

Customer Success Story: ORE Catapult



Transformer hire solution for ORE Catapult powers research to advance offshore wind technologies



The Offshore Renewable Energy (ORE) Catapult is the UK's leading technology innovation and research centre for offshore renewable energy. The company needed a power transformer quickly as part of a major research and development project to advance next generation offshore wind technologies.

ORE Catapult has partnered with GE Renewable Energy on the five-year project to test and develop offshore wind technologies. As part of the programme, GE Renewable Energy's recently announced Haliade-X 12 MW offshore wind turbine and existing Haliade 150-6MW will undergo advanced test and demonstration programmes to further enhance performance and reliability. The testing will be performed by ORE Catapult at their dedicated facility.



ORE Catapult needed a power transformer on a short lead time to step up their 11kV site supply to the 33kV required for the turbine test bed. Slaters Electricals installed a fully refurbished 12/24MVA, 33/11kV transformer at ORE Catapult's powertrain test facility on a six week lead time. "We were impressed with the speedy service from Slaters Electricals. Typically, a built-to-order power transformer of this size would have been around 40 weeks for delivery, but Slaters provided a refurbished transformer to our specification with a quoted lead time of just six weeks" (Andy Brown, Electrical Design Engineer, ORE Catapult).

The transformer will help to power Catapult's testing, which replicates the effects of the wind to emulate operational conditions.

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(Andy Brown, Electrical Design Engineer, ORE Catapult)



Highlights

- 12/24 MVA power transformer on hire
- Fast turnaround from initial enquiry to implementation
- Full hire solution for Catapult’s needs including accurate timescales and datasheets
- “Everyone involved with the project has been impressed with Slater’s capabilities and level of service; the cable works are some of the finest we’ve seen”.

Andy explained, “We were keen to get the project started as soon as possible, which meant that the transformer needed to be ready to mobilise in a short period of time. Slaters were extremely efficient and even brought the transformer on site a week early, which reduced the lead time to five weeks, allowing our site to accommodate other construction works. Slaters were dedicated to finding a solution that worked for everyone involved. They responded very quickly to enquiries and ensured a fast turnaround from initial enquiry to implementation”.

The transformer was commissioned and installed by Slaters’ in-house site engineers, which included 33kV cabling from the hire transformer to the wind turbine grid breaker and wind turbine 33kV transformer. Slaters’ engineers also undertook 3kV cabling between the converters and generator and installed the auxiliary interconnecting cabling for small power, safety and communications between the E-Stack and the Nacelle. Andy added, “Slaters provided accurate timescales, datasheets and a full solution which met our needs. Everyone involved with the project has been impressed with Slater’s capabilities and level of service; the cable works are some of the finest we’ve seen”.

Plans are now underway for the next phase of the project which will involve changing the layout of the High Voltage (HV) equipment to facilitate the installation of a new 66kV substation. Steve Lancaster, Sales Manager at Slaters Electricals, said “We are proud of our long and proven record of delivering effective power distribution solutions and value to customers. The ORE Catapult hire project is a great example of this. The five-year research programme is a major investment and is a testament to Catapult’s industry-leading research and development capabilities. It’s a privilege to play a part in such an important project”.

About Slaters Electricals:

Slaters Electricals Ltd has been a key part of the electrical engineering industry since 1946.

We offer the UK’s largest stock of new and refurbished power and distribution equipment for sale or hire alongside expert installation, maintenance, site and spare part services. We tailor our products and services around your project and site requirements to ensure that your budget, time frame and equipment needs are met.