

Stakeholder Engagement Plan – SE17

Price Calculation Methods - Impacts with 12 Times Ramp Rate



Revision 1 – February 6, 2007: Section V - Decision Making Steps and Schedule of Activities updated.

I. Introduction and Background

While conducting tests in April of 2002, prior to market opening, extreme real-time price volatility occurred during periods of large changes in market demand. The extreme volatility was attributable to the physical inability of marginal generating resources to change their output fast enough to meet rapid changes in demand. This resulted in more expensive resources being dispatched to meet the demand, causing real-time prices that were significantly higher than the pre-dispatch prices, and ultimately introducing the possibility of higher prices to customers.

To compensate for this price volatility, a change was made to how the Dispatch Scheduling and Optimisation (DSO) algorithm calculates the real-time unconstrained (market) schedule and the resulting market prices. The energy ramping capability of all dispatchable facilities was assumed to be 12 times higher than their actual capability, bringing pricing outcomes in line with pre-dispatch results. This was achieved by adjusting the inputs to the DSO by multiplying every dispatchable resource's ramp rate by twelve in the unconstrained sequence. This allowed slower, less expensive resources to satisfy the demand (and set price) in the market schedule. No changes were made to the constrained schedule; the actual physical characters of the resources were still respected.

The change was approved by the IESO Board as a temporary measure with the intent that a more efficient long-term solution would be found to replace it.

There have been several changes to the market since market opening with some of the changes directed specifically at addressing ramping concerns. In 2003, the Spare Generation on Line program (SGOL) was instituted to provide cost-recovery guarantees for generators to start and be available for dispatch. In 2004, the IESO implemented Multi-Interval Optimization, (MIO), into its dispatch algorithm; a program that enables the DSO to look forward several intervals to prepare for high ramp demand periods.

Other market changes were not specifically targeted to address ramping, but do indirectly help address the ramping concerns. For example, in 2005 the IESO Board approved the Day Ahead Commitment Process (DACP) for use over the period June, 2006 through November, 2006. DACP will encourage unit commitment decisions to be made on a day-ahead basis, which should add further confidence that an adequate set of generators will be on line to satisfy ramp periods. DACP has also been designed to decrease the frequency of failed inter-tie transactions; a major source of extreme market demand fluctuations requiring significant ramping of capacity on the system. Finally, the implications of any extreme ramp shortages have been mitigated, relative to what existed at market opening, through the introduction of Control Action Operating Reserve (CAOR), which permits the market to recognize the IESO's ability to implement specific emergency control actions as being available to forestall shortage conditions in the Market.

The 12 times ramp rate impacts the principles of efficiency and transparency as the market clearing price is not reflective of the actual cost of producing the energy required to meet the market demand at that time. Using the 12 times ramp rate reduces the simplicity of the price calculation by adding the complication of additional congestion management settlement credits (CMSC) payments caused by differences between the constrained dispatch and the market schedule, and can result in prices that are not consistent with expectations. Depending on the recommended resolution, some possible changes to the unconstrained algorithm could take up to 6 months to implement, with commensurate cost impacts.

The issue of ramp rate changes has been discussed in the Market Pricing Working Group (MPWG) at numerous meetings since May, 2004 and the notes and materials for these meeting can be found at: http://www.ieso.ca/imoweb/consult/mep_mp.asp

At the December 3rd, 2005 IESO Board meeting, consistent with recommendations received from stakeholders, the Board directed IESO staff to have focussed attention to resuming and advancing work with stakeholders on the appropriate ramp rate multiplier, if any, to be employed in the Market Schedule.

II. Stakeholders

All stakeholders could be affected by any changes to the ramp rate as changes may affect the market clearing prices and uplift charges

III. Stakeholder Engagement Goals and Objectives

Goal

The goal of this stakeholder plan is to determine the proper model for dispatching Ontario generation in the Market Schedule and to develop an implementation strategy to address these changes.

Objectives

1. To provide all affected stakeholders with the opportunity to provide input to the IESO on the impacts those changes to the market prices will have on their operations.
2. To provide all affected stakeholders with the opportunity to provide input to the IESO on the impacts those changes to the market prices could have on the IESO-administered markets.
3. To provide all affected stakeholders with the opportunity to review and provide feedback on potential implementation issues prior to their finalization.

IV. Stakeholder Engagement Approach and Methods

Any changes that affect pricing could have positive effects on one type of market participant and the opposite effect on others. Reaching consensus on a proper pricing model is not anticipated. Stakeholder input will be used to assist the IESO in a recommendation to the Board as to what course of action is best for the evolution of the market.

The stakeholder engagement approach will be stakeholder consultation -- seeking stakeholder input throughout the decision making process involving continuous two-way face-to-face dialogue.

The stakeholder engagement methods to be employed will be a combination of a Working Group and Web-Based Postings with the opportunity for comment.

Stakeholder Working Group

The stakeholder working group will permit directly affected stakeholders to provide more detailed working level input so that the objectives can be met in a timely manner. The proposed working group is the MPWG. This existing group consists of a representation of stakeholders as listed at:

http://www.ieso.ca/imoweb/pubs/consult/mep/MP_WG_MemberList.pdf.

The Terms of Reference for this working group has already been established and can be found at:

http://www.ieso.ca/imoweb/pubs/consult/mep/MP_WG_TermsOfReference.pdf

To the extent possible, members of the working group also represent the views of their constituency. The first meeting of the MPWG on this subject will recap past discussions, and review some of the pricing mechanics.

Working group meeting agendas and documentation from the meetings will be made public through the MPWG's pages on the IESO web site. (http://www.ieso.ca/imoweb/consult/mep_mp.asp). Notes from meetings will be posted to provide an opportunity for all stakeholders that are not participating in the working group to provide comments which can be provided directly in writing or through a sector representative.

Open Stakeholder Session

Most stakeholder sectors will be impacted by any resulting changes that affect market pricing. There will be an open meeting to specifically address impacts of the alternative solutions and their impacts on market pricing. This session may be of particular interest to embedded commercial and industrial sectors that may not be as engaged through the MPWG.

Web-Based Postings

Web-based postings enable those non-represented sectors with a lower cost alternative to keep informed of the process and to provide input as desired. This will provide the opportunity for all interested stakeholders to offer feedback on any proposed changes as a result of the Working Group meetings.

This is a public consultation and feedback supplied will be posted on the IESO website including the identification of the participant.

V. Decision Making Steps and Schedule of Activities

Stakeholder Engagement Schedule	
Activity	Target Date
1. Market Pricing Working Group meeting to present and educate. Agenda and presentations: http://www.ieso.ca/imoweb/consult/mep_mp.asp	January 20
2. Market Pricing Working meetings to discuss alternative solutions and implications.	March 3, March 24, April 7 and April 21
3. Open stakeholder session to solicit feedback on Market Pricing impacts of alternative solutions and implications.	April 26
4. Web postings to provide the opportunity for all interested stakeholders to offer feedback on alternative solutions.	May 5
5. Presentation of APPrO report at Market Pricing Working Group Meeting.	July 7
6. Final deadline for stakeholder comments on 12x ramp rate issue.	August 8
7. IESO recommendation published and submitted to the Stakeholder Advisory Committee for input. Publish IESO response to written stakeholder comments.	August 15
8. Presentation to the Advisory Committee for advice to the IESO Board.	September 5
9. IESO Board of Directors' consideration of IESO management recommendations including how stakeholder input was used.	September 22
10. Stakeholder Advisory Committee Update	November 1
11. Board of Directors Meeting	November 17
12. Technical Panel meetings for Market Rule changes.	January 16, 2007
13. IESO Board of Directors' approval of Market Rule changes.	January 19, 2007
14. Potential IESO Market Manual change process.	To be determined

Process Evaluation

Stakeholders will be provided the opportunity to provide feedback on the effectiveness of the process in achieving stated objectives following each key stakeholder engagement event (e.g., Workshops, the Working Group process, etc.).