

# Commissioning of World's First Superconductor Power Transmission Cable System Celebrated

# -Ceremony Held at Long Island Power Authority's Holbrook Transmission Right of Way -Project Partners Commence Second Phase of LIPA Project Focused on Deployment of Secure Super Grids(TM) Technology

HAUPPAUGE, N.Y.--(BUSINESS WIRE)--June 25, 2008--American Superconductor Corporation (NASDAQ: AMSC), Long Island Power Authority (LIPA) and the Department of Energy (DOE) today celebrated the commissioning of the world's first high temperature superconductor (HTS) power transmission cable system in a commercial power grid. The 138,000 volt (138 kV) system, which consists of three individual HTS power cable phases running in parallel, was energized on April 22, 2008 and is operating successfully in LIPA's Holbrook transmission right of way. A ceremony is being held today to commemorate the completion of the first phase and kick off the second phase of the project.

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 hair-thin, 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. When operated at full capacity, the HTS cable system is capable of transmitting up to 574 megawatts (MW) of electricity, enough to power 300,000 homes.

The Department of Energy (DOE) previously funded \$27.5 million of the \$58.5 million total project cost, which advances the Department's ongoing efforts, through the Office of Electricity Delivery and Energy Reliability, to modernize the Nation's electricity delivery infrastructure. HTS power cables are envisioned by the DOE as a component of a modern electricity superhighway - one that is free of bottlenecks and can readily transmit power to customers from remote generation sites, such as wind farms.

Innovative solutions such as this project are fundamental to the modernization of the nation's electricity infrastructure, said Kevin M. Kolevar, Assistant Secretary for Electricity Delivery and Energy Reliability. We are pleased to support the development and deployment of this promising technology, which is advancing the Bush Administration's efforts to ensure that America continues to have access to readily available, reliable power.

LIPA's installation, which is the longest and most powerful superconductor cable system in the world, includes three phases connected through six outdoor terminations. It was designed, manufactured and installed by Nexans, the worldwide leader in the cable industry. The cable cores utilize HTS wires produced by AMSC, which also is the prime contractor for the project. The liquid nitrogen refrigeration system was manufactured by Air Liquide, the global leader in industrial and medical gases. Three 2,000-foot-long vacuum-insulated flexible cryostats provide high-quality thermal insulation maintaining the cable cores at cryogenic temperature.

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 Phase I of this project shows we are clearly ready to deploy HTS cables more broadly in utility power grids.

We are delighted to be a part of this important project and the advancement of superconductor technologies for the electric utility industry, said Michael Smith, President, Air Liquide Advanced Technologies U.S. LLC. Superconductor power cables provide the advanced technology needed to meet the world's rapidly rising power demands, and we are pleased to have been chosen to provide the critical, sophisticated cryogenic refrigeration technology that produces the operating temperatures required for successful grid application.

### LIPA Phase II Commences

AMSC is leading the development of an extension of LIPA's HTS cable system. The new project calls for the replacement of one of the existing HTS cable system's phases with a 600-meter-long cable made with AMSC's proprietary 344 superconductors, the company's brand name for what is generically known as second generation, or 2G HTS wire. The cable system will also incorporate Secure Super Grids<sup>™</sup> technology.

Introduced by AMSC in May 2007, Secure Super Grids is a system-level solution that utilizes customized 2G HTS wires, HTS power cables and ancillary controls to deliver more power through the grid and suppress power surges that can disrupt service. AMSC is leading a separate, parallel project to demonstrate and deploy the first distribution-voltage (13kV) Secure Super Grid solution in the power network of Consolidated Edison in midtown Manhattan.

The response to our Secure Super Grids solution since its launch in May 2007 has been tremendous, said AMSC founder and Chief Executive Officer Greg Yurek. Utilities worldwide are seeking ways to relieve choke points and instantly suppress power surges in their grids, and Secure Super Grids accomplishes both goals simultaneously.

Secure Super Grids utilize multiple paths for electricity flow in metropolitan power grids to ensure system reliability when individual circuits are disrupted due to severe weather, traffic accidents or willful destruction. In addition, they utilize the special properties of AMSC's 344 superconductors to not only relieve grid congestion, but also instantly suppress power surges that often damage utility equipment and disrupt customer service.

In addition to being the manager for this turnkey project, AMSC will supply approximately 60,000 meters of its second generation HTS wire known as 344 superconductors, needed to manufacture the power cable. As was the case in the original LIPA cable project, AMSC has chosen Nexans as the cable manufacturer and Air Liquide as the provider of the cryogenics system. Apart from being the world's first transmission-voltage cable system powered by 2G HTS wire, AMSC and its project partners will be developing new repairable cryostat and cable joining technology and a low-cost, reliable and efficient refrigeration system.

The DOE, through its National Energy Technology Laboratory, is expected to provide AMSC with \$4 million in federal funding through completion of its first project budget period, expected to end in September 2008. Upon successful completion of key project milestones and sustained execution of a viable business strategy, as much as \$5 million in additional DOE funding may be made available for continued implementation of this two-and-a-half-year project through March 2010, subject to availability of funds appropriated by the U.S. Congress.

# About Long Island Power Authority

LIPA, a non-profit municipal electric utility, owns the retail electric Transmission and Distribution System on Long Island and provides electric service to more than 1.1 million customers in Nassau and Suffolk counties and the Rockaway Peninsula in Queens. LIPA is the 3rd largest municipal electric utility in the nation in terms of customers served and the 6th largest in terms of electricity delivered. In 2006, LIPA outperformed all other overhead electric utilities in New York State in all three major reliability categories. LIPA does not provide natural gas service or own any on-island generating assets. More information about LIPA can be found online at: <a href="http://www.lipower.org">http://www.lipower.org</a>.

# About DOE's Office of Electricity Delivery and Energy Reliability

OE's mission is to lead DOE's national efforts to modernize the electric grid; enhance security and reliability of the energy infrastructure; and facilitate recovery from disruptions to energy supply. For more information, visit: <u>http://www.oe.energy.gov</u>

#### 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 develops solutions for energy, transport and telecom networks and for customers engaged in 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 is available at: <a href="http://www.nexans.com/">http://www.nexans.com/</a>

#### About Air Liquide

With more than 40,000 employees in 75 countries, Air Liquide is the world leader in industrial and medical gases and related services. The Group offers innovative solutions based on constantly enhanced technologies and produces air gases (oxygen, nitrogen, argon, rare gases...) and many other gases including hydrogen. The Group contributes to the manufacturing of many

everyday products: bubbles in sparkling beverages, protective atmosphere for packed foods, oxygen for hospitals and homecare patients, ultrapure gases for the semiconductor industry, hydrogen to desulfurize fuels. Air Liquide is committed to sustainable development and helps to protect life. Founded in 1902, Air Liquide has successfully developed a long-term relationship with its shareholders built on trust and transparency and guided by the principles of corporate governance. Since the publication of its first consolidated financial statements in 1971, Air Liquide has posted strong and steady earnings growth. Sales in 2007 totaled 11,801 million euros, with sales outside France accounting for almost 80%. Air Liquide is listed on the Paris stock exchange and is a component of the CAC 40 and Eurostoxx 50 indices (ISIN code FR 0000120073). More information is available at: <a href="http://www.airliquide.com">http://www.airliquide.com</a>.

### About American Superconductor (NASDAQ: AMSC)

AMSC is a leading energy technologies company offering an array of solutions based on two proprietary technologies: programmable power electronic converters and high temperature superconductor (HTS) wires. The company's products, services and system-level solutions enable cleaner, more efficient and more reliable generation, delivery and use of electric power. AMSC is a leader in alternative energy, offering grid interconnection solutions as well as licensed wind energy designs and electrical systems. As the world's principal supplier of HTS wire, the company is enabling a new generation of compact, high-power electrical products, including power cables, grid-level surge protectors, Secure Super Grids<sup>™</sup> technology, motors, generators, and advanced transportation and defense systems. AMSC also provides utility and industrial customers worldwide with voltage regulation systems that dramatically enhance power grid capacity, reliability and security, as well as industrial productivity. The company's technologies are protected by a broad and deep intellectual property portfolio consisting of hundreds of patents and licenses worldwide. More information is available at <u>www.amsc.com</u>.

American Superconductor and design, Revolutionizing the Way the World Uses Electricity, AMSC, Powered by AMSC, SuperVAR, D-VAR, DVC, PQ-IVR, PowerModule, Secure Super Grids and Windtec are trademarks or registered trademarks of AMSC.

Any statements in this release about future expectations, plans and prospects for the company, including statements containing the words believes, anticipates, plans, expects, will and similar expressions, constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. There are a number of important factors that could cause actual results to differ materially from those indicated by such forward-looking statements. Such factors include: uncertainties regarding the company's ability to obtain anticipated funding from corporate and government contracts, to successfully develop, manufacture and market commercial products, and to secure anticipated orders; the risk that a robust market may not develop for the company's products; the risk that strategic alliances and other contracts may be terminated; the risk that certain technologies utilized by the company will infringe intellectual property rights of others; the competition encountered by the company, including several large Japanese companies. Reference is made to these and other factors discussed in the Management's Discussion and Analysis of Financial Condition and Results of Operation section of the company's most recent quarterly or annual report filed with the Securities and Exchange Commission. In addition, the forward-looking statements included in this press release represent the company's views as of the date of this release. While the company anticipates that subsequent events and developments may cause the company's views to change, the company specifically disclaims any obligation to update these forward-looking statements. These forward-looking statements should not be relied upon as representing the company's views as of any date subsequent to the date this press release is issued.

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