

Minutes of the IESO Technical Panel Meeting

Meeting date: September 9, 2025
Meeting time: 9:00 a.m. – 10:18 a.m.
Meeting location: Virtual

Chair/Sponsor: Michael Lyle

Scribe: Trisha Hickson, IESO

Please report any suggested comments/edits by email to engagement@ieso.ca.

| Invitees | Representing | Attendance Status Attended, Regrets |
|--------------------|---------------------------------------|--|
| Jason Chee-Aloy | Renewable Generators | Attended |
| Rob Coulbeck | Importers/Exporters | Attended |
| Dave Forsyth | Market Participant Consumers | Attended |
| Jennifer Jayapalan | Energy Storage | Attended |
| Forrest Pengra | Residential Consumers | Attended |
| Robert Reinmuller | Transmitters | Regrets |
| Vlad Urukov | Market Participant Generators | Attended |
| Michael Pohlod | Demand Response | Attended |
| Matthew China | Energy Related Businesses and Service | Regrets |
| David Short | IESO | Attended |
| Michael Lyle | Chair | Attended |
| Secretariat | | |
| Trisha Hickson | IESO | Regrets |

IESO Presenters/Attendees

Presenters:

Adam Cumming
Darren Byers
Jo Chung
Josh Duru

Attendees:

Agenda Item 1: Introduction and Administration

Trisha Hickson, IESO, welcomed everyone joining the meeting.

The meeting agenda was approved on a motion by Vlad Urukov.

The July 15th meeting minutes, subject to an edit to Agenda Item 5: Terms of Reference – Alignment with Market Rules to change “through an IESO engagement process warrant Board consideration” to “through an IESO engagement process warrant consideration” were approved on a motion by Vlad Urukov.

Introductory Remarks from the Chair:

Michael Lyle, Chair welcomed everyone and noted that during the April technical panel meeting, the IESO committed to returning at a future date with an explanation of when Market Manuals should be brought forward to the panel for awareness. The IESO will address this matter at the October meeting. Mr. Lyle also noted that Lukas Deeg accepted a new position within his organization and no longer has a role with respect to Ontario and has thus stepped down from the Panel. Mr. Lyle expressed his appreciation to Lukas for his significant contributions to the work of the panel, particularly as we moved through market renewal. Regarding recruiting for new membership, Mr. Lyle noted that the IESO continues its efforts and encourages members to share the opportunities with their networks.

Agenda Item 2: Engagement Update

Ms. Hickson provided an update on the prospective schedule which is posted on the Technical Panel webpage and identified upcoming sessions as part of the IESO September Engagement Days and encouraged panel members and observers to attend. In addition, Ms. Hickson noted that a new

engagement of the Market Rule Improvements and Change to Governance of Approval of Market Parameters, which will be presented at the September 16th engagement webinar, will be brought forward to the panel for education and a vote to post in October.

- Vlad Urukov noted that in the past, education was a separate session that preceded the vote to post and asked if there was any significance to this change.

Jo Chung, IESO noted that in the past there were instances where education and a vote to post were combined at the Technical Panel due to scheduling considerations of engagement and Technical Panel meetings. Mr. Chung added that generally for less material changes, there may be a higher likelihood of coming to the Technical Panel with a combined education and vote to post. There is no real difference in the materials when comparing combined versus separate educations and vote to post meetings. Education materials are intended to get Panel members up to speed on technical aspects related to a proposed change.

Agenda Item 3: Capacity Auction Enhancements: Tie-Break Methodology

Adam Cumming, IESO introduced a revised tie-break methodology for the Capacity Auction, aimed at addressing fairness concerns raised through stakeholder feedback. Mr. Cumming noted that the current system resolves ties using a timestamp, awarding capacity to the earliest offer submission. This approach has been criticized for potentially leading to inequitable distribution of capacity. To improve fairness, Mr. Cumming noted that the IESO is proposing a multi-stage tie-break process, modeled after the approach used in the Transmission Rights Auction.

The memo and materials associated with the Capacity Auction Tie-Break Methodology can be found on the Technical Panel webpage.

- Mr. Urukov acknowledged that he had submitted comments on the proposed language and would leave those with the IESO team for consideration ahead of the next vote. Mr. Urukov then commented that it seems when capacity is awarded in amounts less than 1 MW, the process involves solving a very small problem. For example, if there are three offers of 0.2 MW each, resulting in a total of 0.6 MW, how does cycling through the previous steps resolve the issue? Wouldn't the result be zero for each, due to rounding? If so, why not simply cancel those offers instead of going through additional steps?

Mr. Cumming confirmed that this is essentially what takes place, adding that the process depends on the total amount of capacity available. For instance, if there are 1.9 MW available and three resources tied, each would initially receive approximately 0.63 MW, which rounds down to 0.6 MW. Since none meet the 1 MW minimum, one offer is eliminated typically the smallest or latest by timestamp. The process is then rerun with the remaining two offers. Now, the 1.9 MW is divided between two participants, one receiving 1 MW and the other 0.9 MW. The 0.9 MW offer is then eliminated, and the remaining participant receives the full 1.9 MW. This loop continues until all allocations meet the minimum threshold.

- Mr. Urukov asked whether the process had been tested sufficiently to ensure it would always resolve and not result in continuous cycling.

Mr. Cumming confirmed that yes, it has been tested. The only scenario where it could theoretically cycle is if the total capacity available is less than 1 MW. In such cases, and assuming no participant has a prior obligation, the remaining capacity, say 0.1 MW would simply go unawarded. This outcome is consistent with how the current auction operates.

- Mr. Urukov acknowledged the explanation and added that it is difficult to map without an example but trusts that the process handles fringe cases as intended. He then asked regarding the constraint resolution step, could the IESO clarify what happens when constraints are violated? Specifically, how does the process handle situations where both zonal and virtual limits are exceeded?

Mr. Cumming noted that there are three types of constraints in the capacity auction: zonal, import, and virtual. Most tie scenarios historically have involved only one constraint at a time. However, in rare cases, multiple constraints could be exceeded simultaneously. In such cases, the IESO would solve for the smaller constraint first typically the virtual limit and then allocate the remaining capacity among eligible participants under the remaining constraint. This ensures that the more restrictive constraint is respected first.

- Mr. Urukov noted that this explanation is helpful and may submit comments later.

Mr. Cumming offered to prepare additional examples as the IESO did not include examples for multiple constraints in the education session but can be prepared for the next meeting.

- Mr. Urukov acknowledged the offer of examples.

Agenda Item 4: Post Go-Live True-Ups for the Renewed Market

Mr. Chung explained that the IESO was bringing forward a package of proposed amendments to the market rules as part of the post go-live "true-ups" for the renewed market. These amendments were presented to stakeholders on August 19th and are non-substantive in nature and better align the market rules with MRP's implementation. Mr. Chung clarified that the proposed changes do not reflect changes in design principles, and are limited to typographical, clean-up, clarifications, or computational corrections. Mr. Chung noted that the amendments are categorized into four main areas: Market and System Operations, Market Power Mitigation, Settlements and Miscellaneous Clean-up items.

The presentation associated with the post-go live true ups can be found on the Technical Panel webpage.

- Mr. Urukov asked how the IESO has defined changes as being 'non-substantive', and what the criteria or test was to make the determination.

Mr. Chung responded that the determination of the changes as being non-substantive was based largely on the fact that there were no design changes. The amendments better align the market rules with the actual functioning of MRP implementation.

- Mr. Urukov asked if it is correct to say that all these issues were known prior to MRP go-live and that they were implemented correctly in the IESO's systems and processes? Is the intent then to now align the rules to reflect what was correctly implemented?

Mr. Chung confirmed that was correct.

- Mr. Urukov noted in relation to process, when reviewing the package he considered other related materials, such as the two urgent market rule amendments, a pending market manual change related to registration, and the August 21 update on market performance. Mr. Urukov asked if some of these items could have been included in this true-ups package. For example, the registration change seems to be correcting an error. Also, how will future changes be handled if new issues are identified post go-live?

Mr. Chung responded that this package is limited to the list of non-substantive market rule amendments identified prior to MRP go-live. He noted both the IESO, and market participants are monitoring the renewed market, and there will be a need for future changes. If an amendment is identified, the IESO will evaluate and bring forward future changes through stakeholder engagement. The process includes an assessment on a case-by-case basis, and if a change is urgent or significant, it will be expedited.

- Mr. Urukov asked if there is a threshold or trigger for when the IESO would package and bring forward future sets of market rule changes to the Technical Panel.

Mr. Chung replied that required changes are evaluated internally on a case-by-case basis. If for example a single issue needs to be addressed quickly, the IESO will start the stakeholder engagement for that one issue. For changes that are more of a true-up or relatively minor in nature, those changes can wait and potentially be batched for stakeholders and the Technical Panel. Again, important or material changes will be expedited to the extent possible.

- Mr. Urukov asked so at this moment, the IESO has not identified any changes that need to be expedited, and that is why they were not included in this package?

Mr. Chung confirmed that this is correct.

- Mr. Urukov noted his understanding of these changes are only in relation to items that were implemented correctly, in terms of the functioning of MRP implementation, and noted that this doesn't seem to be the case as the IESO is correcting both the market rules, and then implementing something that corresponds to this new market rule that was not implemented

correctly. Mr. Urukov added that if the design for this revision restriction was always intended to cover the entire hour that a participant receives a binding pre-dispatch advisory schedule, then there is a gap in how the rules were drafted as the binding pre-dispatch advisory schedule is not issued until 30 minutes after the hour. For this item, you are correcting both the market rules, and implementing something that corresponds to this new market rule that was not implemented, is that not the case?

Josh Duru, IESO noted that the design for this revision restriction always intended to cover the entire hour that the participant received a binding pre-dispatch advisory schedule. IESO tools were expected to automatically block participants from increasing offer prices during this time, but this functionality was not implemented.

- Mr. Urukov responded that it's the rules as well as the way it was implemented, which currently has a deficiency, and that the IESO is going to do something incremental to the process in response to the additional language.

Mr. Duru noted that the tool will not be changing as a result of this rule amendment, and that the obligation will be on market participants to avoid offer changes in the first 30-minutes of each dispatch hour.

Mr. Chung noted that one way to view this is that the tools functionality was expected on implementation. There was just a gap in that implementation, that functionality didn't make it into the final version of the tools, but in terms of the detailed design, we were under the understanding that the tool would prohibit offer increases for the full hour. It was a result of the tools gap for which we are adding this explicit clarification of asking participants not to increase offers in the first 30 minutes and to include the explicit ability for the IESO to adjust settlement amounts and redistribute it back to market participants on a pro-rated basis.

- Mr. Urukov noted he was simply challenging the way it was being positioned in the presentation and noted the importance for market participants to have a line of sight, asking if the IESO is changing language to match something that was already implemented, or are we changing the language and enhancing the processes and the tools? He noted that he wanted to make sure he was thinking about it the right way as he reviewed the actual language.

Mr. Chung reiterated this was a case where during the testing phase prior to go-live, that the tools gap was identified.

- Mr. Urukov acknowledged this statement.

- For Item 1B – Revision Restrictions for Daily Dispatch Data: Single-Cycle Mode, Mr. Urukov acknowledged the onus on participants to ensure that the alignment of single-cycle mode for the entire duration of the commitment takes place, but asked what happens if a participant in error does not align or misses that requirement?

Mr. Duru noted that in this circumstance it would necessitate a call from the IESO control room requesting the market participant to revise their daily dispatch data parameter for single cycle mode.

- Mr. Urukov asked if the IESO is limiting the number of instances when the control room will need to call market participants, since participants should be aware of this obligation.

Mr. Duru stated that this is correct.

- For Item 1C – Operating Reserve for Storage Resources (slide 11), Mr. Urukov asked regarding the proposed amendment in red, whether the language already existed?

Darren Byers, IESO responded that the language for operating reserve was correct in the legacy market rules but were inadvertently left out of the renewed market rules. Mr. Byers added that those limitations in the subsequent dispatch hour specifically, so it is the limitation on what you do in the energy market in the subsequent dispatch hour.

- Mr. Urukov acknowledged stating it is an energy type of additional limitation.

Mr. Byers stated this is correct noting the IESO had included the operating reserve limitation in subsequent dispatch hour but had omitted the energy market limitation.

- Mr. Urukov acknowledged this answer.
- For item 2A – Maximum Number of Starts per Day, Mr. Urukov asked if the IESO was aware of this issue before go-live, why was it not corrected in that original package? As it seems that this would have an impact and perhaps some market participants have been impacted to date.

Mr. Byers noted that the IESO felt that it was in the edge case, so this is only applicable for those market participants who had not established their reference level values in advance, and as that process was underway pre go-live the IESO had good insight into the fact that this was not an item which required to be enacted on day one.

- Mr. Urukov asked if the IESO is aware of any market participation who has been impacted to date?

Mr. Byers responded that no market participants have been impacted to date.

- For item 3B – DAM Reliability Scheduling Uplift, Mr. Urukov asked for confirmation that this is an example where the actual computation is correct, and that the change is only altering the formula in the market rules and charge types and equations to match what has already been implemented in terms of the formula.

Mr. Chung noted that is correct.

- For item 3F – DAM Balancing Credit (slide 27), Mr. Urukov asked for GOG-eligible resources, with the required deletion from section a., how these resources were being settled correctly today?

Mr. Chung noted that the settlement for GOG-eligible resources and the DAM balancing credit is specified below in section 3.3.2.2b. (slide 28).

- Mr. Urukov acknowledged.
- Mr. Urukov asked for clarification regarding the settlement section in that it is only the IESO correcting the language in the rules to match what is currently being implemented.

Mr. Chung noted this is correct, noting that the calculation from the IESO's side is correct and the impetus around this language change is to add clarification.

- Mr. Urukov acknowledged.
- Mr. Urukov noted a potential cross-referencing error during his general review of the market rules – specifically Appendix 7.5, sections 18.5.3 to 18.5.6. He requested that the IESO review these sections.

Mr. Byers committed to review the sections.

Note: The IESO reviewed the sections subsequent to the Technical Panel meeting and confirmed with Mr. Urukov that the cross-references as currently specified in the market rules were correct.

Other Business

No other business was identified.

Adjournment

The meeting adjourned at 10:18 a.m.

The next regular TP meeting will be held on October 7, 2025.

Action Item Summary

| Date | Action | Status | Comments |
|------|--------|--------|----------|
|------|--------|--------|----------|

No actions identified.

DRAFT