

The Fault Current Limiting service

Background

The UK's electricity demand is expected to increase significantly in forthcoming years as we move towards a low carbon future and reduce our reliance on fossil fuels.

Problem

Normal current is the steady flow of electricity through the network. Fault current is the instantaneous surge of electrical energy, which occurs only when there is a fault.

Fault level is the potential maximum amount of fault current that will flow during a fault. Additional demand and generation will inevitably increase fault level and if the safety rating of network equipment is exceeded, it must be replaced. This can be disruptive, lengthy and expensive.

Solution

Respond provides a range of innovative techniques to manage fault level at much lower cost than traditional reinforcement by optimising existing assets and offering a new commercial solution - the Fault Current Limiting service (FCL service).

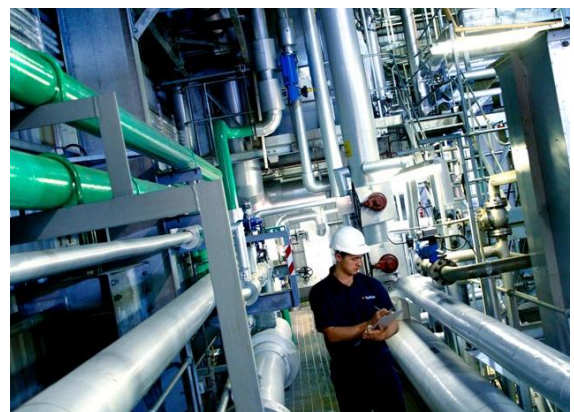
Respond will ensure that customers continue to get the power they need and the network operator has the flexibility to connect demand and generation to the network.

How

Electricity North West will buy a managed service from some industrial and commercial customers which will allow them to remotely switch off large electrical motors and generators, for just a few minutes, when a network fault occurs. This will stop the customer's equipment from contributing to the fault current. The fault level response that will temporarily constrain the customer's equipment is expected to occur only a few times each year.

What's in it for me?

Respond offers significant financial benefits to industrial and customers who are willing and able to sell a FCL service to Electricity North West through a managed service agreement.



- Faster & cheaper adoption of low carbon technology ●
- less disruption ● lower bills ●