

Meeting the challenge of change

Systems and engineering technology solutions that deliver real value



The UK's energy infrastructure is under unprecedented pressure – the 'trilemma' of challenges: reducing carbon emissions, increasing security of supply, and ensuring affordable costs to energy consumers, has precipitated the need for change. There is a crucial need for new technology, soundly managed, and underpinned by sympathetic policy, to deliver the necessary changes in the sector.

The provision of environmentally-sustainable infrastructure to provide energy, where it is required and at reasonable cost to consumers, is one of the key engineering challenges of our generation. Frazer-Nash's work delivering technology development consultancy to the energy industry is informed by this understanding and our environmental and ethical commitments derive from it.

Frazer-Nash is an independent and reliable source of advice and information for our clients. We provide engineering and technical consultancy across the full breadth of the UK energy industry – our client base includes: transmission and distribution network operators; nuclear, conventional and renewable generators; and many large-scale energy consumers. This cross-industry exposure has allowed us to develop a whole systems view of the sector, to understand the interaction of enterprises and technology, and to integrate ideas and best practice from previously unrelated technical areas. The breadth of our practice also ensures our objectivity – we are not tied to a world view, a set of technologies or a single industry sector.

For more information, contact: powertd@fnc.co.uk

Our expertise:

- Power systems
- HVDC systems, HV and LV switchgear
- Power quality
- Protection, discrimination and earthing
- Control and instrumentation
- Network architecture development
- Advanced simulation and modelling
- Model-based design
- Bespoke engineering software
- Transport systems electrification
- Structural and fluid mechanics and dynamics
- Asset integrity, asset and obsolescence management
- Process equipment
- Rotating equipment
- Systems architectures, model-based systems engineering
- Big data management
- Security and resilience
- Due diligence
- Safety and compliance, quantitative safety and risk

Our recent projects

Network Innovation Competition and Low Carbon Network Fund

Frazer-Nash assisted Ofgem in the evaluation of the Low Carbon Network Fund competition submissions for 2014 and the Network Innovation Competition in 2015.

Stakeholder Interactive City Energy Demand Simulator

Frazer-Nash produced electrical generation and distribution systems models to provide through-life data for our clients on the Stakeholder Interactive City Energy Demand Simulator programme.

Tidal electrical generator grid connection assessment

Frazer-Nash carried out an independent assessment of the design and compliance of a prototype 1MW tidal generation device against EMEC requirements.

Power factor correction

Using a requirement driven structured approach, Frazer-Nash helped our industrial client to make a fully informed decision regarding its most cost effective power factor correction strategy.

Electrical power quality survey

We helped our client to establish a quantitative baseline of the electrical power quality at the point of connection with the distribution network operator (DNO), to ensure continuity of operation as they planned to install a Biomass plant.

High voltage design substantiation

Frazer-Nash provided independent design verification support to a new 11kV electrical infrastructure installation for safety critical services.

Electrical design and consultancy services

Frazer-Nash applied a systems-based engineering approach to provide a full turnkey electrical design solution for 415V and 3.3kV infrastructure resilience measures.

About us

Turnover: £81.7 million (2015/2016)

Number of employees: Over 700

Office locations:

United Kingdom
Basingstoke, Bristol, Burton, Dorchester, Dorking, Glasgow, Gloucester, Plymouth, Warrington

Australia
Adelaide, Canberra, Melbourne

Our markets and expertise: aerospace, transport, nuclear, marine, defence, renewable energy and oil and gas, power, transmission and distribution, security and resilience, electronic and electrical engineering

Our Systems Approach

Sometimes, a defined approach to a specific problem is all that is required. But more often than not, engineering projects are framed by the wider context in which they will be applied. So whatever the project we take a holistic view.

Our Systems Approach helps us respond to our clients' challenges. We work with them to understand the whole range of financial, operational, organisational, people and other issues that surround their technical needs. And we use this understanding to deliver demonstrable business and technical value.

“ We want our clients to be delighted by working with a company that genuinely understands their business, the challenges they face and what's really important to them – a high-quality result, complete reliability, value for money and a clear competitive edge. ”