

Update On Day-Ahead Market Evolution

Presentation to Stakeholder Advisory Committee
August 20, 2008



- Background
- Status Update
- Next Steps

In June, SAC and the Board of Directors supported the IESO to:

1. Initiate design of the Common Elements of all three day-ahead options
2. Work with stakeholders and address outstanding concerns

- Common elements include:
 - Unit commitment optimized over 24-hours of the next day
 - Use of 3-part offers for generators
 - Multiple passes of the constrained algorithm to determine unit commitment and resource scheduling
- Draft of Proposed Design posted on August 8, 2008:
 - Facilitate design discussions with Stakeholders
 - Support development of market rules, manuals, procurement documents

- Two Technical Support Groups (TSGs) formed to address concerns related to:
 - Cost guarantees and export inclusion
 - EFM design
- Also held meetings on June 3rd and 26th to discuss shortcomings of Option 3 UDAM and allow Stakeholders opportunity to provide additional information on the benefits from the UDAM

- TSG members agree that the design proposals for generators and imports provide appropriate incentive structures
- Continuing work to ensure the designs are robust under different market scenarios
- Some concern raised that design represents a “pay-as-bid” scheme rather than a market-clearing price design
 - May lead to strategic offers or guessing of clearing price rather than offering energy at cost

- “Pay-as-bid” opportunity is also a shortcoming of the Option 3 UDAM
 - Inherent with uniform pricing regime and cost guarantee designs
- IESO working with LECG to compare relative materiality of this concern between the day-ahead options
- Early findings indicate all options are similarly exposed in magnitude to “pay-as-bid” incentives
- Final report to be presented at next TSG meeting on Sept 4th

- Day-ahead export commitment is possible but unlike imports there are no accompanying guarantees
- A failure charge is also proposed to ensure delivery in real-time and prevention of inefficient day-ahead commitment
- At the request of some TSG members, the IESO is reviewing the design to ensure nothing has been overlooked

- Possible designs are still at a discovery level
- Some TSG members have indicated that support for an IESO EFM would be stronger if the design leveraged an existing exchange platform (e.g. NGX/ICE)
- IESO will report back to the SAC in October on progress made

- Requested stakeholder response and possible quantitative analysis for the questions:
 1. How does a UDAM allow you to be more responsive in real-time than other options?
 2. After achieving unit commitment improvements, would there be efficient import/export transactions that would not occur because of Ontario's lack of day-ahead financial commitment?
 3. How does UDAM overcome current outstanding seams issues?
 4. Does an unconstrained financial position that is not aligned with a physical advisory pose problems? How would you factor in this difference?

- Received 6 responses – 5 related to the 4 questions and 1 broadly stating the potential benefits of a UDAM relative to the other options
- None of the responses included quantitative analysis
- General theme that higher volumes of import and export trade that would occur in a UDAM is of value
 - However none of the responses described how this would ultimately lead to more efficient levels of imports and exports in real-time

- Also general agreement that all of the options are inferior when compared to a day-ahead/real-time market design based on a single constrained schedule as used in many other jurisdictions
- Some indicated that the UDAM represents a more meaningful step in market evolution for Ontario

- IESO continues to support the development of an enhanced day-ahead commitment process based on additional evaluation done to date:
 1. Real efficiency gains can be realized through implementation of the Common Elements
 2. Additional UDAM costs of \$15M renders Options 1 or 2 with higher net benefits for Ontario – reduced costs for Ontario generators and consumers
 3. The proposed design of cost guarantees allows gas generators to realize the level of efficiencies quantified in the Preliminary Assessment

4. The potential for unintended consequences from the proposed cost guarantee design are no more substantial than for the UDAM
 5. UDAM cannot achieve the same benefits as conventional day-ahead markets because of its unconstrained design – however, resolving issues with the current real-time market (also of an unconstrained design) would support a conventional day-ahead market in Ontario
- EFM design can progress on a separate timeline than day-ahead design

- Complete review of day-ahead export inclusion design to ensure nothing has been overlooked
- Address “Pay-As-Bid” Concern
- Provide to the Board of Directors meeting on September 5th:
 - Conclusions from additional work done to date and over the next several weeks
 - Summary of views and positions from SAC members and stakeholders
- Formal approval of project to be considered at a subsequent Board of Directors meeting in late September