

nationalgrid

**Robust
and
Reliable**

National grid

“ *Invisible Systems have worked with us to design and develop a robust wireless remote monitoring system which has saved us £'000's* ”
Graham Moss, National Grid

National Grid is an international electric and gas company and one of the largest investor-owned energy companies in the world.

Project Objectives

Customer needs:

- ✓ Solutions to operational and asset management
- ✓ Remote asset management of network infrastructure
- ✓ Transmitters, to withstand air insulated substation

Project Outcomes

£'000's Saved

Remote Asset Monitoring
Extended life of assets

Robust and Reliable
data collection and displays

The new Ofgem RIIO regulatory framework that started in April 2013, encourages National Grid to play a full part in the delivery of a sustainable energy sector and to deliver network services offering long term value for money to consumers.

In line with focus, National Grid sought innovative solutions to both their operational and asset management challenge across their UK network of locations.

Invisible Systems were engaged to take on the consuming and costly challenge of remote asset management of the network infrastructure. Substations are by nature large in footprint. Retro fitting hard wired data recovery systems in these had proved time consuming and costly. Invisible Systems are proud to be supplying National Grid for over 10 years.

"We needed a research and development partner offering new ways of thinking"
Graham Moss, National Grid

The major obstacles of the project were

- ✓ Reliable long range data transmission in a substation environment where large amounts of concrete and steel structures lie directly in the path of any radio transmitter receiver pathway.
- ✓ Durability of battery powered transmitters that needed to remain operational when exposed to the environment of an air insulated substation.



Realtime-Online™ provided instant dashboard and condition status of all remote sites

Robust and Reliable data collection and displays

Invisible Systems is a software & electronics design manufacturing company that focuses on Energy Saving, Compliance and Asset management via robust RF wireless Monitoring and Energy solutions with our Realtime-Online software management portal.

Our solutions include Energy metering, Critical Asset management, Boiler Control, Water Hygiene & Food temperature compliance, plus general condition monitoring and control.