

December 14, 2016

Independent Electricity System Operator

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Ms. Rosemarie T. Leclair Chair and Chief Executive Officer Ontario Energy Board 2300 Yonge Street, 27th Floor Toronto, ON M4P 1E4

Dear Ms. Leclair:

Re: Market Surveillance Panel Monitoring Report

I am writing in response to your letter of November 4, 2016, requesting that I advise you of: a) the steps that the IESO plans to take in response to the recommendation made in the Market Surveillance Panel (MSP) *Monitoring Report on the IESO Administered Electricity Markets* for the period from May to October 2015, and the 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 the MSP recommendations, should be taken or initiated.

The most recent report included three recommendations: one relating to enhancing the transparency and efficiency of the operating reserve market and the two other recommendations call for revisions to the IESO's Real-Time Generator Cost Guarantee (RT-GCG) Program.

Operating Reserve (OR) Prices and Control Action Operating Reserve (CAOR)

Recommendation 2-1, MSP Monitoring Report for May – October 2015:

Given the number of recent changes in the operating reserve market, the Panel recommends that the IESO review whether the real-time operating reserve prices transparently reflect the value of operating reserve as more Control Action Operating Reserve capacity is scheduled, and whether changes to Control Action Operating Reserve offer quantities and prices could enhance the efficiency of the operating reserve market.

The IESO will undertake the recommended review in the new year to assess the issues with the current CAOR structure and identify potential options. I anticipate that IESO staff will complete the review and report back to the MSP by late Q1 2017.

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Real-time Generation Cost Guarantees - Generator Cost Submission Categories

Recommendation 3-1, MSP Monitoring Report for May – October 2015:

The Panel recommends that the IESO eliminate from the Real-time Generation Cost Guarantee program the guarantee associated with: (a) incremental operating costs for start-up and ramp to minimum loading point; and (b) incremental maintenance costs for start-up and ramp to minimum loading point.

Recommendation 3-2, MSP Monitoring Report for May – October 2015:

The Panel recommends that the IESO modify the Real-time Generation Cost Guarantee program such that the revenues that are used to offset guaranteed costs under the program are expanded to include any net energy and operating reserve revenues earned, as well as all congestion management settlement credit payments received, on:

- (a) output above a generation facility's minimum loading point during its minimum generation block run time (MGBRT), and
- (b) output generated after the end of the facility's MGBRT.

Background

Mandatory North American reliability standards require that the IESO's daily Operating Plan demonstrate that adequate resources will be available to meet the expected load plus operating reserve. The RT-GCG program is a key element of the mechanisms that the IESO relies on in developing its daily Operating Plan and preparing for reliable real-time operations.

In particular, the RT-GCG program helps meet daily reliability requirements by incenting participants to start their facilities, be available and offer real-time supply to the market. The incentive is available for generation facilities that meet eligibility criteria to ensure recovery of certain incremental start-up costs, subject to defined revenue offsets.

As noted, the primary goal of the IESO's RT-GCG program is to ensure that generators are available when needed. The IESO is concerned that the Panel's recommendations, which would significantly reduce the incentive structure under the program, could have negative impacts on the program's overall reliability goals, in that the output from some gas-fired units might not be offered into the market in real time, which would, in turn, impact market dynamics and reliability, potentially impairing the IESO's ability to address changing conditions over the day.

The Panel's recommendation to eliminate guarantees under the RT-GCG program for incremental operating and maintenance costs is based in part on earlier versions of the program where eligible payments were limited to fuel-only costs. However, at the time those earlier versions relied heavily on flexible generation to provide the vast majority of the starts under the program (about 80% of starts - of which over half were coal). By 2009, coal fired generation was being replaced by natural gas-fired generation facilities, which have very different operating

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characteristics and risk profiles. This change in the underlying characteristics of the supply mix was amongst the factors that prompted the IESO to make changes to the RT-GCG program, to include the guarantee of certain start-up operating and maintenance (O&M) costs, impose more stringent program eligibility criteria, and place limitations on eligible fuel costs -- all aimed at improving the overall efficiency of the commitments.

<u>Proposed Improvements to the Commitment Process</u>

Given our concerns regarding the potential impact of the MSP recommendations, the IESO is proposing interim adjustments to the processes around unit commitments pending the market renewal initiative outlined below. These proposed changes would ensure that resources scheduled to provide Operating Reserve (OR) in the day-ahead timeframe continue to offer this OR in real-time.

Currently some resources that are anticipated to provide OR based on day-ahead optimization withdraw their offers for OR closer to real-time. This results in the IESO having to commit additional units in real time, many under the RT-GCG, to meet OR requirements. Introducing a mechanism to maintain scheduled OR offers from Day-Ahead into real-time should result in resources with limited real-time OR capability reducing the quantity they offer into the DACP-giving more confidence that the remaining quantities will in fact be available in real-time. This should result in the necessary units needed for OR to be committed more efficiently through the DACP, instead of through the RT-GCG Program.

At the same time, the changes proposed in the current RT-GCG Cost Recovery Framework stakeholder engagement initiative will limit the initial O & M payments referenced in the Panel report by introducing pre-approved cost values that will ensure greater clarity and transparency in the recovery of eligible costs, and reduce the need for time consuming after-the-fact audits and recovery of ineligible costs. To date, these recoveries have amounted to about 25% of the initial amounts claimed under the program.

The IESO expects that the proposed interim improvements to the commitment process can be implemented in 2017, recognizing that they will need to be formally reviewed under the IESO's stakeholder engagement processes.

Market Renewal

The MSP work, both on GCG and other issues, has driven increased focus on the need for market renewal. Simply put, the market design developed in the early 2000's needs to be modernized to support the very different technologies, services and participants in our fast-changing sector. Accordingly, in considering the balance between investing key resources in our current market (for example in working through major changes to programs such as GCG) or in renewing our market design to meet pressing current and future needs, our market renewal program is being given priority.

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The Market Renewal Program will introduce fundamental changes to the energy market, including a re-design of its real-time unit commitment process to achieve reliability objectives in a more efficient manner. Consistent with the feedback that the IESO received from the Panel, all the energy initiatives (Single Schedule, Day-Ahead Market and enhanced real-time unit commitment process) will be undertaken as a single cohesive project rather than as sequenced projects, as originally proposed. That approach will ensure earlier implementation of all components.

Market renewal will be a significant project for the sector and we are looking forward to working with the MSP as it proceeds.

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

Yours truly,

Bruce B. Campbell President & CEO

c: Glenn Leslie, Chair - Market Surveillance Panel