

Aquamarine's Oyster back in action!



Edinburgh-based Aquamarine Power's Oyster 800 wave energy machine is back in operation following the completion of a comprehensive improvement programme which took place over the summer.

The machine has now been de-ballasted and is clearly visible operating at the company's site at Billia Croo, part of the European Marine Energy Centre (EMEC) in Orkney.

The Oyster 800 improvement programme involved shutting down the near shore wave energy machine to carry out improvements in five specific areas – with the overall goals of improving performance, reliability and availability of Aquamarine Power's second full-scale device.

“The product improvement programme has been extremely challenging but has resulted in an even better Oyster 800,” says Aquamarine Power Chief Executive Officer Martin McAdam.

“We have just completed a huge programme of work over the summer period. I think someone referred to the programme as major heart surgery. I think that that is an exaggeration but we swapped out a large number of failed or non-functioning components

“The machine's survivability is already well proven. It has operated through two winters, enduring massive storms. The downside is that several of the systems and components on Oyster were just not fit for purpose. Our Product Improvement Programme (PIP) allowed us to focus on those areas which were just not up to the job, such as cabling, connectors, accumulators and several of the components of the control and

instrumentation system. We also had some failures in the valve and pipework systems.

“We exported our first power since the refit last week and we are now running through phased testing and building up our electricity exports. We can already see a marked improvement in Oyster 800 performance. Of course we have had some additional start-up issues, we would be naïve to assume that all will work perfectly since the PIP.

“The most important part of the Oyster 800 programme has been the learning. Failures can be frustrating but they are not all bad, they are opportunities to learn and we have done a lot of learning

“The team at Aquamarine Power have given the programme an extraordinary level of commitment. I am very proud and grateful to them all. I am also very pleased with the financial support from our key investors ABB, SSE and Scottish Enterprise. The support from many of our key suppliers is also appreciated – especially those in the local community in Orkney including Leask Marine and Hamnavoe Engineering.

“We have not completed anything yet – we have just started. We have a full-scale research platform in Oyster 800 and before we build our next generation machine we need to learn a lot more,” McAdam concluded.