

OREGON WAVE ENERGY TRUST UTILITY MARKET INITIATIVE

TASK 3: BUSINESS MODEL



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The Utility Market Initiative was prepared by *Pacific Energy Ventures* on behalf of the Oregon Wave Energy Trust.

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About Oregon Wave Energy Trust

The Oregon Wave Energy Trust – (OWET) - with members from fishing and environmental groups, industry and government - is a nonprofit public-private partnership funded by the Oregon Innovation Council in 2007. Its mission is to serve as a connector for all stakeholders involved in wave energy project development - from research and development to early stage community engagement and final deployment and energy generation - positioning Oregon as the North America leader in this nascent industry and delivering its full economic and environmental potential for the state. OWET's goal is to have ocean wave energy producing 2 megawatts of power - enough to power about 800 homes - by 2010 and 500 megawatts of power by 2025.

TASK 3.0 BUSINESS MODEL

Objective

- Utilities and planning agencies understand the value and system effects of wave energy.
- The wave energy industry appreciates the value and costs of the resource viewed by utility.
- Effective business protocols are established between the utilities and wave energy industry.
- Innovative policy recommendations are developed to remove financial barriers and costs.

Background

The Northwest utility market, much like other parts of the nation, is extremely complex and is served by numerous utilities and policy bodies responsible for delivering reliable and cost effective electricity to consumers. Wave energy is currently a more expensive means to generate electricity than other forms of renewable energy, such as wind and biomass, and is similar in cost to solar. However, studies conducted by EPRI and estimates made by technology developers show convincing arguments that the cost of energy will decline as installed capacity increases. However, much like the early days of the wind industry and other renewable energy technologies, the wave energy will require assistance to bridge the gap from demonstration to commercialization. For this reason, more detailed review of the northwest utility market, the value of wave power in this market, and evaluation of prices support and business model alternatives is appropriate to assist developers and utilities in exploring this resource alternative.

Approach

The PEV team will provide easy to use and understand background material to facilitate collaboration among the wave energy industry and the utility community.

Sub-Tasks	Summary of Deliverables
3.1 State of the Industry Report	3.1 Utility Industry in Oregon
3.2 Price Support Mechanism	3.2.1 Market Review (International) 3.2.2 Price support Alternatives Analysis
3.3 Value of Wave Energy	3.3.1 Summary of Results 3.3.2 Model Documentation
3.4 Effective Business Models and Protocols	3.4 Business Protocols
3.5 International Standards Development	3.5.1 Overview of International Standards 3.5.2 Marine Hydrokinetics Technical Standards (TC 114)