



## CASE STUDY

# DanTysk Inter-Array Cable Replacements

In September 2020, work commenced to carry out the replacement of seven high priority inter-array cables at DanTysk Offshore Wind Farm. The 80-turbine site, located in the North Sea, spans 70 square kilometers and has a 288 MW capacity.

Ongoing monitoring at the site identified that the cable protection systems (CPS) were failing, subsequently contributing to cable damage which in turn significantly increased the risk of cable failure.

With a wealth of experience in power cable repairs and replacements at offshore wind farms, Global Offshore, part of the Global Marine Group, was the clear choice to carry out the replacement of seven 33kV inter-array cables totalling 7km.

## THE SCOPE

The overall project involved cable disconnection, removal, deburial, and recovery, and the installation, burial, pull-in and termination and testing of the seven replacement cables.

Contracted through Vattenfall's pre-arranged Fast Response Plan, Global Offshore was able to provide their client with a turnkey solution including provision of highly experienced personnel, specialist assets and cable repair ships. This full turnkey package is part of Global Offshore's Complete Cable

Care service.

The project was successfully completed within four months, despite poor weather conditions over the Winter period.

At the time of the cable replacement, there was an ongoing global pandemic, which presented additional operational challenges for this project. However, Global Offshore worked closely with their RQHSE team to minimise infection risk and ensure a prompt project commencement date.

## SPECIALIST ASSETS

Mobilising from Port of Blyth, the Global Offshore team utilised the Group's versatile cable-lay vessel, Global Symphony, with its onboard Q1400 trencher and two FCV3000 WROVs.

To ensure longevity of the replacement cable, LIRA testing was conducted pre and post cable removal and installation.

In addition, a CUT UK Diamond wire cutter (DWC) was used to cut through the Cable Protection Systems (CPS) at the Wind Turbine Generator (WTG) locations in order to clear the aperture and allow installation and re-burial of the replacement cables.

Two short-term charter offshore support vessels, REM Inspector, fitted with a SMST Walk to Work (W2W) system, and the Normand Jarl, were mobilised for the project, as well as crew transfer vessels to transport personnel and equipment to site.



### VESSEL: GLOBAL SYMPHONY

Submersibles: Q1400 & 2 x FCV3000 WROVs  
Total cable length: 7km  
Completion Year: 2021  
Client: Vattenfall

