

## BIRMINGHAM'S POWER GRID IS NOW REINFORCED WITH NEXANS' SUPERCONDUCTING FAULT CURRENT LIMITERS

Nexans' sFCLs will future proof Birmingham's grid to meet growing energy needs in the city

**Paris, March 10, 2016** – Western Power Distribution has integrated two superconducting fault current limiters (sFCL) from Nexans into Birmingham's power grid. Nexans designed and manufactured both sFCLs (rated at 12 kV), now its third sFCL project in the UK.

Nexans delivered the first sFCL to the Chester Street substation in late 2015, and the second to Bourneville substation. Both sFCLs are now permanently integrated into the grid. The technology opens up new ways of designing distribution grids, such as with coupling busbars to maintain a reliable power supply during maintenance.

Nexans' sFCLs are part of the FlexDGrid project which aims to increase the capacity of existing networks to facilitate the distribution of renewable energy in Birmingham. The £17M project will transform the grid in the city, reducing power cuts and carbon emissions.

### Superconducting fault current limiters

sFCLs are already in use in locations around Europe. Since 2005, Nexans has successfully installed the technology at five other sites across the UK and Germany, including as part of the Ampacity project in Essen, Germany. The sFCL in Essen has been in successful operation since March 2014.

Nexans developed superconducting fault current limiters as part of its commitment to provide the most innovative and reliable solutions to future proof grids. sFCLs provide effective protection from fault currents which constitute a growing issue in power grids. They can also help reduce the need for new substations.

The technology is based on the physical properties of the ceramic superconducting material employed. In its operating state, the material acts as a near perfect electrical conductor without ohmic resistance, and therefore doesn't affect grid operations. A fault current, however, will transform the superconductor into a resistive material, increasing the resistance and reducing the fault current in a few milliseconds.

Frank Schmidt, Head of the Superconductivity Business Unit at Nexans said, *"We're excited to have completed delivery of superconducting fault current limiters to Western Power Distribution for permanent integration into the grid. This further demonstrates Nexans' ability as market leader in superconducting systems for power grids. This contract represents Nexans' commitment to continuing the deployment of state of the art equipment to address the world's ever changing energy needs."*

Jonathan Berry, Innovation and Low Carbon Networks Engineer at WPD, said: *"Nexans' proactive approach meant that following device testing we were able to successfully install and commission the sFCLs at Chester Street and Bourneville substations. The devices are now on load and we're waiting to see their performance under a real network fault situation."*

## About Nexans

Nexans brings energy to life through an extensive range of cables and cabling solutions that deliver increased performance for our customers worldwide. Nexans' teams are committed to a partnership approach that supports customers in four main business areas: Power transmission and distribution (submarine and land), Energy resources (Oil & Gas, Mining and Renewables), Transportation (Road, Rail, Air, Sea) and Building (Commercial, Residential and Data Centers).. Nexans' strategy is founded on continuous innovation in products, solutions and services, employee development, customer training and the introduction of safe, low-environmental-impact industrial processes.

In 2013, Nexans became the first cable player to create a Foundation to introduce sustained initiatives for access to energy for disadvantaged communities worldwide.

Nexans is an active member of Europacable, the European Association of Wire & Cable Manufacturers, and a signatory of the Europacable Industry Charter. The Charter expresses its members' commitment to the principles and objectives of developing ethical, sustainable and high-quality cables.

We have an industrial presence in 40 countries and commercial activities worldwide, employing close to 26,000 people and generating sales in 2015 of 6.2 billion euros. Nexans is listed on NYSE Euronext Paris, compartment A.

For more information, please consult: [www.nexans.com](http://www.nexans.com)

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## About Western Power Distribution

Western Power Distribution (WPD) is the distribution network operator for the Midlands, South West England and South Wales, and is responsible for delivering electricity to approximately 7.8 million customers in the UK.

WPD is not an electricity supply company and does not bill customers in the UK. Its responsibility is to distribute electricity from the point of generation to homes and businesses.

WPD is owned by Pennsylvania Power and Light (PPL). PPL controls or owns about 19,000 megawatts of generating capacity in the United States, sells energy in key U.S. markets, and delivers electricity and natural gas to about 10 million customers in the United States and the United Kingdom.

For further information about the low carbon projects that WPD is involved in, please visit [www.westernpowerinnovation.co.uk](http://www.westernpowerinnovation.co.uk).

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