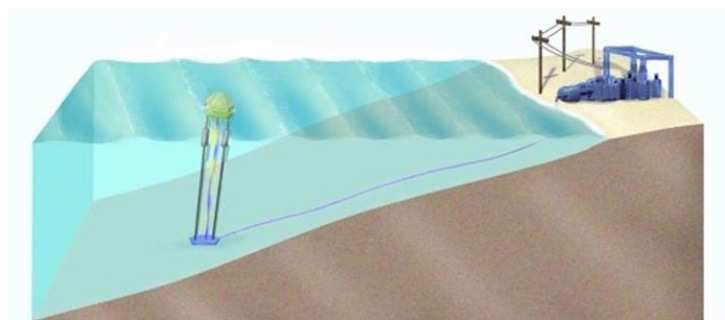
- Honorable Dr. Sam Blakeslee, Project Director, Founding Director of IATPP, Former California State Senator and Assemblyman.
- William Toman, Project Manager, President of Stonehenge's US subsidiary, Protean Wave Energy Inc. and seconded to IATPP
- Dr. Dean Wendt, Faculty Scholar, Dean of Research & Director of the Center for Coastal Marine Sciences at Cal Poly.
- Dr. Dale Dolan, Faculty Scholar, Hood Associate Professor of Electrical Engineering at Cal Poly.
- Honorable George P. Schultz, IATPP Advisor, U.S. Secretary of State (former).
- Honorable Gavin Newsom, IATPP Advisor, California Lieutenant Governor.
- Mike Florio, IATPP Advisor, California Public Utilities Commissioner.
- Carl Guardino, IATPP Advisor, President and CEO of Silicon Valley Leadership Group.
- James Boyd, IATPP Advisor, California Energy Commissioner (former).
- Dian Grueneich, IATPP Advisor, California Public Utilities Commissioner (former).
- Delaney Hunter, IATPP Advisor, Director of Governmental Affairs, California Public Utilities Commission (former).

## ABOUT THE PROTEAN WAVE ENERGY CONVERTER (WEC) TECHNOLOGY



Stonehenge has entered into an option agreement to purchase the Protean WEC technology. The Protean WEC system is based upon a point-absorber wave energy converter buoy device which floats at the water surface and extracts energy from the waves by the extension and retraction of a tether to its anchoring weight on the seabed. The device is unique in that it optimises the conversion of energy from waves at the surface through **all six degrees of wave movement**.

**Figure 1:**  
Protean WEC  
technology



The Protean WEC has been developed to use compact architecture to produce power from a small, low cost, scalable design targeted at keeping the projected levelised cost of energy (LCOE)<sup>1</sup> down. The Protean WEC has been designed to be cost competitive to manufacture, deploy, maintain and retrieve. The future plans for the Protean WEC include the deployment of a pre-commercial demonstration of a dynamic, configurable and scalable power array prior to moving the technology into early commercialisation. During the Option period the Stonehenge assessment program aims to:

1. **Refine** the tried and proven scale device to produce a suitable pre-commercial model;
2. **Create** a scalable power array so as to provide the power requirements of a prospective customer;
3. **Test** the scalable power array for its potential to deliver cost effective power,
4. **Verify** the results, including commissioning of an independent expert to qualify the testing results; and
5. **Commence** commercialisation of the scalable array for small to medium customers.

### Protean Wave Energy Converter (WEC) Design, Fabrication and Deployment

<b>PAST</b> <b>Successfully Tested Prototype</b>	<b>PRESENT AND FUTURE</b> <b>Deploy Demonstration Wave Farm</b>
	 <a href="http://proteanwaveenergy.com.au/technical/">http://proteanwaveenergy.com.au/technical/</a>
<ul style="list-style-type: none"> <li>➤ 1.5m wide proof-of-concept device successfully tested.</li> <li>➤ Device operation validated in varied depths and sea states.</li> <li>➤ Design principles independently verified from test results.</li> <li>➤ Simple patented deployment system demonstrated.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Identify and secure deployment sites and customers.</li> <li>➤ Deploy 1m wide "proof of commercial applicability" unit.</li> <li>➤ Demonstrate key design improvements.</li> <li>➤ Deploy an array (farm) of Protean WEC devices.</li> <li>➤ Confirm Protean as scalable power/water solution.</li> </ul>

For further information visit: [www.proteanwaveenergy.com.au](http://www.proteanwaveenergy.com.au) or [www.stonehengemetals.com.au](http://www.stonehengemetals.com.au)

<sup>1</sup> Levelised cost of energy is one of the industry's main metrics for the cost of electricity produced. It accounts for all of a system's expected lifetime costs (incl. construction, finance, fuel, maintenance, tax, insurance & incentives), which are then divided by the system's lifetime expected power output (kWh) & discounted for inflation & time cost of money.