

February 13, 2020

To: Market Development Advisory Group (MDAG)

Re: Increasing Competition in Ancillary Services through Regulation Service Procurement

Questions asked by the MDAG:

- 1. Feedback on IESO's previous procurements for Regulation Service, or others? Aspects that worked well and should be considered again? Aspects that should be re-examined with stakeholders?
- 2. Does the proposed approach provide certainty to new resources to enter the market?
- 3. Any additional features that the IESO should examine to strike a balance between meeting reliability needs and fostering new participants?
- 4. What considerations should be included to ensure we meet our goal of transitioning Regulation Service into the market?

Introduction

 Energy Storage Canada (ESC) is interested in working collaboratively with the IESO to create greater opportunities for energy storage resources to compete on a level playing field in the ancillary markets.

Question #1: Feedback on Previous Regulation Service Procurements

- It is important to ensure that proponents will be prepared to deliver on their proposals by
 requiring a sufficient level of security to be posted. This is especially important for new-build
 generation facilities, or for adding AGC capability to existing generation facilities. The LRP I and
 II security requirements that involved Bid Security, followed by Performance and Completion
 Security was a good model.
- The 2017 Regulation Procurement was based on providing proponents with a fixed availability payment regardless of how the system was actually operated in response to the AGC signal. This forced proponents to assume a certain operating profile and include the costs associated with that operating profile in their bid price for availability. This type of structure forces proponents to assume a high level of operational risk, which will increase bid prices because proponents will tend to assume a conservative operating profile. IESO could reduce availability bid prices by providing a specification for the how the system would be operated (e.g. maximum number of cycles per day) or by providing a variable payment based on energy throughput.
- The penalty for failing to achieve COD should include forfeiture of the aforementioned Bid Performance and Completion securities, unless unforeseeable circumstances are established to justify the failure.

Question #2: Providing Certainty to New Resources

- While Energy Storage Canada appreciates that the IESO is taking a step in the right direction in attempting to remove barriers to energy storage deployment and recognizing the valuestacking potential of Energy Storage, the proposed short-term (12-month duration) procurements of Regulation Services will not – on their own - drive investment in the deployment of Energy Storage in the market. The IESO should provide additional certainty to new Regulation Services resources by lengthening the proposed contract terms.
- Revenue certainty not just from Regulation Services, but in combination with other market
 activities is required to justify deployment of Energy Storage. It is difficult to build and finance
 a strictly merchant Energy Storage facility to competitively provide Regulation Services, which is
 its sole revenue source, when competing against resources that receive contracted energy rates
 while leveraging existing facilities that enable Regulation Services.

Question #3: Additional Features to Help Foster New Resources

In order to incentivize the development of new Energy Storage to meet reliability needs, the IESO should consider:

- Providing a period of revenue certainty for new Energy Storage resources that de-risks proponents capital investment. A longer forward period is needed to be able to incent new facilities so that they can obtain a multi-year contract. For example, in the proposed schedule contracts would likely be fully executed in Nov/Dec 2020. It generally takes a minimum of 2 years (or more depending on the technology type) to build a new facility. If a new facility takes 2 years to be built and reach in-service, then it would reach in-service in Nov/Dec 2022 and therefore only be able to be bid for the 2023 period. A one-year contract would likely not provide enough incentive for proponents to build a new facility.
- Advancing market opportunities that explicitly value the multitude of services Energy Storage can provide and incentivize the flexible deployment of those Energy Storage facilities.
- The timing of the Capacity Auction and Regulation procurement should be aligned to permit resources to bid/offer in both processes to the benefit of both consumers and resources through value stacking.

Question #4: Ensuring the Transition of Regulation Services into the Market

- Expedite the removal of barriers within IESO's control as identified by the IESO's Energy Storage Advisory Group to ensure Energy Storage resources can compete on a level playing field.
- The plan to evolve Regulation Service into the market is a lofty goal but one that could be successful if in the interim new emerging technology resources are incented to participate in all market products through reduced barriers.
- New merchant Energy Storage resources are competitively disadvantaged in the provision of ancillary services as they are restricted to commit on a monthly basis to participate as a selfschedule resource when providing Regulation Services thereby restricting access to other market revenues.

In addition, new merchant resources are competing with incumbent assets receiving either
regulated rates for their energy or compensation for their investment in the provision of
capacity. Starting from this economic and market disadvantage it is difficult to envision
investment in new Energy Storage without significant improvements in the market structure.

Conclusions

• Energy Storage Canada is encouraged the IESO is evaluating the current Ancillary Services procurement process and specifically enhancing Regulation Services procurement. We look forward to working collaboratively with the IESO to ensure its successful implementation.

Sincerely,

Justin Wahid Rangooni, LL.B.

Executive Director

Energy Storage Canada