## TRELLEBORG NJORDGUARD™ CABLE PROTECTION SYSTEM TEST



## **CASE STUDY**



## ENABLING CONTROLLED WET TESTING FOR INNOVATIVE CABLE PROTECTION SYSTEM

Trelleborg, a world leader in engineered solutions that protect critical applications in demanding environments, utilised ORE Catapult's open-access shallow water testing facilities to prove NjordGuard $^{\mathsf{TM}}$ , its latest innovation in cable protection.

With developers under increasing pressure to reduce costs and de-risk offshore wind farm power cable installation, Trelleborg's innovative NjordGuard™ solution required a series of wet tests to prove its capability of installing and removing offshore cables into both monopile and J-tube openings, without the need for intervention by remotely operated vehicles (ROVs).

Using ORE Catapult's controlled testing environment, Trelleborg was able to develop a test procedure to represent the pulling and locking of cables into an offshore foundation, under the same loads potentially experienced during offshore installation. With the Catapult's support, Trelleborg installed a simulated testing foundation into the dock, using a crane and winch assembly to replicate a cable-laying vessel.

As a result of the test, Trelleborg was able to successfully perform eight full-scale wet tests of NjordGuard $^{\text{TM}}$ , covering a range of installation scenarios, without the associated time, effort and costs of going offshore.

**6.6** The test results provided a greater understanding of potential installation issues that our customers might face...we also gained valuable insights into the dynamics of the system that will help further refine and optimise our designs to accelerate performance for our customers' critical applications.

John Deasey, Renewables Sales Manager at Trelleborg Offshore



The client conducted eight successful, full-scale wet tests of the NjordGuard™ system in controlled subsea conditions.



Undertaking verification in a controlled environment removed the time, effort and costs of testing offshore.



Supporting the transition of client technology and expertise from oil and gas into offshore renewable energy.