

GridON's 30MVA Fault Current Limiter successfully completed short-circuit testing and was shipped to Western Power Distribution

GridON Ltd was awarded a contract for its novel fault current limiter (FCL) by Western Power Distribution (WPD), the electricity distribution network operator for the Midlands, South West and Wales.



Following a contract signature in February 2014, GridON completed the design and build of a 30MVA FCL in July 2014. The device has undergone a complete factory type test, as well as short-circuit testing under rigorous conditions at Ausgrid Testing & Certification 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 3 seconds. WPD approved the successful testing and the product is currently in transit to a primary substation in Birmingham for installation onto the live network.

A GridON FCL is already installed at a UK substation since early 2013 and has been proven very effective during numerous faults, performing exactly as was specified and designed for.

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, minimizing the costs of upgrading transmission and distribution network over the next few decades.

Jonathan Berry, Innovation and Low Carbon Networks Engineer at WPD, said: "Following the device successfully passing all the required tests we're looking forward to the device arriving and utilising it in line with an existing transformer to manage the system fault level effectively."

Yoram Valent, Chief Executive and co-founder of GridON, said: "The project with WPD has been executing on schedule; it was fully built and tested within 6 months of contract signature, and we look forward to the successful installation at WPD's primary substation in Birmingham, UK. 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 or email 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 kilometers service area. WPD's network consists of 221,000 kilometers of overhead lines and underground cables, and 185,000 substations. WPD employ 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 Tier Two projects and seven of the 22 Tier One projects. This is more than any other UK Distribution Network Operator for both categories.

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