

Change the way you use electricity - and save money

electricity
north west

Bringing energy to your door

C₂C



Electricity North West is leading the way in developing smart solutions to meet the UK's future energy challenges. The company is looking at innovative ways to test its customers' willingness to be flexible with their demand for electricity, and keep their bills down too.

Electricity North West, the company who operates the electricity network in the North West of England, is conducting a trial known as Capacity to Customers (C₂C) as part of Ofgem's Low Carbon Networks Fund. C₂C will use new technology and innovative commercial contracts to increase the amount of energy that can be transmitted through the region's existing electricity network.

How it works

The existing electricity network is designed to keep the lights on when things go wrong by keeping some capacity for emergency use. This allows electricity to be re-routed following a power cut (fault). Typically, the majority of customers are affected by a fault once every three years. So for most of the time, only half of the total capacity of the network is used, with half reserved for emergencies. By reconfiguring the network and working smarter, this extra emergency capacity can be released for everyday use.

This will be done by closing the 'normally open point' (NOP) on the C₂C trial circuits. High voltage networks are often interconnected by an NOP which is only used in the event of a network fault or planned outage. Closing the NOP allows all customers affected by a fault to be re-supplied from the alternative circuit. By redesigning the network to allow the NOP to be run closed, the two circuits can be joined to release their full capacity.

This change in operating arrangements could increase the number of customers who experience an individual fault. But the faults experienced will be of significantly shorter duration than under normal operating arrangements.

The trial started in April 2013 and will last for 18 months. If successful, it could form part of the blue-print for the UK's future electricity network.

Project update

Managed contracts

The company has now signed up ten C₂C managed contracts from existing industrial and commercial customers. The customers come from a range of sectors – one each from utilities, retail and leisure; the remainder are a range of manufacturers.

Customers were offered a monthly payment in exchange for allowing Electricity North West to manage their connection in the event of a fault on the system. This means they have agreed to a delay to the restoration of supplies to some or

all of their network for up to eight hours, if a fault were to occur on a circuit in their area.

Fault performance and power quality monitoring

Since the trial started in April, five faults have occurred on designated C₂C high voltage trial rings. All five faults show that when the network is reconfigured, the interruption duration is improved. However, initial short duration interruptions are increased due to the closure of the NOP.

A series of surveys has been carried out to monitor the effects of the trial on customers. From the interviews conducted to date the findings suggest that for domestic customers the introduction of C₂C and the new network configuration has improved their perception of the occurrence of faults. Data from industrial and commercial customers is insufficient to draw any conclusions at this stage of the project. Further research will compare customer survey data to actual fault frequency and duration to compare customer perception with reality.

Find out more at www.enwl.co.uk/c2c.

Take part in our trial and you could earn cash rewards for your business

We are still looking for customers to get involved in C₂C.

If you are a new connection customer or need to apply for additional load and you are interested in taking part, you could make significant financial savings for your business against a standard connection quote.

As a new customer or additional load customer, you will be presented with a standard connection design and quotation (with applicable reinforcement charges) along with a C₂C design and lower cost quotation. The C₂C contract is based on a reduced connection charge as the new managed arrangement removes the need for network reinforcement. This is in exchange for allowing us to delay the restoration of your supply by up to eight hours after a fault. We will discuss specific commercial and technical arrangements with you. To take part, you need to sign a C₂C contract by 30 September 2014.

To find out more and to see all commercial templates and associated documents visit: www.enwl.co.uk/c2c/keydocs or send an enquiry to futurenetworks@enwl.co.uk and a member of our team will contact you to explain the offer in more detail.