



## Keeping the lights on

Radius provides a distribution automation system to assist a Scottish Utility company in achieving their regulatory requirements.

Over the past decade a Scottish Utility company has been able to provide their customers with an optimum quality of supply, through the use of Radius' highly technical and reliable Distribution Automation products and services.

### WORKING PARTNERSHIP

Radius has been at the forefront of one of Scotland's most important utility schemes, their goal to reduce the number of power cuts to their network. Before Radius products, the utility company were reliant on customers calling their centres and informing the operator about the problem. They would then send teams of line engineers out in to the field to search for the fault. This process was not only time consuming, considering the vast scale of the electrical network, but also very cost ineffective.

### DATA RADIO EXPERTISE

The utility turned to Radius, experts in data radio communication and distribution automation systems. The goal was simple: a reliable and cost effective system to increase efficiency and quality of supply. The system should be able to monitor both the electrical network and handle a number of faults automatically. The system should also be able to be controlled and monitored via the utilities' own SCADA system back at their control centres.



### KNOWLEDGE AND POWER

The ongoing project is a highly collaborative one, with both companies bringing their expertise to the continual development of the scheme. One of the key staff on the development team for the utility company stated "Radius has been a key player in helping us provide a better service to our customers. Their in-depth knowledge has helped to significantly reduce the number of customers who have down time on our network".

### DIVERSITY OF PRODUCT

The utilities network utilises a number of Radius products from CCU's (Central Control Unit) in the primary substation (which provides the link to all the remote outstations, SCADA interfaces and logic routines) to the NMS 100 (manoeuvre device) which provides a very flexible interface to a range of remotely located switchgear. Radius even developed a specific SCADA protocol for the utility. This protocol is now part of an increasing protocol library which also involves DNP3 & IEC870.

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### DEPTH IN DIVERSITY

In this particular project Radius has interfaced with some of the leading switch operators in the world to provide a high level of service for the utility. These include devices such as the Novexia Auguste Switch, FKI GVR Recloser, Noja recloser and Merlin Gerin circuit breakers and switches, all of which operate seamlessly with the equipment.

## CHALLENGE OF TOPOGRAPHY

The utilities network topography is very varied, from urban environments with high levels of local interference to remote mountainous areas, where signals have to be transmitted over long distances. Using the Radius' tailor made multiple repeating radio system, wherever the equipment is located, the same high levels of performance and reliability are maintained meaning satisfaction for the utility and its customers regardless of location.

During the course of the project the utility will be able to monitor and control over 4,500 switching points by the use of Distribution Automation products from Radius. A staggering achievement in such a short period of time.

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In cooperation with:

Do you want to know more about Radius?  
Please contact us: