



Network Rail West Coast is undertaking a large scale investment project to upgrade the OHL Power Supply System on the West Coast Mainline. The project involved the installation of eight new Autotransformer GIS substations and carry out the conversion of an existing GECMK1 building.

Contract Details

Commenced September 2006
Completion date June 2008

Location

West Coast Mainline TV4 - Lichfield / Tamworth

Harker Feeding Area

Weaver Junction ATFS

Oxenholme Feeding Area

Principal Works

- Installation Test & Commissioning at 9 HV Auto Transformer Substations
- HV Section Proving and Soak Testing of sites.
- Provision of other associated equipment and services

The West Coast Power Supply project is part of a programme of works to reinforce the electrification infrastructure along selected routes to permit operation of an enhanced train service.

The new traction supply comprises of a series of new 25-0-25 kV autotransformer power supply substations to be installed at specified Network Rail sites, as part of the West Coast Autotransformer Project.

The project has involved the installation of 2 new Autotransformer Feeder Station (ATFS) buildings. The biggest challenge of this installation has been the interface with the 400kV National Grid system. The installation, test and commissioning strategy was produced to minimise outages of the 400kV system and allow system testing to be

carried out jointly by both parties. The key to this successful interface was the careful planning by the testing team well in advance of the site works.

Pre-commissioning of the Transmittion and Westinghouse Rail SCADA systems right through to final end to end testing back to the ECR was completed.

The final part of the Overhead line to power testing works carried out was the section proving and short circuit testing required for entry into service. Again the possession, outage, third party planning has been key to the efficient completion and handback of the sites.

The project involved test and commissioning of Siemens 8DA, Areva WI, GECMK1, FKI Hawker Siddereley switchgear.