

# Minutes of the IESO Technical Panel Meeting

Meeting date: 20/10/2020  
Meeting time: 09:00 a.m.  
Meeting location: Teleconference

Chair/Sponsor: Michael Lyle  
Scribe: Mitchell Beer / Smarter Shift Inc.

Please report any suggested comments/edits by email to [engagement@ieso.ca](mailto:engagement@ieso.ca).

<b>Invitees</b>	<b>Representing</b>	<b>Attendance Status</b> <b>Attended, Regrets, Teleconference</b>
Robert Bieler	Consumer	Attended
David Brown	Ontario Energy Board	Attended
Jason Chee-Aloy	Renewable Generators	Attended
Ron Collins	Energy Related Businesses and Services	Attended
Rob Coulbeck	Retailers or Wholesalers	Attended
Dave Forsyth	Consumer	Attended
Sarah Griffiths	Other Market Participant	Attended
Jennifer Jayapalan	Energy Storage	Attended
Robert Lake	Residential Consumer	Attended
Phil Lasek	Industrial Consumer	Attended
Robert Reinmuller	Transmitter	Regrets

<b>Invitees</b>	<b>Representing</b>	<b>Attendance Status Attended, Regrets, Teleconference</b>
Sushil Samant	Generator	Attended
Joe Saunders	Distributor	Attended
Jessica Savage	IESO	Attended
Vlad Urukov	Generator	Attended
Michael Lyle	Chair	Attended
<b>Observers / Presenters</b>		
Darren Byers	IESO	Present
Jo Chung	IESO	Present
Rob Doyle	IESO	Present
Brennan Louw	IESO	Present
Anna Lafoyiannis	IESO	Present
Jessica Tang	IESO	Present
James Hunter	IESO	Present
<b>Secretariat</b>		
Agatha Pyrka	IESO	Present

## Agenda Item 1: Introduction and Administration

Agatha Pyrka, IESO, conducted a roll call of members and observers attending the virtual meeting.

## Chair's Remarks:

The Chair welcomed Ms. Pyrka as the Technical Panel's Secretariat liaison and explained that Jason Grbavac has taken on new duties as senior advisor to IESO Interim CEO Terry Young.

The Chair reported that nominations for the Technical Panel member vacancies closed October 1, and a review of the recommendations to fill the positions was scheduled for a Markets Committee meeting later in the day, followed by an IESO Board meeting October 21. He advised that the proposed market rule amendments related to the Storage Design Project were scheduled for consideration at the December Board meeting, pending discussion and a vote by Panel members. The annual joint meeting between the Technical Panel and the IESO Board was still on track for December, with calendar invitations to follow in the near future. The Secretariat will also be circulating a draft 2021 meeting schedule for the Panel, reflecting the busy year ahead with Market Renewal.

The Chair reported back on the issue related to reliability in the Northwest that was raised by Vlad Urukov at the Panel's September meeting. Mr. Lyle explained that the IESO had identified a short-term, localized need for capacity given delays in the east-west expansion coming into service. After performing a market sounding exercise in the area, the IESO determined that an agreement with Manitoba Hydro would be the most cost-effective and expedient way to address this need in the low probability event that the Northwest hydro fleet would not be able to supply the Northwest load under drought conditions. The matter will be communicated to the market if the IESO enters into an agreement, and the Chair agreed with Mr. Urukov that the process leading up to the decision had highlighted issues with the way stakeholders are advised of Market Manual amendments. He said the IESO had established controls to prevent a repeat of the issues that arose in this case to ensure reporting thresholds are considered for all market manual amendments.

The Chair thanked Robert Lake for his long, distinguished career and contributions to the energy sector, including two terms on the Technical Panel, and wished him well in his future endeavours.

The agenda was adopted with no amendments on a motion by Robert Bieler.

The Chair invited comments on the minutes of the Panel's September 15 meeting. Jason Chee-Aloy recommended a revision to clarify his remarks on governance and decision-making, deleting the reference to adequacy with the Market Renewal Program. The Chair agreed with the change. Jennifer Jayapalan asked about the context for the list of action items at the end of the minutes. The Chair said the item with respect to in camera meetings of the Panel had been discussed previously with the Panel and that the Panel had discussed the balance between the value of in camera meetings versus the interest in the Technical Panel operating in an open and transparent manner. The Chair advised that he was not familiar with the second action item but would advise further on the matter at the next meeting.

The minutes were approved as amended on a motion by Joe Saunders.

## Agenda Item 2: Engagement Update

Agatha Pyrka reviewed the prospective Technical Panel schedule, consisting mostly of education items beginning later in the day's agenda and continuing at the November 10 meeting. She advised members that all three detailed design documents for the Market Renewal process had been

published, with stakeholder input due over the next few weeks. The IESO will review that feedback by the end of the year, she said, with a target to publish the second version of the detailed design documents in early 2021.

In addition to the education item on Congestion Management Settlement Credit Recovery for Dispatchable Loads at the November 10 Technical Panel meeting, Ms. Pyrka said the IESO had scheduled a webinar October 27 to present and gather feedback on proposed market rule amendments. On Resource Adequacy, she said a first webinar took place September 28, with the goal of finalizing a high-level framework for presentation to stakeholders in Q1 2021. The timeline for the engagement item on Improving Accessibility of Operating Reserve has been pushed back to allow for more direct engagement with affected stakeholders. The agenda for the November 3 Stakeholder Advisory Committee has been posted, with background materials to follow shortly, and materials for the Engagement Days on October 26-28, have been posted.

There were no questions on Ms. Pyrka's presentation.

### Agenda Item 3: Storage Design Project

<b>Presenters</b>	<b>Action</b>
Darren Byers Brennan Louw	Vote to recommend market rule amendments proposals R00/R01/R02/R03/R04/R05 for consideration by the IESO Board.

Darren Byers, IESO, thanked Technical Panel members for their review of the proposed amendments. The IESO had received comments from three Panel members acknowledging that it was "no small task" to go through the volume of revisions. He reviewed the changes staff had made in light of those comments, many of them related to defined terms. He reminded members that the IESO's standard preference is to avoid creating new defined terms where possible. In some cases then, the IESO proposed changes to reword sections to avoid the need for a defined term. All changes made based on Technical Panel member feedback were listed in the cover memo. Mr. Byers went through some of the revisions such as Mr. Urukov's note on an inconsistency in the description of a self-scheduling electricity storage facility and the requirement to be a self-scheduler and provide frequency regulation. The inconsistency was resolved by updating the defined term for a self-scheduling storage facility. Staff also found and corrected redundancies in the definition of an electricity storage unit. Mr. Byers also explained a number of other revisions concerning the testing of 10-minute operating reserve and changes proposed by Sarah Griffiths and Ron Collins.

Mr. Byers said not all comments resulted in revisions, since the approach of the Storage Design Project was to ensure consistency with equivalent terms for generation and load. The result was that while some sections appeared new, in fact they were replicated from existing sections for other resource types. Where there have been improvements in language that could be made for these sections, they have been noted for consideration in a future market rule amendment omnibus package.

David Forsyth asked how an effective date of January 18, 2021 for the proposed amendments would affect the December, 2020 Capacity Auction. Mr. Byers said the IESO's versioning process ensures that the relevant Market Rules that are in place at the time of an auction remain in force for the duration of the commitment period for those resources that have cleared. If these proposed rules are adopted by the IESO Board, they will apply to future auctions.

Jessica Savage, IESO, asked Mr. Forsyth to elaborate on his concern. Mr. Forsyth noted that storage resources will be participating in the next Capacity Auction and asked whether the amendments would be material to that process. James Hunter, IESO, said the Market Rules for the Capacity Auction include language that locks all provisions in place from the beginning of a pre-auction period to the end the commitment period. At a functional level, the point-in-time rules for an auction are held in a separate library to avoid confusion with the updated rules, which in this case would take effect ahead of the May auction.

Mr. Forsyth expressed concern about Market Rules that apply to a storage facility in one instance, but not to another if that facility had cleared a prior Capacity Auction. Mr. Hunter said the IESO put considerable effort into finalizing rules for the Transitional Capacity Auction, to ensure clarity and consistency for all market participants through the end of the commitment period. He said the only Market Rules locked into place for a specific auction will be those that pertain to participation as a capacity market participant.

Brennan Louw, IESO said a decision was made early on to develop the new rules for the Capacity Auction separate from the Storage Design Project but the two staff teams coordinated their efforts, and do not foresee any conflicts between the two rulesets.

Mr. Bieler asked whether the IESO had received any broader stakeholder or public comments following the vote to post. Mr. Byers said none were received.

Mr. Bieler asked whether the IESO had set a timeline for the shift from interim to permanent Market Rules on storage design, noting that it might be beneficial to allow time to identify any issues arising from implementation of the interim provisions. Mr. Byers agreed that the experience would be useful, adding that that was one reason to establish an interim period. He said the timing would also be contingent on IESO tool upgrades that would be required to fully integrate storage, so it would be premature to set a defined schedule.

Mr. Louw added that the interim design was meant to be consistent with today's real-time market and Market Rules, and would remain in effect until the future day-ahead market and real-time market being developed through Market Renewal Project (MRP) are implemented. The interim design will be updated before the MRP go-live date, to ensure that the progress on storage design isn't lost. After that, the IESO will consider more substantial tool changes to fully integrate storage into the system. The IESO has communicated to the storage community that subsequent rounds of changes will occur after the MRP go-live date.

Robert Lake identified an issue that could arise if a local distribution company wanted to introduce small-scale storage, for example to charge a battery via a solar array. That facility's relationship with the transmission system would make it a generator when it supplied the distribution system, but a load when it collected and stored off-peak power. The Ontario Energy Board's treatment of that entity would depend on whether it was considered a generator, a distributor, or a peak shaver. The

issue falls outside the IESO's jurisdiction, Mr. Lake said, but it underscores that there will be issues to work out after the Storage Design Project has done its work.

Mr. Louw agreed that there are many questions yet to be resolved for distributed energy resources, and noted that the situation raised by Mr. Lake falls outside the scope of the Storage Design Project which has focused on stand-alone storage facilities that participate directly within the IESO-Administered Markets.

Ms. Jayapalan asked for further clarity on how storage will operate under two sets of rules in connection with the December Capacity Auction. Mr. Louw invited Technical Panel members to identify any specific areas of concern. Ms. Jayapalan said it was a discussion that could be continued outside of the Technical Panel.

On a motion by Sushil Samant, the Technical Panel voted unanimously to recommend market rule amendment proposals R00/R01/R02/R03/R04/R05 for consideration by the IESO Board.

The Chair said Robert Reinmuller had provided a proxy vote in favour of the amendment package, along with a written rationale for his vote. He reminded members to provide their written rationales by the end of the week.

#### Agenda Item 4: Market Renewal Program Education

Jessica Tang, IESO, gave a refresher on the detailed design phase for the Market Renewal Project, noting that some of the published segments had been delayed by the substantive feedback the IESO received from stakeholders on the first drafts of detailed design documents. The time required to consider and address that input will inevitably shift the stakeholder engagement timelines for proposed Market Rule and Market Manual amendments, and the IESO is assessing that impact. That being said, stakeholders will receive sufficient time and notice for review of each proposed batch of market rule amendments.

Mr. Urukov noted that the order of presentation for the different batches of amendments had shifted, and asked for clarity on scheduling. Ms. Tang said the next two batches will deal with market power mitigation and the calculation engines, and subsequent scheduling will shift based on the feedback to date on detailed design. In response to a follow-up from Mr. Urukov, Ms. Tang confirmed that the batch numbers for the different groupings of amendments had been removed as the order will likely change.

Mr. Chee-Aloy said he could understand why the IESO had not yet identified the next batches to appear, adding that the scheduling issue pointed to a more general challenge facing everyone involved with the Market Renewal process. The IESO had undertaken to review stakeholder feedback by the end of the year, and made a verbal commitment to additional meetings on Market Power Mitigation, but he said stakeholders didn't yet understand where the IESO sees the biggest issues or how they will be addressed at the design stage. Those questions, in turn, will have a causal impact on when the IESO can bring forward draft Market Rules for Technical Panel review. Ms. Tang thanked Mr. Chee-Aloy for his comment.

Rob Coulbeck expressed concern about scheduling the amendments on settlements toward the end of the process, noting that those revised Market Rules would require market participants to make changes in their own systems. He said he could understand the reasoning behind the sequence of

amendments, but urged the IESO to allow sufficient time for implementation. Ms. Tang said the IESO is committed to fully supporting stakeholders through the implementation process through advance notice of changes and education sessions on specific requirements.

Anna Lafoyiannis, IESO, reviewed the proposed development of Market Entry and Prudential Security, noting that the associated detailed design documents were first published for stakeholder comment in November 2019 and received generally supportive feedback in February 2020. On that basis, she said the IESO decided to begin development of draft market rule amendments for the specific chapters involved.

Mr. Collins asked how the IESO would determine the extent of virtual traders' market participation if there was no set limit on their transactions. Ms. Lafoyiannis said market participants will provide a maximum trading limit at the beginning of the process. This would be used to support a screening process during the daily monitoring of prudential support enabling the IESO to stop bids or offers that exceeded the limit.

Mr. Saunders asked how the screening would take place, knowing that some private companies are technically sound on paper, but can be subject to rapid changes in status. He said the challenge and potential risk to the system would be more acute given the faster trading speeds enabled by artificial intelligence. Jo Chung, IESO, explained that controls on virtual transactions would include two screening mechanisms to control a virtual trader's actual exposure, including a maximum daily trading limit (in MWh). Mr. Forsyth asked whether the no-margin call option would be available to virtual traders. Mr. Chung said that the 'no-margin call' option would not be available for virtual traders.

Ms. Lafoyiannis added that the registration process requires market participants to disclose technical aspects of their facilities that are then modelled in the system. The IESO is purposely not changing that approach for virtual traders, she said, and noted that because stakeholder engagement on the new framework for market power mitigation is ongoing, any related parameters will be introduced in a future batch of proposed market rule amendments. She noted that the IESO was also proposing to introduce a new type of facility, the Price Responsive Load, which would act like a non-dispatchable load in real-time but could also opt to participate in the day-ahead market, receive a schedule, and be settled using the nodal price. On the other hand, a non-dispatchable load would not receive a schedule, and would be settled using the Ontario zonal price.

Throughout the drafting process, Ms. Lafoyiannis said staff were attentive to opportunities to increase clarity in the future market, and to ensure precision in the way rules were drafted. With that in mind, the first batch of amendments includes a new Chapter 11 definition for the term resource that is consistent with the way the word has colloquially been used to date. Mr. Chung noted that incorporating the term resource has an effect across the entirety of the Market Rules, demonstrated when a review of the 13 detailed design documents found 4,900 uses of the word. He indicated that a new chapter 11 term for resource would assist in drafting the rules and manuals for the new designs, and would enhance clarity for the new market. Mr. Chung added that the new definitions will be incorporated in subsequent batches, and that for completeness, the omnibus will incorporate the new terms within rules and manuals that won't otherwise be amended as part of the other batches. Ms. Tang gave an update on the schedule for review of the various batches of proposed Market Rule and Market Manual revisions.

Mr. Urukov asked how the different batches of amendments will map back, in the event that a later batch raises concerns about earlier revisions that have already been approved. Ms. Tang said the process would take stakeholders through a series of conditional approvals, realizing later batches might raise issues that require changes to earlier batches—but also recognizing the need to deliver and sequence the information in a way that allows stakeholders and the Technical Panel to digest and comment on amendments in a meaningful way, and vote on current information that they’ve recently reviewed. With records of votes and detailed rationales, it will be feasible to look back as much as 12 to 18 months to remember how and why earlier decisions were reached, to allow for revisions and rebalancing in the latter phases of the Market Renewal process.

James Hunter reiterated that each batch of proposed amendments will be reviewed and conditionally adopted by the IESO Board. At the end of the whole process, the batches will be reconciled prior to a final vote. Mr. Urukov recommended defining the process of conditional approval to maximize clarity in the Terms of Reference.

## Agenda Item 5: Other Business

There was no other business.

The meeting adjourned at 10:30 AM.