

WAVE HUB PROGRESS UPDATE - JUNE 2008

Construction of the world's first large scale wave energy farm off Cornwall's north coast has moved a step closer. The South West RDA will begin advertising next week (w/c 30 June) to recruit a company to manage the procurement and installation of Wave Hub.

An appointment is likely to be made in the autumn, paving the way for detailed contracts to be placed in spring 2009. It is hoped that Wave Hub will then be up and running in 2010. The RDA's decision to begin the appointment process for this management contractor re-starts the procurement process that stopped in February, due to a disappointing response from the market. The RDA believed the responses it received did not represent best value for tax-payers' money.

Following this, the RDA completed a three-month review of the entire project and procurement process. The RDA's board has now agreed (23 June) to seek a specialist company to manage all aspects of the design and installation including selection of sub-contractors. The successful company will need to have extensive experience in offshore engineering. The RDA had previously tendered to appoint the various equipment suppliers and installers under a single contract but believes that better value will be gained by appointing each separately with a single management contractor coordinating the work.

Wave Hub is at the cutting edge of many marine technologies, such as underwater transformers. There is a growing research base in wave energy in the region, coupled with a strong commitment from wave device developers and abundant natural resources.

Wave Hub will be essentially a giant electrical socket on the seabed. It will allow developers of wave energy devices to test new wave energy technology. Groups of wave energy devices will be connected to Wave Hub and float on or just below the surface of the sea to assess how well they work and how much power they generate before going into full commercial production.

The decision has also been made to defer the installation of sub-sea transformers until they have been adequately tested by the offshore oil and gas industry. Wave Hub will eventually have a total capacity of 20MW – sufficient to power more than 7,500 homes or meet 3% of Cornwall's energy needs – but will initially generate around 8MW until the transformers are added. This is still twice the capacity of Cornwall's first commercial wind farm at Delabole in North Cornwall.

Wave Hub is expected to create 1,800 jobs and inject £560 million into the UK economy over 25 years. Almost 1,000 of these jobs and £332 million would be generated in the region.

Four wave device developers have already been chosen to work with the South West RDA on the project. They are Oceanlinx, Ocean Power Technologies Limited, Fred Olsen Limited and WestWave, a consortium of E.ON UK and Ocean Prospect Limited, using the Pelamis technology of Pelamis Wave Power Ltd.

Wave Hub will be a 'live' laboratory for the £15 million Peninsula Research Institute for Marine Renewable Energy (PRIMARE), a collaboration between the Universities of Exeter and Plymouth which is backed by the South West RDA. Professor Julian Wolfram, Chair of PRIMaRE, met with RDA Board Members on 23 June to outline the progress that has been made to date, providing details of the academic appointments that have been made and the broad areas of expertise represented. The RDA was impressed by the overall strength of the PRIMaRE team, which has some of the world's leading researchers in key areas of marine energy and science with significant networks and contacts upon which to build. The academics are already building strong collaborations across the two institutions (Exeter and Plymouth) and are keen to extend this to other regional universities.

The South West RDA board has also agreed to provide additional funding to enable an increased focus on business development activity, which needs to go on alongside the development of Wave Hub and PRIMaRE to realise the potential economic benefits.