High Temperature Superconductor project in Long Island moves into second phase as partners celebrate the successful commissioning of the world’s first transmission voltage superconductor cable

- Official ceremony held at Long Island Power Authority’s Holbrook transmission right of way celebrated the successful commissioning of the first project phase.
- Second phase will utilise cost-effective 2G HTS tapes and develop jointing solutions

Paris, June 25, 2008 – Nexans, the worldwide leader in the cable industry, American Superconductor Corporation (AMSC), Air Liquide, Long Island Power Authority (LIPA) and the Department of Energy (DOE) today celebrated the commissioning of the world’s longest high temperature superconductor (HTS) power link and of the first transmission HTS cable in a commercial power grid. Partners will now focus on the second phase of the LIPA HTS project. This will see the deployment of a new cable based on second generation (2G) HTS tapes that offer the potential for a more cost-effective cable system, as well as jointing solutions - with the objective of developing a commercial product suitable for power links of several kilometers in length.

“Long Island Power Authority has a strong interest in the development of superconductor technologies and is the first utility in the world to commission an HTS power transmission cable system,” said LIPA President and Chief Executive Officer Kevin Law. “We view superconductor power cables as an important option in our technology portfolio that will help us further enhance the reliability of our grid as we meet our customers’ increasing demands for electric power.”

The HTS cable system installed in LIPA’s power grid contains ribbon-shaped HTS wires that conduct 150 times the electricity of similar sized copper wires. This power density advantage enables transmission voltage HTS cables to utilize far less wire and yet conduct up to five times more power – in a smaller right of way – than traditional copper-based cables. The 138 kV, 600-metre power link was energized on April 22 2008 and is operating successfully in LIPA’s Holbrook transmission right of way. When operated at full capacity the HTS cable system is capable of transmitting up to 574 MW of electricity – enough to power 300,000 homes.

The purpose of the LIPA project, which is supported by the US Department of Energy (DOE), is to provide a real-life demonstration of the application of an HTS cable within an electric utility’s operational transmission system. The DOE sees HTS cables as a
core component of a modern electricity superhighway, one that is free of bottlenecks and can readily transmit power to customers from remote generating sites, such as wind farms.

The cable system, comprising three HTS cable phases running in parallel and six outdoor terminations for connection to LIPA’s grid, was designed, manufactured and installed by Nexans. The cable utilizes HTS wire produced by American Superconductor Corporation (AMSC), which also is the prime contractor for the project. Air Liquide, the world leader in cryogenics, has provided the liquid nitrogen refrigeration system.

“Nexans remains committed to providing the electric utility industry with advanced technologies, and HTS power cables are among our most promising offerings,” said Pascal Portevin, Chief Corporate Officer in charge of Strategic Operations, Nexans. “The unique ability of superconductor cables to deliver large amounts of power through small corridors offers a key solution for congested urban and metropolitan power grids. The success of the first phase of this project shows we are clearly ready to deploy HTS cables more broadly in utility power grids.”

**LIPA second phase**
The second phase of the LIPA HTS project involves the same partners (Nexans, AMSC and Air Liquide). The introduction of second generation (2G) HTS tapes, which are designed to be significantly cheaper than the first generation HTS conductors used in the initial project, will lead to a more cost-effective cable system – an important step towards commercialization of HTS power cable technology.

LIPA’s existing HTS cable is 600 meters in length. As future multikilometer power links are expected to be composed of cable sections of similar length, the second phase also encompasses the development and demonstration of a suitable cable joint.

**About Nexans**
With energy as the basis of its development, Nexans, the worldwide leader in the cable industry, offers an extensive range of cables and cabling systems. The Group is a global player in the infrastructure, industry, building and Local Area Network markets. Nexans addresses a series of market segments from energy, transport and telecom networks to shipbuilding, oil and gas, nuclear power, automotive, electronics, aeronautics, handling and automation. With an industrial presence in more than 30 countries and commercial activities worldwide, Nexans employs 22,000 people and had sales in 2007 of 7.4 billion euros. Nexans is listed on Euronext Paris, compartment A. More information on [http://www.nexans.com/](http://www.nexans.com/)

**Contacts:**
**Press**
Céline Révillon  
Tel.: +33 (0)1 56 69 84 12  
Celine.revillon@nexans.com

**Investors Relations**
Michel Gédéon  
Tel.: +33 (0)1 56 69 85 31  
Michel.gedeon@nexans.com