

# Stakeholder Feedback and IESO Response

## Hybrid Integration Project – June 27, 2022

Following the June 27, 2022 posting of the draft design document “Enabling Foundational Hybrid Facility Models”, the Independent Electricity System Operator (IESO) received feedback from participants on the draft design document.

The IESO received feedback from:

- Canadian Renewable Energy Association (CanREA)
- Energy Storage Canada (ESC)

The presentation materials and stakeholder feedback submissions have been posted on the [Hybrid Integration Project webpage](#). Please reference the material for specific feedback as the below information provides excerpts and/or a summary only.

### Notes on Feedback Summary

The IESO appreciates the feedback received from stakeholders. The IESO has provided a summary below, which outlines specific feedback or questions for which an IESO response was required at this time.

## Foundational participation models

Both stakeholder feedback submissions indicated the design document is aligned with the design decisions presented under the Hybrid Integration Project engagement. These points are included in the table below, including an additional consideration from CanREA.

Feedback	IESO Response
<p>CanREA:</p> <ul style="list-style-type: none"> <li>• Yes, in general the design document reflects our understanding of the design decisions taken during the stakeholder engagement sessions.</li> <li>• The one issue missing is the ability for a Market Participant to switch between participation models. CanREA recommends that IESO clearly allow for this change to be made, firstly because the Co-located model, being easier to implement, may be available before the Integrated model and secondly because both participation models are new, a Market Participant may discover after a period of operation that the initially chosen model is not conducive to ongoing operations and it would be more effective to switch to the other model.</li> </ul>	<p>Thank you for your feedback.</p> <p>As you have noted, Market Participants may wish to switch between the co-located and integrated hybrid facility participation models. As long as the market rules allow, changes in registration of a facility are permitted. There are no current or planned market rule limitations for registration changes, including new connection assessment &amp; approval for an existing facility.</p> <p>Switching between participation models is not a market design element that was identified and discussed in any detail under this stakeholder engagement, and therefore the IESO does not plan to make changes to the design document. However, in a previous response to stakeholders, the IESO described at a very high level how a market participant could move between models in the IESO Administered Markets:</p> <p>The participant with a co-located hybrid facility would need to contact the IESO to change the registration of the separate storage and generation resources, instead registering a combined generator resource with underlying technologies. Registration would include completion of the connection assessment and approval process for the new resource; expediting of the system impact assessment would be determined as per applicable rules/manuals. Revenue meter registration would need to be addressed to meter the combined generator resource of the integrated hybrid under a single meter, rather than under the separate meters for the co-located hybrid storage and generation resources.</p>

Feedback	IESO Response
	<p>Similarly, the participant with an integrated hybrid facility would need to contact the IESO to change the registration of the combined generator into separate storage and generation resources. Registration would include completion of the connection assessment and approval process for the new resources. Revenue meter registration would need to be addressed to use separate meters for the co-located hybrid storage and generation resources.</p> <p>Note that although market rules allow changes in registration, there may be additional considerations and implications from a contracting/procurement perspective that a participant will need to take into account when making a decision to switch between models.</p>
<p>ESC:</p> <ul style="list-style-type: none"> <li>• Yes. In our view, the document is complete and clear.</li> </ul>	<p>Thank you for your feedback.</p>

## General Comments/Feedback

Both stakeholder submissions included additional feedback and/or general questions, which are included in the table below.

Feedback	IESO Response
<p>CanREA:</p> <ul style="list-style-type: none"> <li>• In reviewing the design document, it appears very few changes are required beyond edits to manuals etc. The one significant component is the creation on a Market Power Mitigation methodology for the Integrated Hybrid model. Given the simplicity of implementation, especially for the co-located model, and the great need for additional capacity as identified in the Expedited and LT1 RFP processes, CanREA suggests that</li> </ul>	<p>The IESO is currently identifying the requirements to implement the co-located model, with the intention of enabling this model in 2023. There are potential changes to market rules, market manuals, procedures and business processes. Once requirements are confirmed, the IESO will provide a summary of the requirements for the co-located model in the current market and an update on timelines for changes to governing documents.</p> <p>The integrated model will be implemented to facilitate procurement timelines. As you have noted, the integrated model is more complex, in part due to market power mitigation requirements for the combined generator. In addition, the IESO will need to make changes to the power system model, and other requirements for the integrated</p>

Feedback	IESO Response
<p>the few changes required for the Co-located model be implemented right away, and efforts be made to implement the Integrated Model as soon as possible.</p>	<p>model may be identified during the implementation phase of the project.</p>
<p>ESC:</p> <ul style="list-style-type: none"> <li>• ESC is encouraged to see the IESO move forward with the design of a foundational model for hybrid facilities. We believe this will be an important participation model to support resource development and the enhancement of existing generation resources.</li> <li>• Given recent developments, we ask that the IESO consider the following clarifications within the design document: <ul style="list-style-type: none"> <li>○ On June 3, 2022 the IESO filed IR responses (EB-2022-0002) that announced a delay in the MRP implementation timeframe. Several aspects of the foundational model reference MRP completion (for example, Section 4.3, amongst others). Therefore, we believe the IESO should clarify how it could implement the foundational design in the event of a delay of the MRP in order to maintain the current implementation schedule (e.g., availability for projects planning to be</li> </ul> </li> </ul>	<p>Thank you for your feedback.</p> <p>The design document is intended to describe the foundational models under the renewed market, and the IESO does not plan to make changes to the document to address MRP implementation timeline changes.</p> <p>However, the IESO will provide a summary of the requirements for the co-located model in the current market as part of implementation activities in 2023. The integrated model will be implemented to meet procurement timelines that occur upon or after MRP implementation, so the documented design for that model will be utilized.</p>

Feedback	IESO Response
<p>developed as part of upcoming IESO RFP processes).</p> <ul style="list-style-type: none"> <li>○ On June 14, 2022 Technical Panel rejected the IESO’s proposed market rule amendments (MR-00469). As a result, the IESO is not moving forward with changes to capacity qualification (e.g., UCAP). Therefore, we believe the IESO should clarify Section 4.1.1 of the design document to reflect existing market rules.</li> </ul>	<p>Although the UCAP enhancements for the 2022 Capacity Auction were not approved, the IESO expects to continue to discuss feedback on UCAP methodologies with stakeholders, and intends to bring forward these enhancements for the 2023 Capacity Auction. This plan was discussed with stakeholders on July 21, 2022 at the Capacity Auction information session under the Resource Adequacy Engagement.</p> <p>As noted, the design document is intended to describe the foundational models under the renewed market. Since the IESO intends that the UCAP enhancements will be in place before MRP go-live, there is no plan to make changes to the Capacity section of the design document. Further, the design document indicates that that capacity will be qualified using UCAP methodologies only for procurement or capacity auctions that use UCAP methodologies.</p> <p>In the event that UCAP methodologies are not utilized in the future, the prevailing capacity qualification methodology described in IESO governing documents for the capacity auction will apply, subject to procurement terms. Currently, the participant submits the maximum quantity of capacity that they can reliability provide, which establishes the “enrolled capacity” for the capacity auction. An availability de-rating factor is not applied in the current process. Note that VG are not eligible for participation in the capacity auction at this time.</p> <p>For more information, refer to Chapter 7, Section 18 of the Market Rules and/or:  <a href="https://ieso.ca/capacity-auction-rules-library">Capacity Auction Rules Library (ieso.ca)</a></p>