



Gracetown waves

Clean power plan moves a step closer

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FRESH water and electricity being delivered to Gracetown by wave energy could be a step closer after a high level meeting last Sunday.

Representatives from the UK-based Renewable Energy Holdings met with Planning and Infrastructure Minister Alannah MacTiernan on the weekend to discuss their plan for a wave energy farm in Cowaramup Bay.

A Renewable Energy Holdings spokesperson, who asked not to be named, said the minister had been very receptive to the plan and it was hoped the project could come to fruition within two years.

“REH made it clear to the minister it was very interested in providing a 10-unit wave energy installation at Gracetown which would supply both fresh water and elec-

tricity,” the spokesperson said. “It would not be in the middle of a surf break and it would not be visible.”

The wave energy converters would be completely submerged.

The structure includes a buoy that floats below the ocean surface, which would be tethered to a 10m high unit that sits on the sea-bed.

Waves drive an underwater pump to deliver high-pressure seawater through a pipe to the shore. The seawater drives a turbine to generate electricity, or it passes through a reverse osmosis desalination unit to produce fresh water.

The process does not produce carbon dioxide.

One unit produces about one million litres of fresh water every day and has the capacity to generate 180kW of clean electricity. According to REH, 10 units would supply all of Gracetown — including a pro-

posed residential development — with competitively-priced fresh water and electricity.

A full-scale commercial development of 120 units could supply 45GL of fresh water or enough electricity to supply 20,000 households.

“Should the (Water Corporation’s) Yarragadee proposal go ahead, it is anticipated only a fraction of the water would need to come from there (if a commercial wave energy set up was established),” the spokesman said.

The technology was developed by REH and its subsidiary, WA’s Seapower Pacific, at a cost of about \$10million.

Still in the pre-commercialisation phase, nine wave energy converters will be installed in the ocean about 250m off North Fremantle next year for final tests.