Critical Asset Monitoring Enables National Grid In Saving £1000's

Remote asset monitoring extended the life of assets across multiple National Grid sites.

Our smart monitoring solutions have helped them in the delivery of sustainable energy and the reduction of maintenance costs.

The Challenge

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 this focus, National Grid sought innovative solutions to both their operational and asset management challenges across their UK locations.

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





The Solution

Based on their needs, National Grid implemented a Condition Based Monitoring Solution.

The implementation of this solution resulted in:

- 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.
- An established reliability and ability to accurately predict asset failures.
- Improved levels of production and efficiency, with little to no impact on operations or IT infrastructure.

Did you know?

National Grid own and operate no fewer than 4,481 miles of overhead electricity lines, 1,417 miles of underground electricity cables and 4,760 miles of high-pressure gas pipes in the UK.



Beyond Invisible

energy consumption and potential wastage efficiency and profitability, while reducing

Project Outcomes

- Alerts & notification by email & SMS
- Automated reporting
- Implementation of Realtime-Online web browser
- Targeted energy reduction
- Reduced operating costs
- Proactive planned maintenance
- Improved machine efficiency
- Captures realtime vibration & temperature data

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In order to reach the desired outcome, we needed a solution, as well as a research and development partner offering new, innovative ways of thinking.

Jonathan Hennah, **Substations Lifecyle Engineer** National Grid.

Ready to take control of your data?

For a comprehensive consultation on needs of your business, talk to the Invisible Systems team today.

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