

Preparation is key to riding the waves of energy costs

By Christopher R. Anderson

The Massachusetts High Technology Council has been providing its members with significant savings by creating and offering first-in-the-nation opportunities to reduce and manage energy costs. Collectively, since we started in 1996, council member savings have topped \$30 million.

In conjunction with our exclusive energy partner, Constellation NewEnergy, we have successfully crafted innovative approaches to protecting energy budgets in ways that reflect the needs of both the consumers and our supplier.

But as the energy markets continue to evolve, it becomes almost impossible for large energy consumers to know when the best time to lock in fixed-price energy contracts might be. Better to follow the advice of Fidelity's Peter Lynch: "You can't predict the market's ups and downs. But you can prepare for them."

What market conditions are fueling the market's volatility? On the demand side of the equation, the Massachusetts Electricity Restructuring Act's standard



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offer service ended in March 2005. This significantly increases the number of commercial customers seeking to competitively procure electricity.

In addition, during the next few months there will be more than 5,000 megawatts of wholesale-level utility default service coming up for competitive bid in New England, and more than 22,000 megawatts across the eastern United States (the entire New England Region has an average demand of 15,000 megawatts). This buying activity will create significant upward pressure on prices.

On the supply side of the equation, there are several factors placing upward pressure on prices. Regional electricity prices are strongly influenced by natural gas price levels, which in turn are driven by world crude prices. Natural gas prices have a strong influence on regional electricity prices because a substantial portion of the region's electricity generation fleet is fired by natural gas, and U.S. natural gas supplies are declining.

The drilling rig count has doubled — responding to higher prices — but gas production continues to decline. The United States will increasingly import gas from unstable areas — notably from Iran and Russia — causing increased price volatility and rising price levels. On a longer-term basis,

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several industry experts have noted current price levels are likely to persist for some time. In particular, Cambridge Energy Research Associates, a globally recognized firm that analyzes oil and natural gas markets, has predicted price levels in the current range could continue for the next four to five years.

In response, Mass High Tech Council members will have an opportunity to participate in a new approach to managing the long-term risks associated with energy market volatility on their budget, bottom line and shareholders.

Specifically, these consumers will be offered a diversified portfolio of electricity products to limit price risk and allow consumers to benefit from price opportunities.

The ramifications of such a long-term portfolio approach require the chief financial officer to be involved and aware of the risks of the more traditional fixed-price contract strategy. That point is even more important now that all Massachusetts electricity customers not being served by a competitive supplier will be supplied by energy priced at the more volatile market prices establish by utilities every few months.

In commodity markets, all buyers and sellers are price takers. Fortunately, multiple electricity products are available, each with different attributes for price level, price volatility and time horizon. With the proper alignment of corporate financial objectives, customers have opportunities to strategically shape the delivered price of energy, similar to what a portfolio manager achieves with a stock mutual fund.

High Tech Council members will soon be able to apply financial portfolio techniques to their energy budget process by incorporating goals with strategy and execution, evaluation and periodic portfolio rebalancing. This approach will optimize a diversified mix of energy contracts including:

- Long-term, fixed-price power from sources including renewable electricity from wind, solar and photovoltaic,
- Long-term, fixed-price power as well as nuclear power contracted from specific plants;
- Medium-term, forward-price products;
- Short-term, monthly spot market purchases (allowing for increased purchases during market dips), and;

• Short-term, peak-unit generation entitlement; as a physical hedge against spot market prices. How will Mass High Tech Council members control power costs in the volatile energy market? Remember what Peter Lynch said: "You can't predict the market's ups and downs. But you can prepare for them."

Thanks to yet another innovative energy strategy, we'll be prepared.

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