

# Day-Ahead Market – 2007 Stakeholder Plan

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# What is the role of a Day-Ahead Market?



- Producers make many decisions over a 24-hour horizon that would benefit from greater certainty – less risk should equate to lower cost
- Market may operate more efficiently with better coordination of resources one day in advance
- Some consumers can use day-ahead price certainty to their benefit by deciding to shift their consumption out of high priced hours into lower priced hours – more smart meters are coming!
- Other consumers could make use of better price forecasts for same reasons
- Traders are working in day-ahead markets all around us

# What is IESO Saying About a Day-Ahead Market for Ontario



The IESO's 2007 to 2009 Business Plan states:

“At the core of the IESO's Business Plan is the implementation of a set of progressive enhancements. The first key enhancement continues to be the development of a DAM.”

Stakeholder Plan was posted last week

- learns from recent stakeholdering experiences
- IESO to develop a straw man design
- trying to get written input
- will involve some sector-specific sessions, some one-on-one discussions and some plenary sessions

Some  
“made in Ontario”  
challenges to be addressed

# Roles of a DAM

## - *Predictable Financial Outcomes*

- Coming out of the DAM both suppliers and consumers have commitments to prices “P” and quantities “Q” for specific hours of the next day
- If they consume or produce consistent with the quantities then they know they will pay no more and no less than the DAM prices

# *Predictable Financial Outcomes*

## **- Ontario's Current Reality**

- A simple DAM that hedges against Hourly Ontario Energy Price (HOEP) may work well for most consumers
- Most producers, on the other hand, must be dispatched by the IESO and then paid congestion payments to compensate them if they are dispatched differently than they would have been if paid HOEP
- It is unlikely generators will be able to replicate DAM Qs in physical operation (risk! Will real-time energy payments and congestion payments offset this risk?)
- Other markets avoid this problem by conducting their DAM using locational prices

# Roles of a DAM

## - *Fine-Tuning Hedge Volumes*

- Participants take forward positions for fixed quantities;  
e.g. 50 MW, 5 x 16, realizing they will likely want or even need more or less, but that they will manage that risk once better understood (orders, breakdowns, weather)
- They then use the DAM to either augment their contracts by buying more, or decrease them by selling back into the market
- The DAM brings both liquidity and transparency, providing confidence that this “fine-tuning” will be available and convenient

# *Fine-Tuning Hedge Volumes*

## **- Ontario's Current Reality**

- Most domestic suppliers (generators) have price guarantees without any commitment to a quantity (Bruce A, OPG Prescribed, OPG Non-Prescribed). They have either little or no need to manage any market risks associated with under- or over-delivery (under or over relative to what?)
- All Ontario consumers receive the benefits of the Global adjustment and OPG Rebate which are distributed as a function of consumed energy. This is equivalent to a hedge for 80% of consumption volume. They have very little need to manage any risks associated with under- or over-consumption

## Roles of a DAM (or any hedge, for that matter)

### - *Protect Against Real-Time Volatility*

- Real-time should be a balancing market
  - the place to be for flexible suppliers and consumers
  - the place you're thrust into for non-reliable performers
- Prices in a balancing market should reflect the “bumps and grinds” of real-time operation – potentially very high when times are tight – potentially low when surplus
- Forward commitments (including day-ahead forward) shield participants from this volatile outcome. In other jurisdictions participants want the predictable outcomes and use the DAM accordingly

# *Real-Time Volatility*

## **- Ontario's Current Reality**

- Ontario's real-time energy price has some major "shock absorbers"
  - ramp rate
  - single energy price for entire province
  - unconstrained pricing methodology
- Ontario's real-time price is a relatively safe haven, so why hedge?

# -Roles of a DAM

## *Improving Intertie Trade*

- All surrounding markets include a day-ahead market
  - New York
  - New England
  - PJM
  - Midwest ISO
  
- Day-ahead business is the norm
  - deals are set up
  - reservations are made
  
- Relying solely on real-time can have both reliability and efficiency implications

## *Intertie Trade*

### **- Ontario's Current Reality**

- IESO and stakeholders implemented the Day-Ahead Commitment Process (DACP) in the summer of 2006, in response to some extreme reliability challenges in the summer of 2005
- DACP improves the reliability of imports to Ontario at times of system stress
- DACP does not include exports – significant difference between DACP and a DAM

# Why Explore day-ahead arrangements?

- Better coordination of resources – pursuit of operational efficiencies – particularly relevant for Ontario with our significant component of energy-limited hydro
  - achieve this with a DAM?
  - achieve this with DACP improvements?
- Better alignment with the gas industry
  - aligning day-ahead signals with gas nomination windows can address risks
- Improved operation of Clean Energy Supply (CES)-style OPA contracts
  - deeming on day-ahead prices significantly reduces proponents' risks

# Why Explore day-ahead arrangements? (cont'd)



- Day-ahead prices are key to providing some consumers with the price certainty needed to shift demand – this is about to become an even more real opportunity with the coming smart meter implementation
- Critical to further market evolution
- Expected to be significant risk-management tool needed under any Load Serving Entity (LSE) model
- Provides consumers and producers with the platform and the tools to work in a future, more competitive market-based industry – addressing the chicken or the egg question

# So.....Where We Stand

- Many factors to be considered
- A few of the drivers are stronger than ever (e.g. smart meters)
- Stakeholders are significantly engaged on many industry initiatives right now – need to be efficient
- Some of the normal drivers for a DAM either don't exist at this time, or are currently being mitigated
- IESO will extensively study, stakeholder, and recommend over 2007
- IESO will develop a Business Case with a Cost/Benefit analysis
- Targeting fall for IESO Board consideration