

ONTARIO ENERGY BOARD

**ASSOCIATION OF MAJOR POWER
CONSUMERS IN ONTARIO (AMPCO)**

**Application for Review of an Amendment
to the Independent Electricity System Operator Market Rules**

AFFIDAVIT OF COLIN ANDERSON

I, COLIN ANDERSON, of the City of Oakville, in the Province of Ontario, MAKE OATH
AND SAY:

1. I am employed as the President of the Association of Major Power Consumers in Ontario (AMPCO). AMPCO is a not-for-profit consumer interest advocacy organization that is active in the electricity sector. AMPCO's members represent Ontario's major industries: forestry, chemical, mining and minerals, steel, petroleum products, cement, automotive and manufacturing, and industrial consumers in general.
2. Since March of 2019, in my role as AMPCO President, I have been closely following and actively participating in the stakeholder process leading up to the market rule amendments at issue on this application. As such, I have knowledge of the matters attested to in this affidavit. I have also had discussions with AMPCO members who directly participate in the Ontario Independent Electricity System Operator (IESO) Administered Market (IAM) as Demand Response resources (DR Resources). Where statements made in my affidavit are based on information from AMPCO members I have so stated.
3. AMPCO has brought this Application on behalf of its members who will be negatively impacted by the amendments at issue. I am providing this evidence, in my role as President of AMPCO, and because of reticence that I perceived among my members to do so themselves. In my view this is an important role for an industry advocacy association, and its President.

4. Accordingly, I provide this affidavit in support of the Application brought by AMPCO for review and revocation of the IESO Ontario Electricity Market Rules (Market Rules) amendments MR-00439-R00-R05 as published by the IESO on September 5, 2019¹ (Amendments). This affidavit also supports the motion brought by AMPCO to stay the operation of the Amendments pending resolution of the Application for review. This affidavit is made for no other or improper purpose.

The Amendments.

5. On September 5, 2019 the IESO published the Amendments on its website.²
6. The Amendments facilitate the expansion of the current IESO Demand Response Auction (DRA) to a broader, Transitional Capacity Auction (TCA).
7. The first TCA is scheduled for early December, 2019. Attached at Exhibit A is the IESO's *2020 Transitional Capacity Auction (TCA) Phase 1 Timelines for TCA held in December, 2019*.
8. Although the issue of appropriate compensation for DR Resources for the services they provide to the IAM (i.e., the issue of energy payments to DR Resources) has long been outstanding and has been discussed for some time as part of the IESO's Demand Response Working Group (DRWG), in which I have participated in 2019, the IESO has not yet resolved the issue. It is unlikely that this issue will be resolved before the first TCA happens in December, 2019.
9. AMPCO participated in the stakeholder process leading up to the Amendments, and the six written submissions which AMPCO provided to the IESO between March and July 2019 as part of that process are attached at Exhibit B.

¹ Filed herein as part of AMPCO's Notice of Appeal, Attached as Footnote 1, pages 3 through 60.

² The notice of publication is filed herein as part of AMPCO's Notice of Appeal, Attached as Footnote 1, pages 1-3.

AMPCO Members' Participation in the IAM, including the DRA.

10. The IESO's existing Demand Response Auction (DRA) process permits the participation of only DR Resources. The IESO reports that the DRA is a *"valuable and reliable tool for the IESO to secure capacity on the system. Decreasing prices year-over-year demonstrates the ongoing maturity of the demand response market as more consumers participate and competition increases..."*. Attached at Exhibit C is a copy of the IESO's published report on the most recent DRA held in December of 2018.
11. The TCA, proposed to be conducted in early December 2019 under the Amendments, will allow generators to participate in the process, alongside DR Resources.
12. In the existing DRA, the only revenue stream available to participants is a capacity payment. There are currently no payments made for energy activations in the DRA. If the TCA proceeds in December 2019, in a situation where energy is activated, DR Resources will still only qualify for capacity payments, whereas generators will qualify for both capacity payments and energy payments.
13. If the TCA proceeds in accordance with the Amendments, the TCA will allow for two distinct classes of participant – one whose members receive an energy payment (generators) and one whose members do not (DR Resources).

Implications of the proposed TCA.

14. If the TCA is implemented in December 2019, pursuant to the Amendments:
 - (a) generators will be able to offer into the auction taking into account their anticipated energy payments, which would allow them to set their "offer price" factoring in the anticipated value of the energy payment stream that they will receive when dispatched;
 - (b) DR resources will not have the benefit of such anticipated energy payments, and so will not have an anticipated energy payment stream to factor in when setting their "offer price"; and
 - (c) DR resources will thus be at a competitive disadvantage to generators in the auction because they will not have additional anticipated IAM payment streams to factor in when setting their "offer price".

15. I am informed by AMPCO members and verily believe that in the existing DRA process, an IESO proposed “work-around” has sometimes been used. In that “work-around” DR Resources have increased their capacity offers by an amount sometimes referred to as a “utilization payment”. This “utilization payment” is thought of as a partial proxy for energy payments upon activation. Inclusion of this proxy allows the DR Resources to offer a price that would provide them with some compensation if they are activated for energy. If this proxy methodology were to be used by DR Resources in the TCA it would increase their offers and make them uncompetitive relative to the generators.
16. Any DR Resource that includes a “utilization payment” amount in its capacity offer (as a proxy for the nonexistent energy payments to DR Resources) will move itself up the offer stack (i.e., make itself more expensive) and no longer be competitive with those entities that do not include such cost elements in their capacity offers.
17. Those participants who include “utilization payments” in their capacity offers (DR Resources) are unlikely to clear the capacity market since they will be including cost elements that other participants (generators) will not be including, because those other participants will cover those costs in their energy payments that they will receive when activated.
18. I am informed by some AMPCO members and verily believe, it can be problematic for DR Resources to simply omit “utilization payment” amounts from their capacity offers, since they have no other reasonable means of recovering those amounts in the event that they are activated in the energy market.
19. In other words, if they include utilization amounts, they cannot compete in the capacity market and if they do not include them they may clear the capacity market, but cannot recover legitimate costs if they are activated to provide energy.
20. If the TCA proceeds before appropriate resolution by the IESO of the issue of energy payments for DR Resources, it is unlikely that DR Resources will clear the new capacity market. DR Resources’ inability to be cost competitive will effectively exclude them from participation in a process that was originally exclusive to them (the DRA), and the TCA would thereby replace one set of capacity auction participants (DR Resources) with another (generators).

Harm to DR Resources can be Avoided.

21. By staying the Amendments pending the outcome of AMPCO's broader Application, the effective exclusion of DR Resources from the capacity auction can be avoided. A stay would delay the implementation of the first TCA. That delay would allow the IESO time necessary to appropriately resolve the issue of energy payments to DR Resources – an issue that the IESO has already acknowledged as a barrier to DR Resources' participation in the IAM and that the IESO has long been discussing through the DRWG (see Exhibit D, which is a copy of the IESO "Active Engagements" web page discussion of the ongoing IESO work on energy payments for activation of DR Resources). With that issue appropriately resolved, a capacity auction process could be conducted in a manner that is fair for all participants.
22. On the other hand, staying the Amendments pending the outcome of AMPCO's broader Application should have no negative impact to the IAM. Attached as Exhibit E is a copy of a communication from the IESO's CEO, Peter Gregg, stating that, *"it is clear that over the next decade, we have enough energy to meet provincial demand and a limited need for new capacity if existing Ontario resources are reacquired when their contracts expire. We believe these limited capacity needs can be met through existing and available resources such as Demand Response (DR), imports, generators that are coming off long-term contract, uprates and energy efficiency."* The IESO has also indicated that there is no need for additional capacity until the year 2023 when the phase-out of the Pickering nuclear plant begins, as stated in Stakeholder Advisory Committee Meeting Notes dated August 14, 2019, which indicate that the attached Exhibit F.

SWORN BEFORE ME at the City of Toronto,
in the Province of Ontario on October 11,
2019

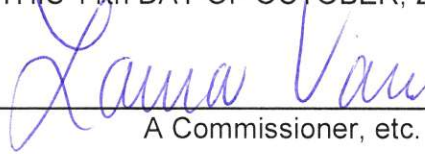


Commissioner for Taking Affidavits
LSUC 554085



COLIN ANDERSON

THIS IS **EXHIBIT A** REFERRED TO IN
THE AFFIDAVIT OF **COLIN
ANDERSON** SWORN BEFORE ME,
THIS 11th DAY OF OCTOBER, 2019.

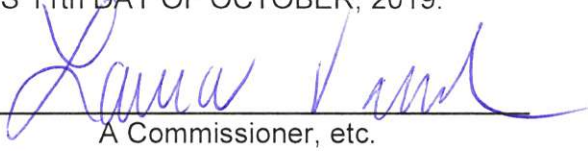
A Commissioner, etc.

2020 Transitional Capacity Auction (TCA) Phase 1 Timelines
For TCA held in December 2019



Process	Activity Milestones	Responsibility	Dates	Comments
Pre Auction Activities				
Pre-Auction Registration	For new Market Participants, the suggested last date to start "Register Organization" to participate in the December 2019 TCA Link to Register an Organization	Organization	30-Jul-19	This applies to non IESO-registered organizations that plan to participate in the TCA. It is a one-time requirement. This step is only applicable to Demand Response organizations (Organizations with capacity auction eligible generation resources are already registered with the IESO).
	For organizations registered with the IESO, the suggested last date to start "Demand Response Auction Participant (DRAP) Authorization" to participate in the December 2019 TCA Link to onlineIESO	Organization	30-Aug-19	Demand Response participants with registered organizations must become Auction Participants (one-time authorization requirement). Registered DRAPs will be migrated from DRAP to Capacity Auction Participant (CAP) by the IESO in early October 2019. This step is only applicable to Demand Response organizations (Organizations with capacity auction eligible generation resources will be eligible to start authorization at a later date mentioned below).
	The suggested date to start the "Capacity Auction Participant (CAP) Authorization" to participate in the December 2019 TCA Link to onlineIESO	Organization	15-Oct-19	Participants not already authorized as DRAP must become Capacity Auction Participants (one-time authorization requirement). This date applies to all organizations with capacity auction eligible generation resource and to organizations with demand response resources that had not authorized as a DRAP. More information is available in Market Manual 12 Section 3.2.
	Last date for all Capacity Auction Participants to complete "CAP Authorization"	Organization	05-Nov-19	Organizations must complete this milestone in order to participate in the TCA to be held in December 2019.
				Participants not already authorized as DRAP must become Capacity Auction Participants (one-time authorization requirement). This date applies to all organizations with capacity auction eligible generation resources and to organizations with demand response resources that had not authorized as a DRAP.
Reports	Publish TCA Pre-Auction Report Pre-Auction Report	IESO	26-Sep-19	
Capacity Qualification	Suggested start date for the submission of Capacity Qualification information Link to online IESO	Capacity Auction Participant	15-Oct-19	More information is available in the Market Manual 12 Section 3.2.
	Last date to complete the Capacity Qualification (including posting of auction deposit)		27-Nov-19	Capacity auction participants are encouraged to initiate the capacity qualification process as soon as feasible. After submitting the capacity qualification information, auction participants are required to provide deposit and the process may require up to 30 days. Participation in the auction is conditional upon providing the auction deposit by the published date.
Auction Period Activities				
Conduct Transitional Capacity Auction	Start of Capacity Auction Offer Submission Window Link to onlineIESO	Capacity Auction Participant	04-Dec-19 - 09:00 AM	
	End of Capacity Auction Offer Submission Window	Capacity Auction Participant	05-Dec-19 - 05:00 PM	
Reports	Publish TCA Post Auction Report Post Auction Report	IESO	12-Dec-19	
Forward Period Activities Prior to Summer Obligation Period				
Post-Auction Registration	Suggested last date to start "Capacity Market Participant (CMP) Authorization" to participate in the 2020 Summer Obligation Period	Capacity Auction Participant	29-Jan-20	This applies only to auction participants with a capacity obligation that have not previously registered as a DRMP. Registered DRMPs will be migrated from DRMP to Capacity Market Participant (CMP) by the IESO.
	Last date to start "Register/Update Capacity Resources"	Capacity Market Participant	29-Jan-20	Registration of new resources or update existing resources.
	Suggested last date to "Post/Update Capacity Prudential Support"	Capacity Market Participant	02-Mar-20	See Market Manual 5, Part 5.4. Participants that cannot post or update their capacity prudential support by this date are encouraged to speak to the IESO to ensure their prudentials can be processed prior to the obligation period.
	Last date to complete the market registration process to become dispatchable	Capacity Market Participant	17-Mar-20	This requirement is only applicable to the non-dispatchable market participants that are seeking to change attributes of their resources in the IESO's registration system in order to allocate a capacity obligation to a capacity generation resource.
	Last date to be "Authorized as Capacity Market Participant (CMP)"	Capacity Market Participant	30-Mar-20	
	Last date to complete "Register/Update Capacity Resources"	Capacity Market Participant	31-Mar-20	
	Last date to "Register/Update Contributor Management" for Virtual Resources (Monthly Process)	Capacity Market Participant	09-Apr-20	Click to view Calendar for full details.
Summer Obligation Period (Summer 2020)				
Energy Market Participation	Summer obligation period begins	Capacity Market Participant	01-May-20	
	Latest date to "Submit Measurement data" for Virtual Resources (Monthly Process)	Capacity Market Participant	23-Jun-20	Click to view Calendar for full details.
Forward Period Activities Prior to Winter Obligation Period				
Post-Auction Registration	Suggested last date to start "Capacity Market Participant (CMP) Authorization" to participate in the 2020/21 Winter Obligation Period	Capacity Auction Participant	30-Jul-20	This applies only to auction participants with a capacity obligation that have not previously registered as a DRMP. Registered DRMPs will be migrated from DRMP to Capacity Market Participant (CMP) by the IESO.
	Last date to start "Register/Update Capacity Resources"	Capacity Market Participant	30-Jul-20	
	Suggested last date to "Post/Update Capacity Prudential Support"	Capacity Market Participant	02-Sep-20	See Market Manual 5, Part 5.4. Participants that cannot post or update their capacity prudential support by this date are encouraged to speak to the IESO to ensure their prudentials can be processed prior to the obligation period.
	Last date to complete the market registration process to become dispatchable	Capacity Market Participant	17-Sep-20	This requirement is only applicable to the non-dispatchable market participants that are seeking to change attributes of their resources in the IESO's registration system in order to allocate a capacity obligation to a capacity generation resource.
	Last date to be "Authorized as Capacity Market Participant (CMP)"	Capacity Market Participant	29-Sep-20	
	Last date to complete "Register/Update Capacity Resources"	Capacity Market Participant	30-Sep-20	
	Last date to "Register/Update Contributor Management" for Virtual Resources (Monthly Process)	Capacity Market Participant	14-Oct-20	Click to view Calendar for full details.
Winter Obligation Period (Winter 2020/21)				
Energy Market Participation	Winter obligation period begins	Capacity Market Participant	01-Nov-20	
	Latest date to "Submit Measurement data" for Virtual Resources (Monthly Process)	Capacity Market Participant	23-Dec-20	Click to view Calendar for full details.

THIS IS **EXHIBIT B** REFERRED TO IN
THE AFFIDAVIT OF **COLIN**
ANDERSON SWORN BEFORE ME,
THIS 11th DAY OF OCTOBER, 2019.

A handwritten signature in blue ink, appearing to read "Kama V and", is written over a horizontal line.

A Commissioner, etc.



March 27, 2019

IESO Stakeholder Engagement
Transitional Capacity Auction (TCA)

Submitted via email

Re: AMPCO Comments on TCA Stakeholdering

AMPCO is the voice of industrial power users in Ontario. Our mission is industrial electricity rates that are competitive, fair and efficient.

Attached are AMPCO's comments on the IESO's stakeholdering of the Transitional Capacity Auction (TCA), as introduced at a public stakeholder session on March 7, 2019. AMPCO appreciates the opportunity to provide such feedback.

Best Regards,

[Original signed by]

Colin Anderson
President

Transitional Capacity Auction

Submissions of the Association of Major Power Consumers in Ontario (AMPCO)

INTRODUCTION

Ontario's electricity system is complex and always evolving. AMPCO provides Ontario industries with effective advocacy on critical electricity policies, timely market analysis and expertise on regulatory matters that affect their bottom line. We are the forum of choice for major power consumers who recognize that their business success depends on an affordable and reliable electricity system.

These submissions are in relation to the IESO's stakeholdering of the Transitional Capacity Auction, as introduced at a public stakeholder session on March 7, 2019. AMPCO's members are major power consumers, responsible for over 15 TWh of annual load in the province. Many of those members participate in the existing Demand Response Auction, which is why AMPCO has an interest in this consultation.

AMPCO appreciates the opportunity to provide feedback and looks forward to continued dialogue.

SUMMARY OF AMPCO COMMENTS

AMPCO appreciates that changes to the Demand Response Auction (DRA) have been contemplated for some time as part of migrating to the Incremental Capacity Auction (ICA). These changes are intended to ultimately reflect the truly competitive nature of the ICA. However, both the pace of those changes as well as some of the specific design elements (or omissions) of the current IESO proposal require some modifications.

Of greatest importance is the clear bias that is being included in the current design whereby generators who receive a demand response activation will receive energy payments, while loads will not. This is clearly discriminatory and cannot be permitted to go forward. This must be remedied now - in Phase One of the project - not at some undetermined future date.

Additionally, the IESO has not included within the current design the ability for all loads to participate in the provision of operating reserve or other ancillary services, such as regulation services. AMPCO believes that again, this represents a bias against loads that should be rectified in a timely fashion.

Accordingly, AMPCO cannot support the TCA in its current form and looks forward to working with the IESO and other stakeholders to correct the proposed design flaws that currently exist.

DISCUSSION

A stakeholder session was hosted by the IESO on March 7, 2019. This was the first public discussion of the newly proposed Transitional Capacity Auction (TCA), which is intended to migrate the existing Demand Response Auction (DRA) into the proposed Incremental Capacity Auction (ICA) which is currently being stakeholdered and designed as part of the overall Market Renewal Program (MRP). As such, the TCA can be regarded as a temporary measure, intended to address capacity shortfalls that occur between now and the initiation of the ICA which is currently scheduled for 2023. Notwithstanding the temporary nature of the TCA, it is expected that many design elements of the TCA will be used as inputs to the ICA - which will be a permanent construct. For this reason, it is imperative that the TCA be appropriately stakeholdered to ensure that its design is as correct, fair and acceptable as possible to all stakeholders.

According to IESO Stakeholder documentation, this engagement will be divided into two phases:

Phase One: Evolving the DRA to enable other resource types to participate. In Phase One of this engagement, the IESO is looking for feedback on auction elements that inhibit or prohibit an eligible resource's ability to participate and provide capacity in the auction and subsequent commitment periods. The IESO will provide a list of proposed design features to be included in the 2019 TCA, as well as define resource eligibility.

Phase Two: Ongoing evolution of the TCA. In Phase Two of this engagement, the IESO will seek feedback on subsequent design improvements to further enable broader participation for future auctions.

In AMPCO's submission, it is unacceptable to tolerate the inclusion of major problems in Phase One by assuming that they will be remedied as part of Phase Two. Phase Two should be viewed as an ongoing initiative to fine-tune the design of the TCA - it should not be relied upon to correct known errors which are intentionally included at the Phase One design stage. Phase One must represent the IESO's and stakeholders' best efforts at a functional and fair design.

With that guiding principle as an objective, AMPCO has a number of comments about the specific materials that were covered at the March 7, 2019 Stakeholder Session:

- In general, AMPCO is concerned at the rapid pace that has been set out for the development of the TCA. AMPCO understands the need for expedience in order to guard against any potential capacity shortfalls, but that expedience should not be achieved at the expense of a correct, fair and well stakeholdered design. We need this quickly, but - more importantly - we need this done right. Accordingly, AMPCO suggests that the IESO review its draft schedule to ensure that appropriate durations exist for meaningful stakeholdering throughout the design and market rule amendment process.
- Slide 7 of the IESO presentation materials includes the Principles that exist in the design of the Market Renewal Program (MRP) and indicate that those principles are also driving the design of the TCA. One of those principles is "Competition", which is further described in IESO documentation as "provide

open, *fair, non-discriminatory* competitive opportunities for participants to help meet evolving system needs”¹ [*emphasis added*]. AMPCO supports this principle and feels that it is particularly relevant, given some of the issues that were discussed on March 7.

- The subject of Energy Payments is a major area of concern for AMPCO. While this subject has been raised before within the Demand Response Working Group, it has not yet been resolved. Arguably, one could take the position that since - currently - the only providers of demand response are loads, the issue is not as important as it will be in the future, since all loads are currently being treated similarly (i.e. equally unfairly). However, as soon as the pool of DR providers is expanded to include generators, a very real discriminatory element is introduced. To be clear - if the current IESO design allows for both generators and loads to secure a capacity payment for provision of DR, but only allows a generator to receive an energy payment in the event that its DR is activated, this is an unacceptable bias that cannot be permitted.
- Ontario is not the only jurisdiction that has contemplated this issue. In the U.S., the Federal Energy Regulatory Commission (FERC) issued its Order 745 in 2011. In the Summary of that Order, the following text appears:

“In this Final Rule, the Federal Energy Regulatory Commission (Commission) amends its regulations under the Federal Power Act to ensure that when a demand response resource participating in an organized wholesale energy market administered by a Regional Transmission Organization (RTO) or Independent System Operator (ISO) has the capability to balance supply and demand as an alternative to a generation resource and when dispatch of that demand response resource is cost-effective as determined by the net benefits test described in this rule, that demand response resource must be compensated for the service it provides to the energy market at the

¹ <http://www.ieso.ca/en/Sector-Participants/Market-Renewal/Overview-of-Market-Renewal>

market price for energy, referred to as the locational marginal price (LMP).”²

- Further, FERC’s Order 745 was upheld in January, 2016 by a decision of the Supreme Court of the United States³.
- The IESO is not the only system operator to engage in consideration of this issue, but it appears to have landed in a different position than many other ISOs. AMPCO recommends that the IESO re-evaluate its decision on this issue and to put a design in place that treats loads consistent with generators - and FERC Order 745 - in their provision of demand response. To not do so is to intentionally create unfairness and discrimination within the TCA design, clearly violating one of the key Market Renewal principles.
- AMPCO also believes that if the DRA would benefit from broader participation, then other markets including operating reserve and regulation would also benefit from increased participation and should be considered for expansion. This does not necessarily have to take place on the same timeline as the TCA, but it should be planned with a clear implementation schedule.

As the TCA design is further revealed, AMPCO reserves the right to comment on other specific features, inclusions or exclusions. AMPCO appreciates the opportunity to provide feedback and looks forward to continued dialogue.

² <https://www.ferc.gov/EventCalendar/Files/20110315105757-RM10-17-000.pdf>

³ https://www.supremecourt.gov/opinions/15pdf/14-840-%20new_o75q.pdf



May 2, 2019

IESO Stakeholder Engagement
Transitional Capacity Auction (TCA)

Submitted via email

Re: AMPCO Comments on TCA Design Document

AMPCO is the voice of industrial power users in Ontario. Our mission is industrial electricity rates that are competitive and fair.

Attached are AMPCO's comments on the IESO's Design Document associated with the Transitional Capacity Auction (TCA). AMPCO appreciates the opportunity to provide such feedback.

Best Regards,

[Original signed by]

Colin Anderson
President

Transitional Capacity Auction - Phase One Design Document

Submissions of the Association of Major Power Consumers in Ontario (AMPCO)

INTRODUCTION

AMPCO provides Ontario industries with effective advocacy on critical electricity policies, timely market analysis and expertise on regulatory matters that affect their bottom line. We are the forum of choice for major power consumers who recognize that their business success depends on an affordable and reliable electricity system.

These submissions are in relation to the IESO's Phase One Design Document (the "Design Document") for the Transitional Capacity Auction (TCA), released for public commentary on April 11, 2019. AMPCO's members are major power consumers, responsible for over 15 TWh of annual load in the province. Many of those members participate in the existing Demand Response Auction, which is why AMPCO has an interest in this consultation.

AMPCO appreciates the opportunity to provide feedback and looks forward to continued dialogue.

SUMMARY OF AMPCO COMMENTS

AMPCO's single most significant area of commentary deals with the unjust discrimination against Demand Response (DR) proponents which exists within the Design Document as a result of a fundamental design flaw. That flaw provides for energy payments for one class of TCA participant (generators) but does not allow for such payments for a second class of TCA participant (DR providers) in similar circumstances.

This discriminatory treatment must be remedied now - during Phase One Design of the project - not at some undetermined future date. Accordingly, AMPCO cannot support the TCA in its current form and looks forward to working with the IESO and other stakeholders to correct this flaw as part of Phase One activities.

DISCUSSION OF THE DISCRIMINATORY DESIGN ELEMENT

1. The Core of the Discriminatory Design Element

The subject of just and fair treatment and non-discriminatory competition is a major area of concern for AMPCO within the context of the TCA Design Document.

In general terms, the Design Document sets out, among other things, the process by which participants will offer their available capacity into the TCA. Those offers will be evaluated against the target capacity and each other, and successful capacity providers will be determined based on offer price, with the result being that some participants will be successful in their offers (i.e. they will clear the market, and be eligible to provide capacity during the commitment period) and some will be unsuccessful (they do not clear the market and will not be eligible to provide capacity during the commitment period). Successful participants will receive capacity payments during the commitment period, where unsuccessful participants will not.

For clarity, entities that offer lower prices will generally be more successful in clearing the TCA than those that offer higher prices. This is intuitively obvious.

Entities that provide capacity during the commitment period will be obligated to provide corresponding energy offers, for that capacity amount, to allow for the activation of that capacity in the energy market. Should such activations occur, a TCA participant that is a generator will receive energy payments for that portion of its capacity that is activated. A TCA participant that is a DR provider will not. This gets to the core of the discriminatory design element. AMPCO submits that

demand response resources must be compensated for the service they provide to the energy market at the market price for energy, in the same way that generators are compensated.

While this subject has been raised before within the context of the Demand Response Working Group, it has not been resolved. Arguably, one could take the position that since currently (i.e. “pre-TCA”), the only providers of demand response are load customers, the issue is not as explicitly unfair as it will be in the future, since all loads are currently being treated similarly (i.e. equally unfairly). There is no discrimination today, since none of the providers receives an energy payment. However, as soon as the pool of DR providers is expanded to include generators, a very real discriminatory element is introduced. Two classes of participants will be created - one that is eligible for energy payments and one that is not. This separation of participant classes is what gives rise to the issue of discriminatory treatment.

If the current IESO design allows for both generators and loads to secure a capacity payment for provision of DR, but only allows a generator to receive an energy payment in the event that its DR is activated, this is unacceptable discrimination that cannot be permitted.

2. Utilization Payments and Energy Payments are Not the Same Thing

In the current Demand Response Auction (DRA) process, it has been possible to avoid having to address this issue by using “Utilization Payments”. Since the only participants in the DRA are on the load side (i.e. no generators currently participate) it has been possible to include amounts in capacity offers that act as a proxy for an energy payment, in a situation where capacity is activated. These amounts are referred to as utilization payments. Since all participants would include these amounts in their capacity offers, the issue of discrimination is avoided.

In the design contemplated within the Design Document, this proxy approach no longer works. Because the TCA will allow for two distinct classes of participant - one who receives an energy payment and one who does not - any participant that includes a utilization payment amount in its capacity offer (as a proxy for the non-existent energy payments) will move itself up the offer stack and no longer be competitive with those entities that do not include such costs elements in their capacity offers. Those participants who include utilization payments in their capacity offers are unlikely to clear the capacity market since they will be including cost elements that other participants (i.e. generators) will not be including, because those other participants will cover those costs in their energy payments that they will receive when activated.

It is also not a viable solution for loads to simply omit utilization payment amounts from their capacity offers, since they have no other means of recovering those costs in the event that they are activated in the energy market. In effect, loads are in a no-win situation. If they include utilization amounts, they cannot compete in the capacity market and if they do not include them they may clear the capacity market, but cannot recover legitimate costs if they are activated to provide energy.

For these reasons, it is clear that the topic of utilization payments does not solve the discriminatory treatment that is inherent within the Design Document. DR providers who only receive capacity payments (either with or without utilization payments) are not competing on a level playing field with generators who receive capacity and energy payments.

3. Other Jurisdictions

Ontario is not the only jurisdiction that has contemplated this issue. In the U.S., the Federal Energy Regulatory Commission (FERC) issued Order 745 in 2011. In the Summary of that Order, the following text appears:

“In this Final Rule, the Federal Energy Regulatory Commission (Commission) amends its regulations under the Federal Power Act to ensure that when a demand response resource participating in an organized wholesale energy market administered by a Regional Transmission Organization (RTO) or Independent System Operator (ISO) has the capability to balance supply and demand as an alternative to a generation resource and when dispatch of that demand response resource is cost-effective as determined by the net benefits test described in this rule, that demand response resource must be compensated for the service it provides to the energy market at the market price for energy, referred to as the locational marginal price (LMP).”¹

The FERC Order specifically references two conditions that must apply in situations where DR energy payments will take place. First, the resource in question must have the capability to balance supply and demand, and second, the DR resource must be deemed to be “cost-effective”. Some form of these conditions could be adopted for use in Ontario to ensure that appropriate resources are paid and that overall value to the system is achieved.

Further, FERC’s Order 745 was upheld in January, 2016 by a decision of the Supreme Court of the United States². The following is an excerpt from that ruling:

“FERC’s decision to compensate demand response providers at LMP—the same price paid to generators ... is not arbitrary and capricious. ... this Court’s important but limited role is to ensure that FERC engaged in reasoned decision making—that it weighed competing views, selected a compensation formula with adequate support in the record, and intelligibly explained the reasons for making that decision. Here, FERC provided a detailed explanation of its choice of LMP and responded at

¹ <https://www.ferc.gov/EventCalendar/Files/20110315105757-RM10-17-000.pdf>

² https://www.supremecourt.gov/opinions/15pdf/14-840-%20new_o75q.pdf

length to contrary views. FERC’s serious and careful discussion of the issue satisfies the arbitrary and capricious standard.”³

The IESO is not the only system operator to engage in consideration of this issue, but it appears to be landing in a different position than the Federal Energy Regulator in the U.S. AMPCO strongly recommends that the IESO re-evaluate its decision on this issue and to put a design in place that treats loads consistent with generators in their provision of demand response. To not do so is to intentionally create unfairness and discrimination within the TCA design.

4. The Need to Deal with this Issue in Phase One

According to IESO Stakeholder documentation⁴, this engagement is intended to be divided into two phases:

Phase One: Evolving the DRA to enable other resource types to participate. In Phase One of this engagement, the IESO is looking for feedback on auction elements that inhibit or prohibit an eligible resource’s ability to participate and provide capacity in the auction and subsequent commitment periods. The IESO will provide a list of proposed design features to be included in the 2019 TCA, as well as define resource eligibility.

Phase Two: Ongoing evolution of the TCA. In Phase Two of this engagement, the IESO will seek feedback on subsequent design improvements to further enable broader participation for future auctions.

In AMPCO’s submission, it is unacceptable to tolerate the inclusion of major flaws in Phase One by assuming that they will be remedied as part of Phase Two. Phase Two should be viewed as an ongoing initiative to fine-tune the design of the TCA - it should not be relied upon to correct known design errors which are intentionally included at

³ Ibid

⁴ March 25, 2019 IESO Engagement Plan

the Phase One stage. Phase One must represent the IESO's and stakeholders' best efforts at a functional and fair design that is non-discriminatory in nature.

In support of this perspective, Section 1.1 of the Design Document sets out the design principles that will be applied in the creation of the TCA. The second principle listed in that section reads as follows:

- **Competition:** Provide *open, fair, non-discriminatory competitive opportunities* for participants to help meet evolving system needs by evolving the DRA to enable additional resources. *[emphasis added]*⁵

Further to this, Section 1.2 of the Design Document ("Transitional Capacity Auction Objective")⁶ states that "The objective of Phase I is to take a first step toward the ICA [Incremental Capacity Auction] by *increasing competition* and enabling participation from existing, Noncommitted, Dispatchable Generators ... to compete with Demand Response Resources. *[emphasis added]*"

It can be reasonably concluded by looking at these two sections together that the objective of Phase One of the TCA is to increase competition, but that competition must be open, fair and non-discriminatory.

A Phase One design that does not provide for open, fair and non-discriminatory competitive opportunities has failed to satisfy the stated objective of Phase One of the project. As such, changes must be made to any such design elements prior to the conclusion of Phase One - it is not permissible pursuant to the Phase One stated objective to accept design elements that actively undermine the objective, even if there is an explicit intention to further evaluate the issue in a subsequent stage of the project.

⁵ TCA Phase One Design Document, pp 9

⁶ TCA Phase One Design Document, pp 10

OTHER SPECIFIC COMMENTS ON THE DESIGN DOCUMENT

The following are other specific comments that AMPCO wishes to advance in respect of the TCA Phase One Design Document.

- Section 2.6 - AMPCO requests additional clarity on the topic of zonal constraints. In particular, the calculation methodology for each of the three zonal limits is of interest.
- Section 6.1.1.1 - AMPCO understands the historical need for the \$100/MWh bid price threshold, and does not oppose its continuation as part of the TCA. However, this issue is an example of a control being placed on DR providers, where no such controls are being considered in other situations for generators. AMPCO questions whether Phase One of the TCA should consider some form of Market Power Mitigation in order to drive the appropriate behaviours.
- Section 6.2.3 - AMPCO would like to revisit the values for Non-Performance Factors. As a general statement, AMPCO believes the stated Non-Performance Factors are too high. For loads, the main reason for non-performance would be a forced outage, over which loads have no (or very little) control. Further, during forced outages load are already penalized by the economic consequences of lack of production. Imposing high non-performance factors increases the degree of penalty. AMPCO recommends reducing 1.5 to 1, and 2 to 1.5.

Stakeholder Comment Request – Draft Market Rules and Market Manuals

MR-00439-R00-05 – Transitional Capacity Auction

Date Submitted: 2019/06/04 Feedback Due: June 5, 2019	Feedback provided by: Company Name: Association of Major Power Consumers in Ontario (AMPCO) Contact Name: Colin Anderson Phone: 416 260-0225 Email: canderson@ampco.org
--	--

Please provide comments relating to the section of the draft amendment proposal in the corresponding box. Please include any views on whether the draft language clearly articulates the requirements for either the IESO or market participants. Please provide any alternative language by inserting the draft language below and red-lining the suggested changes.

MR Chapter	Design Element (MR section)	Stakeholder Comments
2	Participation	<i>Stakeholder comments to be included here.</i>
2 (app)	Appendices	
3	Administration, Supervision, Enforcement	
7	System Operations and Physical Markets	

9	Settlements and Billing	
11	Definitions	

MM	Design Element (MM section)	Stakeholder Comments
1.1	Participant Authorization	<i>Stakeholder comments to be included here.</i>
1.2	Facility Registration	
1.3	Identity Management	
2.10	Connection Assessment	
4.3	Real-time Scheduling of the Physical Market	
5.4	Prudential Support	
5.5	Physical Market Settlement Statements	
6	Participant Technical Reference Manual	
7.3	Outage Management	
12	Definitions	

Stakeholder comment is requested on the following IESO directed questions that will be forwarded to Technical Panel for their consideration in the recommendation of market rules to the IESO Board of Directors:

Question	Stakeholder Comment
Do you believe there is a clear and common understanding of the intent and purpose of the draft market rule amendment?	
In your view, is this market rule amendment in the interest of consumers with respect to prices?	

In your view, is this market rule amendment in the interest of consumers with respect to the reliability of electricity service?	
In your view, is this market rule amendment in the interest of consumers with respect to the quality of electricity service?	
In your view, are there any adverse effects (not identified in a previous answer) that may be caused by implementing these proposed changes, either to consumers or market participants.	AMPCO believes that the current market rules being developed for the Transitional Capacity Auction (TCA) will result in a serious adverse effect, in the form of discriminatory treatment against a class of market participant, as set out in AMPCO's submission to the IESO dated May 2, 2019.
<p>General Comments:</p> <p>In general, this submission focuses on only one element of the TCA where AMPCO has material comments. AMPCO's silence on any other issue / market rule / market manual should not be interpreted as approval. It should be interpreted as taking no position.</p>	



July 5, 2019

IESO Stakeholder Engagement

Submitted via email

Re: AMPCO Submission - DRWG and TCA (HDR Resources and Energy Payments)

AMPCO is the voice of industrial power users in Ontario. Our goal is industrial electricity rates that are competitive and fair.

Attached is AMPCO's submission made in response to the call for input as part of the Demand Response Working Group's involvement in the proposed Transitional Capacity Auction.

AMPCO appreciates the opportunity to provide such a submission, and looks forward to continuing the dialogue.

Best Regards,

[Original signed by]

Colin Anderson
President

HDR Resources and Energy Payments:

Submissions of the Association of Major Power Consumers in Ontario (AMPCO)

INTRODUCTION

Ontario's electricity system is complex and always evolving. AMPCO provides Ontario industries with effective advocacy on critical electricity policies, timely market analysis and expertise on regulatory matters that affect their bottom line.

These submissions are made in response to the call for feedback issued by the IESO at its June 19 stakeholder session (the Demand Response Working Group (DRWG) meeting). AMPCO's members are major power consumers, responsible for over 15 TWh of annual load in the province. A reliable and affordable energy supply is critical to the success of their businesses, which is why AMPCO has an interest in these discussions.

AMPCO appreciates the opportunity to provide this feedback and looks forward to continued dialogue on the Transitional Capacity Auction (TCA).

SUMMARY

Directionally, AMPCO supports the movement by the IESO on the issue of energy payments for demand response (DR) proponents. However, the pace of the movement does not match the IESO's desired pace for the movement of the remainder of the TCA project.

AMPCO fully supports payments for both out-of-market and economic activations of DR, and AMPCO feels strongly (as set out in its submission of May 2, 2019¹) that such payments need to be implemented at the same time as the initiation of the TCA

¹ Found at <http://www.ieso.ca/Sector-Participants/Engagement-Initiatives/Engagements/Meeting-Ontarios-Capacity-Needs-2020-2024>

itself. To do otherwise is to embrace a design element that is blatantly discriminatory in nature and counter to clear objectives that have been set for the design of the TCA.

Accordingly, AMPCO suggests that both the out-of-market and economic activations of DR be scheduled to be implemented prior to the first TCA auction. If this necessitates a delay of the first auction, then so be it, since the auction is not required from a reliability perspective in December 2019. It is better to take a little longer and do things correctly than to rush them and include known deficiencies within the design.

In regards to the HDR testing method that the IESO is recommending, AMPCO supports the proposed approach.

MAJOR ELEMENTS OF THE JUNE 19 STAKEHOLDER SESSION

Below are the main elements of the DRWG stakeholder session conducted by the IESO on June 19 on which AMPCO will submit comments:

1. Testing of HDR Resources - Seeking stakeholder feedback on the proposal
2. Cost Recovery for Out-of-Market Activation of DR Resources - Seeking stakeholder feedback on concept and design considerations
3. Energy Payments for Economic Activation of DR Resources - Seek stakeholder input on approach to conducting the analysis.
 - What is the appropriate analysis to complete?
 - Who is best to complete the analysis?
 - Who else should be consulted?
 - When is a decision required by?

AMPCO COMMENTS ON EACH ELEMENT

1. Testing of HDR Resources

AMPCO fully supports the testing approach being proposed by the IESO.

However, as highlighted in AMPCO's submission on the IESO's alternative Load Pricing design, hourly demand response (HDR) still requires some attention from a pricing perspective. In today's market, such resources can participate as NDL while receiving uniform pricing. As part of its new Load Pricing proposal, the IESO has (somewhat arbitrarily) decided that these resources must now be dispatchable and be paid a nodal price, without properly justifying this change. AMPCO does not see the need for this change and as such, cannot support it.

2. Out-of-Market Activation of DR Resources

AMPCO supports the IESO proposal to compensate out-of-market activation of DR resources. AMPCO agrees that these activations (due to testing and emergency situations) can often occur at a price below the bid price of a DR resource. Further, payment for these activations is consistent with energy market and existing design treatment of other resources (including dispatchable loads), thereby leveling the playing field and guarding against any discriminatory treatment that would serve to undermine confidence in Ontario's electricity markets.

In anticipation of compensation being paid for both Out-of-Market as well as Economic Activations, it seems reasonable to maintain consistency between these two different situations. The IESO has listed three potential approaches for consideration in the materials posted on its website on the DRWG page:

- Using energy bids as representative costs
- Historical precedents, such as CBDR activation payments

- Identify costs on individual or type of resource basis

In AMPCO's opinion, the third option would be an administrative nightmare for the IESO and should not be further considered.

The second option has the advantage of having been used previously as part of the Capacity-Based Demand Response (CBDR) Program. However, the value of CBDR, set at that time at \$200, seems somewhat arbitrary. While AMPCO could live with this approach, it does not recommend this as the final solution.

The first option has the advantage of being most consistent with what other participants will be receiving. For this reason alone, AMPCO is in favour of option one - using energy bids as representative costs.

3. Economic Activation of DR Resources

In reviewing the points listed on slide 40 of the presentation materials from the June 19 stakeholder meeting², AMPCO is struck by the similarities to some of the points raised in its own submission of May 2, 2019. To summarize, when it was only DR that was participating in the DR Auction, all DR resources were impacted equally by proponents' inclusion of expected costs of activations in DR Auction offer prices. However, once another class of participant is introduced, the impact is no longer equal. Accordingly, this same concept needs to be applied to economic activations.

AMPCO strongly supports the compensation of DR resources in economic activations, and believes that it must be consistent with the compensation provided to others and to the compensation contemplated in out-of-market activations.

² Found at <http://www.ieso.ca/sector-participants/engagement-initiatives/working-groups/demand-response-working-group>

While the IESO has agreed to implement compensation for out-of-market activations, it is proposing to undertake additional analysis before reaching a conclusion on economic activations. Given the sentiments expressed on slide 40, AMPCO believes that the conclusion of the IESO analysis is already determined - compensation is appropriate. Any analysis, therefore, should focus on “how” to achieve this end.

The IESO has asked four specific questions as part of its call for submissions. Each will be addressed here.

- **What is the appropriate analysis to complete?** As already stated (in this and prior submissions), principles of non-discrimination, fair treatment and level playing fields have already dictated that compensation is appropriate. An assessment of whether or not to compensate is therefore not required. The analysis should rather focus on how best to effect compensation and at what level it should be paid. As set out above in the section on out-of-market activations, consistency with other participants should be the paramount criterion.
- **Who is best to complete the analysis?** AMPCO is mindful of a number of competing considerations in this area. First, there is a need to move swiftly, as will be set out in greater detail below. Second, there is the issue of cost to consider. The benefit of conducting such an analysis should not be overwhelmed by its own expense. Third, one must consider work that has already been done in this area and it should be an objective of the analysis to leverage that work³ in order to avoid costly duplication of effort. Finally, the credibility of the entity performing the work must be beyond reproach. Conflicts, or perceived conflicts, should be avoided.

³ Including work in Ontario as well as work that was done pursuant to FERC Order 745, where appropriate.

Consideration of these criteria does not yield one specific entity that should be the clear choice to perform this work. However, the time constraint, in concert with the need to be impartial and to be able to quickly gather and interpret previous relevant analyses points to a body external to the IESO, such as Navigant, who has previously been engaged in work associated with the DRWG.

- **Who else should be consulted?** AMPCO has few comments in this area. Specifically called out in the IESO materials were the MDAG and the OEB. If the IESO wishes to engage the MDAG, AMPCO has no objections. However, given the role of the OEB in adjudicating conflicts that may arise pursuant to market rule development, AMPCO does not feel that it is appropriate to engage the Board, in any capacity, on this question. The OEB (whether Staff or Board Members) should not be asked to opine on an issue that it could potentially have to decide later. This represents a clear conflict of interest.
- **When is a decision required by?** This is a critical question. In AMPCO's submission, the issue of compensation for economic activations must be clearly decided - and implemented - prior to the initiation of the TCA. The reasons for this view are clearly articulated in AMPCO's submission of May 2, 2019⁴ and (for brevity) will not be repeated here.

Admittedly, the amount of work that must be done (analysis, rules, manuals, approvals, etc.) is likely too great to be completed by the IESO's desired first auction date of December 2019. If a genuine, urgent reliability concern existed, then this would outweigh the need for executing the first

⁴ Found at <http://www.ieso.ca/Sector-Participants/Engagement-Initiatives/Engagements/Meeting-Ontarios-Capacity-Needs-2020-2024>

TCA auction with all of the appropriate design elements in place. This is not the case.

While AMPCO supports the IESO's desire to learn from TCAs in advance of the design and implementation of the Incremental Capacity Auction (ICA), it does not place that desire above the need to implement a fair and non-discriminatory TCA in a situation where no immediate reliability concern is required to be addressed. As AMPCO has stated multiple times in the past - we need to get this right from the start.

Accordingly, AMPCO recommends a six month delay in the start of the TCA in order to accommodate all the work that needs to be done to properly implement the auction.

Alternatively, if for whatever reason the IESO cannot abandon its December 2019 TCA deadline, then the following approach could be adopted. The TCA can proceed on its original timeline, but the promised May 2020 implementation date for out-of-market activations must also apply to implementation of economic activations. In this way DR proponents can be assured that, notwithstanding that the TCA will have commenced, the IESO will have provided its formal assurance that compensation for both types of activations will be designed and implemented by May 2020, at the latest. This means that the auction will be implemented with a known shortcoming, but at least there will be a clear guarantee that the shortcoming will be addressed in a timely fashion.

AMPCO appreciates the opportunity to provide such feedback, and looks forward to continuing to work with the IESO and other stakeholders in designing and implementing a fair, non-discriminatory auction process.



July 9, 2019

IESO Stakeholder Engagement

Submitted via email

Re: AMPCO Submission - MR-00439 - Transitional Capacity Auction

AMPCO is the voice of industrial power users in Ontario. Our goal is industrial electricity rates that are competitive and fair.

Attached is AMPCO's submission made in response to the call for input as part of the market rule amendment process associated with the IESO's proposed Transitional Capacity Auction.

AMPCO appreciates the opportunity to provide such a submission, and looks forward to continuing the dialogue.

Best Regards,

[Original signed by]

Colin Anderson
President

MR-00439 - Transitional Capacity Auction:

Submissions of the Association of Major Power Consumers in Ontario (AMPCO)

INTRODUCTION

Ontario's electricity system is complex and always evolving. AMPCO provides Ontario industries with effective advocacy on critical electricity policies, timely market analysis and expertise on regulatory matters that affect their bottom line.

These submissions are made in response to the call for feedback issued by the IESO in relation to market rule changes required to operationalize the Transitional Capacity Auction (TCA). AMPCO's members are major power consumers, responsible for over 15 TWh of annual load in the province. A reliable and affordable energy supply is critical to the success of their businesses, which is why AMPCO has an interest in these discussions.

AMPCO appreciates the opportunity to provide this feedback and looks forward to continued discussion on the TCA.

GENERAL COMMENT

AMPCO is among the stakeholders that believe the proposal for market rule changes, as it currently stands "*may cause discriminatory treatment against a class of market participants*" [June 25th, TP presentation, page 37]. The proposed market rule changes are designed to facilitate participation by generators in an expanded Demand Response Auction (DRA) platform (i.e. an evolving TCA). Requiring Demand Response (DR) participants to compete against generators in a capacity market without first resolving issues regarding compensation to DR resources for the value which these resources provide in the energy market will undermine the current success of the DRA and handicap DR resources from successfully participating in the market through their own

existing (DRA) platform, as AMPCO has previously set out in its submissions to the IESO of March 25, 2019, May 2, 2019, June 5, 2019 and July 5, 2019.

Generators would bid into a TCA taking into account their anticipated energy payments. DR resources would have to compete against these bids without the prospect of an equivalent energy payment stream. DR resources would thus be at a competitive disadvantage to generators in the TCA.

While the IESO proposes to study the introduction of energy payments to DR resources, the study is proposed to be concluded “*before the end of 2020*”, with a next step proposed to be to “[o]btain input from stakeholders on the approach to conducting the analysis required...” [IESO Demand Response Working Group Meeting Materials, June 19, 2019, p.7].

While AMPCO does accept resolving the issue of DR resources compensation through DRWG and/or MDAG engagement [June 25th TP Presentation, page 39], we are also of the view that requiring DR resources to compete with generators in a TCA prior to resolution of the issue would:

- (a) Undermine competition and market confidence, not only failing to achieve the IESO’s objectives for the TCA/ICA program but actually unduly constraining competition.
- (b) Introduce undue and unjust discrimination against DR resources in the expanded auction program by requiring them to compete with generators prior to resolution of their eligibility for energy payments.

It is our understanding that, contrary to the suggestion otherwise [June 25th TP presentation, page 39], there are a number of DR participants that remain similarly concerned.

Given the lack of any apparent urgency for launch of the TCA, while supporting the proposed market rule and market manual amendments *per se* AMPCO is of the view that the TCA should not proceed prior to resolution of the issue of appropriate compensation

for the value to the market provided by DR resources. Introducing an interim Transitional Capacity Auction (TCA) which undermines the ability of DR resources to compete in Ontario's electricity market would be a regressive step in the quest for enhanced competition and innovation.

July, 2019

IESO PROPOSED CAPACITY AUCTIONS & DEMAND RESPONSE RESOURCES

AEMA/AMPCO BRIEF

Summary of Concerns and Recommendation.

1. The Ontario Independent Electricity System Operator's (IESO) proposal for developing a broadened capacity auction is part of the IESO's overall Market Renewal Program (MRP). The overall objective of the MRP is to encourage and enhance competition¹:

Creating a stable and efficient marketplace that produces value for consumers involves encouraging competition and innovation among suppliers – and is the catalyst behind initiatives to resolve long-standing market design issues.

2. Proceeding with a broadened capacity auction, in the form of the "Transitional Capacity Auction" (TCA) currently proposed, without first resolving how demand response (DR) resources are compensated for the value that they provide to the IESO administered market (IAM) would not only fail to further this objective, it would undermine this objective.
3. It has been definitively recognized that DR resources can provide electricity wholesale market energy services, and that failure to compensate DR resources for such services in a manner equivalent to compensation provided to generation resources for similar services is unjust and unreasonable.
4. Without ensuring just and reasonable compensation to DR resources, on a comparable basis with other resources which bring similar value to the IAM, the TCA proposal could result in replacement of one set of capacity providing resources with another. This would not enhance competition, but it may well stifle it.
5. While the IESO has indicated that it will address the issue of compensation of DR resources for the value that they provide to the IAM, resolution of this issue is not anticipated prior to the proposed December 2019 implementation of TCA Phase I.
6. Fortunately there appears to be no urgency to proceeding with the TCA. On July 16, 2019 the IESO indicated that it would suspend further work on an "Incremental Capacity Auction" (ICA), the mechanism towards which the TCA was to evolve, in light of an imminent forecast indicating sufficient baseload and other resources to ensure reliability for the foreseeable future. The IESO indicated that work on the TCA would continue as currently planned. The current plan is for an initial TCA by the end of 2019.
7. As there is currently no time frame within which a full ICA program is required, there is no rationale for implementing a TCA prior to resolution of the issue of just and reasonable

¹ IESO Transitional Capacity Auction: Phase I Design Document, April 11, 2019, page 1.

compensation for DR resources in the IAM, and all the more reason for getting the TCA right initially so that it will facilitate, rather than undermine, competition.

8. ***Implementation of the TCA should be deferred. It would be more appropriate and more equitable, and it would better achieve the IESO's stated objectives, to forego the proposed "Phase I" TCA implementation in December, 2019 and instead focus on getting the proposed TCA right from its initiation.***

Background and Current Status.

9. DR is the changing of electricity consumption patterns by end-use consumers in response to market prices.²
10. Since 2015 the IESO has held annual demand response auctions (DRAs) to acquire DR capacity from market participants that are able to provide that capacity to the market in exchange for an availability payment³ (which is for present purposes essentially a "capacity payment" - i.e. a payment to ensure that capacity is available to supply energy services as and when called upon).
11. Four successful DRA's have been held in Ontario, the most recent in December 2018. The IESO's report on the most recent DRA underscores the success of the DRA program⁴ [emphasis added]:

This year, 38 organizations were registered as auction participants, the highest number since the auction began in 2015. The successful proponents included four new participants who represent a mix of commercial and industrial consumers.

The average annual clearing price for availability payments of \$52,810/MW represents a 30% decrease from last year, and a 42% decrease since the first auction in 2015. The auction cleared 818 megawatts (MW) for the 2019 summer commitment period and 854 MW for the 2019/2020 winter commitment period.

Moving in to its fourth year, the auction has been established as a valuable and reliable tool for the IESO to secure capacity on the system. Decreasing prices year-over-year demonstrates the ongoing maturity of the demand response market as more consumers participate and competition increases. Lower capacity prices benefit all Ontario consumers, while auction participants benefit by offsetting their energy costs and improving their competitiveness.

As the electricity system moves towards competitive electricity auctions under IESO's Market Renewal project, the participation of consumers providing demand response will increase competition leading to overall lower prices for Ontario consumers.

² IESO Market Manual, Part 12.0: Demand response Auction, Issue 6.0, page 4, paragraph 1.

³ IESO News and Updates page; <http://www.ieso.ca/en/Sector-Participants/IESO-News/2018/12/IESO-Announces-Results-of-Demand-Response-Auction>

⁴ *Ibid*

12. Starting in December, 2019 the IESO is proposing to “transition” the DRA into a broader auction by opening participation to other resources.⁵ While the “Phase 1” December, 2019 auction was initially proposed as a first step towards transition to an ICA to be implemented in 2022, with the recently announced suspension of work on the ICA, the first TCA will simply be the first in potentially a series of capacity auction evolutionary steps without any defined end state timing.
13. While AEMA/AMPCO support broadening of the DRA into a more robust and competitive capacity auction mechanism, they are concerned that in the current state of the market for DR such broadening will not only fail to enhance competition for the benefit of Ontario consumers, it will have the opposite effect.
14. Generation resources have other revenue opportunities in the IESO administered markets, including payments for energy services provided. DR resources do not currently have commensurate revenue opportunities for the energy services which they provide to the market.
15. As long as this is the case, commandeering the currently successful DRA into a TCA will not broaden the existing auction platform, it will only result in driving the DR resources that participate in that DRA out of the IESO administered market, and replacing one set of capacity auction participants (DR) with another (generators). This would actually be a step backward in evolution of the IESO administered markets, not a step forward.
16. ***AEMA/AMPCO urge the IESO to match the timing for evolution of capacity auctions with resolution of the issue of how to justly and reasonably compensate DR in the broader IESO administered market.***
17. Given that the IESO now does not anticipate in the foreseeable future a period of significant system need, the current proposal to implement the first TCA in December, 2019 cannot be said to be driven by an imminent need to secure capacity. There is no apparent driver for a rush to implementation of a broadened capacity auction this year.
18. ***AEMA/AMPCO urge the IESO to reschedule the first TCA to allow for sufficient time to ensure just and reasonable and non-discriminatory compensation for DR in the broader IAM, thus preserving the ability of the TCA to enhance, rather than restrict, competition.***

Enhancing competition, for the benefit of consumers.

19. As noted above, the overall objective of the IESO’s MRP is to encourage and enhance competition⁶:

Creating a stable and efficient marketplace that produces value for consumers involves encouraging competition and innovation among suppliers – and is the catalyst behind initiatives to resolve long-standing market design issues.”

⁵ IESO Transitional Capacity Auction: Phase I Design Document, April 11, 2019, page 2.

⁶ IESO Transitional Capacity Auction: Phase I Design Document, April 11, 2019, page 1.

20. The IESO's proposal to evolve the DRA into a broader based capacity auction is to the same end⁷:

The ICA will help us to prepare for [a future period of capacity requirement] by allowing more resource types to compete to provide future capacity, enabling the IESO to flexibly meet the province's adequacy needs.

21. The success of a broadened capacity auction hinges on expanding participation in competition for the provision of capacity:

*One of the advantages of the ICA is that all eligible sources of capacity – new and existing, on both the supply and demand sides – compete with each other, regardless of resource type. ...From the perspective of meeting adequacy needs, there is no functional difference between a megawatt of power from an electricity generating facility and a megawatt of reduced consumption from demand response.*⁸

22. The TCA would start with the DRA, and add non-committed dispatchable generators as eligible capacity auction participants. The IESO's stated intent in so doing is to "enable competition between additional resource types".⁹

23. At the same time the IESO has acknowledged concerns that there are barriers to DR participation in the IESO markets, and that one of these barriers is the unavailability to DR resources of energy payments.¹⁰

24. The IESO proposes to study the introduction of energy payments for DR resources (i.e. to determine "whether there is a net benefit to electricity ratepayers if DR resources are compensated with energy payments for economic activations". The study proposed is to be concluded "before the end of 2020", with a next step proposed to be to "[o]btain input from stakeholders on the approach to conducting the analysis required to make this determination".¹¹

25. Requiring DR resources to compete against generators without resolving the comparative value of DR resources and generation resources in the energy market, and how to justly and reasonably compensate the former in a manner comparable to the latter, would undermine the current success of the DRA and handicap DR resources from successfully competing within their own existing market platform.

- (a) Generators will bid into capacity auctions taking into account their anticipated energy payments.

⁷ IESO *Incremental Capacity Auction High-Level Design: Executive Summary*, March 2019, page 1.

⁸ IESO *Incremental Capacity Auction High-Level Design: Executive Summary*, March 2019, page 3.

⁹ *Transitional Capacity Auction Phase I Design Document*, April 11, 2019, p.2.

¹⁰ IESO Demand Response Working Group Meeting Materials, June 19, 2019, pages 54 *et seq.*

¹¹ IESO Demand Response Working Group Meeting Materials, June 19, 2019, page 7.

- (b) DR resources will have to compete against these bids without an equivalent energy payment stream, putting DR resources at a competitive disadvantage to generators in the capacity market.¹²
26. Requiring DR resources to compete with generators in a TCA prior to resolution of the eligibility of DR resources for energy payments would:
- (a) Undermine competition and market confidence, a result inimical to the IESO's objectives for the capacity auction program and its MRP in general.
 - (b) Introduce undue discrimination against DR resources in the expanded auction program by requiring them to compete with generators prior to resolution of their eligibility for energy payments.
- (The IESO has recently recognized just this sort of issue in respect of DR compensation for out of market Hourly DR resource activations.¹³)
27. Premature introduction of a TCA such that it undermines the ability of DR resources to compete in Ontario's competitive electricity market would be a regressive step in the quest for enhanced competition and innovation.
28. Commandeering the current DRA to a broader auction platform without first addressing the competitive position of DR resources *vis a vis* generators and other sources of capacity would unnecessarily damage a highly successful existing market mechanism, which would be unfair to DR resources, counterproductive to robust evolution of the Ontario electricity market, and irresponsible on the part of the IESO.

Failing to recognize and compensate the value of DR resources to the energy market is unjust and unreasonable.

29. It has been definitively recognized that DR resources can provide electricity wholesale market energy services, and that failure to compensate DR resources for such services is unjust and unreasonable.
30. In a Final Rule issued in March, 2011 the United States Federal Energy Regulatory Commission (FERC) determined that:¹⁴

... when a demand response resource participating in an organized wholesale energy market... has the capability to balance supply and demand as an alternative to a generation resource and when dispatch of that demand response resource is cost-effective... that demand response resource must be compensated for the service it provides to the energy market at the market price for energy...

¹² Energy payments avoided by the load are not economically equivalent to energy payments for provision of demand reduction to the market, and are not adequately compensatory for the value provided by DR resources to the energy market: 134 FERC ¶ 61,187, 18 CFR part 35, Docket No. RM10-17-000; Order No. 745, *Demand Response Compensation in Organized Wholesale Energy Markets*, March 15, 2011, paragraph 62.

¹³ IESO Demand Response Working Group Meeting Materials, June 19, 2019, pages 36 *et seq.*

¹⁴ 134 FERC ¶ 61,187, 18 CFR part 35, Docket No. RM10-17-000; Order No. 745, *Demand Response Compensation in Organized Wholesale Energy Markets*, March 15, 2011, page 1.

This approach for compensating demand response resources helps to ensure the competitiveness of organized wholesale energy markets and remove barriers to the participation of demand response resources, thus ensuring just and reasonable wholesale rates.

31. The FERC's conclusions on this topic followed a comprehensive rule making process during which opposing positions on the issue were thoroughly represented (with supporting expert evidence), canvassed and considered.
32. On January 25, 2016, the Supreme Court of the United States issued a determination that in making the foregoing determination FERC was within its jurisdiction to regulate wholesale power markets. While expressly eschewing making a finding on the correctness of FERC's determination as outside of the Court's legitimate area of inquiry, following a detailed 33 page review of the evidence and arguments placed before FERC in the rule making process, the Court commented:¹⁵

Our important but limited role is to ensure that the Commission engaged in reasoned decision making – that it weighed competing views, selected a compensation formula with adequate support in the record, and intelligibly explained the reasons for making that choice. FERC satisfied that standard.

33. FERC's determination that establishing just and reasonable wholesale power market rates requires that a DR resource must be compensated for the service it provides to the energy market at the market price for energy was subject to satisfaction of a "net benefits test" to assess the appropriateness of that DR compensation. The "net benefits test" condition was applied to address what was referred to in the FERC's rule making proceeding as the "billing unit effect" of dispatching DR resources in the energy market. Essentially, the concern is that as the volume of energy consumed declines when DR resources actually reduce demand (i.e. avoid consuming energy), the reduction in the costs to meet overall energy demand by dispatching competitive DR is offset in end-user rates to some extent by the fewer units consumed, resulting in an upward pressure in the price for each unit. Whether the reduced costs of supply outweigh the upward pressure on unit rates determines whether there is a "net benefit" for end-users from participation of the DR resource in the market. If there is, then it is in the interest of consumers that DR resources be dispatched when they require a lower energy payment than other resources bidding into the market.
34. On this point FERC concluded as follows¹⁶:

For this reason, the billing unit effect associated with dispatch of a demand response resource in an energy market must be taken into account in the economic comparison of the energy bids of generation resources and demand response resources. Therefore, rather than requiring compensation at [marginal price] in all hours, the Commission requires the use of the net benefits test described herein to ensure that the overall benefit of reduced [marginal price] that results from dispatching demand response resources exceeds the cost of

¹⁵ Federal Energy Regulatory Commission v. Electric Power Supply Association Et Al., 577 U.S. (2016), page 33.

¹⁶ 134 FERC ¶ 61,187, 18 CFR part 35, Docket No. RM10-17-000; Order No. 745, *Demand Response Compensation in Organized Wholesale Energy Markets*, March 15, 2011, paragraph 53.

dispatching those resources. When the above-noted conditions of capability and of cost effectiveness are met, it follows that demand response resources that clear in the day-ahead and real-time energy markets should receive the [marginal price] for services provided, as do generation resources.

35. In the course of its consideration of the equivalency of DR resources and generation resources in providing energy services, the importance of recognizing and compensating this equivalency appropriately, and the importance of thus reducing barriers to DR participation in wholesale markets, FERC cited an earlier order which included a finding that¹⁷:

A market functions effectively only when both supply and demand can meaningfully participate, and barriers to demand response limit the meaningful participation of demand in electricity markets.

36. FERC went on to find that:

Removing barriers to demand response will lead to increased levels of investment in and thereby participation of demand response resources (and help limit potential generator market power), moving prices closer to the levels that would result if all demand could respond to the marginal cost of energy.¹⁸

...

In Order No. 719, the Commission found that allowing demand response to bid into organized wholesale energy markets “expands the amount of resources available to the market, increases competition, helps reduce prices to consumers and enhances reliability.”¹⁹

37. In its rulemaking deliberations FERC also considered arguments that DR resources are “compensated” by avoiding energy costs when responding to requests to curtail consumption, and accordingly paying such resources for energy thereby effectively supplied would amount to double compensation. On these arguments FERC found as follows:²⁰ [emphasis in original]

Furthermore, Dr. [Alfred E.] Kahn argues that paying demand response [marginal price] sets “up an arrangement that treats proffered reductions in demand on a competitive par with positive supplies; but one is no more a [case of overcompensation]²¹ than the other: the one delivers electric power to users at marginal costs – the other – reductions in cost – both at competitively-determined levels.

... In the absence of market power concerns, the Commission does not inquire into the costs or benefits of production for the individual resources participating as supply resources in the organized wholesale electricity markets and will not here,

¹⁷ Ibid, paragraph 57, citing FERC Order No. 719.

¹⁸ Ibid, paragraph 59.

¹⁹ Ibid, paragraph 61.

²⁰ Ibid, paragraph 62.

²¹ Insert in original.

as requested by some commenters, single out demand response resources for adjustments to compensation. The Commission has long held that payment of [marginal price] to supply resources clearing the day-ahead and real-time energy markets encourages “more efficient supply and demand decisions in both the short run and long run,” notwithstanding the particular costs of production of individual resources. Commenters have not justified why it would be appropriate for the Commission to continue to apply this approach to generation resources yet depart from this approach for demand response resources.

38. FERC also recognized in its rule making findings the interrelationship between just and reasonable compensation to DR resources in energy markets and the fairness of associated capacity markets. FERC noted “*how the increased participation by demand resources [in energy markets] could actually increase potential suppliers in capacity markets by reducing barriers to demand resources, which would tend to drive capacity prices down*”, and the need to “*examine the way in which capacity markets already may take into account energy revenues*”.²²

Instituting a TCA without resolving issues regarding just and reasonable compensation to DR resources is discriminatory.

39. As outlined above, the pre-eminent North American energy regulator – FERC – has carefully and thoroughly considered the role of DR resources in wholesale energy markets, and the issue of just and reasonable compensation of those resources for their participation, and has concluded that:
 - (a) Failure to compensate DR resources for the value they provide to energy markets in the same manner as compensation is afforded to generation resources for the value which they supply to energy markets results in wholesale prices that are unjust and unreasonable.
 - (b) Fair compensation of wholesale energy market participants for energy services provided influences the fairness and efficiency of capacity markets.
40. It follows that expanding the current DRA platform to allow generation resources eligible for energy market compensation to participate in the broadened capacity auction without addressing just and reasonable compensation for DR resources providing energy market services would result in capacity markets that are effectively anti-competitive and discriminatory.
41. Without resolution of payment to DR resources for energy services that they can and do provide to the energy market in a manner that fairly recognizes the value of these services provided, inviting generators to compete with DR resources in a capacity auction would unduly and unfairly prejudice the ability of those DR resources to compete, and would thus be discriminatory.

²² 134 FERC ¶ 61,187, 18 CFR part 35, Docket No. RM10-17-000; Order No. 745, *Demand Response Compensation in Organized Wholesale Energy Markets*, March 15, 2011, page 67, footnote 167.

Market Rule Amendments which, in the result, are discriminatory, must be rejected.

42. The Ontario *Electricity Act, 1998 (EL Act)* governs the authority of the IESO to make Market Rules, and the manner in which the Ontario Energy Board (OEB) oversees that IESO authority.
43. Subsection 33(9) of the *EL Act* requires the OEB to consider whether a Market Rule amendment “*unjustly discriminates against or in favour of a market participant or class of market participants*”. If the OEB so finds, it must make an order revoking the amendment, and referring the amendment back to the IESO for further consideration.
44. For the reasons articulated above, Market Rule amendments which have the effect of allowing generation resources to unjustly and unfairly compete against DR resources for the provision of capacity to the IAM would “*unjustly discriminate against a class of market participants*” – i.e. DR resources currently active in the very successful DRA – and would have to be revoked by the OEB.
45. The IESO should refrain from instituting Market Rule amendments which would co-opt the current DRA platform to a broadened capacity auction prior to addressing the currently unjust and unreasonable wholesale energy market compensation structure under which DR resources are not fairly and properly compensated for the energy services which they provide to the IAM.
46. To proceed with the TCA related Market Rule amendments proposed without first addressing this unfairness would have the effect of unjustly discriminating against DR resources competing to provide capacity to the IAM. Such amendments would not withstand regulatory review.

Recommendation.

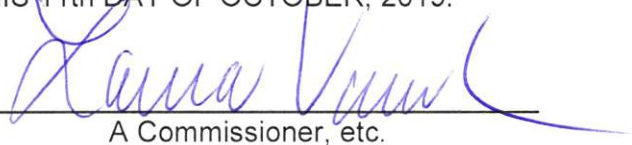
47. The unjust discrimination outlined above would be particularly objectionable where there is no need to rush to ICA implementation prior to resolution of the issue of just and reasonable compensation for DR resources in the wholesale energy market. With the suspension of work on the ICA as a result of an updated forecast which sees no resource constraints for the foreseeable future there is no justification for rushing to TCA implementation.
48. AEMA and AMPCO support expansion of the current DRA into a broader capacity auction platform, and the use of a broadened capacity auction platform along with other competitive procurement options to address future capacity needs.
49. While AEMA/AMPCO recognize that the IESO has now proposed a study, to be completed by the end of 2020, to determine “*whether there is a net benefit to electricity ratepayers if DR resources are compensated with energy payments for economic activations*”, as outlined above the FERC has already exhaustively considered this issue as recognized by the U.S. Supreme Court, and has unequivocally concluded “yes”. Repeating this comprehensive examination is unnecessary and wasteful. That work has already been done, and concluded.

50. A more appropriate, and considerably more focussed, inquiry to validate the “net benefits” to consumers should not take until the end of 2020.
51. In order to enhance competition and market confidence, both to the ultimate benefit of Ontario’s electricity consumers, **AEMA and AMPCO urge the IESO to:**
- (a) **Recognize and respect both its own overall MRP objectives and its capacity auction specific objectives of “[c]reating a stable and efficient marketplace that produces value for consumers” by “encouraging competition and innovation among suppliers” and “resolv[ing] long-standing market design issues”²³.**
 - (b) **Proceed expeditiously with a more focussed study to validate the “net benefits” to consumers of energy payments for DR resources, so that the study can be concluded as soon as feasible and its results implemented.**
 - (c) **Defer implementation of a TCA from December, 2019 and instead focus on getting the proposed TCA right from its initiation, following resolution of the issue of compensation of DR resources for the value that they provide to the IAM.**
 - (d) **Thereby avoid a result which would unfairly and unjustly discriminate against DR resources in the IAM.**

TOR_LAW\ 9986048\7

²³ IESO Transitional Capacity Auction: Phase I Design Document, April 11, 2019, page 1.

THIS IS **EXHIBIT C** REFERRED TO IN
THE AFFIDAVIT OF **COLIN
ANDERSON** SWORN BEFORE ME,
THIS 11th DAY OF OCTOBER, 2019.

A handwritten signature in blue ink, appearing to read "Hanna Vonn", is written over a horizontal line. The signature is fluid and cursive, with a long, sweeping tail that extends to the right.

A Commissioner, etc.



[Sector Participants](#) > [IESO News](#) > [IESO Announces Results of Demand Response Auction](#)

News and Updates

[< Back to IESO News](#)

IESO Announces Results of Demand Response Auction

December 13, 2018

The results of the Independent Electricity System Operator's (IESO) fourth demand response (DR) auction shows continued growth in consumer participation and significant decreases in cost.

The auction is an annual competitive process through which participating residential, commercial and industrial consumers are selected to be available to reduce their electricity consumption as needed. Successful DR providers compete in the electricity market along with generators to help maintain the reliability of the province's electricity system.

This year, 38 organizations were registered as auction participants, the highest number since the auction began in 2015. The successful proponents included four new participants who represent a mix of commercial and industrial consumers.

The average annual clearing price for availability payments of \$52,810/MW represents a 30% decrease from last year, and a 42% decrease since the first auction in 2015. The auction cleared 818 megawatts (MW) for the 2019 summer commitment period and 854 MW for the 2019/2020 winter commitment period.

Moving in to its fourth year, the auction has been established as a valuable and reliable tool for the IESO to secure capacity on the system. Decreasing prices year-over-year demonstrates the ongoing maturity of the demand response market as more consumers participate and competition increases. Lower capacity prices benefit all Ontario consumers, while auction participants benefit by offsetting their energy costs and improving their competitiveness.

As the electricity system moves towards competitive electricity auctions under IESO's Market Renewal project, the participation of consumers providing demand response will increase competition leading to overall lower prices for Ontario consumers.

The full list of this year's successful participants is as follows:

Participant	Summer Capacity Cleared [MW]	Winter Capacity Cleared [MW]
CPOWER ENERGY MANAGEMENT CORPORATION	11.6	14.1
DIRECT ENERGY MARKETING LIMITED	11	14
ENERNOC LTD.	216.3	203.4
GC PROJECT LP	20.1	19.1
GERDAU AMERISTEEL CORPORATION	72	72
GERDAU AMERISTEEL CORPORATION -CAMBRIDGE	2.4	2.4
IVACO ROLLING MILLS 2004 L.P.	25	25

9/25/2019

Participant	Summer Capacity Cleared [MW]	Winter Capacity Cleared [MW]
NRG CURTAILMENT SOLUTIONS CANADA, INC.	143.5	143.5
NRSTOR C&I L.P.	2.4	21.8
PEAK POWER INC.		1
RESOLUTE FP CANADA INC.	28	28
RODAN ENERGY SOLUTIONS INC	201.7	203.1
TEMBEC ENTERPRISES INC.	40	40
VOLTUS ENERGY CANADA LTD	44.4	66.8
Total	818.4	854.2

Additional information about the auction is available on [Demand Response Auction](#) webpage.

More information regarding technical difficulties experienced this year and a quick refresher on the treatment of zonal limits in the auction mechanism can be found [here](#).

The next DR auction will be held in December 2019, for delivery of DR capacity for summer 2020 and winter 2020/2021. Through the Demand Response Working Group, the IESO will continue to evolve demand response as it shifts to more competitive ways to secure capacity.

More information about Market Renewal can be found at [Electricity Market of Tomorrow](#) webpage.

[< Back to IESO News](#)

Contact

Document Library

Careers

IESO Public Reports

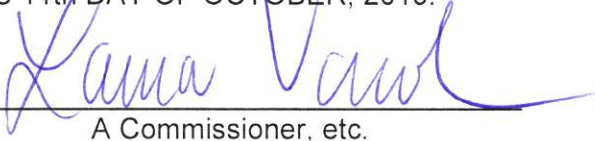
saveonenergy.ca

[Subscribe to News and Updates](#)

Copyright © 2019 Independent Electricity System Operator

[Terms of Use](#) | [Privacy](#) | [Accessibility](#)

THIS IS **EXHIBIT D** REFERRED TO IN
THE AFFIDAVIT OF **COLIN
ANDERSON** SWORN BEFORE ME,
THIS 11th DAY OF OCTOBER, 2019.

A handwritten signature in blue ink, reading "Kama Vaul", written over a horizontal line.

A Commissioner, etc.



[Sector Participants](#) > [Engagement Initiatives](#) > Energy Payments for Economic Activation of DR Resources

Active Engagements

The IESO is committed to an open, two-way dialogue with stakeholders and communities to help understand their views about proposed changes that may affect them.

IN THIS SECTION...

Status of Active Engagements

2019 Conservation Achievable Potential Study

Development of an IESO Competitive Transmission Procurement Process

Energy Storage Advisory Group

Formalizing the Integrated Bulk System Planning Process

Improving Accessibility of Operating Reserve

Innovation and Sector Evolution White Paper Series

Capacity Auction

Energy Payments for Economic Activation of DR Resources

Integrated Regional Resource Plan - Kitchener-Waterloo-Cambridge-Guelph

Regional Electricity Planning – East Lake Superior

Regional Planning – Greater Bruce/Huron

Integrated Regional Resource Plan - Ottawa Area Sub-Region

Integrated Regional Resource Plan - Windsor-Essex

Integrated Regional Resource Plan - York Region

Market Development Advisory Group

Meeting Ontario's Capacity Needs: 2020-2024

Planning Outlook

Regional Planning Review Process

Regional Planning - GTA West

Renewable Distributed Generation Integration (RDGI) Fund

Transmission Asset End-of-Life: Asset Replacement Information Process

Completed Engagements

Energy Payments for Economic Activation of Demand Response Resources

Energy payments (or utilization payments) for the economic dispatch of demand response (DR) resources has been an ongoing topic of discussion at the Demand Response Working Group (DRWG). Stakeholder interest in energy payments was renewed as a result of proposed market rule amendments to enable off-contract, non-regulated dispatchable generators to participate in the capacity auction along with dispatchable loads and hourly demand response resources.

To date, DRWG has been the forum for discussions with stakeholders on energy payments for DR resources – for both economic dispatch and out-of-market activations. However, given that energy payments for economic dispatch of DR resources is a complex issue and would be a substantive change to Ontario's energy market, the IESO has determined that a broader stakeholder engagement is needed to advise on this issue. Energy payments for out of market activations will continue to be discussed through DRWG with the intent to implement the proposal by the December 2019 capacity auction.

Through this engagement, the IESO will seek feedback from stakeholders on:

- The inputs and outputs of the research and analysis required to determine whether there is a net benefit to electricity ratepayers if DR resources are compensated with

energy payments for economic activations. The IESO will commission a third party consultant to support the research and analysis.

- The IESO's decision and rationale on whether demand response resources will be compensated with energy payments for economic activations

Additional details on the IESO's plans to engage with stakeholders can be found in the [engagement plan](#). All comments and enquiries on this engagement can be directed to engagement@ieso.ca.

Anticipated timing for this engagement is presented below.

Schedule of Activities

Date	Activities
June 2020	Post IESO final decision and rationale
May 2020	Present draft IESO decision and rationale for stakeholder review
Q1 2020	Post final research findings and analysis
Q1 2020	Present draft research findings and/or analysis for stakeholder review
November 2019	Present final study scope and study plan
October 10, 2019	Meeting to review engagement plan and objectives, draft scope of research and analysis for stakeholder feedback
September 11, 2019	Stakeholder Feedback <ul style="list-style-type: none"> • AEMA

9/25/2019

Date

Activities

August 22, 2019

Engagement launched – stakeholders to provide feedback on engagement plan by September 11, 2019 to engagement@ieso.ca

- [Communication](#)

Contact

Document Library

Careers

IESO Public Reports

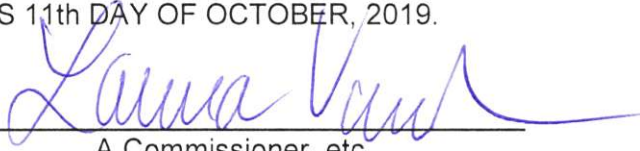
saveonenergy.ca

[Subscribe to News and Updates](#)

Copyright © 2019 Independent Electricity System Operator

[Terms of Use](#) | [Privacy](#) | [Accessibility](#)

THIS IS **EXHIBIT E** REFERRED TO IN
THE AFFIDAVIT OF **COLIN**
ANDERSON SWORN BEFORE ME,
THIS 11th DAY OF OCTOBER, 2019.

A handwritten signature in blue ink, appearing to read "Laura Van", is written over a horizontal line.

A Commissioner, etc.

From: IESO Engagement
Sent: July 16, 2019 11:45 AM
To: IESO Engagement
Subject: Market Renewal Update

I want to provide you with a status report on our market renewal efforts and outline some of the changes that we are making with respect to the plans for the Incremental Capacity Auction (ICA). This revised approach reflects an update in our planning assumptions and allows us an opportunity to respond to the stakeholder comments that we have received about the ICA.

The Independent Electricity System Operator (IESO) will be releasing our annual planning outlook over the next few months. As we finalize the report, it is clear that over the next decade, we have enough energy to meet provincial demand and a limited need for new capacity if existing Ontario resources are reacquired when their contracts expire. We believe these limited capacity needs can be met through existing and available resources such as Demand Response (DR), imports, generators that are coming off long-term contract, uprates and energy efficiency. We do not see a need for new baseload resources to meet those limited capacity needs over the next 10 years.

As a result, we are stopping further work on the current High Level Design (HLD) for the ICA. We will instead continue with our efforts to implement the Transitional Capacity Auction with a first auction this December. We will evolve this auction over the next few years while also further engaging with stakeholders to determine how their ICA feedback should be reflected in our plans going forward and which features from the original HLD are needed to support an enduring capacity auction mechanism in Ontario.

We will continue to enable the initiatives contained within the energy stream of Market Renewal, including the pricing changes associated with the single schedule market. Responding to concerns from large customers, we have put forward an alternate design on load pricing that meets the key objectives of both the IESO and the Association of Major Power Consumers of Ontario. We will be seeking approval from our Board of Directors on the energy stream HLD later this summer, and we will be proceeding with an energy-only business case at this time.

We have also initiated work at the DR Working Group to address concerns about demand side participation in our capacity auctions.

With the existing conservation framework set to end at the end of 2020, we will also explore whether energy efficiency results can be more competitively acquired, including through the use of a capacity auction.

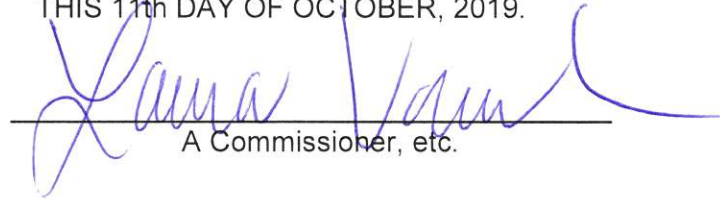
Additional details on today's announcement will be available at the next Market Renewal stakeholder meeting [tomorrow](#).

We remain committed to a more competitive electricity marketplace and working with all of our stakeholders in developing the capacity auction process that can meet our resource adequacy needs. This work will help ensure that future electricity needs can be reliably met at the least cost to Ontario electricity customers.

Peter Gregg

+++This message is being sent to all participants in the Market Renewal Program stakeholder engagements.

THIS IS **EXHIBIT F** REFERRED TO IN
THE AFFIDAVIT OF **COLIN
ANDERSON** SWORN BEFORE ME,
THIS 11th DAY OF OCTOBER, 2019.


A Commissioner, etc.

IESO Stakeholder Advisory Committee Meeting Notes – August 14, 2019

Advisory Committee Members:

Mr. Brian Bentz (representing Distributors and Transmitters)
Mr. Nicolas Bossé (representing Energy Related Businesses and Services)
Mr. David Butters (representing Generators)
Mr. Pat Chilton (representing Ontario Communities)
Ms. Judy Dezell (representing Ontario Communities)
Ms. Brandy Giannetta (representing Generators)
Ms. Malini Giridhar (representing Energy Related Businesses and Services)
Ms. Julie Girvan (representing Consumers)
Mr. Jim Hogan (representing Distributors and Transmitters)
Ms. Rachel Ingram (representing Energy Related Businesses and Services)
Mr. Bruno Jesus (representing Transmitters and Distributors)
Mr. Paul Norris (representing Generators)
Mr. Mark Passi (representing Consumers, via teleconference)
Mr. Mark Schembri (representing Consumers)
Mr. James Scongack, Vice Chair (representing Generators)
Mr. Terry Young (representing IESO)

Regrets:

Mr. Frank Kallonen (representing Distributors and Transmitters)
Mr. Hari Suthan (representing Energy Related Businesses and Services)

IESO Board Members:

Mr. Michael Bernstein
Mr. Simon Chapelle
Ms. Cynthia Chaplin
Mr. Peter Gregg
Ms. Margaret Kelch
Ms. Pat Koval
Mr. Joe Oliver
Ms. Deborah Whale

Presentations:

Mr. Peter Gregg
Mr. Terry Young

August 20, 2019

Please report any comments by email to engagement@ieso.ca

Ms. Barbara Ellard
Mr. Chuck Farmer
Mr. Leonard Kula
Ms. Candice Trickey
Ms. Barbara Anderson

Meeting materials can be accessed online at www.ieso.ca/sac

Agenda Item 1. Welcome Remarks

Mr. Brian Bentz welcomed Mr. Pat Chilton to the SAC. Mr. Chilton hails from Moose Factory and currently lives in Timmins. He is the CEO of Five Nations Energy Inc.

Mr. Bentz welcomed a special guest to the meeting: the Hon. Bill Walker is the new Associate Minister of Energy and represents the riding of Bruce–Grey–Owen Sound. Elected to the legislature in 2011, he was formerly the Minister of Government and Consumer Services. Mr. Scongack noted that Bruce Power has worked extensively with Mr. Walker, and said he is known as a politician dedicated to community engagement.

Mr. Walker said the Minister of Energy, Premier, cabinet, and caucus members are all committed to ensuring reliability and cost effectiveness within the energy sector and that stakeholder engagement will play an important role.

Agenda Item 2. IESO Business Update Items – Memoranda and Discussion

Mr. Terry Young

Mr. Young provided the following business updates:

On the conservation front, the IESO is delivering the Interim Energy-Efficiency Framework that was introduced at the end of March. Participation levels are comparable to the previous framework. The IESO has worked closely with local distribution companies (LDCs) with respect to the submission of wind-down costs, transfer of customer applications, and coordinated communications. Customer disruption has been minimal.

The Achievable Potential Study was recently completed and the final report will be available in September. It identifies energy efficiency potential in Ontario.

The IESO is developing an energy-efficiency auction pilot to test the feasibility of acquiring peak demand reductions through an auction mechanism. The objective is to inform the future opportunities for energy efficiency to compete directly against other resources in a capacity auction or through an alternative competitive procurement mechanism. A draft will be released

in the fall for feedback. The intent is to hold a single auction next year with a two-year commitment period.

As part of the Interim Energy-Efficiency Framework, the Local Program Fund makes funding available to LDCs to deliver local programs that are not duplicative of the IESO province-wide programs. Applications are now being accepted. Four local program concepts have been approved. Three concepts follow a collaborative delivery model that involves the participation of 19 LDCs. Half of the \$27-million budget has been committed.

With respect to stakeholder and community engagement, planning activities are continuing in eight regions. The third First Nations Energy Symposium will take place in Toronto on November 4-5 with the theme of local capacity building. An energy workshop is being planned for the Métis Nation of Ontario in order to understand its priorities and interests. The IESO has taken over delivery of conservation programs for First Nation communities.

A Technical Panel (TP) meeting was held yesterday during which members reviewed the market rules to enable the first capacity auction in December 2019. The TP voted to recommend IESO board approval, and approval will be sought this month.

Mr. Jim Hogan commended the IESO for expanding the scope of the Windsor-Essex regional plan to include significant growth happening in the agricultural sector west of London.

Ms. Brandy Giannetta noted that expanded representation is needed on the TP, particularly from distributed energy resources (DERs). Mr. Young said the composition of the TP is under consideration.

Mr. Mark Schembri asked if retail consumers would be eligible to participate in the energy-efficiency auction pilot. Mr. Young said the IESO is working this out, but he sees no reason why they would not be allowed in.

Ms. Rachel Ingram said with respect to the market rule amendments that were approved yesterday by the TP for the Transitional Capacity Auction (TCA), there is concern that the Association of Major Power Consumers in Ontario (AMPCO) and the Advanced Energy Management Alliance (AEMA) brief was posted just 18 hours prior to the TP meeting and that this did not provide sufficient time for consideration of objections to the amendments. It is hoped that the objections will be made available to the IESO board. Mr. Young said the IESO's understanding was that AMPCO and AEMA requested a meeting to discuss this submission in advance of its posting and that it was posted immediately following the meeting with the IESO. Mr. Young stated that the legal brief would be made available to the board.

Ms. Julie Girvan asked if the energy-efficiency auction pilot is being developed internally by the IESO. Mr. Young replied that it is. Proposals will be sought later this year and the auction will take place in 2020.

Mr. Bruno Jesus asked if loss reduction is being considered in the energy-efficiency auction pilot. Mr. Young said the scope has not been finalized.

Mr. Nicolas Bossé noted that it is interesting that those at the retail level would be allowed to participate in a wholesale product offering within the capacity auction.

Comment from the Floor

Mr. Colin Anderson, AMPCO, echoed Ms. Ingram's concern that the TP did not have sufficient time to read and understand objections made to the market rule amendments for the TCA, or to address what was seen as a fundamental flaw in the market rules. Mr. Young noted that the chair of the TP offered to defer the vote at yesterday's meeting, but the committee decided to go ahead.

Mr. James Scongack commented that the IESO does a lot of stakeholder engagement work and takes stakeholder feedback as an input but that ultimately the IESO needs to make a decision that it is accountable for. Mr. Scongack suggested that a future SAC meeting held in Northern Ontario would serve to broaden stakeholder participation.

Agenda Item 3. Update from the CEO

Mr. Peter Gregg

Mr. Gregg introduced two new IESO board members in attendance.

Ms. Patricia Koval is a corporate director and lawyer, a former adjunct professor at the University of Toronto, and a recently retired senior partner from Torys LLP. She serves on the board of Trans Mountain Corporation. She is a member of the board of the Institute of Corporate Directors and the Canadian Performance Reporting board of the Chartered Professional Accountants of Canada. She is chair of the Toronto Region Conservation Foundation and serves on various conservation-focused organizations, including the Ontario regional board of the Nature Conservancy of Canada.

Mr. Michael Bernstein is president of Juno Advisors Ltd., a private investment company. He is the former president and CEO of Capstone Infrastructure Corporation and the former chair of the Association of Power Producers of Ontario.

Mr. Steve Baker, former president of Union Gas Limited, and Mr. Richard Wilson, a partner in PwC Canada's cyber security and privacy practice, have also joined the IESO board.

Mr. Gregg noted that it was 16 years ago today that Ontario last experienced a major power blackout. Much progress has been made since then toward enhancing reliability, including improved compliance to the standards governed by the North American Electric Reliability Corp (NERC).

Mr. Gregg explained the rationale for the IESO decision to stop work on the Incremental Capacity Auction (ICA). Firstly, there is sufficient energy available in the province for the next two decades. Foreseeable additional capacity needs of 1000-2000 MW over this period can be met with existing and available resources, eliminating the requirement for new base load. Secondly, there were stakeholder concerns surrounding the High Level Design of the ICA and these concerns need to be better understood. The IESO remains committed to using competition to balance reliability and cost effectiveness. The first expanded Demand Response (DR) auction will take place in December 2019 and new resources will be added during the next few years. Recognizing that the capacity auction does not necessarily work for all resources, alternative procurement processes will be considered.

The next annual planning outlook will be released this fall and extensive stakeholder engagement will begin on how best to meet the needs in the outlook. While a capacity auction is one method we would like to hear from stakeholders what other procurement mechanisms should be considered. A cost-benefit analysis to support decisions will be important. Thanks in part to the hard work of stakeholders, the energy stream is moving along well.

The IESO revenue requirement has been flat for the past three years. The IESO has proposed an increase of around 2% per year and this will be presented to the board in a few weeks' time. The increase is needed to support wage growth in collective agreements and to manage cyber security enhancements in next few years. The new five-year strategic plan reinforces the IESO commitment to a competitive marketplace. The plan will be submitted to the minister in early September.

Comments

Mr. Bentz said it is becoming more difficult to forecast load. How does the IESO manage volatility of load going forward? Mr. Gregg said various scenarios are reflected in the annual planning outlook. The IESO has developed a sensitivity analysis and is confident that the right amount of conservatism is built in. The capacity market will put resources through a relatively small time commitment compared with 20-year contracts. Continued development of the capacity market is essential to managing volatility.

Ms. Dezell echoed Mr. Bentz's point about increasing volatility and suggested that the IESO keep a long-term perspective. Mr. Gregg replied that moving away from the ICA does not mean moving away from a long-term view.

Mr. Scongack said the ICA was causing a lot of distraction, for better or for worse, and stopping work on it will allow the sector to focus.

Mr. David Butters agreed that shelving the ICA was a good decision. He questioned the use of the term Transitional Capacity Auction. Mr. Gregg said the IESO is shifting away from using the term, and in future it will be referred to as an evolving capacity market. Mr. Butters expressed concern that the transitional capacity auction would morph into the larger incremental capacity auction. Mr. Gregg stated that the plan is not for the transitional capacity auction to evolve back into an incremental capacity auction and will work with stakeholders on other procurement mechanisms on capacity. Mr. Butters said the addition of alternative procurement mechanisms is a good idea. Also, the cost-benefit analysis is important going forward. Mr. Gregg said consultations around who should own the risks would take place. Mr. Butters said Enbridge and APPrO met with the IESO in July to discuss the challenge of electricity and natural gas alignment. It is important to make them work together. The shorter the commitment period, the more difficult it is to align them.

Mr. Paul Norris said it is important to keep an eye on the assumption that resources on the ground now will continue to operate. Mr. Gregg agreed.

Ms. Ingram said capacity auctions must be open and transparent and provide a level playing field. There is a concern that the proposed market rule amendments for the TCA do not provide a level playing field. Mr. Gregg said the IESO would continue to address this concern.

Mr. Schembri asked how the market performed this summer. Mr. Gregg said it was reliable and served the province well.

Ms. Malini Giridhar asked if natural gas capacity is considered in integrated regional planning. Mr. Gregg said it is and will receive additional attention with Steve Baker's appointment to the Board.

Agenda Item 4. Market Renewal – Energy Update

Ms. Barbara Ellard

Ms. Ellard said the energy market is nearly 16 years old. Technological change has been significant, as evidenced by the arrival of electric vehicles, DERs, storage, and prosumers.

The past 16 years have revealed flaws and associated higher costs within the energy market. Day-to-day operating profiles have begun to change and there is a need to find a better way to commit, dispatch, and price to ensure reliability and cost-effectiveness.

The final High Level Designs are published. The fundamental flaw of the current market is that the market price is not reflective of system conditions. The price ignores transmission constraints, congestion, and operational constraints, for example. Out-of-market payments are required to ensure reliability. Ontario's two-schedule system has prevented the IESO from making improvements. While incremental changes have been made, locational prices are needed to evolve the market more significantly.

In addition to pricing, dispatch and resource scheduling also needs improvement. The energy work stream will introduce a day-ahead market, providing financial incentives to secure the next day's operational profile. It will also introduce real-time unit commitment and a single-schedule market.

Feedback on the High Level Design has been generally supportive. Areas of concern expressed by stakeholders include zonal pricing for loads, how to align market changes with contract changes, and implementation risks for LDCs.

Stakeholders expressed concerns on the load-pricing component of the design. After consulting with AMPCO about risk management, the IESO has proposed choosing between an Ontario zonal price and a nodal price, and this has been reflected in the updated High Level Design.

Stakeholder engagement on the detailed design will take place this fall.

The energy business case will focus on quantifying unit commitment and dispatch, as well as pricing flaws within intertie transactions and dispatch. Modeling results and cost estimates will be discussed at the Market Renewal Plan (MRP) stakeholder update on August 26. Response to the feedback and final business case will take place in September, to be wrapped up in October.

Comments

Mr. Bentz asked, with respect to moving to locational/marginal pricing, what behaviours are expected by sending a different pricing signal to the market? He asked what the impact would be on the retail consumer. Ms. Ellard said having price signals that are reflective of the system conditions would elicit a better response from suppliers and consumers. People may not currently have the right incentives to ensure competitive bidding. The Market Surveillance Panel has documented that there is an opportunity for gaming, and locational prices will eliminate this. Mr. Bentz asked if there would be a net cost saving. Ms. Ellard said total system

cost would be reduced. Regulated price plan (RPP) consumers are expected to stay on an RPP pricing regime, based upon the average Ontario zonal price.

Ms. Giannetta asked when stakeholders will have a better understanding of the detailed design and what are the next steps for market amendment impacts with respect to contracts. Ms. Ellard said the detailed design schedule will be outlined at the August 26 MRP meeting. The IESO will continue to work in unison with the contract team to ensure cohesion.

Ms. Girvan asked what changes were made in response to concerns expressed by AMPCO. Are there implications for other customers? Ms. Ellard said one concern was that with respect to volatility that might arise from zonal pricing. As to the impact, an average uniform price would be lower for some zones.

Mr. Colin Anderson said AMPCO was concerned about trade-offs between short- and long-term economic efficiency. Eight of the 10 zones were going to pay more than an average price. There was concern with respect to risk management. AMPCO members are paying a lot and cannot afford additional upward pressure. Locational marginal pricing (LMP) is seen as a risk with no corresponding return and no way to mitigate it. After fruitful discussions with the IESO, AMPCO is satisfied that the optionality of the new proposal as that would allow the vast majority of industrials to pay an average price going forward. AMPCO was thankful to the IESO having provided the alternative load pricing proposal.

Ms. Ellard said impacts on other consumers will be marginal and costs will come down for all consumers.

Mr. Hogan noted that the OEB approves final RPP rates. He asked if there is a plan to work with OEB? Ms. Ellard said the IESO has worked with the OEB throughout the High Level Design phase and this will continue through the detailed design phase.

Mr. Schembri noted that if AMPCO is happy with the zonal pricing, it could be assumed that Class B consumers will be negatively impacted. Ms. Ellard said the system costs through all of the MRP changes would be reduced for all customers. The change in the load pricing design has a marginal impact on non-Class A customers. Mr. Schembri asked if these efforts would result in an increase in the hourly Ontario energy pricing (HOEP) and reductions to global adjustment pricing. Ms. Ellard replied that it is difficult to forecast but that some design elements may provide downward pressure on market prices.

Mr. Anderson added that AMPCO's participation in market renewal is to find reductions in cost. What is good for AMPCO members may be good for other people. Class B members would benefit just as much or more than Class A members.

Mr. Jesus asked how the changes would affect transmission and what signals will be sent to transmitters from an outage planning perspective. Second, how will the signals affect new customers wanting to locate in Ontario? Ms. Ellard said the system is currently dispatched based on reliable operations and that the changes will not affect how we dispatch the system from a transmission perspective. The changes are focused on scheduling and pricing. The result will be more transparent price signals, and congestion will become more visible. Mr. Jesus asked if the signals would encourage transmission development. Ms. Ellard said this has been seen in other jurisdictions.

Agenda Item 5. Market Renewal – Capacity Update

Mr. Terry Young, Mr. Leonard Kula, Mr. Chuck Farmer

Mr. Farmer provided a preliminary look at the assessment around the upcoming annual planning outlook to be released later this year. Mr. Farmer focused in on the slides that outline that we are energy adequate but we have some capacity requirements. The IESO does not see a need for new build for reliability reasons. The need for additional capacity would emerge in the year 2023 when the phase-out of the Pickering nuclear plant begins. This will translate to a need for 1000-2000 MW over the longer-term if the existing resources remain. If existing resources do not remain, significantly more capacity will be required.

The energy adequacy outlook considers Ontario as an isolated system, without imports. It shows adequacy for the next 20 years if existing resources continue to participate. If existing resources do not renew at the end of their contracts, the gas fleet will fill any potential shortfalls until 2028 when significant needs would emerge. Therefore, throughout the next decade the requirement is for resources that run very little. They will be there for extreme weather events and unforeseen conditions. Overall, a 1% increase in demand is expected.

Comments

Mr. Norris said the assumption that all resources continue to operate is difficult given that capital investment decisions must be made now for 2029-2030. Mr. Kula said a short-term commitment mechanism works well for imports. Long-term capital investments require alternative mechanisms. The challenge is in determining when is a good time for resources to exit, and whether they should exit. Mr. Kula went on to state in response to an earlier comment from Mr. Butters that the IESO will facilitate this while ensuring alignment of electricity and gas. With respect to cost-benefit analysis, it is necessary to think of system cost outside of the cost of the resource. For example, on each of the five peak days so far this year, base load resources have been spilled, including water, wind, and nuclear resources. Upwards of 1000 MW have been spilled at 3 a.m.

Mr. Young said monthly update meetings associated with market renewal would continue over the next 18 months. Phase 1 rules for the capacity stream were dealt with at yesterday's TP meeting, and Phase 2 is to begin within a few days. This will be followed by a discussion of the annual planning outlook and how to meet identified needs.

Mr. Bentz expressed concern about the forecast assumptions on the demand side in the face of an increasingly volatile market which will see the arrival of cannabis operations, data centres, DERs, fuel switching, electric vehicles, mass transit, and generators coming off contract. He asked if it would make sense to have a band of values as opposed to a straight line on the planning outlook graph. Mr. Farmer said electric vehicles would not shock the system over the next 10 years. He worries more about risks caused by economic change. The global economic crisis of 2008 was highly impactful. Mr. Bentz asked if Metrolinx initiatives have been considered. Mr. Farmer said they have.

Ms. Judy Dezell noted that studies indicate people are charging electric vehicles during high-peak rather than low-peak times, and asked how the IESO will work to manage human behavior? She asked how climate change is modeled. Mr. Farmer said customers will be encouraged to charge their vehicles at night. High-peak charging and concentration of EV adoption will be impactful to LDCs, but will not significantly impact the overall system. Factoring in climate change impacts remains a weakness in forecasting that the IESO seeks to address.

Ms. Giannetta supports the needs for the long term reliability needs engagement. Mr. Giannetta said wind generation is not an *ad hoc* process so decisions need to be made now for adding future capacity. Acquiring capacity does not have to be done on an individual basis; bilateral contracting is coming. Mr. Kula said in the absence of a robust buyer community, it is difficult to facilitate bilateral contracting.

Mr. Bentz said with respect to bilateral contracts, industrial customers are looking at one-off cogeneration facilities or reciprocating gas engines to curtail what the grid sees as demand. This is a growing trend and presents a potential risk in terms of asset utilization. He asked how this is factored into the forecast. Mr. Farmer said behind-the-meter generation is a blind spot. The IESO forecasts on a net and grid level. Mr. Bentz noted that the Ontario Energy Board is conducting a review of connecting facilities behind the meter.

Agenda Item 6. Demand Response Working Group Update

Ms. Candice Trickey

Ms. Trickey highlighted progress on the revised DR work plan.

There are two initiatives concerning payments when DR resources are activated in the market. The first is compensation for out-of-market activation of hourly DR resources. By the next auction it is expected they will be provided compensation when they are activated for a test. Market rules will be developed this fall. The second initiative is to determine whether or not to provide energy payments for economic activation of DR resources. While this is a rare occurrence we recognize that it is an important one to the DR community. The FERC ruling says that if there is a net benefit to consumers to activating that resource and giving them an energy payment then they should receive an energy payment. Ms. Trickey outlined that the IESO is looking into this but that it needs to take time to understand the implications and to get this right. A draft on the scope, approach, and timeline for this initiative will be provided at the September 4 meeting of the Demand Response Working Group.

Comments

Ms. Ingram said her constituents are supportive of the conversations and progress on out of market payments. Ms. Ingram said the subject of energy payments has been raised consistently since the beginning of the DR auction and it is disappointing that it is not yet resolved. The currently proposed rules are discriminatory against DR participants. Generators will be entitled to energy payments and DR participants will not. A legal brief will be provided to the IESO Board before a decision is made. This will not be resolved by the December auction, so discrimination will happen there. Ms. Trickey said in all likelihood any activations will be test activations, not economic activations. Ms. Ingram said it would make sense to get the rules for the capacity auctions right at the beginning, not to fix them later on.

Mr. Schembri asked how many DR calls there have been outside of tests this year. Ms. Trickey said there have been none.

Mr. Anderson echoed Ms. Ingram's concern about discrimination in the proposed rules and asked if they could be resolved before pushing ahead with the December auction. There is no significant capacity requirement for the next decade, and no urgency. Mr. Young said the IESO is taking a phased-in approach and notes that the December date for the capacity auction is important to this approach.

Agenda Item 7. 2020-2022 Business Plan

Ms. Barbara Anderson

Ms. Anderson summarized the five-year strategic plan. Refreshments have been made to the purpose and vision. There are five key strategic objectives:

1. culture and workforce transformation
2. competitive marketplace
3. reliability

4. stakeholder value perception
5. prioritized spending

six risks have been identified: policy and regulatory uncertainty, particularly around the competitive marketplace; government stakeholders losing faith in the IESO approach to deliver on resource adequacy; frequency and complexity of cyber attacks; extreme weather events; scarcity of skilled human resource talent to support the needs of the sector; and non-electricity entrants, where the Googles and Amazons potentially cause disruption. Mitigation strategies have been developed for all of the identified risks.

With regards to the business plan, revenue requirement levels were flat from 2017 to 2019. A 2% annual increase for the next three years has been suggested, in line with the Consumer Price Index. The increase will allow for investment in cyber security enhancements, efficiency of the markets, working with stakeholders on enduring mechanisms for resource adequacy, and ensuring reliability is maintained in a cost effective manner.

Comments

Mr. Bentz asked what is meant by potential risks posed by Google or Amazon. Ms. Anderson said any non-electricity entrant could disrupt the market.

Mr. Scongack asked if the winding down of the ICA could bring about a net benefit to the overall revenue requirement. Ms. Anderson said most of the capital is financed and does not come through the IESO fee.

Mr. Hogan said customers and service providers want to know what will happen after 2020 when the conservation programs are completed. Mr. Young said discussions on this will begin soon.

Mr. Butters asked for clarification as to whether the TCA will become the preferred method for capacity procurement. Ms. Anderson said the capacity team is stratifying the resources and looking at the risk profile for each to determine the correct mechanism. Capacity auction is one option of many that will be investigated over the course of 2020.

Comment from the Phone

With respect to conservation efforts, Mr. David Katz said deep retrofits required by decarbonization include electricity and gas. The duality should be reflected to ensure economic sense. Mr. Young said this would be considered post-2020.

Agenda Item 8. Other Business

There was no other business.

Agenda Item 9. Adjourn

Mr. Bentz adjourned the meeting. The next meeting will take place on October 16, 2019.