

Minutes of the IESO Technical Panel Meeting

Meeting date: September 10, 2024
Meeting time: 9:00 a.m. - 10:52 a.m.
Meeting location: In-Person/Video Conference

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
Indra Maharjan	Consumers	Attended
Forrest Pengra	Residential Consumers	Attended
Robert Reinmuller	Transmitters	Attended
Joe Saunders	Distributors	Attended
Vlad Urukov	Market Participant Generators	Attended
Michael Pohlod	Demand Response	Attended
Lukas Deeg	Generators	Attended
Matthew China	Energy Related Businesses and Service	Attended
David Short	IESO	Attended
Michael Lyle	Chair	Attended
Secretariat		



Invitees	Representing	Attendance Status Attended, Regrets
Trisha Hickson	IESO	Attended
IESO Presenters/Attendees		
Stephen Nusbaum		
Darren Byers		
Jo Chung		
James Hunter		
Jessica Savage		
Candice Trickey		
Carita Edwards		
Paula Lukan		
Adam Cumming		

Agenda Item 1: Introduction and Administration

Trisha Hickson, IESO, welcomed everyone joining the meeting.

The meeting agenda was approved on a motion by Joe Saunders.

The September 10, meeting minutes were approved on a motion by Forrest Pengra.

Introductory Remarks from the Chair:

Michael Lyle, Chair welcomed everyone and thanked Technical Panel (TP) members for their participation and contributions during the additional sessions held over July and August to discuss Market Renewal related items ahead of the today's meeting. Mr. Lyle pointed to the Panel's commitment and thoughtful feedback as being critical to ensuring the market rules reflect the design. In addition, Mr. Lyle noted that the IESO is still accepting nominations for the Market Participant, Consumer representative. The posting is still available on LinkedIn. Mr. Lyle also noted that the IESO Board has approved the 2024 Capacity Auction Market Rule Correction Amendments, effective September 20th.

Agenda Item 2: Engagement Update

Trisha Hickson, IESO provided an update on the prospective schedule which can be found on the Technical Panel webpage. Ms. Hickson identified upcoming sessions as part of the IESO September Engagement Days and encouraged Technical Panel (TP) members and observers to attend.

Agenda Item 3: Market Renewal Program (MRP) – Final Alignment Batch

Jessica Savage, IESO noted that the proposed vote to recommend of the MRP market rule amendments via the Final Alignment (FA) batch, concludes more than 30 TP meetings over four years. Ms. Savage noted the TP's role is to provide advice to the IESO Board on whether the market rule amendments meet the design intent, and these rules have been developed with feedback from stakeholders for the past eight years. On behalf of the IESO, Ms. Savage thanked TP members and stakeholders for their collaboration and noted that the many years taken reflects the extent of engagement in response to stakeholder concerns with adjustments made along the way. The IESO also recognized that MRP is new and complicated, and that there will likely be growing pains after go-live. In consideration of this challenge, the MRP implementation and Market Power Mitigation (MPM) working groups will continue their respective stakeholder engagement efforts.

Stephen Nusbaum, IESO, provided a presentation outlining stakeholder feedback on the FA Batch. The presentation included stakeholder comments, the IESO's response and revisions to the Market Rules and Manuals. In addition, Mr. Nusbaum presented supplemental materials (posted Sept 6) on TP member feedback specific to the proposed market rule language on establishing an MPM working group (MPM WG).

All presentations can be found on the Technical Panel webpage.

Jason Chee-Aloy asked what the IESO's plans were if additional market rule amendments were required after IESO Board approval of the FA batch and following testing. Specifically, he asked whether the TP would stick with the same cadence of meeting and how the baseline of the rules would be handled.

- Candice Trickey, IESO, noted that the regular cadence of TP meetings will be scheduled, and additional meetings can be booked as required to ensure priority issues are addressed. Ms. Trickey reminded the panel that there is also the urgent market rule amendment process that can be utilized if required.

Mr. Chee-Aloy asked for confirmation whether market participants (MPs) also had the right to raise issues through the TP or propose market rule amendments themselves.

- Ms. Trickey confirmed this was correct.

Vlad Urukov asked whether the discretion to delay the designation of narrow constrained areas (NCAs) and dynamic constrained areas (DCAs) until six months after go-live was a firm commitment from the IESO.

- Mr. Nusbaum responded that yes, it is a firm commitment. Mr. Nusbaum further clarified that previous version of the market manuals engaged on with stakeholders, already states that once an NCA is published, it cannot come into effect sooner than 30 business days later. The timing for the start of the DCAs assessment process was unclear and the IESO made a further amendment to ensure that there was no ambiguity. and that the IESO has the ability, once the Potential Constrained Areas (PCA) were published, for the DCA to come into effect no sooner than 30 business days later.

Mr. Urukov asked for clarification as to where in the market rules the timing for the first publication of the PCA/NCA is described, as it was described in the presentation to the panel on August 15.

- Mr. Nusbaum noted this language is not explicitly documented as part of the market rules. The market rules only require that the IESO publish results once per calendar year, rather the timing commitment discussed in August by the IESO detailed how the PCAs would be rolled out as part of the transition to the renewed market. It was further noted that this commitment has been documented in presentation materials and meeting minutes.

Lukas Deeg asked regarding pseudo-units (*PSUs - slide 6 - IESO to consider on a case-by-case basis PSU registration requests where not all resources designated as part of that PSU are connected to the IESO-controlled grid at the same connection point*), whether there are situations where the IESO having completed an assessment, might reconsider that assessment at some other point for reliability purposes?

- Mr. Nusbaum noted the one-time assessment is done at the time of registration. There is no continuous process to review connections. If something material was to cause a reliability issue to the grid, the IESO can constrain a resource to address the concern. Mr. Nusbaum noted that it is an unlikely scenario where the IESO would grant an exception to a PSU registration request where not all resources are connected at the same connection point, and then find itself where it cannot reliably operate the grid in that configuration thereafter. There would need to be an extraordinary event or change to drive the IESO to take actions that would lead to the need for a change in registration.

Mr. Deeg asked for confirmation that it would only be at the time of registration where reliability concerns would prevent a combined cycle plant from being permitted to be registered as a PSU.

- Mr. Nusbaum noted that if the IESO's assessment is that there are reliability concerns at the time of registration then yes, that is correct.

Mr. Deeg asked if there is a combined cycle plant that has two separate connection points and is not PSU eligible, can they manage their operations through offers?

- Mr. Nusbaum acknowledged, that yes, they can.

- Ms. Trickey noted that if a unit that is contemplating and assessing how to configure their facility, a conversation would be had with the IESO upon registration to determine a path forward.
- David Short, IESO, noted that if a participant wants to change their connection, they are able to do so by applying through the connection assessment process.

Mr. Deeg noted that there is one MP who is considering changing their connection because of complications related to MRP implications. Mr. Deeg indicated that he would assume the market participant is looking for confirmation from the IESO whereby the IESO would allow PSU resources to be connected at different connection points.

- Mr. Nusbaum noted that the IESO is aware of the facility and has started to look into their connection to be able to provide advance guidance. He noted the benefits of PSUs, and that the IESO would try to facilitate where possible.

Mr. Deeg asked about the point made on slide 6 relating to Make Whole Payment eligibility (allowance for certain non-quick start resources that are not GOG-eligible to be eligible for make-whole payments up to their minimum loading point), and whether there might be any additional changes required?

- Mr. Nusbaum noted that the IESO's understanding is that the edit proposed in the FA Batch will address the issue. If any additional gaps or issues arise, the IESO is willing to further discuss.

Mr. Chee-Aloy asked for clarity regarding the previous statement of the IESO only needing to document the delay in declaring NCAs through the meeting minutes and presentations?

- Mr. Nusbaum explained that the IESO does not believe there is a need to codify this language into the Market Rules or Market Manuals. The IESO has the necessary authority to designate PCAs at any point within the first year after go-live, and the IESO has committed to delaying the initial designation for 150 calendar days (with a further 30 business days before the NCAs and DCAs would be used in mitigation assessments).

Mr. Chee-Aloy asked why the IESO would not consider inserting language to address the IESO's commitment under Market Rule 4.8.1-RO7 page five rule B.1.1?

- Mr. Nusbaum noted that the IESO has already expressly committed to the timelines discussed and that this commitment is documented in TP minutes and presentations.
- Ms. Savage reinforced that the IESO has made a public record and commitment in relation to this matter and believed that including language within the Market Rules is not required.

Mr. Chee-Aloy acknowledged but noted that MPs would be more comfortable should these

commitments be integrated into the Board materials. Transparency in providing the exact language or information being brought forward to the IESO Board regarding the designation of constrained areas would provide comfort.

- Mr. Nusbaum agreed and confirmed that the commitment will be integrated into the Board materials, and that the materials submitted to the Board when asked to consider adopting market rule amendments are posted publicly, which contributes to further transparency and documentation of the IESO's commitment.

Mr. Chee-Aloy acknowledged and accepted this approach.

On another matter, Mr. Urukov asked if there was an update on any engagement regarding the interpretation bulletins.

- James Hunter, IESO, noted that he expected MACD would be providing an update, and that he would also expect the update to be prior to MRP go-live.

Mr. Urukov asked if the IESO would be open to the MPM WG including references to recourse within the MPM WG ToR.

- Mr. Nusbaum noted, yes, the IESO would be open to that if deemed to be important to do so by the MPM WG itself.

Mr. Urukov stated his understanding of the four incremental changes proposed by the IESO during the August 15 meeting that was captured in a presentation from that date. Mr. Urukov stated the challenges in finding these commitments contained in presentations and questioned why these incremental changes would not be put into the proposal package. Specifically, Mr. Urukov questioned why the IESO would include the MPM WG commitment into a transitional market rule, however would not integrate the IESO's commitment to not issue ex-post mitigation assessments into the market rules.

- Mr. Nusbaum noted that the market rules already state that the IESO "may" issue notices in regard to physical withholding, thereby indicating discretion and questioned what else might be needed.

Mr. Urukov expressed concern over the reliance on the term "may" and that the IESO has committed to go over and above which is not articulated in the market rules.

- Mr. Hunter noted the difference between the two points. The creation of a working group is establishing a new action that would not otherwise have taken place, whereas with ex-post physical withholding, the IESO already has discretionary authority and the IESO has made a public commitment with respect to how the IESO will exercise that existing discretion for a period of time. The Market Rules are meant to capture the rights, obligations, and authorities of the IESO and MPs and in this case the discretionary authority is in the Market Rules and

what the IESO is doing is making a specific commitment with respect to how the IESO will exercise that discretion for a period of time. The IESO's view is that this does not change the discretionary authority.

Mr. Urukov asked for confirmation of the IESO's commitment.

- Mr. Nusbaum noted that the commitment is that the IESO will not assess physical withholding in isolation for a period of time post-go live. The IESO recognizes that challenges could occur in how ex-ante mitigation and physical withholding are working and that there could be complex interactions that had not been anticipated that may require further analysis. The IESO will consider this information prior to deciding whether to issue a notice of physical withholding. The commitment is to work with the sector to ensure the appropriate outcomes.

Mr. Urukov asked if the IESO would pause sending out ex-post notices until issues are resolved related to excessive amounts?

- Mr. Nusbaum noted there may be instances where notices would be issued. It is not the intent to pause the entire mechanism. Mr. Nusbaum added that in circumstances where the IESO believes there are extenuating circumstances, it would be appropriate to delay issuing notices.

Mr. Urukov asked why the presentation is noting the pause of ex-post mitigation assessments?

- Ms. Savage noted the IESO is highlighting that if there are unintended interactions, the IESO has the ability to proactively exercise discretion.
- Mr. Nusbaum noted the IESO will pause issuing notices of physical withholding in those situations where the IESO is seeing unintended outcomes such as excessive volumes of physical withholding that are not aligned with the design intent.

Mr. Urukov stated that what he believes is excessive may be different than what the IESO considers excessive.

- Ms. Trickey noted that the IESO will look at both individual cases and broader situations. If the IESO finds there are broader situations contributing to an unexpectedly large volume of cases, then the IESO could pause all similar cases for the time being until the root issue is identified and addressed.

Mr. Urukov noted his concern remains that if an MP received an excessive number of notices which may be different than the IESO thinks, it is not clear what an MP could do in this case.

- Ms. Savage noted that there would be discussion with the IESO and there is an opportunity

to table issues with the MPM WG which could provide recommendations to pause.

Mr. Urukov recommended that the IESO make this as part of the MPM WG ToR.

- Ms. Savage noted that it is still the IESO's discretion, and it is not the intent to automatically pause ex-post. The IESO needs to maintain discretion, and this is noted in the language used of "may".

The IESO noted that more discussion can take place on this matter offline.

Mr. Urukov noted a concern with respect to ex-ante market power mitigation. Under the current settlement rules there is a clear path from a notice of disagreement to a notice of dispute, that requires as an initial step the filing of a notice of disagreement through the receipt of a settlement statement. However, ex-ante market power mitigation will be different as the impact will be less direct. Offers will be replaced with mitigated offers, resulting in different schedules and different prices. Mr. Urukov added, so where the concern lies is where there might be an inappropriately mitigated price, but it may not be possible for a market participant to recognize this within the time restrictions for filing a notice of disagreement.

- Mr. Hunter noted that the notice of dispute process is available to address any disagreement between the IESO and market participants with respect to the IESO's application of a market rule. There is no general requirement to file a notice of disagreement in advance of a notice of dispute. The exception to this general principle is with respect to disputes regarding some settlement outcomes. The market rules establish a notice of disagreement process which must be followed as a precondition to filing a notice of dispute, and that process includes timelines for filing notices of disagreement. The purpose of the notice of disagreement process is to catch issues that could be identified by market participants through review of their preliminary settlement statements before the IESO settles the market; it is more administratively burdensome to correct such errors following the issuance of a final settlement statement because the correction requires re-settlement of the entire market. However, market participants can otherwise challenge the IESO's application of market rules without having to first commence a notice of disagreement, and arbitrators can make appropriate awards. In the hypothetical case where there is an unintended outcome in the ex-ante process that could only have been identified after the fact, and that outcome gives rise to a disagreement between the IESO and a market participant regarding the IESO's application of the relevant market rule(s), the participant can challenge the IESO's application of the rules outside the time restrictions for filing a notice of disagreement.

Mr. Urukov asked for clarity on what would be subject to a notice of disagreement?

- Mr. Hunter stated that the notice of disagreement process is complex but clearly set out in the market rules. He added that it is important to note that the notice of disagreement is a special channel to address disputes for settlement purposes, but that it is not necessary for other disputes to proceed through the notice of disagreement process.

Mr. Urukov asked whether, if the MPM WG brings forward an issue, and the IESO then disagrees with that issue, could that issue still be taken by an MP as a matter of a subject of dispute?

- Mr. Hunter noted that yes that is how the dispute process is intended to work.

Mr. Chee-Aloy commented that this is the crux of why the MPM WG has been created and why he continues to advocate for the group to address recourse. Using ex-ante mitigation as an example, it is a very mechanical process subject to technical assumptions. The IESO can state that they are applying the rules as they are intended, but what is behind the calculations are a lot of gray areas. Mr. Chee-Aloy stated his belief that the MPM WG is a compromise to addressing this issue and sees it as a way forward. Mr. Chee-Aloy shared that there is historical scepticism related to the application of the dispute process in Chapter 3.

- Mr. Hunter noted Mr. Chee-Aloy's position that there was a problem with relying on the dispute resolution process to address issues related to ex-ante mitigation and noted as well that skepticism had been expressed about the sufficiency of the dispute process to address such issues. Mr. Hunter acknowledged that there are cases where an arbitrator could agree that the IESO properly applied rules as drafted, but where the real issue is that a participant may believe that a market rule should have been drafted differently. Mr. Hunter noted that there was nothing special about ex-ante as far as that concern goes. It may be that in some cases the IESO did follow the rules correctly and the best way to address a subsequently determined issue in those cases could be by amending the rules, rather than disputing them.

Mr. Chee-Aloy noted that MPM is a special case as it is new and a different framework being introduced into the wholesale market design that will impact the economics of the market in areas with transmission constraints. Based on past work including historical examples of narrow constrained areas the generators and storage providers in northern Ontario could be subject to long periods of MPM that will only negatively impact their economics. That has never happened before. This is a new untested impactful feature, and this is why the IESO has been hearing concerns being raised from stakeholders for months.

- Mr. Hunter noted the comment provided and stated that he did not intend to downplay the significance of the new framework, and that he appreciated the comment.

Mr. Deeg noted his understanding of the broad language around unintended outcomes but expressed a remaining concern on how the MPM WG might apply the processes and procedures for recourse purposes. It would be helpful to provide additional clarity.

- Ms. Savage noted that the response to the question has been covered by Mr. Hunter's previous remarks which explained the procedures.

Mr. Deeg clarified asking if the intent is that if the MPM WG flags harm that was caused by

unintended outcomes, could that market participant rely on a process for recourse?

- Mr. Hunter noted that should a dispute come up between an MP and the IESO and the same issue is reviewed by the MPM WG, which agrees with the MP, that finding could be persuasive to the IESO or an arbitrator, depending on what the issue was about.

Mr. Deeg stated that one of the challenges is there may be issues with more than just an application of the Market Rules. For example, the MPM WG may identify a need for specific requirements that outline the thresholds for conduct and impact tests. There could be broader issues than just how the market rules are applied.

- Mr. Hunter indicated that it is hard to discuss these things in the abstract, but that it was fair to say that there will be some cases where there will be a clear disagreement about whether a market rule was correctly applied, all things considered, and others where the market rules do not at all imply or require an outcome, but where the question is about whether they should be amended going forward and there are a myriad of cases between the two.

Rob Coulbeck noted that the thresholds themselves are an issue, as there is not a lot to back up the operators or price thresholds. The pricing thresholds are included in the Market Rules. As such, is this something that could be disputed, if the MPM WG sees a significant amount of mitigation occurring as a result of the pricing thresholds? Should there be a term for this included in the MPM WG Terms of Reference (ToR) to address how the MPM would look at this?

- Mr. Nusbaum noted that this topic is something the IESO and MP would discuss to align on in identifying if the MPM Framework is doing what it is intended to do. If they mutually agree that it is not doing what it is intended, then we would agree to update those thresholds. As such, the IESO is not sure it would not need to flow through the dispute resolution process rather than a working group designed to continually evolve and improve the MPM Framework.

Mr. Coulbeck noted that it would be beneficial to have something identified in the MPM WG ToR that if the operating reserve thresholds are imposing mitigation on a frequent basis, it should be reviewed.

- Ms. Savage stated that the purpose of the MPM WG is to first identify and prioritize issues with input from technical experts. Once it is agreed that there is an issue that needs resolving, the WG can then discuss potential solutions. The IESO and Technical Panel should first align on the issues, then that leads to potential fixes rather than beginning to solution hypothetical issues at this time.

Mr. Urukov noted the importance of this conversation is to have assurance that the group will have the right mandate and identify issues that will face the WG.

- Ms. Savage noted these discussions will be better suited for the next Technical Panel

meeting in October which will discuss the ToR of the MPM WG.

Mr. Urukov added that there may be challenges determining what the group should discuss due to ambiguities with respect to causes of potential issues.

- Ms. Trickey agreed that it may be difficult to accurately identify issue and their causes, but the benefit of having a group is to assist in that work.

Mr. Deeg stated that many market participants are likely to rely on the MPM WG for MPM issues and hence why the recourse issue is so important. Mr. Deeg added that MPs do not want to go to the OEB, and neither does the IESO. MPs will need to preserve the right to dispute.

- Mr. Hunter noted the IESO will not tell an MP that they cannot file a notice of dispute about an issue they have with respect to the IESO's application of the market rules. Whether an arbitrator would agree that a participant is entitled to an award is another question. But to be clear, if the MPM WG recommends that the market rules should be changed in some way, an arbitrator will not order that the IESO should apply the change retroactively. Arbitrators will not do that. An Arbitrator makes a decision about what the rules required at the time they were applied, not what they might have required if a better or different framework had, counterfactually, been in place. Mr. Hunter noted that it was difficult to speak in the abstract about these things, but that it was also important to remember that much of the dispute resolution process is focused on good faith negotiations, before the dispute proceeds to arbitration. There is no time limit to good faith negotiations under the rules, and the reason for that is to afford the opportunity for market participants and the IESO to work through complicated issues and arrive at equitable and appropriate solutions. The IESO takes the good faith negotiation process seriously and has a long track record of addressing issues in dispute in good faith.

Mr. Chee-Aloy asked in relation to proposed language on the purpose of the MPM WG if the IESO would be willing to add the words "and reconcile" after "means".

- Mr. Lyle asked for further clarification of the proposed edit.

Mr. Chee-Aloy, explained that without using the term recourse, this edit may help address some the concern from the Technical Panel members to help guide what the terms of reference could be for the MPM WG.

- Ms. Savage noted the earlier answer from the IESO stands regarding not including this proposed edit.

Mr. Chee-Aloy asked if it would make sense to also include an edit to the length of the MPM WG by changing it from one-year to two.

- Mr. Nusbaum and Ms. Savage noted that this may not be the best approach to include within the market rules as it would be better advised to see how the working group progresses instead of committing to a longer period to time and being held to that timeline should the working group not be functioning as intended.

Mr. Chee-Aloy requested that the Technical Panel be involved in informing the decision to extend the duration of the MPM WG.

- Ms. Savage noted that because the MPM WG will be reporting back to the TP as well as to the IESO, TP will therefore be involved in any discussions with respect to extending the duration of the working group.

Upon completion of comments and the presentation Mr. Lyle called the panel for a vote.

Robert Coulbeck moved the vote to recommend the MRP Final Alignment Batch of market rule amendments for IESO Board approval.

The Technical Panel voted unanimously in favour of recommending the MRP market rules to the IESO Board for approval – see TP member comments attached.

Other Business

No other business was brought forward.

Adjournment

The meeting adjourned at 10:52 a.m.

The next regular TP meeting will be held on October 15, 2024.

Action Item Summary

Date	Action	Status	Comments
March 23, 2021	In relation to MR-0448-R00 market rule amendments, the IESO will periodically review the availability of Error and Omissions insurance for negligence.	Open	

DRAFT

Member Vote and Rationale – Market Renewal Program: Final Alignment Batch

IESO Technical Panel, September 10, 2024

The vote to recommend the proposed market rule amendments (MR-00481-R00-R13) for consideration to the IESO Board of Directors passed unanimously at the September 10, 2024, Technical Panel meeting.

MR-00481-R00-R13 – Market Renewal Program: Final Alignment

TP Member	Vote and/or Rationale
Michael Pohlod (Demand Response)	For
Indra Maharjan (Consumer)	For
Forrest Pengra (Residential Consumer)	For Throughout the entirety of the process of MRP and more specifically MPM, I have listened along carefully to both the IESO and fellow Technical Panel members. From the residential consumers perspective, it's critical to understand regulation and industry, as they intertwine with real-world consequences and impacts on all consumers in the province. Balancing the economics of both affordability and attractiveness to industry will remain the most difficult part of the new market. I feel throughout the entirety of the process, both sides worked well together to voice concerns and find

TP Member	Vote and/or Rationale
	<p>opportunities. Where opportunities coexist with enhanced economic protection mechanisms, the consumer benefits. I felt confident in my yes vote prior to being asked the question, and even more so after the unanimous response.</p>
Lukas Deeg (Generator)	<p>For</p> <ul style="list-style-type: none"> i) The IESO has been seeking feedback from market participants on MRP market rule batches since 2021; ii) The amendments within the Final Alignment Batch are generally in line with the approved MRP detailed design document; iii) To help address market participant concerns related to market power mitigation, the IESO committed in their August 15th presentation and subsequent discussions to: <ul style="list-style-type: none"> a. enhance end-to-end user testing; b. effectively delay the designation of constrained areas to a minimum of six months after MRP Go Live; c. provide preliminary data on potential constrained areas and narrow constrained areas based on the first ninety days after MRP Go Live; d. use extra discretion when assessing ex-post mitigation for physical withholding to avoid unintended consequences under specific circumstances; and e. establish the Market Power Mitigation Working Group prior to MRP Go Live; iv) The IESO remains open to further amendments to the market rules if issues or challenges are identified through testing or by market participants; and v) The IESO has committed to continue to work with: <ul style="list-style-type: none"> a. the Technical Panel to establish the terms of reference of the Market Power Mitigation Working Group; b. the Technical Panel and stakeholders to ensure knowledgeable representatives from a cross section

TP Member	Vote and/or Rationale
	<p>of market participants are effectively represented on the Market Power Mitigation Working Group;</p> <ul style="list-style-type: none"> c. market participants who wish to register their facilities as a pseudo unit to address potential dispatch compliance concerns ahead of MRP Go-Live; and d. the market participant who has a non-quick start unit that is not GOG eligible to ensure the amended provisions introduced in the Final Alignment Batch addresses their unique circumstance. <p>Implementation remains an outstanding concern for market participants and several critical components related to market renewal remain outstanding. The contracts between the IESO and generators still require amendments and agreement between parties to reflect the market changes brought on by MRP. Reference level discussions between the IESO and generators are ongoing, and system testing is set to conclude next year. MRP requires these items to uniformly work together if the transition and framework will be successful, and generators will not fully know the implications of the transition to the new market until these are resolved. These items are outside the Technical Panel's terms of reference. However, I would encourage the IESO to continue to work with market participants to resolve these items quickly.</p>
Jason Chee-Aloy (Renewable Generators)	<p>For</p> <ul style="list-style-type: none"> 1. conclusion of establishing Reference Levels with Market Participants for inclusion within IESO's application of Market Power Mitigation (MPM); 2. determination of Terms of Reference for the MPM Working Group, including knowledgeable sectoral membership within the Working Group; 3. outcomes regarding addressing concerns and solutions relating to hydroelectric generators, as documented between the Ontario Waterpower Association (OWA) and IESO; and 4. conclusion of amendments to contracts held between Suppliers (e.g., wholesale market participant generators) and IESO, contractually triggered by MRP

TP Member	Vote and/or Rationale
	<p>amendments to the Market Rules. (In future, I recommend that IESO work with stakeholders to review how the role of the TP may need to change to consider explicit linkages between IESO procurement contracts and Market Rules – as no such stakeholder forum exists today to assess linkages to Market Rules and contracts administered by IESO. This is prudent because the scope of the TP was founded decades ago at a time when contracts were not used by IESO as the main mechanism to ensure resource adequacy. Rationale for this recommendation is supported by this point - if the Incremental Capacity Auction (ICA) (i.e., a Forward Capacity Market) was not discarded and continued within MRP scope (resulting in IESO not using contracts as the main mechanism to ensure resource adequacy), then the TP would have had to opine on ICA related amendments to the Market Rules and would have had to consider factors relating to electricity infrastructure investment regarding new and operating assets (e.g., generators, storage, etc.)</p>
Vlad Urukov (Generator)	<p>For</p> <p>As guided by the Technical Panel Terms of Reference, a Technical Panel vote on any Market Rule amendment, including the Market Renewal Program (MRP), is ultimately a contemplation on whether the proposed Market Rule language meets the intent of the proposed change. In the case of the MRP Final Alignment vote, the proposed changes span the entire 11 Chapters of the Market Rules as well as Market Manuals. The intent of MRP is multi-faceted and complex, covering the operation and settlement of both the Energy and Reserve markets.</p> <p>An additional challenge is the introduction of the Market Power Mitigation (MPM) framework, which is a layered, three-part framework that relies on the designation of constrained areas and independently set reference levels. This framework does not have an equivalent structure in the existing market. In recognition of these challenges, my vote on the alignment package of all previously voted sections relies on my review as well as the extensive stakeholder engagement over the last</p>

TP Member	Vote and/or Rationale
	<p>eight years and the PwC MRP DAM Engine Pre-Implementation Review and MRP PD & RT Engine Review.</p> <p>My vote in support of advancing to the next stages of MRP is also based on the expectation that the IESO will collaborate with participants on establishing an effective MPM Working Group, finalizing MPM reference levels, enhancing end-to-end testing, delaying the deployment of NCAs and DCAs, and exercising discretion in ex-post mitigation. Additionally, I recommend that the IESO continue to enhance the MRP Market Rules in response to future stakeholder feedback and testing outcomes.</p>
<p>Robert Reinmuller (Transmitters)</p>	<p>For</p> <p>While there were many challenges over the past few years, I wanted to thank IESO for listening to the engagement community and allowing teams to focus on closing specific gaps. With clear progress made last two years, there is still anxiety in the industry and providing an opportunity to work out the finite details of transactions, enabling a mechanism to evaluate recourse options, manage unintended consequences in an open and transparent way, allowed me to support the approval. With the MPM Working Group evaluating the refinements that are still required pre and post implementation, I have confidence that any remaining gaps can be dealt with as we transition to the new process.</p>
<p>Rob Coulbeck (Retailers or Wholesalers)</p>	<p>For</p> <p>To start I would like to compliment the IESO and the entire Technical Panel on the work everyone has done, and the compromises made in achieving the outcome of unanimous approval in the vote to recommend. In representing the trading community my vote to recommend came with minimal items of concern. There are issues around Predispatch and Real-time congestion allocation on the interties that were debated and ultimately the IESO rejected the comments of the trading community. While we are still of the opinion the decision on intertie congestion may result in reduced intertie</p>

transactions, this is not an item to without support of the entire Market Renewal package. I do have serious concerns though on Market Power Mitigation and its impact on creating an efficient market outcome. The components that are used to initiate and evaluate if a resource(s) may have or is considered to have market power are administrative values that have not been properly vetted and in my opinion are without valid justification. The values in question are:

- BCACondThresh \$25
- IBPThresh \$100
- ORGCondThresh \$15
- CTEnThresh2BCA \$100
- CTEnThresh2GM \$100
- CTORTresh2ORL \$25
- CTEnThresh2ORL \$25
- CTORTresh2ORG \$25
- CTEnThresh2ORG \$25
- CTEnMinOffer \$25
- CTORMinOffer \$5
- ITThresh2NCA \$25
- ITThresh2DCA \$25
- ITThresh2BCA \$50
- ITThresh2GMP \$50
- ITThresh2ORG \$25

The addition of a Market Power Mitigation Working Group along with delaying the application of the Dynamic and Narrow Constrained Areas will permit evaluation of the effectiveness of the parameter for those calculations but the application of market power for Global market power and Broad Constrained Areas are to be live at implementation of MRP. While it is unlikely that Global market power for energy will bind initially, that is not the case when it comes to operating reserve. Assuming MRP goes live May 1, 2025, this will be in the height of freshet with an abundance of

TP Member	Vote and/or Rationale
Jennifer Jayapalan (Energy Storage)	<p>hydroelectric generation and historically limited operating reserve available. Based on my work, historically as a market participant managing a variety of resources over 22 years and analysis of MRP, the Global operating reserve threshold limit of \$15 will trigger the conduct and impact test frequently in the first 2 months of MRP. Another item that will play a major role in the application of the operating reserve Global market power is the Operating Reserve Demand Curves for each class. The market rules state each operating reserve class's demand curve will be calculated based on the 99th percentile of historic prices. The IESO has indicated these values will not be available until 4th quarter of this year. It is impossible to fully appreciate the impact of the administrative threshold values until the operating reserve demand curve values are known. Additionally, it appears that negotiations between the IESO and market participants on the reference values have been frustrating for participants with the threat a resource may ultimately end up with the default values of \$0.00 for price reference and full registered values for non-price related reference values. In conclusion, I fully support moving forward with Market Renewal with market power mitigation, but I believe there needs to be a thorough review of the threshold values for the conduct and impact tests.</p> <hr/> <p>For</p> <p>While I commend the effort by the IESO in reaching this significant milestone and getting us to this point, I wanted to highlight that I am recommending this batch with the recognition and understanding that there is still significant work to be done. The success of the full implementation of MRP will be dependant on an approach by the IESO that recognizes the learning curve the of industry as a whole in MPM application, limitations and outcomes. An important part of this will be the development of the Terms of Reference for the new MPM Working Group in transparent and functional way to allow it to address industry concerns.</p> <p>Additionally, one of the larger challenges with reviewing MRP in relation to energy storage is the limited experience and understanding within both the community and the IESO in how larger scale energy storage will be scheduled and operate under market renewal. While I am approving the MRP Final</p>

TP Member	Vote and/or Rationale
	<p>Alignment Batch based on existing interim storage rules within the MRP framework, there are serious challenges and shortcomings with energy storage operating under MRP. This ranges from the simple inability to set an ADE and provide operating reserve at the same time thus creating potential technology inequalities in the DAM, to reference levels and the fluctuating operating costs of charging, through to the more challenging integration of real time state of charge management. The understanding is that the implementation of MRP will provide a clear avenue to initiating and developing a full integration solution for energy storage resources.</p> <p>Lastly, my approval is based on the understanding that we have a long way to go ahead of May 1st and there will more than likely be changes and tweaks to be done to the rules as we work through end-to-end testing. I look forward to continuing to work with the IESO in ensuring we have a functional, working set of rules that allows for the end goal of more efficient supply, scheduling, and pricing of electricity.</p>
Dave Forsyth (Consumer)	<p>For</p> <p>I voted yes to support the final alignment batch of rules for MRP. I believe the IESO worked with the sector to address issues brought forward by the industrial consumer load community. However, I am concerned that the provision that dispatchable load must offer operating reserve in all hours they are dispatchable in the energy market to be unreasonable. The IESO has committed to work with dispatchable load to address criteria that will be considered when making determinations that dispatchable loads are exercising market power which is a very highly unlikely outcome and I look forward to those meetings.</p>
Matthew China (Energy Related Business and Service)	For
Joe Saunders (Distributor)	For

TP Member	Vote and/or Rationale
David Short (IESO)	<p>I voted in favour of the Vote to Recommend the proposed market rule amendments MR-00481-R00-R013 to the IESO Board for approval at its October 18, 2024, meeting. The final alignment for Market Rules and manuals were posted for stakeholder review on June 7, 2024. The comments received from the stakeholder review were shared with the Technical Panel (TP) with a series of TP meetings held in July and August to discuss comments in detail with IESO staff. Due to the complexity of the changes, a number of concerns were raised by TP members, including concerns regarding potential unintended outcomes of the implementation of the market power mitigation (MPM) framework and to mitigate the risk of a material, unintended impact on suppliers. The IESO has committed to the establishment of an MPM working group to address concerns and advise the IESO and TP.</p> <p>The TP has been meeting for many years to discuss the market rule amendments with IESO engaging in significant stakeholder engagement, MPM working groups and TP education sessions. IESO staff and TP agreed that discussions and opportunities for potential amendments would continue through to the May 2025 MRP go-live date.</p>