

**REMARKS BY GORDON VAN WELIE
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CONNECTING WHOLESALE AND RETAIL ELECTRICITY MARKETS
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Good morning and welcome. I am pleased to see so many of you here to discuss how to connect our wholesale and retail markets and to examine some of the many challenges we face.

Today's forum is especially timely given the catastrophic events in the Gulf of Mexico and the recent order by FERC to convene a special task force to study the progress of competition in the nation's wholesale and retail electricity markets.

Last week, ISO New England issued a report highlighting the impact that significant constraints on natural gas delivery can have on electricity production this winter. We asked businesses and consumers to take precautionary steps by becoming more energy efficient and conserving electricity – consistent with their own health and safety needs.

On the same day, the Federal Energy Regulatory Commission announced that an “Electric Energy Market Competition Task Force” established by the Congress as part of the Energy Policy Act of 2005 will conduct a study of the development of wholesale and retail competition.

As Dave has pointed out, we need well-functioning wholesale *and* retail markets to fulfill the promise of restructuring. But the two cannot exist in parallel universes. Each needs to be linked to the other to work properly. By creating strong links between the two, both can be strengthened, enabling the markets to deliver benefits to all consumers.

Before we get into the specifics of how to link these markets, I'd like to spend a little time reviewing how the wholesale side is progressing.

Wholesale Market Development

The original goals for restructuring were clear: increased supply, reliable delivery, efficient and clean production and lower prices – all based on competitive markets that provide reasonable

returns for investors. There have been bumps along the way and political hurdles to overcome, but the restructuring effort has resulted in significant progress and has yielded measurable benefits. Today, we have a more reliable, economical, and environmentally friendly power system than we did seven years ago. Let me give you some examples:

- Wholesale prices have dropped by 5.7 percent since 2000 when you factor out increased fuel costs. Combined with other efficiencies created by the new markets, this has resulted in \$700 million in annual savings for consumers.
- More than \$6 billion has been invested in new, cleaner, more efficient and more reliable power plants in New England. These plants have increased capacity by 30 percent, improving the overall reliability of the system.
- The new, cleaner power plants have reduced annual emissions of carbon dioxide, nitrogen oxide and sulfur oxide.
- The percentage of time generators have been available to operate has improved from 81 percent to 88 percent, suggesting that power plant owners are responding to market signals and competition.
- Five critically needed transmission projects have been sited and progress is being made on a sixth.
- Participation in demand response programs has doubled over the past two years. 500MW are now enrolled. Last year, these programs resulted in more than 13,000 megawatt-hours of decreased electricity use.

These results indicate that a successful wholesale market can be built where none existed – and in a relatively short period of time. Today, more than 260 companies and entities participate in these markets and complete more than \$7.25 billion of wholesale transactions annually. With 88 percent of its generation deregulated, New England has one of the most robust, competitive electricity marketplaces in the nation and the world.

New England is building a strong foundation for achieving successful competitive wholesale markets. However, the recent dramatic increase in the price of natural gas and oil that fuel the majority of our power plants, the debate over LICAP, and the slow development of our retail

markets have led to questions about whether restructuring is providing the benefits that were envisioned.

It is clear that the region faces significant challenges, and it is important to recognize that the competitive markets are still under development. The traditional vertically integrated utility model was abandoned just a few years ago. It is far better to move forward and address the challenges that remain, rather than retreat to a regulated environment. Traditional regulation provides more safety for utilities than consumers, since consumers are the ones who generally bear the risk of utility investments. In addition, re-regulating the markets would not protect consumers from price shocks caused by catastrophic events, such as a war in the Middle East and two Gulf Coast hurricanes.

Our markets are doing what they were created to do: sending us clear signals about what infrastructure is needed so that we can provide electricity at the lowest cost.

The markets are sending us three critical messages:

- We need to diversify our fuel sources;
- We need to price electricity appropriately if we want future investment and a reliable electricity supply under scarcity conditions; and
- We need more demand side participation to more efficiently utilize scarce fuel and capacity resources, which would result in lower prices and reduced market power.

Fuel Diversity

New England has become increasingly reliant on natural gas and oil to produce electricity.

Consider these facts:

- More than 60% of the region's electricity supply is derived from either gas or oil.
- More than 40% of New England's total annual natural gas consumption goes toward the production of electricity;

- Power plants that burn only natural gas set the clearing price in the wholesale electricity market 55% of the time last year, and units that burn gas or oil set the price 85% of the time;
- Since 2002, the price of natural gas has nearly tripled, while the price of oil has more than doubled.

These factors spell trouble for New England. Electricity costs have become heavily influenced by natural gas and oil prices. That trend is expected to continue with the commercialization of additional gas-fired generators, the conversion of existing generators to gas, and the deactivation or retirement of existing oil or coal-fired generators. The region's limited ability to import electricity over the transmission system and its lack of local fuel supplies make it especially vulnerable to fuel supply disruptions and price volatility.

Historically, our concern over an adequate electricity supply focused on the summer months. But, New England has become vulnerable to electricity shortages in the winter, as well. The coincident needs of home heating and electricity production have placed an extremely high demand on natural gas supplies. There is a risk that this winter will be particularly difficult in the wake of Hurricanes Katrina and Rita and their effects on natural gas production, storage and distribution in the Gulf.

The markets have been affected by these elements: electricity prices are climbing because of the increase in the price of natural gas and oil. The markets are telling us that we need to build new power plants that operate on fuel sources other than natural gas and oil. The markets are also sending signals to generation companies to invest in clean coal, wind power – or perhaps nuclear, which would result in further diversification of our fleet.

Smart investors know not to put all their eggs in one basket; financial advisors preach diversification. Likewise, the region needs to diversify its portfolio of generating facilities.

Building Capacity

The second message the markets are sending is that we are undervaluing capacity. Reliability is still a serious concern in Greater Boston and Connecticut. There is not enough electricity

produced locally to meet growing demand and the transmission infrastructure is inadequate to bring surplus power in from other areas. Even with planned transmission upgrades, New England could face electricity shortages that would require emergency actions to meet peak demand as early as 2008.

The core question is one that is challenging every organized market in the electric industry: How can we adjust the competitive markets to attract investment in maintaining and operating existing resources and develop a variety of new resources in the right places to meet New England's electricity needs? This includes investment in new power plants, quick-start facilities, alternative energy sources and demand response.

As many of you undoubtedly know, we are engaged in a vigorous debate over how to address this problem and those discussions are continuing before the FERC. We are optimistic that the recent request for a settlement judge will result in a region wide settlement on this important issue.

Retail Market Linkages

The third message the markets are sending is the focus of today's conference: we need more direct participation of consumers in the markets. In order to achieve this outcome, consumers need to see and pay the price for their consumption decisions. If customers pay the same retail electricity price hour-to-hour, day-to-day, and month-to-month, they have no incentive to change how they use electricity.

By seeing and paying the price for consumption decisions, customers are given the opportunity to reduce their overall energy bill by changing their consumption pattern or installing control technology. When some customers begin responding to prices, the existing electricity system is used more efficiently, which reduces price volatility, the need for additional capacity, and overall prices in the wholesale market. Thus, the demand response of some customers benefits all customers. This is the wholesale retail linkage that must be made to improve the performance of both markets.

Pricing

There are mechanisms available for creating closer linkages between wholesale and retail market pricing. These mechanisms include:

- Implementation of dynamic retail pricing, which varies directly with changes in wholesale spot-market energy prices;
- More sophisticated metering, communications technology, and billing systems to send more accurate price signals directly to consumers in real time.
- Control technology, which adjusts customer consumption levels automatically as prices vary over the course of the day.
- Customer education to assist retail customers better understand how the markets work and their choices for managing changing price levels.

You will hear more about these mechanisms throughout the day.

Retail Procurements

In New England, progress has been made in serving large customers through the wholesale markets. However the retail market has developed more slowly for small customers. In Massachusetts the switch from standard offer service to default service, or competitive supply, may provide the opportunity for new companies to enter the retail market.

However, the length of time that default service is offered poses potential problems, since it does not encourage long-term contracting and investment on the part of those suppliers serving retail load. Region-wide, contracts between distribution companies and suppliers to supply default service are as short as three months and few exceed a year.

These short-term deals act as barriers to financing new generators and demand response. They also create uncertainty over how long wholesale suppliers will be serving the amount of load designated in the contract. Thus, they are unlikely to invest in supply or demand response programs that have a multi-year payback period.

The issue of how to structure such services to encourage investment in resources should be considered by state policymakers and regulators.

Demand Response

Greater use of dynamic retail pricing will likely be the most direct and cost-effective way to link the two markets. Since this type of pricing will have the most value during periods of supply shortages and price spikes, ISO New England is working with market participants and state policymakers to improve the linkages between wholesale and retail markets in the area of demand response.

In the wholesale markets, we see demand response as a mechanism for providing incentives to wholesale customers for reduced usage at the right times *and* for increasing supply. But, to get demand response to a level below large industrial users, we need to work on getting the retail rate structure to reflect underlying wholesale prices. If we believe that demand response provides critical benefits, the next question becomes: How do we get price signals to all retail customers?

We've been reasonably successful to date in developing effective wholesale demand response "programs."

We have programs that operate in real-time and this June we began offering a day-ahead option. We have programs that require customers to respond in as little as thirty minutes and programs that don't require you to respond at all unless the price is right for you. We have high-tech and low-tech metering options and we are working on a project to demonstrate demand response's ability to provide reserves.

We currently have almost 500 megawatts of highly reliable demand response resources available throughout New England and nearly 200 megawatts of customers are now enrolled in the Real-Time Price Response program.

But our vision for demand response isn't just about having successful wholesale programs that are paid for by market participants. Our vision is to have customers naturally adjusting their consumption in response to changes in wholesale market prices. We want retail customers to be

presented with opportunities to see and respond to wholesale price levels so that they can better identify and receive the services that best meet their needs at the lowest cost. We want retail customers and demand response providers to feel comfortable investing in demand response projects and technologies knowing it will be a permanent part of the portfolio of resources in the wholesale market. Retail prices that are more strongly linked to wholesale prices would help us achieve this vision.

A robust market for demand response provides benefits well beyond the customers who are actually “responding.” Demand response can play an important role in mitigating the volatility of prices, and it also reduces the potential for market power. These benefits accrue to the entire market, not just to those actively responding. If only 3 to 5 percent of New England’s total demand were actively responding during peak demand or high price periods, wholesale power costs could be reduced by several hundred million dollars per year. These benefits can be achieved through retail rate design without the need or expense of special demand response “programs.”

Achieving a critical mass of price responsive demand that benefits the entire market depends on two critical factors: the ISO integrating demand resources into the wholesale markets, and state regulators developing retail rates that allow the wholesale price signal to get through to the end consumer in some fashion.

Retail prices indexed to the real-time or day-ahead wholesale markets and critical peak pricing are examples of how demand response can be developed to accomplish these goals by creating linkages between the wholesale and retail markets. This will lay the groundwork for customers to change their usage patterns to save money and reduce total costs.

Since states have jurisdiction over the structure of retail service, we are very fortunate to have with us today representatives from all six New England regulatory Commissions, and the key legislator who drafted the Massachusetts restructuring law. They are here to participate in the discussion, hear various points of view and share their concerns as they think through these issues and formulate new policies.

Of course, the real innovation in providing demand-side resources comes from retail customers working with their utility, competitive supplier or demand response provider. Our vision is that one day the market structure will provide customers across the region the ability to see the true price of electricity and let them shift their use according to their sensitivity to price.

Conclusion

As the markets mature, we will continue to respond to the challenges that develop. I am confident the additional enhancements that are planned will ensure the long-term reliability of the region's electricity system, so it can continue to meet the needs of New England consumers and support economic growth. It is important for the power industry as a whole to continue to move forward with market-based initiatives and not fall back into what I believe is a less efficient regulated electricity industry.

For eight years, ISO New England Inc. has been the not-for-profit corporation responsible for the day-to-day reliable operation of New England's bulk power generation and transmission system with an installed capacity of 32,000 megawatts; oversight and fair administration of the region's \$7.25 billion wholesale electricity marketplace, comprised of more than 260 market participants; and management of a comprehensive regional bulk power system planning process. For more information, visit our Web site at www.iso-ne.com.