



TMS GRID

COMBINE - CONSULT - CONNECT

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Peter has been instrumental in bringing over £500m in projects relating to sustainable, renewable and green energy into service. Peter's comprehensive experience sets him ahead of many of his peers within the 'green energy / sustainable' arena.

Peter's expertise is related specifically within Grid Connections and Contestable Works, energy management, business development, cost control, strategy, construction management, commercial law, power management and power engineering.

His project delivery background includes utility scale windfarms, solar farms, battery storage and gas peaking sites as well as many large demand connections and private networks.

PETER EAGLE
MANAGING DIRECTOR



"Here at TMS Grid, we are committed to creating a greener planet for future generations.

With environmental challenges becoming increasingly critical, we believe that it is our responsibility to make a positive impact and contribution to a greener, more sustainable future in energy and power.

Not only by producing high quality renewable energy projects, but also inwardly, we look to optimise energy consumption, reducing our own carbon footprint, aiming to make a tangible difference to the environment.

We all have a role to play in safeguarding our planet for future generations, but at TMS Grid, we strive to lead by example, and inspire positive change".

TMS Grid Ltd provides independent advice and guidance to developers, investors and construction organisations on all matters power and grid-related, across the UK&I.

We were recently certified to ISO standards 9001, 14001 and 45001.

With over 20 years' experience, our expert knowledge delivers value to clients and their projects; throughout the procurement, operational delivery and management of the power network and grid connection, to any power generation or demand developments.

We are an ICP/EPC contractor with an experienced team that manages all aspects of engineering design and procurement. We also, successfully advise on EPC products.

Our team of highly skilled project managers and construction site managers are experts at consistently delivering projects on time and within budget to the highest standard.



- ICP
- EPC
- Energy Trading
- New Utility Connections
- Power Solutions
- Construction
- Business Development & Bid Writing
- HV/LV Switchgear
- Transformers
- Power Cable & Accessories
- Distributors of ALLBRO Enclosures
- Switchboard Components & Equipment

- Cabling & Jointing
- Containerised Substations
- Emergency Callouts
- Industrial, Commercial, Manufacturing
- Maintenance
- New Connections
- Power System Design
- Testing & Commissioning
- EV Charging

RENEWABLES

TMS Grid can fulfil all wind power, solar power, hydro and bio-generation, anaerobic digestion (AD), waste-to-energy, gas peak STOR and battery storage electrical infrastructure requirements. We currently offer turnkey solutions for these renewables projects. Our highly-skilled electrical engineers can also supply and install short term operating reserve (STOR) infrastructure.

Our highly-skilled high voltage electrical engineers can carry out the following services:

- Cable Infrastructure
- Civil construction works
- Design, supply and installation
- Earth systems
- Grid connections from 6.6kV to 400kV
- Installation of feed in tariff (FIT) and auxiliary supply meters
- SCADA cabling
- Switchgear
- Testing and commissioning
- Transformers



INDEPENDENT CONNECTION PROVIDER (ICP)

As an Independent Connection Provider (ICP) TMS Grid Limited is approved and accredited to provide grid connections in all areas of the UK.

Whether industrial or commercial premises or a generation scheme. We can deliver a competitive, turnkey offering, from initial application, design, construction and commissioning, through to final adoption and energisation.

We have been assessed and accredited nationally by Lloyds Register, to carry out the following infrastructure works:

- Cable jointing (LV Dead, LV Live, 11kV, 33kV, 132kV)
- Cable laying (LV, 11kV, 33kV, 66kV, 132kV)
- Civil engineering works (including design, construction, excavation, cable laying and reinstatement)
- Electrical design
- HV cable networks (11kV, 33kV, 66kV, 132kV)
- Overhead steel tower (11kV, 33kV)
- Overhead wooden pole (LV, 11kV, 33kV)
- Project management
- Substation installation (11kV, 33kV, 66kV, 132kV)



- Competition in Connections for the electricity distribution system introduced in 1995 by the electricity market regulator
- All connections to the distribution system have two elements:
- Non-contestable works: undertaken by the host Distribution Network Operator (DNO)
- Contestable works: undertaken by a registered independent connections provider (ICP)
- Customers can seek competitive quotes from registered ICPs for the Contestable elements of work or opt for the host DNO to complete the works

ENGINEERING, PROCUREMENT AND CONSTRUCTION (EPC)

TMS Grid Ltd has been involved in helping to balance supply and demand to the UK grid since infancy of the Engineering Procurement and Construction (EPC) market. This area is rapidly evolving, and with our turnkey service offerings, we're helping drive standards forwards.

Our multi-disciplined team is well-equipped with vast knowledge and experience across an array of balancing services. As well as having worked alongside some of the largest Short-Term Operating Reserve (STOR) developers in the country, we have expertise in Triad, Enhanced Frequency Response (EFR), Firm Frequency Response (FFR), Secondary Frequency Response (SFR) Demand Side Balancing Reserve (DSBR), System Voltage Reduction (SVR) and merchant trade.

END-TO-END PROJECT MANAGEMENT

No matter the scope of your project, we can provide a turnkey solution that's tailored to your specific requirements - and a single source of warranty. With in-house expertise to handle everything from design to commissioning. We're the go-to service provider for developers looking for a safe, efficient and cost-effective capacity management solution.

That's one trusted, experienced contractor to handle the entire scope of works.

- All cabling, jointing, switchgear and transformer works
- Carbon reduction advice
- Containerised solutions
- Design and supply of networks with embedded generation
- Design and supply of solutions that facilitate stable, continuous and optimised flow of electricity.
- Design, procurement and installation of new connections
- Grid connection applications



- Maintenance
- Network operations
- Off-site UIP assistance
- On-site gas and diesel services
- Project and excavation management
- Supply and Installation and testing of gas or diesel gensets (up to 4MW)
- Supply and Installation of battery containers (up to 50MW)
- Testing & Commissioning

ENGINEERING

We Coordinate all aspects of the design of the asset from pre-construction through to install and commissioning.

Our Scope of design management covers:

- Site layout design.
- Full site Civil Engineering design.
- On site electrical design and associated studies. Inclusive of all High Voltage and Low Voltage networks and all electrical generation equipment/plant.
- On site gas network design and associated studies.
- ICP Grid connection design and associated studies. With close liaison with the Distribution Network Operator (DNO)
- Utility Gas connection design and associated studies. With close liaison with the Gas Distribution Network Operator (GDNO).

PROCUREMENT

We procure all equipment and services required to complete the development of the asset.

- This includes the programming and logistical coordination of the equipment and services to ensure a smooth, constant and chronological construction phase.
- All equipment is specified in the detailed design phase of the project lifecycle. We use the specifications to procure only equipment that meets the high standards we design for.
- We programme all items into a procurement schedule that reflects our project drawdown facility. This allows us to plan for equipment to arrive at a time that it can be installed preventing unnecessary delays.

PROCUREMENT

We Manage the entire construction phase from site establishment through to commissioning.

The key construction phases we plan and conduct are:

- Establishment/Enabling works
- Geotechnical investigations
- Civils & Groundworks
- Mechanical & Electrical installation
- Grid connection
- Gas connection
- Commissioning

POWER SYSTEM DESIGN

Boasting many years of combined industry experience, the TMS Grid power system design team offers a complete range of civil and electrical project design and consultancy services.

Our design experts can take responsibility for conducting initial project feasibility studies and specifications, along with designing and negotiating grid and primary substation connections, electrical protection and control schemes.

Possessing a wealth of expertise, including working with Transmission System Operators (TSO), Distribution Network Operators (DNO), Distribution System Operators (DSO), Independent Distribution Network Operators (IDNO) and renewable energy providers. The team ensures projects are dealt with effectively, and efficiently.

We hold full Lloyds National Electricity Registration Scheme (NERS) accreditation for the following design activities:

- Cable networks from 11kV to 132kV
- LV cable networks to industrial / commercial properties
- Substations from 11kV to 400kV
- Transformers from 11kV to 400kV

- Cable Route and directional drilling evaluation, GPR mapping and unity searches.
- Circuit Designs for electrical connections - up to and including 400kV
- Design of electrical protection, control and G99 and G98 generator interface schemes - up to and including 400kV
- Earthing soil resistivity surveys, earthing system modelling and earthing layout designs.
- EPC design services to customer networks
- Full computer aided design (CAD) services using AutoCAD
- Full substation civil and structural substation design packages

- Grid and primary substation electrical layout designs for DNOs, DSOs, IDNOs and generation connections - up to and including 132kV
- Preparation of technical reports, calculations, and project-specific functional specifications
- Production of general arrangements drawings, schematic and wiring diagrams for protection and control relay panels
- Provision of design checking of civil, electrical and protection and control systems
- SCADA system design and control system interfacing



CABLING AND JOINTING

Cable joints and terminations are a fundamental component of the power distribution system. Therefore, the integrity of any scheme is reliant on their quality and reliability.

Whether you're working on a commercial and industrial, renewables offshore, water treatment or capacity management project, our highly skilled jointers have experience working with most types of power cable up to 132kV, as well as small diameter control, telecoms and fibre optic cables.

Because the development of new cable types and connection techniques is continuously evolving, our jointers are constantly re-training to remain abreast of the latest technology. They have been independently certified by ABB, Raychem (Tyco), 3M, Lovink, Nexans and Pfisterer to name but a few. On inner and outer cone plug connectors, joints, terminations and sealing ends.

Cable installation is all part of the package. Whether it be large power cables, small diameter control cables or fibre optics, we provide a complete installation service - including cable management systems, ladder racking, tray and basket systems, civil works and pulling.



What our cabling and jointing services include:

- Cable and fault location, identification and spiking
- Cable and jointing services including cable management, installations and fault finding
- Certified testing, with HV pressure testing up to 80,000 volts DC and VLF testing up to 94,000 volts
- Sheath testing
- Network switch-on - we are trained and certified to act as an authorised person for switching on client networks and projects
- Turnkey installation - cable management, joints and terminations; cable ladder racking; cable tray and basket systems; civil works and cable pulling

CONTAINERISED SOLUTIONS SWITCHGEAR & TRANSFORMERS

Whether electrical power is required for a new, expanding or outdated facility, TMS Grid offers a comprehensive containerised solution, including the design, supply and fit-out of switchgear and transformers.

Our experienced engineers will survey the site to understand the specification of works, before constructing the best-fit substation, off-site. Everything from the switchgear and transformers, to the auxiliary panels - is housed and pre-tested in a single, purpose-built unit.

The only on-site activity required is the preparation of a base, which keeps civil and planning works to a minimum. As soon as the slab is ready, we'll deliver, install and connect the containerised solution. We can supply any sized container to suit your individual requirements or to any DNO specification.

Switchgear

Whether you are looking for new or reconditioned switchgear - regardless of the manufacturer we can provide a full erection and installation service. Our rigorously trained team has worked with older equipment through to modern, state-of-the-art vacuum and SF6 models, ensuring all project requirements are covered. Our engineers have received training and certification from several major manufacturers including Siemens, Schneider, ABB, GE Alstom, Eclipse, switchgear and transformers throughout the UK, including:

- EHV switchgear up to 132kV
- HV and LV switchgear up to 33kV
- Package substations
- Portable site supplies
- Power factor correction equipment

Transformers

We can also supply, erect and install a wide range of new and reconditioned power transformers, from 100kVA to 100 MVA. Our cast resin, fluid-filled, and air-cooled transformers are suitable for installations from 3.3kV of up to 400kV.



OPERATIONS & MAINTENANCE (O&M)

We offer a wide range of O&M contracts, with so much at stake for your project it is crucial to have a sound operation and maintenance agreement in place.

At TMS Grid Limited, it is vital to for us to know that you can rely on us for any of your O&M needs. We want you to know that **WHEN** you need us, or even **BEFORE** you need us, TMS Grid will be there.

TMS O&M provides technical, operational and administrative personnel and expertise in all areas of site investigations, remedial system design, installation and remedial system operation and maintenance services.

O&M is hugely important to the longevity, sustainability and optimisation of your project, having the correct processes in place will help your project to fulfil its intended function safely and effectively. Maintenance activities involve physically inspecting and caring for your equipment. Our O&M services, when performed systematically, will help to increase your reliability, reduce equipment degradation and sustain energy efficiency and project profitability.

A reliable O&M contract in place can often be the only means of maintaining a project's mechanical systems in an organised, ongoing manner.

At TMS we are fully aware that there is no 'standard' O&M requirement, and your needs will vary from project to project. We are therefore extremely fluid in the services which we can offer your project, and each O&M agreement will consist of a unique package of demands, requirements and contracts, varying from full-coverage, full-labour, preventative-maintenance, inspection contracts, or a completely custom programme.



TESTING AND COMMISSIONING

Armed with decades of experience and a wealth of quality and safety accreditations, we pride ourselves on delivering professional testing and commissioning support on low and high voltage systems throughout the UK.

Our high voltage power engineers are well-equipped to test and commission all the equipment within your electrical transmission and distribution infrastructure, and we always supply a comprehensive report to authenticate our work.

Our comprehensive testing and commissioning services include:

- All types of protection systems, including but not limited to unit protection, distance protection, and bus zone differential protection.
- Commissioning of all rotating machines and associated equipment
- Ductor testing
- Earth system testing including fall of potential earth and soil resistivity testing
- FT4 LV bus bar flash testing
- Full DNO witness testing for new connection works
- Full range of transformer and switchgear oil testing
- Full scheme functionality testing
- G99/98 protection, ROCOF and vector shift testing for renewable sector works
- High Voltage AC pressure testing
- High Voltage DC pressure testing
- Primary and secondary injection testing
- VLF Cable testing



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CIVIL ENGINEERING

We have a highly experienced civils team, with a extensive wealth of expertise. Here at TMS Grid, we take pride in the fact that the services we provide are of the highest quality, delivered with a commitment to excellence that will ensure that your finalised project will be complete to the highest standard, and stand the test of time.

Our civils team will take care of all aspects of the project build;

Surfacing:

- eco-friendly surfacing materials
- Strategical plans
- Cost-effective layering

Ground Works:

- Foundation
- Drainage
- Retaining wall

Highway Maintenance:

- Route inspections
- Pothole repairs
- Crack sealing
- Resurfacing

Utilities civil works:

- Underground ducting for utilities
- Chamber building and construction
- Concrete foundations for street furniture
- Cabinets
- Columns and poles

Traffic Management:

- Road safety prioritised during every project
- Full traffic management plans in place
- Temporary traffic lights for single lane closures.



PROJECTS

You can find more information on our completed projects on our website;

WWW.TMSGRID.COM

send us an email enquiry at:
enquiries@tmsgrid.com

or find us on our socials



PARTNERS



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Our team of highly skilled project managers and construction site managers are experts at consistently delivering projects on time and within budget to the highest standard.

Our ability to work with a variety of suppliers enables us to pass cost savings on and deliver the most cost-effective and professional solution to each individual client.

With vast experience of working on schemes both large and small, we are particularly equipped to deliver turnkey packages for especially complex or high voltage jobs. Our highly skilled team can take care of everything from design and build to testing, commissioning and ongoing maintenance.

We continually invest in the ongoing professional development of our team to ensure we consistently provide clients with future ready solutions. as efficiently and cost-effectively as possible.

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