

Technical Panel Education Capacity Auction Tie-Break Methodology

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Today's Discussion

- This discussion is to update Technical Panel members on the Market Rule (MR) amendments associated with the Capacity Auction tie-break methodology enhancement.
- These amendments aim to improve auction outcomes by allocating capacity amongst tied offers more equitably.
- This enhancement was re-prioritized for the 2025 Capacity Auction following stakeholder feedback.
- The enhanced tie-break methodology, and the benefits it offers to participants, is supported by stakeholders.



Agenda

- Engagement process
- Proposed market rule and manual amendments
- Summary and next steps



Engagement Process



Engagement Process for Future Enhancements

- The IESO's approach to the <u>Capacity Auction Enhancements</u> engagement has aimed to provide a timely, transparent, and inclusive process for participants.
- Engagement sessions for the 2025 enhancements were held on a regular cadence of every second month, starting in Q2 2024.
- The tie-break enhancement was initially part of the broader set of enhancements engaged upon for 2025.
- Stakeholders, specifically those in the HDR community, supported an enhancement to the tie-break methodology and urged the IESO to prioritize, design and implement this enhancement as soon as possible.



Engagement on the Enhanced Tie-Break Methodology

- A high-level design was presented at the September 2024 engagement that was based on the tie-break design in the Transmission Rights Auction. This was followed by a design memo presented in November 2024.
- In April 2025, the IESO informed stakeholders of a delay to the enhancement of the tiebreak. This was done to ensure successful implementation considering other organizational priorities this year.
- Following this decision, stakeholders urged the IESO to find a solution to implement this enhancement in 2025. They cited the current tie-break methodology as being inadequate, and a threat to market confidence and competition in the auction.



Engagement Timeline

O May 2024		November 2	2024 🤇	June 2025	
Engagement Meet	Engagement Meeting:		eting: Design	Engagement Meeting: Tie- break methodology re- prioritized to 2025, Draft Market Rules & Manuals	
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\bigcirc	September	2024 🤇	April 2025		



Timeline for 2025 Market Rule Amendments

O June 2025	Ç	Septembe	r 2025 🤇	October 2	025
Present Market Rule and Manual Amendments to Stakeholders (Complete)		el: Vote to	o IESO Board Approval		
	Technical Pane	I: Education	Technical Pan Recommend October 2		Market Rules & Manuals Effective Prior to 2025 Capacity Auction



Proposed Market Rule and Manual Amendments



Objective of Enhanced Tie-Break Methodology

This enhancement aims to achieve two main objectives:

1. <u>Improve competitive Capacity Auction outcomes</u>

The enhanced tie-break methodology considers all tied offers and allots capacity amongst them more equitably.

2. Maintain participant confidence in Capacity Auction

As market conditions evolve, it is important that the Capacity Auction remains an accessible marketplace to a diverse range of capacity resources while meeting the changing needs of the system.



Summary of Current Tie-Break Methodology

- A tie-break occurs when two or more Capacity Auction offer laminations are submitted at the same price for the last available quantity of capacity.
 - This is increasingly prevalent in virtually constrained zones.
- In these instances, a set of criteria must be used (i.e., the tie-break methodology) to determine how the capacity is awarded to tied offers.
- Currently, capacity is awarded to the tied offer with the earliest time stamp.
- If capacity remains once awarded to the tied offer with the earliest time stamp, the offer with the next earliest time stamp is awarded the remaining capacity. This continues until no capacity remains.



Summary of Enhanced Tie-Break Methodology

At a high level, the new tie-break methodology is completed in 3 steps:

Step 1

- Divide the remaining available (tied) auction capacity by the number of auction offers involved in the tie.
- Round down to one decimal place and allot this equal share of auction capacity to participants (where possible).
- Offers can be flagged as "full" or "partial" by participants. Offers flagged "full" must be fully satisfied in step 1.

Step 2

• For auction capacity remaining after Step 1, allot a proportional share to each partial offer that was not fully satisfied in Step 1.

Step 3

• For auction capacity remaining after Step 2, allot by time stamp rank.

This methodology is detailed in Design Memo 3.0 Tie Break Methodology 2025



In this example, three offer laminations share the same price for the final 40 MWs of capacity in a zone. The tied offers are shown in the table below.

	Offer (MW)	Lamination	Offer Type
Offer A	5.0	1	Full
Offer B	25.0	1	Partial
Offer C	40.0	1	Partial
Total:	70.0		



Step 1: The remaining available (tied) capacity is split into equal shares and allotted to the tied offers as shown below. If an offer is less than the equal share it will be allotted its entire offer amount. Any "full" offer that is greater than the equal share will not be allotted capacity and will not be considered further in the tie-break.

Remaining Capacity = 40.0 MW Equal Share = 13.3 MW

Capacity After Step 1 = 8.4 MW

	Offer (MW)	Offer Type	Step 1 Allotment (MW)	Remaining Offer (MW)
Offer A	5.0	Full	5.0	0.0
Offer B	25.0	Partial	13.3	11.7
Offer C	40.0	Partial	13.3	26.7
Total:	70.0		31.6	38.4



Step 2: The 8.4 MW of available capacity remaining after Step 1 is proportionally allotted to the partial offers that were not fully satisfied in Step 1, rounding down to one decimal place. This is shown in the table below:

	Remaining Offer (MW)	Offer Type	Step 2 Calculation	Proportion (MW)	Step 2 Allotment (MW)
Offer A	0.0	Full	-	-	-
Offer B	11.7	Partial	(11.7 / 38.4) * 8.4 =	2.559375	2.5
Offer C	26.7	Partial	(26.7 / 38.4) * 8.4 =	5.840625	5.8
Total:	38.4			8.4	8.3



Step 3: Any capacity remaining after Step 2 is allotted in ranked order of earliest to latest time stamp. Any capacity not allotted after Step 3 will remain unallotted.

	Remaining Offer (MW)	Offer Type	Time Stamp Rank	Step 3 Allotment (MW)
Offer A	0.0	Full	-	-
Offer B	9.2	Partial	1	0.1
Offer C	20.9	Partial	2	0.0
Total:	30.1			0.1



After Steps 1-3 of the tie-break process are completed, all 40 MWs of remaining capacity have been allotted. The final results are shown in the table below:

	Offer Quantity (MW)	Offer Type	Step 1 Allotment (MW)	Step 2 Allotment (MW)	Step 3 Allotment (MW)	Final Allotment (MW)
Offer A	5.0	Full	5.0	0.0	0.0	5.0
Offer B	25.0	Partial	13.3	2.5	0.1	15.9
Offer C	40.0	Partial	13.3	5.8	0.0	19.1
Total:	70.0		31.6	8.3	0.1	40.0



Obligations of Less than 1 MW

- The tie-break methodology allots capacity in increments as small as 0.1 MW. It is possible that the tie-break process may result in a total capacity obligation of less than 1 MW for one or more resources.
- In this scenario, the offer that would receive a total obligation of less than 1 MW will be removed from consideration, and the tie-break process will be repeated starting again from Step 1.
- If multiple resources would receive an obligation of less than 1 MW, then the offer with the latest time stamp is removed. This process is repeated until all obligations awarded are greater than 1 MW.



Constraints

- It is possible, albeit rare, that multiple constraints could be involved in a tie-break.
 - e.g., an intertie limit and a zonal limit are both reached in the same tie-break scenario, with the available capacity of one limit being lower than the other.
- In this scenario, the capacity allotted through the tie-break must respect all applicable auction constraints.
- The tie-break for the lower limit will be resolved first using the tie-break steps.
- The remaining capacity is then allotted to the rest of the tied offers associated with the higher limit using the tie-break steps.



Feedback on Enhanced Tie-Break Methodology

- Stakeholders are supportive of the enhanced methodology design. Feedback has been unanimous that it is an improvement from the existing method.
- There was a suggestion to incorporate guardrails into the tie break methodology to discourage aggregators from creating multiple subsidiary organizations in order to clear more capacity through the tie-break.
- While the IESO acknowledges this could be a risk, it is not one that can be addressed solely through the tie-break methodology. The IESO believes that this enhanced tiebreak is an improvement on the current methodology and will allocate capacity more equitably. The impact of multiple subsidiary organizations will be considered more broadly as part of future enhancement discussions.







Summary

- Market rule amendments discussed today enable the tie-break methodology enhancement that is well supported by stakeholders.
- This enhancement aims to improve competitive auction outcomes by considering all tied offers and allotting capacity amongst them more equitably.
- The IESO continues to engage with stakeholders to prioritize future Capacity Auction enhancements.



Next Steps

- Pending stakeholder feedback, the Technical Panel process is anticipated to proceed as follows:
 - September 2025: Vote to post
 - October 2025: Vote to recommend
- The IESO plans to seek IESO Board approval in October 2025.





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