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.

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.

The team was with the project from the pre-commissioning and installation stage all the way to final testing, including overhead line testing, section proving and circuit testing, which was required before the newly upgraded line could be put into service.

The successful testing was fully documented and results, testing plans and itemised faults were outlined and fixed as part of our testing services. After the successful completion of the testing phase, the line was put into service for commercial use after minimal downtime.

The key to our prompt success was the integration of resources from WJ Project Services, as well as the ongoing attention to detail and detailed plans of action to follow the brief as precisely as possible to the client's specifications.

Our team of engineers work in tandem with each other, seamlessly performing complex and innovative procedures and testing schemes to the letter, crafted with the best interests of the client and Network Rail infrastructure in mind.