OFFSHORE RENEWABLES SUBSTATION CABLE REPAIR ON LIVE STRUCTURE

ACTEON | ENGINEERING, MOORINGS AND FOUNDATIONS

PROJECT OVERVIEW

LDD, a marine foundations brand in Acteon's Engineering, Moorings and Foundations division was contracted to provide a fabric formwork cable support as part of a repair job to a UK renewables substation.

THE CHALLENGE

During an inspection survey damage to the Cable Protection System (CPS) linked to the export cable was identified at an Offshore Substation Platform (OSP). The external stiffener component of the CPS was found to be cracked and open. To prevent the broken CPS from damaging the cable, support from underneath was required. This challenge required LDD to develop a bespoke fabric formwork support. The small deck area on the repair vessel necessitated a compact equipment spread and remote installation.

CUSTOMER GOAL

The operator needed a safe remediation solution to protect the cable.

OUR SOLUTION AND ITS COMMERCIAL BENEFITS TO THE PROJECT

Market-leading services and integrated solutions

- LDD developed a custom-designed bespoke grout bag to suit the subsea dimensions between the cable and the seabed.
- A method was developed with the customer so the bags could be deployed remotely and pulled into position using a remotely operated vehicle (ROV).
- A bespoke fabric formwork deployment frame was designed and built.
- The bags/formworks were filled correctly and performed as planned.
- Supported the customer with permitting.

PRODUCTS USED

- Ordinary Portland cement grout
- Compact pan mixing and pumping system offshore cement storage silos
- Offshore laboratory
- Mobile workshop
- Subsea ROV grout connections
- ROV deployment frame
- Custom grout bags/fabric formworks.

"LDD provided a bespoke innovative solution to effectively protect the cable whilst overcoming the challenges of installing it. Utilising remote technology allowed a safe installation which enabled the wind farm to return to a fully safe operational state."

Peter McElligott - Business Development Manager, LDD