

# Summary of Written Stakeholder Input on the Day-Ahead Market and the IESO Management Response



December 3, 2007 – Revised – new row added on page 3.

Stakeholder Input	IESO Management Response
<b>TIMELINE</b>	
Timeline for cost benefit analysis a challenge due to complexity of the activity. Proposed schedule too aggressive given the issues and uncertainties in Ontario's energy market.	The original schedule for SE21 was revised in October. The IESO Board will be provided with an initial analysis of day-ahead mechanisms at their December 2007 meeting, to determine if investigation should continue in 2008.
<b>OPTION 3</b>	
Option 3 is not detailed enough to comment upon, benefits versus costs still remain unclear. Option 3 shows promise but warrants additional investigation. Premature to assess whether Option 3 is moving in the right direction as the "right direction" is unknown; who is looking after the "big picture"?	The analysis provided to the IESO Board in December, 2007 will include a high-level discussion of the expected costs and benefits associated with improved day-ahead mechanisms. Given the high-level nature of this analysis, with IESO Board agreement, additional work on the design and on the expected costs and benefits will be performed in 2008 before any implementation decision is made.
<b>OPTION 1</b>	
Why is improving the pre-dispatch price forecast not included in the base case? Improved price forecast should be implemented in parallel with DAM.	In conjunction with two consultants, Dr. Derek Bunn of the London School of Economics and Dr. Angelo Melino of University of Toronto, the IESO has developed a forecasting tool that shows promise. Results from this tool were presented to a recent Market Pricing Working Group (MPWG) meeting. Based on the results and the discussions at the MPWG meeting, the IESO Board will continue work on this option early in 2008.
<b>THIRD PARTY ACTION</b>	
Commitment to day-ahead mechanism by authorities that hold energy contracts paramount to implementation success.	Agreed. The existing contractual and regulatory structure of the industry would have to be adapted to a day-ahead world, requiring effort from market participants and others, including government. All contracts currently administered by the OPA contain provisions that address the development of a day-ahead market.
Day-ahead market mechanism introduction should not change risks/rewards of existing government contracts.	Existing contracts and regulations fall under two categories. 1. Non-market-responsive contracts or regulations: While changes that would take advantage of the efficiency opportunities provided by a day-ahead market would be desired, it is likely that changes to the contracts or regulations could result in such

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	<p>facilities being held harmless for any additional risks introduced through DAM participation, and therefore indifferent to a requirement to participate in DAM.</p> <p>2. Market-responsive contracts: All such contracts held by the OPA contain provisions that their settlement would flow into day ahead if an IESO-administered day-ahead market were to materialize. Therefore while requiring negotiation and coordination of timing; this adaptation is not likely to be a barrier to a DAM development.</p>
<b>PARTICIPATION</b>	
<p>Participation must be voluntary.</p> <p>A way forward might be to investigate and develop additional detail around variations of the Option 3, including, for example, a mandatory version and a voluntary version.</p> <p>Set threshold for minimum enrolment if voluntary DAM is initiated.</p>	<p>The day-ahead market being investigated by the IESO contemplates that at least to start the IESO would forecast the default demand (the vast majority of demand in Ontario), enter that demand into the DAM thereby creating a day-ahead price and quantity for this default customer pool. With such significant demand-side participation, natural market drivers would be expected to result in supply side alternatives coming forward to guarantee sufficient participation from any facilities either without contracts or operating under a market-responsive contact, and hence DAM participation can likely be voluntary for such facilities. However, without changes to contracts and regulations, a sizeable portion of the generation fleet is insulated from natural market drivers and such facilities might not willingly appear in the DAM. If changes to such contracts or regulations are developed whereby these facilities are held harmless for any additional risks introduced through DAM participation, and therefore indifferent to a requirement to participate in DAM, then their participation may have to be mandated.</p>
<b>MEASURING ACHIEVEMENT</b>	
<p>Development of potential threshold criteria (e.g. price transparency, market efficiency, reliability, capability to implement etc.) a must to support DAM proposals as well a “go/no go criteria should be established.</p>	<p>The IESO outlined several of these decision criteria in its August paper. The IESO will provide stakeholders an explanation of how the criteria have influenced the decision when making final recommendations to the IESO Board.</p>
<p>Sufficient measures and procedures must be in place as part of day-ahead market implementation to ensure transparency of bidding for default consumers</p>	<p>Agreed. The IESO will ensure that appropriate measures and procedures are in place and made publicly available to facilitate transparency of this activity.</p>

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<b>PRICING &amp; DISPATCH</b>	
Three-part bidding needs to be incorporated into real-time to limit systematic differences between day-ahead (DA) and real time (RT).	Agreed. Incorporating three-part bids into real-time will likely be necessary. Development of the integration along with corresponding procedures to provide transparency will be detailed as designs of different options progress.
Import/ Export should be able to set real-time price.	The MPWG has this as an open high priority issue - Issue 007 Intertie Transactions setting Real-time Prices. However, the Working Group agreed to defer further work on this issue pending the outcome of DAM alternatives. When more is known about what path the DAM design will take, the Working Group will return to the issue of the role of intertie transactions in setting the real-time market price. This is an issue generators have been promoting since the market opened. The thinking was that if intertie transactions were able to set the DAM price it might address their concerns. See Market Pricing May 9, 2007 Meeting Notes (Final) <a href="http://www.ieso.ca/imoweb/pubs/consult/mep2/MP_WG-20070509-notes.pdf">http://www.ieso.ca/imoweb/pubs/consult/mep2/MP_WG-20070509-notes.pdf</a>
Is it possible to let the constrained run set day-ahead price?	Pursuing a locational pricing-based day-ahead market would have to be accompanied with implementing locational prices in real time. As such, this represents a much bigger design change than just the development of a day-ahead market. The IESO remains interested in studying the efficiency gains that may be possible from locational marginal pricing, however, that significant design change will not be combined with this DAM effort.
Reconciliation between DA and RT pricing must not be onerous or lack transparency.	Agreed. Reconciliation between day-ahead and real-time must be clear and transparent to all participants.
Any work on day-ahead mechanisms must be in conjunction/parallel with work on outstanding real-time pricing issues - many recorded in MPWG list of outstanding issues	Agreed. Work on pricing issues will continue in parallel with outstanding real-time issues. Recently published corporate performance measures include expectations of progress on issues by MPWG.
A day-ahead market could substantially change the operation of the real-time market. Concerns revolve around the possibility that day-ahead market results may provide incentives for some generators to pre-define their operating pattern for the day, significantly reducing the frequency that their facilities would be dispatched by the IESO on a 5-minute basis. Doing so would then	The IESO feels that a two-settlement system ensures that real-time incentives are unaffected by the existence of financial day-ahead positions, and that both the bidding behaviours and the resultant dispatch should be unaffected by the day-ahead market. Even though a fixed price and volume is defined for a generator it remains their option as to how to behave relative to that commitment. If the

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<p>cause the burden of dispatch to be concentrated on a smaller group of facilities than today, thereby increasing the negative effects of constant dispatch. Concerns about this possibility are heightened as one looks forward to the changing fleet characteristics with the introduction of more renewable generation and additional gas-fired generation.</p>	<p>market can dispatch a cheaper resource to fulfil the commitment, that is in the interest of the generator, which should therefore appreciate being dispatched accordingly. The reverse is true when the market price exceeds the generator cost, and the generator should therefore want to be dispatched on. For those that have the flexibility to be dispatched, they should welcome this occurring as frequently as possible. Further, the IESO does not believe such incentives differ in any way between those of a merchant generator or one under an OPA-held CES-style contract. Therefore, while there are legitimate concerns about the need for load-following capabilities in the future fleet and how to facilitate the use of the ramping capabilities that are inherent in the facilities of the future, they appear to be unrelated to the creation of a day-ahead market.</p>
<p><b>DETAILED DESIGN CONCERNS</b></p>	
<p>Day-ahead timing may negatively affect efficiency of Energy Limited Resources operation unless design has some built in flexibility.</p>	<p>The IESO will work with stakeholders to better understand this concern. Any impacts on efficiency will be addressed, or as a minimum identified and quantified to the extent possible through the cost benefit analysis.</p>
<p>Why is the IESO not implementing DR programs along with day-ahead markets?</p>	<p>Demand response (DR) serves an important energy supply role in the recently published Integrated Power System Plan (IPSP). Knowing today the price for electricity for tomorrow, would hopefully heighten awareness of consumers' options and provide a greater potential for demand response and possibly provide a better indicator of the need for demand response than the current pre-dispatch price signal.</p> <p>The IESO is making progress towards understanding the benefits (potential efficiency gains) attributable to a day-ahead market, in terms of improved opportunities for demand response</p>
<p>A plan for transitioning of Transmission Rights (TRs) from real-time to day-ahead must be stakeholdered.</p>	<p>As part of the detailed design and implementation of a day-ahead market, the IESO will develop a transition plan that will adhere to our stakeholder principles.</p>
<p>Retailers need ability to represent their consumption at their discretion in DA and RT. Large embedded consumers should be given a considered voice in the DAM design.</p>	<p>Agreed. Going forward, the IESO needs to continue our dialogue, giving particular consideration to how specifics of any DAM designs affect generators, consumers and aggregators who are embedded within LDCs.</p>

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<p>Operating Reserve provided by dispatchable load will go away due to uncertainty of availability 24 hours out.</p> <p>Of particular interest is the question as to whether there is a need for an operating reserve market day-ahead.</p>	<p>In real-time, economic gain from trade is maximized in both the dispatch and market schedules by finding the combination of resources that satisfy the demand for both energy and OR markets simultaneously at the lowest possible cost. The current Option 3 design similarly uses joint optimization between energy and operating reserve resources to realize comparable gains from trade. Removing joint optimization would introduce further differences between day-ahead financial positions and real-time physical schedules. Compounding differences between day-ahead and real-time could eliminate many of the benefits for a day-ahead market introduction. However, in response to stakeholder concerns, the IESO will further investigate the need for day-ahead financial operating reserve positions in Option 3.</p>
<p>If possible leverage off work that was done for 2003/2004 DAM</p>	<p>Agreed. The IESO will, where possible, make use of work completed in the last DAM design</p>