

# Summary of IESO Strategy Discussion with Stakeholder Advisory Committee



The following is a summary of the June 2 meeting between IESO senior management and the Stakeholder Advisory Committee (SAC).

The purpose of this meeting was to engage the Committee in an initial high level presentation and discussion of the IESO's approach to the development of the 2011-2013 IESO Business Plan. The Business Plan will be reviewed with SAC at the August meeting prior to being submitted for approval to the Minister of Energy and Infrastructure and the Ontario Energy Board.

To begin the session the IESO outlined the strategies presented to the IESO Board of Directors at its annual strategic planning session. These strategies, which incorporate priorities identified by SAC members at the March 31 meeting, reflect the changes that are taking place in Ontario's electricity sector and help form the foundation of IESO business planning for the next three years.

A summary of the sector priorities, the IESO's business strategies and some of the initiatives associated with the strategic approach the IESO is proposing are summarized below. The IESO asked the Committee to share this information with their constituents to enable them to provide more detailed feedback at the June 16 SAC-Board meeting.

The following questions are intended to guide the feedback provided by each sector.

1. Does your sector support the overall direction and intent of the strategies presented?
2. Does your sector support each of the specific initiatives identified?
  - a. Renewables Integration
  - b. Market Roadmap
  - c. Energy Modeling
  - d. Methods for Managing Surplus Baseload Generation
3. Is there something substantial that is not being addressed by these strategies and identified initiatives?
4. Is there a strategy or initiative that your sector would not consider a priority?
5. Does your sector support a well-grounded increase in fees if necessary to implement these strategies and associated initiatives?

## SECTOR PRIORITY THEMES

The IESO reviewed the priorities for Ontario's electricity market presented or submitted by each of the sector representatives and identified a number of common themes.

The IESO heard that many sectors have an overarching concern with a multitude of cost increases consumers will be faced with and also heard that stakeholders would like the IESO to focus on the following:

1. improving price signals
2. evolving the electricity market to improve efficiency
3. integrating renewable energy into the electricity system and market
4. educating and engaging consumers
5. resolving global adjustment issues
6. addressing inertia issues
7. advocating on behalf of customers with Ministry and other agencies to address issues and complexities outside of IESO control

## OPERATIONS STRATEGY

### Strategic Objective

To deliver and maintain our current level of electricity service reliability in a manner that balances reliability and costs, while meeting all applicable reliability standards.

### Situational Analysis

The key challenges and opportunities that the IESO will need to deal with in respect to system operations and reliability over the near-term are as follows:

- Increases in renewable generation will add supply variability to the hour-to-hour demand changes that have been seen. The IESO is planning on the basis of 6000 MW of wind and solar generation being installed by 2012. This level will require existing dispatchable generation to operate differently than it has in the past. As well, increasing penetration of wind energy in MISO and NYISO is expected to lead to more variability in inertia flows.
- To manage potential surplus baseload generation (SBG) conditions the IESO will need to be able to utilize the dispatch provisions of FIT contracts for generators greater than 5 MW in addition to utilizing increased flexibility to economically reduce output through renegotiated Non-Utility Generator (NUG) contracts.
- The IESO already manages the operation of 35 Special Protection Schemes (i.e. generation-rejection and load-rejection schemes). These are expected to become

more complex with greater variability in supply and more of these protection schemes may be requested.

- The actions and associated impacts of generation installed on the distribution systems may not be directly under the IESO's control or "view". As well, there is enormous potential for similarly "invisible" and autonomous demand response across all customer classes - driven by smart metering and the intelligent infrastructure (Smart Grid).
- Overall there is an increasing tension between a reduced drive for market participants to understand the IESO-administered markets owing to the nature and extent of contracts or regulation, and a contrasting increased drive to distributed decision making due to the rising level of distributed resources, including those connected at the distribution level.

### Strategy

IESO needs to connect its operating strategy to the government's policy objectives. Reliability continues to be the hallmark of the organization and essential to Ontario's economy. The IESO will deliver on its reliability responsibilities; but must also add value by coordinating economically efficient and environmentally-responsible outcomes when fully-contracted or regulated facilities would not otherwise achieve such an outcome within our market.

Thus, to achieve its strategic reliability objective, the IESO will:

1. Increase its role in coordinating market participants' actions to address shortage or surplus situations;
2. Develop signals, provide incentives, and generally encourage consumers and embedded generators to help manage supply and demand variability; and
3. Strive to decrease the complexity of current grid operations and market rules to lower operating risks, increase IESO efficiency, and lower a barrier to participation.

## **EFFICIENT ELECTRICITY PRICING STRATEGY**

### Strategic Objective

Over the long-term the IESO's strategic objective is to evolve the IESO-administered markets in an orderly manner in the direction of a more self-sustaining Ontario electricity sector.

Over the business planning cycle, however, the objective is to achieve efficient electricity price signals in the electricity sector so as to drive economically efficient investment and operational decisions in the consumption of electricity.

### Situational Analysis

The key challenges and opportunities that the IESO will need to deal with in respect to achieving efficient electricity price signals are:

- An increasing amount of supply is “outside of the wholesale market” – contractually and connection wise. Most of the generators in the province have some form of contract or financial guarantee outside of the market. While original visions for the market included significant contracting, many generators are now operating under contracts that pay them simply to produce energy, effectively insulating these generators from the market signals and transferring risks to consumers.
- The revenue stability provided for generators should provide an opportunity for market change. However, there is no consensus as to direction. There is a limited appetite for reintroducing a fully competitive market, and there is no reasonable prospect of an early unwinding of the commitments flowing from the long-term contracts and regulatory structures associated with the current hybrid market.
- The current hybrid market is expected to endure for the foreseeable future.
- Efficient price signals can and will drive consumption decisions – and the emerging “smart” technologies can provide the information necessary to organize and aggregate consumer behaviours, for the benefit of overall efficiency and individual consumption.

### Our Strategy

The IESO continues to believe that a competitive electricity market is the most fair and efficient way to organize the electricity sector, and that structure will most equitably share risks between suppliers and consumers, as well as provide the greatest net benefit to Ontario.

While the Ontario electricity market will continue to play an important role in achieving operational efficiency in the province, it is efficient pricing that can be the most powerful tool for advancing Ontario’s electricity supply and consumption policy objectives.

The IESO strategy over the near-term is to:

1. Maintain a focus on improving the efficiency of our pricing signals – both in the wholesale market price and through influencing the design of consumer pricing;
2. Focus our investments in the current market on changes that both increase efficiency and achieve simplification; and
3. Aim for a more competitive market in the long term.

## PROPOSED INITIATIVES

The IESO will need a number of initiatives to realize this strategy; some are underway, some proposed and some are still in the idea stage. The following initiatives are projects that are proposed to kick-start the strategies presented. These initiatives are under development, and will form part of the IESO business plan submission.

### 1. Renewables Integration

- The IESO heard it is important to many sectors to integrate the extensive fleet of renewable resources resulting from the FIT contracts, and some sectors wanted to ensure that renewable resources are part of the solution to the issues arising as a result of surplus baseload generation experienced in the last year.
- A cross-functional internal IESO team has developed a framework for integrating this new renewable fleet into IESO processes in a way that minimizes changes to existing tools and processes but also takes advantage of new technology to simplify the requirements to register these and other new facilities.
- This proposed framework also ensures that those resources that choose to respond to dispatch signals can contribute to the efficiency of the market and the formation of price.
- Centralized forecasting is a key component to this framework and the IESO is currently working towards the launch of a centralized forecasting trial while also consulting with stakeholders on the funding model and requirements.
- The IESO will be discussing the renewable integration framework with stakeholders in the coming months.
- The IESO is also working with the OPA to determine how best to integrate wind generation with RES contracts into the market.

### 2. Market Road Map

- The IESO heard support from many sectors for improving the effectiveness of the price signals from our market, and for moving toward a more flexible and responsive market environment.
- To understand how best to achieve these goals the IESO plans to kick off an intensive consultation later this fall with a small group of stakeholders to develop a road map for evolving the market.
- The mandate of the group would be to develop a set of market proposals by Q4 2011 that would provide a framework for subsequent market development initiatives.

### 3. Energy modeling

- Develop the capability for forward energy simulations to better understand, assess and develop future operating strategies.

- This capability will provide the IESO with ability to analyse the impact of potential operating issues resulting from changes planned within and beyond Ontario.
  - The analysis will also help customers plan their business.
4. Methods for managing Surplus Baseload Generation
- Develop methods to increase coordination of outages and market participant actions when surplus baseload generation is expected or occurring.
  - This will assist with integrating additional renewable generation and will also contribute to market efficiency.

## COMMITTED INITIATIVES

Each of these initiatives is also important to the strategies presented but does not require business plan approval because it is either already approved or in development. Stakeholders can participate in the ongoing consultations related to these initiatives.

1. Global Adjustment Allocation
  - A proposal for coincident peak allocation was presented at the last SAC meeting.
  - The Global Adjustment working group has discussed this proposal with the Ministry of Energy and Infrastructure and they are currently considering next steps.
  - If this allocation model is implemented the IESO will embark on a stakeholder consultation to develop a communication and education plan to ensure that those eligible for this allocation will be aware of the changes, understand the potential impacts and have the information they need to make the right decisions for their business.
2. Alternative Technologies for Regulation
  - Market rule amendments have been approved to allow non-generation resources to provide regulation consistent with the principle that the market should provide for open non-discriminatory access by all who can meet the standards.
  - The IESO will be launching a pilot to test the capability of load to provide regulation.
3. Enhanced Day-Ahead Commitment
  - This project is designed to enhance the efficiency of the electricity market through the advanced scheduling and commitment of resources required to provide electricity on a daily basis.
  - It is currently on-schedule and expected to be fully operational by the fall of 2011.

4. Projects to maintain IESO infrastructure and improve IESO efficiency
  - The IESO has a number of projects underway to upgrade existing systems where they have reached the end of their life and to introduce improvements to our infrastructure and customer facing tools.
  - These include projects related to customer information systems, system limit derivation and outage management.