

## GridON's 30MVA Fault Current Limiter successfully energised at one of Western Power Distribution's primary substation

GridON's 30MVA Fault Current Limiter (FCL) has been commissioned and energised onto a live network at one of Western Power Distribution's primary substations in Birmingham, UK, in early April 2015. GridON designed and built its novel FCL within five months of contract signature, before testing and then installing it onto the live grid.

Another GridON FCL is already installed at a different utility operator's substation since early 2013, and has proven very effective limiting numerous faults of all types during the past two years; performing exactly as was specified and designed for. These two live installations in the UK prove the maturity of GridON's product and its extensive capabilities.



The FCL has undergone a complete factory test, as well as short-circuit testing under rigorous conditions at Ausgrid Testing & Certification lab, a certified high-power test lab. During the tests, the FCL limited 20.2kA first-peak fault current by over 50% and withstood 13.1kA rms (33.4kA peak) prospective fault current for three seconds. Following successful testing, the FCL has been commissioned and energised early April, at WPD's Castle Bromwich primary substation in Birmingham, UK.

GridON provides operators and grid planners with a very robust and efficient fault current limiter, which enables network meshing and connection of additional power generation sources. Traditional solutions are very costly and may negatively impact power quality, stability and reliability of supply. GridON's FCL will significantly cut capital expenditure and extend the useful life of existing network assets, minimising the costs of upgrading transmission and distribution network over the next few decades.

Jonathan Berry, Innovation and Low Carbon Networks Engineer at WPD, said: "GridON's proactive approach meant that following device testing we were able to successfully install and commission the FCL at Castle Bromwich. The device is now on load and we're awaiting to see its performance under a real network fault situation."

Yoram Valent, Chief Executive and co-founder of GridON, said: "We are glad to see our 30MVA FCL energised in live operation at WPD and looking forward to very successful experience in mitigating faults on the Birmingham grid. This is a major milestone for GridON, proving our ability to deliver once again a commercial, robust fault current limiter with very high fault limiting characteristics. Once again, the quality and robustness of our product is an outcome of a very successful and synergistic partnership with Wilson Transformer Company."

## About GridON Ltd

GridON offers fault current limiters for distribution and transmission networks and for energy-intensive industrial grids. GridON's FCLs enable increased supply by cost-effective network meshing and connection of power generation and renewable energy sources. The FCL improves grid resilience and reliability and significantly lowers capital expenditures and operating costs, while extending the useful life of existing network assets.

GridON's FCL is based on combining industry-standard, proven transformer technology with unique and proprietary concept of electro-magnetic flux alteration on a saturated iron core. The self-triggered system responds instantaneously to faults, suppresses fault current for its entire duration, and recovers immediately following fault clearance – being always ready for consecutive faults events.

GridON's first installed FCL was funded by Energy Technologies Institute, a public-private partnership between global industries - BP, Caterpillar, EDF, E.ON, Rolls-Royce and Shell - and the UK Government. GridON is offering scalable FCL solutions from distribution to very high transmission voltage ratings, in partnership with Wilson Transformer Company - Australia's leading manufacturer of high-quality transformers.

GridON was awarded the Global Cleantech 100 and the UK Energy Innovation in 2013, and received the prestigious ACES Smart Grid and GE ecomagination Powering the Grid awards in 2012.

For further information, please visit [www.GridON.com](http://www.GridON.com) or email [sales@GridON.com](mailto:sales@GridON.com) or call +972.3.711.1183.

## About Western Power Distribution

Western Power Distribution is the electricity distribution network operator for the Midlands, South West and Wales. It delivers electricity to over 7.8 million customers over a 55,500 square kilometres service area. WPD's network consists of 221,000 kilometres of overhead lines and underground cables, and 185,000 substations. WPD employs over 6,000 staff.

The Fault Current contract forms part of WPD's Project FlexDGrid, a £17m project based in Birmingham which uses ground breaking solutions to accommodate more low carbon generation across the city, reducing power cuts and carbon emissions.

Ofgem's Low Carbon Networks Fund was established as part of its current price control arrangements for electricity distribution businesses (DNOs). It allows up to £500 million of support between 2010 and 2015 to projects sponsored by companies that trial new technology, operating and commercial arrangements. It aims to help DNOs deliver cost-effective and innovative solutions for a sustainable future electricity network.

Two tiers of funding are available. Tier One is designed to enable DNOs to recover a proportion of expenditure incurred on small-scale projects.

Tier Two involves a competition annually to help fund a small number of flagship projects.

WPD now has four live Tier Two LCNF projects.

For further information, please visit [www.westernpower.co.uk](http://www.westernpower.co.uk) or contact Michael Clarke on +44(0)1332 827172.