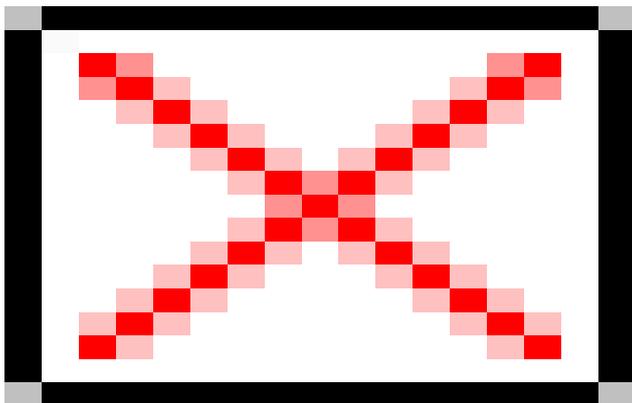


IMDC
Pipelines and offshore cables
Location:
Oostende, Belgium
Client:
C-Power



Project Contact Information

For more information about this project, contact:

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C-Power Offshore wind farm - Phase 1

Project description

The first phase of C-Power's Farshore Wind Farm located approximately 30km off the Belgian coast on the Thornton Bank marks a major milestone for this Belgian company. The installation of the first six wind turbines was done in 2008-2009 and early 2009 the first energy production was realised. The 6 wind turbines are situated on the Thorntonbank, an offshore sandbank situated in water depths varying between 17 and 23m below low water level. The support structures for the wind turbines with a hub height of +94m TAW are gravity base foundations (GBF) surrounded by an appropriate designed scour protection. IMDC acted as Owner's Engineer from the very beginning until the execution phase of the project and was involved in the daily follow-up of the marine works, which were part of the design and build contract between C-Power and THV Seawind for the installation of the offshore wind farm.

Follow up of the marine works related to the installation of the gravity based foundations

IMDC was responsible for the qualitative control of all marine works. Several site engineers were involved in the follow up and evaluation of the dredging activities, the installation of the foundation layers, the positioning of the GBF's and the backfill and infill works. IMDC performed the detailed scour protection design for the 6 GBF's. During the works material quality control was followed up on land, while based on the in- and out-survey results the quality of the installed scour protection was verified.

Follow up of the marine works related to the installation of the 150 and 33kV cables

IMDC acted as C-Power's representative on the cable lay barge during the installation of the 150kV sea cable and 33kV infield cables. IMDC followed-up the cable laying, landfall works, cable burial, cable cutting and sealing operations. On land cable trajectory analysis was performed based on results of multibeam, side scan sonar and magnetometric surveys. The 33kV infield cable lay works and temporary and final hang off works were supervised.

Weather downtime assistance

During the execution period of the works on site weather downtime assistance was based on a weather downtime protocol set up by IMDC. Measurements of wind and wave conditions at the Thorntonbank were combined with the contractual workability of the different equipment and the daily activity reports to report weather downtime costs on a monthly basis

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