



Jimmy Glotfelty, a director with the U.S. Department of Energy, left, speaks with Philip Pellegrino, president of SuperPower, second from left, at a Monday groundbreaking for SuperPower's superconducting cable, which promises to deliver electricity more efficiently and

reliably. Gov. Pataki, center, looks at a piece of the cable given as a gift, along with Glenn Epstein, chair and CEO of a SuperPower parent company, second from right, and Peter R. Smith, president of New York Energy Research and Development Authority.

MEREDITH L. KAISER *Gazette Photographer*

Pataki cheers SuperPower test

By **BRIAN MCGUIRE**
Gazette Reporter

ALBANY — A Schenectady company that has developed a new, more efficient way to transmit electricity moved one step closer to commercialization Monday.

In a groundbreaking ceremony at the Niagara Mohawk substation on Broadway in Albany, SuperPower Inc. launched construction of the world's first ever in-grid, high-temperature, superconducting cable.

The long-awaited event, attended by local, state and federal officials, brings technology developed at the Duane Street firm out of the laboratory and onto 1,155 feet of the Niagara Mohawk grid.

Scientists at SuperPower say the cable they have developed is capable of transmitting five times the electricity of same-size copper cables while wasting far less electricity in transmission.

Gov. George Pataki said construction on the cable is evidence his plan for making the Capital Region a global leader in new energy products is well placed. Pataki has spent the past week speaking at events across the

state that highlight his efforts at leveraging public funds for private technology investment.

"We're looking to lead the world in nanotechnology, but we're also looking to be ahead of the curve in energy technology," Pataki said over the sound of cars and trucks rumbling over nearby I-90. "This is going to transform the way power is delivered to, hopefully, every corner of the world."

A subsidiary of Latham-based Intermagnetics General Corp., SuperPower was established in March 2000 after the discovery of an inexpensive method for developing superconducting materials made its commercialization viable.

Previous high-temperature superconducting methods, known as first generation, required large quantities of silver and could not be automated. When a new method that allowed for automated production and cheap materials was discovered, Intermagnetics saw a huge market opportunity.

SuperPower has secured funding for the experimental Albany superconducting cable from federal and state sources. The U.S. Department of Energy has committed \$13

million and the New York Energy Research and Development Authority \$6 million.

The remaining \$7 million will be split between Intermagnetics and commercial partners The BOC Group, of England, and Sumitomo Electronics, of Japan. Niagara Mohawk will host the project, supply a project manager, and provide backup power if the cable fails.

SuperPower executives say that if the Albany cable project goes as planned, the company could be in a position to commercialize its second-generation superconducting cable by 2007. They say success could result in the tripling of its Schenectady work force, currently 50, and a new manufacturing facility nearby.

The company's president, Philip Pellegrino, said the cable would first be used in densely populated cities like New York where cables are already buried. Noting that U.S. energy needs grew 25 percent in the 90s alone, Pellegrino said: "You can't build anything anymore and sooner or later the lights are going to go out."

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