Math TransEnergie-Style:
One Plus One Equals Profits

Merchant Transmission Line Wins Approval

New England-New York Power Prices a Draw

Concept May Work in the Southwest and Florida

By Rick Stouffer
rstouffer@ftenergy.com

Merchant power plants, constructed to fill an electricity need—at a price—soon could be joined by another offshoot of industry deregulation: the merchant transmission line.

TransEnergie U.S. Ltd., the Westborough, MA-based unit of Canada’s power behemoth Hydro-Quebec, has received conditional approval from the Federal Energy Regulatory Commission to build a 26-mile underwater transmission line between New Haven, CT, and Shoreham, NY, on Long Island.

If TransEnergie complies with FERC’s requests, including detailing how it will offer service over the 600 MW transfer capacity line and agreeing to join a regional transmission organization once available, environmental permits from New York and Connecticut soon will be sought. The high-voltage, direct-current line is expected to be serviceable by May 2002.

As currently designed, costs for the underwater cable will be borne by TransEnergie, which will recoup its costs—and make money, it hopes—by serving as a conduit. That means funneling power from New England to Long Island, or vice versa, depending on who’s willing to rent the space.

“We’ve been looking at this project, doing analysis and looking at various routing options for the last three years,” said James Nash, TransEnergie’s Cross Sound Cable project manager.

FEEDING THE ISLAND
TransEnergie’s efforts, which will serve as another link between the New England and New York State control areas, were prompted by the Long Island Power Authority’s desire to provide “the Island” with badly needed, additional power.
Long Island was one of the nation's trouble spots during the summer of 1999, with 110,000 customers experiencing service interruption at various times during a July 3-8 heat wave.

One of the acknowledged problems was that peak load growth increased more than 25% between 1998 and 1999, with transmission and distribution capability failing to keep up.

Currently, some 40% of Long Island's power comes from off-island sources, a figure some expect to increase with the area's rising energy needs.

The consortium of Asea Brown Bovieri and TransEnergie made one of three original bids on the Long Island Sound project. Other initial bidders included an Enron-Northeast Utilities partnership, and an American Electric Power-Westinghouse alliance.

Originally, the cable costs were supposed to be imbedded in the rate base, according to AEP's John Provanzana. The Enron-Northeast Utilities bid was about $400 million, ABB-TransEnergie was roughly $210 million, while the AEP-Westinghouse bid was about $165 million.

AEP's project was AC, using a unified power flow controller; its competitors were both DC cable.

"We took LIPA to court and actually won, with them having to rebid the project " to bidders, said Mr. Provanzana, managing director of AEP Resources Services Co. "We had our consultant take a look at the project as a merchant line and we couldn't see how we could make the economics work."

While LIPA got the project ball rolling, its role in the end product still is to be...
resolved.

"It's yet to be determined how much of the line's capacity we will take," said LIPA spokesman Bert Cunningham.

**FULL STEAM AHEAD**

But TransEnergie is not worried about LIPA's power take; it's moving ahead with the $200-plus million project—a cost it will swallow initially—because it's looking at power pricing between New England and New York. And it likes what it sees: Growing generation sources in the Northeast, and a constrained transmission system in downstate New York, lead to a situation which can be expressed as one plus one equals profits.

"This project is a market response to transmission constraints on the system," said James Avery, a vice president with the energy consulting firm R.J. Rudden Associates of Hauppauge, N.Y.

The transmission system, not only in the New England-New York area but throughout the country, was designed to move electricity quickly and economically intra power pool, not inter-pool.

"But in some areas, we still have intra-pool problems," according to Mr. Avery. Long Island is an elongated radial of New York City, and that creates locational differences in power pricing. If you built the cable across the Sound, energy produced in New England could be worth more on Long Island."

TransEnergie itself is not looking to sell power over the line, but Mr. Nash said it will offer, via a so-called open season process, capacity on its line to power producers, marketers and even electric users.

Still, AEP's Mr. Provanzano sees substantial economic risk for any cable developer unless it has secured firm power purchase contracts. These long-term commitments ensure that the cable flow is maxed at all times.

"The need for additional transmission is coming about, but it must be based on the laws of supply and demand and economics," Mr. Provanzano said.

**INDEPENDENT LINES**

He also admits, however, that the concept of independent lines is intriguing, and that AEP is always looking for opportunities.

"In general, this project sits with a good trend. It's a way to bring competition to the transmission business," said Craig Roach, a principal with the consulting-investment
services firm Boston Pacific Company Inc., Washington, D.C. Mr. Roach said such merchant transmission lines may be just the impetus needed to force transmission line owners to put money for expansion into their systems.

"That's how generation opened up," according to Mr. Roach.

Rudden Associates' Mr. Avery said the Long Island Sound cable could be just the beginning of a wave of new merchant transmission lines.

"These kinds of projects make sense anywhere there is a constrained transmission path," Mr. Avery said. "You have intra-California, inter-California, Arizona, the Southwest in general, with Florida another possibility."

There are a number of potential constraints that could put a crimp in a merchant transmission "fleet," including, but not limited to, need. Just as not every merchant power plant proposed make it from a set of blueprints to generation, the same will hold for merchant transmission line projects.

There also is the delicate matter of state utility/public service commissions and their continued reign over transmission-related matters. While regulators may be seeing their hold over generation slip away, thus far the control on transmission remains tight.

"There are lots of states which have regulations concerning transmission lines," Mr. Avery said. "There will need to be a change in thinking on the regulatory front before we see a number of these projects."

Still, Boston Pacific's Mr. Roach said projects can be done provided developers take the time to work with all affected constituencies.

"Siting of power plants always has been a problem, yet a number of the independent power producers have had success in getting projects approved," according to Mr. Roach. "If a new transmission line owner works with all the factions involved in a project, they could have success."