

September 13, 2022

RE: August 25-August 26, 2022 IESO Capacity Auction Enhancements Meeting

Dear IESO Stakeholder Engagement Team,

This letter is written in support of the comments submitted by the Advanced Energy Management Alliance (AEMA). Voltus is a member of the AEMA and was involved in the drafting of these comments.

Included in these comments is a description of the ERCOT framework for demand response availability derates. We have also included comments on how these could best be incorporated into an Ontario context without increasing the reporting burden on aggregators or the IESO. Voltus is available for further questions on this proposal at your convenience.

In general, we support the proposed enhancements around contributor outage management, but we have some concerns about how longer outages are handled and await further details on the IESO's proposal.

Voltus continues to assert that a major issue driving performance gaps for Hourly Demand Response resources is the use of a single HDR baseline methodology. The current methodology may assess energy delivered to the system but is not necessarily an appropriate measure of capacity delivered. We would be interested in discussing this further with the IESO.

We look forward to on-going engagement with the IESO on the next round of Capacity Auction rule amendments to develop a Capacity Auction that will meet Ontario's system requirements now and in the future.

Best regards,

A handwritten signature in blue ink, appearing to read "Michael Pohlod".

Michael Pohlod
Senior Energy Markets Manager
Voltus Energy Canada Ltd

Feedback Form

Capacity Auction Enhancements – August 25 & 26, 2022

Feedback Provided by:

Name: Katherine Hamilton

Title: Executive Director

Organization: Advanced Energy Management Alliance (AEMA)

Email: [REDACTED]

Date: September 12, 2022

Following the August 25 and 26 sessions on the Capacity Auction Enhancements, the Independent Electricity System Operator (IESO) is seeking feedback from participants on the information presented at those two respective sessions that are outlined in the table below.

The meeting materials from these sessions can be found on the [Capacity Auction Enhancements engagement initiative](#).

Please provide feedback by September 9, 2022 to engagement@ieso.ca.

This feedback will be posted on the Capacity Auction Enhancements engagement webpage unless otherwise requested by the sender.

The IESO will work to consider and incorporate comments as appropriate and post responses on the webpage.

Thank you for your contribution.

Draft Engagement Plan – 2023 Capacity Auction Enhancements

Topic	Feedback
Please provide any feedback on the draft Engagement Plan, specifically with respect to the approach and design topics included in the plan	<p>AEMA believes the Engagement Plan may be ambitious in the implementation time frame suggested to complete the review and drafting of Market Rules. AEMA members will strive to help the IESO move this Engagement Plan along but are skeptical it can be completed with the comprehensive engagement required for the proposed elements. AEMA recommends that this engagement also reviews the Zonal and Capacity Import constraints sections of the market rules to provide clarity and transparency for participants. Sections 2.6 and 2.7 of Market Manual 12 should, but do not define the criteria used by the IESO to “establish” these limits. Additionally, no section of the Market Rules should be considered “out of scope” during this engagement as amending one rule can cause another to become inappropriate or unreasonable. In the interest of completing the engagement for a March 2023 Technical Panel approval, AEMA believes the IESO should consider reducing the number of elements in the plan and leave the more controversial engagement topics for a more thorough examination at a later time.</p>

Engagement Topic 1.0 - Qualification: Non-HDR Resources

Topic	Feedback
Please provide any feedback on Design Memo 1.0 - Capacity Qualification (Non-HDR)	No comment.

Engagement Topic 2.0 – Performance Assessment: Testing Framework

Topic	Feedback
<p>Please provide any feedback on Design Memo 2.0 – Testing Framework</p>	<p>AEMA supports the ability to self-schedule tests.</p> <p>As noted in the 2022 Capacity Enhancement engagement, and during the August 25th and 26th Stakeholder engagement sessions on the 2021 Capacity Auction Enhancements, AEMA does not support the lack of payment for HDR resources that participate in the Capacity Test. HDR resources will take an administrative action to lower their bids and be dispatched. IESO staff have informed Stakeholders that HDR resources should include these costs in their Capacity Auction bids. However, this will place HDR resources at a disadvantage as other Capacity Auction participants will not include the totality of this cost in their bids as they will receive an energy payment. The same logic that applies to an administrative fee for the Dispatch Test should apply to the Capacity Test.</p> <p>Please confirm that the hours of the Capacity Test will be excluded from the baseline of HDR resources.</p>

Engagement Topic 3.0 – Performance Assessment: Charges/True-ups

Topic	Feedback
<p>Please provide any feedback on Design Memo 3.0 – Charges & True-ups</p>	<p>The AEMA supports the inclusion of an Availability Charge True Up Payment and a Capacity Auction Charges True Up Payment. However, the Alliance does urge the IESO to implement penalties/charges in a way that does not have compounding punitive impacts. For example, if a resource has reduced availability on a given day where an activation takes place, the existing proposed structure could result in penalties for those MW in the form of Availability penalties, Augmented Availability charges, impacts on the PAF (if the activation is during capacity event), and dispatch charge penalties.</p> <p>The AEMA would like the IESO to provide a definition for a resource’s registered capability. This term is referenced in several manuals and has no definition.</p>

Engagement Topic 4.0 – Hourly Demand Response Standby Trigger Review

Topic	Feedback
<p>Please provide any feedback on the proposed scope of the hourly demand response (HDR) standby trigger review. General feedback is also welcome.</p>	<p>AEMA welcomes the opportunity to review the standby trigger for HDR.</p> <p>AEMA supports the scope of the HDR Standby Trigger Review and understands the focus for the 2023 Capacity Auction will be limited to revising the threshold price.</p> <p>AEMA recommends that the IESO provide insight into the forecast of prices and system needs so that the need for the Standby Trigger can be established. Once this analysis is complete, HDR participants will have a better understanding of what the standby Trigger should be to ensure that the HDR resource is available when it is required. As noted, when the original Trigger was created the market dynamics were quite different and the price trigger no longer reflects the time of need on the grid.</p> <p>For a future review of the Standby Trigger, the AEMA recommends the update of IESO tools to a naturally dynamic trigger (I.E., one that does not require IESO staff and stakeholders to forecast energy prices for a given capacity year and one that properly reflects system needs). The AEMA believes that capacity surplus in the Adequacy Report could be an appropriate measure.</p> <p>AEMA recommends that the Standby Trigger process be dynamic and reflect the changing needs of the grid. This way a review will not have to occur as the supply/demand scenarios evolve.</p>

Engagement Topic 5.0 – Qualification: HDR Resources (Standby Charge)

Topic	Feedback
<p>Discussion with stakeholders during the August 26 Technical Session indicated stakeholder support for the use of a charge or penalty that would apply within the relevant obligation period, as a method for HDR resources to “self de-rate” their capacity in lieu of an availability de-rate.</p> <p>Do stakeholders support investigating further options for a charge/penalty that would apply within the obligation period as a next step for discussion on the HDR capacity qualification methodology?</p>	<p>While the AEMA contends that most ISOs in North America do not have an availability de-rate for demand response resources, if the IESO is intent on pursuing this avenue, we support the investigation of further options for an Availability de-rate as part of the HDR Capacity Qualification Methodology. Moreover, as part of the UCAP process, the AEMA continues to assert that the IESO should include loss factors in the HDR Capacity Qualification Methodology.</p> <p>AEMA strongly urges IESO to consult with its members regarding any further discussion on charges/penalties that would apply within the obligation period.</p>

Stakeholders are invited to submit suggestions on potential options for this availability charge/penalty. IESO will compare stakeholder proposals (including a proposal to double the existing availability charge) with the current proposal of a standby availability charge that involves a multiplier of 5x during peak months of the auction year, limited to 25 standby events per obligation period. This comparison of options will be presented to stakeholders for discussion and comment at the September engagement and technical sessions.

The only ISO that the AEMA is aware of that includes an availability de-rate for HDR resources is ERCOT (Texas). ERCOT's framework provides a good avenue for the IESO to emulate. Availability settlements are described in [ERCOT Nodal Protocols Chapter 8, section 8.1.3.1.3](#). Availability is considered to be 100% during the auction, but resources are subject to an availability derate after the end of the capacity period. Availability is calculated for each 15-minute interval (it would be hourly in IESO), where a resource is considered unavailable if:

- 1) Its total load is less than 95% of its obligation; and
- 2) Data was not received for the time period. **Note:** In order to not increase data gathering for market participants and data collection burdens for the IESO, we would suggest aligning availability assessments with when data is submitted for tests/activations.

Otherwise, the load will have been considered available for that time period and the Availability De-rate for the resource will be the ratio of the number of intervals in which the resource was available divided by the total number of contracted intervals in the settlement period. Notwithstanding, ERCOT excludes the following:

- Any interval in which the resource was deployed,
- Any interval following a resource's deployment (recovery period).

If the Availability de-rate is above 95%, it is considered to be 100%. If it is below 95%, then total payments are derated accordingly.

In applying this methodology to the IESO, it might look as follows:

Example #1

- Resource AEMA has an obligation of 10 MW and is composed of ten 1 MW sites.
- Its load is 10 MW in all intervals in June 2022 except for 9 hours on Tuesday, June 7th when 1 site was offline for all hours.
- The resource is considered available in 189 hours of 198 total hours. Its availability factor for the

Topic	Feedback
	<p>month is 95.4%, therefore the resource's payments are not derated.</p> <p><u>Example #2</u></p> <ul style="list-style-type: none"> - Resource AEMA has an obligation of 10 MW and is composed of ten 1 MW sites. - Its load is 10 MW in all intervals in June 2022 except for 9 hours on June 7th and 9 hours on June 8th when 1 site was offline for all hours. <p>The resource is considered available in 180 hours of 198 total hours. Its availability factor for the month is 90.9%, therefore the resource's payments are derated by a factor of 0.909.</p>

Engagement Topic 6.0 – HDR Performance Thresholds

Topic	Feedback
<p>Do stakeholders support the IESO further pursuing the proposed solution of removing contributors on forced outages from the HDR baseline methodology and presenting the proposal at an upcoming engagement session?</p>	<p>AEMA supports this discussion.</p>
<p>If the proposed solution addresses stakeholder concerns about contributors on forced outages unfairly impacting measurement within the HDR baseline methodology, are there any further issues stakeholders have with the capacity test performance assessment threshold changes enhancement?</p>	<p>AEMA continues to take issues with the single HDR baseline methodology. The current methodology generally assesses energy delivered to the system but is not necessarily an appropriate measure of capacity. We would be interested in discussing this further with the IESO.</p>

Topic	Feedback
Do stakeholders have any initial feedback regarding the high-level proposed solution?	<p>In general, the AEMA is supportive of the overall direction for managing outages on the day of an activation. However, we have some concern with the following section:</p> <p>“Forced and/or planned outages that started before the actual activation day will continue to be managed based on current processes. The solution will not change the existing process to the established baseline.”</p> <p>Additional information is required here as this makes it sound like a contributor outage that began before the activation date would not be eligible for removal from the baseline. This would not be a direction that the AEMA would be supportive of as that outage could still have a dramatic impact on resource baselines and in-day adjustments.</p>

Engagement Topic 7.0 – Demand Curve Review

Topic	Feedback
Do stakeholders support the proposed scope of the demand curve review?	<p>AEMA supports a thorough review of the Demand Curve. As part of that review, the AEMA believes the following are key aspects of the scope:</p> <ol style="list-style-type: none"> 1) A design which provides stability to auction participants year to year 2) A flexible design which allows the Demand Curve to be adjusted more frequently to match current market conditions 3) A careful balance between the FCA and ACA once the design of the FCA is better understood
Are there other aspects of the demand curve that should be addressed in the review?	<p>A review of the demand curve that also considers the design and implementation of an FCA will be difficult. The eventual design decisions made with regards to the interplay between the FCA and ACA should have a material impact on the Demand Curve design for each auction since the FCA is no longer intended to be incremental to the ACA.</p>

Engagement Topic 8.0 – Forward Capacity Auction (FCA) Design

Topic	Feedback
<p>Based on the clarifications regarding the intent, design, and pros and cons of the FCA commitment length options presented, do stakeholders continue to support a single auction for a multi-year commitment for the FCA, or is there support for 3 sequential auctions each with a one year commitment?</p>	<p>The AEMA continues to struggle to provide the IESO with meaningful feedback on the FCA due to lack of details and shifting design principles. Originally, the FCA was presented as a mechanism to attract <u>incremental</u> megawatts to Ontario to help the IESO meet the needs identified in the AAR. At this month’s stakeholder session, the purpose of the FCA has shifted away from incremental megawatts and is instead intended to secure megawatts “earlier”. This fundamentally changes the dynamics between the FCA and ACA and raises a number of significant issues.</p> <p>First, the AEMA questions the IESO’s need for securing megawatts earlier in the process. Thus far, the ACA has always had more megawatts available than the IESO has procured, and those megawatts have consistently been showing up year after year. The key to maintaining the reliability of those megawatts is to provide a stable market each year. The ACA provides this as long as the IESO provides minimum annual targets. With the introduction of an FCA that will presumably take megawatts away from the ACA’s annual target, this will significantly erode the viability of the ACA. The AEMA encourages the IESO to weigh the risk of significantly reducing the viability of the ACA against the perceived advantage of procuring megawatts earlier.</p> <p>Second, as stated previously, many resources which participate in the ACA (such as Demand Response), are unable to commit to a 3 year term due to uncertainty in production levels, factory changes and equipment upgrades. These issues equally impact Dispatchable Load resources. The fact that some resources are unable to commit to a 3-year term (or 1 year terms with very long forward periods) means that the FCA and the ACA could inherently favor one resource type over another without careful design.</p>

Topic	Feedback
<p>The IESO is requesting further elaboration from stakeholders on the specific risks, limiting factors or general preferences associated with holding a capacity auction (FCA and/or ACA) earlier in the year during the summer months as opposed to the current end of year timing.</p>	<p>Key factors include quantity of MWs procured through the FCA vs ACA, Demand curve design and contractual terms. In order for the IESO to effectively design an FCA and ACA that provides a level playing field, the IESO must provide the market with a quantification of the value of procuring MWs early so that can be factored into an effective design.</p> <p>Finally, with an FCA which is not procuring incremental MWs, the ACA becomes more like a balancing auction. Effective balancing auctions require the ability for participants to use the balancing auction to exit or expand their positions from the forward auction. These mechanisms do not exist in the current ACA design and would need to be introduced as part of the overall FCA process.</p>

General Comments/Feedback

HDR resource participants including members of AEMA have long advocated and supported design “enhancements” and market rule amendments to improve all aspects of the Capacity Auction to enable an efficient and competitive procurement mechanism including expanding the eligibility of the Demand Response Auction while ensuring a level playing field existed. Based on comments posted throughout Capacity Auction engagements, our willingness to work with IESO is apparent. AEMA and its members look forward to continuing to work with IESO and other stakeholders to develop a Capacity Auction that will meet Ontario’s system requirements now and in the future.

Advanced Energy Management Alliance (“AEMA”) is a North American trade association whose members include distributed energy resources, demand response (“DR”), and advanced energy management service and technology providers, as well as some of Ontario’s largest consumer resources, who support advanced energy management solutions due to the electricity cost savings those solutions provide to their businesses. The comments herein represent those of the organization, not those of any individual member.