

Feedback Form

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

Meeting Date: October 16, 2025

Feedback Provided by:

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Date: October 30, 2025

Following the **October 16, 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.

Please submit feedback to engagement@ieso.ca by October 30, 2025. If you wish to provide confidential feedback, please submit it as a separate document, marked “**Confidential**.” Otherwise, to promote transparency, feedback that is not marked “Confidential” will be posted on the engagement webpage.

Storage/Hybrid Project Feedback:

Topic	Feedback
<i>October 16th Presentation Material:</i> Do participants have any questions or comments based on the presentation material?	Please see section below

Topic	Feedback
Optimization Design Memo: Are there any significant concerns with the information included in the Optimization Design Memo?	Please see section below

General Comments/Feedback

Energy Storage Canada (ESC) appreciates the opportunity to provide feedback on the Independent Electricity System Operator's (IESO) October 16 webinar on the Enabling Resources Program (ERP) and its associated *Optimization Design Memo*.

ESC supports the IESO's continued efforts to integrate energy storage into Ontario's electricity market and recognizes the importance of the ERP in enabling a single, streamlined model for participation. These reforms are essential to realizing the full operational and economic potential of energy storage in supporting system reliability and affordability.

At the same time, ESC members have identified several areas within the ERP design that could create barriers to efficient operation, fair competition, and long-term investment certainty. This submission outlines those concerns and offers constructive recommendations to ensure the ERP delivers on its objectives while aligning with best practices from other leading jurisdictions.

Regarding the ERP consultation, the following are the key issues identified by Workbench that we think ESC should pay particular attention to:

Ramp Rate Restrictions

ESC is concerned that the proposed 100 MW/min ramp rate limitation for energy storage dispatches is arbitrary, unsupported by analysis, and inconsistent with the capabilities and performance of battery storage technologies. Limiting ramp rates in this way undermines efficiency and competitiveness by preventing storage from responding quickly to dispatch instructions.

Internal analysis by ESC members indicates that such restrictions could materially reduce market revenues and diminish the cost-effectiveness of storage projects, ultimately leading to higher costs for ratepayers through contract adjustments.

The IESO has stated that ramp rate limitations are required to manage Area Control Error (ACE) but has not provided supporting evidence that storage resources are the source of these challenges. Other factors, such as load forecasting errors and non-dispatchable demand variation, are far more likely contributors.

ESC recommends that the IESO:

- Publish the analysis linking storage ramp rates to ACE challenges;
- Reassess the 100 MW/min restriction based on actual system data; and
- Explore using energy storage resources themselves as part of the solution to manage ACE, including through enhanced frequency regulation products.

These changes would align with the IESO's stated design principles of efficiency, competition, certainty, and transparency.

State-of-Charge (SoC) Management

The IESO's proposed Initial State of Charge (ISoC) parameter creates a financial risk for storage owners which can not be mitigated. This is a fundamental flaw with the current proposal. The IESO is pushing all risk to the storage owners, despite the issue being out of the storage owners' control.

ESC continues to recommend that the IESO establish a voluntary opt-out mechanism for State-of-Charge management within the IAM. Allowing storage facilities to self-manage their SoC — as practiced in other ISO markets such as NYISO — would provide needed flexibility for resources to optimize operations, protect warranties, and ensure efficient participation in both the day-ahead and real-time markets.

Mandatory SoC management risks creating inefficiencies and financial misalignment between system schedules and project-level economics. Offering a voluntary option would enhance competitiveness and ensure more accurate market outcomes without adding system risk.

Coordination with IESO Contract Management

ESC strongly encourages the IESO to integrate its Contract Management team directly into ERP stakeholder engagement and market rule development. ESC suggests that the engagement process must include feedback and consideration of impacts to existing contract structures. To avoid significant issues down the line, the IESO market rules team must not ignore contract impacts. In the past, this has been an issue.

Changes to market design inevitably intersect with the terms and operation of IESO contracts. Engaging contract management staff alongside market design personnel would allow for early identification of misalignments, improved clarity for participants, and reduced need for future amendments.

ESC recommends that the IESO host joint sessions with both ERP design and contract management teams to ensure consistent understanding and coordination across all affected parties.

Multiple Market Participation Units

Several energy storage facilities have been structured with multiple generation and load resource IDs under a single point of connection. This creates operational and compliance challenges, as these units are typically controlled by a single site controller and cannot independently follow multiple dispatch signals.

While the IESO's proposal for "Compliance Aggregation" is a step in the right direction, the current ± 15 MW tolerance band may be insufficient. ESC recommends that the IESO further clarify how multi-unit facilities will be dispatched, measured, and settled, and ensure flexibility that reflects operational realities.

Internal Service Load (ISL) and Round-Trip Efficiency (RTE)

ESC supports reasonable data validation requirements but encourages the IESO to ensure flexibility in reporting ISL and RTE values, given that both are influenced by environmental conditions and system operation.

ESC recommends that market participants be permitted to update ISL and RTE submissions on an hourly or daily basis up until the submission deadline to reflect real-world performance. Additionally, ESC requests that the IESO clarify how RTE values will be used within SoC management and availability assessments.

Energy Storage Canada appreciates the IESO's continued engagement on the Enabling Resources Program and its recognition of storage as a critical asset in Ontario's evolving electricity system.

ESC looks forward to continued collaboration with the IESO to advance these shared goals.