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GridON's Award Winning Fault Current Limiter Selected by The Energy Technologies Institute to be Tested in a £4m Project on a Live Power Network Environment at UK Power Networks - The Next Step in the Evolution of Stable and Safer Electricity Networks

TEL AVIV, Israel, July 11, 2011 11:00 AM -- (Business Wire) -- GridON's unique Fault Current Limiter (FCL) solution, which has won significant international recognition, has been selected by the Energy Technologies Institute (ETI) to be developed and tested in a £4m project aiming to reduce the impact of fault currents on electricity networks and helping the growth and increased flexibility of distribution systems while minimizing capital expenditure in upgrading the UK electrical networks.

Ambitious specifications, which surpass the capabilities of currently demonstrated devices, and best meet the real needs of network operators, were set for the GridON device. Once the FCL is built by Wilson Transformer Company, a leader in transformer engineering and manufacturing, and one of GridON's shareholders, and independently tested, it will be installed and demonstrated in service on the UK Power Networks (UKPN) substation in Newhaven, East Sussex. E.ON will provide network analysis and data management for the project.

Faults within electrical power systems are inevitable and can cause stresses on the network equipment. The short-duration currents arising from these faults increase as more energy sources are connected to distribution systems.

Existing techniques to manage these fault currents are costly and may negatively impact power quality, stability, reliability and security of supply. Fault current levels are therefore becoming a significant barrier to the installation of low-carbon and other generation facilities. Management of these fault levels is also a key enabler for the growth of smart distribution systems, offering improved operation, flexibility and efficiency.

ETI Chief Executive Dr David Clarke said: "Although we hear a lot about the importance of renewable energy sources to the UK's future energy mix, the infrastructure that provides power and heat to people's homes and businesses is also vital. This project will deliver a radical new approach for a fault current limiter which will be thoroughly demonstrated on a live substation. FCLs which are reliable and cost effective, would benefit distribution network operators, suppliers of distributed generation equipment as well as consumers who would experience more reliable electricity supply at a time when more energy is generated from renewable sources."

Yoram Valent, Chief Executive of GridON said: "This project has a game changing potential. The holy grail for network operators is a fault current limiter, that requires practically no maintenance, uses established technologies and has instantaneous response. This would be the first time that such a device is put to the test within the context of a live network, in partnership and collaboration with two of the world's largest and most advanced and versatile utilities, namely UKPN and E.ON. We are very proud to have been selected by the ETI for this project and we look forward to rapid implementation and successful results."

GridON is an Israeli company whose novel, saturated core, 3-phase fault current limiter, is based on a standard transformer manufacturing technology. The device instantaneously turns itself into a very high impedance system upon current surges, and limits the current for as long as required to clear the fault. It recovers immediately thereafter and thus can protect from multiple faults occurring in quick succession. In addition to the device fault currents suppression ability, it facilitates current regulation and reactive power balancing.

The roots of GridON's technology are in the research and development conducted for the past eight years by a multi-disciplinary team of researchers with grounding in electrical engineering, mathematics, magnetism and superconductivity from Bar-Ilan University and Ricor. In bringing this groundbreaking, patent-pending technology to market, GridON entered a strategic partnership with long-established Wilson Transformer Company.

The industry has recognized GridON's innovative solution. GridON was the recipient of a coveted innovation award from GE's Ecomagination - Powering the Grid Challenge, and was awarded the Smart Grid Award in the annual European ACES Academic Enterprise Awards.

David Openshaw, Head of Future Networks for UK Power Networks, said: "This project forms an important part of our low carbon network innovation portfolio, through which we are trialling the technologies necessary to deliver the flexible distribution networks required in the future. Fault Current Limiters offer the prospect of greater network flexibility, which is particularly relevant to our urban networks such as those serving London. This is we anticipate a much greater contribution from low carbon electricity generation as a direct result of London's decentralised energy policy and ambitious carbon emission reduction targets."

The ETI is a public private partnership between six global industrial companies and the UK Government tasked with developing "mass scale" technologies that will help the UK meet its 2020 and 2050 energy targets. It is concerned with identifying affordable, sustainable and secure energy across heat, power, transport and the infrastructure that links them. The ETI's six private sector members are BP, Caterpillar, EDF Energy, E.ON, Rolls-Royce and Shell (www.energytechnologies.co.uk).

UK Power Networks provides power to a quarter of the UK's population through its electricity distribution networks, responsible for delivering power supply to eight million homes and businesses across London, the South East and East of England (www.ukpowernetworks.co.uk).

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