

# **About EPS**

We are a group of engineers, consultants and designers that specialise in providing electrical engineering solutions.

Engineering Power Solutions is a UK based electrical engineering & design company delivering high performance, cost-effective technical services to our customers.

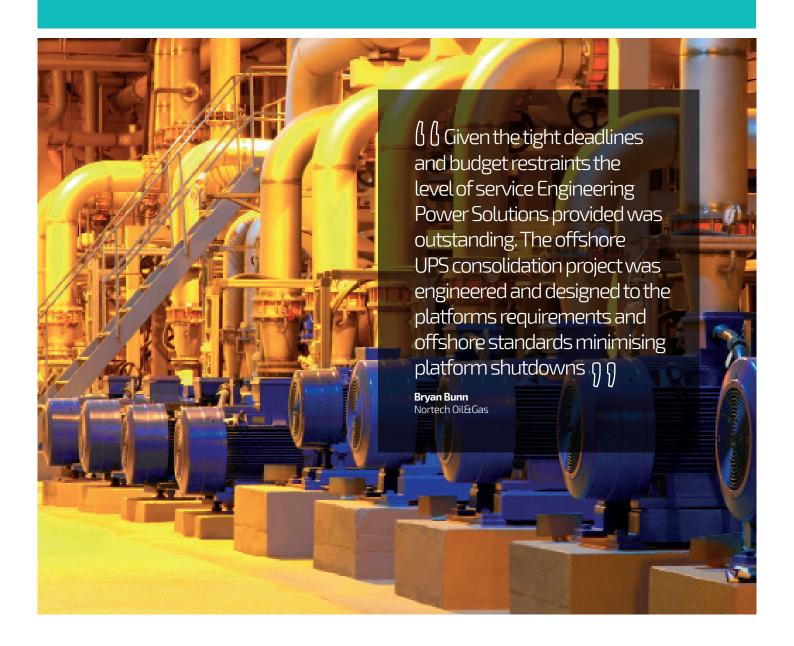
Our engineering & design achievements include challenging electrical engineering projects from renewable, manufacturing, petrochemical and oil & gas sectors.

In an age when time and budgets are tight it's important to use these resources effectively. Being a proactive and dynamic business we can adapt and deliver high quality and consistent support for any stage of your project, ensuring you can meet more of your own business objectives.

#### Consultancy

We provide consultancy services specific to power system modelling using electrical engineering software such as ETAP, SKM Power Tools, ERACS and DigSILENT. Typical electrical engineering studies include:

- Arc flash energy studies and switchgear risk assessments
- Transformer energisation studies
- Load flow analysis studies
- Short circuit studies
- Transient Motor Starting Studies
- Harmonic analysis
- Protection co-ordination / grading studies
- Electrical thermal imaging survey reports
- FEED Studies (Front End Engineering Design)



#### Detailed Engineering & design

Typical documentation EPS has provided to energy sector clients include:

- Substation and plant layout drawings
- Electrical protection calculations for both LV and MV equipment
- Substation lighting and small power supplies.
- Earthing and lightning conductor design
- Medium Voltage and Low Voltage equipment specifications
- Cable routing drawings
- Cable calculations for both Low Voltage and High Voltage cable networks
- Electrical equipment specifications (UPS, Diesel Generators, Transformers, Switchgear).
- Bill of Materials
- Project capital cost estimates
- As-built drawings

## Electrical drawing / documentation consolidation:

- Utilising existing drawings and combine them into one 'up to date' drawing e.g. key single line drawings.
- UPS key single line drawings
- · Topside subsea key line drawing consolidation

#### **Specialist Services**

These specialist services include:

- Factory Acceptance Testing witness support.
- Onshore & offshore surveys
- Earthing design
- Thermal Imaging surveys
- Remote Monitoring / Condition Monitoring
- Obsolescence reviews for asset life extensions
- Critical Spares / Parts reviews

#### Topside subsea key line drawing consolidation

- Schematic drawings
- Layout drawings

#### Specialist electrical grid connection consultancy services:

- Renewable energy conceptual designs to integrate the renewable energy system into the existing building / manufacturing plants electrical system
- Grid connection support for power generation systems for Low Voltage (415V), Medium Voltage (6.6kV and 11kV), High Voltage from 33kV up to 132kV grid connections
- · Grid connection application forms.
- Energy efficiency calculations
- Feed in Tariff revenue calculations
- Soil resistivity testing
- Reactive and active power flow studies (kVAr and kW)
- Earthing solutions for substations and power generation equipment
- Solution provider for onshore and offshore condition monitoring equipment



### We are members of:













# Capabilities

Our extensive experience in the energy, process and manufacturing sectors enable us to help you achieve your project goals to your budget and programme requirements.

The broad range of capabilities Engineering Power Solutions can offer range from conceptual, Front End Engineering Design studies through to detailed design. We can support the whole asset lifecycle to closeout and as-building. Our Chartered Engineers understand project requirements from both a practical and academic perspective, because our engineers have significant experience and knowledge.

Working to recognised international, European, British and industry standards you can rely on.

We have strong technical capabilities in the following industries:

- Renewables
- Offshore Oil & Gas
- Manufacturing & Commercial
- Petrochemical & Process

All our Chartered Engineers understand the safety requirements stipulated by the engineering construction industry including BOSIET, MIST and EBS training with offshore experience, so whether you have an offshore or onshore project we're ready to support you.



















Renewables





Manufacturing & Commercial



Petrochemical & Process

