Minutes of the IESO Technical Panel Meeting

Meeting date: June 11, 2024 Meeting time: 9:00 a.m. – 10:49 a.m. Meeting location: 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

Trisha Hickson

IESO Presenters/Speakers

Stephen Nusbaum Jo Chung Adam Tschirhart Tim Cary Candice Trickey James Hunter Adam Cumming Dale Fitzgerald

Agenda Item 1: Introduction and Administration

Trisha Hickson, IESO, welcomed everyone joining the meeting.

The meeting agenda was approved on a motion by Robert Reinmuller.

The May 14, 2024, meeting minutes were approved on a motion by Lukas Deeg.

Introductory Remarks from the Chair:

Michael Lyle, Chair extended congratulations to members, David Forsyth and Joe Saunders for the recent extension of their second terms. Mr. Lyle noted the importance of consistent membership as the Market Renewal Program approaches go-live and thanked David and Joe for their ongoing commitment. Mr. Lyle also thanked the panel for their participation in the June 6 IESO Markets Committee and Technical Panel Joint meeting.

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 June Engagement Days and encouraged Technical Panel Members to attend.

Agenda Item 3: Capacity Auction Amendments

Adam Cumming, IESO provided an overview of the proposed administrative Market Rule amendments related to the Capacity Auction. Mr. Cumming identified that during the implementation of the 2023 Capacity Auction Enhancements there was an omission in the cleared ICAP formula within the Market

Rules that went forward for approval. The cleared ICAP formula was missing the Performance Adjustment Factor (PAF).

Mr. Cumming noted a second amendment brought forward by a Technical Panel member relating to a concern around the Capacity Auction Availability Charge language within the Market Rules as it relates to Hourly Demand Response Resources (HDRs). The IESO is proposing to clarify the language to specify when the Availability Charge is applied to HDRs in relation to a stand-by notice. Mr. Cumming noted for background, that HDRs are required to submit bids in the day ahead time frame and maintain those bids through to real time. However, if an HDR has not received a standby notice for the applicable day, the HDRs are only required to maintain that bid until 7:00 a.m. of the relevant trading day. If the HDR had either failed to bid in the day ahead or to maintain at their full Capacity Obligation they would then be subject to an Availability Charge. Mr. Cumming stated that the language as it is written currently is ambiguous on how the charge is applied when a standby notice is not provided, so the intent is to clarify that the charge is applicable at all times, however when a standby notice is not issued, the charge will be assessed until that 7:00 a.m. cut-off period.

In addition, Mr. Cumming noted that clarification will be made to the time period language in section 4.7J.2.1B of Chapter 9, which specifies the applicable time period for application of the Capacity Auction Availability Charge for all other resource types. Mr. Cumming indicated that the IESO expects this will eliminate concerns from participants going forward.

Mr. Cumming indicated that the Market Rule amendments are posted for feedback, and one Technical Panel member, Vlad Urukov, provided comments. Mr. Cumming noted Mr. Urukov's question seeking clarification around the cleared ICAP calculation. Mr. Urukov's understanding was that for the UCAP calculation, the IESO has an individual calculation for each individual resource type and not all resources are subject to an availability de-rating factor.

Mr. Cumming indicated that Mr. Urukov's understanding is correct, stating that HDRs and system backed resources are not subject to a de-rate. The cleared ICAP calculation is a generalized calculation that applies to all resource types, even those where a de-rate is not applicable. In those cases, where there is no de-rate on resources, those resources are assigned a value of one. The calculation is still performed; however, the value does not change as it is one over one and is performed in the background system. Mr. Cumming noted that the IESO is looking at how best to clarify this to participants, either through a statement in the Market Rules or Manual, or a separate break down for resource types.

Michael Pohlod asked for clarification on issues arising from the Stakeholder Engagement sessions around the PAF calculation and the definition in Market Manual 12 as it pertained to Demand Response resources.

 Dale Fitzgerald, IESO confirmed that the current Market Manual language is posted for stakeholder comment and was discussed during the May engagement session. Mr. Fitzgerald noted that feedback may still be coming in from the Demand Response community related to this topic, and the IESO is finalizing feedback and language prior to completing the baseline process. Regarding another matter, Mr. Fitzgerald referenced a previous question from Technical Panel member Jennifer Jayapalan regarding how participants should treat the Availability Charge in this interim period, prior to the Market Rule language update. Mr. Fitzgerald noted that Availability Charges for this summer and winter obligation periods will be applied to HDRs consistently with past practices.

For example, the following will be applicable:

- On days where a standby notice has been issued the charge applies when HDRs submit bids below their Capacity Obligation from day ahead through to real time.
- On days where no standby notice has been issued the charge applies when HDRs submit bids below their Capacity Obligation from day-ahead until 7:00 a.m. on dispatch days.
- Where charges have been applied on days when no standby notice has been issued, they will be adjusted through the resettlement process at a later date, but no later than May 2025. The IESO has not confirmed the date when the resettlement process will be completed but will keep participants informed.

Regarding corrections to Availability Charges applied by the IESO, Mr. Fitzgerald noted it is not necessary to submit a NOD regarding the specific scenario for HDRs where no standby notice has been issued. Participants can still submit notices of disagreement according to normal protocol if they disagree on a charge that has been applied. This decision does not change the obligations that all participants have under Chapter 7 section 3.3.8 to submit energy market bids and offers to accurately reflect their resources' capability each day.

The vote to post for broader stakeholder engagement for the proposed Market Rule amendments related to the Capacity Auction was moved on a motion by Indra Maharjan.

Agenda Item 4: Market Renewal Program: Final Alignment Batch

Stephen Nusbaum, IESO provided an overview of the Final Alignment (FA) batch and notable changes from previous batches. It was noted that there are three categories of changes to what has been provisionally approved to date: the first are changes for which amendments have previously been posted and reviewed, the second are proposed amendments for changes being newly introduced as part of the FA batch, and the third are the new amendments to the market rules required to support the transition to the renewed market.

Mr. Nusbaum noted that there were efforts to ensure the majority of FA changes have been seen by stakeholders previously, however there is some new content that will be shared with stakeholders as part of the June 20 engagement session. This session will speak to how the broader stakeholder engagement will conclude as part of the FA batch.

In addition, Mr. Nusbaum noted that the presentation includes information on how the documents are structured and how to navigate the FA batch, as well as a discussion on the proposed summer education sessions for the panel and next steps on FA.

The presentation can be found on the Technical Panel webpage.

Regarding Incremental Changes to MPM and Settlement Batches (slide 6), Jason Chee-Aloy asked for an update on engagement efforts with hydro generators and gas-fired generators in terms of establishing reference levels.

- Mr. Nusbaum noted the ramp up of engagement over the last few months as Market Participants are preparing for Market Trials.
- Tim Cary, IESO noted that on the hydro front engagement is concluding and on the thermal side the IESO is experiencing more engagement with participants as we approach the end of this year. The IESO has no specific concerns on the engagement efforts and progress to date. Mr. Cary added that he appreciated the engagement from participants and recognized the significant amount of work required to stay on track for the registration launch later this year.

Mr. Chee-Aloy followed up asking if the efforts could be quantified.

 Mr. Cary stated it is difficult for the IESO to assess and track the total volume of work and noted that the majority of engagement on hydro is complete and the IESO is around 50 percent of the way through engagement on thermal. Mr. Nusbaum indicated that the IESO could provide more details on the status of reference levels at the upcoming Technical Panel education session on MPM.

Regarding Physical Bilateral Contracts (PBCs) (slide 11), David Forsyth asked the IESO to elaborate on the outreach efforts that took place with the current industrials that have PBCs, if participants who previously had PBCs were contacted, and what information did the IESO share with participants (i.e., industrials) to help them understand the impact of removing the PBCs or the benefit to customers of PBCs.

Mr. Nusbaum noted that outreach was only to those that currently have active PBCs and in • terms of reaching out to others who may have used PBCs in the past, it is the IESO's understanding that it is a limited pool of participants. However, the IESO will consider if there are other participants with whom it would be beneficial to conduct outreach. This item is available as part of the broader stakeholder engagement on the FA batch to ensure it is available for all stakeholders to provide feedback. In terms of potential impact on prudentials, Mr. Nusbaum noted recent feedback from certain parties who have questions and concerns around prudential support obligations and how those may change. Mr. Nusbaum stated that it is the IESO's intention to solicit feedback and work with those parties to understand their concerns and discuss options available to them. Mr. Nusbaum indicated that it is not unexpected that the suspension will result in some level of increased administrative burden; however, the IESO assessed that it was appropriate to suspend given the significant cost and effort that would have been required to continue offering this mechanism in the renewed market given the limited uptake overall from Market Participants.

Mr. Urukov asked the IESO to expand on the noted extensive effort that would be required from the IESO to continue with PBCs in the new market, given the Technical Panel had voted on the proposed language.

• Mr. Nusbaum explained that as the IESO began to assess the additional reports and settlement system changes that would need to be completed given the two-settlement system, the complexity on the IESO side of continuing to support PBCs increased significantly from what was initially assumed.

Mr. Urukov followed up, asking if the IESO has looked at other markets that have PBCs and how they operate for learnings so the IESO can implement PBCs.

• Mr. Nusbaum clarified that it's not that the IESO cannot implement PBCs, but at this time the added time, effort, and costs versus the benefits to the market is the reason the IESO made the decision to not move forward with facilitating PBCs as part of the renewed market. Mr. Nusbaum noted that the IESO has looked to other jurisdictions and noted other jurisdictions have a very different construct for PBCs compared to Ontario.

Mr. Chee-Aloy noted that as part of the Ontario government's second proposed amendments to O.Reg 429/04 to help facilitate bilateral transactions in clean energy between customers and suppliers, the government made reference that these contracts (PPAs) be executed only between Market Participants and that these PPAs are reported to the IESO or given to the IESO. Mr. Chee-Aloy acknowledged this is in draft form, but wondered if the IESO has considered that potential in line with eliminating the PBCs.

• Mr. Nusbaum replied that the IESO was involved in this engagement and met with Ministry staff to discuss. It was assessed and determined that there are no direct correlations. If in the future, should an opportunity arise where there was benefit in leveraging certain aspects of the current PBC mechanism, then this is something that could be considered at the time.

Regarding Dispatch Scheduling Errors (slide 16), Mr. Urukov asked if corrections will be made in only those cases when the Market Participant has gained, but not if they have incurred losses as a result of dispatch scheduling.

• Mr. Nusbaum confirmed that a dispatch scheduling error will only result in a change if the Market Participant is eligible for a payment or an increase if there is a net financial benefit to the Market Participant.

Regarding NOD Timelines Market Rule language, Mr. Urukov asked if the language is meant to say that a Market Participant has 10 days from April 30 or is it applicable to a trade date that starts on May 1.

• Mr. Nusbaum clarified that the intention is that it is ten days beginning May 1, that is when the new provisions would become operative. Going forward for trade dates as of May 1 a Market Participant will have ten days, not ten days retroactive from May 1.

Mr. Urukov noted his understanding and indicated that the actual language may need to be clarified.

• Mr. Nusbaum acknowledged and indicated it would be made clear in the drafting of the Market Rules as part of the Vote to Post process.

Regarding Prudential Monitoring (slide 21), Mr. Chee-Aloy asked how the estimated actual exposure process based on a three-month invoice history would apply to virtual traders, who will have no history.

• Jo Chung, IESO indicated that the estimated actual exposure process based on invoice history will not be applicable to virtual traders and virtual transactions, as virtual traders cannot complete the authorization process until after go-live and after the prudential data and tools are available.

Mr. Chee-Aloy acknowledged and asked whether virtual traders were aware of this.

• Mr. Chung confirmed that this lag has been communicated to the sector already as part of the April 25 stakeholder engagement session.

Regarding Dispatch Scheduling Errors, Mr. Forsyth asked for clarification on the calculation of the Dispatch Scheduling Errors.

- Mr. Nusbaum noted that it is based on the period of time the IESO has determined a dispatch scheduling error has occurred, for example if it was a 5-minute interval or one hour, or five hours it would be over this timeframe.
- Adam Tschirhart confirmed that the charges being considered as part of the dispatch scheduling error assessment for compensation includes looking at the net of all those charges to ensure the net result would be a benefit to the Market Participant.

Mr. Forsyth acknowledged the clarification.

Regarding Notice of Disagreement Timelines (slide 31), observer, Reena Goyal asked for clarity on slide 17, specifically regarding how the ten business days for the final settlement statement and the recalculated settlement statement differs from the 10 days for the preliminary settlement statement. Ms. Goyal asked how this reconciles with the eight and six business days identified on this slide (31).

 Mr. Nusbaum noted ten business days is from the time the IESO issued the preliminary settlement statement and noted that the change is the time to file a NOD, and that it is only for the preliminary settlement statement that the timeline will reduce over time from ten to eight to six days. Market Participants will continue to have ten business days following the final settlement statement to issue a NOD; and then also ten days from the recalculated settlement statement. It is only the first interval that is being adjusted.

Ms. Goyal indicated she would take another look and Mr. Nusbaum noted they could connect offline to discuss further as necessary.

Mr. Urukov asked if there will be any changes on the IESO side to how long they need to respond to NODs.

• Mr. Nusbaum noted that as both the IESO and Market Participants become familiar with the renewed market we expect the number of NODs and issues to reduce. To support the IESO Settlements team in this effort, the IESO is making enhancements to the tool to allow for quicker recalculation and easier issue identification and exploration of issues.

Mr. Urukov asked for clarification regarding the real-time locational market price for a given market participant and if the IESO meant that both day-ahead and real-time locational prices will be applicable in the form of the day ahead balancing.

Mr. Nusbaum noted that the IESO intends for the real time market to be launched on May 1 at midnight with real-time market Locational Marginal Pricing (LMPs) being created and available to settle the market, and that the IESO intends to declare a Day-Ahead Market (DAM) failure for May 1 as the IESO will not have collected the data necessary to run the DAM on this first day of the renewed market. It will not be until the following day (May 2) that the IESO will ask Market Participants to submit offers and bids into the DAM, and the market will then run at 10:00 a.m. as normal, with the first day to which the new two-settlement approach would apply being May 3. In summary, for the first two days the IESO will only be relying on the real-time market and the LMPs coming from that market, with DAM settlement not applying until the third day.

Mr. Urukov asked a question on the bullet stating that market participants will receive the real-time locational marginal price (slide 40 – Compensation during market transition) – specifically, whether both the day-ahead and real-time locational marginal prices plus real-time balancing would be applicable.

• Mr. Nusbaum confirmed it would be the same approach that would be used in the future in steady state if for any reason there is a DAM failure, the IESO would rely on real-time prices only and there would be no DAM element to the settlement. There are no new settlement equations required.

Mr. Urukov asked which specific settlements charge type this approach would appear under.

• Candice Trickey, IESO clarified that there will be a zero value for the day ahead price.

Mr. Urukov asked for further clarification regarding the calculations and Ms. Trickey noted an offline discussion would be beneficial to better understand. Mr. Urukov acknowledged and agreed with the response.

Lukas Deeg asked if on April 30 up to 11:59 p.m. a Market Participant would receive a price that would be under the existing market rules?

• Mr. Nusbaum clarified that up until the shut-down of the existing market a Market Participant would be settled based on legacy market settlement (i.e. HOEP based market), and after the market is stopped and the Control Room is manually dispatching the market on the evening of April 30 the IESO will transition to a period where administrative prices will be used. The IESO will use the most appropriate administrative pricing mechanism based on available data to establish prices and MPs will still be settled under HOEP for all hours before May 1, but in

all instances, it will be the administrative pricing mechanisms contained in the new market rules that will be applied.

Mr. Deeg acknowledged and asked, as the market approaches midnight then it is expected to switch over to the new real-time LMP based settlement.

• Mr. Nusbaum confirmed Mr. Deeg's understanding is correct.

Mr. Deeg asked whether in this scenario if there are any cut-over issues would you still receive administrative prices until the issues are understood, and if there is a potential roll-back that may be required, is there a chance for administrative pricing after midnight.

 Mr. Nusbaum confirmed yes that there could be scenarios where administrative pricing is required for certain hours in the renewed market. However, beginning at midnight any administrative pricing will be to provide missing LMPs not HOEP based settlement. The intent is even if using administrative prices for the first hour or two of the renewed market, the new LMP-based settlement system will be used. Should the IESO decide that the cutover has been unsuccessful, and a roll back is required, then the administrative pricing mechanism used would be HOEP based for all hours of April 30 and May 1.

Mr. Chee-Aloy asked how engagement on the FA batch will be communicated to the IESO Board.

• Mr. Nusbaum confirmed the planning and timing for the stakeholder engagement, Technical Panel education and the existence of a scheduled education session for the IESO Board. And acknowledged a six-week period between education and approval for IESO Board.

Mr. Chee-Aloy asked for further clarification on how the IESO Markets Committee would be kept informed between the summer and fall period.

• Mr. Nusbaum acknowledged there are regular touch points with the IESO Market Committee to discuss issues and education.

Observer, Ms. Goyal asked if the education sessions with the Technical Panel to discuss the Final Alignment batch are open to observers.

• Mr. Lyle acknowledged that these sessions are open to the public.

Mr. Urukov asked how the Capacity Auction rules impact the review of MRP.

- Mr. Nusbaum acknowledged the two internal teams are working closely to ensure alignment.
- James Hunter, IESO noted an engagement hosted by the Capacity Auction team will be scheduled to walk through how the MRP market rule amendments will impact the Capacity Auction.

Mr. Urukov asked if in terms of broad Market Rule changes, if any are brought forward in the fall how would these be tracked.

• Mr. Hunter noted there will be two amendment packages, one to the legacy rules and one to the renewed rules package. Once MRP rules are effective in November, then future changes would take place as part of the normal rules process.

Ms. Savage noted that it is the IESO's intent to work offline with the members who have identified potential topics for the Panel education sessions, including two members that brought forward the topic of MPM in response to the IESO's request for discussion topics. Ms. Savage noted that requests received to date are related to the need for a refresher to understand how all the pieces of the Market Power Mitigation framework fit together and the IESO will support this request. Ms. Savage noted the importance of utilizing existing materials and providing advance information ahead of any required education sessions to ensure efficient use of time. To this end, the IESO will connect with Vlad and Lukas, the two TP members who submitted suggested discussion topics, to develop an agenda structure for the TP education session(s). Mr. Chee-Aloy and Jennifer Jayapalan requested to be included in the agenda planning discussions. Ms. Savage acknowledged the request.

Other Business

No other business was brought forward.

Adjournment

The meeting adjourned at 10:49 a.m. The next meeting will be held on July 16, 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	