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Cornwall set for the surge of wavepower

OCEAN Power Technologies (OPT) is to install a wave-power station with 5MW capacity off the north coast of Cornwall.

The company has similar installations off the coast of Spain, France and Hawaii, but the Cornwall unit will be the first of its kind in the UK.

The PowerBuoy will form part of the so-called South West Wave Hub Project, which will provide a direct connection to the national grid from 10 miles out to sea off the coast of Hayle. The hub is being backed by the South West of England Regional Development Agency (RDA).

Initially, the wave-power station is expected to comprise the company's 150kW PowerBuoys. It may include 250kW devices for the final stage. In total, 30 PowerBuoys will be deployed over the period 2007-08.

OPT said the project would provide a launch pad for further UK wave-power stations to capture a significant part of the potential 20,000MW wave-energy market.

Mark Draper, chief executive of OPT, said: "Wave Hub offers us an excellent wave resource, and access to Cornwall's long-standing manufacturing credentials, a skilled labour force and strong public support."

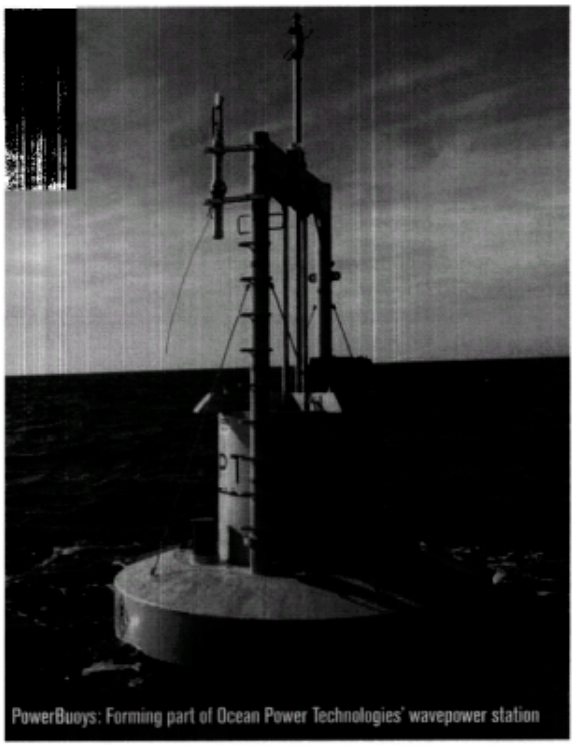
Nick Harrington, South West RDA's Wave Hub project manager, said: "There were 16 expressions of interest in this project. We evaluated each company based on a set of criteria, including how advanced they were with their projects. OPT will bring with them significant international experience, tested technology and financial resources."

OPT's wave-energy systems are based on modular, buoy-like structures, which are capable of responding to differing wave conditions. The rising and falling of the waves offshore causes the buoy to move freely up and down.

The resultant mechanical stroking drives the electrical generator. The generated AC power is converted into high-voltage DC and transmitted ashore via an underwater power cable.

The PowerBuoy is enhanced with sensors which continuously monitor the performance of the various subsystems and surrounding ocean environment. In the event of very large oncoming waves, the system automatically disconnects. When the wave heights return to normal, the system reconnects and recommences energy conversion and transmission.

The Wave Hub project is expected to create 100 jobs.



PowerBuoys: Forming part of Ocean Power Technologies' wavepower station