

CLIENT

**Melton Wind Ltd / Seneca Global
Energy**

PROJECT

Melton Wind Farm

LOCATION

**Gibson Lane, Melton, Hull,
East Yorkshire**

SERVICES PROVIDED

- Outline and detailed design (Electrical and civil)
- 33kV Contestable connection work
- On-site private 33kV infrastructure work
- Procurement of equipment
- Construction of primary substation building to DNO standards
- Horizontal Directional Drilling railway crossing
- Possession planning
- Installation of 33kV switchgear
- Installation of containerised substations on raised platforms
- Installation of 33kV cables
- Heavy lifting operations
- Protection design
- Installation of turbine LV cables
- Testing and commissioning
- Preparation of handback documentation

OVERVIEW

IUS has completed the electrical construction works associated with the Melton Wind Farm development. The connection of the two 2.3MW wind turbines to the grid required a 33kV extension to the Northern Powergrid (NPg) electrical network. IUS was appointed to undertake the design and installation of the 33kV contestable elements of the connection works, along with the private 33kV and LV infrastructure.

DESCRIPTION

The project involved the construction of a combined building to house the 33kV NPg intake substation equipment and the customer-owned 33kV switchgear. The 33kV cable route to the new substation required the crossing of the Hull–London Railway Line by Horizontal Directional Drilling (HDD) methods. The IUS scope of works included all negotiations with Network Rail, HDD design and settlement calculations, possession planning and drilling operations. The private electrical infrastructure installed by IUS included; 33kV, pilot and LV single core cables; a three-panel 33kV switchboard; protection equipment; substation ancillary apparatus and two 2.5MVA containerised substations on raised platforms (flood risk mitigation).