IESO Technical Panel Meeting Minutes of Meeting

Date held: August 13, 2019		Time held: 9:00 am	Location held: IESO Office, Toronto	
Invited/Attended	Sector Representation		Attended; Regrets	
Robert Bieler	Consumer		Present	
David Brown	Ontario En	Ontario Energy Board		Present
Ron Collins	Energy Rela	ated Businesses and Services		Present
Dave Forsyth	Consumer	Consumer		Present
Sarah Griffiths	Other Mark	Other Market Participant		Present
Robert Lake	Residential	Residential Consumer		Present
Phil Lasek	Industrial C	Industrial Consumer		Present
Robert Reinmuller	Transmitter	Transmitter		Absent
Sushil Samant	Generator	Generator		Present
Joe Saunders	Distributor		Present	
Jessica Savage	IESO	IESO		Present
Vlad Urukov	Generator		Present	
Julien Wu	Wholesaler	Wholesaler		Present
Michael Lyle	Chair		Present	
Observers / Presenters				
Adam Cumming	IESO			Present
Mohab Elnashar	IESO			Present
Robert Doyle	IESO			Present
Silviu Motoc	IESO			Present
David Short	IESO			Present
Jessica Tang	IESO			Present
Candice Trickey	IESO		Present	
James Hunter	IESO		Present	

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Secretariat		
Reena Goyal	IESO	Present
Jason Grbavac	IESO	Present
Prepared by: Mitchell Beer / Smarter Shift Inc.		

Agenda Item 1: Introduction and Administration

Chair's Remarks:

The Chair indicated that Robert Reinmuller would not be attending the meeting, but had provided his vote and rationale on Agenda Item #3. He also provided an update on the proposed Market Rule amendment previously submitted by Resolute Forest Products, advising Technical Panel members that the IESO had received notice of an application from Resolute to the Ontario Energy Board, calling for review of an existing market rule in accordance with Section 35 of the *Electricity Act*.

Members approved the meeting agenda with no amendments, on a motion by Joe Saunders.

Vlad Urukov provided two specific edits to the minutes of the previous meeting. The minutes were approved as amended on a motion by Mr. Urukov.

Agenda Item 2: Engagement Update

Jason Grbavac, IESO, drew members' attention to the engagement update in their information packages, noting that several of the items on the chart, beginning with the Phase I of the Transitional Capacity Auction (TCA) were on the agenda for today's meeting. He said the TCA engagement team was preparing to launch work on the next phase of the Capacity Auction with plans to schedule an education item with the Technical Panel as was done for Phase I. The review of the Technical Panel's composition and process, as recommended by the Governance and Decision-Making Advisory Group, was also on the Panel's agenda for August and September, with comments already received from Technical Panel members as well as the Market Development Advisory Group.

Hourly Demand Response (HDR) Out-of-Market Activation and Payments and Grid Connection Payments were both on the agenda as education and information items, while a Market Renewal Program (MRP) education item and annual omnibus package are scheduled for the Panel's last meeting of the year in November. Mr. Grbavac noted that the IESO was currently conducting monthly update meetings on MRP, which will shift to a bimonthly schedule once a series of single-issue items have been fully addressed. The August 26 session will focus on the business case for MRP, and Panel members are welcome to attend.

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The joint Technical Panel-IESO Board meeting has been rescheduled to October 23, and Mr. Grbavac said a more detailed agenda would be published in advance, including any business items the Panel might need to conduct.

Mr. Grbavac indicated that members would soon receive a draft schedule of Technical Panel meetings for 2020, and reminded them that a full list of engagements is always available on the engagement page of the IESO website.

Mr. Urukov asked about the colour coding in the engagement update. Mr. Grbavac said there was no significance to difference in shading.

Sushil Samant asked why the engagement update contained no reference to the Incremental Capacity Auction. Mr. Grbavac said the MRP education item would include an update on changes to the capacity stream. Jessica Savage, IESO added that the Technical Panel would be asked to address market rules amendments from the energy stream before capacity, as previously planned.

Mr. Urukov asked whether cancellation of the Incremental Capacity Auction would change the scope of the Transitional Capacity Auction, Phase II. The Chair invited him to pose that question to the presenters during the next agenda item.

Julien Wu asked about coordination between MRP education and the more general market education available through the IESO website. Mr. Grbavac said the customer readiness and support plans for MRP will be developed in coordination with Market Renewal and will include the support of the traditional IESO market training function as required.

Agenda Item 3: Transitional Capacity Auction (TCA)		
Presenters	Robert Doyle, David Short, Jessica Tang, James Hunter, Candice Trickey	
Action	Review amendment proposal MR-00439-R00-R05 and vote on whether to recommend the amendment packages for consideration by the IESO Board.	

Robert Doyle, IESO noted that the memorandum to members for today's meeting addressed comments received at the Technical Panel's June 25 meeting, and summarized feedback from individual Panel members and outside stakeholders. He invited questions and discussion from members.

Sarah Griffiths said the community she represents has always supported the Transitional Capacity Auction, as well as the initiative to expand the Demand Response Auction and include more resources. However, ever since Demand Response (DR) resources were migrated from the Ontario Power Authority contract program, there has been a concern about market fairness,

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given that DR providers are not paid for meeting their energy dispatch requirements. She noted a concern that the issue has remained on the Demand Response Working Group agenda, the development of market rules and design has not advanced, and now the issue has become a fast-track priority. She said the legal brief submitted to the Panel by the Advanced Energy Management Alliance (AEMA) and the Association of Major Power Consumers of Ontario (AMPCO) called for a six-month delay in TCA Phase I to address concerns regarding the potential discriminatory nature of the market rules.

Ms. Griffiths said the authors of the legal brief had had a very productive meeting with IESO senior staff the previous day, but the omission of energy payments in the TCA would still have an impact on the competitive process for the December TCA auction.

Mr. Samant asked whether AMPCO and AEMA were concerned about activation or with testing. David Forsyth said the issue was with respect to regular, in-market dispatch and activations.

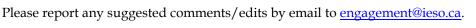
The Chair reiterated Mr. Urukov's question from agenda item #2 of whether the cancellation of the Incremental Capacity Auction would have an impact on the Transitional Capacity Auction, Phase II. Mr. David Short, IESO said Phase II work would continue, adding that the IESO has always sought to align the TCA as closely as possible with the ICA design given the time frames involved and the resources that could be admitted or enabled through the auction. He said the IESO is always seeking to evolve the capacity and energy markets, and ongoing stakeholder engagement might provide an opportunity to continue the evolution of the TCA following completion of the official project at the end of 2020. Mr. Short said the evolution of the capacity markets beyond 2020 would not constitute re-enactment of the ICA.

Robert Lake asked how long the TCA would be considered transitional. Mr. Short said he expected to address that point in conjunction with IESO communications staff. The TCA was branded as transitional to ensure that market participants understood that it sat between the Demand Response Auction and the future ICA, but at some point the "transitional" label will be dropped. Mr. Lake noted that the system will eventually need options for a range of renewable energy businesses entering the system. Mr. Short said the upcoming engagement would provide an opportunity to discuss that point.

Mr. Forsyth said the unequal treatment of different categories of market participants was the most contentious aspect of the Transitional Capacity Auction and expressed concern that the legal brief had only been distributed to Technical Panel members at 4:00 PM the previous day. He stressed the importance of the document, and of Panel members having time to thoroughly review it, and said the circumstances made it impossible to conduct a proper deliberation. The Chair said Ms. Savage had explained the late distribution of the legal brief, and invited Panel members to share their views.

Ms. Griffiths said the two organizations who authored the legal brief had made the decision not to post it online, since it addresses an issue with implications beyond the current market rule

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deliberation. On that basis, the authors were initially prepared to work with the IESO to arrive at a mutually agreeable timing for posting the document. But she said the IESO only contacted the authors in the last week for permission to publish, and at that point AMPCO and AEMA agreed it would be better to circulate it to Panel members late rather than not at all. She said the late posting was ultimately driven by the communication back and forth between the parties.

James Hunter, IESO said the legal brief elaborated on and provided supporting arguments for a concern about alleged discriminatory treatment that had been introduced through the stakeholder feedback process and through formal written submissions to the Technical Panel from both AMPCO and AEMA, so the staff position was that the issue had already been communicated to stakeholders and the Technical Panel. Given the IESO's mandate to maximize market competition and transparency, he said the IESO position was that adding generators to the Transitional Capacity Auction, Phase I was not discriminatory. He acknowledged that the question of whether competition requires a utilization payment for DR resources is contentious and warrants further study, and the IESO has already committed to a more in-depth study of the impact on the market. But at the same time, the IESO recognizes the need to move forward with changes to the TCA, and sees no impact on efficiency or competitiveness in proceeding with the process and including DR resources in December 2019, given that the substantive concern is with activations. The outcome of the study might ultimately call for some form of market solution or compensation, but Mr. Hunter said the IESO sees no discriminatory impact on utilization payments. He noted that the U.S. Federal Energy Regulatory Commission had determined that DR resources may receive utilization payments subject to a net-benefit test, and that opinion had been a reference point for the IESO.

Mr. Forsyth said it was inappropriate for staff to critique the legal brief when Panel members hadn't had a chance to read it yet. Mr. Hunter said that wasn't his intent, but that staff had a responsibility to explain their position, adding again that the issue was complicated and warranted the further analysis to which staff had already committed. Mr. Forsyth said the commitment to further review would have no bearing on the concern about discriminatory aspects of the December 2019 round of the Transitional Capacity Auction. Mr. Hunter replied that there were parallel reasons to move forward with the TCA, but that staff would monitor the DR activation record during Phase I to assess any impact.

Mr. Urukov asked how frequently in-market activations had been utilized in the past. Mr. Hunter said they had been virtually non-existent. Mr. Short explained the IESO has access to sufficient energy, so the issue has to do with the small sliver of capacity that comes into play if a particular combination of extreme conditions occurs.

Ms. Griffiths said that members within her constituency had not been activated in the energy markets, while adding that the TCA was a new auction and its rules should be right from the beginning. It was on that basis that AEMA and AMPCO submitted their comments, during the TCA stakeholder engagement and directly to the Technical Panel. Ms. Griffiths expressed her

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personal view that it was very important to move forward with the TCA in December, and that cancellation of the ICA represented an overall threat to some forms of market design.

Mr. Short said IESO staff agreed with the need for a complete assessment. But he stressed the underlying need to prepare for the anticipated capacity shortfall in 2023, adding that the transformation of the DR Auction was the first step in the required phase-in. Capacity is ultimately about system reliability, he said, and that was why the IESO proposed to complete the Transitional Capacity Auction Phase I, then continue deliberations in advance of the TCA, Phase II in June 2020.

Mr. Saunders asked how the December auction would be affected if the Panel postponed its decision. Mr. Short said a delay might leave staff with insufficient time to complete its preauction work, noting that the process called for an October 15 launch to give participants time to prepare for the auction to open on December 4.

The Chair noted that the current timeline called for a recommended Market Rule amendment package to be brought forward to August Board meeting, but said it was important that Panel members not feel pressured into a decision. The Chair noted that Technical Panel could delay the vote on this agenda item until later in the week, to give members a chance to review the AEMA/AMPCO legal brief in more detail.

In reply to a question from Mr. Collins, Mr. Short said a generator's participation in an auction would increase competition, but it would be impossible to predict what impact that would have on prices. Mr. Collins expressed concern that some market participants might not receive payments for their participation, a situation that amounted to discrimination that must be resolved in an expeditious way. Mr. Short reiterated that the IESO's paramount concern was to have a plan in place for 2023 which includes a capacity auction.

Mr. Samant asked whether the discussion applied to hourly demand response (HDR) as well as dispatchable loads, adding that utilization payments for dispatchable loads that had not participated in the DR auction would be a fundamental market change. Ms. Griffiths said the concern was with economic DR resources already participating in the energy market, and the difference between participating in the energy market versus a capacity market construct. Mr. Short clarified that this issue could provide energy payments for every load would participate in the energy market, whether or not they were a part of the DR market, and Mr. Samant reiterated that that represented a big change, since dispatchable loads have not received utilization payments since the market opened.

David Brown, OEB asked for clarification of the statement in the legal brief that the IESO had advised demand response participants to build utilization payments into their auction offers. Mr. Forsyth said loads had been looking for a provision similar to a utilization payment, and the IESO wasn't prepared to allow it, but advised entities to build the provision into their bids. In the new TCA rules, that advice applies to loads but not generators, which would incur costs and receive no corresponding payments.

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Mr. Brown asked what equivalent provisions would apply to a generator entering the market today. Mr. Samant said he would assume the rules would be unchanged. Ms. Griffiths said the requirement to add the energy payments affected the competitiveness of her constituency's energy bids, potentially requiring bidders to adjust their auction offers accordingly.

Mr. Brown asked whether the advice to loads would be the same today. Mr. Short said it would still be up to the loads to decide how they wanted to participate in the capacity auction. If the Capacity Auction were to include energy payments, we expect the net benefit determination would be very complex as it should consider energy market participant bids/offers in the context of forecasted or actual energy market conditions. He added that the question was under review by the Demand Response Working Group.

A Panel member asked what costs a load would incur by participating in the auction under the current rules. Ms. Griffiths said the cost of stopping production would go well beyond availability prices for a capacity position and the dollars saved by not buying energy for that production.

Mr. Saunders asked whether the legal brief would be brought to the IESO Board's attention. The Chair said it would.

The Chair invited other views from members and observers. Candice Trickey, IESO said the DRWG would be addressing a number of related issues, including energy payments, which she noted is a difficult matter that has continued to receive considerable discussion in the United States. She said the working group had received initial feedback on the issue at its meeting in July, and would be putting forward a plan, timeline, and next steps to resolve the matter at its upcoming meeting on September 4. Additionally, IESO staff have a timeline for moving the item forward as quickly as possible, while following a stakeholder engagement process and having a transparent discussion, in which the IESO will engage with stakeholders to work through the issues and seek a resolution. One consideration, she added, is that energy payments should be provided when loads are activated if the practice delivers a net benefit to consumers. But if that approach was adopted, it would be necessary to understand how it would apply in Ontario.

Mr. Forsyth said he appreciated the explanation, but stated it had been a long time coming. The issue was on the table when the Demand Response Auction was first discussed, has remained on the DRWG's annual work plan, arose as a major issue at the first meeting on the Transitional Capacity Auction, and is now being dealt with as an emergency issue.

Mr. Brown noted that loads in Ontario are being economically dispatched against their own bid prices, in contrast to the FERC context where loads receive fixed recall rates and are dispatched for demand response at a price well below the spot price of electricity. Ms. Griffiths said dispatch on the PJM grid is based on scarcity prices, whereas price caps in Ontario are based on the bids that market participants submit. Mr. Forsyth said a PJM market participant would receive a favourable revenue stream anytime they were dispatched above a certain price per

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megawatt-hour, but the cost is spread over more megawatts. The difference in Ontario is that demand response participants are competing directly against generators.

Mr. Forsyth said a market participant with a capacity position in demand response is required to bid into the energy market, facing a penalty if they fail to do so. On that basis, he said they should be compensated for competing against generators. Mr. Urukov said generators receive marginal costs; Mr. Forsyth said loads do, too.

Mr. Short said the discussion appeared to be presupposing an outcome on a complex issue, where the concerns of market participants have been articulated and are understood. In the United States, most independent system operators opposed the FERC policy decision when it was made. In Ontario, if the cost of implementing the new approach exceeds the benefit, the IESO won't pursue it, which is why the current objective is to understand the methodology, conduct the assessment, gather stakeholder feedback, and decide on implementation.

At the same time, Mr. Short said, it's essential for the Ontario system to prepare for 2023, and a delay in the implementation of the TCA now will mean a year of opportunity lost. The IESO's position is that it believes capacity auctions provide a benefit through increased competition. On the whole, he said the immediate course of action should be to prepare for the December auction, in order to meet future system requirements.

The Chair reiterated his earlier comment about the option of delaying the vote, posing the question to members as to whether they felt they had sufficient information to vote on the proposed Market Rule amendment or whether they preferred to wait until the end of the week and review the AEMO/AMPCO brief in more detail. Messrs. Saunders, Bieler, Samant, Lake, and Wu all said the few days would make no difference and they were prepared to vote. Mr. Bieler said the issues were complex, but that he had had an opportunity to read the submissions. Mr. Lake said the Panel was in an uncomfortable position, but a few days wouldn't change that, and Mr. Wu agreed.

Messrs. Collins and Urukov identified editorial and punctuation changes in the draft Market Rule amendment proposals. The IESO staff agreed to make all suggested changes.

On a motion by Mr. Collins, the Technical Panel agreed to recommend the Market Rule amendment proposals for consideration by the IESO Board.

The Chair thanked Panel members and the IESO team for their attention to a complex topic, and invited members to explain the reasoning behind their votes. Technical Panel members were asked to confirm their rationale, in writing – refer to Appendix A.

The result of the vote on MR-00439-R00-R05: Transitional Capacity Auction, Phase 1 was:

In favour: Bieler, Collins, Griffiths, Lake, Lasek, Reinmuller, Samant, Saunders, Savage, Urukov, Wu

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Agenda Item 4: Hourly Demand Response Out-of-Market Activation Payments

Candice Trickey, IESO, explained the costs to be recovered and payments issued when a resource is activated, usually as a result of a test activation. Tests are carried out because market resources are not typically activated frequently, but must still be available for emergency use and as market economics dictate. The IESO tests them once per period to ensure that all parties are ready for an activation, and to give the IESO confidence that the resource is able to respond.

In this proposal, there are two scenarios in which a resource would be entitled to compensation. In test situations, resources are typically activated "out-of-market", i.e. at a price below its bid price. Acknowledging that the loads incur costs, they should have the opportunity to recover because the activation is not based on the bid price. Also, an emergency activation can occur as one of a number of actions the IESO control room might initiate to restore balance across the system. These activations are also out-of-market.

Ms. Trickey said the IESO has been discussing Hourly Demand Response (HDR) out-of-market activation payments with the Demand Response Working Group, and very recently received a second round of feedback. The topic will be on the agendas for the DRWG and Technical Panel meetings in September.

Mr. Samant asked whether the discussion had to do with test or emergency activations. Ms. Trickey said an out-of-market activation could occur under either scenario.

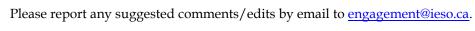
In reply to a question from Mr. Urukov, having to do with the transition to the Transitional Capacity Auction, Ms. Trickey explained that the Demand Response Auction currently provides for two six-month commitment periods, and the current market rules allow two activations of a DR resource per period. The IESO's typical practice is to activate each resource once, then conduct a second activation if the first one raises any issues.

Mr. Urukov pointed to the three options on Slide 7 of Ms. Trickey's presentation, and asked whether the DR community was leaning toward bids as the basis for market payments. Ms. Trickey said that was the majority response in the first tranche of stakeholder feedback, but other preferences may be emerging from subsequent comments.

In reply to a question from Mr. Urukov, Ms. Trickey said the IESO would schedule a readiness test for generators ensure they were prepared. Because they would be scheduled at a price that was uneconomic compared to the market clearing price, they would be compensated based on the difference between their bid and the clearing price.

Mr. Samant asked about the basis for the payment and whether activations are measured on a local meter. Ms. Trickey said resources are typically dispatched for the full amount of their

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aggregation and calculated in megawatt-hours. Mr. Samant asked what would happen if a resource were dispatched for 10 megawatt-hours, for example, but could only deliver eight, and whether the activity would be measured on a revenue meter. Ms. Trickey said some resources have IESO revenue-grade meters, but some don't. For loads connected at the distribution level, the IESO doesn't have access to individual metering, but the aggregators manage bids on behalf of all their loads. In those cases, the IESO doesn't see the meters in real time, but still has a process to verify and quantify the responses to an activation. Additional information including draft market rules will be available for TP review in September.

Agenda Item 5: Updates to performance requirements for generation, load and electricity storage

Silviu Motoc, IESO, explained how the 2019 operability assessment was a driver for reviewing performance requirements, as distributed energy resources (DERs) are increasingly displacing transmission-connected generation that supports grid reliability. When an unexpected event occurs on the grid, he said a response takes about 100 milliseconds, and the transmission element is isolated—at which point all the system sees is a flicker in voltage. But that effect is felt across a very large area within the wider grid—in Ontario's 500-kilovolt system, the voltage dip would affect virtually every user south of Barrie. That reality pointed to the need to clarify the situation, to ensure that all market participants knew how they were to respond.

Mr. Motoc reviewed the considerable work the IESO has done on this issue to date, noting that the current agenda item served mainly to bring the market rules in line with updated Canadian Standards Association (CSA) standards for DERs connected to distribution systems.

Mr. Lake noted that Mr. Motoc had referred to transmission and distribution systems, and asked about the treatment of sub-transmission resources supplying 10 MW or less. Mr. Motoc said the IESO's definitions are based on the legislation defining transmission and distribution, and everything below 50 kV counts as distribution. He added that the IESO doesn't have access to data that would allow it to identify each individual resource, and noted that electricity storage is not currently defined in the market rules, even though it displaces generation when it injects energy into the grid.

Mr. Saunders said different types of DER behave differently in the system, and asked whether they would all be covered by a single update to the market rules. Mr. Motoc acknowledged the point, but said the IESO's focus was on their response to voltage and frequency fluctuations caused by faults in the transmission system. In reply to a short series of questions from Mr. Collins, he said the IESO was not recommending any changes that fell outside the CSA and NERC standards.

Ms. Savage said those details would be addressed through stakeholder engagement and the actual Market Rule amendments. Mr. Collins acknowledged the point, but still raised the concern that the proposed changes in practice would not be inexpensive. Mr. Motoc said the intention was to speak to the vast majority of cases, with a cut-off likely at 5 MW. Mr. Collins

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said the issue was not with the size of the unit, but with the aggregate size of the resource being dispatched. Mr. Collins said he had confidence in aggregators to enter the market and take the small units, but expressed concern about applying the rules to aggregated resources.

Mohab Elnashar, IESO said the new CSA standard was expected to receive final approval by the end of August. That would make it applicable to new resources, he said, and the treatment of existing resources should be addressed in conversation between the IESO, the Ontario Energy Board, LDCs, and asset owners. Mr. Collins said the cost of the new provisions would be enough to shift the market, and suggested starting the conversation soon if there is any likelihood of applying them to existing resources. Ms. Griffiths said the provisions seemed to be in contradiction to work under way at Hydro One, and to discussions of the Energy Storage Advisory Group.

Mr. Motoc said the IESO's intention with the proposed update was to align market rules that are now one step behind current practices in distribution. Ms. Griffiths supported the IESO interest to initiate a stakeholder engagement with a wide enough reach to elevate the discussion beyond only storage. Mr. Urukov agreed the changes could apply to a wider range of market participants.

Adam Cumming, IESO said the intent at this stage in the process was to spur conversation with stakeholders. Ms. Savage said the issue also pertained to energy storage resources, and agreed on the need for broader stakeholder engagement. Mr. Collins acknowledged the point and said he appreciated the effort, but cautioned the Secretariat to be prepared for a lot of feedback.

Mr. Saunders reiterated that each form of DER has its own impact on the system. Mr. Collins stressed the need for a standard that would deliver consistency across all LDCs. Mr. Motoc said consistency was what the CSA standard would deliver. Mr. Collins said the IESO should be attentive to the time it takes to bring a new resource online, and Mr. Elnashar said staff were looking years down the road.

Agenda Item 6: IESO TP Review - Process and Composition

Mr. Doyle, said the review of the Technical Panel's process and structure had generated a lot of feedback, much of it from Panel members. He pointed to varied viewpoints on the Panel's composition between Technical Panel members and the constituencies they represent.

Mr. Samant said differences of opinion on composition might have been influenced by recent discussions before the Market Design Advisory Group, where participants were not directly privy to the Panel's ongoing processes. Mr. Doyle acknowledged the point and noted that wider stakeholdering had still shown a wider range of perspectives on some issues. At that point, staff realized they needed more time to review stakeholder input before coming back to the Panel with recommendations. He invited further feedback from members before the recommendations are presented in September.

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Mr. Urukov asked what process the Secretariat would undertake to deliberate and resolve the differences of opinion. Mr. Doyle said the extra month to develop recommendations would enable staff to review the discussion more closely, within the wider context of Market Renewal and the new rulesets it will generate, to set criteria for the choices ahead. Mr. Urukov asked that the Secretariat explain the rationales behind those choices. Mr. Doyle agreed, and the Chair said the recommendations would be a high level proposal to generate further discussion.

Ms. Griffiths pointed to the quality of the submissions from different groups of market participants, including demand response, aggregated response, generators, and renewables, and said it was crucial for those voices to be represented on the Technical Panel. She said it was very powerful that 34 market participants had worked together on a joint submission, adding that she wasn't sure the IESO had ever seen that level of response across so many resource types.

Ms. Griffiths said a structure that included a non-IESO co-chair would give a market participant a shared role in setting agendas, thereby helping to democratize the Panel's process.

Ms. Griffiths recalled submissions in the last year that called for a 'markets committee', with representatives of different categories of market participants and co-chairs who worked together to develop agendas and move issues forward, particularly as proposed market rules amendments become more complex and controversial. Mr. Urukov said he wasn't sure a co-chair structure would solve the problem. The Chair said the group could resume discussion of the topic in September.

Ms. Griffiths said an MDAG representative could bring valuable perspective to the Panel. Mr. Samant asked whether the Technical Panel's purpose and terms of reference would change significantly as a result of the review process. Mr. Doyle said the intent was to review the Panel's process and representation and avoid duplication with other decision-making bodies. Mr. Samant asked whether the Panel's specific role in ensuring that the market rules reflect stakeholder engagement was on the table. Mr. Doyle acknowledged the question, adding that he didn't believe the process had generated any impetus to change that role.

Mr. Urukov asked about the formation of the Market Development Advisory Group and the differences between the IESO Governance and Decision-Making Advisory Group and the MDAG.

Ms. Savage summarized the process and related streams of engagement to date, noting that formation of the committee that became the MDAG was just one of 14 recommendations. Mr. Urukov asked whether the process was still in a development phase, or whether the intent was to work it into the functioning of the Technical Panel. Ms. Savage said the development phase was still under way, and may or may not produce changes.

As one example of a change in process, Mr. Doyle noted that draft market rules are now subject to stakeholder engagement before they are brought before the Technical Panel. Mr. Urukov

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asked whether that process had already taken place. The Chair said it had, adding that the question now is whether there's still a need for the Technical Panel to post those proposals for general stakeholder review. Mr. Doyle said members would be asked to consider that point when staff present recommendations next month, along with the promised narrative on the underlying rationale.

Agenda Item 7: Other Business

There was no other business.

The meeting adjourned at 11:35 AM.





Appendix A

The following is the TP member rationale regarding MR-00439-R00-R05: Transitional Capacity Auction, Phase 1 $\,$

TP Member	Rationale to Support Vote
Bieler, Robert Representing: Consumers	The amendments as reviewed by the Technical Panel have been offered for stakeholder input and in my view the language reflects the intent of the policy approach for the Transitional Capacity Auction. I believe that implementing the capacity auction will provide greater competitiveness in the market and therefore benefits to consumers. While this approach may not be preferred by all stakeholders, this is transitional by definition and as such will evolve over time. There will be future opportunities to amend the Market Rules to address additional concerns should they arise.
Collins, Ron Representing: Energy Related Businesses and Services	I support the Market Rule amendments proposed by the IESO staff for the Transitional Capacity Auction. The proposed Market Rule amendments support the development of a capacity market to address future resource adequacy and increase flexibility in the IESO-administered market. Such amendments will encourage broader competition for establishment of capacity in a transparent and cost-effective manner.
Forsyth, David Representing: Market Participant Consumers	I voted against the TCA proposed rules based on the fact that in my opinion the TCA design is fundamentally flawed without including the energy payment element for loads, and therefore discriminates against some market participants. I believe this violates the Electricity Act. The basis for this opinion is included in the joint submission from AMPCO and AEMA.

Representing: Other Market Participants	I voted today to approve the MRA for the Transition Capacity Auction as I have long advocated for markets and competition for the IESO to meet the capacity needs. However, without resolving how demand response resources are compensated for the value they provide to the IESO is an issue, and undermines the competition in this auction. Many DR Market Participants do not agree with the approval of the MR and asked me to vote against or abstain, and DR participants continue to ask the IESO to postpone the first Auction at least 6 months until this issue is resolved. Both AEMA and AMPCO have provided a legal brief to IESO staff that outlines how a TCA without resolving issues regarding just and reasonable compensation to DR resources is discriminatory. My vote is based on the acknowledgement that the IESO staff have outlined, at the DRWG, a path forward and that they continue to engage with market participants/interested parties on this topic. The DR resource is a valuable resource to the overall electricity system but it needs to be treated in a comparable manner to ensure the ratepayer and the system receive its true value.
Lake, Robert	Representing consumers, I want our electricity system to develop into one
Representing: Residential Consumers	where we have what economists call pure competition. If we would have had numerous suppliers competing at the time of deregulation we probably would have a competitive, mature electricity market today, like Sweden and Norway. While we might not initially get all details perfectly correct with this proposal, there will be accommodation to make changes in the future, after we have had some experience with TCA. This is one good step towards developing an efficient, competitive electricity market.
Lasek, Phil	Generally supported the shift to a different program, adding that it might not be optimal but is still in the interest of power consumers.
Representing:	
Market	
Participant	
Consumers	

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Reinmuller, Robert	I reviewed the comments provided and while feedback on behalf of DR participants has points that will need consideration, it was clear in the IESO plans that the DRA will evolve into the TCA and therefore due consideration will be made while finalizing the ultimate construct.
Representing:	In an attempt to ensure the system is adequately prepared to meet future
Transmitters	needs, continued progress has to be made now and consideration for DR will have to be integrated as we develop the ultimate market construct. DR resources that are traditional load customers have been connected to the grid on the basis of their electricity needs at the time and as such, transmission, distribution and generation infrastructure was developed to meet their demand over a number of years. In most cases investments in the system are amortized and recovered through rates over a long period of time. When we discuss DR and equivalency with generation a more indepth study needs to be undertaken to fully understand how existing upstream infrastructure investments (generation and system) are affected by DR. The current market takes into account the system needs and provides multiple quantifiable ways to fulfill capacity and energy requirements. As we transform to better integrate DR, DER, storage, load displacement etc., we must ensure that we can guarantee the long term viability of the solution, while quantifying the exact value of each resource in the overall context of the system need. Critical elements like voltage control, frequency control, phase angle, inertia, response time, etc. will need to be reviewed along with regulating local load quantities. As AMPCO indicated, a "reliable and affordable energy supply is critical" and we can only achieve that goal with thoroughly quantifying the value proposition of all critical resources included in the TCA.
	I trust that IESO will follow through with including DR and other existing and new resources into the ultimate TCA construct. This is why I vote yes to recommend sending the TCA MR amendments to the IESO BOD for consideration.
Samant, Sushil	The immediate implementation of the TCA will assist the IESO in its goal of Reliability
Representing: Market Participant	Increased competition in the TCA will put downward pressure on the capacity auction clearing prices, which is of interest to Ratepayers
Generators	The MRAs associated with the TCA have been thoroughly

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discussed and comments received at the appropriate Stakeholder





Engagement(s)z

- The IESO is in the process of making changes for the use of Utilization Payments for out-of-market activations for Hourly Demand Resources (HDR).
- The IESO has agreed to further stakeholder the use of Utilization Payments for in-market or economic activations of all Demand Response (DR) resources.
- o The issue concerning compensation to DR resources for economic activations is a wider market issue that would require years of stakeholdering and has implications for the entire design of Ontario's electricity market (energy and capacity). As a result, it is not worth holding up this worthy TCA initiative for an issue that will most likely end up having little relevance or merit after further study (see my note below).
- Furthermore, there has been a non-material amount of economic activations of DR resources in the past. It is anticipated that this will continue into the near future. This weakens the argument that the TCA initiative is flawed.
- As a result, I feel that the MRAs reflect the intent of the design as contemplated in the Stakeholder Engagement(s)
- The MRAs are a proper fit with other Market Rules

Note: The legal brief submitted by AMPCO/AEMA and made public by the IESO on August 12, 2019 further solidified my decision to vote in favour. This is because its main argument for delaying the TCA so that the IESO could address the issue of compensation to DR resources seemed to rely on Item 33 (Page 6) which discusses the basis upon which FERC made its March 2011 Order.

In particular, the recommendations in FERC Order No. 745 as described in the legal brief hinge on the condition that there is a positive "net benefits test" which measures the "billing unit effect" when dispatching DR resources. I felt that in Ontario, this threshold requirement of a positive "net benefits test" is not met.

My reasoning was that while costs (i.e. HOEP or MCP) would be reduced when dispatching DR resources, there was a commensurate increase in

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	end user rates as fewer units are consumed. This increase in end user rates is the result of the Global Adjustment increasing whenever the price of electricity (i.e. HOEP or MCP) decreases. In effect, while fewer MWhs would be consumed as a result of DR, the fixed costs of maintaining the electricity system are still the same. This results in an increase to what FERC refers to as the billing unit effect. As a result, I believe the requirement of a positive "net benefits test", if similarly adopted in Ontario, would not be met.
Saunders, Joe Representing: Distributors	The proposed amendments reflected the evolution of the existing market, and were important to the system as a whole. He acknowledged the concerns raised by market participants, but said he supported the package as a first step, on the understanding that the IESO will take stakeholders' concerns into account.
Savage, Jessica Representing: IESO	The proposed Market Rule amendment is a "first step towards enabling competition to provide reliability services, in this case, capacity. Building on the existing DR auction and enabling additional resources to compete now is a prudent approach to maximizing future participation when a more significant capacity need emerges in several years' time.
Urukov, Vlad Representing: Market Participant Generators	The Market Rule amendment package presented to the Technical Panel reflects solely the implementation of the first phase of a staged approach transitioning the existing Demand Response Auction to a more competitive auction process. The Market Rule package was <i>stakeholdered</i> in a dedicated stakeholder engagement and reflects feedback provided by participants. In my assessment, the proposed Market Rules reflect the intent of broadening participation by enabling auction bidding of uncommitted, dispatchable generators, while retaining all features and functionality required by Hourly Demand Response (HDR) and dispatchable loads to continue to participate. In addition, the proposed rules appropriately retain features essential for the execution and settlement of the remaining commitments associated with the last Demand Response auction.
	With consideration given to the submissions by AMPCO and AEMA, I support implementing the proposed Market Rule amendments as drafted on the following basis: The IESO has demonstrated and reaffirmed that based on history, existing Demand Response Auction participants have not been utilized materially over and above out-of-market activations for

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testing. The IESO is in the process of addressing out-of-market activations through ongoing stakeholder engagement, targeting an implementation in advance of the first auction held under the proposed new rules. The assessment of the appropriateness of other forms of payments is a complex question that must consider a wide range of economic aspects across the breadth of applicable costs and supplier types. The IESO has committed to evaluate and report on an appropriate path forward in the context of the Ontario market in subsequent phases of auction development. While I support and encourage the IESO to ensure that the issue is addressed in a thorough and transparent fashion, this effort need not delay the implementation of the proposed set of Market Rules. Wu, Julien The proposed Market Rule amendments are necessary and important for planning and reliability, with the Transitional Capacity Auction coming into force very quickly. However, the deliberation has been reminiscent of the discussion initiated previously by Resolute Forest Products, where it Representing: felt as though nothing had been resolved in the end because both the Wholesalers substance and the process were so complex. In that instance, there was a dispute resolution going on in parallel with the Technical Panel discussion. Julien voted in favour of the draft amendment so that the concerned parties would not have its resolution process held up by the Panel, and could take the matter forward to the Board if they so choose as a next step.

