



12 August 2015

## We need customers with generators or large motors to take part in our revolutionary £5.5 million low carbon trial – and earn financial rewards

Electricity North West is leading the way in developing smart solutions to meet the UK's future energy demands.

As the regional electricity operator we are responsible for keeping the lights on for five million people in the North West of England. But it's also our job to plan for the future and look at smarter ways of meeting the expected increase in electricity demand as we start to reduce our reliance on fossil fuels.

### Background

To help meet the unprecedented challenges of a low carbon future, the electricity industry regulator Ofgem has set up the £500 million Low Carbon Networks (LCN) Fund to provide vital backing for a series of innovative projects aimed at developing smarter and more efficient ways of managing electricity networks.

Electricity North West has won funding from the LCN Fund to launch the Respond project which will deliver an intelligent approach to managing fault current – the instantaneous surge of energy which occurs under fault conditions.

An increase in demand for electricity will increase the potential fault current on the network, known as fault level. If fault levels exceed the current safety rating of the network equipment, it will need to be replaced, which can be disruptive, lengthy and expensive.

Respond will explore new technical and commercial solutions to resolve the fault current problem without the need to invest in new expensive infrastructure. It will ensure customers continue to get the power they need and give them the flexibility to connect renewable energy sources.



### How does it work?

Respond will deliver a 'Fault Level Assessment Tool' which calculates potential fault current. When the fault level approaches or rises above the fault level rating of network equipment, the Fault Level Assessment Tool will enable one of three innovative techniques designed to manage fault current.

One of the techniques is a commercial solution which provides a unique opportunity for demand and generation customers to earn rewards by selling a Fault Current Limiting (FCL) service to Electricity North West through a managed service agreement.

When a fault occurs, all sources of generation connected to the electricity network contribute to fault current. Using new technology which will be trialled as part of the Respond project, your generation source can be turned off instantly for a few minutes so that it no longer contributes to the fault current.

This solution will enable you to earn financial rewards and will benefit all electricity customers in the long term by reducing reinforcement costs.



## The role of Ener-g in the Respond trial

Ener-g has joined Electricity North West as a project partner to support the introduction of the FCL service concept to you, and to provide expert customer engagement support.

We are seeking input from Ener-g's members and associates from anywhere in Great Britain to take part in a one-off online customer survey to understand the appetite for an FCL service and how to structure appropriate contracts.



## Taking part in the Respond trial

The survey will take place in autumn 2015. Survey participants will be rewarded with £25 in shopping vouchers or the equivalent charitable donation.

If you would like to take part in the survey, please register at: [enwl.co.uk/respond-survey](http://enwl.co.uk/respond-survey) by 28 August 2015.

Following the survey we will be recruiting customers to sign up to a managed service agreement to provide an FCL service for the duration of the 12-month trial starting in May 2016.

If you are interested in providing an FCL service please contact us at [enwl.co.uk/respond/contact-us](http://enwl.co.uk/respond/contact-us).

To find out more about Respond and to watch our project video please visit [enwl.co.uk/respond](http://enwl.co.uk/respond).



Active fault current management