

Uskmouth and Swansea North Substation Trenches

CLIENT: Neary Construction

LOCATION: United Kingdom

YEAR OF COMPLETION: 2010

The project involved the design of the ground support systems for a series of trenches for the laying of new electricity cables as part of upgrading the power station and substations. The trenches varied up to 3m deep and over 2m wide. The support system catered for the construction traffic adjacent or passing over the trench, and for the scaffolding erected at the sealing ends of the cable runs. The ground conditions varied from stiff clay to soft marshy soils along the cable route.

We worked closely with the contractor to develop designs that suited their preferred methods and sequence of excavation. A fully supported trench system was used to provide a dry, clean environment in which the cables could be installed. Special trench support systems were required at jointing bays along the cable route and at the sealing ends where the cables were connected into the substations.

KEY FACTS:

- HV cable trenches
- Timber boarded trench designs
- Jointing bays

