

Stakeholder Feedback and IESO Response

Resource Adequacy – April 22, 2021 Webinar

Following the April 22, 2021 Resource Adequacy engagement webinar, the Independent Electricity System Operator (IESO) invited stakeholders to provide feedback on the materials presented.

The IESO received feedback from:

Advanced Energy Management Alliance

Capital Power

Consortium of Renewable Generators, Energy Storage Providers, and the Canadian Renewable Energy Association

Demand Power

Energy Storage Canada

Manitoba Hydro

Northland Power

Ontario Energy Association

Ontario Power Generation

Ontario Waterpower Association

Voltus Energy Canada

This feedback has been posted on the [engagement webpage](#).

Note on Feedback Summary and IESO Response

The IESO appreciates the feedback received from stakeholders. The table below outlines a summary of the feedback received and an IESO response in relation to that feedback.

Feedback on draft market rule and manual amendments for 2021 Capacity Auction administrative enhancements

Feedback	IESO Response
<p><u>Market Rule (MR) Chapter 11</u></p> <p>A suggestion to add the word “allocated” to the proposed amendments.</p>	<p>The IESO will add this suggestion to its proposed definition of <i>capacity auction eligible import resource</i> as it further clarifies that the capacity secured through the capacity auction cannot be committed elsewhere.</p>
<p><u>Market Manual (MM) 12, Section (S) 3.2 and 5.2</u></p> <p>Questions about the purpose and underlying rationale for the market rule change that requires a capacity auction participant (CAP) to be the owner of the resource being registered in the auction.</p>	<p>The IESO introduced the registration requirements for physical capacity resources in the 2020 Capacity Auction, requiring that the registered owner of the physical resource (except for capacity import resources) be authorized as the Capacity Auction Participant/Capacity Market Participant. This was done to create a straightforward line of accountability and settlement with market participants, including those with a capacity obligation, meaning that all market activities are settled under the same registered owner.</p> <p>This ownership requirement applies to all physical resources eligible to participate in the capacity auction (i.e., physical hourly demand response (HDR) resources, dispatchable generation resources, storage resources and dispatchable loads). Participants with virtual HDR resources are permitted to include physical or virtual non-dispatchable loads owned by a third party as demand response contributors to a virtual portfolio.</p> <p>In order to facilitate a role for third parties, we enabled the option of having a third party administer all Capacity Auction activities and act on behalf of the registered resource owner by having the owner assign the third party as the Capacity Auction Contact during Capacity Auction Participant authorization. The registered owner also has the ability to assign a third party to other participation contact roles to facilitate participation in the real-time energy market (e.g., Dispatch Data Submitter, etc.) if they wish to do so during Capacity Market Participant authorization. This framework is meant to provide a degree of flexibility to enable a role for third party activities while ensuring a clear line of accountability for physical auction and market participation. To further clarify, this participation model was introduced with the first Capacity Auction held in Dec. 2020,</p>

Feedback	IESO Response
	<p>and no changes to the participation model are being proposed through these administrative edits.</p> <p>Having the registered owner authorize as a Capacity Auction Participant, and later a Capacity Market Participant, is a straightforward process that only needs to be completed once. After a participant is authorized as a Capacity Auction Participant/Capacity Market Participant they do not need to do so again for subsequent auctions. Once a third party is assigned to the necessary contact roles, they can manage the associated auction activities on behalf of the resource owner. Further details regarding CMP authorization and the role of third parties will be provided in the Capacity Auction Training Workbook which will be posted on the Capacity Auction webpage when available.</p>
<p><u>MM 12, S. 5.2</u></p> <p>A question was raised regarding what the timing requirement will be if the proposed amendment deletes the wording outlining the three-month timing requirement for capacity market participants to indicate contributor type for virtual demand response.</p> <p>A potential issue with insufficient timing was noted with this amendment for customers who may be installing a behind-the-meter resource to participate in the auction.</p>	<p>Due to the number of edits made to Market Manual 12, S. 5.2, it can be difficult to see the original language that was clarified under the sub section for 'Virtual Demand Response'. The language in this sub section originally indicated that CMPs providing demand response with facilities that are not revenue metered by the IESO must register as hourly demand response at least 3 months prior to the beginning of the obligation period. In an effort to clean up repetitive language and align references to registration deadlines in section 5.2, the IESO removed the reference to a registration deadline under the Virtual Demand Response sub section. Instead, the resource registration deadline for all eligible resources is stated in the first two paragraphs of Section 5.2, which says, among other things, that it must be completed at least 45 business days before the start of the obligation period.</p> <p>We understand that some registration activities may require some time to complete, and for this reason the IESO encourages participants to start the registration process as early as possible. Per Section 5.2 of Market Manual 12, if the registration process is not completed by 45 business days before the start of the obligation period, the IESO cannot guarantee that the registration will be effective as of the start of the obligation period and this may have consequences related to non-performance charges.</p>

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	<p>The IESO recommends starting at least eight months in advance for new facilities, and at least four months ahead for any modification to existing facilities.</p> <p>See the Market Registration Process Schedule for details on registration timelines.</p>

Feedback on draft scope for HDR baseline methodology review

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<p>Recommendations to consider more than one type of baseline in the HDR baseline methodology review so that HDR resources can choose alternative baselines based on the contributors in the aggregation (e.g. Metered Generation, Custom Baselines)</p>	<p>The type of baseline methodology used to measure DR resource performance is largely dependent on the type of service the resource is providing, and across North America, the North American Energy Standards Board (NAESB) Type-I baseline (i.e. 'High X of Y' calculated baseline) is the standard baseline type used to measure performance of resources providing an HDR product with an energy market must-offer obligation.</p> <p>In other jurisdictions (e.g. PJM), an alternative or Custom Baseline is applied only if the market participant can demonstrate the standard offer baseline is not appropriate via an accuracy test. As part of the review, IESO will seek to better understand the extent to which resources within the broader HDR fleet may be more accurately modelled by different Type-I baselines by segmenting resources by load characteristics, to the extent possible based on existing data).</p> <p>Regarding Metered Generation baselines the IESO requires that responses to dispatch instructions (i.e., net changes in load or energy injection) be observable and measured at point of interconnection with the IESO-Controlled Grid to ensure the IESO can maintain system balancing. The IESO does not accept Metered Generation methodologies for measuring and verifying demand response performance as the presence of a potentially variable load between the metered behind-the-meter generation and the ICG creates uncertainty that metered generation will produce an equivalent change in load on the grid.</p>
<p>Questions raised regarding the need for the in-day adjustment factor</p>	<p>As proposed, the baseline methodology review will assess the performance of 'High X of Y' type baselines with an IDAF to the</p>

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<p>(IDAF) in the HDR baseline methodology. Stakeholders encouraged the IESO to consider allowing resources to opt-out of it if the analysis results in proceeding with a single baseline.</p>	<p>performance of 'High X of Y' type baselines without an IDAF. Given the purpose of a baseline is to approximate a resource's consumption in absence of a DR activation, in-day adjustments are standard practice in order to accurately capture day-of activation operational characteristics in the baseline calculation.</p> <p>IESO will consider the costs and benefits associated with providing an option to opt-out of the IDAF, and conditions for eligibility to opt-out, if the analysis shows that an unadjusted baseline is a materially more accurate measure of performance for certain load types.</p>
<p>Detailed comments and suggestions on the draft scope for HDR baseline methodology review were provided, including:</p> <ol style="list-style-type: none"> 1. Consider weather patterns and other impacts in proposed timeframe when assessing accuracy of methodologies (i.e. May/June 2020 heat waves, mild winters) 2. Consider adding a 5 of 10 baseline with IDA for weather-sensitive loads and a 5 of 10 baseline without IDA for non-weather sensitive loads. 3. A separate methodology should be considered for non-dispatchable batch loads 4. Include analysis for use of metered generation and custom baselines 5. Support indicated for exclusion of regression-based baselines 	<ol style="list-style-type: none"> 1. IESO does not have consumption data for the HDR resource fleet for May and June 2020, given the requirement to submit data on a monthly basis ended as of May 1, 2020. As proposed, the baseline review covers a two-year timeframe and will estimate the baseline on Proxy Event Days throughout the seasonal commitment periods in order to ensure a broad range of consumption behaviour is captured. 2. A high 5-of-10 baseline type is already included in the scope of the analysis and will be assessed with both an in-day adjustment and without an in-day adjustment similar to the other 'High X of Y' type baselines in the analysis. The use of an in-day adjustment is not exclusively for weather-sensitive loads. Previous studies have demonstrated that adjusted baselines can also outperform unadjusted baselines for non-weather sensitive loads. 3. IESO will assess the appropriateness of applying different methodologies to different load types by segmenting the data sample by load characteristics (to the extent possible based on existing data). 4. While IESO agrees accuracy is the most important principle of baseline development, simplicity and integrity remain important considerations, in part to ensure market participants are able to estimate C&I HDR baselines in real-time in order to comply with dispatch instructions. 5. Thank you for your feedback.

General Comments/Feedback

Feedback	IESO Response
<p>Concerns were raised regarding the pace of engagement on the mid and long-term mechanisms of the Resource Adequacy framework given the approaching capacity needs identified in APO</p>	<p>The IESO is committed to publishing the first Annual Acquisition Report (AAR) as soon as possible, in order to inform stakeholders on how the IESO intends to address the needs identified in the APO. Following publication of the AAR, it is expected that the IESO will engage stakeholders on the specifics of the subsequent procurement processes, including the associated timing.</p>
<p>Requests for IESO's rationale on the energy production requirement of up to four hours for the capacity auction and at least four hours proposed for the mid-term RFP. Further engagement on these items was requested before requirements were finalized.</p>	<p>The up to four-hour energy production requirement has been a component of the obligation within both the Capacity Auction and the previous Demand Response Auction. Four hours effectively strikes the balance between operational reliability requirements and cost to ratepayers, and therefore it is an appropriate input to inform capacity obligations.</p> <p>The IESO will engage with stakeholders on the requirements for the medium-term procurement but at this point, the IESO considers it reasonable that the obligations associated with a medium-term procurement mechanism which offers a longer commitment term would be at least as stringent as those associated with the capacity auction.</p>
<p>A question was raised about the status of engagement on the four major discussion areas proposed in the November 2020 Resource Adequacy engagement webinar.</p> <p>A group of stakeholders suggested that the focus of the Resource Adequacy engagement should remain on certain elements of the framework, specifically.</p>	<p>The IESO has aimed to adjust and remain responsive to stakeholder feedback throughout the Resource Adequacy engagement with recognition of the importance of progressing the development and implementation of the framework and mechanisms to address upcoming capacity needs. Engagement activities in 2021 have focused primarily on the development of the first Annual Acquisition Report and enhancements to the Capacity Auction due to the more immediate needs for those items. Resource Adequacy engagement topics can be expected to continue to adjust in response to IESO and stakeholder priorities and as various milestones are surpassed. The Resource Adequacy framework information guide will provide additional clarity to stakeholders on the status of engagement on Resource Adequacy-related items.</p>
<p>Requests for clarity, perhaps in the form of principles, that will help guide organizations with resources</p>	<p>The IESO expects the Resource Adequacy framework and AAR will provide greater transparency into the IESO's future resource acquisition plans to enable organizations' investment</p>

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<p>coming off contract to assess future revenue opportunities within the IESO-administered markets (IAM) and outside of IAM to make investment decisions.</p>	<p>decisions. Regarding the medium-term RFP, details will be outlined in the draft procurement documents, including the draft RFP and draft contract. These documents will be posted for stakeholder review and feedback before they are finalized (in line with past IESO practice when conducting competitive procurements). We look forward to having further discussions regarding what additional clarity may be required once the above information is available and has been reviewed by stakeholders.</p>
<p>A stakeholder group noted findings from a March 23, 2021 Federal Energy Regulatory Commission conference on resource adequacy and capacity markets that should be considered in the design and implementation of the Resource Adequacy framework.</p>	<p>Thank you for noting these findings. The IESO agrees these findings may be useful to consider in the Ontario context.</p>
<p>A request for specific information/details to be included in the June 2021 AAR, such as:</p> <ol style="list-style-type: none"> 1. Information on uncontracted resources and resources with contracts expiring within the report timeframe (resource name, fuel type, date of contract expiry, contracted energy amount, nameplate capability, capacity contribution, zonal location) 2. Amount of capacity anticipated to be re-contracted annually with term length and explanation of rationale to re-contract (global or local need) 3. Timing and length of term for mid-term RFP 4. Capacity amount anticipated to be procured through the mid-term RFP 	<p>The AAR is planned to be published as soon as possible, and is expected to include content that addresses many of the requests identified. Some of the information requested cannot be provided due to confidentiality limitations.</p>

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<ul style="list-style-type: none"><li data-bbox="235 170 618 279">5. Target capacity allocation process description for mechanisms<li data-bbox="235 289 639 399">6. Eligibility requirements for mid-term RFP and Capacity Auction<li data-bbox="235 409 618 518">7. Annual capacity needs in excess of current physical resources<li data-bbox="235 529 651 722">8. Total capacity amount from resources currently engaged through government directive or unsolicited proposals	