

Market Renewal - Enabling Flexibility

IESO Response to Stakeholder Feedback

The IESO held an Enabling Flexibility stakeholder meeting on August 1, 2017. During this session the IESO provided information on pricing outcomes related to flexibility, described the relationship of near-term solutions bridging to Market Renew elements enabling flexibility and proposed an interim market solution for flexibility. The IESO invited stakeholders to provide feedback on the materials presented.

IESO received feedback from the following stakeholders:

- [HQ Energy Marketing Inc \(HQEM\)](#)
- [Powerful Solutions](#)
- [TransAlta](#)

The IESO has also included a response to feedback received from the previous stakeholder session held earlier this year from the following stakeholders:

- [Atmospheric Energy Systems/David Wilson](#)
- [MIDAC / NextHydrogen](#)
- [Ontario Society of Professional Engineers \(OSPE\)](#)
- [Veresen Inc.](#)

A summary of feedback and the IESO's response (in Italics) is included below.

Stakeholder Engagement Feedback and Responses

HQEM

One of the interties, PQAT, which is already providing operating reserve (OR) in the IESO market, up to a 100MW limit, has been upgraded and is now able to provide operating reserve up to 300MW. This increased capability should be tapped for additional OR and potentially other services.

Currently, the limitation is related to how OR from imports could be activated. The current processes to activate OR from imports need to be enhanced before the amounts of OR from imports can be increased. The IESO is investigating the scope of these enhancements and will communicate updates when available.

TransAlta

On the proposed interim solution to increase 30-minute OR requirements when a 'flexibility' need is expected, TransAlta suggests the following operational needs be considered:

1. Notification period of two hours. This will provide adequate notice for facilities to respond while reducing uncertainty in IESO forecast.
2. Minimum commitment time. The IESO will need to commit units respecting minimum run-time to ensure that participants have sufficient ability to recover costs and earn revenues.

The IESO intends to use the existing commitment and scheduling processes for the proposed interim solution. As such, the notification of the need for flexibility would be in advance of the 3-hour pre-dispatch window for Real-Time Generator Cost Guarantee (RT-GCG) commitment program, the Minimum Loading Points (MLP) and Minimum Block Generation Run Times (MGBRT) of scheduled resources will be respected.

The IESO appears to suggest that cost recovery, as provided through the RT-GCG process, would be sufficient to incentivise generators who would not otherwise be online to provide the required the OR for flexibility. In addition, the generator may be committed incurring losses as the current RT-GCG program, revenues gained in the OR market would offset the start-up costs submitted.

Under the current RT-GCG program, OR revenues are not included in the calculation of the generator cost guarantee settlement.

Further market data is required for market participants to make informed choices about their participation in the proposed interim solution for flexibility.

Additional analysis on the frequency, amount and duration of flexibility need will be presented at an upcoming meeting.

Powerful Solutions

The IESO should seriously reconsider the proposal to increase Operating Reserve, even on an interim basis for the following reasons:

1. It does not address the root cause of price spikes that were said to be due to forecast uncertainty of the timing and variability of VG output,
 2. It uses OR for other than its intended purpose,
 3. It will reduce efficiency and increase costs for all ratepayers.
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1. *Price spikes indicate the value of providing system needs. As discussed in the last meeting, there can be multiple factors contributing to price spikes and price spikes result with the dynamism of a well-*

functioning market. The objective of the Enabling Flexibility Stakeholder Engagement is to determine solutions that enable and achieve system flexibility.

- 2. OR can be carried for multiple purposes beyond contingency and regulation uses. Mark Rules Chapter 5 section 4.5.1.3 allows use of OR for uncertainty.*
- 3. Currently, costs are already incurred for system flexibility. The proposed interim solution aims to improve efficiency, reduce costs, and increase transparency of flexibility need and value.*

Atmospheric Energy Systems

We have a solution that, to the grid, is essentially dispatchable load. It does not seem to fit into the Flexibility discussion. Where should that discussion take place?

As indicated at the last session, the IESO is supportive of technology-agnostic, transparent, competitive market solutions to address flexibility. The participant is encouraged to remain engaged in these discussions.

MIDAC / Next Hydrogen

MIDAC and Next Hydrogen submitted a report which identifies the potential environmental benefits of using electrolyzers to produce hydrogen using Ontario's surplus zero-emission electricity.

Thank you for the report. Currently, the IESO is not seeking proposals or investigating any solution which is resource-specific. One of the principles under the Enabling Flexibility engagement is to look at how market mechanisms can be used to signal flexibility needs in a way that allows the innovation and competition within the market to respond. This report has been posted as feedback on the engagement webpage.

Ontario Society of Professional Engineers

Are the thermal plants currently allowed by the dispatching algorithm to bid more than their design rating at a higher marginal cost? If yes, are they encouraged to bid that additional "stretch" capacity into the market? Can that "stretch" capacity provide the required system flexibility that you need at a lower cost than procuring separate additional flexible assets?

The flexibility sought is from resources that are already on-line or can synchronise to the grid and ramp within 30-minutes. "Stretch" capacity if it has this type of response capability can provide flexibility.

Veresen

Veresen had questions relating to an RFP and its potential contents. As discussed at the last meeting, there is no RFP currently planned; the IESO is looking at market mechanisms to address flexibility in the near term.