

Improving Accessibility of Operating Reserve – Feedback Form

Webinar Date: December 10, 2019

<u>Date Submitted:</u> <i>2020/01/10</i>	<u>Feedback Provided By:</u> Organization: Ontario Power Generation Main Contact: Jin Kim Email: [REDACTED]
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Following the December 10, 2019 Improving Accessibility of Operating Reserve (OR) webinar, the Independent Electricity System Operator (IESO) is seeking feedback from participants on the details of the recommended solution that was presented during the webinar. The presentation can be accessed from the [webpage](#) for this stakeholder engagement.

Please submit feedback to engagement@ieso.ca by January 10, 2020. If you wish to provide confidential feedback, please submit as a separate feedback form, marked “Confidential”. Otherwise, to promote transparency, this feedback will be posted on the engagement webpage unless otherwise requested by the sender.

General Feedback on the Proposed Solution	
Questions	Feedback
Is the high-level design of the proposed solution clear and understandable?	Yes, the high level design of the proposed solution is clear.
Is there any other information you require to understand the scope and impact of the proposed solution?	No
How will the proposed solution result in changes to your OR participation, if any?	<p>The bulk of OPG’s OR originates from hydro-electric stations where the max capability, which underpins both energy and OR offers to market, is estimated based on a forecast of hydro conditions and forebay elevation. In addition, some hydro-electric resources require the use of the river compliance deadband to manage minor deviations in river flows in real-time. Due to the uncertainty of water forecasts along with the constant variation in the necessary use of the compliance deadbands in response to real time conditions, some hydro-electric resources may need to offer OR in a more conservative manner to ensure full compliance with the IESO’s proposed ORA performance requirements (slides 29 & 30 of Dec 10, 2019 Stakeholder Engagement Session).</p> <p>OPG believes that if the IESO’s proposed ORA performance requirement is implemented, it may result in a reduction of OR offered into the IESO market in order to remain compliant with the proposed changes. It is important to note OPG’s hydroelectric generators physically cannot output beyond their maximum capability. This effectively limits the provision of any portion of incremental energy beyond the generator’s max capability when the generator output is greater than the energy schedule (Scenario B, slide 29 of Dec 10, 2019 Stakeholder Engagement Session).</p>

Are there modifications to the design of the proposed solution that the IESO should consider?

It is OPG's opinion that enforcing the proposed ORA performance requirements may, for some generators, decrease or constrain participation in the OR market (see above for details).

On [IESO's response to feedback received](#) dated Aug 15, 2019, the IESO stated the following:
"1. A review of the compliance deadband and any required changes to applicable Interpretation Bulletins or Market Manuals are not within the scope of this stakeholder engagement."

OPG believes that before the proposed ORA performance requirements are implemented, there needs to be a comprehensive review of the compliance deadband. This will require changes to any applicable Interpretation Bulletins or Market Manuals. It is OPG's view that the proposed ORA performance requirements and compliance deadband (an existing market mechanism to allow operational flexibility) are heavily dependent on each other.

When software tools are revised under Market Renewal, the IESO should consider changing its dispatch tool to calculate the actual incremental energy a generator can provide during an ORA event, and issue that dispatch signal. The IESO's dispatch tool should be aware of each generator's current energy output, including the compliance deadband, and the generator's OR offers. The IESO dispatch tool is in the best position to calculate the lowest cost solution of required 'incremental dispatch' quantity for an OR activation.

If the IESO cannot change its dispatch tool to determine the incremental energy during an ORA event, the IESO should not implement the proposed ORA performance requirements. However, OPG agrees with implementing the proposed claw-back mechanism.

Providing the Required Amount of Incremental Energy	
Questions	Feedback
Are there Market Participant (MP) tool or process changes needed to determine the amount of incremental energy required during an ORA? If changes are required, please provide high-level estimates on the timeline for the changes.	<p>Currently, OPG’s Energy Dispatch System (EDS) software tool does not have the capability to track the generator’s output moments before the ORA is issued in order to calculate the proposed incremental energy requirement during an ORA. Given the number of generators OPG operates through its control centres distributed across the province, a major IT project involving multiple OPG facilities would need to be undertaken. OPG estimates that this process could take around a year to implement.</p> <p>In addition, a business case to evaluate and justify cost recovery for any such software project expenditures would be required prior to undertaking such a software tool change.</p> <p>The IESO should consider the cost and the time burden that it imposes on the Market Participants to track the incremental energy required to stay compliant with the proposed ORA performance requirements. OPG believes it may be more cost effective for the ratepayer if the IESO developed the capabilities through its dispatch process to determine the amount of incremental energy required during an ORA event and translate this to the ORA dispatch target amount for respective generators and dispatchable loads.</p>
Claw-back Mechanism	
Questions	Feedback
Is the claw-back mechanism clear and understandable?	Yes, the claw-back mechanism is clear and understandable. OPG agrees with the IESO in implementing the claw-back of OR payments related to inaccessible OR.
Is there anything the IESO should consider when undergoing a more thorough assessment of the impacts of the claw-back mechanism?	No other comments