



WA energy firm wins wave licence

By **STEVE ROBERTSON**

A WAVE energy system located out of sight along the Portland coast could generate enough emissions-free electricity to help power Portland homes and industry on a test basis by 2012.

That's the optimistic view of Carnegie Wave Energy following the company winning a license from the State Government to explore the potential of wave energy offshore from Portland, Warrnambool and Phillip Island.

Company spokesman Tim Sawyer said Portland had the ideal conditions for a 20MW demonstration system that could be up and running sometime in 2012 at the earliest.

"There is 25-metre-deep water nearby to shore, waves are the right size, you are close to excellent grid infrastructure

from the smelter and the wind farms, and the community is supportive," Mr Sawyer said. "We need to assess commercial viability in deciding where the demonstration project will go. The Victorian Government has

been very supportive, very proactive in all this."

He said proposals from other wave energy companies interested in Portland were not a problem for Carnegie.

"We are talking about different means of power generation. They might be located in deeper water, for example. As far as we're concerned, the more the merrier."

He promised extensive consultation with a wide range of local stakeholders as part of a staged management plan.

"Taking into account the proximity of power transmission

infrastructure, approximately

20 per cent of Victoria's current power needs could be met by harnessing wave energy," the company's statement to the stock exchange said.

Based in Perth, Carnegie Wave Energy has been a consistent partner with Victoria in advising on wave energy potential. The company, which had previously been awarded exploration consents, told the government that the state possesses a near-shore wave energy resource of 18,000 megawatts. That's almost double the state's present installed power generation capacity.

If Portland testing proves positive, Carnegie announced it would use the CETO system for generating power. Anchored to the seabed, CETO operates out of sight from land. An array of submerged buoys is tethered to seabed pump units. The buoys move in harmony with

the motion of passing waves, driving pumps that force water onshore via a pipeline.

The high-pressure water is then used to drive hydroelectric turbines, before being returned at low pressure back into the ocean.

Carnegie promised this system would not harm marine life and would be located in deep water so it wouldn't interfere with popular surf breaks.

The south-west is a region hungry for electrical power.

"Alcoa in Victoria needs 820MW," Alcoa's Australia managing director Alan Cransberg said during a Portland visit in March. He said the smelter would be happy to use power from renewable energy sources like waves and wind, as soon as it was available on a large enough scale.

