IESO Technical Panel Meeting Minutes of Meeting

Date held: Septemb	per 15, 2020	Time held: 10:00 am	Location held: Teleconference			
Invited/Attended	Sector Rep	resentation	Attended; Regrets			
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		Attended			
Sushil Samant	Generator		Attended			
Joe Saunders	Distributor		Attended			
Jessica Savage	IESO		Attended			
Vlad Urukov	Generator		Attended			
Michael Lyle	Chair		Attended			
Observers / Presenters						
Darren Byers	IESO		Attended			
Adam Cumming	IESO		Attended			
Robert Doyle	IESO		Attended			
Brennan Louw	IESO		Attended			
Secretariat						
Jason Grbavac	IESO		Attended			
Prepared by: Mitchell Beer / Smarter Shift Inc.						

September 15, 2020

Page 1

IESO Technical Panel



Agenda Item 1: Introduction and Administration

Jason Grbavac, IESO, welcomed members and stakeholders to the Technical Panel's fourth online meeting, conducted a roll call, and reminded participants to mute their lines when they weren't speaking.

Chair's Remarks:

The Chair said Vlad Urukov had given notice of an item he planned to raise under Other Business at the end of the meeting. He invited comments or questions on the agenda, which was adopted on a motion by Joe Saunders.

The minutes of the Panel's August 11 meeting were adopted on a motion by Robert Lake.

The Chair updated members on the August meeting of the IESO Board of Directors, reporting that three sets of recommended Market Rule amendments were approved, dealing with the Transmission Rights Clearing Account, Reliability-Related Information, and Performance Requirements. On the recommendation of the Markets Committee, the Board also approved the appointment of two new Technical Panel members, Jason Chee-Aloy and Jennifer Jayapalan, and initiated a process to fill up to five additional vacancies.

The Chair reported that the IESO is considering postponing the annual meeting between the Technical Panel and the Board of Directors from October to December. The meeting will take place virtually, with details to follow closer to the day.

The Chair invited the two new Panel members to introduce themselves to the group.

Agenda Item 2: Engagement Update

Jason Grbavac reported on engagement activities currently under way, beginning with the IESO's new engagement framework. Surveys conducted after each monthly series of sessions indicate strong support for the new format, with stakeholders reporting that the more concentrated schedule makes it easier to navigate the IESO's many engagement processes and participate in multiple topics. Mr. Grbavac said the IESO continues to make improvements to both the technology and the presentation process for the engagement days.

The next series of engagement days will take place September 28-30, and Mr. Grbavac said agendas and materials would be posted imminently. The program will include opening remarks by Interim President and CEO Terry Young, followed by an overview of changes in Ontario's electricity sector and the IESO's plans to engage with stakeholders over the next six months. Other sessions will focus on a long-term competitive resource adequacy strategy and the Indigenous Energy Support Programs (ESP) Review, Market Renewal, the launch of the Settlement Statements Recalculations Process, and treatment of transmission losses within the system.

September 15, 2020







Mr. Grbavac reminded members that the Market Renewal process is currently in the detailed design stage, with stakeholders in the midst of reviewing 13 draft design documents. The documents are generally posted for a six- to eight-week review period, with opportunities for questions and clarifications. On the Technical Panel calendar, he noted that members were expected to vote later in the day on whether to post recommended Market Rule amendments flowing from the Storage Design Project for stakeholder comment, ahead of a vote to recommend to the IESO Board at the October Technical Panel meeting. The October and November meetings will feature education sessions on Market Renewal and Operating Reserve Accessibility.

Mr. Grbavac noted that further updates were available on the IESO's active engagements page, and encouraged Panel members to participate in any engagements that interest them.

Mr. Urukov asked that the next Market Renewal education session include an update on the potential target dates for the different batches of proposed Market Rule and Market Manual amendments the Technical Panel will be receiving for review. He reported a degree of anxiety in the generator community and said a clear sense of timing would help market participants prepare for the review process.

Mr. Grbavac thanked Mr. Urukov for the feedback and said the IESO intended to bring that level of detail to the October meeting. He said the implementation phase of Market Renewal, including the review of draft Rules and Manuals, will be subject to review through the stakeholder engagement initiative as well as the Technical Panel. The MRP web page will include an engagement plan that establishes target release dates, stakeholder engagement opportunities, feedback deadlines, and when the IESO intends to respond to comments and feedback. That level of detail will be available in time for the October MRP education discussion at Technical Panel, and for the October engagement days.

Mr. Samant asked whether the Technical Panel's revised terms of reference would permit members to vote to recommend the upcoming Storage Design Project amendments for Board consideration if they agreed unanimously to waive posting the drafts for additional stakeholder feedback if the topic had received sufficient stakeholder input. Mr. Grbavac said the terms of reference would allow that option, but added that the IESO memo recommended a vote to post to ensure that all stakeholders in all constituencies had the opportunity to comment or ask questions. Mr. Samant clarified that he wasn't advocating to waive the vote to post stage in this case. Rather, he was looking for confirmation as to how the revised terms of reference could apply.

Agenda Item 3: Storage Design Project				
Presenter	Brennan Louw, Darren Byers			
Action	Vote to post proposals R00/R01/R02/R03/R04/R05 for broader stakeholder comment			

September 15, 2020





Brennan Louw, IESO, provided background on the proposed amendments and the feedback the IESO has received from stakeholders to date. He traced the discussion back to late 2018, when the IESO published a report that was developed with input from the Energy Storage Advisory Group (ESAG) which identified obstacles to energy storage in Ontario. He reminded participants that that the Storage Design Project (SDP) had identified two different time frames for proposed market design changes, and the amendments before the Technical Panel focused on the interim period, or today's IESO-Administered Markets. The IESO previously presented information on the SDP to the Technical Panel in February to introduce the project and in June to provide an update.

The most important barrier the IESO sought to address in the interim period was the absence of references to storage in the existing Rules and Manuals, Mr. Louw said, resulting in a lack of clarity or definition on the opportunities and requirements for storage stakeholders to participate in the wholesale market within the IESO's existing toolset. That focus led to a comprehensive review of Market Rules and Manuals.

Mr. Louw reviewed the stakeholder feedback the IESO received through the SDP dating back to October 2019. The interim design document, which was published in February, generated feedback from eight stakeholders and groups, with most of them supportive of the proposed changes and a couple providing more detailed feedback. Some stakeholders said they supported the interim solution, but looked forward to a more comprehensive process to fully integrate storage resources over the long-term. They also encouraged the IESO to address opportunities beyond stand-alone storage, including hybrid facilities that combine generation and storage, and behind-the-meter storage resources. Mr. Louw said the IESO agreed these are important areas for future exploration but remained outside the scope of the SDP.

Following the June ESAG meeting, the extensive sets of proposed Market Rule and Market Manual amendments produced feedback from 10 stakeholders, which were largely supportive and focused on clarity of language. The IESO's comprehensive response to all feedback received is now available on the ESAG web page, Mr. Louw said.

Among the high-level messages from stakeholders, the IESO heard that it should not consider allowing self-scheduling for storage, but ultimately decided to maintain the option for now, since it parallels the treatment of generators since market opening and is an issue that can be explored more holistically at an appropriate time in the future. Stakeholders also expressed support for implementing a long-term storage design through the Market Renewal process, but Mr. Louw said the IESO had decided against doing so, based on the timing and cost risk doing so could impose onto the Market Renewal project. However, the IESO acknowledged the gap that decision could create for storage resources, and committed to update the interim storage design before Market Renewal go-live to ensure that progress made through the SDP is not lost.

One stakeholder also expressed concern that the use of "electricity storage" rather than "energy storage" in the amendments may exclude specific technology types, Mr. Louw said. The IESO has maintained that references to electricity storage are technology-agnostic, and are consistent with the language used in Ontario government regulation.

There were no questions or comments on Mr. Louw's presentation.

Darren Byers presented details of the proposed amendments, aimed at creating a new class of Market Participants with comparable rights and responsibilities as generators. He said the full

September 15, 2020





set of changes added 740 instances of the term "electricity storage" where previously there were none. By comparison, the terms "generation" or "generator" show up in the current ruleset over a thousand times, and load about 760 times, so the volume of instances we have included is about what one would expect. The IESO's review also resulted in changes to thirty Market Manuals, about three-quarters of the total. Like the rule chapters, many manuals had only a couple of revisions while others had more significant edits in terms of volume.

Where possible, he said the IESO drafting team tried to stick with the existing structure of the specific section by simply inserting the new storage terms. Elsewhere, however, more extensive revisions were required due either to the structure of the section or to the unique nature of storage facilities in that they can both act as a load and a generator and at times a delineation of the two were required.

Mr. Byers explained that the storage rules were parcelled into two categories; those that were needed for the interim design, and those that may not require changes for the longer term design. As an example of the difference between the two, Mr. Byers provided the no-overlap rule. A single storage resource will be required to register twice during the interim period, as a generator and as a load, and so an interim rule will be required to prevent that single physical resource from being dispatched by the IESO's Dispatch Scheduler and Optimizer to both inject and withdraw during the same dispatch interval. This is termed the 'no overlap' rule, where the prices of a storage resource's bids to withdraw energy must not overlap with its offers to inject. In the enduring design, this rule will not be required as storage resources will have a single registration and will provide a single continuous offer curve that will cover both withdrawals and injections. So this rule will at some point in the future be removed, and to facilitate these interim provisions have been placed in a dedicated section, Chapter 7, Section 21. This section is covered in proposal MR-00446-R04. Other changes, such as the new defined terms to support storage resources, were included throughout the Market Rules, since they are not expected to change over the long term.

Jennifer Jayapalan said she agreed with consolidating interim provisions in a dedicated section, but asked how the interim provision against overlapping bids and offers would be monitored. Mr. Byers and Mr. Louw said the rule would be subject to after-the-fact monitoring.

Robert Lake commented on electricity rates, and the "bad economics, bad politics" of situations when Ontario must export surplus electricity at low cost. He asked whether the province's fledgling energy storage industry could be given preferential treatment during periods of surplus. Mr. Louw said the SDP is focused on market participant storage facilities which are exposed to the market price for energy so they can make economic choices to discharge or recharge based on market signals, which includes the opportunity to withdraw energy during periods of low energy prices

Mr. Byers referred to the five sets of proposed amendments on the day's agenda, the stakeholder guide the IESO had produced to summarize the amendments, and the corresponding Market Manual amendments that had been provided for TP's reference. He said Technical Panel members would be asked to vote on whether to post the amendment package for further stakeholder review, with October 20 as the target date for a vote on whether to recommend the package for Board approval. Under that timeline, the new rules are expected to take effect in Q1 2021.

September 15, 2020





Robert Bieler said the guide to the draft amendments was very helpful, but asked whether the table could include references to specific amendment documents. Mr. Byers said he was glad to hear that it was a helpful resource and that this would be considered if it gets revised or similar resources are prepared in the future.

Sarah Griffiths said the definition of objectives in MR-00446-R02, Chapter 5, Section 4.1.1, System Reliability, had been revised and was now confusing. She suggested the definition of capacity for purposes of system reliability should include demand-side resources, at least during the summer. Previously, it was more generic and was interpreted as pertaining to a broader resource mix. Mr. Byers said the only intent of the revision was to incorporate storage, and staff would review the language to ensure it doesn't now exclude another resource type.

Ms. Jayapalan asked what the intent had been in requiring energy storage resources to schedule either as self-scheduling or all-dispatchable, rather than allowing a balance between the two options. She also asked whether the IESO had considered allowing an exemption for existing resources that don't fall into the new registration framework.

Mr. Louw said the new registration model was driven primarily by the need for a storage facility to see the same price signals for both load and generation, to avoid any risk of gaming the system. He added that this approach was consistent with how storage will participate over the long-term and noted the IESO was reviewing how the rules would apply to existing resources.

Ms. Jayapalan reiterated the storage community's concern that the solutions under discussion will not be included in Market Renewal, and asked how they'll be addressed in the next round. Mr. Louw said there would be a gap between the interim and final market designs, and the IESO is committed to updating the interim design before the final Market Rules for Market Renewal go live, while leaving substantial tool changes for later consideration. He said details of that process will be communicated to stakeholders as soon as they're available.

The Chair invited further comments or questions from Technical Panel members or observers.

On a motion by Sarah Griffiths, the Technical Panel voted to post MR-00446-R01/R02/R03/R04/R05 for further stakeholder review.

Other Business

Mr. Urukov recalled that the Technical Panel had previously deliberated on disclosure practices for Market Manual revisions related to Market Rule amendments, in a process that led to a reporting threshold for Manual revisions that changed Market Participants' obligations or carried major economic or material impacts. TP Members stated that proposed Market Manual revisions should be shared with stakeholders if either threshold was met.

On that basis, he drew the Panel's attention to a recent Market Manual revision in which the IESO sought to acquire additional firm capacity from Manitoba Hydro, through a posting process that was not sufficiently visible to the generator constituency. He said the item was never flagged through Technical Panel, Stakeholder Advisory Committee, or the IESO Bulletin, even though it had economic and material impacts, particularly in the northwestern part of the province. He asked how the IESO had decided on its engagement process for the decision, what other options had been considered, and whether there was a need to change the criteria for materiality for matters that are not associated with an active engagement.

September 15, 2020





The Chair thanked Mr. Urukov for raising the matter and agreed to bring it back to IESO management for further review. He said that an issue of internal coordination had led to it being first communicated through the Market Manuals change process. For context, he noted that the IESO had been working on electricity system needs in the northwest for several years, and had initiated a project to add a new east-west tie line to address reliability issues in low water years. The discussions with Manitoba Hydro were motivated by the period of potential vulnerability the region will face from a capacity standpoint until the new transmission line is in service.

The Chair stressed that the proposed Market Manual revision would not proceed at this point in time, and that there was no intention of entering into an agreement with Manitoba Hydro for this year. Any agreement to address capacity needs in the northwest will focus on autumn, 2021.

Dave Forsyth asked whether Manitoba Hydro could simply participate in the IESO's capacity auction for imports. The Chair explained the matter concerned a localized reliability/must run issue, and the IESO was searching for the lowest-cost way to address it. In that case, Mr. Urukov said, there should be visibility around the decision-making to demonstrate that an import from Manitoba was the lowest-cost option. He asked again how the decision had been reached. The Chair acknowledged the point and said the IESO would bring forward further information to the market.

Mr. Forsyth said he was uncertain whether Manitoba had the capacity to resolve the issue. The Chair said his understanding was that they did.

A Panel member said it would be helpful to know whether the IESO was reviewing other mechanisms to obtain import capacity from Minnesota or sectors within Ontario. The Chair said other approaches had been made to possible providers, and while the details were commercially sensitive, the IESO made its assessments based on the information they supplied. Ms. Griffiths expressed serious concern that the market was never advised of the discussion, adding that others on the Panel would never have heard about the issue if Mr. Urukov hadn't raised it. The Chair acknowledged the concern and said he would convey it to the in-house team involved.

Jason Chee-Aloy supported other Panel members' comments, thanked Mr. Urukov for raising the issue, and said he would expect matters of transparency of decision-making frameworks to come up again during the resource adequacy engagement. There will always be a tension between Market Rule revisions and Market Manual changes, he added, and it will be particularly important to clarify the fine line between the two as the IESO turns its attention to issues like reference levels, market power mitigation, and the economics of market participants in the province's day-ahead and real-time markets.

The Chair invited further comments, and there were none. He thanked Mr. Urukov for raising the issue and other Panel members for their feedback, and said the IESO would report back to the Panel on next steps regarding an agreement with Manitoba Hydro and on process improvements regarding Market Manual revisions that have major economic or material impacts.

September 15, 2020





The meeting adjourned at 11:25 AM.

Action Item Summary						
Date	Action	Status	Comments			
January 23, 2018	The IESO will investigate the Technical Panel's request for more in-camera sessions.	Open				
December 1, 2015	The IESO will provide an update to the Panel regarding the potential timelines and impacts of changing the reference to the OPA within Chapter 1 of the General Conduct Rule.	Open				