



Electrical Engineering

CASE STUDY

South Fork Offshore Wind Farm: Termination and Testing of 66kV Platform Connector and Inter-Array Cables.

PROJECT OVERVIEW

The Correll Group, Electrical Engineering Division is delighted to have successfully completed the South Fork Offshore wind farm in the USA.

South Fork is New York's first offshore wind farm and constitutes of 12 Wind Turbine Generators (WTG's), 2 Strings with 1 Offshore Sub Station (OSS).

The scope was successfully delivered in two phases, the 1st phase was the completion of the Offshore Substation cable pulling and Terminations of the Platform Connector Cables (PCC) in Corpus Christi Texas.

The 2nd campaign was the offshore scope of termination and testing on the 12 WTG's, located 19 miles southeast of Rhode Island's Block Island and 35 miles east of Montauk Point on the South Fork of New York's Long Island.

SCOPE OF WORKS

- Preparation of project specific engineering documentation & procedures.
- Planning assistance & coordination of the works.
- Onshore Mock-up trial

- Pre-mobilisation competence cable preparation and jointing trials at Hellenic Cables Factory.
- Pre works hand over inspection walkdown certificate.
- US Onshore shipyard (Corpus Christi, Texas) IPC HV cable installation & cleating, Continuity & DC Sheath testing, Pfisterer size 4 HV terminations GIS Transformer & Joints
- Offshore Pre-Termination Testing, Continuity & DC Sheath
- Offshore Nexans 66kV cable terminations at each WTG including installation of permanent hang-off, cable stripping and fixing, HV termination and testing, FO terminations and testing
- Offshore PCC Subsea cable terminations at the OSS including installation of permanent hang-off, cable stripping and fixing, HV termination and testing, FO terminations and testing
- Post Termination Testing, LIRA & TDR
- Mechanical Completion Certificate and Associated As-Built Documentation.

ABOUT SOUTH FORK

Upon completion, the 132 MW offshore wind farm is projected to provide enough clean renewable energy to power over 70,000 Long Island homes.

