Energy Storage Design Project – Feedback Form

February 18, 2020

Date Submitted: 2020/03/03	**Feedback Provided By:** Company Name: Energy Storage Canada _____ Contact Name: Justin Rangooni _____ Contact Email: [redacted] _____

Following the February 18, 2020 Energy Storage Advisory Group (ESAG) meeting to discuss the Energy Storage Design Project, the IESO is seeking feedback from participants on whether the Interim Design Features presented within the design document offer pragmatic solutions for the participation of energy storage in IESO Administered Markets in the near term. The IESO will work to consider feedback and incorporate comments as appropriate and post responses on the engagement webpage.

The referenced presentation and design document can be found under the February 18, 2020 entry on the ESAG webpage.

Please provide feedback by March 3, 2020 to engagement@ieso.ca. Please use subject: *Feedback: Energy Storage Design Project*. To promote transparency, this feedback will be posted on the ESAG webpage unless otherwise requested by the sender.

Thank you for your time.

Topic	Feedback
Design Feature Self-Scheduling 1 – Maintain current capacity limit of 10 MW for Self-Scheduling energy storage resources in the real-time energy market	- This rule is consistent with the current rule for generation and should be reviewed if the capacity limit of generators is reviewed
Design Feature Self-Scheduling 2 – Raise current capacity limit of 10 MW for Self-scheduling energy storage resources providing regulation service only	- As a temporary measure this would provide an opportunity for storage resources larger than 10 MW to pursue regulation obligations
Design Feature Facility Registration 1 – Registration of self-scheduling energy storage facilities providing regulation service only	- No comment
Design Feature Facility Registration 2 – Registration of self-scheduling energy storage facilities in the real-time energy market	- No comment
Design Feature Facility Registration 3 – Registration of dispatchable energy storage facilities	- There may be benefits to the market and participants to have the ability for a storage facility to be dispatchable as a generator and non-dispatchable as a load. Is the IESO open to looking at this option?
Design Feature Prudential Security 1 – Prudential Support Obligation for market participants with energy storage facilities.	- No comment

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Design Feature Day Ahead Commitment Process 1 – DACP data submission requirements for each class of interim energy storage participation	- The approach aligns with current resource DACP participation requirements although how will Operating Reserve (OR) offers be managed? Should the market participant offer OR on both resources or only on one? And if only on one resource would it be on the generator or load?
Design Feature Day Ahead Commitment Process 2 – No overlap rule for bids and offers into the DACP for energy storage facilities	- Seems appropriate.
Design feature State of Charge 1 – Restriction against overlapping or equal bid/offer prices	- Seems appropriate
Design feature State of Charge 2 – Addressing potential changes to SoC-limited bids and offers	- The State of Charge (SoC) methodology as laid out seems appropriate. Discussions on the future automated management of SoC will need to be discussed within the context of designing future market tools
Design Feature Operating Reserve 1 – no simultaneous offers of operating reserve from the two resources comprising a dispatchable energy storage facility	- This seems appropriate as an interim process
Design Feature Operating Reserve 2 – Operating reserve requirements specific to a dispatchable load resource comprising a dispatchable energy storage facility	- Energy Storage Canada (ESC) recognizes the importance of OR and acknowledges the need of the IESO to ensure resources participating in the OR market can provide the energy needed upon activation and therefore accepts the restrictions placed on this feature and the following restriction on generation resource. These restrictions emphasize the need to

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	implement a solution such that energy storage may provide the benefits to the system that have been recognized
Design Feature Operating Reserve 3 – Operating reserve requirements specific to a dispatchable generator resource comprising a dispatchable energy storage facility	- See above

General Comments/Feedback:

Energy Storage Canada appreciates the opportunity to provide feedback on the Draft Design Document. The interim measures laid out within the document will provide clarity on how energy storage facilities will participate within the limitations of the current market design and functionality. These temporary processes should have a very limited lifeline and ESC continues to emphasize the need to expedite a lasting solution through a combination of tools and rules enhancements. While it is important to meet the short-term needs of energy storage facilities currently participating in the IAM, inclusion of the long-term energy storage solution in Market Renewal would address the needs of the grid while achieving the full benefits of these resources. ESC looks forward to working with the IESO and market participants to expedite the elimination the barriers and permit optimum participation of Energy Storage resources.