

May 6th Ocean Energy Public Meeting Sponsored by TIDE
Tillamook Library

Presenters: Jason Busch with Oregon Wave energy Trust
Teresea Wisner with Aquamarine Power
Kevin Banister with Principle Power Inc.

TIDE Board present: Paul Levesque, Barbara Trout, Mark Labhart

Jason Bush's Comments

- Ocean energy projects take a long time to develop because of the new technology, infrastructure, incentives and tax breaks needed as wind needed to get started.
- The future of energy will include a significant component of conservation and current sources such as hydro, coal, nuclear, oil, gas.
- Ocean is already heavily used and now one more use wants to come in. In addition, social values will play a major role in the development with view sheds, green energy desire, surfers, and quality of life issues.
- Believes a go slow approach is best method. Ocean energy is where wind was a decade ago. Still lots of technology testing to be done. Federal and state permitting will take considerable time. Is it economical?

Questions/Comments

1. Is their going to be mitigation for the fishing community if fishing is disrupted by a device?
2. Where does the energy go that is generated? Wheeling
3. Still lots of technical data to gather – bathometry, sediment transport, high use fishing areas, scenic considerations.
4. Is the actual energy generated by from ocean power used by local users vs hydro?
5. Will the devices have navigational aides?
6. Are there any places zoned for these types of facilities now?
7. Aquamarine is proposing 2,000 – 2,500 acres for DSL leasing. Goal is to have 3 devices in the demonstration mode in 2013.

8. Is Aquamarine going to seek tax assistance? Answer was wave is permitted now to seek tax assistance.
9. PPI is proposing at build-out 20 unit arrays with 10 in front and 20 behind. $\frac{1}{4}$ to $\frac{1}{2}$ mile long
10. Where are the arrays going to go?
11. What happens to these devices in an earthquake?
12. Does wave monitoring measure waves as well as currents? Answer was yes.
13. How often is maintenance done? Answer Once a year
14. Why did you pick sites for testing in front of communities? Answer picked all potential sites based on topography and reduce from there using other facets like scenic and fishing issues.
15. There could be a loss of property value if a device is put in front of communities.
16. Are you using adaptive mngt. to learn from research and new info? Answer was yes.
17. Territorial Sea Plan once adopted will determine where devices will go and not go.
18. The wind resource is more consistent over time offshore than onshore. 30% on land and 40% & higher offshore. As you deeper costs increase and so does the wind resource. The challenge is to produce an economic product.
19. PPI – Going after a \$500,000 feasibility study grant with the feds. Looking at Coos Bay to build. Maintenance would happen out of Garibaldi if devices are placed offshore of our area. Power would be DC current. Looking at a 15 sq. mile project that could produce 150 MW. We are still years away from an actual project.
20. When will you know what the KW costs will be? PPI – We know now and can offer consistent power. We believe we will be economically feasible for California market.
21. Does Oregon need the green power? Answer yes