

## Western Morning News

### WAVE POWER COMES CLOSER TO REALITY

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The prospect of generating electricity from the waves off the coast of Cornwall came closer yesterday with the announcement of a major study to work out how to feed the power back to shore.

Plans for the world's first "wave hub" - described as being like a giant socket - to be situated on the seabed nine miles off the coast are being examined by scientists and engineers in a £500,000 feasibility study funded by the South West Regional Development Agency.

The "wave hub" would act as a socket into which wave power turbines will connect, allowing the electricity they generate to be transferred back to shore through cabling along the seabed back to the shore.

A spokesman for the South West RDA said: "It would act as a sort of electric plug in the water, a socket connecting individual wave power machines to a central point."

The wave hub could be built as soon as 2006 if the study reaches a positive conclusion. Engineering, legal and financial experts are due to start reporting back in December.

Dominic Vincent, environment manager at the RDA, said: "This project is still at an early stage but we are hopeful that Wave Hub will put the South West on the map with regard to wave and tidal technologies.

"We will be consulting with local interests as soon as there is something more concrete to say. The RDA will receive the final report by the end of the year, but we should have formed a preliminary view by autumn."

Up to 30 wave power machines - similar to the world's first offshore tidal energy turbine built into the seabed one mile offshore from Lynmouth on the coast of North Devon, last year - could be connected to the hub.

The Lynmouth tidal energy turbine works like an underwater windmill with an 11-metre rotor blade capable of producing 300 kilowatts.

An artist's impression of the hub shows a yellow mound on the seabed, with cables sprawling from it.

A spokesman for the RDA said possible size and location would be determined by the study, as would the type of wave power machines, which could be floating or submerged.

"It could be five connections, ten connections or more than 30," he said.

"There are different capabilities for wave power machines. There is one developer who is doing one with a 750 kilowatt output and another with five megawatts for each machine. Obviously, there would be fewer of the larger ones.

"We need to keep looking into the best location, which will be where there are the best waves, but we know we are looking at the North Cornwall coast.

The wave hub would not be visible from sea or shore, the spokesman added.

"The wave hub will certainly be about nine miles off the coast: the horizon, if you are standing on the beach, would be about four miles out."

He added that shipping areas would be taken into consideration.

Halcrow - a company specialising in planning, design and management services for infrastructure development worldwide - will carry out the main study into siting, engineering, environmental assessment, energy analysis, operations and maintenance. It will interview marine energy device developers from around the world to assess the level of potential demand.

International consultancy Arthur D Little will produce a full economic assessment and business plan, while the law firm Bond Pearce, which has offices in Devon, will investigate the complex and unique planning issues.

Mr Vincent said: "This is a very exciting and innovative project and we have been pleasantly surprised by the level of support and interest that has come from local, regional and national organisations."

Proposals for the wave hub were first suggested in a report, the Seapower South West Review, prepared for the South West RDA by renewable energy agency Regen SW in October 2003.