Technical Advisor Services for Offshore Transmission Owner (OFTO)

Client	Diamond Transmission Partners (DTP)
Country	UK
Year	2016 - ongoing

Diamond Transmission Partners (DTP) are a UK Offshore Transmission Owner (OFTO) who currently own and operate five offshore transmission systems connecting the Burbo Bank Extension, Race Bank, Galloper, Walney Extension and Hornsea One wind farms to the onshore National Grid Electricity Transmission (NGET) owned transmission network.

DTP have acquired these assets, with a combined value of approximately £2.5 billion through a competitive tender process facilitated by the UK regulator, Ofgem. DTP are also expecting to participate in future tender rounds.

Challenge

DTP required a technical advisor to undertake a robust technical due diligence of the assets throughout the Invitation to Tender (ITT) stage and the Preferred Bidder (PB) stage. The technical due diligence is required to:

- Highlight, and assess the impact of, any technical design or installation issues which may impact on the integrity of the assets or the ability to operate and maintain them
- Provide advice on any areas where operating arrangements may be used to maximise availability
- Provide a forecast of the availability of the assets to allow the OFTO to determine its forecast revenue from the availability incentive mechanism
- Review the operation and maintenance activities required against the OFTO's proposed solution
- Make recommendations on spares holdings.

Project solution

PSC has acted as Technical Advisor to DTP and their project lender's throughout their bidding efforts during the Invitation to Tender (ITT) phase for a total of nine offshore wind farms.

During the ITT phase, PSC has undertaken a thorough review of the technical aspects of the transmission assets which consist of:

- Offshore Transformer Platforms/offshore reactive compensation platforms
- HV export cables
- Onshore substation including reactive compensation

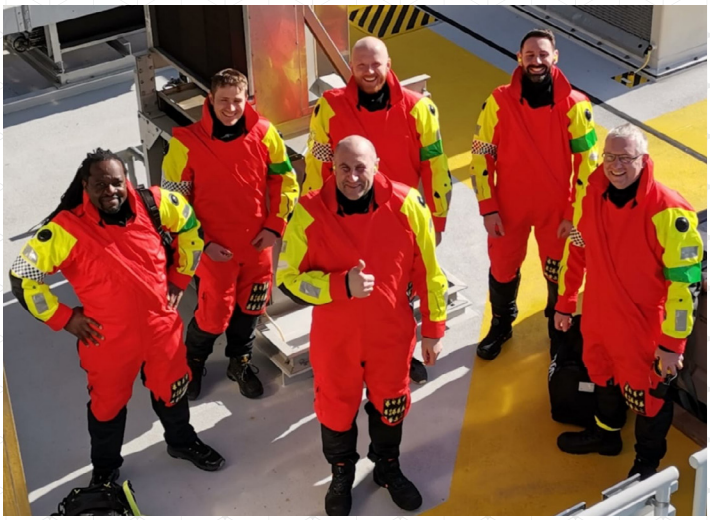
PSC produced a technical due diligence report covering the existing status of all the proposed OFTO assets and advised on all technical aspects associated with them. This includes a calculation on the expected availability of the connection, operation and maintenance requirements, recommended spares and overall ability of the connection to meet the grid code requirements.

Project Solution continued

PSC provided the following services:

- Full technical due diligence and reporting on all assets to be transferred
- Review of proposed operation and maintenance agreement
- Studies to determine available capacity during outage scenarios and possible alternative operating arrangements to maximise availability
- Calculation of forecast of availability
- Recommendations on spares holding
- Ongoing reporting throughout operational phase

PSC continues to provide ongoing technical advisor role, technical due diligence and support to the DTP engineering team.



Back row (L-R): Tawanda Felix Chitfa – Asset Manager (DTP), Michael Hook – Senior Engineer (PSC), Joel Matthews -Asset Manager (DTP), Sacha Henty – Transaction Manager (Ørsted), Gary Thornton – Technical Director (DTP).

Front Row: Peter Russell – Senior Authorised Person (Ørsted)

PSC advantage

DTP scored very high on technical robustness in their bid, contributing to the client's success. To date DTP have been appointed preferred bidder on five of these projects (total asset value of approximately £2.5 billion). The recently acquired Hornsea One assets are, at the time of writing, providing a connection for the largest offshore wind farm in the world located the greatest distance from shore of any UK offshore wind farm, and is currently the largest OFTO transaction to be completed to date with a value of over £1billion. Throughout the preferred bidder process, PSC worked with the client and developer to close out all remaining technical issues and contributed to review of the overall Sale and Purchase agreement.

"PSC's lead engineer continues to excel for our contracts. We are delighted with the valuable service provided by PSC."
-- Gary Thornton, Technical Director

PSC

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