

## **Recommendation 2-1:**

*The Panel recommends that the IESO's ramping of intertie schedules in the unconstrained process (the pricing algorithm) be consistent with actual intertie procedures and the treatment in the constrained scheduling process.*

This change would require system changes and as settlements are working appropriately and there are no operational concerns, the IESO assigns this recommendation a low priority.

Transaction scheduling is currently done on an hourly basis as a result of the hourly pre-dispatch (PD) evaluation. Hourly intertie offers/bids that are successful are scheduled and settled for the hour in which the offer/bid is valid. Industry processes typically have successful transactions ramping in and out a little before and a little after the start and end of the hour to ease the transition from hour to hour however settlement for these transactions remain within the bounds of the scheduling hour. Energy, transmission tariff and inadvertent settlement are considered to be within the clock hour of the successful offer/bid.

In order to be consistent with the industry standard the unconstrained (or market) sequence is reflective of participant offers/bids ensuring proper financial settlement. The constrained sequence, in order to maintain the proper settlement, is automatically adjusted (an after-the-fact process) that essentially matches the constrained sequence to the unconstrained sequence. The transactions are then settled using the values of the hours where they are scheduled.

That being said, the IESO does acknowledge that the current method does create two interval prices (interval 12 for preceding and actual dispatch hours) that may differ, even though settlement is not affected. Matching the unconstrained sequence to the constrained sequence may bring the unconstrained and constrained prices together, but there would still need to be a process put in place to correct the unconstrained schedules for settlement.

## **Recommendation 2-2:**

*The Panel recommends that when an intertie trade fails in some intervals while not in others within the hour, the IESO should apply a failure code only for those intervals with the failure.*

The IESO has been aware of this issue and is currently looking at possible solutions and these changes are currently given a low priority. The event used highlighted two types of failures one which is identical to the reported upon earlier and one which is a very rare set of circumstances that has a curtailed transaction increasing and decreasing throughout the hour. In any case the solution to this particular recommendation and that previously made is the same. As the IESO previously agreed the adjustment to the market schedule (MS) should be only be made where such an adjustment does not inappropriately add MW's to the MS.

**Recommendation 3-1:**

- 1) *In light of the Panel's findings on the inefficiency of the Demand Response Phase 3 (DR3) program, the Ontario Power Authority (OPA) should review the effectiveness and efficiency of the program.*
- 2) *Until that review is completed, to improve short term dispatch efficiency:*
  - a. *The IESO, with input from the OPA, should improve the supply cushion calculation; and/or*
  - b. *The OPA should develop other triggers such as a pre-dispatch price threshold that could be better indicators of tight supply/demand conditions.*

1) This recommendation is directed toward the OPA.

2a) The IESO considers this change a low priority. The MSP recommended, in their July 25, 2008 reports, improving the supply cushion calculation to take into account forced outages, derates and import capabilities at the interties. The IESO acknowledges the differences in the MSP and IESO supply cushion calculations and will consider the appropriate changes. At this time, the IESO supply cushion calculation is based on offered energy in the market. This is consistent with the capacity calculation that is published in the System Status Report and the IESO believes that being consistent with this application is important. Participants and program operators use these signals to respond to the ambient conditions and although we don't disagree with the MSP recommendation the consistency of these signals is important.

2b) This recommendation is directed toward the OPA.

**Recommendation 3-2:**

*In an earlier report, the Panel encouraged the IESO to limit self-induced congestion management settlement credit (CMSC) payments to generators when they are unable to follow dispatch for safety, legal, regulatory or environmental reasons. The Panel further recommends that the IESO take similar action to limit CMSC payments where there are induced by the generator strategically raising its offer price to signal the ramping down of its generation.*

The IESO agrees with this recommendation. The changes require market rule amendments. This recommendation currently sits with the Technical Panel (MR-00252). This market rule is listed as complete by the end of Q2 2009.

**Recommendation 3-3:**

*In consideration of the length of time until the Panel's prior recommendation of an optimized Day Ahead Commitment Process (DACP) can be put in place (estimated to be 2011), the Panel recommends that the IESO consider basing the Generator Cost Guarantee on the offer submitted by the generator or other interim solutions that allow actual generation costs to be taken into account in DACP scheduling decisions.*

The IESO agrees with this recommendation and initiated market rule amendment MR-00356: Interim Changes to Real-Time and Day-Ahead Generation Cost Guarantee Programs to address the identified issues. This rule amendment proposes to include the offer associated with minimum loading point in the cost guarantee calculation to incent generators to submit offer prices that are more reflective of their true incremental energy costs.

**Recommendation 3-4:**

*As coal-fired generators are eventually phased out, the market will require replacement for this source of Operating Reserve (OR). New gas-fired generators are generally not offering OR. The Panel recommends that the IESO and OPA explore alternatives for obtaining appropriate OR offers from recent and future gas-fired generation entrants.*

A solution to this issue is being proposed under market rule amendment MR-00356: Interim Changes to Real-Time and Day-Ahead Generation Cost Guarantee Programs is to remove operating reserve revenues from the cost guarantee calculation. This change is being proposed to eliminate the potential disincentive for generators that are eligible for guarantees to provide operating reserve.

**Recommendation 3-5:**

*The Panel recommends that market participant's offers should reflect environmental costs flowing from the environmental standards established by the applicable regulatory authorities.*

This recommendation is directed at market participants.

**Recommendation 4-1:**

*In an effort to efficiently accommodate greater levels of renewable resources in the Ontario Market:*

- i) The panel recommends the IESO consider centralized wind forecasting to reduce the forecast errors associated with directly connected and embedded wind generation in the pre-dispatch schedules;*
  - ii) The Panel also reiterates its December 2007 recommendation that the IESO investigate a 15-minute dispatch algorithm which should further reduce forecast errors and allow for more frequent rescheduling of imports and exports in response to the different output characteristics of renewable resources.*
- i) The IESO agrees with this MSP recommendation and is working on the assessment of benefits for centralized renewable forecasting into the IESO controlled grid. The IESO SE-57 (Embedded and Renewable Generation) meeting scheduled for June 16<sup>th</sup> will consider the issue. For both this and recommendation ii) the IESO is considering all of the recommendations identified by the IESO and others in the NERC special report on "Accommodating High Levels of Variable Generation".
  - ii) The IESO is continuing to work with stakeholders to identify current and future dispatch issues and identify possible solutions (refer to SE-61 Exploration of Enhancements to Dispatch Methodology and Processes). Investigation of a 15-minute dispatch algorithm will be explored under SE-61.