



Project FALCON



FALCON is a project led by Western Power Distribution (WPD) and involves a number of partners. The project is being funded by energy regulator Ofgem under their Low Carbon Networks Fund, which tasks Distribution Network Operators (DNOs) like WPD to look at ways to provide security of supply at value for money as Great Britain moves to a low carbon future.

FALCON will test six alternatives to conventional network reinforcement methods, to see how they work in practice. It will also analyse their effectiveness in different situations, modelling their impact over many years. Ultimately, **FALCON** will provide guidance for network planners to select the best technique from a range of options. Four of these options are based around engineering approaches that will involve modifications to the network itself.

The remaining two options are Commercial Techniques, which focus on the energy consumption behaviour of businesses. Trials will be conducted with local businesses in the Milton Keynes area and will provide opportunities for participants to receive an incentive for changing their behaviour for a short period of time. This is commonly known as a Demand Side Response (DSR).

www.westernpowerinnovation.co.uk

THE CHALLENGE

When electricity is produced at a power station it needs to travel through the National Grid *TRANSMISSION* system then on through the lower voltage *DISTRIBUTION* network to which the consumers are connected. As the **Distribution Network Operator (DNO)** for the Midlands, South West and Wales, it is Western Power Distribution's responsibility to ensure that the installed infrastructure meets the needs of homes and businesses.

This means that the network is designed and maintained to cope with times of peak consumption, usually in the coldest days of Winter. This can lead to a huge expense and disruption, as more cables and transformers are laid. **FALCON** is testing smarter alternatives to reduce the need to do this.

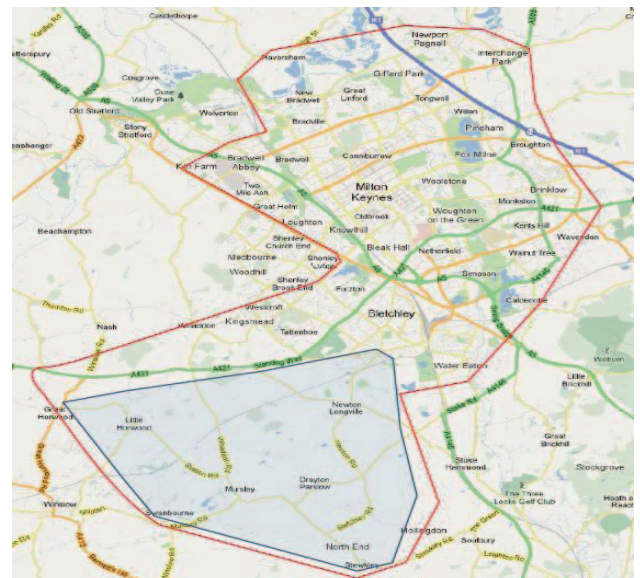
THE SOLUTION

By communicating directly with users and paying them to either reduce their consumption or rely on an alternative such as emergency generators, **FALCON** will test the effectiveness of '**Demand Side Response**'. The network area that has been selected for the trials does not currently suffer from overloading constraints. It will however be

benefiting from enhanced monitoring that is necessary to test the technical methods of intervention. This will allow Western Power Distribution to gain incredibly valuable information on the reliability of the service and detailed data on the network impact.

If successful it could not only improve the efficiency of the local network but also reduce CO2 and enable increased growth of renewable generation technologies.

If you are an industrial or commercial user located within the red boundary on the map below, you may be able to take part in this unique trial.



For further information about project FALCON and the opportunity to discuss getting involved please contact

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