

Feedback Form

Long-Term 2 RFP | Deliverability Guidance Document | April 18, 2024

Feedback Provided by:

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To promote transparency, feedback submitted will be posted on the Long-Term RFP engagement page unless otherwise requested by the sender. If you wish to provide confidential feedback, please mark "Confidential".

Following the LT2 RFP Guidance Document webinar on April 18, 2024, the Independent Electricity System Operator (IESO) is seeking feedback from participants on the items discussed during the session. The presentation material and recording can be accessed from the [engagement web page](#).

Please submit feedback to engagement@ieso.ca by May 3, 2024.

Guidance Document: Readability and Layout

Topic	Feedback
Do you have any advice or feedback on the style, layout and overall readability of the April 2024 Deliverability Guidance Document released by the IESO?	No Comment.

Guidance Document: Content

Are there any specific areas of the Deliverability Guidance Document that you would like to provide feedback on from a technical and/or content-specific point of view?

If so, please be as specific as possible in your feedback and consider using page numbers and content title where possible to ensure the IESO can consider your feedback accurately

Yes. In general, we at Tesla believe the IESO team could unlock significant ratepayer benefit by analyzing how the BESS resources it has procured through the Oneida Energy Storage Project, the E-LT1 as well as the BESS resources it may choose to procure in LT1 and LT2 can alleviate many of the grid restrictions it has identified in this report.

The Tesla Megapack BESS systems being deployed at multiple sites across Ontario possess a technical capability to make a positive contribution to solving many of the grid restrictions identified in this report and unlocking more hosting capacity for renewables. Their effectiveness in this regard has been validated through their large-scale employment by other grid operators dealing with the challenges of integrating high levels of Inverter Based Resources (IBRs) onto their grids such as the Australian Electricity System Operator and the Hawaiian Electrical Company.

Our specific feedback is as follows:

1. Section 2, 3, 5 and 7 (Congestion, line, or node capacity): BESS systems can help offset peak transfers across the zone, line, or a station thereby increasing the renewables hosting capacity.
2. Section 3, 5 (transfer limits): In the case that the transfer limits are voltage related. This allows them to help support the voltage thereby helping increase the line transfer limits. This application of grid forming BESS has been explored in some markets like MISO. Tesla Megapack BESS Systems can set their inverters to Grid Forming Mode by using installed software at no extra cost.
3. Section 4 (IBR stability and SSR/SSCI concerns): Tesla's BESS systems are stable down to SCR=0 and can be tuned to provide damping to frequency related controls interactions. Additionally, our BESS systems can have software filters to damp out circuit resonance issues related to SSR with series compensated lines.
4. Section 6 (short circuit and protection): For the situations where fault current is marginally above the circuit breaker ratings, the fault

Topic	Feedback
	<p>current can be set in the software down to 1pu. For the situations, where there is a concern of differential protection mis-operation, the Megapack's Grid Forming Mode can be helpful because it can inject instantaneous surge current with correct phase relations to voltage leading as required by the protection systems.</p>
<p>Do you find the preliminary connection guidance information sufficient for your siting needs? If you feel more information is required, please be specific on what other information you would find useful.</p>	

General Comments/Feedback:

The technical capabilities offered by BESS systems, particularly Tesla's Megapacks with its Grid Forming Inverters, are an untapped resource that the IESO should carefully consider employing to resolve a variety of constraints on the grid and potentially unlock more renewable energy hosting capacity. These solutions are being connected to Ontario's grid and are already being relied upon by other grid operators globally. Tesla's Power Systems team has extensive experience working successfully with grid operators to bring these solutions to market and would welcome the opportunity to share more information on these capabilities and work collaboratively with the IESO and project owners in Ontario to bring this solution to the Ontario market.