Feedback Form

Enabling Resources Program (ERP) - Storage and Co-located Hybrid Integration Project

Meeting Date: July 24, 2025

Feedback Provided by:

Name: Ravi Pinnelli

Title: Founder & President

Organization: Charge Power Inc

Email: ravi.pinnelli@chargepowerinc.com

Date: 02 September 2025

*Following the **July 24, 2025**, engagement webinar, the Independent Electricity System Operator (IESO) is seeking feedback on the items discussed during the webinar. The presentation and recording can be accessed from the engagement web page.*

Dear Engagement Team,
Please find attached our feedback regarding Storage/Hybrid project specifically pertaining to the SoC limits. We understand that our response has been delayed, we apologize for the same. Hope our input will help in further refinement and development of BESS projects and market in Ontario

I am happy to clarify any queries.

Best Regards,

Ravi,
Charge Power Inc

Storage/Hybrid Project Feedback:

Topic	Feedback
Exceeding Min/Max SoC limits: Do you anticipate needing to exceed min/max SoC limits for specific market opportunities, or just maintenance and what are the typical min/max limits – is this a fixed/static value that can be derived for registration? Frequency and magnitude of exceeding these limits? Are there equipment concerns from this, what are the specific concerns (faster equipment aging/degradation, other)?	During normal operations, the asset will be operated within warranty specified SoC limits. Typically this is between 5%(Min) to 95% (Max). Since SoC is a calculation, the % is dependent on the cell voltages. During registration, the SoC values are derived from system specifications. These are further tuned during commissioning stage and optimized for maximum performance. These limits may need to be adjusted on annual basis based on State of Health (SoH). If the limits are exceeded for any ad hoc reasons, main concerns would be warranty compliance, faster degradation (only in case of prolonged operations) as well as system voltage imbalances. The latter is a system performance concern and may impact normal operations. For instance, leaving the system at low SoC for longer duration impacts each cell differently and with self balancing mechanisms some battery modules will disconnect and require manual charging to put back in service. Similar condition can be observed at higher SoC with cells charging at different rates (due to CCV) which may result in voltage imbalances. During annual maintenance, for conditions like cell or rack balancing, individual units maybe operated locally. In this case, Min/Max SOC limits could be exceeded based on manufacturer balancing requirements.

General Comments/Feedback

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