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# Memorandum

To: THE BOARD OF DIRECTORS
of the Independent Electricity System Operator

From: Mike Lyle
Chair, IESO Technical Panel

Date: August 20, 2018

Re: Technical Panel Report
Recommended Market Rule Amendment Proposals

The IESO is seeking a decision from the Board of Directors on the following proposed market rule amendments:

- MR-00433-R00, R01: Demand Response – Notification and Activation of Hourly Demand Response; Hourly Demand Response to the Emergency Operating State Control Actions (EOSCA) List
- MR-00420-R00, R01, R02: Capacity Exports in the IESO-Administered Markets, Settlements, and Transmitter Outages

Also attached for the Board's information, is the IESO's assessment of the impact of the above amendments on the interests of consumers with respect to price, reliability, and quality of electricity service which are required for the Ontario Energy Board market rule amendment review process.

**MR-00433-R00, R01: Demand Response – Notification and Activation of Hourly Demand Response; Hourly Demand Response to the EOSCA List**

Description and Rationale
These rule amendments will increase the utilization of Hourly Demand Response (HDR) resources by reducing the minimum dispatch duration and increasing real-time availability. The amendments will provide greater flexibility and real-time availability by modifying the requirements for standby and activation notices, thereby increasing the value of HDR resources.

In addition, the amendments will eliminate ambiguity regarding the IESO's authority to include HDR resources as control actions on the Emergency Operating State Control Actions (EOSCA) list.

Stakeholder Consultation
The amendment proposals are based on stakeholder consultations as part of the Demand Response Working Group. The proposals were also published on the IESO public website for stakeholder review and written comment for two weeks. No comments were received during the posting period.

Technical Panel Vote and Comments
The Technical Panel unanimously recommended the amendment proposals for IESO Board approval.

Ms. Sarah Griffiths, the "other market participant" representative on the Technical Panel, stated that the demand response community is supportive of making HDR resources available to the system in real time, but has concerns with the standby and activation notices and their deployment. Ms. Griffiths stated that the demand response community will work with IESO staff to prepare for the May 1, 2019 effective date of the notification and activation related amendments.

Recommended Effective Date
The recommended effective date of MR-00433-R00: Notification and Activation of HDR is expected to be in May 2019, upon implementation of the required IT system changes and to align with the start of the delivery period associated with the next DR auction. The IESO will specify the effective date in a notice to all market participants.

The recommended effective date of MR-00433-R01: HDR to the EOSCA List is September 21, 2018.

**MR-00420-R00, R01, R02: Capacity Exports in the IESO-Administered Markets, Settlements and Transmitter Outages**

Description and Rationale
These rule amendments codify a framework for Ontario-based resources to export capacity, as approved by the IESO.

The IESO will continue to assess and determine the need for changes to the capacity exports framework in the future as a result of requirements arising from the Market Renewal Program or from the IESO having entered into capacity export agreements with additional jurisdictions, if applicable.

The amendments will:

- Introduce a new section on capacity exports in the market rules for eligible Ontario-based generation facilities that wish to export their installed capacity to external control areas;
- Specify market participant and IESO rights and obligations for capacity export requests, IESO review of capacity export requests and capacity call processes;
- Specify that called capacity exports will be ineligible for congestion management settlement credits (CMSC);

- Specify instances when a capacity resource will be ineligible for a real-time generation cost guarantee (RT-GCG) and day-ahead production cost guarantee (DA-PCG) payment;
- Enable the IESO to reject or revoke a planned outage to transmission connection facilities that would make a capacity export generation resource incapable of delivering electricity to the IESO-controlled grid, in circumstances where the external system operator determines that the planned outage would result in an unacceptable risk of adequacy shortfall within their jurisdiction, and the outage is unable to be rescheduled.

Background

It is anticipated that Ontario resources will satisfy or exceed expected domestic Ontario capacity requirements until the early or mid-2020s. Additionally, most neighbouring or nearby jurisdictions have auctions and/or contracting mechanisms to secure capacity which could include importing capacity from Ontario. These conditions offer an opportunity for market participants to export capacity determined by the IESO to be surplus to Ontario's needs for specified periods.

More specifically, capacity exports:

- Provide Ontario-based resources an opportunity to monetize capacity not required for Ontario planned adequacy needs during certain periods;
- Offer an alternative to facilities that may otherwise choose to idle or shut down due to Ontario market conditions; and
- Improve the efficient utilization of assets regionally.

Capacity export pilots, as part of the Enabling Capacity Exports initiative, enabled generators on a trial basis to export limited amounts of capacity over limited periods to neighbouring jurisdictions for external reliability purposes. The Capacity Exports initiative will build upon the learnings from the pilots to implement enduring and enhanced design features and will broaden the scope of the initiative. Importantly, the initiative will also continue to ensure that the benefits of enabling Ontario-based resources to export their capacity are appropriately balanced against the overarching need to meet planned Ontario reliability needs and to limit congestion related costs.

Stakeholder Consultation

The amendment proposals are based on stakeholder consultations as part of the Capacity Exports stakeholder engagement. The proposals were also published on the IESO public website for stakeholder review and written comment for two weeks. One set of written comments were received from Ontario Power Generation (OPG). OPG disagrees with the IESO decision to not allow CMSC payments for called capacity exports, and proposes an alternative suggestion to allow partial payments of CMSC to the capacity exporter. The IESO responded that it does not believe that any CMSC should apply to called capacity export transactions because such transactions are different from regular export transactions. The purpose of CMSC is to keep market participants whole by compensating them in certain circumstances where they are scheduled in such a way that they lose operating profit due to a difference between the bid price and the market clearing price. A capacity exporter must bid at the prescribed price in order to receive curtailment treatment as a called capacity export. By choosing to export capacity, the exporter is accepting the commitment that it has made to the external jurisdiction to deliver energy when required regardless of whether the called export transaction itself is economic. Therefore, compensation for lost operating profit through CMSC is not appropriate for such transactions.

Hydro One has also expressed concerns about how the proposed amendments, which enable the IESO to reject or revoke a transmitter's planned outage in limited circumstances, might affect their outage planning. To address these concerns, the IESO held several meetings with Hydro One to develop detailed processes, such that Hydro One can better assess any risks involved with the process, and to increase communications with generators to further reduce the likelihood that an outage may be rejected or revoked. Hydro One was satisfied with the level of detail provided by the IESO on the proposed transmitter outage implementation details.

Technical Panel Vote and Comments

The Technical Panel unanimously recommended the amendment proposals for IESO Board approval. Panel members provided the following rationales in support of their votes:

Ms. Sarah Griffiths (other market participant representative) was appreciative of the extra work done by the IESO to bring the requested market manual content to the Technical Panel.

Mr. David Dent (natural gas representative) commended the IESO for creating an innovative capacity exports process in Ontario.

Mr. Bob Lake (residential consumers representative) commented that the capacity exports process and corresponding rules appeared fair to all market participant classes involved.

Mr. Sushil Samant (generator representative) indicated that he initially had concerns regarding the limited time to review draft market manual content (related to transmitter outages) prior to the Technical Panel vote. However, since the proposed market rules won't go into effect until November following further stakeholdering of market manuals, he felt comfortable enough to vote in favour of recommending the rules for IESO Board consideration.

Mr. Bob Bieler (consumer representative) commented that the capacity exports mechanism balances nicely to provide generators with the opportunity to earn additional revenues, while giving the IESO sufficient control to manage the reliability interests of Ontario.

Mr. Joe Saunders (distributor representative) commented that capacity exports strike a good balance for all parties involved and is a good step forward for the market.

Mr. Julien Wu (wholesaler representative) commended the IESO for providing comprehensive drafts of proposed market rule amendments and supporting material. He noted the need for a strong governance process to ensure the capacity exports process works as intended, noting that different jurisdictions will be involved. Governance will need to be carefully considered within the Single Schedule Market design stakeholdering process of the Market Renewal Program.

Recommended Effective Date

The recommended effective date is expected to be in November of 2018 upon the implementation of required market manual changes. The IESO will specify the effective date in a notice to all market participants.

I recommend that the Board approve market rule amendment MR-00433-R00, R01: Demand Response and MR-00420-R00, R01, R02: Capacity Exports with the effective dates as noted above. Upon your approval, the formal Ontario Energy Board rule amendment review process will be initiated.

Mike Lyle

Enc
Cc: IESO Records