

Energy Storage Design Project – Feedback Form

July 23, 2020

<u>Date Submitted:</u> <i>2020/08/13</i>	<u>Feedback Provided By:</u> Company Name: TC Energy Contact Name: Charles Conrad Contact Email: [REDACTED]
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In light of the additional information provided in the July 23 Energy Storage Advisory Group (ESAG) presentation, the IESO is again seeking stakeholder feedback on whether the State-of-Charge (SoC) Management Lite proposal offers a pragmatic solution for the participation of energy storage in the IESO-Administered Markets in the long-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 July 23, 2020 entry on the [ESAG webpage](#).

Please provide feedback by August 13, 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
<p>State-of-Charge (SOC) Management: The IESO has proposed an SoC Management Lite approach that will provide the same market access as a generator and account for the practical operating realities of a storage facility</p>	<p>TC Energy believes the preliminary design presented by the IESO for SOC-Management Lite is a pragmatic solution to integrate energy storage resources into the IESO-Administered Markets (IAM). At this stage of the design process, TC Energy supports the direction and framework the IESO is following, including mandatory state of charge telemetry and the prevention of infeasible dispatches.</p> <p>That being said, TC Energy continues to recommend that further enhancements and evolutions be considered. First, TC Energy believes that a final decision on SOC management selection at this stage of the storage design process is premature, and that the IESO should continue to explore further enhancements. For example, the IESO could consider additional features that would allow for close to ISO-SOC Management for large critical storage facilities.</p>

General Comments/Feedback:

It would be helpful at this stage for the IESO to clearly lay out the next stages in the storage design process. At a high level, and borrowing from the Market Renewal Program (MRP) approach, TC Energy views the decisions on SOC Management and other long-term design decisions as “Preliminary Design Decisions”. The next stage would be to prepare and stakeholder a High-Level Design (HLD) that would detail the tool selection, market participation requirements and integration needs to fit with the redesigned IAM through MRP. As with MRP, preliminary design decisions in the Storage Design Project (SDP) could be adjusted, amended or reversed in the transition to the HLD, depending on stakeholder feedback and analysis, as well as the IESO’s own analysis. From there, the IESO could consider detailed design decisions that would describe how the market design, rules and manuals will change to meet the objectives and conclusions of the SDP. The MRP has operated for over 3 years and a similar timeline may be required to implement the changes discussed in the long-term SDP. If this is the case, the IESO should establish a timeline as early as

possible to manage expectations with stakeholders. In addition, and perhaps more importantly, the timeline should be established soon to target alignment with the conclusion of the implementation of MRP. Waiting for MRP to conclude to start the next stage of SDP will needlessly delay fundamental design changes that are required to fully integrate energy storage resources into the IAM. The conclusions of the long-term phase of the SDP in 2020 is an excellent starting point, but further work is required in 2021 and beyond to implement the changes after MRP has concluded.