

Notes for Remarks  
APPrO 2011

Bruce Campbell  
Vice President, Resource Integration  
Independent Electricity System Operator

Market Evolution in the context of the Electricity Market Forum

November 16, 2011

## **Introduction**

Let me start by saying how delighted I am to be back at the APPrO conference.

Congratulations to the conference organizers for another great agenda and for their continued focus on Ontario's electricity market. With all the action around procurements, smart grid and a host of other issues, it's good to remember that the market has been churning along – mostly in the background – but not without some room for improvement, as the Market Surveillance Panel (MSP) likes to remind us. The latest MSP report is expected to be posted this week.

As many of you know, we have been working with our stakeholders this year to develop a roadmap that will help define the future development of the market. The focus of my remarks today will be to provide an update on the Electricity Market Forum.

But I don't talk with anyone these days without making special mention of where we are with integrating the significant amounts of renewable generation expected over the next few years.

## **Integrating Renewables**

The fact is that wind is fast becoming a mainline generating resource in Ontario – and I'd like to share some of the recent results to emphasize why we are giving it so much attention.

Just last Sunday, November 13, Ontario set a new hourly wind record generating 1,426 MW in hour ending 9, and a new record for daily wind output of over 32,000 MWh. To give you some context, that's getting close to 10 per cent of total Ontario demand for the day and about 8.8 per cent of total market demand for the day.

What else did we notice? At the same time as we were setting wind records - at eight hours away from real time the production forecasts we were getting from the wind farms were low by as much as 700 MW - and for a good many hours the forecasts available only one and two hours out from real time were 200 MW low. This doesn't make our operations any easier and emphasizes the importance of putting the necessary tools in place to manage large volumes of variable generation.

By the end of 2013, we anticipate that the over 1,600 MW of wind that is now installed in the province will grow to over 3,500 MW. Looking to 2014, that growth doesn't

diminish. In fact both wind and solar growth accelerate as more Feed-in Tariff (FIT) projects come into service and we move toward the Province's target of 10,700 MW by 2018.

The IESO has the responsibility to ensure that additional wind over the coming months and years is reliably integrated into the system. We need to ensure that it can be and is operated like other mainline resources that play a significant part in meeting Ontario's electricity needs as they change rapidly through the day and across the year.

We are continuing to engage stakeholders every step of the way. In the last 12 months, the IESO set up a specific stakeholder engagement initiative and developed a principles paper to guide our efforts. Those efforts are focused in three areas - forecasting, visibility, including on the distribution side, and dispatch.

Through the Stakeholder Engagement 91 process, we have established a number of working groups including the Dispatch Technical Working Group and the Floor Price Focus Group. The floor price discussion paper has been posted on our website and we have a meeting scheduled for November 21.

So please stay involved – we need your help as we all learn how best to take advantage of Ontario's renewable investment.

## **Market Forum**

Let me now shift my remarks back to the Market Forum.

As we approach the tenth anniversary of Ontario's electricity market, I think it's important to remember the advantages that the market brings to the sector. I'm not going to list or debate those, but I do want to point out one benefit that is often overlooked – and that's transparency. The information available to you – to plan your businesses, evaluate potential investments, control your costs, and manage your consumption has never been greater.

I'm constantly amazed at the analyses that people can do based just on the information they take off our website – insights that would have been impossible to generate under the integrated utility structure of the past. Just look at the Sygration website if you want to see one example of what can be done.

At the IESO, we believe that transparency and more easily available market information will continue to drive efficiencies on both the generation and consumer sides of the market. And we will be working to improve these areas.

It's also worth noting some of the changes we have seen since opening the market – legislation that regulated retail rates; legislation to establish the OPA to drive demand-side and generation procurement programs and direct power system planning; and, more recently, the Green Energy and Green Economy Act and the FIT program.

These changes have moved the market towards increased centralized decision making regarding power system planning and procurement of demand-side and supply resources set by explicit targets.

It is against this backdrop of benefits and changes that the IESO invited our stakeholders to explore market issues and opportunities with us, and to make recommendations to guide the future development of the market.

We were pleased to have George Vegh chair this process – it's safe to say that everyone involved has appreciated his leadership in developing the roadmap.

And this morning you will also hear from Jason Chee-Aloy who has contributed as facilitator for the Forum.

As part of the process we formed two committees - the Market Development Committee (MDC) which met every two weeks to identify issues, options and recommendations. An Executive Steering Committee was also created to review and endorse the work of the MDC, and develop a broad consensus on the issues, options and recommendations. The membership of both of those committees is displayed behind me.

As we worked through the process, we also identified a number of “game changers”, those developments that are expected to have significant impacts on the Ontario electricity system in the medium and long terms. Those game changers include the adoption of electric transportation on a commercial scale, smart grid technologies using real-time information and pricing to better connect both generators and customers to the control room; and the potential for a carbon or environmental pricing regime.

We expect to complete our discussions with both the Market Development Committee and the Executive Steering Committee over the next several weeks, with the report to come out in December.

The recommendations will fall into three categories: (i) engaging and empowering consumers; (ii) integrating the changing supply mix; and (iii) improving efficiency.

Ontario has demonstrated leadership in a number of areas of the electricity sector - the transition off coal, the installation of smart meters and implementation of time-of-use pricing across the province, the move to a cleaner supply mix, and the development of a smart grid.

From the IESO perspective, as we look to build on Ontario's leadership role and strengths and maximize the benefits of the market, we have identified three areas of focus:

- Fostering innovation in the market and across the sector through increased availability and transparency of information.
- Encouraging the participation of electricity consumers in the IESO-Administered Markets by removing barriers and providing opportunities.
- Helping to contain consumer costs through efficient operation and efficient markets.

So in closing, I want to again thank all of those who participated in the Market Forum - watch for the final report before the end of the year. I look forward to your questions for the panel.