

CorPower Ocean to Test at EMEC

Swedish wave energy developer, CorPower Ocean, have signed up to test their resonant wave energy converter at the European Marine Energy Centre (EMEC) in Orkney, UK. The announcement follows CorPower's success in Wave Energy Scotland's (WES) power-take-off (PTO) call that, combined with funding from KIC InnoEnergy and the Swedish Energy Agency, completes a EUR6.5m Stage 3 funding round for dry rig testing of a half scale prototype system followed by an ocean deployment at EMEC's scale test site in Scapa Flow.

The project aims to deliver a PTO solution using the WaveSpring control technology offering an improvement in performance and cost to the wave energy sector.

The unique technology will be taken through a programme of structured verification guided by best practice support from EMEC, alongside the experience from offshore power generation company Iberdrola Engineering, the University of Edinburgh, and WavEC Offshore Renewables' expertise in cost and performance modelling.

Test Programme

The project will involve a five-month programme of cyclical dry and wet testing of the system in Orkney, culminating in a performance assessment by EMEC.

Prior to arriving in Orkney, the PTO will undergo a five-month dry test period in Stockholm using the same test rig, thereby significantly de-risking the ocean deployment.

This novel to PTO development will incorporate the installation of a bespoke dry test rig at EMEC for hardware-in-the-loop testing. The test rig will have the ability to subject wave devices to the full range of wave loads corresponding to the most challenging sea states.