

# Feedback Form

## Hybrid Integration Project – April 21, 2021

### Feedback Provided by:

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Following the April 21, 2021 webinar on the Hybrid Integration Project, the IESO is seeking feedback from participants on the proposed definitions, stakeholder information needs, the timelines and deliverables, and the engagement plan objectives and approach. The IESO will work to consider feedback and incorporate comments as appropriate and post responses on the engagement webpage.

The referenced presentation can be found under the April 21, 2021 entry on the [Hybrid Integration Project webpage](#).

**Please provide feedback by May 12 2021 to [engagement@ieso.ca](mailto:engagement@ieso.ca).** Please use subject: *Feedback: Hybrid Integration Project*. To promote transparency, this feedback, if provided in an AODA-compliant format (e.g. using this form) will be posted on the [Hybrid Integration Project webpage](#) unless otherwise requested by the sender.

Thank you for your time.

## Proposed definitions

Topic	Feedback
<p>Does the proposed definition of 'Co-located Facility' make sense? Is there anything further that should be considered?</p> <p><i>"A combined facility consisting of electricity storage and generation facilities located behind a single connection point, that participates in the IESO markets as separate resources."</i></p>	<p>ESC agrees this definition makes sense.</p> <p>We suggest that the IESO clarify that 'Co-located Facilities' would be eligible to participate in Capacity Auctions, energy market, OR markets, and provide other ancillary services.</p> <p>With respect to Co-located Facilities, we request the IESO to ensure there is an opportunity for front of the meter (FTM) storage resources that can demonstrate the same or better hybrid integration value (e.g., through bi-lateral contracts, comms/SCADA, etc.). FTM storage strategically located adjacent to or nearby renewable facilities (e.g., same feeder) to address localized reliability/congestion issues offers meaningful value and potential to deliver ratepayer benefits.</p>
<p>Does the proposed definition of 'Hybrid Facility' make sense? Is there anything further that should be considered?</p> <p><i>"A combined facility consisting of electricity storage and generation facilities located behind a single connection point, that participates in the IESO markets as a single bi-directional resource."</i></p>	<p>ESC agrees that this definition makes sense.</p> <p>We suggest that the IESO clarify that 'Hybrid Facilities' would be eligible to participate in Capacity Auctions, energy market, OR markets, and provide other ancillary services.</p>

## Information required to evaluate investment potential

Topic	Feedback
<p>What information do stakeholders need to evaluate the potential of Hybrid Resource investments as we evolve our resource adequacy needs?</p>	<p>Simply, investors will require confidence in the revenue streams that would be available to the hybrid projects (e.g., from contracted revenues), as well as assurance that the project could meet operating requirements established by market rules.</p>

Topic	Feedback
	Further, for projects with existing contracts, investors will require assurance that participation as a hybrid resources would not de-value or put-at-risk expected contract revenues.

## Timelines and deliverables

Topic	Feedback
Do the timelines and deliverables for the Hybrid Integration Project make sense?	<p>ESC is supportive of the timelines proposed. Ideally, IESO would be positioned to identify a potential timeframe for enabling hybrids or co-located projects in advance of finalizing the design vision.</p> <p>IESO should ensure alignment of HIP deliverables with upcoming RFPs as described in the Resource Adequacy Engagement.</p>

## Engagement Plan

Topic	Feedback
Are stakeholders supportive of the objectives and approach detailed in the draft Hybrid Integration Project Engagement Plan?	<p>ESC asserts that IESO's workplan should establish metrics for success. For example, while the outcome of this engagement may be the development hybrid participation model, a measure of success would be the implementation of changes to market rules/manuals, stakeholder buy-in and support of the participation model, and development of hybrid resources.</p> <p>We are supportive of the approach in general.</p>

## General Comments/Feedback

ESC commends the IESO on this undertaking, and we are strongly supportive of the IESO's planned targeted call per the Grid Innovation Fund.

We believe there is significant opportunity to "firm" capacity of existing variable generators to cost-effectively meet future capacity needs in Ontario. In addition to existing resources coming off-contract, we suggest that the opportunity for hybrids is greater than IESO indicates in its presentation, given the potential for new development or expansion at existing renewable energy sites.

ESC suggests that the IESO should clarify the scope of the HIP. For example, hybrid facilities or co-located facilities may be located behind-the-meter of a customer (e.g., BTM storage + solar). Further, we believe there is also opportunity for hybrids consisting of storage and variable generation on the same distribution feeder. For example, one distribution-connected storage resource with multiple renewable facilities on the same feeder could provide significant value and flexibility.

Finally, ESC recommends that the IESO clearly outline the barriers in place within the IAM today that restrict hybrids or co-located projects. IESO's tools may more easily enable co-located projects given that a participation model for variable generators and front-of-the-meter energy storage (per interim design) has been established in today's market – i.e., participate as separate resources at same connection point.

We look forward to next steps of this process.