

Notes for Remarks

Strengthening the vision for the Market

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Thanks very much. I appreciate the opportunity to be here.

My congratulations to the organizers ... Jake, Dave and others. This APPrO conference has lived up to its promise and we aren't even through the first day yet.

Tonight, the new Minister of Energy, Gerry Phillips will be making his inaugural speech as Energy Minister at this conference.

As he takes over his new portfolio, Minister Phillips has a few issues on his plate. No doubt, many of us will offer him advice on what his priorities should be. I had an opportunity to sit down with the new Minister last week. From what I know of Minister Phillips, and from my initial meeting, I believe there will be a good fit with the energy sector and I look forward to working with him.

Many of us in this room spent the past four years reacting, modifying our strategies, plans, and our operations in response to government initiatives to implement the hybrid market.

From my vantage point, mid-term supply issues are largely being addressed provided the infrastructure can be approved and built when it is needed. This provides us a window, or the breathing room, for the

industry to be more proactive about what is needed to realize reliability, price and environmental objectives for our sector.

The title of my presentation today is Strengthening the Vision for the Market.

Now from that title, one would assume that we indeed have one vision for the market. But I almost feel that while we all agreed what the play was going to be when we were in the huddle, when we broke from the huddle, some of us lined up for a run, some of us prepared for a Hail Mary pass, while others were thinking about punting.

Our task now is to make sure we are all working from the same playbook.

When we think about what's needed for this market, we often move quickly to individual components or mechanisms such as a Day Ahead Market, or Load Serving Entities or rule changes such as letting imports set the price.

And we are moving forward in addressing the need for those enhancements and changes.

Day Ahead Market

On the Day Ahead Market, Jan referenced the benefits of a DAM and threw it my way to elaborate on. At the risk of disappointing those who were expecting a speech on the DAM benefits ... and in the interests of time ... let me simply categorize the benefits under three areas:

Providing consumers with firm prices a day ahead over having the prices determined five minutes after consumption; better alignment with the day ahead gas nomination process; and more efficient unit commitment decisions.

We will be providing a report to the IESO Board of Directors next month that summarizes our investigation thus far of day ahead mechanisms.

Throughout our work, we have been focused on a DAM that requires little if any change to the real time market and one in which the majority of consumption would be priced day ahead. Both generators and consumers would hold financial positions going into the day ahead, with only changes from those day ahead expectations being priced in real time. This would effectively relegate the real time market to its more appropriate balancing role.

We had a meeting with stakeholders yesterday to discuss our analysis and findings to date and we continue to be encouraged by the input and comments we are receiving from stakeholders.

At this point, we expect to be recommending to the Board that we move ahead with further definition and evaluation of the Unconstrained Day Ahead Market, and on providing a day-ahead forecast of real-time prices.

While we will be providing a high level assessment of the costs and benefits associated with an Unconstrained DAM, we are not yet at the point where we can make a recommendation on its implementation.

Over the next few months, we expect to focus our efforts in three particular areas: aligning contracts and regulated rates with the day ahead price; continuing to define the design including addressing some real-time operational concerns raised by generators; and developing day ahead price forecasting.

We have posted a status paper on our efforts to date which is available on our web site.

Market Pricing Work Group

DAM isn't our only market-forward focus at the IESO.

The Market Pricing Working Group is in the process of establishing its priorities for 2008 and at this point the priorities being discussed are:

- 1) A study of the efficiency impacts of using peak or average demand forecasts in the pre-dispatch sequence;
- 2) An examination of what would be involved to sell operating reserve to neighbouring markets, (there was a promise to review this that is as old as the market!); and
- 3) An investigation into the feasibility and potential benefits of conducting intertie transactions based on locational prices.

As is the case for these issues, much of the Market Pricing Working Group work arises as a result of recommendations included in reports from the OEB's Market Surveillance Panel.

In addition, once more is known about what path any DAM designs will take, the Working Group will return to the issue of the role of inertia transactions in setting the real-time market price. This is an issue generators have been promoting since the market opened. They agreed to postpone further discussions on it pending the outcome of DAM alternatives. The thinking was that if inertia transactions were able to set the DAM price it might address their concerns.

In 2008 we'll also be looking at addressing concerns about erratic dispatch. We think we have to answer the question of whether the current market is rewarding flexible suppliers sufficiently to ensure that tomorrow's fleet will deliver the flexibility the system needs and values.

Some of you who heard my colleague Yakout Mansour, CEO of the California ISO when he came to town a couple of weeks ago will know that this is a question he also has on his mind. As jurisdictions everywhere incorporate new technologies such as distributed generation, and increasing renewable components, the changing aggregate fleet performance characteristics require us to think these issues through thoroughly and carefully.

Need for Demand Side involvement in the market

But let me step back from our short-term efforts, and look at the future of the market more broadly.

From the outset, our market and, indeed, most electricity markets have been supply side markets.

There has always been a lack of participation in the market from consumers. I believe the real breakthrough for electricity markets has to come from the consumer side.

Adam White, the President of AMPCO, has said he would like to see a market where consumers are in the driver's seat. At times, I think I would be happy if we could at least get them in the car.

In preparing for this conference, I came across a presentation given last month in Syracuse by Dr. John Anderson, President and CEO of ELCON, the association representing large consumers in the U.S.

Dr. Anderson said that in the 1980s his association was an advocate for competition because it believed that true competition would discipline artificially high prices that came from some forms of regulation. True

competition would also bring technological innovation, new products and services, a customer focus and allow customers to be in control of their risk.

And while markets have emerged, Dr. Anderson argued we are still missing real or true competition.

Future Supply Characteristics

While John and I don't always share the same views, I do agree that for this Ontario market to survive and thrive, we need participation from consumers. And that need will continue to increase as we bring certain types of new generation on line.

Our future includes increased amounts of less flexible generation ... new and refurbished nuclear, wind, solar, cogeneration, combined cycle gas generators that have very high minimum loads ... all of this is in the works. Yet all of this has limited flexibility.

Wind generation in particular can actually increase the need for flexibility because it is intermittent; and in Ontario, as elsewhere, it tends to decrease as the load is increasing in the morning and does the reverse at night.

And while many of the hydroelectric resources offer the flexible characteristics we need to follow load, the current and projected hydroelectric capacity may not be enough given the increase in less flexible supply; particularly with the planned addition of more than 4,000 MW of wind in the next 15 years.

IRC studies

Ontario is not alone in its increasing reliance on wind as a clean source of supply or in recognizing the importance of demand response. Policy-makers on both sides of the border have recognized the needs and benefits.

The 10 Independent System Operators and Regional Transmission Operators in North America recently published a series of papers on the incorporation of renewables into the ISO markets and the development of demand response in these markets.

Within the ISO areas, which cover about two-thirds of North American demand, there is more than 124,000 MW of wind generation in the ISO connection queues. This is more than the gas proposals, more than the coal proposals and more than the nuclear proposals in the queues. Of

course not all of these proposals will be built but it gives an idea of the magnitude of the potential for new wind generation. Twenty-five states in the U.S. have renewable portfolio standards and there is federal legislation proposed for a National RPS.

In contrast, these same ISO areas have only about 4,000 MW of hydro power in their connection queues.

With respect to demand response, the ISO's report that more than 23,000 MW of demand response is now participating in North American ISO and RTO markets. The case studies in the reports demonstrate the benefits that have been realized through price mitigation, efficiency improvements and reliable operation.

But as more intermittent resources such as wind power are added to the grid, the need for DR resources and the balancing capabilities of regional grid operators will become even greater. Increasingly we are recognizing that in an interconnected grid with adjacent markets, a broader regional view is necessary to make efficient use of the diversity and capabilities that will exist. We are also recognizing the important role that consumer response will have to play.

Some industrial customers are already in the Ontario market as dispatchable loads and the OPA is rolling out new Demand Response programs to larger customers. But the residential market offers potential that has yet to be tapped.

Smart Meters

It is one of the reasons why smart meters make sense and why the IESO has taken such an active role in the province's Smart Meter Initiative. The IESO is responsible for building and operating the central data repository that will house metering data for every LDC in the province.

Smart meters represent one tool that will enable residential customers to benefit by shifting their use of electricity to off-peak hours, reducing the strain on the power system, reducing environmental impacts and saving customers money.

But increasingly attention is being focussed on even more direct control of end-use appliances and devices – control that would enable increases or decreases in demand to be used to match the changes in system demand and supply on a minute-to-minute basis. The information and control technology and the market mechanisms to pay for this kind of service are on the horizon. Our challenge is to create the environment

that will allow the innovation that is possible to flourish; to ensure our institutional structures don't create barriers; and to see that market incentives are not distorted.

Conclusion

You may wonder why I am focussing primarily on consumer response at a power producers' conference. Ironically, at an AMPCO meeting last week I spent most of my time talking about supply. The point is that if we are going to move our market forward in Ontario we need to do it together. And to do it together we need to understand the needs, concerns and possibilities of the whole market, not just one side or the other.

Now I am not suggesting that demand response is going to solve all our problems.

We still need the new supply and the new transmission facilities that are being planned. And we need to make sure those facilities are in service in time to meet our needs.

But increasing focus on consumption is being driven now and will be driven more in the future by environmental and reliability objectives.

Both can benefit from increased consumer response. Cost increases that will inevitably arise as we strive to lower carbon use can also be mitigated through consumer response.

As I said at the beginning, the crisis of a few years ago has passed and we have some time to plan how to best meet our environmental, reliability, and price objectives. Increased consumer participation can play a big part in effectively meeting those objectives.

Technology will enable new possibilities. And efficient markets and innovation can make it happen.

My expectation is that 20 years from now we will have a very different mix of resources, a very different demand makeup, a very different mix of control technologies to deal with these and better coordination across broader regions. And a market that has all of us in this room focused on the consumer.

Thank you very much for your attention.