

IESO Responses to the Market Surveillance Panel (MSP) Report (Period: May 2012 – October 2012)

Report Date:	2013/06/21	Report:	MSP
Report Origin:	OEB	Report Type:	Public

Recommendation 2-1

Status: Pending
Category: Local Market Power &
Day-Ahead
Commitment Process

Recommendation: The IESO should consider expanding the current local market power framework to cover analogous circumstances that arise as part of the day-ahead commitment process.

Response(s): The IESO agrees that this recommendation warrants further consideration. However, with over ten years of market history and numerous market rule amendments, we believe an overall review would be appropriate and would allow the IESO to assess whether the existing local market power framework is achieving its intended purposes, and whether the present framework should be extended to the day-ahead commitment process. This review will commence in the first quarter of 2014.

Recommendation 3-1

Status: Pending
Category: CMSC

Recommendation: The IESO should implement a permanent, rule based solution to eliminate self-induced CMSC payments to ramping down generators.

Response(s): The IESO continues to believe that there are legitimate costs to a generator when ramping down that should be accounted for in a generator's revenue requirement, but in that context generators should only be compensated for legitimate costs incurred.

The IESO also believes that this recommendation is better addressed as part of a more comprehensive review of the real-time and day-ahead guarantee programs. This review has already been initiated, and will address this recommendation. The stakeholder engagement process began in May 2013, with findings and recommendations targeted for Q4 2013. The market rules process, if applicable, will flow from those findings and recommendations.

IESO Responses to the Market Surveillance Panel (MSP) Report (Period: November 2011 – April 2012)

Report Date:	2013/01/14	Report:	MSP
Report Origin:	OEB	Report Type:	Public

Recommendation 3-1

Status: Pending
Category: Efficiency

Recommendation: The IESO should reassess the design of the Ontario transmission rights market to determine whether it is achieving its intended purpose.

Response(s): The IESO agrees with this recommendation and will perform a comprehensive review of the transmission rights market to determine whether the transmission rights market is achieving its intended purpose, and to determine what improvements can be made. This overall review is a longer term commitment and while the review has been somewhat delayed as we balance priorities, it is expected to get underway later in 2013.

Recommendation 3-2

Status: In Progress
Category: Uplift

Recommendation: The IESO should limit the number of transmission rights auctioned to a level where the congestion rent collected is approximately sufficient to cover the payouts to transmission right holders.

Response(s): The IESO initiated a review of the confidence level and its associated stabilization design which determines the number of transmission rights available for auction. This is the first phase of the comprehensive review (refer to recommendation 3-1). The findings of this first stage and any resultant recommended changes to the confidence level will be presented to stakeholders through our normal stakeholder process with the intent to return to the IESO Board of Directors with a recommendation in September 2013.

Recommendation 3-3

Status: (A) Closed
(B) In Progress
Category: Uplift

Recommendation: (A) The IESO Board of Directors should authorize the disbursement of the portion of the Transmission Rights Clearing Account balance that currently exceeds the Reserve Threshold to reduce the transmission charges payable by loads.

(B) In the future, the IESO Board of Directors should authorize disbursements of Transmission Rights Clearing Account balances in excess of the Reserve Threshold after each year end.

Response(s): In February of this year, the IESO Board of Directors approved the disbursement of \$42 million, to be paid in 12 equal monthly installments. This disbursement began in April 2013. A recommendation will be made on the continued disbursement to the IESO Board at the completion of the first phase of the comprehensive review in September 2013.

Recommendation 3-4

Status: Pending

Category: Uplift

Recommendation: The IESO policy of selling only long-term transmission rights on single-circuit interfaces should be replaced by a policy of reserving a significant portion of the available transmission rights for sale at short-term transmission right auctions.

Response(s): The IESO does not have a policy of selling only long-term transmission rights on single-circuit interfaces. However there can be instances where only long-term transmission rights are available on single-circuit interfaces, for example where short term outages or lower monthly ratings result in no incremental rights being available over and above the long-term transmission rights sold cumulatively in the previous auctions for that period.

Under the comprehensive review of the transmission rights market the IESO will consider whether a more conservative approach to determining available long-term and short-term transmission rights for single-circuit interfaces should be adopted.

Recommendation 3-5

Status: In Progress

Category: Uplift

Recommendation: As part of the IESO's planned review of the Enhanced Day-Ahead Commitment Process, the Panel recommends that the IESO examine the interplay between the day-ahead intertie offer guarantee program and the transmission rights market.

Response(s): The IESO agrees with this recommendation. The IESO has initiated a review of the interplay between the day-ahead intertie offer guarantee program and the transmission rights market to determine whether there is an immediate solution that does not affect reliability or market efficiency. If no immediate solution is found, the issue will be addressed as part of the review of the real-time and day-ahead guarantee programs. The IESO has commenced internal work on the review of the guarantee programs and initiated the stakeholder process in May of 2013.

IESO Responses to the Market Surveillance Panel (MSP) Report (Period: May 2011 – October 2011)

Report Date:	2012/04/27	Report:	MSP
Report Origin:	OEB	Report Type:	Public

Recommendation 3-1

Status: In Progress
Category: Efficiency

Recommendation: The Panel recommends that the IESO continue to pursue the introduction by the Northeast Power Coordinating Council of a revised Regional Reserve Sharing Program and the negotiation of any necessary implementing agreements with neighbouring ISOs as expeditiously as possible.

Response(s): The IESO agrees with this recommendation and is pursuing this within the requirements of NPCC's Regional Reliability Reference Directory #6. Directory #6 contains NPCC's set of requirements regarding participation in Reserve Sharing Groups (RSG). These requirements outline who can participate in an RSG, the obligations of the RSG once formed (for example each RSG will have an RSG Agreement), and the Reserve Sharing Implementation requirements within the RSG Agreement.

Recommendation 3-2

Status: In Progress
Category: Uplift

Recommendation: The Panel recommends that the IESO implement a permanent, rule-based solution to eliminate self-induced CMSC payments to ramping-down generators.

Response(s): The IESO has initiated a review of the real-time and day-ahead guarantee programs. Ramping down CMSC will be considered in the context of this broader review to ensure that generators are compensated for only legitimate costs incurred during ramp down. The stakeholder engagement process began in May 2013 (SE-111), with findings and recommendations targeted for Q4 2013. The market rules process will flow from those findings and recommendations. Similar to recommendation 3-4(i) from the 2011/03/10 Panel report.

Recommendation 4-1

Status: In Progress
Category: Efficiency

Recommendation: The Panel recommends that the IESO proceed with development work on those recommendations of the Electricity Market Forum that are directed at improving market efficiency, including the consideration of options to replace the two-schedule structure of the current market design.

Response(s): The IESO agrees with this recommendation. The IESO has initiated work based on the Electricity Market Forum's recommendations aimed at improving market efficiency, including reviews of HOEP, Global Adjustment (GA), the two-schedule system and intertie trading. A Request for Proposal (RFP) for this work was issued in February 2013 and a vendor has been selected. The internal work has commenced and will be brought through the stakeholder engagement process.

IESO Responses to the Market Surveillance Panel (MSP) Report (Period: November 2010 – April 2011)

Report Date:	2011/11/16	Report:	MSP
Report Origin:	OEB	Report Type:	Public

Recommendation 2-2

Status: In Progress
Category: Dispatch

Recommendation: The Panel recommends that the IESO and the Electricity Market Forum investigate increasing the frequency with which inerties are scheduled in order to improve market efficiency and price fidelity. In conjunction with any such increase, the IESO should explore parallel increases in the frequency of the forecasts of demand and the output from wind and other intermittent generation, as well as pre-dispatch schedules.

Response(s): The IESO has initiated internal work based on the Electricity Market Forum's recommendations aimed at improving trading processes, including evaluating more frequent scheduling of inertia transactions. Stakeholder engagement is currently anticipated to commence by the end of Q3 2013, with the findings and recommendations on the feasibility of more frequent scheduling flowing from that stakeholder engagement.

Recommendation 2-3

Status: In Progress
Category: Price Fidelity

Recommendation: The Panel recommends that the IESO accelerate its efforts under Stakeholder Engagement (SE-91) to make wind generators dispatchable.

Response(s): The IESO Board has approved the market rule amendments (MR-00381: R02-R06) related to the dispatch of all variable generators that are market participants (i.e. wind and solar photovoltaic resources directly connected to the IESO-controlled grid) on a five-minute, economic basis. The expected implementation date of these rules is September 11, 2013.

IESO Responses to the Market Surveillance Panel (MSP) Report (Period: May 2010 – October 2010)

Report Date:	2011/03/10	Report:	MSP
Report Origin:	OEB	Report Type:	Public

Recommendation 3-1

Status: Pending
Category: Price Fidelity

Recommendation: The IESO should not remove imports curtailed to address surplus baseload generation conditions from the unconstrained market schedule. This could be accomplished by changing how the ADQh code operates with respect to the market schedule.

Response(s): There are several issues regarding the appropriate market price during curtailment of intertie transactions due to adequacy. The IESO's current practices are based on the belief that the resultant price impacts of curtailed transactions do not represent a distortion. Not removing these transactions from the unconstrained algorithm would also result in further differences between the constrained and unconstrained sequences, which would create an additional uplift burden for Ontario consumers and would be opposite in direction from the IESO's goal of aligning pricing with actual dispatch.

Recommendation 3-2

Status: In Progress
Category: Hourly Uplift Payments

Recommendation: Where there are transfer capability reductions outside Ontario that prohibit power flow out of or into Ontario, the IESO should not make CMSC payments. Possible methods might include but not limited to: removing the related offers/bids, reducing intertie transfer capability to zero, or establishing a mechanism for clawback of the CMSC payments.

Response(s): The IESO agrees that CMSC payments for external congestion are inappropriate. Furthermore, removing these transactions from the market schedule will result in a more accurate price signal to the market. There are several options that can be looked at in order to resolve this issue, some having negative consequences.

The option of reducing the intertie capability would send incorrect congestion signals by moving external congestion to congestion on the intertie. This congestion can create possible shortages in the Transmission Rights market and prevent other efficient trade from occurring.

A second option could see the removal of offers/bids from the pre-dispatch sequence. While this method would address transactions receiving CMSC payments for external reasons, it may inappropriately remove CMSC payments for transactions legitimately constrained off for internal limitations (deserving of CMSC).

Another option would be to clawback the inappropriate CMSC. This however, is not a trivial task as they would require complex, resource intense manual assessments. The complexity is driven by knowing which limitation - either internal or external- drove the two schedules to diverge, thus generating CMSC - our tools do not recognize this.

The final option, and the IESO preference, would be to address the root of the issue: participant behaviour. Recognizing the inability to flow in the external market as a result of the lack of transmission service, participants should remove their dispatch data when conditions permit. The Market Assessment Unit should continue to monitor and take appropriate action as required to address these issues as they occur. We believe this action

would be best suited to resolve such issues and mitigate reoccurrence in the future.

Recommendation 3-3

Status: In Progress
Category: Hourly Uplift Payments

Recommendation: As part of its “market road map” process, the IESO should work with stakeholders to examine the feasibility of replacing the two-sequence design with locational pricing, variable pricing for dispatchable resources or other alternatives.

Response(s): The IESO agrees with this recommendation. The IESO has initiated work based on the Electricity Market Forum’s recommendations aimed at improving market efficiency, including reviews of HOEP, Global Adjustment (GA), the two-schedule system and intertie trading. A Request for Proposal (RFP) for this work was issued in February 2013 and a vendor has been selected. The internal work has commenced and will be brought through the stakeholder engagement process.

Recommendation 3-4 (i)

Status: In Progress
Category: Dispatch

Recommendation: The IESO should resume work on Stakeholder Engagement 84 regarding elimination of self-induced CMSC payments for ramping down generators and should amend the Generation Cost Guarantee program to ensure that all guaranteed costs are considered as part of the dispatch optimization.

Response(s): Consistent with this recommendation, the Enhanced Day-Ahead Commitment (EDAC) process was implemented on October 12, 2011 and considers all costs in the optimization of the day-ahead commitments of resources.

The IESO has initiated a review of the real-time and day-ahead guarantee programs. Ramping down CMSC will be considered in the context of this broader review to ensure that generators are compensated for only legitimate costs incurred during ramp down. The stakeholder engagement process began in May 2013 (SE-111: Review of Generator Guarantee Programs), with findings and recommendations targeted for Q4 2013. The market rules process flow from those findings and recommendations.

Recommendation 3-4 (ii)

Status: In Progress
Category: Dispatch

Recommendation: On an interim basis until after-the-fact start-up cost submissions are capped by generator offer prices and CMSC payments to ramping down generators are eliminated, the IESO should amend the Generation Cost Guarantee program to limit generators to one start-up cost guarantee submission per day unless the IESO requests a second start during the day.

Response(s): The IESO's concern with this recommendation is that limiting generators to one start-up cost guarantee per day may prevent the use of the least-cost option later in the day simply because the generator has operated earlier in the day. Instead, the IESO will ensure that the costs recovered from any second start-up are limited to a level that reflects that the unit is already hot and would have both reduced start-up time and a shorter minimum run time. In accordance with the market rules the facility data specified by the market participant should reflect the technical requirements of the facility, and is auditable if the market participant receives a

generation cost guarantee on the basis of this data.

The IESO has initiated a review of the real-time and day-ahead guarantee programs. This recommendation will be considered as part of the broader review of the guarantee programs. The stakeholder engagement process began in May 2013 (SE-111: Review of Generator Guarantee Programs), with findings and recommendations targeted for Q4 2013. The market rules process will flow from those findings and recommendations.

Recommendation 3-4 (iii)

Status: In Progress

Category: Dispatch

Recommendation: The IESO should re-examine whether the GCG program continues to provide a net benefit to the Ontario market once the Enhanced Day-Ahead Commitment (EDAC) process is implemented or as part of its “Market Roadmap” process.

Response(s): The Enhanced Day-Ahead Commitment (EDAC) initiative was implemented on October 12, 2011. The IESO has initiated a review of the real-time and day-ahead guarantee programs. This recommendation will be considered as part of the broader review of the guarantee programs. The stakeholder engagement process began in May 2013 (SE-111: Review of Generator Guarantee Programs), with findings and recommendations targeted for Q4 2013. The market rules process will flow from those findings and recommendations.

IESO Responses to the Market Surveillance Panel (MSP) Report (Period: November 2009 – April 2010)

Report Date:	2010/08/30	Report:	MSP
Report Origin:	OEB	Report Type:	Public

Recommendation 3-3

Status: Pending
Category: Price Fidelity

Recommendation: The IESO should explore the feasibility of tightening its compliance deadband definition for dispatchable loads by linking the deadband more closely to the facility's dispatchable capability and/or ramp rate.

Response(s): Pursuant to the MSP's recommendation and associated issues previously brought to its attention, the MACD Compliance and Enforcement unit re-assessed the current compliance deadband, as it is detailed in the related Interpretation Bulletin. Based on its assessment and the feedback from various parties within the IESO, MACD has determined not to alter the current deadband flexibility generally afforded market participants, on the basis that enforcement action could result in circumstances where the market participant is clearly behaving in a fashion contrary to the stated purpose of the deadband.

Recommendation 3-4

Status: In Progress
Category: Price Fidelity

Recommendation: To the extent that the IESO believes a reliability program such as the generation cost guarantee program continues to be warranted, the IESO should base the guarantee payment on the offer submitted by the generator or should implement another solution that would require actual generation costs to be taken into account at the time of scheduling decisions.

Response(s): The IESO has initiated a review of the real-time and day-ahead guarantee programs. This recommendation will be considered as part of the broader review of the guarantee programs. The stakeholder engagement process began in May 2013 (SE-111: Review of Generator Guarantee Programs), with findings and recommendations targeted for Q4 2013. The market rules process will flow from those findings and recommendations.

Recommendation 3-5

Status: In Progress
Category: Price Fidelity

Recommendation: The IESO should limit the number of transmission rights auctioned to a level where the congestion rent collected is approximately sufficient to cover the payouts to transmission rights holders.

Response(s): The IESO initiated a review of the confidence level and its associated stabilization design which determines the number of transmission rights available for auction. This review is the first phase of the comprehensive review (refer to recommendation 3-1). The findings of this first stage and any resultant changes to the confidence level will go through our normal stakeholder process with the intent to return to the IESO Board of Directors with a

recommendation in September 2013.

Recommendation 3-6

Status: In Progress

Category: Price Fidelity

Recommendation: The IESO should reassess the design of the Ontario Transmission Rights market to determine whether it can play a more effective role in supporting efficient trade with neighbouring jurisdictions.

Response(s): The IESO agrees with this recommendation and will perform a comprehensive review of the transmission rights market to determine whether the transmission rights market is achieving its intended purpose, and to determine what improvements can be made. This overall review is a longer term commitment and while the review has been somewhat delayed as we balance priorities, it is expected to get underway later in 2013.

IESO Responses to the Market Surveillance Panel (MSP) Report (Period: November 2008 – April 2009)

Report Date:	2009/07/31	Report:	MSP
Report Origin:	OEB	Report Type:	Public

Recommendation 3-2

Status: In Progress
Category: Uplift Payments

Recommendation: The IESO should improve the mechanisms for aligning submitted costs and associated revenue streams at combined cycle stations for its Spare Generation On-line and Day-Ahead Commitment Process generation cost guarantee programs, in the context of the other changes taking place to these programs. The preferred mechanism is to determine guarantee payments on an aggregate basis for all units at a station. Alternatively, the IESO should eliminate allocations that result in over-compensation (for example, by requiring allocation of submitted costs among units in proportion to the revenue they generate during the period associated with these costs).

Response(s): The IESO agrees with the principles of this recommendation however during the GCG stakeholder engagement processes it was determined that the enhancement of settling guarantee payments on an aggregate basis would not be introduced. A significant number of changes were introduced as a result of these discussions including interim changes to the RT-GCG program, the implementation of EDAC (multi-part bids, 24 hr optimization and Pseudo Unit settlement). Although these changes are not inclusive of this recommendation, many strides were made to improve the efficiencies of the guarantee programs. The IESO continues to monitor this aspect of the guarantee framework and has initiated work in preparation for a review of the real-time and day-ahead guarantee programs.

The IESO has initiated a review of the real-time and day-ahead guarantee programs. This recommendation will be considered as part of the broader review of the guarantee programs. The stakeholder engagement process began in May 2013 (SE-111: Review of Generator Guarantee Programs), with findings and recommendations targeted for Q4 2013. The market rules process will flow from those findings and recommendations.

IESO Responses to the Market Surveillance Panel (MSP) Report (Period: May 2008 – October 2008)

Report Date:	2009/01/30	Report:	MSP
Report Origin:	OEB	Report Type:	Public

Recommendation 2-1

Status: In Progress
Category: Price Fidelity

Recommendation: 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.

Response(s): Under the existing design, settlements are working appropriately and there are no operational concerns. This change, currently assigned a low priority, would require system changes.

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.

The IESO has initiated work based on the Electricity Market Forum's recommendations aimed at improving market efficiency, including reviews of HOEP, Global Adjustment (GA), the two-schedule system and intertie trading. A Request for Proposal (RFP) for this work was issued in February 2013 and a vendor has been selected. The internal work has commenced and will be brought through the stakeholder engagement process.

Recommendation 2-2

Status: Pending
Category: Price Fidelity

Recommendation: 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.

Response(s): The IESO has been aware of this issue, currently assigned a low priority, and may look at

possible solutions. 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(2)

Status: Pending
Category: Dispatch

Recommendation: Until the OPA's review of the effectiveness and efficiency of DR3 program is completed, to improve short term dispatch efficiency, the IESO, with input from the OPA, should improve the supply cushion calculation.

Response(s): The MSP previously recommended 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 may consider the appropriate changes, currently assigned a low priority. 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.

Recommendation 4-1

Status: 4-1(i) [Closed –
Intentionally left blank]
4-1 (ii) In Progress
Category: Price Fidelity

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

- i. [Closed – Intentionally left blank]
- 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.

Response(s):

- i. [Closed – Intentionally left blank]
- ii. The IESO has initiated internal work based on the Electricity Market Forum's recommendation aimed at improving trading processes, including evaluating more frequent scheduling of intertie transactions. Stakeholder engagement is currently anticipated to commence by the end of Q3 2013, with the findings and recommendations on the feasibility of more frequent scheduling flowing from that stakeholder engagement.

IESO Responses to the Market Surveillance Panel (MSP) Report (Period: November 2007 – April 2008)

Report Date:	2008/07/25	Report:	MSP
Report Origin:	OEB	Report Type:	Public

Recommendation 3-6(2)

Status: Pending
Category: Price Fidelity

Recommendation: The MSP restates the recommendation in its December 2007 report that curtailed exports (or imports) for internal resource adequacy ('ADQh') should not be removed from the unconstrained schedule in order to ensure that actual market demand (or supply) is not distorted.

Response(s): As stated in response to the December 2007 report, there are several issues regarding the appropriate market price during curtailment of exports (imports) due to adequacy. The IESO's current practices are based on the belief that the resultant price impacts of curtailed exports do not represent a distortion. Not removing these exports from the unconstrained algorithm would also result in further differences between the constrained and unconstrained sequences, which would create an additional uplift burden for Ontario consumers and would be opposite in direction from the IESO's goal of aligning pricing with actual dispatch.

Recommendation 2-2

Status: Pending
Category: Price Fidelity

Recommendation: The MSP reiterates the recommendations in its December 2006 and June 2007 reports, respectively, regarding Shared Activation of Reserve (SAR), and prompt replenishment of the Operating Reserve requirement levels. In addition, the MSP recommends the IESO review the application of Regional Reserve Sharing (RRS) because the current treatment of RRS in the unconstrained sequence also induces counter-intuitive prices.

Response(s): This recommendation is currently assigned a low priority.

Recommendation 3-1

Status: In Progress
Category: Hourly Uplift Payments

Recommendation: As market supply conditions have improved, an increasing fraction of Intertie Offer Guarantee (IOG) payments is being paid in hours when there appear to be negligible reliability concerns. The MSP recommends the IESO review the real-time IOG program and determine if it is providing commensurate improvements in reliability.

Response(s): The IESO is currently reviewing the materiality of IOGs.

Recommendation 3-2

Status: Pending
Category: Transparency

Recommendation: The MSP recommends that the IESO publish masked bid and offer data on a four month time lag.

Response(s): The IESO believes that market data and information is fundamental to the efficient and effective operation of the market. The IESO established the Market Information Working Group under SE-97 in May of 2012, to look at enhancements or changes to market information. This recommendation was brought to the attention of SE-97 in late 2012 and is currently assigned a low priority.

Recommendation 3-4

Status: Closed
Category: Transparency

Recommendation: The MSP recommends that when the System Status Reports indicate that a generating unit of greater than 250 MW has been forced from service, the IESO should also disclose the fuel type of the unit in order to increase the information available to all market participants regarding future market conditions.

Response(s): The IESO agrees with the principle of providing more information to the market participants and has therefore begun publishing additional information for generator forced outages in the System Status Reports. As of March 2013, SSR's indicate the fuel type for a generator loss over 250 MW.

Recommendation 3-5

Status: Pending
Category: Transparency

Recommendation: The IESO is planning to publish the supply cushion on an hourly basis. Its current calculation, however, does not represent actual supply capability. The MSP recommends that the IESO refine its formula to take into account forced outages, deratings, and import capabilities at the interties.

Response(s): This supply 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 the application is important as it is used for OPA program integration. The IESO will need to consider any changes to other processes. While the recommendation represents a reasonable change, this change is currently assigned a low priority.

Recommendation 3-9

Status: In Progress
Category: Hourly Uplift Payments

Recommendation: The MSP recommends that the IESO review the benefits of constrained off payments with a view to their discontinuation.

Response(s): The IESO has initiated work based on the Electricity Market Forum's recommendations aimed at improving market efficiency, including reviews of HOEP and the two schedule system. Constraint payments arise whenever there is a difference between how the IESO dispatches a resource and how the price setting Market Schedule has used that same resource. As such, constraint payments will be evaluated as part of the review of the two schedule design. An RFP for the work related to the two-schedule structure was issued in February 2013 and a

vendor has been selected. The internal work has commenced and will be brought through the stakeholder engagement process. In the meantime, the IESO has implemented market rule amendment MR-00395-R00, effective October 1, 2012, which eliminates constrained off CMSC payments to imports offered into chronically congested areas.

IESO Responses to the Market Surveillance Panel (MSP) Report (Period: May 2007 – October 2007)

Report Date:	2008/01/15	Report:	MSP
Report Origin:	OEB	Report Type:	Public

Recommendation 2-1

Status: Pending
Category: Price Fidelity

Recommendation: Export curtailment due to 'adequacy' has an effect of suppressing the market price during times of serious scarcity since the curtailed amount is removed from the market schedule, thus distorting the market price signal. The Panel recommends that the IESO not remove the curtailed amount due to 'adequacy' from the market schedule.

Response(s): There are several issues regarding the appropriate market price during curtailment of exports due to adequacy. The IESO has currently assigned this recommendation a low priority.

Recommendation 3-3

Status: In Progress
Category: Dispatch

Recommendation: The MSP recommends the IESO begin investigation of a 15 minute dispatch algorithm to enhance the efficiency of the market.

Response(s): The IESO has initiated internal work based on the Electricity Market Forum's recommendation aimed at improving trading processes, including evaluating more frequent scheduling of intertie transactions. Stakeholder engagement is currently anticipated to commence by the end of Q3 2013, with the findings and recommendations on the feasibility of more frequent scheduling flowing from that stakeholder engagement.

Recommendation 3-5

Status: In Progress
Category: Hourly Uplift Payments

Recommendation: The IESO should initiate a rule change to make Intertie Offer Guarantee payments subject to offsets where affiliated market participants are simultaneously importing and exporting.

Response(s): This change was addressed by EDAC and the IESO is currently reviewing the materiality of IOGs.

IESO Responses to the Market Surveillance Panel (MSP) Report (Period: November 26, 2006 – April 10, 2007)

Report Date:	2007/08/10	Report:	MSP
Report Origin:	OEB	Report Type:	Public

Recommendation 2-1

Status: Pending
Category: Price Fidelity

Recommendation: Review Time Lags for Replenishing the OR Requirements:
The Panel recommends the IESO review the time lags which it currently employs for replenishing the OR requirements following a contingency. Replenishment as quickly as possible would be consistent with the treatment of other operating reserve or energy obtained through out-of-market control actions and similar to the NYISO practice. This would result in prices which more accurately reflect the loss of supply and encourage market participants to respond as quickly as possible.

Response(s): This recommendation is currently assigned a low priority.

Recommendation 3-4

Status: In Progress
Category: Hourly Uplift Payments

Recommendation: Review of RT-IOG and DA-IOG in Off-Peak Hours:
The Panel recommends the IESO review off-peak conditions to determine if the RT-IOG and DA-IOG programs are providing an improvement in reliability commensurate with the payments being made. The IESO should consider discontinuing off-peak IOG payments where these no longer appear to provide corresponding reliability benefits.

Response(s): The IESO is currently reviewing the materiality of IOGs.

Recommendation 3-5

Status: Pending
Category: Hourly Uplift Payments

Recommendation: Treatment of Energy Exports Through SMO:
The Panel recommends the IESO review the treatment of energy exported through Segregated Mode of Operation with a view to including this energy in the determination of RT-IOG offsets for implied wheeling.

Response(s): The IESO does not disagree with this recommendation. We are monitoring the materiality and frequency of this issue, however this issue is currently assigned a low priority.

IESO Responses to the Market Surveillance Panel (MSP) Report (Period: May 2006 – October 2006)

Report Date:	2006/12/22	Report:	MSP
Report Origin:	OEB	Report Type:	Public

Recommendation (pg 75)

Status: Pending
Category: Price Fidelity

Recommendation: Treatment of Shared Activation of Reserve:
“The use of SAR has an effect similar to an emergency import in that it simply reduces demand. The IESO should consider treating SAR similar to emergency imports whereby demand is added back to the unconstrained schedule.”

Response(s): With respect to the impact on price during activation the IESO agrees with this finding. A more detailed analysis however shows that it may not be appropriate given the dissimilar way the SAR is paid back relative to the Emergency Energy. In the case of emergency energy the energy is paid back financially. With SAR however the energy is paid back in kind. With this payment approach one could argue that the market is impacted twice for the same event. Market demand is increased during SAR activation and again during SAR pay back.

Recommendation (pg 76)

Status: Pending
Category: Price Fidelity

Recommendation: Reflecting Transmission Contingencies on Price:
“IESO should discuss with MPs if a more appropriate treatment is applicable for the loss of transmission elements so that prices are more reflective of scarcity.”

Response(s): The issue is not so much about the type of contingency i.e. transmission vs. generation, it is more about the type of generation affected by the contingency and whether or not its loss is recognized by the unconstrained pricing schedule (MS). With the existing uniform design all resources that can be dispatched, regardless of transmission connectivity, can affect price. In the specific example discussed in the MSP report the affected generation was in fact generation that could immediately respond to IESO dispatch should the transmission be made available. It is important to recognize however that in other similar circumstances, such as nuclear or thermal generation rejection, a transmission contingency will impact the MS due to the fact that post contingency a thermal or nuclear unit typically cannot respond to a dispatch should the transmission be made available. This recommendation is currently assigned a low priority and may be impacted by the results of the two-schedule review.

IESO Responses to the Market Surveillance Panel (MSP) Report (Period: November 2005 – April 2006)

Report Date:	2006/06/14	Report:	MSP
Report Origin:	OEB	Report Type:	Public

Recommendation (pg 47)

Status: Pending
Category: Price Fidelity

Recommendation: The Panel recommends work be undertaken by the IESO to be able to relate constraint payments to specific transmission interface limits.

Response(s): Constraint payments arise whenever there is a difference between how the IESO dispatches a resource and how the price setting Market Schedule has used that same resource. When differences occur, they can be for many reasons. The two most notable differences are that the Market Schedule does not consider transmission limitations within Ontario, and the Market Schedule currently uses a three times multiplier for ramp rates of dispatchable facilities. Hence, a constraint payment made to a resource may have been caused by one or more transmission limitations, or by the ramp rate differences. Analysis of the reasons for particular constraint payments to particular resources is very complex and would involve judgement. One of the benefits of locational marginal pricing is that the impacts of transmission constraints will be transparent through the prices.

This recommendation will be revisited dependent upon the outcome of the two-schedule review.

Recommendation (pg 128)

Status: In Progress
Category: Price Fidelity

Recommendation: There is merit in the IESO conducting a review of options to reform the uniform price construct. Locational pricing offers greater efficiency than the uniform price construct.

Response(s): The IESO agrees with this recommendation. The IESO has initiated work based on the Electricity Market Forum's recommendations aimed at improving market efficiency, including reviews of HOEP, Global Adjustment (GA), the two-schedule system and intertie trading. A Request for Proposal (RFP) for this work was issued in February 2013 and a vendor has been selected. The internal work has commenced and will be brought through the stakeholder engagement process.