

# 33kV Primary substation



## Priors Hall, Corby

To provide the backbone of the electrical supply infrastructure required for the Priors Hall development Powersystems were appointed by Connect Utilities to design and build a new 24MVA 33/11kV primary substation. The substation was connected at 33kV from two central networks 33kV metering circuit breakers 2.5km from the site and will supply a commercial area, 3 schools and 5000 houses once connected. Powersystems acted as designer and principle contractor throughout the construction phase of the project.



Corby Priors Hall 33/11kV primary substation



33/11kV 11/18/24MVA Transformer offload



33kV switchboard

The substation construction and electrical design of the primary substation was taken on as a complete turnkey project with Powersystems responsible for the complete works.

- ▶ Substation civil and electrical design
- ▶ Substation civil construction
- ▶ Specification, Procurements and installation of electrical equipment
  - ▶ 1No 15MVA 132/11KV transformer
  - ▶ 5 panel 33kV switchboard
  - ▶ 2No 11/18/24MVA transformers
  - ▶ 9 panels of 11kv switchgear
  - ▶ Transformer Protection panels
  - ▶ DC Battery chargers
- ▶ Excavation of 2.5km 33kV grid connection route.
- ▶ Installation of 5km of 33kV cable and pilot cables.
- ▶ Jointing and termination of 33kV cables along grid route
- ▶ Excavation of 4.5km 11kV connection to adjacent site and cable laying.
- ▶ Test and commissioning of substation and cable installation.

The complete project was designed and constructed in 70weeks ready for connection.