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Questions for IESO at Technical Conference Relating to MSP Monitoring Report on the IESO-Administered Electricity Markets for the Period from May 2009 - October 2009 (and previous MSP reports)

Please find below, the IESO's written responses to the Board's questions concerning the recent MSP report.

It is the IESO's position that Congestion Management Settlement Credits (CMSC) are a component of electricity market design and are not relevant for the purposes of the IESO's current fees proceeding. CMSC payments do not impact on the IESO's costs except indirectly insofar as devoting additional work on the matter of CMSC payments or market evolution in general would require additional resources and costs.

CMSC is an important issue and, as detailed below, it has and is continuing to be addressed through market evolution activities including work with the IESO's Market Assessment Unit (MAU), which assists the MSP, and through the market rule amendment process. It is the IESO's position that these are the most appropriate forums in which to address this issue. That being said, the IESO has addressed Board staff's specific questions and would be pleased to meet with members of the Board to discuss this subject in more detail or other market design issues.

1) The MSP has released (or is about to release today) its most recent monitoring report on the IESO administered markets. This report highlights the significant levels of Congestion Management Settlement Credits or CMSC payments which total over \$1 billion since market opening. While CMSC payments are an integral part of the current Ontario market design, the panel reports that many of these are constrained off payments – i.e., payments for generators or importers not to generate or import. In many cases these payments appear to be inappropriate or unwarranted especially in the North West region of the province and particularly as concerns export and import transactions.

Are these issues being addressed in current IESO market evolution and market rule amendment activities? Please provide an update on what actions, if any, the IESO has been taking in this area and what actions it plans to take.

IESO Response

Background — CMSC payments are an integral part of the current Ontario electricity market design which is based on a uniform pricing/two schedule

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system in contrast to a locational based pricing model. CMSC payments are paid for numerous reasons including, ramp rate limitations, transmission limitations, locational reserve requirements, and when facilities are dispatched out of merit for regulatory, safety and equipment related concerns.

In the context of the Ontario market design, CMSC payments are integrated with other fundamental components of the market and serve a number of purposes, including

- Pricing (A) CMSC encourages generators to offer the full capacity of their generation resources notwithstanding transmission constraints that limit the quantity that would ordinarily be scheduled. Without CMSC, these same generators would likely change their offering behavior to offer only the quantities that they would reasonably expect to be scheduled. This would reduce generation supply offered into the market and would have an upward (or in the case of loads and exports downward) pressure on price.
- Pricing (B) The IESO currently employs a 3X (formerly, 12X) ramp rate methodology. The effect of this is that price is not representative of the marginal cost of certain resources when they are ramping up or down. Constrained-on and off payments are accordingly made to those quick-ramping marginal suppliers (i.e., gas generators, some hydro) whose offer prices are not affected by the 3X ramp rate.
- Resource Funding CMSC currently provides revenue streams necessary for certain resources to remain commercially viable. For instance, there are certain resources that are located in areas that are bounded by transmission constraints and that frequently experience oversupply/undersupply. The commercial viability of these resources could be jeopardized if they were frequently constrained off/on without any compensation or with reduced compensation. Any reduced compensation would likely need to be replaced through other mechanisms such as OPA contracts.
- Dispatch Compliance CMSC payments encourage market participants to comply with IESO dispatch instructions. Without CMSC, generators that are constrained off due to transmission limitations would be incented to continue to run in order to receive (higher than cost) uniform market clearing prices. Absent CMSC, compliance with dispatch instructions would need to be regulated through a punitive enforcement system. CMSC therefore contributes to reliability and lower compliance costs.

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Given this integration of CMSC with other components of the market, any elimination, reduction or other change in CMSC may have consequences in other areas. Similarly, elimination or reduction in the amount of CMSC paid out could save consumers CMSC-related costs, but add to consumer costs in other areas (e.g., MCP, OPA contract costs). For these reasons, changes to CMSC cannot be addressed in isolation from other fundamental aspects of the market.

It should be noted that the IESO agrees that a locational based pricing system is more efficient than the current uniform pricing/two schedule system and, as the market and sector evolve, the IESO will consider whether transitioning to a locational based pricing system is advisable (see below).

Actions taken and planned to address CMSC — While CMSC is an integral part of the Ontario market, the IESO continually and actively monitors the nature and extent of CMSC payments to ensure that they continue to be appropriate and warranted in light of changes to the market and the sector. The IESO does this through the MAU (which assists the MSP), consultation with the MSP itself, market evolution activities and ongoing stakeholder consultation. Where the IESO identifies problems or improvements that can be made (or problems or improvements are identified and brought to the IESO's attention by others), the IESO makes changes through the market rule amendment process or through changes in its market manuals and/or procedures.

Some of the changes the IESO has made since market opening to address CMSC include:

- Limiting generator/import offers for the purpose of CMSC to \$0 (June 2003);
- Introducing dispatchable load "self-induced" CMSC clawback provisions (January 2004);
- Moving the market schedule from 12X ramp rate multiplier to a 3X. (September 2007); and
- Transactional coding changes removing CMSC payments for certain causal events (November 2009).

Recently, the IESO proposed a generator "self-induced" CMSC claw back initiative. This is currently going through the stakeholder process prior to a planned Market Rule amendment submission. The purpose of this planned amendment is to eliminate CMSC payments currently being made to generators for operating restrictions within their control and not the result of transmission limitations or other intended CMSC casual events.

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The MSP, through the IESO's discussions with the MAU is aware of this initiative.

With regard to Board staff's specific question as to whether the IESO is taking steps to address the issues referenced in the recent MSP report, the answer is yes - work is currently being undertaken. Prior to the release of the MSP's recent report, the IESO discussed with the MSP/MAU the specific matter of increasing CMSC payments to exporters and dispatchable loads who bid at negative prices and potential solutions. The frequency and magnitude of these payments in the Northwest has increased as load has declined and Ontario exports have increased. Some of the potential solutions discussed with the MSP/MAU are in the process of being incorporated in a rule amendment submission. Similar to the limitation placed on generators/imports, the IESO intends to bring forward rules that will limit the CMSC calculation for exports and dispatchable loads to \$0.

It should be noted, as discussed above, that CMSC is integrated with other aspects of the market and the proposed changes to CMSC payments to exporters/dispatchable loads may have potentially adverse consequences. These will need to be assessed in considering and formulating the rule amendment in order to ensure that the objective of reducing the magnitude of these specific CMSC payments does not trigger other substantial costs or unduly undermine market efficiency or reliability.

Market Evolution — More generally the IESO will be initiating longer term market evolution considerations during 2011 which, in light of recent changes to the sector, may include consideration of additional changes to CMSC, including constrained off limitations, locational pricing opportunities and other matters.

2) Related to the above question, the MSP report indicates that at the Minnesota intertie there are cases where the intertie is import-congested in the unconstrained sequence when in fact there is no actual power being imported. Please explain why this situation is arising and whether or not it is leading to significant costs being borne by Ontario ratepayers. Please also explain any plans or actions, if any, the IESO is taking in regards to the situation.

IESO Response

The above noted references in the MSP report require some background explanation and clarification.

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The referenced section of the MSP report describes a condition where the economic offers from Minnesota exceed the transmission interface capability and thus create congestion in the uniform market schedule. Simultaneously the constrained scheduling system recognizes a constrained transmission interface in Ontario and limits actual flows to 0 MW. In these circumstances, the transmission rights (TR) market will pay TR rights holders when there is congestion in the uniform market schedule regardless of the real-time flows from the constrained sequence. For example, a TR rights holder would be paid "congestion rent" even though 0 MW actually flowed. This is how the TR market is designed to function and, in response to Board staff's specific question, this situation has no impact on Ontario ratepayers.

The TR market is a 'closed' design which is entirely funded by TR rights auction proceeds, and it is designed so that these proceeds are sufficient to fund congestion rents. Specifically, the market is designed so that over time the offset of TR auction revenues and congestion rents maintains a rolling balance of approximately \$20 million. Over time, non-TR market participants (and ratepayers) are therefore not exposed to TR market costs. Similarly, the reference at p. 96 of the MSP report to "paying less rebate to Ontario consumers" is not a potential consequence of the current TR market design. As noted, the market is designed to maintain a rolling balance of \$20 million and to not rebate any surplus to Ontario consumers.

3) The MSP report indicates that at the Manitoba intertie there are significant cases of constrained-off imports Manitoba to Ontario resulting in CMSC payments to Manitoba Hydro totaling approximately \$80 million over the last 7 years — while Ontario has received no power in return. The report also indicates that over the same time frame Manitoba Hydro has been paid about \$3 million for constrained-on exports from Ontario to Manitoba. Please explain how these patterns of payments are arising and any actions or plans the IESO has in this regard.

IESO Response

The constrained-on and off payments referenced above are a result of congestion in Northwestern Ontario — specifically, oversupply that requires constraining-on dispatchable loads/exports or constraining-off generation/imports.

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In the circumstances noted, and assuming the export limit on CMSC is \$0, constraining on exports at one cent is, in fact, cheaper for Ontario consumers than paying constrained off payments to generators or importers at an offer price of \$0. The IESO as indicated earlier is expecting to introduce rules limiting the export/dispatchable load CMSC calculation to \$0. It is worth noting that at present it is our understanding that much of this CMSC has been recovered through the local market power mechanisms.

4) With reference to the MSP report of November 2008 to April 2009 (released July 31, 2009) Appendix 4A (pages 264-272): This appendix contains a list of recommendations that the MSP has made to the IESO. Please indicate whether the IESO responses therein are still current, and, if not please provide any more up-to-date information.

IESO Response

The IESO formally responds to all MSP recommendations, typically within 4-6 weeks of each report, and at the same time updates the responses to the previous recommendations. The IESO responses to the referenced recommendations are up to date.

Further, all recommendations are considered and, if accepted, prioritized along with all other IESO initiatives. Based on this prioritization and resource availability, the IESO then implements the recommendations.