

June 20, 2012

Ms. Rosemarie T. Leclair Chair & CEO Ontario Energy Board P.O. Box 2319 2300 Yonge Street, 27th Floor Toronto, ON M4P 1E4

Dear Ms. Leclair:

Re: Market Surveillance Panel Monitoring Report

Independent Electricity
System Operator
655 Bay Street
Suite 410, PO Box 1

Toronto, Ontario M5G 2K4

t 416 506 2800 www.ieso.ca

Your letter of May 22, 2012, requests that I advise you of: a) the steps that the IESO plans to take in response to the recommendations made in the Market Surveillance Panel (MSP) *Monitoring Report on the IESO-Administered Electricity Markets* for the period from May 2011 – October 2011, and the estimated timelines for completion of those steps; and b) whether, in the IESO's view, any actions or market rule amendments, in addition to those reflected in or underlying the MSP's recommendations, should be taken or initiated. In addition, your letter requests an update on the status of actions taken by the IESO in response to the recommendations set out in the MSP's previous monitoring report.

The IESO has been requested to address five of the six recommendations in the April 2012 Report, numbered by the MSP as 3-1, 3-2, 3-4, 3-5 and 4-1. A comprehensive listing of the status of recommendations from the current and previous report is appended. The status of active recommendations from all prior MSP reports is also regularly published on our website, and can be found on the IESO's surveillance page at:

http://www.ieso.ca/imoweb/marketSurveil/surveil.asp. Closed recommendations will appear in the status report until the next update.

The most recent MSP recommendations, and related recommendations from the previous report, are discussed below. At this time, in the IESO's view, there are no further actions or market rule amendments that should be initiated beyond those reflected in the MSP report and the Electricity Market Forum report.

Electricity Market Forum

Recommendation 4-1, MSP Report for May 2011 – November 2011
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.

Recommendation 2-2, MSP Report for November 2010 – April 2011

The Panel recommends that the IESO and the Electricity Market Forum investigate increasing the frequency with which interties 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

The IESO agrees with these recommendations. The IESO launched the Electricity Market Forum to consider the issues facing the sector and make recommendations for an actionable plan to evolve the IESO administered markets. In December 2011 the Electricity Market Forum stakeholder group issued a report which contains findings and recommendations for Ontario's electricity sector and will form a basis for further action and discussion among policy makers, regulators and industry participants. The IESO is initiating work on the Forum's recommendations aimed at improving market efficiency, including reviews of HOEP, Global Adjustment, the two-schedule system and intertie trading. Requests for Proposals (RFP's) related to the HOEP and GA recommendations have been posted. Work on the two-schedule structure will be influenced by the results of the HOEP effort and we anticipate initiating this work by the end of the year. The IESO has begun work on the recommendations related to improved trading processes.

Regional Reserve Sharing

Recommendation 3-1, MSP Report for May 2011 – November 2011
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.

The IESO agrees with this recommendation and is continuing to advocate within the relevant NPCC processes, for the reintroduction of regional reserve sharing.

Generation Cost Guarantees

Recommendation 3-2, MSP Report for May 2011 – November 2011 The Panel recommends that the IESO implement a permanent, rule-based solution to eliminate self-induced CMSC payments to ramping-down generators.

The MSP monitoring document which provides guidance to generators regarding offer prices used to signal an intention to come offline has resulted in a substantial reduction in CMSC payments to ramping down generators. The IESO's judgement is that the remaining CMSC amount of \$3-4M of the original \$12M may well be consistent with the cost of efficiency losses that generators incur when ramping down and that removing ramping down CMSC from generator revenues would require an alternate mechanism to allow for generators to recover legitimate losses.

The IESO will conduct a review of the real-time and day-ahead guarantee programs commencing this fall and plans to have recommendations related to issues requiring consideration by the first quarter of 2013. 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.

Transmission Rights

Recommendation 3-4, MSP Report for May 2011 – November 2011

The Panel recommends that the IESO improve its internal controls and external processes to ensure that all information about outages and other relevant contingencies is taken into account when establishing the level of Transmission Rights to be auctioned.

The IESO agrees with this recommendation. Since the event referenced in the MSP Report, the IESO has implemented new processes with the neighbouring jurisdictions to improve communication of outage plans, allowing this information to be considered in the sales of Transmission Rights.

Recommendation 3-5, MSP Report for May 2011 – November 2011
The IESO should ensure that, when a trader which owns Transmission Rights has failed its intertie transactions (at the same interface in the same direction), either the Transmission Right payout should not be paid or the Congestion Rent should be charged for the quantity of the failed transactions.

The IESO agrees with this recommendation. The IESO currently has market rules in place to allow for the recovery of Transmission Rights payouts when the trader fails its intertie transactions, and intends to adjust settlement amounts paid or payable to traders in situations where the trader has failed to schedule the transaction with the appropriate scheduling entity other than for bona fide and legitimate reasons.

Renewables Integration

MSP recommendations 2-1 and 2-3 from the previous report address this matter.

Recommendation 2-1, MSP Report for November 2010 – April 2011

The Panel recommends that the IESO publish the most current aggregate wind generation forecast information that is available. The published information should be updated on an hourly basis and should cover all future hours for which wind generation forecasts are available.

The IESO has begun the market rule amendment process on centralized forecasting publication via MR-00381-Q00/R00 and intends to publish the following information:

Aggregate forecast report

• A 48-hour energy forecast for all variable generation (i.e. all grid-connected variable resources and embedded variable generators >= 5MW): this report will be updated hourly (based on hourly average values), published prior to the dispatch hour.

Individual forecasts

- A rolling 48-hour confidential market participant specific report updated every hour for each of their variable generators available to each market participant prior to each dispatch hour.
- As soon as practicable following each dispatch hour, actual generation capability
 (i.e. the centralized forecast) (MW) and energy production (MWh) for each
 generation facility with a maximum output capability of 20MW or greater will be
 made publicly available via the Hourly Generator Output & Capability Report.

System Status Reports (SSRs)

- Where intermittent generator forecasts are used today, centralized forecasting data for variable generators will be added and will provide a more accurate forecast of future system conditions.
- Messages regarding ramp forecasts will be made available via the SSRs.

The target effective date of the market rules is the fourth quarter of 2012. Updates will be available through stakeholder engagement SE-91.

Recommendation 2-3, MSP Report for November 2010 – April 2011 The Panel recommends that the IESO accelerate its efforts under Stakeholder Engagement (SE-91) to make wind generators dispatchable.

The IESO has begun the market rule amendment process on Centralized Forecasting Integration and Dispatching Variable Generation via MR-00381. The IESO continues stakeholder discussions through SE-91 to develop an enduring solution for the dispatch of variable generation resources. The target is to fully integrate 5-minute dispatch for wind and solar directly connected to the transmission grid into our automated dispatch tool sets by late 2013. Market Rule Amendment Submission MR-00381-Q00 was presented to the Technical Panel at its May 2012 meeting. This amendment proposes to amend the market rules to integrate centralized forecasting for variable generation into IESO operations, and to incorporate the dispatch of all variable generators that are market participants on a five-minute economic basis. Initial amendment proposals related to dispatch under MR-00381 are expected to be approved by the IESO Board as early as November 2012.

Constraint Payments to Dispatchable Loads

Recommendation 3-1, MSP Report for November 2010 – April 2011
The Panel recommends that for the purposes of calculating constrained-on CMSC payments made to dispatchable loads that have bid at a negative price, the IESO should set a new replacement bid price that does not take into account any global adjustment charges. This new price would be higher than the current replacement price of -\$50/MWh.

The IESO has revised the replacement bid price to -\$15/MWh. The calculation became effective on March 13, 2012 for trade date March 7, 2012.

Please do not hesitate to contact me should you have any additional questions on these matters.

Yours truly,

Paul Murphy

Neil Campbell, Chair, Market Surveillance Panel

Attach.

IESO Response Matrix

MSP Recommendations November 2010-October 2011



MSP Report for the period from May 2011 to October 2011 (released April 2012)

Recommendation 3-1

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.

IESO Response

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

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

IESO Response

The MSP monitoring document which provides guidance to generators regarding offer prices used to signal an intention to come offline has resulted in a substantial reduction in CMSC payments to ramping down generators. The IESO's judgement is that the remaining CMSC amount of \$3-4M of the original \$12M may well be consistent with the cost of efficiency losses that generators incur when ramping down and that removing ramping down CMSC from generator revenues would require an alternate mechanism to allow for generators to recover legitimate losses.

The IESO will conduct a review of the real-time and day-ahead guarantee programs commencing this fall and plans to have recommendations related to issues requiring consideration by Q1 2013. 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.

Recommendation 3-4

The Panel recommends that the IESO improve its internal controls and external processes to ensure that all information about outages and other relevant contingencies is taken into account when establishing the level of Transmission Rights to be auctioned.

IESO Response

The IESO agrees with this recommendation. Since the event referenced in the MSP Report, the IESO has and will continue to implement new processes with the neighbouring jurisdictions to improve communication of outage plans, allowing this information to be considered in the sales of Transmission Rights.

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Recommendation 3-5

The IESO should ensure that, when a trader which owns Transmission Rights has failed its intertie transactions (at the same interface in the same direction), either the Transmission Right payout should not be paid or the Congestion Rent should be charged for the quantity of the failed transactions.

IESO Response

The IESO agrees with this recommendation. The IESO currently has market rules in place to allow for the recovery of Transmission Rights payouts when the trader fails its intertie transactions, and intends to adjust settlement amounts paid or payable to traders in situations where the trader has failed to schedule the transaction with the appropriate scheduling entity other than for bona fide and legitimate reasons. Refer to the Market Rules Chapter 3, section 6.6.10A and Chapter 7, sections 7.5.8A and 7.5.8B.

Recommendation 4-1

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.

IESO Response

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Generator Output & Capability Report.

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