

# RJ PWER GROUP

- WHO WE ARE
- WHAT WE DO

#### 🥒 RAI

- HV Electrification Works
- DC Traction Power
- Earthing & Bonding
- Signalling Power Supplies

#### **2** NETWORKS

- HV & LV Project Works
- Maintenance of HV & LV Distribution Systems
- 길 Emergency Callout Works
- Non-Intrusive Operational Switchgear and Substation Assessments

#### CONNECTIONS

- 길 Commercial & Industrial
- Capacity Management
- Renewable Energy

#### **2** NORTH

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- **W** GET IN TOUCH

### **WHO WE ARE**

# RJ Power Group of companies provide integrated design and engineering services to the power sector for both LV and HV applications.

We offer a comprehensive planning and feasibility service to complement our full turnkey design, installation, testing and commissioning capabilities, which allows us to engineer the most appropriate electrical power solutions.

We have established trusted relationships with many UK power network providers and have built an excellent reputation for delivering projects on time, to budget and with an outstanding safety record.

We have four complementary businesses that cover Rail, Private Networks and Connections, to meet and exceed our customers' requirements in respect of design, installation, testing and commissioning of power applications in the UK.

RJ Power Group of companies support our clients from initial design, through to successful installation, testing and commissioning with on-going maintenance to ensure continued efficiency and safety of their power assets.

We offer our clients a responsive, collaborative and valued added service, delivering complex power projects twenty-four hours a day, seven days a week.



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### **22 THE BUSINESSES**

We have four complementary businesses that meet and exceed our customers' requirements in respect of the design, installation, testing and commissioning of both high and low voltage power applications in the UK.

#### **RJ Power Rail Limited**

RJ Power Rail provide power engineering services for the rail industry as a Principal Contractor. Its expert team has decades of experience covering all aspects of electrical engineering within high voltage electrification systems, traction power and industrial low voltage distribution systems across various regions within the UK.

#### **RJ Power Networks Limited**

RJ Power Networks design, install, operate and maintain High and Low Voltage Distribution Networks to end users and duty holders throughout London and the South.

#### **RJ Power Connections Limited**

RJ Power Connections is a NERS certified Independent Connections Provider (ICP), experienced in delivering safe, sustainable and costeffective grid connections to electricity distribution systems.

#### **RJ Power North Limited**

RJ Power North undertakes all manner of installation works, from control cabling and relay works, through to the provision of high voltage ring-main systems and private distribution networks in the North of the UK.



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### **20** OUR HISTORY

Our history is one of continuing evolution around our core skills and our strength is the diversity of our expertise offered by a directly employed skilled workforce of dedicated specialists.

Started by professional engineers with experience stretching over three decades, our four companies and their teams of experts have continually striven to provide a wealth of industry experience in HV and DC, delivering project success in both renewals and maintenance for our clients.

At RJ Power Group of companies, we believe our proactive approach is what makes us different. We have worked hard to ensure each business is up-to-date with the latest skills and knowledge. Focusing on self-investment, training and continual employee staff development has allowed us to develop highly skilled and motivated internal workforces that are experienced and deliver a tailored solution to suit our customers' needs.

As dynamic organisations, every company is able to quickly integrate its expertise into respective client structures, working as collaboratively or as autonomously as required.

We offer a flexible approach to business, but with bigger company attitudes to safety, quality and overall risk management, which has enabled key members of staff across the businesses to build up local knowledge of their respective infrastructure and gain respect from the organisations that work within it.



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### **20 OUR VALUES**

At RJ Power Group of companies, our core values provide the foundation for how we work. Taking a consultative and highly proactive approach, we seek to work in partnership with our clients and our supply chain, to create the most effective solutions.

Recognising the imperative to continually change and adapt our services to meet the developing needs of our clients, we place a particular emphasis on responding pragmatically to specific client requirements or circumstances, and on providing continuing support to clients throughout their use of our solutions.

Our values are at the core of everything we do; they characterise our behaviour and help to shape the culture, attitudes and principles of our business.



#### **SAFETY**

Act safe, be safe, think safe' is inherent in our business culture. We have a zero-tolerance policy to safety.



#### **QUALITY**

We believe in delivering a high quality service, one that we are all proud of.



#### **RESPECT**

We have respect for our team, our partners and the areas in which we operate.



#### RELIABILITY

We believe in delivering on time and to budget, without compromise.

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### **WHAT WE DO**

We provide innovative power engineering solutions in four distinct but complimentary businesses, covering rail, private networks and connections.

Our in-house engineers have vast knowledge in solving problems across various distribution systems and we can offer a full design, install, test and commission service from 415V up to 66kV.

We combine extensive levels of competence with decades of experience and undertake all aspects of HV and LV power systems engineering.

As a result, we can offer a fully integrated turnkey offering to each of our customers.

#### Design

We devise power-engineering solutions to meet any challenge. We value engineer your requirements to provide the most cost effective and appropriate solution that meets all associated operational and industry requirements.

#### **Installation**

We offer a cohesive, reliable implementation service, which is delivered with high levels of quality, safety and

environmental adherence. We collaborate throughout the planning phase giving due consideration to all parties involved and are capable of delivering complex electrical infrastructure solutions in a multi-disciplinary environment.

#### **Testing and Commissioning**

We provide a full testing and commissioning service in respect of electrical power distribution assets. This covers the assets full operational life, from the initial installation through to the final commissioning and handing back into service.

#### Maintenance

We can provide a comprehensive maintenance service, to ensure reliable performance of electrical power assets.

Our in-house resources are competent and fully authorised for work on the various power networks, following the strict guidelines and codes of practice for work within a controlled and safe system of work environment.



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### **W** RAIL

RJ Power Rail was established in 2008 and provides power engineering services for the rail industry. Our expert team has decades of experience covering all aspects of electrical engineering within high voltage electrification systems, traction power and industrial low voltage distribution systems across various regions within the UK.

RJ Power Rail shares our clients' objectives in how we conduct ourselves and our business, which has allowed us to develop longterm relationships with Network Rail, TfL and a number of Tier 1 railway principal contractors.



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### **WHY ELECTRIFICATION WORKS**

RJ Power Rail provides a range of HV electrification works and services – 6.6kV to 33kV – for our rail clients across the UK rail infrastructure. We cover every aspect of an HV electrification project including design, installation, testing, commissioning and bringing into service. Our highly experienced staff are specifically trained in dealing with the HV networks across the rail industry.

**HV feeders** – providing maintenance, fault finding, repair, cable jointing, installations, renewals and enhancements of 33kV, 25kV and 11kV Oil and XLPE HV feeder and pilot cables on Network Rail's HV electrification network including works within National Grid sites.

**Transformers** – from auxiliary transformers to transformer rectifiers – covering all services including design, de-commissioning, modifications, installations, testing and commissioning of various types of equipment into service.

**Substation installations** – from containerised sub-stations to installation/modifications of internal switchgear, including all associated protection setting requirements and the upgrade of existing traction parallel huts (TP huts). We can also supply and install new modules, undertake re-builds and test and commission into service.



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### DC TRACTION POWER

RJ Power Rail has extensive knowledge and experience of the rail Traction network working on renewals, enhancements and maintenance schemes. We provide fully trained in-house staff who manage the entire scope of a DC traction power project including delivery, installation, testing and commissioning, along with bringing into service.

**Smarter Safer Isolations** – design, installation and commissioning of Controlled Track Switches (CTS), Negative Short-Circuiting Devices (NSCD) Track Feeder Switches (TFS), Negative Bonding Switches (NBS) and all associated integrated switches.

**DC Switchgear** – renewal and enhancement of DC equipment within substations and TP huts including interconnecting wiring to SCADA and supervisory control systems, battery/LV supplies and modifications to existing equipment.

**DC Positive and Negative track cabling** – design, installation and commissioning of both positive and negative track cabling from substations to interconnecting cables, hook switches, motorised and non-motorised track isolation switches, advanced plates, jumper cabling, cross and track bonding, track terminations, in-line jointing and other associated electrical track equipment.

Complete depot traction supplies – from maintenance, renewals and upgrades, through to brand new depot traction supplies including the installation of shore supply switchboards, line side pillars and changeover switches to facilitate shore supplies.



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### **EARTHING & BONDING**

RJ Power Rail provides design, installation and commissioning expertise for of all types of earthing and bonding systems including sub-station earthing. This is prevalent when it comes to "Hot Sites" which are locations where the voltage between the substation and or switching station earth bar and the local earth (UTE), exceed a defined voltage limit (UTE MAX), during a phase-to-earth fault. RJ Power Rail can provide valuable support in both consulting and designing efficient earthing rectification.

**Sub-Station Earthing** – from early engagement and consulting with Network Rail Engineers, RJ Power Rail can design, install and commission all types of earthing arrangements from "Hot Site" rectification, to new installations using the standard methodology of driving earth rods into the ground utilising pneumatic drivers, to core drilling and installing earthing systems using Marconite Conductive Concrete.

**Bonding** – from new installations to maintenance of existing systems in predominantly 25kV areas, RJ Power Rail can design and install all types of bonding systems whether it be connecting from the existing Return Screen Conductor (RSC) using Pfisterer ground tap connections, or connecting 120mm bonding cables to extraneous metalwork.



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### SIGNALLING POWER SUPPLIES

RJ Power Rail delivers the design, installation and commissioning of new and modified Principal Supply Points (PSP's), Auxiliary Supply Points (ASP's), Functional Supply Points (FSP's) and 650V Signalling Power Distribution Feeders with Auto Reconfiguration Systems.

#### Principal Supply Points (PSP's) and Auxiliary Supply Points (ASP's)

- from the supply, delivery, installation and commissioning of new containerised PSP's, we can manage the lifecycle of the project through early engagement at the design phase. We also work with the manufacturers to provide the most appropriate plant and switchgear in order to provide a safe and secure signalling power supply to the track side equipment.

Functional Supply Points (FSP) – we provide a fully managed service for the installation and commissioning of new FSP's and provide a modification service for existing FSP's to maximise the efficiency of the newer, safer Functional Supply Points, in order to remove 'touch potential' dangers. When faced with non-compliant housing's products, we can complete work to these to make them SIN119 compliant.

**650v Signalling Power Distribution Feeders** – we install all types and sizes of 650v Signal Power Cables over varying distances. Terminations to trackside equipment and full dead testing is carried out by our testing engineers prior to commissioning.



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### NETWORKS

RJ Power Networks Limited, design, install, operate and maintain High and Low Voltage Distribution Networks to end users and duty holders throughout London and the South.

Our activities support many sectors typically, Building Services, Manufacturing, Hospitality and Leisure, Hospitals and Pharmaceuticals, Transportation, MOD, Media and Television, Renewables (Solar and Wind), Generation Companies, National Infrastructure, Airports, Shipping, DLR, Data Centre, Mines, Quarries, Universities and Schools.

We follow the guidance of statutory obligation (Electricity at Work Regulations 1989 – Electricity Safety, Quality and Continuity Regulations 2002) and adhere to manufacturers OEM specifications for periodic maintenance, looking at service intervals and any known defects that must be addressed.

RJ Power Networks Limited subscribe to the NEDeRS, a live database and reporting portal that updates the industry with equipment defects to support safe operation of an electricity network. Our customers benefit from this and we will communicate any restrictions and equipment failures that may compromise the customers own NED works.



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### NETWORKS

#### **Capabilities**

RJ Power Networks Limited has a dedicated team of Electrical Engineers, Electrical Technicians and support staff committed to delivering quality engineering solutions from electrical distribution plant maintenance through to turnkey electrical plant upgrades. The business has a wealth of in-house knowledge and skills through the employment of trusted industry experts enabling self-delivery of our activities.

We are identified as a quality business, which exceeds expectation and we believe this separates us from our competitors. Quality and high standards of competence are the driving force of RJ Power Networks' day-to-day operation, from original enquiry, to delivery and after event reporting.

Our commitment to safety is at the core of what we do. We operate our own distribution safety rules, ensuring statutory compliance. Our Authorising Engineer and Managing Director holds ultimate authority in managing safety throughout our business. RJ Power Networks' primary role is to ensure safety protocols are maintained at all times.

#### Services

- HV and LV Switchgear Maintenance (400v 3 Phase to 33kV)
- Installation of HV and LV Switchgear Switchroom and Substation Construction (400v 3 Phase to 33kV)
- Testing and Commissioning of Electrical Distribution Equipment (400v 3 Phase to 33kV)
- Senior Authorised Person Duties
- Power Factor Correction
- AE Services (Authorising Engineer)
- Training and Development
- Mand LV Cable Services Installation, Testing and Commissioning
- Condition Based Monitoring of Electrical Assets and Infrastructure
- Total Asset Management Control Operation and Maintenance (COMA)
- Earthing Lightning and Protection Systems Earthing Systems Design and Testing
- Full Turnkey Infrastructure Projects Design, Procurement, Installation, Testing and Commissioning
- Nationwide 24 Hour, 365 days a year Emergency Response
- Consultancy Services (Arc Flash Studies Protection and Grading Studies G99 Compliance)
- 🔊 Independent Connections Provider Lloyds Accredited Networks Resilience and Infrastructure Design
- Design and Energy Management



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### W HV & LV PROJECT WORKS

RJ Power Networks can undertake all manner of HV and LV project works ranging from replacing or upgrading equipment to completely new installations. We have the skills and capability to offer these services for voltages between 400v and 33kV.

Whether it be for a brand-new installation, to provide expansion to support client's growth or due to a change in equipment, RJ Power Networks are able to support with electrical system design. We will attend client sites, identify and document systems currently in place and work together to recommend a fit for purpose solution that delivers a safe and effective solution providing the best value for money.

We are able to offer an end to end service from developing the project scope, sourcing and procurement of equipment, installation, testing and commissioning and ongoing maintenance. We also offer a full replacement service, when equipment has reached the end of its working life.

We can undertake works 24/7 to suit each project requirement, additionally offering an emergency callout service, so that we can minimise disruption to our client's operations when a problem arises.

We are fully conversant with The Construction (Design and Management) Regulations 2015 and the relevant requirements for delivering project works.

We pride ourselves on building strong, long lasting relationships with our clients, so we can ensure their electrical systems function and adapt in line with their business development.



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# MAINTENANCE OF HV & LV DISTRIBUTION SYSTEMS

RJ Power Networks are maintainers of HV and LV Voltage electrical distribution systems to Duty Holders and End Users throughout the UK and Europe, offering an unequalled and unique service to those looking for high standards in the delivery of Maintenance activities.

The Networks Team provide exceptional skills, knowledge and competence within the Electrical Power Industry and carry a wealth of expertise in the application of electrical plant, cable systems and controls.

Regular inspection and maintenance of electrical systems is essential for ensuring that equipment remains in safe and good working order at all times and prevents lost productivity due to unplanned shut downs. We work closely with our clients to ensure maintenance activities are scheduled at times which cause minimal disruption to their operations including evenings and weekends.

We work closely with our clients throughout the completion of maintenance activities, keeping them informed of any identified issues including faulty equipment or performance problems. Our experienced and knowledgeable team are able to recognise root cause and identify cost effective solutions for bringing systems back to safe working order.

Our team are experienced in working with a wide range of equipment and we work closely with our supply chain partners to source any replacement equipment quickly, ensuring it is installed to manufacturers specifications.

Following the completion of our activities, clients are provided with a full maintenance report detailing the completed activities and any recommendations for further future proofing their electrical systems.



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### EMERGENCY CALLOUT WORKS

RJ Power Networks' offer a dedicated Nationwide Emergency Response Service providing cover to commercial and industry duty holders and end users nationally, 24 hours a day, 365 days a year.

Often triggered by a sudden loss of supply, clients can contact RJ Power Networks and request the attendance of our highly skilled team to investigate and identify the source of the problem. We can respond quickly and efficiently using a combination of internal skills and expertise as well as engaging members of our trusted supply chain where required.

We work closely with our supply chain partners to ensure we are able to source any required equipment quickly and at the best possible value, focusing on working closely with our clients to achieve safe and normal working operations as soon as possible.

For Emergency assistance please contact 0345 034 1480.



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# NON-INTRUSIVE OPERATIONAL SWITCHGEAR AND SUBSTATION ASSESSMENTS

RJ Power Networks offer a non-intrusive assessment service for operational switchgear and substations. The Networks team can provide regular inspection of substations and substation equipment without any power interruptions.

Our services include and are not limited to:

- Partial discharge testing of HV equipment
- Battery charger and DC system inspection and test
- Substation integrity checks
- Substation earth terminal inspection and test
- Thermographic studies
- Transformer insulating oil sampling to comply with British standards for oil quality (DGA/Moisture/Acidity/Fibre/FFA/Electrical Strength)
- Load monitoring and power quality studies

All services conform to and include:

- BS 6626 2010 Maintenance of Electrical Switchgear and Control Gear for Voltages above 1kV and up to and including 36kV
- BS 6423 2014 Codes of practice for maintenance of Low Voltage switchgear and control gear
- The Electricity at Work Regulations 1989 (EAWR)
- Health and Safety at Work Act 1974 (the HSW act)
- Management of Health and Safety at Work Regulations 1999 (the Management Regulations)
- Reference HSG230 Keeping Electrical Switchgear Safe



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RJ Power Connections specialise in Grid/Network Connections and Contestable Works, offering the client an alternative to using the local Distribution Network Operators (DNO). RJ Power Connections are a customer focused business that delivers high quality, flexible solutions for a wide range of utility connection requirements.

As a NERS accredited Independent Connection Provider (ICP), we have no contractual links to equipment suppliers or contractors, meaning we are justly independent and able to consider all available options for a project. We strive to build long term relationships with our clients to provide the optimal engineering solution whilst maintaining commercial advantages.

Whether you are responsible for domestic, commercial or industrial facilities, capacity management requirements, renewable construction or water treatment facilities, RJ Power Connections always provides the most timely and competitive Network connection offer, to meet each and every requirement.

In conjunction with offering competitive packages for new connections, we have the ability to design and install private high voltage networks downstream of any metering point. This provides a more flexible design and specification to produce a complete end to end package of works to save Clients time and money.



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Temporary connections are often required as we enter an ever-evolving market for new buildings and infrastructures. RJ Power can offer, in addition to any permanent connection works, temporary connections or temporary builder supplies (TBS). We provide this service which allows supplies to be connected temporarily thus allowing negotiations to continue for a permanent connection. Thanks to our in-house expertise, we provide a trusted point of contact throughout the project lifecycle, which helps to minimise the risk of schedule delays and helps us to maintain project quality, whilst delivering a safe and sustainable solution.

We can assume responsibility for the following elements of a project:

- Design of a connection from the 'Point of Connection' (POC) to the site
- Supply of all cables, switchgear, and transformers required to make the connection
- 2 Civil engineering works including excavation of the connection route, cable laying from the POC to the site, the installation of concrete bases for substations and other electrical equipment.
- Construction and installation of electricity substations
- Commissioning of the installed connection assets
- Full project management of all works
- Full project handback including as-built records for all connected assets

We specialise in both high and low voltage distribution systems covering the following:

- Cable jointing (LV, 11kV, 33kV, 132kV)
- Cable laying (LV, 11kV, 33kV, 66kV, 132kV)
- HV cable networks (11kV, 33kV, 66kV, 132kV)
- Substation installations (11kV, 33kV, 66kV, 132kV)
- Full electrical design facility

## RJ PWER GROUP

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- HV Electrification Works
- DC Traction Power
- 길 Earthing & Bonding
- Signalling Power Supplies

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- Maintenance of HV & LV Distribution Systems
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### COMMERCIAL & INDUSTRIAL

Our Clients select us as their partner in ICP of choice, because we offer a faster, more flexible and cost-effective service for new connections and related power services, without having to rely on DNOs. RJ Power Connections work closely with IDNO (Independent Distribution Network Operators) to provide adoption of our Clients assets, thus providing financial benefits in return, or more flexible technical solutions.

When planning commences for a new or expanding commercial or industrial facility, timing is everything. Delays to project scheduling can prove extremely costly, which is why we pride ourselves on providing highly responsive support to clients in this sector.

Our experienced electrical engineers specialise in both high and low voltage distribution systems, and we can provide all relevant services in house, without the need for subcontracting.

Developments are often in remote locations with limited access requiring expertise in planning, design and project management. At RJ Power Connections, we pride ourselves in delivering connection solutions that meet our Clients requirements.

#### Our services

We have experience of working on numerous commercial and industrial power projects throughout the UK. We offer a full suite of electrical infrastructure services, for your project:

- Design
- New connections
- Cabling & jointing
- Containerised solutions for time-sensitive or space constrained sites
- Switchgear & transformers
- Testing and commissioning
- Service, full maintenance and project hand back

In addition, we are also able to deliver an entire project from start to finish, providing a fully managed project solution from project feasibility through to energisation and adoption.



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### CAPACITY MANAGEMENT

Capacity managements primary good is to ensure that information technology resources are right sized to meet current and future business requirements in a cost-effective manner.

The capacity market will ensure security and stability of supplies by providing a payment for reliable sources of capacity, alongside electricity revenues to ensure energy is delivered when needed. RJ Power Connections have vast capabilities and experience in helping to balance supplies and demands to the UK grid to working with developers for options within import, export, STOR and triad services.

Our capacity management services include:

- Grid/Network connection applications
- Design, procurement and installation of new connections
- Design and supply of networks with embedded generation
- Design and supply of solutions that facilitate the stable, continuous and optimised flow of electricity
- Groundworks, including all civil engineering and construction works
- Cabling, jointing, switchgear and transformer works
- Full project management
- Containerised solutions
- Network operations
- Testing and commissioning
- Full Maintenance and project hand back

In addition to these services, our electrical engineers can provide a full managed solution and a single source of warranty for your project. We deliver a fully risk managed project covering the entire scope of works – from feasibility, through to design and project handover and offer full on-going maintenance – which helps to minimise project delays and is extremely cost effective.



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### RENEWABLE ENERGY

RJ Power Connections has vast experience in the renewables sector, covering any wind, solar, AD or waste to energy project. Clients can benefit from our experience, which enables us to value engineer every project that we are involved in.

RJ Power Connections team has worked on some of the biggest STOR schemes in the UK and because of our experience in this complex field, we have the ability to supply a sustainable, professional and fully managed solution.

Our highly skilled electrical engineers are able to deliver following services:

- Execution of major electrical balance of plant contracts
- Grid/Network connections from 6.6kV to 132kV
- Electrical design, supply and installation, switchgear, transformers, cable infrastructure, earth systems and SCADA cabling
- Installation of feed in tariff (FIT) and auxiliary supply meters
- Civil engineering and construction works
- Full testing and commissioning



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### **2** NORTH

RJ Power North Limited design, install, operate and maintain High and Low Voltage Distribution Networks to end users and duty holders throughout the North of the UK.

Our activities support many sectors typically, Building Services, Manufacturing, Hospitality and Leisure, Hospitals and Pharmaceuticals, Transportation, MOD, Media and Television, Renewables (Solar and Wind), Generation Companies, National Infrastructure, Airports, Shipping, DLR, Data Centre, Mines, Quarries, Universities and Schools.

We follow the guidance of statutory obligation (Electricity at Work Regulations 1989 – Electricity Safety, Quality and Continuity Regulations 2002) and adhere to manufacturers OEM specifications for periodic maintenance, looking at service intervals and any known defects that must be addressed.

RJ Power North Limited subscribe to the NEDeRS, a live database and reporting portal that updates the industry with equipment defects to support safe operation of an electricity network. Our customers benefit from this and we will communicate any restrictions and equipment failures that may compromise the customers own NED works.



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### **2** NORTH

#### **Capabilities**

RJ Power North Limited has a dedicated team of Electrical Engineers, Electrical Technicians and support staff from its York office, that are committed to delivering quality engineering solutions from electrical distribution plant maintenance through to turnkey electrical plant upgrades. The business has a wealth of in-house knowledge and skills through the employment of trusted industry experts enabling self-delivery of our activities.

We are identified as a quality business, which exceeds expectation and we believe this separates us from our competitors. Quality and high standards of competence are the driving force of RJ Power North's day-to-day operation, from original enquiry, to delivery and after event reporting.

Our commitment to safety is at the core of what we do. We operate our own distribution safety rules, ensuring statutory compliance. Our Authorising Engineer and Managing Director holds ultimate authority in managing safety throughout our business. RJ Power North's primary role is to ensure safety protocols are maintained at all times.

#### Services

- HV and LV Switchgear Maintenance (400v 3 Phase to 66kV)
- Installation of HV and LV Switchgear Switchroom and Substation Construction (400v 3 Phase to 33kV)
- Testing and Commissioning of Electrical Distribution Equipment (400v 3 Phase to 66kV)
- EV Battery Charger Unit Installation Works
- Senior Authorised Person Duties
- Power Factor Correction
- AE Services (Authorising Engineer)
- Training and Development
- HV and LV Cable Services Installation, Testing and Commissioning
- Condition Based Monitoring of Electrical Assets and Infrastructure
- Total Asset Management Control Operation and Maintenance (COMA)
- 🔰 Earthing Lightning and Protection Systems Earthing Systems Design and Testing
- 🥒 Full Turnkey Infrastructure Projects Design, Procurement, Installation, Testing and Commissioning
- Nationwide 24 Hour, 365 days a year Emergency Response
- Consultancy Services (Arc Flash Studies Protection and Grading Studies G99 Compliance)
- Independent Connections Provider Lloyds Accredited Networks Resilience and Infrastructure Design
- Design and Energy Management



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### W HV & LV PROJECT WORKS

RJ Power North can undertake all manner of HV and LV project works ranging from replacing or upgrading equipment to completely new installations. We have the skills and capability to offer these services for voltages between 400v and 66kV.

Whether it be for a brand-new installation, to provide expansion to support client's growth or due to a change in equipment, RJ Power North are able to support with electrical system design. We will attend client sites, identify and document systems currently in place and work together to recommend a fit for purpose solution that delivers a safe and effective solution providing the best value for money.

We are able to offer an end to end service from developing the project scope, sourcing and procurement of equipment, installation, testing and commissioning and ongoing maintenance. We also offer a full replacement service, when equipment has reached the end of its working life.

We can undertake works 24/7 to suit each project requirement, additionally offering an emergency callout service, so that we can minimise disruption to our client's operations when a problem arises.

We are fully conversant with The Construction (Design and Management) Regulations 2015 and the relevant requirements for delivering project works.

We pride ourselves on building strong, long lasting relationships with our clients, so we can ensure their electrical systems function and adapt in line with their business development.



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# MAINTENANCE OF HV & LV DISTRIBUTION SYSTEMS

RJ Power North are maintainers of HV and LV Voltage electrical distribution systems to Duty Holders and End Users throughout the UK and Europe, offering an unequalled and unique service to those looking for high standards in the delivery of Maintenance activities.

The North Team provide exceptional skills, knowledge and competence within the Electrical Power Industry and carry a wealth of expertise in the application of electrical plant, cable systems and controls.

Regular inspection and maintenance of electrical systems is essential for ensuring that equipment remains in safe and good working order at all times and prevents lost productivity due to unplanned shut downs. We work closely with our clients to ensure maintenance activities are scheduled at times which cause minimal disruption to their operations including evenings and weekends.

We work closely with our clients throughout the completion of maintenance activities, keeping them informed of any identified issues including faulty equipment or performance problems. Our experienced and knowledgeable team are able to recognise root cause and identify cost effective solutions for bringing systems back to safe working order.

Our team are experienced in working with a wide range of equipment and we work closely with our supply chain partners to source any replacement equipment quickly, ensuring it is installed to manufacturers specifications.

Following the completion of our activities, clients are provided with a full maintenance report detailing the completed activities and any recommendations for further future proofing their electrical systems.



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## **EMERGENCY CALLOUT WORKS**

RJ Power North offer a dedicated Nationwide Emergency Response Service in the North providing cover to commercial and industry duty holders and end users 24 hours a day, 365 days a year.

Often triggered by a sudden loss of supply, clients can contact RJ Power North and request the attendance of our highly skilled team to investigate and identify the source of the problem. We can respond quickly and efficiently using a combination of internal skills and expertise as well as engaging members of our trusted supply chain where required.

We work closely with our supply chain partners to ensure we are able to source any required equipment quickly and at the best possible value, focusing on working closely with our clients to achieve safe and normal working operations as soon as possible.

For Emergency assistance please contact 01904 238256.



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# NON-INTRUSIVE OPERATIONAL SWITCHGEAR AND SUBSTATION ASSESSMENTS

RJ Power North offer a non-intrusive assessment service for operational switchgear and substations. The Networks team can provide regular inspection of substations and substation equipment without any power interruptions.

Our services include and are not limited to:

- Partial discharge testing of HV equipment
- Battery charger and DC system inspection and test
- Substation integrity checks
- Substation earth terminal inspection and test
- Thermographic studies
- Transformer insulating oil sampling to comply with British standards for oil quality (DGA/Moisture/Acidity/Fibre/FFA/Electrical Strength)
- Load monitoring and power quality studies

All services conform to and include:

- BS 6626 2010 Maintenance of Electrical Switchgear and Control Gear for Voltages above 1kV and up to and including 36kV
- BS 6423 2014 Codes of practice for maintenance of Low Voltage switchgear and control gear
- The Electricity at Work Regulations 1989 (EAWR)
- Health and Safety at Work Act 1974 (the HSW act)
- Management of Health and Safety at Work Regulations 1999 (the Management Regulations)
- Reference HSG230 Keeping Electrical Switchgear Safe



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### **22** GET IN TOUCH



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