



CLIENT

PX Ltd

PROJECT

**66kV and 11kV Primary Substation
Infrastructure Project at the
Teesside Gas Processing Plant**

LOCATION

Seal Sands, Teesside

SERVICES PROVIDED

- Principal Contractor and Principal Designer
- Substation building and fencing
- Fire and Security System for the site compound
- 66kV Circuit Breakers
- 66/11kV Transformers
- 11kV incoming switchboard
- LV Panels for auxiliary loads
- Auxiliary transformers
- HVAC for safe operations
- Supply and installation of 66kV cables, 11kV cables, LV cables, and communications cables
- All cable joints and terminations
- Cable containment and cable trench work
- Earthing system
- Electrical protection system
- SCADA Works
- Testing and Commissioning

OVERVIEW

The Breagh Gas Field is located in the North Sea. A 20" pipeline transports hydrocarbon fluids from the Breagh Alpha Platform to the Teesside Gas Processing Plant (TGPP) terminal at Seal Sands, for processing and gas export to the National Grid National Transmission System gas pipeline.

DESCRIPTION

The scope for the TGPP ICP & HV Infrastructure Project included the establishment of a new 66kV point of supply within the adjacent Northern Powergrid (NPg) 66kV Seal Sands Substation. A new 20MVA 66kV metering substation compound was established, including all civil, building, electrical, control, ancillary equipment, cabling, earthing, and 66kV / fibre optic cabling between the site and Seal Sands 66kV Substation. IUS undertook all contestable works as an ICP for adoption by NPg on completion.

A new 66/11kV compound was established, including all civil, building, electrical (66/11kV transformers and main intake 11kV switchboard), control, ancillary equipment, cabling, earthing, and cabling to remote equipment including the new compressor unit, 2 x 11kV Switchboards, and all ancillary interfaces.

As an ICP, IUS also carried out the 66kV contestable works under accreditation to the Lloyds Register (LR) National Electricity Registration Scheme (NERS), with technical assessments undertaken at key stages throughout the project.