



part of **mitie**

power & grid



High-Voltage power.  
Wherever you need it.

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Get connected with G2 Energy.

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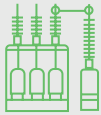
INTRODUCTION

Delivering end-to-end  
electrical and civil  
**engineering services**

G2 Energy is a NERS (National Electricity Registration Scheme) accredited independent connections provider (ICP) that delivers contestable works at voltages up to and including 132kV and National Grid self-bay connection works up to 400kV.

Whatever your sector, our specialists are ready to provide large-scale high-voltage electrical and civil-engineering services for your next project. Certified by ISOQAR and with almost two decades of experience, you can be sure our team will deliver to the highest standard.

Together with Rock Power Connections, ESM Power, and Custom Solar, we make up Mitie Power & Grid. This powerful team combines deep domain knowledge, specialist experience, and a national network of leading resources and capabilities to help you reduce emissions, increase efficiency, and secure your energy supplies for a decarbonised, sustainable future.



**400+**

connections to the national electricity grid



**1.5GW**

of renewable energy and storage projects connected



**4GW+**

delivered through G2 grid connections



**30%**

of all operational BESS developments in the UK



**10%**

of UK energy demand connected





## Accelerating your transition to net zero

Are you looking to decarbonise your built environments and accelerate the UK's transition to net zero? As specialists in renewable energy and battery storage projects, including electric vehicle (EV) infrastructure, solar panels and wind farms, we're perfectly positioned to help you.

Our service offering covers the full lifecycle of project delivery, from design and installation to project management, connections to the grid and long-term proactive and reactive operations and maintenance of electrical assets.

We also work with our sister companies, JCA Engineering and GBE Converge, to offer the full design and build of your Data Centre projects.

# Mitie Power & Grid – getting you connected to **decarbonise the UK**

By working with us, you benefit from Mitie's extensive ecosystem of resources and capabilities – including landscaping, security, engineering and decarbonisation expertise – adding more value at every stage of the project lifecycle.

You get access to over 500 mobile engineering technicians and over 3500 MEP engineers across the UK to support your renewable energy and storage projects.



## Electrical grid connections

As your energy needs evolve and grow, we can make sure you always have efficient, reliable, and cost-effective power. We provide stable and consistent power supplies through new grid connections and to new power sources.

We've been delivering high-voltage electrical and civil engineering services, including grid connections, for a wide range of cross-sector engineering projects since 2006. From our very first 132kV grid connection in 2012, we now complete grid connections up to 400kV.

## Infrastructure upgrades

As well as establishing new connections, we'll also work with you to upgrade existing infrastructure, so you're ready to meet tomorrow's demands. That could be replacing transformers or providing additional sustainable solutions to meet your evolving requirements.

Proper infrastructure maintenance and upgrades allow you to protect and extend the lifespan of your assets, save costs on operations and maintenance and reduce your carbon footprint. Plus, well-serviced infrastructure supports more efficient energy transfer, keeping your power demand on a very constrained National Grid stable.

## Containerised substations

We provide power exactly where you need it – designing, building, delivering and installing bespoke container solutions for substations tailored to the exact needs of your site. All substation containers are individually designed to meet application requirements and technical specifications.

By taking the specifics of your site into account, we can properly protect substation equipment from adverse weather conditions to maximise its availability. And, we can accelerate delivery schedules with our “plug and play” solutions.

## Battery energy storage solutions (BESS)

A high-quality, reliable power supply that's stable and consistent helps you avoid disruptions and ensure business continuity. Our battery energy storage solutions allow you to manage peak demand, reduce energy costs, and integrate with renewable energy sources such as solar and wind power.


With more than 20 fully-operational developments, our battery energy storage Balance of Plant (BoP) solutions account for over 30% of all operational BESS developments in the UK – including Europe's biggest BESS project – totalling roughly 1.5GWh of battery storage capacity connected to the UK grid.











## Operations, maintenance and decommissioning

Our services don't end when a project powers up. Making sure you gain long-term benefits from an efficient, reliable, and sustainable energy supply is fundamental to our service.

Ensuring proper maintenance, ongoing compliance with regulations and standards and detecting emerging issues early helps you avoid disruptions, reduce risks, and ensure business continuity. So, we offer both proactive maintenance and a 24/7 emergency control call centre service that provides immediate assistance across the breadth and depth of the UK. We have a 24/7 fully-manned Technical Services Operations Centre (TSOC) in Manchester, that's constantly monitoring your assets and ready to dispatch on-call engineers with exceptional SLAs. We also offer 24/7 security cover and surveillance from our Security Operations Centre (SOC) in Northamptonshire.

And we don't stop there. You can also call on us to decommission or repower sites at the end of their expected service life. We'll help you achieve stretched and additional revenue recovery on your sites whilst ensuring minimal disruption, adherence to safety and environmental regulations, and cost-effective implementation.

## Balance of plant (BoP) services

Our BoP services ensure your BESS project progresses smoothly and efficiently, with our streamlined project management providing reliable, compliant and safe delivery on time and to budget.

We combine our extensive in-house design capabilities and civil engineering experience to provide leading balance-of-plant services that include: 3D conceptual layout designs, construction works, ground levelling, foundations, fencing, equipment installation and cabling, right through to testing, commissioning and handover of operational assets.

## Specialist environments

Your requirements will be unique to your industry, use case and site. Our experts have vast experience delivering projects with specialist needs, like powering data centres, national strategic infrastructure and other critical environments – ensuring you get the outcome you need within your budget and timeframe.

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OUR CLIENTS

# Making connections across the UK

G2 Energy supports clients in multiple sectors, including:

Critical Environments | Manufacturing | Utilities



Here are a few highlights from our expansive client base:

## Overseeing Europe's largest battery energy storage system projects

As the principal contractor we were responsible for the full construction design management (CDM) of Europe's largest BESS projects providing enough energy to power 300,000 homes. These projects involved numerous challenges, with one of the sites situated in a flood sacrifice zone and work taking place during the global pandemic.

## End-to-end delivery of a bespoke 132kV substation

We assisted with the planning and application process, as well as the design and build of a WPD (now NGED) bespoke 132kV substation in North Cornwall. This was the first 132kV project we completed. The project saw us deliver a truly end-to-end service, from the initial contestable design through to installation and connection. As part of the development project, we also provided wind turbine design and construction works for the project, with five wind turbines now connected to the substation and providing green power to the surrounding area along with a separate 10MW STOR project.

## Supporting the first critical infrastructure Enhanced Frequency Response (EFR) project in the UK

As part of a 200MW EFR project, we completed the ICP and full BoP design and build works on two major sites. These included a 40MW battery storage site in Kent, and a 10MW facility in Cumbria, representing 25% of the first EFR contract.

Our work saw us design the electrical equipment to the respective DNO specifications and construct foundations and structures to support the equipment we supplied. We also installed the equipment and oversaw the project management, including commissioning and testing.

These were the very first large-scale BESS projects to become operational in the UK.





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## Let's connect

If you want to know more about how our experts can help with your power connections or renewable energy projects, get in touch using the channels below.

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