

May 17, 2010

## Wave Hub on course for summer deployment

**Wave Hub, the pioneering marine energy project, is on course to be deployed this summer with fabrication of sub-sea cables and the hub itself nearing completion.**

Wave Hub will create the world's largest test site for wave energy technology by building a grid-connected socket on the seabed, 10 miles off the coast of Cornwall, to which wave power devices can be connected and their performance evaluated.

The £42 million project has been developed by the South West RDA (Regional Development Agency) and is a cornerstone of its strategy to develop a world class marine energy industry in South West England.

Hartlepool-based JDR Cable Systems is constructing the armoured 25km subsea cable that will connect Wave Hub to the National Grid, and the hub structure that will sit on the seabed.

JDR is well advanced with the cable manufacture, a process which involves twisting together copper and fibre optic cables and covering with two layers of steel armouring and an outer sheath.

When complete, the 1,300 tonne cable will be spooled directly onto a cable laying vessel from JDR's deepwater quayside facility at Hartlepool Dock.

The company is also making four 300-metre 'tails' that will connect wave energy devices on or just below the surface of the sea back to Wave Hub.

Work is also well underway on the hub assembly. This is a rigid steel structure which is the size of a van (around two metres high and about six metres long) that will sit on the seabed in 50 metres of water and be covered in several metres of rock.

It will provide a connection between the main cable from the shore and the tails leading to the wave energy devices, and will weigh around 12 tonnes when completed. A connection block inside will be filled with resin to ensure it remains watertight and the whole structure is designed to last at least 25 years.

Guy Lavender, Wave Hub's general manager at the South West RDA, said: "After seven years of planning it's hugely satisfying to see the cable and hub actually taking shape.

"We're on course for deployment this summer and extensive testing will take place before we welcome our first wave energy devices at Wave Hub, which we expect in 2011.

"The announcement in March by the Crown Estate of the first commercial licenses for wave energy deployment off the north coast of Scotland makes Wave Hub more relevant than ever because we can provide the industry with a grid-connected test facility on a scale not seen before, that it can use before commercial deployment."

Patrick Phelan, managing director of JDR Cable Systems, said: "We are delighted to be taking a leading role in the design and manufacture of the Wave Hub cable system. This is exactly the type of renewable energy project that our Hartlepool factory was designed to build. We are combining our extensive experience in subsea oil and gas developments with our more recent experience of large scale offshore windfarm projects to provide a comprehensive solution to this exciting project."

Meanwhile onshore work for Wave Hub continues with the construction of an electricity substation at Hayle on the north Cornwall coast.

The six-month project includes the installation of more than £1 million of electrical equipment, including a monitoring system for wave energy developers to measure how much power their devices produce.

It follows the completion in February of the first phase of work to drill a 200-metre duct through sand dunes at Hayle where Wave Hub's subsea-cable will come ashore. It will be linked to onshore cabling threaded through the duct and connected to the new sub-station.

Wave Hub is being funded with £12.5 million from the South West RDA, £20 million from the European Regional Development Fund Convergence Programme and £9.5 million from the UK government.

An independent economic impact assessment has calculated that Wave Hub could create 1,800 jobs and inject £560 million in the UK economy over 25 years. Almost 1,000 of these jobs and £332 million could be generated in South West England.

## Ends

For more information contact Jason Clark, on 01208-77900 or via  
[jason.clark@dca-pr.co.uk](mailto:jason.clark@dca-pr.co.uk)

### Notes to Editors

1. **Images:** of Wave Hub and the cable can be downloaded at [www.flickr.com/photos/southwestengland](http://www.flickr.com/photos/southwestengland). Scroll down the right hand side of the screen and click on the 'Wave Hub' set.
2. **Film:** of Wave Hub and the subsea cable under construction is available here: [www.youtube.com/southwestrda](http://www.youtube.com/southwestrda)
3. You can follow Wave Hub's progress on Twitter ([@wavehub](https://twitter.com/wavehub)) and on Facebook.
4. The **South West RDA** works for and promotes a modern, stronger and more resilient economy across South West England. Our work involves creating better jobs, successful businesses, more prosperous cities, towns and villages within an economy that uses less carbon and will still be thriving in 20, 50 and 100 years time. Find out more at [www.southwestrda.org.uk](http://www.southwestrda.org.uk)
5. **Wave Hub** is a major marine renewables infrastructure project that will create an electrical 'socket' on the seabed in some 50 metres of water around 16kms (10 miles) off the coast of Cornwall in South West England and connected to the National Grid via a subsea cable. 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 being commercially produced and deployed. There are four berths available at Wave Hub, each covering two square kilometres. Wave Hub will have an initial maximum capacity of 20MW (enough electricity to power approximately 7,000 homes) but has been

- designed with the potential to scale up to 50MW in the future. The project will be built in the summer of 2010 with the first wave energy devices expected to be deployed in 2011.
6. Legal agreements have been signed with leading renewable energy company **Ocean Power Technologies Limited** to take the first berth at Wave Hub using its PowerBuoy wave energy converter. Images of PowerBuoy can be downloaded at [www.flickr.com/photos/southwestengland](http://www.flickr.com/photos/southwestengland). Discussions are ongoing with other device developers.
  7. **JDR Cable Systems Ltd** has been appointed to manufacture the armoured 25 km (16 mile) 33kV cable and is overseeing the manufacture of the hub assembly for Wave Hub at its factory in Hartlepool in a contract worth £7.6 million. The cable will weigh 1,300 tonnes. The hub will be about the size of a van and will sit on the seabed. It will split the main cable linking it to the National Grid on shore into four 300m cables to which groups of wave energy devices can be attached and monitored for how they perform.
  8. **Powermann Ltd** of Poole in Dorset has been appointed to handle the £1 million onshore electrical works that will connect Wave Hub to the UK's National Grid network, and a new electricity sub-station at Hayle is being built by **Dawnus Construction**.
  9. In Cornwall and the Isles of Scilly the **Convergence Programmes** are made up of European Regional Development Fund (£347 million) and European Social Fund (£153 million). Convergence Programmes will run until 2013 and follow the successful Objective One Programme and prior to that Objective 5b. For further information see: [www.convergencecornwall.com](http://www.convergencecornwall.com). Convergence helpline telephone: 0800 0280120.

**For more information contact:**

Jason Clark  
Deborah Clark Associates  
01208-77900  
07980-834368  
[jason.clark@dca-pr.co.uk](mailto:jason.clark@dca-pr.co.uk)