

Demand Response Working Group – Meeting Notes

June 19, 2019

Dates held: June 19, 2019	Time held: 9:00am to 1:00pm	Location: Crowne Plaza, Toronto International Airport
Company	Name	Attendance Status (A) Attended; (WebEx) Attended via WebEx
Alectra Utilities	DeJulio, Gia	Attended
AMPCO	Anderson, Colin	Attended
Bruce Power	Zhang, Alvin	Webex
Cascades	Ross, Jean-Philippe	Attended
Centrica Business Solutions	Cavan, Peter	Webex
City of Toronto	Gu, Michael	Attended
Cpower Energy Management	Hourihan, Mike	Webex
Customized Energy Solutions	Luukkonen, Paul	Attended
Customized Energy Solutions	Withrow, David	Attended
Ecobee	MacCaull, Aira	Attended
EDA	Williams, Lynn	Attended
Enel X	Chibani, Yanis	Attended
Enel X	Griffiths, Sarah	Attended
Great Circle Solar Management Corp	Wharton, Karen	Attended
HCE Energy Inc.	Crown, Mike	Webex
Ivaco Rolling Mills	Abdelnour, Francois	Attended
Ministry of Energy	Akhter, Freed Kersman, Paul	Webex
MSP	Yauch, Brady	Attended
Northland Power	Samant, Sushil Zajmalowski, Mike	Attended
NRG Curtailment Solutions, Inc.	Briggs, Kara Popova, Julia Vukovic, Jennifer	Webex
Ontario Energy Board	Brown, David	Attended
Ontario Power Generation	Kim, Jin	Attended
Power Advisory	Simmons, Sarah	Webex
Power Advisory	Lusney, Travis	Attended
Resolute Forest Products	Degelman, Cara	Webex
Rodan Energy Solutions	Forsyth, Dave Quassem, Farhad	Attended
Rodan Energy Solutions	Goddard, Rick	Webex
Newmarket Tay Power	Gaye-Young, Donna	Teleconference
Southcott Ventures	Lampe, Aaron	Attended

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Strategic Policy Economics	Tzolov, Marty	Webex
Rayonier Advanced Materials	Laflamme, Serge	Attended
Toronto Hydro-Electric Services Limited	Marzoughi, Rei	Webex
Voltus, Inc.	Grav, Jorgen	Attended
Voltus, Inc.	Strawczynski, Zygmunt	Webex
Independent Consultant	Coulbeck, Rob	Attended
IESO	Campbell, Alexandra	Attended
IESO	Chapman, Tom	Attended
IESO	Cumming, Adam	Attended
IESO	Karapetyan, Samvel	Attended
IESO	King, Ryan	Attended
IESO	Kula, Leonard	Attended
IESO	Nicholson, Tina	Attended
IESO	Rashid, Fahad	Attended
IESO	Singh, Diljeet	Attended
IESO	Short, David	Attended
IESO	Trickey, Candice	Attended
IESO	Woo, Phillip	Attended
IESO	Young, Jennifer	Attended

Please report any corrections, additions or deletions by e-mail to engagement@ieso.ca
All meeting materials are available on the IESO web site at: <http://www.ieso.ca/en/Sector-Participants/Engagement-Initiatives/Working-Groups/Demand-Response-Working-Group>

Introduction – Jennifer Young – IESO

The IESO welcomed participants and described the format of the meeting.

Agenda Item 1: DRWG Update - Alexandra Campbell (IESO) and Candice Trickey (IESO)

With the introduction of the TCA, there is renewed focus to the DRWG and the group will be expected to move faster during the upcoming months. As part of refocusing the group, Candice Trickey will be the new chair of the DRWG. Alexandra Campbell will continue to participate as needed.

The IESO noted that an additional presentation has been added to the agenda regarding how performance testing is conducted for other IESO programs (Non-Demand Response Resources).

Agenda Item 2: Presentation - Revised DRWG 2019 Work Plan
Speaker: Candice Trickey (IESO)

Candice presented the revised 2019 DRWG work plan that includes items raised by stakeholders and the IESO. The IESO noted it is looking to gather feedback on this proposal. The purpose is to ensure that the current Demand Response Auction (DRA) program flows smoothly into Transitional Capacity Auction (TCA) and then to the Incremental Capacity Auction (ICA).

A participant asked if only the Market Manual 12.0 would be considered for documentation updates should there be changes related to Contributor Management, Measurement Data Submission and DR Audit?

The IESO explained that it is too early to specify what document changes will be made. It will be necessary to understand what are the opportunities and challenges before progressing to the next steps of documentation changes.

Participants asked for more clarity regarding different aspects of Single Schedule Market (SSM): Hourly Demand Response (HDR) participation types, HDR settlement prices, and settlement calculations.

The IESO committed to providing some further documentation on this topic.

Editor's Note: Additional information on the proposed SSM design was sent to DRWG participants on June 26, 2019. The materials can be found on the IESO's website [here](#).

Agenda Item 3: Presentation & Discussion - Capacity Obligation Transfer in the Transitional Capacity Auction (TCA)
Speaker: David Short (IESO)

David presented the current work on changes to Capacity Obligation Transfers in the TCA based on the received stakeholder feedback.

A participant asked how does the IESO define transferring capability within entities. Does it mean the delivery points associated with the entity? Sometimes one entity can have two delivery points - one withdrawing, one injecting.

The IESO explained that an entity assigns a resource to meet the obligation. For a physical resource, there is a delivery point associated with it. It is up to the transferor and transferee to agree and accommodate the transfer between uncongested zones.

A participant asked how does an entity qualify for a transfer and whether it is based on the delivery point.

The IESO explained at a high level what the qualification requirements are to transfer a capacity obligation from one resource to another.

Editor's Note: These requirements are included in Section 9 of draft Market Manual 12, prepared for the TCA and available on the IESO website [here](#). The requirements for qualifying for a transfer are also described at a high-level in Section of 5.4.2 the TCA Phase 1 Design Document (available on the IESO website [here](#)), and in Chapter 7, Section 18.9 of the Market Rules (available on the IESO website [here](#)). The capacity obligation transfer in Phase 1 of the TCA is based on the obligation, which is set by organization and zone, not by delivery point.

A participant asked if a physical resource can have multiple delivery points. The IESO will get back on this request. The IESO further explained that in case of a physical connection, the facility should have a delivery point. There are no multiple delivery points within a zone for virtual resources.

Editor's Note: A capacity auction market participant with a capacity obligation may use multiple resources (i.e., multiple delivery points) to fulfil its obligation so long as the resources linked to the physical capacity obligation have the same-metered market participant (MMP).

Agenda Item 4: Presentation – Demand Response Testing Results **Speaker: Diljeet Singh (IESO)**

Diljeet presented the additional DR testing results as requested by the stakeholders during the April 25th DRWG meeting.

A participant noted that at a prior DRWG meeting, Enel X presented difficulties faced by HDR, specifically with setting the baseline. The IESO explained the current focus is the existing criteria for HDR testing. The IESO did take a note of the comments made by Enel X, and it will consider those as the IESO evolves the HDR testing process.

A participant asked why are dispatchable loads (DL) tested for 15 minutes (three, five-minute intervals) and not for more intervals. The IESO explained that DL is a 5-minute resource that participates in the market, and IESO has good visibility of the DLs' in-market performance, therefore IESO regards 3-interval tests is sufficient to evaluate their performance.

A participant commented that the method of evaluating the test results for DLs and HDRs is different, so drawing comparisons where the results show better performance for DL versus HDRs is not correct. The IESO explained that the intention is not to compare, but to present HDR results.

Another participant made a point that DL's face more stringent testing criteria. If a DL doesn't follow dispatch instructions, then the financial implications can be bigger compared to the HDRs. The IESO acknowledges that HDR is a new resource and that there is an opportunity for the IESO to better understand their level of performance and what is holding HDR resources from passing tests,

whether it is the testing methodology or the capabilities of the resource. IESO is open to further discussions.

A participant commented that they want to understand testing criteria better and asked for additional details on testing, such as, for example, a confidential performance report on a monthly basis to be benchmarked against peers' performance, similar to what metering service providers currently receive. This will enable to clearly identify which HDRs cause the problem and address it.

The IESO indicated that the purpose is to build the confidence that resources are there to meet dispatch instructions when called upon and if there is something in the testing that can be modified then we can have a further discussion.

The participants asked if it is possible to publish data behind regular testing results to set the benchmark publicly, so when working on addressing HDR low performance issues all participants have the same foundation.

The IESO will consider this recommendation as it evolves the HDR testing.

A participant noted that the way the results are calculated is completely dependent on the baseline. The participants expressed the need for more details on how the IESO calculates the baselines.

The description of how the IESO calculates the baselines is included in the Market Manual 5.5, Section 1.6.26.3.

The participants asked if the IESO considered Enel X proposal regarding measurement verification.

The IESO replied that the Enel X proposal will be considered when working on the HDR testing updates.

A participant, who has a facility consisting of both DL and HDR resources, indicated that they face challenges when the IESO tests their DL resource separate from the HDR resource and ideally, it would be best if they were tested at the same time. This becomes challenging for the participant when the operation of their DL is dependent on a portion of their HDR capacity.

The IESO acknowledged the participants concern.

Editor's note: Currently the IESO is not considering a change to the testing requirement for participants that have both HDR and DL obligations. These types of participants can be subjected to activations separately and are required to comply with both HDR and DL capacity obligations, which reflect the real-time activation scenario.

Agenda Item 5: IESO Performance Testing
Speaker: Diljeet Singh (IESO)

Diljeet presented how the IESO conducts performance testing for other products and services that it procures outside of the DRA.

A participant asked for which facilities the unit readiness test is applicable.
The IESO explained that it is applicable to all non-quick start facilities whether under contract or not.

Agenda Item 6: Hourly Demand Resource (HDR) Testing Proposal
Speaker: Diljeet Singh (IESO)

Diljeet presented the IESO's proposal for changes to testing of HDR resources. The deadline to provide written comments is July 5th.

A participant asked to provide more clarity on how many times the IESO will test the resources, since in one slide the IESO mentioned at least once and on another slide it was mentioned up to two times.
The IESO explained that the IESO has authority to test DR resources twice per commitment period, but tests DR resources at least once every commitment period.

A participant thanked the IESO for taking steps towards revisiting testing process. One participant found that many issues are in the measurement and verification process and asked if this can be included in the future considerations for updating the testing procedure.
The IESO thanked the participant for the comment.

A participant asked to provide more clarity when the resources will be re-tested.
The IESO responded that the plan is to revise the testing criteria which may allow a reduction of testing duration from the full 4 hours. Having said that, the IESO highlighted that it will always reserve the right to test resources for the full 4 hours for reliability purposes.

One participant asked if receiving a Standby report without an advisory notice will mean that Demand Response Market Participants (DRMPs) should expect in market activation the next day.
The IESO explained that there will be an Advisory notice before issuing a standby notification. DRMPs should understand the reason behind receiving a standby notification. If there is no advisory notice issued that will imply that this is an in-market standby notification. DRMPs should confirm if there were any triggers for in-market standby notification met before following up with the IESO.

As a follow up, the participant asked if they can see in the standby notice for what hours they will be activated during the dispatch day.
The IESO responded that triggers for a standby notice are identified in the Market Manual 4.3. In the standby notice the IESO doesn't specify for which hours the resource will be activated. The IESO sends

activation notices at least two hours before the actual activation, where it specifies for which hours the resource will be activated. The rationale is that the IESO wants to make the activation decision as close as possible to dispatch hour to appropriately account for real-time conditions.

One participant asked what happens if a resource increases or decreases its capacity obligation significantly (due to transfer) after they pass a four-hour test.

The IESO responded that this will be explored as part of the revised test criteria.

A participant asked what is the relationship between in-market and test activations given the expectation is to have more in-market activations with \$200 trigger, especially what is the implication if the resource successfully met in-market activation.

The IESO responded that when the IESO schedules resources for a test, it considers not only past test activations but also past in-market activations.

Agenda Item 7: Presentation & Discussion – Cost Recovery for Out-of-Market Activation Payments: HDR Resources Proposal

Speaker: Ryan King (IESO)

The IESO presented the proposal for cost recovery for out-of-market activation of HDR resources and possible methods of providing compensation for out-of-market activations.

One participant noted that if loads were to receive some sort of economic payment, outside of out-of-market framework, that may change the bid that they put in.

The IESO noted that it can be a consideration with the work underway for the energy payment for economic activation.

Of the various methods and precedents presented on how to determine compensation, one participant asked if Capacity Based Demand Response (CBDR) activation payments were based on \$/MW.

The IESO replied that cost recovery was set at a \$/MW price for CBDR.

One participant asked which compensation method presented results in the most administrative burden on the IESO?

The IESO replied that quasi-regulatory cost recovery model may have the highest administrative burden, however, at this point; the IESO is looking at all possible compensation models.

One participant suggested that it may be useful for the DRWG that the IESO presents how other resource types are being paid for out-of-market activations.

The IESO indicated that on a high level, the payment is a function of the bid/offer.

One participant noted that when testing a generator to meet some requirements, they have to get scheduled, they have to offer at a price that may not be economic to make sure that they meet testing requirements, which can result to higher costs than generators will be compensated.

The IESO clarified that contract requirements and IESO market testing are treated differently. The IESO also noted that with regard to compensation design considerations the IESO was comparing with existing market testing processes.

One participant thanked the IESO for considering cost recovery models for out-of-market activations and is looking forward to the next steps.

The IESO noted also that work will require market rule changes and the deadlines are aggressive. The market rule amendment process will start Q3, 2019.

Agenda Item 8: Presentation & Discussion - Energy Payments for Economic Activation of Demand Response Resources Research Plan

Speaker: Candice Trickey (IESO)

The IESO presented the research plan for energy payments for economic activation of DR resources and asked for input from stakeholders (feedback is due by July 19).

The participants asked if the assessment to be undertaken would mirror the cost effectiveness element of FERC Order 745.

The IESO replied that the market context is different in Ontario. This is why it may not be possible to completely mirror the cost effectiveness element of FERC Order 745. The assessment would require understanding what elements from the FERC Order 745 would be applicable in the Ontario context.

One participant expressed its concern that there is no end date on this particular analysis and could take long to complete.

IESO will need time to do a proper analysis, however, the IESO noted that hopefully the progress we have demonstrated on the non-economic activation cost recovery is a show of good faith and gives some confidence that we will have good progress on this. The IESO understands this is of high importance to the DR community.

While a net benefit analysis to ratepayers will be examined in the energy payments analysis, one participant expressed if a similar net benefit analysis that was used for the TCA be applied for this analysis.

IESO mentioned this is something that can be looked at if there is a relevant parallel.

Agenda Item 9: Wrap-Up & Next Steps

Speaker: Candice Trickey (IESO)

The IESO recapped the main topics of the meeting and reminded important deadlines for feedback from stakeholders.

The participants expressed that they will be happy to be engaged in HDR testing and measurement data submissions discussions rather sooner than later.

The IESO thanked the participants for the comments.

Responsible Party	Action Item
IESO	Provide more clarification on which HDR (physical/virtual) will be bidding in DAM, which will be settled on nodal, which on the uniform price. <i>Editor's Note: Additional information on the proposed SSM design was sent to DRWG participants on June 26, 2019. The materials can be found on the website here.</i>
IESO	Provide further information on the methodology of calculating testing results and how the IESO calculates the baselines. (i.e. provide Market Manual reference).
IESO	Clarify what happens if a resource increases or decreases its capacity obligation significantly after they pass a four-hour test.
Stakeholders	Stakeholders to refer to the DRWG slide deck for the list of items and dates in the 2019 Work Plan requiring their feedback.