

OWEZ Windpark

Quarter 3 - 2007



As its name suggests, the Q7 offshore wind farm (now called the Princess Amalia windfarm) is located in block Q7 of the Dutch Continental Shelf. This is located 23km from the shore in water is 14m to 19m metres deep, which makes this the first offshore wind farm to be constructed in such deep waters and at a distance beyond the 12 mile Territorial Waters limit from the shore, in the Netherlands.

Major Installation Challenges

Van Oord Offshore (VOO) chartered Global Marine Systems vessel the CS Sovereign along with the Atlas 1 ROV, to perform cable burial and survey works.

The area of operations is near Ijmuiden in the southern North Sea and is approximately 1 days steaming from Global Marine Systems Depot in Portland, Dorset, UK.

The burial works were performed by the powerful Atlas 1 ROV and its experience Subsea team.. The burial was of the 45 inter-array power cables generally between 400 and 600m long with some up to 800m in length.

The starting point was the 5 inter-array cables on cable string 3, where construction was most advanced in regards to turbine installation and power cable termination.

The CS Sovereign was able to bury up to 3 inter-array cables per day. This entailed an initial burial pass followed by a second pass if this was necessary and a final survey pass.

An Environmental Implementation

Using the CS Sovereign, Global Marine successfully completed remedial burial on all 45 inter-array cables and conducted post burial survey on the sections of the export cable.

The company paid particular attention to the surrounding environment to ensure that the cable burial did not disturb the sea life and bird life in this coastal region.



The Benefits

VOO Client (ENECO Energie) Representative Mr Chris Coles said in his customer feedback: "It's been a pleasure to work with a team of professionals again on a very capable and well maintained vessel led by Captain Neave. The ROV team should be congratulated for their skills, good humour and abilities throughout the work to maintain and operate the vehicle to its high standard of reliability."

VOO Customer Representative Mr Eric Van Empel said in his customer feedback: I personally was very satisfied with the way in which operations were carried out, and with the performance and pro-active attitude of the vessel's crew and it was a pleasure for me to work with GMSL. Therefore I highly recommend GMSL to VOO management for similar projects in the future."

Mr Hidde de Boer the Project manager for VOO said: "We are very pleased with the services provided and cooperation during the trenching works at Q7."

Resources

Navigator Software:

The Navigator suite of software was used throughout the project.

Ship:

CS Sovereign, one of the most advanced offshore engineering ships of its kind in the world. Capable of handling a wide variety of Subsea tasks required by such diverse industries as Telecommunications, Oil and Gas, Renewable Energy and Deep Sea Research.

Submersibles: Atlas 1 ROV

Burial Speeds – on average a speed of 200m per hour was achieved during the primary pass.

Ship-side team:

This project was lead by Captain Chris Neave.

Shore-side team:

The Global Marine Commercial Directorate and Project Teams worked seamlessly on this project, with Stuart Wilson as the project manager. Stuart has completed further projects in 2007 and 2008 for Global Marine telecoms maintenance customers and for PGS undertaking innovative 4D seismic survey works in the North Sea.

For more information on Global Marine's capabilities please contact Ian Gaitch, Sales Director of Global Marine Energy, ian.gaitch@globalmarinesystems.com

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