



THE POWER
BEHIND RAIL





We have played lead and collaborative roles in several flagship railway projects

WHAT WE DO

With over 20 years experience as a rail contractor, UK Power Networks Services are a leading provider of electrical rail infrastructure services throughout the UK.

UK Power Networks Services offers a fully integrated solution including consultancy, project management, finance, design, construction, operation and maintenance, asset management and sustainability solutions. UK Power Networks Services work on all variants of both AC and DC rail infrastructure found in the UK, including high speed, continental, classic, the London Underground System and light rail.

Our expertise ranges from high voltage engineering and traction power supplies through to station services for the full spectrum of rail infrastructure.

We have played lead and collaborative roles in several flagship railway projects, including Thameslink, the Great Western Electrification Project and the complete design and construction of the traction and auxiliary power systems for High Speed 1, the UK's first high speed rail link.

HEALTH & SAFETY IN RAIL STAY SAFE INITIATIVE

UK Power Networks Services deliver a fully integrated approach to developing health and safety by applying proven strategies and innovations from the Safety Management System (SMS). UK Power Networks Services are also very heavily involved in Network Rail's Infrastructure Projects (IP) Southern Shield initiative where Network Rail are working with their supply chain to collaboratively and continuously improve health and safety.

UK Power Networks Services have a proactive rather than reactive mind-set to Health and Safety. We believe that coaching our team's perception with regards to behaviours, beliefs and attitude is the safest way going forward. In essence we wish to ensure that safety is not a conscious choice but part of our DNA, conditioning the mind to always think 'Stay Safe'.

In January 2013, UK Power Networks launched the 'Stay Safe' programme to challenge the psychological aspects of behaviour and attitudes toward safety. In its first year, 2,293 staff attended the 'Stay Safe' launch day, where all were given the opportunity to progress further to become Front Line Coaches (FLCs), Organisational Coaches (OCs), or trainers.

As a result, the 'Stay Safe' programme has contributed greatly to UK Power Networks' lowest incident rate ever for a Distribution Network Operator (DNO) in 2014.

OUR TECHNICAL CAPABILITIES

- Electrification power modelling and design services for heavy and light rail infrastructure
- Design and installation of incoming power supplies ranging from 11kV to 33kV
- 400kV, 132kV & 66kV interface capability
- Design and construction of AC and DC traction power substations
- AC/DC substation upgrades and renewals including rectification and protection systems
- Installation and commissioning of switchboards
- 11kV and fibre optic cabling
- Installation and commissioning of battery charger units
- Installation of traction power Inverter
- Electrical Track Equipment (ETE) works
- SCADA systems
- Practice whole life asset management
- Infrastructure operations and maintenance capabilities
- Design and installation of control, protection and fire alarm systems

ACCREDITATIONS

- BS-EN-ISO 9001:2008
- BS-EN-ISO 14001:2004
- BS-OHSAS 18001:2007
- Network Rail Principal Contractor Licence
- High Speed 1 Contractors Assurance Case
- BS11000 – Collaborative Business Relationships
- Achilles RISQS
- Achilles UVDB
- Lloyds Register NERS
- Constructionline
- CHAS
- CHAS Designer
- Electrical Contractors Association (ECA)
- Joint Industry Board (JIB)
- NSAR (National Skill Academy for Rail)
- FORS (Fleet Operator Recognition Scheme)

CASE STUDIES

KENT POWER SUPPLY ENHANCEMENTS

South Eastern Trains' aspiration was to introduce twelve-car networker trains between London (Cannon Street, Charing Cross, and London Bridge) and Dartford, Gravesend, Hayes and Sevenoaks to provide additional seating capacity.

UK Power Networks Services were successful in their bid; including 5 transformer rectifiers, 37 TP Huts, 17 new DC switchboards and up to 52km of DC cabling. We then brought the rest of the system up to the same standard by the end of 2014 when extra trains were added to the timetable.

UK Power Networks Services, working in collaboration with its subcontractor (SRS) and their client (Network Rail) have delivered this complex programme on time, bringing real benefits to the travelling public.



GREAT WESTERN ELECTRIFICATION

The ABB and UK Power Networks Services equal-share consortium are responsible for the turnkey delivery of more than 30 new traction power substations, designed to the new Rationalised Autotransformer Scheme (25-0-25kV), that will play a vital role in the upgrading of one of the UK's oldest and busiest railways – helping to ensure more efficient and reliable transport connections for towns and cities across the South West and South Wales.



SUB SURFACE RAIL PACKAGES 2 & 3B

London Underground are currently conducting a programme of works to strengthen the Underground's high voltage, low voltage and DC power networks, in support of major line upgrades and timetable enhancements.

Since being awarded the contract, UK Power Networks Services have upgraded the traction power supplies at 16 traction power substations throughout the Metropolitan, Circle, Hammersmith and City, and District Line London Underground Infrastructure.





Head Office Address:
UK Power Networks Services
Newington House (2nd Floor)
237 Southwark Bridge Road
London SE1 6NP

Contact:
David Mitchell
Head of Rail
enquiries@ukpowernetworks.co.uk

