# Feedback Form

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

## Meeting Date: July 24, 2025

### Feedback Provided by:

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Date: Aug 14, 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.

**Please submit feedback to** engagement@ieso.ca by **August 21, 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.

## General ERP Feedback:

| Topic | Feedback |
|---|---|
| Feedback on the engagement approach, meetings, or the S/H Project in general? | Engagement approach and meeting frequency are supported fully by Oneida Operations. The S/H Project is a necessary step in getting the IESO's market rules and tools updated to better incorporate Hybrid and ESF. |

## Storage/Hybrid Project Feedback:

| Topic | Feedback |
|---|---|
| *Telemetered SoC:*<br>Required for calculations in PD and RT timeframes. This value is expected to inform the IESO of the injection capability of the resource in MWh and therefore should account for any losses. Current performance requirements will continue, with data sent every 4 seconds to the IESO.<br>Do MP's have concerns or foresee challenges with this requirement? | There is no concern on the ability to implement this Telemetry point from site to the IESO. Further clarification on how it feeds into RT dispatch optimization and considerations of how this telemetry point will be used to ensure ESF's are dispatched economically/for reliability reasons would be beneficial. |

| Topic | Feedback |
| --- | --- |
| *OR Offers:*<br><br>Are there concerns about OR provided by storage being branched from withdrawal to injection? | Branched OR offers would act as a large benefit to both IESO's reliable operation of the grid, and to MP's to fully utilize their facilities capabilities in the OR market. Being limited to only 5 PQ pairs makes creating offers that will act competitively in the RT market difficult. Further clarification on how the dispatch engine will view the offers while injecting in order to limit the quantity amount are needed – current market rules/MPM do not support these offers. |
| *Ramp Rates:*<br><br>Do you have feedback on the 100 MW/min static ramp rate and utilizing a standardized approach to dispatch? | A static ramp rate applied to all ESF's does not allow individual facilities to capitalize on their full potential; limiting their ability to respond to interval level price signals. Our hope is the IESO continues to improve CR's ability to manage fast responding resources and subsequently increase the MW/min response of all resources. |
| *CycleDEL:*<br><br>Is CycleDEL sufficient to limit the cycling for storage in Phase 1?<br><br>What is the expected default setting? | CycleDEL as a replacement for MaxDEL used in the current market will eventually be a benefit; specifically IF it can be passed into the RT to prevent further dispatches regardless of what the telemetered SoC is. Without changing how PD scheduling is passed into RT, or the ability to alter what the MWh's define a CycleDEL(see response to Min/MaxSoC below) there is very little benefit to using CycleDEL over MaxDEL current being used by scheduling systems. |

| Topic | Feedback |
| --- | --- |
| *Exceeding Min/Max SoC limits:*<br><br>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?<br><br>Frequency and magnitude of exceeding these limits?<br><br>Are there equipment concerns from this, what are the specific concerns (faster equipment aging/degradation, other)? | Min/Max SoC limits will change constantly, and having them as a registered value that needs to be derated is extremely onerous, creates an incorrect value for the proposed CycleDEL, and does not allow for a accurate market scheduling in either DA or PD. The Absolute MaxSoC value mentioned in the presentation should exist as registration values – and having a MinSoC value during registration as well would be helpful. It is our belief that these Min/Mar SoC limits should exist as Daily Dispatch Data, which would allow the facility to give proper market inputs dependent on what the planned site activities are. Derates should be used to limit operating capabilities (i.e. MW's capable of injecting) and not be counted on to complete scheduling activities. |

| Topic | Feedback |
|---|---|
| *Derates:*<br><br>Do you have feedback on the derates that the IESO is considering; specifically, what requirements need to be set ensure that these are used sporadically?<br><br>Will there be separate derate values for injection and withdrawal?<br><br>Will MPs need to derate their SoC limits? Does this only require update to max SoC limit which will result in overall SoC reduction?<br><br>How frequently does the MP need to update the round-trip efficiency? | It is most likely that MP's will derate and change Max SoC point. Because of the reasons behind a derate, it is anticipated that both the load/injection MW amount would need to derates co-currently – so a single derate would suffice. Round trip efficiency would expect to be updated yearly – easiest way would be to update after the IESO capacity checks and only be derated under extreme conditions. |
| *Uprates:*<br><br>Any feedback on this concept of utilizing "uprates" to support maintenance?<br><br>Any conditions or requirements that the IESO may need to consider when developing its process to allow uprates?<br><br>Are there any other operational or market participation considerations that need to be considered? | Click or tap here to enter text. |

## General Comments/Feedback

There may need to be further exploration on how Reference Levels for providing OR will be calculated so they can consider the degradation of charge over time as well as the lost energy revenue while providing this service. The current workbooks are lacking when trying to consider how an ESF functions. We hope that the ERP might consider trying to make changes to the mandatory window regarding BESS facilities. A shortened timeframe for changes to

bids/offers would allow the fast-responding BESS to be better utilized and position itself to react to RT conditions and ultimately benefit the market and grid reliability. It is hard to make decisions 3 hours out with a resource that only has a 4 hour maximum discharge capability.