

Resource Adequacy – November 23, 2021

Feedback Provided by:

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Date: December 14, 2021

To promote transparency, feedback submitted will be posted on the Resource Adequacy webpage unless otherwise requested by the sender.

Following the November 23, 2021 Resource Adequacy webinar, the Independent Electricity System Operator (IESO) is seeking feedback from stakeholders on the following items: the ***Annual Acquisition Report (AAR), enhancements to the Capacity Auction, the Long-Term RFP and IESO Procurement Fees.***

Background information related to these feedback requests can be found in the presentation, which can be accessed from the [engagement web page](#).

Please submit feedback to engagement@ieso.ca by December 14, 2021. If you wish to provide confidential feedback, please mark the document "Confidential". Otherwise, to promote transparency, feedback that is not marked "Confidential" will be posted on the engagement webpage.

Annual Acquisition Report

Topic	Feedback
How can the IESO evolve the Resource Adequacy Framework to enhance it?	Click or tap here to enter text.
What sections of the 2021 AAR were most helpful?	Click or tap here to enter text.
Are there specific topic areas the IESO should focus on in upcoming AARs?	Click or tap here to enter text.
What additional data would be most helpful to be included as supplemental information in future AARs?	Click or tap here to enter text.
General comments and feedback	Click or tap here to enter text.

Capacity Auction

Topic	Feedback
Proposed changes for the December 2022 Capacity Enhancements	<p><u>Questions</u></p> <p>IESO has proposed a higher availability performance charge of 10x the availability payment “in a circumstance where the IESO has issued a system emergency advisory, such as NERC Energy Emergency Alert (EEA-1) or when a resource has been put on stand-by.”</p> <p>Can you confirm that the proposal would assess higher penalties for availability changes after resources are placed on standby regardless of emergency conditions? Or are the higher penalties for changing availability after a standby notice only assessed if emergency conditions have already been declared at the time the standby notice is issued? Or are the higher penalties assessed for reduced availability in any case where a standby notice has been issued and an EEA is issued at any time (I.E. before or after the standby notice is issued).</p>

Penalty Structure & Incentives

Voltus would like to propose that the new standby mechanism be revised to better align the financial incentives that HDR resources face with the IESO's mandate to maintain grid reliability. We understand that real-time operators depend on an accurate view of availability during times of acute system need. Rather than improving the accuracy of availability data, however, the proposed market changes will have the opposite effect.

Increased availability penalties will create an incentive for aggregators to show full availability and take on the risk of a dispatch failure even for resources that are not actually available for curtailment. The IESO should instead decrease availability penalties to incentivize aggregators to revise their bids in real-time to reflect true availability.

Below we demonstrate that the economic incentive is for aggregators to offer full availability and risk a dispatch failure under both the existing and proposed new penalty structures. The tables below are based on a hypothetical 1 MW resource that is unavailable more often than not after approximately September 1 as weather cools down. An aggregator could handle this resource's shortfall by reducing availability each day, or by risking a failed dispatch. In these hypothetical scenarios, we assume 1 Energy Emergency Alert (EEA) with activation on September 5th, and 1 Test on October 15th.

Scenario 1: Current IESO penalty structure

	Revenue Under Current Penalty Structure	
	Make 1 MW unavailable	Keep the 1 MW available and risk dispatch
Revenue to Date	\$23,048	\$23,048
Buy-out Charge	\$0	\$0
Availability Payments	\$10,988	\$10,988
Availability Charges (Excl Sept 5)	-\$16,080	\$0
Capacity Charges (EEA Sept 5)	\$0	-\$5,628
Availability Charges (1 EEA, Sept 5)	-\$536	\$0
Dispatch Charges (1 EEA, Sept 5)	\$0	-\$2,144
Capacity Charges (October Test)	\$0	-\$5,360
Dispatch Charges (4-hour resource - Oct Test)	\$0	-\$1,072
Total Impact	\$17,420	\$19,832

Under the current penalty structure, and as based on the hypothetical scenario described above, an aggregator could earn more money by keeping the 1 MW available and risking a dispatch (earn \$19,832) relative to reducing bids to accurately reflect availability (earn \$17,420). The economic incentive is for aggregators to show full availability and take on the risk of a

dispatch failure even for resources that are not actually available for curtailment.

Scenario 2: IESO newly proposed penalty structure (availability charge during emergency = 10x availability payment)

	Total Revenue Under NEW IESO Penalty Structure	
	Make 1 MW unavailable	Keep the 1 MW available and risk dispatch
Revenue to Date	\$23,048	\$23,048
Buy-out Charge	\$0	\$0
Availability Payments	\$10,988	\$10,988
Availability Charges (Excl Sept 5)	-\$16,080	\$0
Capacity Charges (EEA Sept 5)	0	-\$5,628
Availability Charges (1 EEA, Sept 5)	-\$5,360	\$0
Dispatch Charges (1 EEA, Sept 5)	\$0	-\$2,144
Capacity Charges (October Test)	\$0	-\$5,360
Dispatch Charges (4-hour resource - Oct Test)	\$0	-\$1,072
Total Impact	\$12,596	\$19,832

Under the new penalty structure, the economic incentive is even greater for aggregators to show full availability and take on the risk of a dispatch failure. Keeping 1 MW available and risking dispatch earns \$19,832 versus \$12,596 for making the 1 MW unavailable.

Voltus proposes that the penalties be revised to flip the relative cost of dispatch failures and availability shortfalls, such that the economic incentive is for aggregators to reflect their true availability on an hourly basis. We propose availability charges be revised to 0.5x the availability payment, and dispatch charges be doubled.

Scenario 3: Voltus proposed penalty structure (availability charge during emergency = 0.5x availability payment, 2x dispatch charge)

	Total Revenue Under Voltus Proposed Penalty Structure	
	Make 1 MW unavailable	Keep the 1 MW available and risk dispatch
Revenue to Date	\$23,048	\$23,048
Buy-out Charge	\$0	\$0
Availability Payments	\$10,988	\$10,988
Availability Charges (Excl Sept 5)	-\$8,040	\$0
Capacity Charges (EEA Sept 5)	0	-\$5,628
Availability Charges (1 EEA, Sept 5)	-\$536	\$0
Dispatch Charges (1 EEA, Sept 5)	\$0	-\$4,288
Capacity Charges (October Test)	\$0	-\$5,360
Dispatch Charges (4-hour resource - Oct Test)	\$0	-\$1,072
Total Impact	\$25,460	\$17,688

Our proposed rebalancing of incentives would incentivize aggregators to maintain accurate availability. Keeping 1 MW available and risking dispatch would earn \$17,688 versus \$25,460 for making the 1 MW unavailable.

The IESO understandably needs to know that the offered megawatts of load curtailment are actually available and can be counted on to

relieve emergency conditions. Proper market incentives will drive aggregators to reflect accurate availability at all times.

Loss Factors in UCAP

As Voltus has requested in prior comments, we continue to believe that the IESO should include Loss Factors in the calculation of UCAP for Demand Response resources. The IESO would incent additional Demand Response participation if the value added by these behind-the-meter resources were fully recognized, including the avoidance of transmission and distribution losses. The IESO remains the only jurisdiction in North America using UCAP that does not include Loss Factors in the calculation of UCAP for Demand Response resources.

Qualifying Capacity at Contributor Level

The IESO should shift performance derates from the aggregated resource level to the contributor level in order to eliminate the risk of gamesmanship. If derates occur at the resource level, there will be a loophole through which poor-performing contributors can avoid consequences. Contributors that would be derated if they remained in a current Resource could easily switch to another demand response provider in the subsequent year to avoid any penalties. The IESO expects aggregators will sufficiently manage contributor behaviour, however this does not properly reflect the reality that commercial contracts with contributors may expire in any given year and as a result, would have no bearing on the future. Moreover, leaving derates at the aggregation level may place aggregators in the difficult position of having to pursue damages from their contributors. This is likely to drive animosity between aggregators and their contributors, instead of promoting the cooperative environment needed to drive proper performance for the IESO.

HDR Test Performance

We understand IESO's concerns regarding the historically poor performance of HDR resources during tests. However Voltus believes that the problem is not that these resources aren't available in times of real need, but that their capabilities aren't being measured correctly. To improve the test performance of these resources and ensure that capacity obligations are being met going forward, we believe the IESO should consider revising the current baseline

	<p>mechanism, and taking weather sensitivity into account for the timing of test activations:</p> <ol style="list-style-type: none"> 1. Baseline: the current baseline mechanism severely punishes resources if any major contributor dispatches too early. This means that any major contributor that chooses to pursue an ICI signal over the HDR dispatch or is not producing the day of the test would dramatically reduce the entire resource’s baseline. Using contributor-level baselines or allowing non-weather sensitive loads to opt-in to an unadjusted baseline would drive better measurement of HDR performance. 2. Test activation timing: Grid emergencies primarily occur between June - September, January and February. Dividing the program into four seasons instead of two could allow weather sensitive loads to be accredited at a level they can achieve all season long. Eliminating shoulder months from the program would also be an option.
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Input on how the point in time rule could be enhanced

[Click or tap here to enter text.](#)

General comments and feedback

Question: Performance Adjustment Factor

IESO has proposed that Performance Adjustment Factors (PAFs) be applied on a ‘go-forward’ basis, starting with the December 2023 auction (based on assessed performance during upcoming December 2021 capacity auction associated commitment period: May 2022- April 2023).

Can you clarify how the IESO plans to handle the PAF of a resource that will operate in 2022, but does not clear the December 2023 auction, instead returning to the market in December 2023? If a resource clears the auction in subsequent years after taking a one-year hiatus, Voltus believes that the resource should be allowed to reset its performance to the resource average in this case. This approach will enable the IESO to best incentivize additional capacity resources at the lowest possible cost.

Long-Term RFP

Topic	Feedback
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Proposed LT RFQ process and high level considerations	Click or tap here to enter text.
LT RFP design considerations	<p>Voltus would like to again reiterate its view that the IESO should not pursue additional fixed contracts in the province of Ontario. Voltus believes that the use of market mechanisms like the Capacity Auction will better enable the IESO to drive affordable rates over the next twenty years and would prefer to see the Capacity Auction expanded in place of RFPs. Auctions have driven lower costs and more resilient grids in a number of jurisdictions throughout North America. The procurement of capacity through fixed term contracts is likely to drive further expansion of the Global Adjustment settlement pool, which will be of financial detriment to the province's ratepayers.</p> <p>Question</p> <p>Will the IESO be developing a similar increased penalty mechanism for the Medium and Long Term RFPs in the event capacity resources paid through RFPs do not perform during an emergency?</p>
LT RFP engagement considerations	Click or tap here to enter text.
General comments and feedback	Click or tap here to enter text.

Procurement Fees

Topic	Feedback
Does the proposed framework assist the IESO in running effective procurements with serious proponents?	Click or tap here to enter text.
Does the proposed approach and then stakeholdering the exact fees under each procurement provide appropriate opportunities for feedback?	Click or tap here to enter text.
General comments and feedback	Click or tap here to enter text.

General Resource Adequacy Comments/Feedback