

DRWG Meeting – April 6, 2017

Feedback and IESO Response

Item #	Topic	Participant	Summarized Comment	IESO Response
	Peaksaver transition to the energy market	City of Toronto	The City supports the approach for preserving the value of an existing asset.	<i>It is the goal of the IESO to reduce barriers to the participation of Peaksaver resources in the energy market. However, the Peaksaver devices are owned by the customer who will decide whether to participate using the Peaksaver device or another technology. The IESO is neutral on this matter.</i>
	Peaksaver transition to the energy market	City of Toronto	When compared to traditional CBDR resources, Peaksaver represents an asset that can be activated more often with a shorter availability period.	<i>This will be considered as part of the 2017 DR Work Plan item “Improved Utilization of DR”.</i>
	Peaksaver transition to the energy market	City of Toronto	The City recommends that the IESO evaluate the value of these (Peaksaver) resources and if the Capacity market is the recommended tool for this unique asset. The IESO should model how a low priced 100 MW resource will impact the energy price for the summer peak. The IESO should utilize a process similar to the DR Pilot and allow providers to compete for capacity.	<i>The DR auction is the primary mechanism used by the IESO to select the lowest cost set of DR resources. A pilot would be considered if there is a substantive reason to treat Peaksaver resources differently than other DR resources including residential DR (RDR) which participated in the DR auction in December 2016.</i>
	Residential DR	City of Toronto	Residential DR should include a maximum daily bid price i.e. \$40/MWh and a minimum number of activations.	<i>Change to the participation of RDR, as stakeholdered during the past year, is not in the 2017 DRWG Work Plan.</i>
	Residential DR	City of Toronto	The current policy requiring Residential DR participants to have access to energy	<i>The IESO is aware that access to meter data and/or homeowner information is a potential barrier to</i>

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			consumption data will limit competition for an RFP.	<i>participation.</i>
	Standby Notice	City of Toronto	The City does not support the elimination of standby notices. Standby Notice enables participants to maintain bids in the energy market, increasing the value and market benefit from DR. Existing and future participants may require this notice in order to participate. The IESO should redefine the time period for a standby activation to align with the proposed minimum length of activation.	<p><i>The IESO believes that redefining the time period of a standby activation adds a further limit to the activation process, and is counter to our goal of increasing the utilization of DR.</i></p> <p><i>The options we are currently investigating are; removing the need for a standby notice, i.e. you're always on standby, and maintaining a standby notice but reducing the criteria from 4 to 1 hours in the predispatch for a standby notice to be sent.</i></p>
	Standby Notice	City of Toronto	Assuming a utilization payment for DR resources is implemented, the IESO should amend the Market Rules to allow a DR resource to remain in the market regardless of the price and activate if economic.	<i>This will be considered as part of the 2017 DR Work Plan item "Improved Utilization of DR". Results of that review will inform any IESO recommendation.</i>
	Varying DR Capacity Obligations/New Peak Resource	City of Toronto	Due to the effect of weather on residential resources and limited requirements for standby, would the IESO consider a non-market based standby notice for residential DR? e.g. if the temperature is below 30°C, all residential DR bids will be removed.	<i>This will be considered as part of the 2017 DR Work Plan item "Varying DR Capacity Obligations/New Peak Resource". Results of that review will inform any IESO recommendation. Note that the IESO prefers market mechanisms.</i>
	Activation Notice Time	City of Toronto	The City would support a reduction to 2 hour notice if this demonstrates value for the system. The IESO should evaluate historical location-based pricing to verify that updating standby notice time would result in increased	<i>Thank you for your feedback. The IESO will be looking at evaluating the impact of shortening the activation window, and will provide a recommendation based on these results at a later DRWG meeting.</i>

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			activations.	
	Activation Notice Criteria	City of Toronto	The IESO should redefine the criteria to send activations to align with the proposed minimum length of activation.	<i>Thank you for this feedback; we will take into consideration the operational characteristics of other resources when looking further into this.</i>
	Duration of Activation	City of Toronto	The City supports a reduction in the activation to allow resources to participate for shorter periods; however resources shall be capable of achieving longer activations if required.	<i>Thank you for this feedback; this is one of the options we are exploring and a recommendation will be presented at a later DRWG.</i>
	Utilization Payment	City of Toronto	The IESO should add a Utilization payment to support resources that can activate at lower prices. Challenge – Participant Free Riders – Facilities going off line for 4-6 hours can bid a negative price and ensure that they are economic.	<i>This will be considered as part of the 2017 work plan discussion item “Utilization Payments”. The results of this review will form the basis for any IESO recommendation. Note that the bid price threshold of &gt;\$100/MWh should mitigate the risk of “free riders”.</i>
	Baseline	City of Toronto	The baseline for C&I customers includes an In-Day adjustment that supports participants with increased consumption due to weather. Participants with operational requirements to curtail on peak days are excessively penalized. Example: A participant with a 3 MW baseline and a commitment to curtail 1 MW. During the morning hours the facility experiences an operational shift and reduces consumption to 2 MW. During the DR activation they are prepared to curtail an additional 1 MW, however the adjusted baseline will require further curtailment to meet the 1 MW. Increased complexity including shorter	<i>Change to the C&amp;I baseline is not in the 2017 DRWG Work Plan and may be considered in the future.</i>

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			standby, activation notification, and activation period will further complicate the challenges associated with the in-day adjustment.	
	Peaksaver transition to the energy market	Anonymous	LDCs have established important relationships with Peaksaver customers; however, do Peaksaver devices have value given the advances in thermostat technology?	<i>Although there have been advances in technology, there may also be value in the installed Peaksaver devices, which would be determined by the market through the DR auction.</i>
	Peaksaver transition to the energy market	Anonymous	The IESO should explore supporting home automation solutions, incenting consumers to participate in utility programs for DR and conservation, which will allow utilities to gain some level of control and will benefit all stakeholders. Utilities should be allowed to maintain and support current enrolled Peaksaver participants, including drawing on them as DR resources. Dropping all Peaksaver support will create some setback to relationships developed. However, there needs to be a migration path to the next generation of RDR technology. The IESO needs to investigate alternative next generation approaches to engage customers, create revenue streams and enhance management of our energy future.	<i>At this time, the IESO does not plan to provide funding/incentives for consumers to participate in utility-sponsored programs for DR, which is utilized by the IESO as an operational/dispatch tool. The existing IESO conservation framework does fund utilities to offer energy efficiency programs to their customers. Although the Peaksaver program funding for device maintenance is ending, there is potential revenue through the DR auction and the energy market. The IESO is communicating with utilities to provide information regarding participation in the DR auction. Peaksaver devices (which are owned by the consumer) can be aggregated with each other or with other RDR contributors, or replaced by new technology and aggregated, to offer into the DR auction. The DR auction is technology neutral.</i>
	Residential DR	Anonymous	The current DR auction is for commercial applications and is not transferrable to residential devices due to measurement & verification, reimbursement, etc. Significant investment will be needed to maintain and	<i>Residential DR (RDR) resources participated in the December 2016 auction. An alternative baseline methodology was implemented for residential M&amp;V purposes, and other changes were made for submission of contributor data and</i>

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			<p>deploy assets in a residential DR auction model, which will require appropriate funding in order to grow from the current Peaksaver participants.</p>	<p><i>settlement. More information on these changes can be found in Market Manuals 1.2, 5.5 and 12. Although there may still be barriers to participation of RDR, further change is not in the 2017 DRWG Work Plan.</i></p>
	Brant Pilot	Anonymous	<p>The primary barrier to success of the pilot is its short term nature. The initial RFP asks for non-wires alternative (NWA) load reduction which is not typically deployed for short terms due to cost and risk of stranded assets. A longer term scope (1-5 years) would enable more potential solutions. Although the plans are for a NWA to be implemented in 2019, having load reduction assets installed within the service area is an alternative that would provide levels of redundancy to the NWA as well as offering continue reduction capabilities for the utility.</p>	<p><i>Thank you for this feedback. It has been provided to the IESO Brant Pilot project team.</i></p>
	Peaksaver transition to the energy market	Alectra	<p>Alectra agrees that Peaksaver resources should be bid into the market for 2018/19 commitment period, creating incentives for LDCs to actively manage this resource and the customer. To support participation of Peaksaver resources:</p> <ul style="list-style-type: none"> <li>• LDCs should be able to use both Peaksaver and non-Peaksaver resources in the same bid; not segregated, as residential is segregated from commercial;</li> </ul>	<p><i>The IESO agrees that DR market participants (DRMPs) should be able to combine residential Peaksaver devices with other residential contributors in a virtual residential hourly DR (HDR) resource; residential HDR resources utilize an alternative baseline methodology, and there are other differences from commercial/ institutional/</i></p>

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			<ul style="list-style-type: none"> <li data-bbox="806 375 1365 483">• The rules for transitioning should be clarified as soon as possible in advance of the December 2017 auction;</li> <li data-bbox="806 532 1365 1109">• Alectra agrees that customers need to consent to their continued participation in residential DR with their device, and that an electronic acknowledgement should be sufficient (a new hard copy signed form is not required); LDCs should be able to offer their Peaksaver resources to the auction either by themselves or through another party, including LDC affiliates; rules governing how 3<sup>rd</sup> parties can bid on behalf of an LDC's Peaksaver resources should be made clear, and the role of the existing RDR aggregator going forward should be clarified.</li> <li data-bbox="806 1438 1365 1500">• LDCs should be allowed to set the strategy for achieving DR with their</li> </ul>	<p data-bbox="1398 253 1881 326"><i>industrial (C&amp;I) resources for M&amp;V and settlement.</i></p> <p data-bbox="1398 375 1990 483"><i>The IESO is consulting with stakeholders through the DRWG and other channels, and we aim to complete the transition plan in Q3 of 2017.</i></p> <p data-bbox="1398 532 2007 1068"><i>It is the responsibility of the DR auction participant (DRAP) to ensure that they have the appropriate customer consent (satisfying any applicable regulatory and privacy requirements) before offering into the DR auction. LDCs must ensure that they have consent for further sharing of information with partners and/or other third parties. Note that the IESO requires access to contributor-level measurement data in order to verify a DR resource's capability and performance through audit, and therefore the contributor must also provide consent to the DRAP/DRMP to share their residential meter data information with the IESO.</i></p> <p data-bbox="1398 1122 1997 1386"><i>For clarity, the customer has title to the Peaksaver device installed in their home, and there is no existing aggregator after the Peaksaver program ends and the devices transition to the energy market. A customer may provide their consent to the entity of its choosing. This applies to Peaksaver devices and other technology.</i></p> <p data-bbox="1398 1438 1976 1500"><i>LDCs may set the strategy for DR. However, similar to C&amp;I consumers, residential consumers</i></p>

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			<p>customers and there should be no restriction on customers participating in other CDM or pricing initiatives aside from the rules set by the IESO for managing the DR auction and the methodology for determining contribution.</p>	<p><i>may not offer the same service at the same time under different initiatives (both DR and CDM).</i></p>
	<p>Peaksaver transition to the energy market</p>	<p>EnerNOC</p>	<p>HDR, procured through the Demand Response Auction (DRA), continues to evolve to meet the needs of the system and provide value and flexibility to the system through competition. As we move towards an incremental capacity auction, which is being developed through the Market Renewal initiative, the DRWG should ensure that the rules for HDR build a foundation for the ICA. This includes the notion that there may be different rules for different resource types, such as dispatchable loads, residential and C&amp;I loads. However, those rules ensure equality and a level playing field among the resource types. Any transition of the Peaksaver resources should take this into account.</p>	<p><i>The IESO agrees with this feedback.</i></p>
	<p>Duration of Activation</p>	<p>EnerNOC</p>	<p>EnerNOC supports the need to continue to evolve the Hourly Demand Response (HDR) resource to compete against traditional sources of supply. EnerNOC also supports the need to ensure that the HDR resource is competitive and flexible to meet the IESO system needs. EnerNOC believes that increasing the</p>	<p><i>This is useful feedback and forms one of the IESO's proposals for improving the Activation window. Analysis is currently underway and a recommendation will be provided at a later DRWG.</i></p>

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			<p>flexibility of activation by adjusting the duration requirements is a necessary first step. The duration should reflect the needs of the system. EnerNOC recommends that the duration of events be changed to <i>up-to</i>-four hours. If resources are only needed for one hour, HDR could be activated for just one hour instead of the current four hour duration. Various other markets and DR programs have a maximum number of hours of dispatch versus a set number of hours.</p>	
	Peaksaver transition to the energy market	Energy Hub/Whisker Labs	<p>Stakeholders raised concerns about the competitive advantage of the Peaksaver resources: preferred access to customers, competitive information and “free” devices.</p> <ul style="list-style-type: none"> <li>• Although there was investment in Peaksaver devices, customers may prefer to use newer connected thermostats and they should be able to easily switch to programs which use their newer thermostat.</li> <li>• We are concerned that administrators may have a special advantage, and request that 3<sup>rd</sup> parties have equitable access to customers. We ask utilities to inform participating customers that the Peaksaver program is ending, transitioning to the energy market. Utilities should provide customers with information about service providers</li> </ul>	<p><i>It is the goal of the IESO to reduce barriers to the participation of Peaksaver resources in the energy market. However, the Peaksaver devices are owned by the customer who will decide whether to participate using the Peaksaver device or another technology. The DR auction is technology neutral.</i></p> <p><i>The IESO is meeting with LDCs through the Residential working group to discuss transition communications and potential content.</i></p>



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			<p>that have qualified to participate in the IESO market.</p> <ul style="list-style-type: none"> <li>• Since Peaksaver was publicly funded, we request that utilities make public anonymized program data by zone and LDC including marketing information used for Peaksaver, success metrics (click rates, enrollment rates), participation data for activations (number of opt outs, full participants, ineligible devices), and load shed data by aggregation and device.</li> </ul>	<p><i>The IESO has published the 2015 report prepared by the external evaluator of the Peaksaver program which includes some of the information requested, and can be found at the following link:</i>  <a href="http://www.ieso.ca/sector-participants/conservation-delivery-and-tools/evaluation-measurement-and-verification">http://www.ieso.ca/sector-participants/conservation-delivery-and-tools/evaluation-measurement-and-verification</a></p>
	Standby Notice	Energy Hub/Whisker Labs	<p>Early standby notice is more of a concern for some large customers and customers without enabling technology. Aggregators of residential customers enabled with connected devices or energy management systems, can respond relatively quickly, with little advanced notice. However, day ahead or early morning notice does allow sufficient time to do some pre-cooling or other forms of preparation to “tune” load aggregations. The IESO concern that pre-cooling could antagonize the peak demand at the wrong time is understandable, but can be addressed in a number of ways.</p>	<p><i>This is useful feedback and will be taken into consideration when the work item “Improved Utilization of DR” is discussed during future DRWG meetings. Currently the IESO is analysing whether removing or reducing the standby window would have an impact on the number of DR activations.</i></p>
	Varying DR Capacity Obligations/New Peak Resource	Energy Hub/Whisker Labs	<p>If the IESO sees value in also having more flexible resources that do not require significant advanced notice, and that can be</p>	<p><i>This will be considered as part of the 2017 DR Work Plan item “Varying DR Capacity Obligations/New Peak Resource”. Results of that</i></p>

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			<p>called multiple times in a day, perhaps it should investigate the creation of a second product. This would seem to be the best way to retail the larger blocky loads that require advance notice, as well as reward the aggregations of more flexible resources appropriately.</p>	<p><i>review will inform any IESO recommendation.</i></p>
	Residential DR	Energy Hub/Whisker Labs	<p>The current control group construct says that there must be a minimum of 350 participants. This is much too large, adding significant cost for residential load aggregations, and the IESO is not capturing as much load shed as it reasonably can.</p> <p>The IESO should adopt alternative baseline methodologies so that smaller aggregations can more easily meet their minimum load response threshold. The requirements to aggregate 1 MW by zone and LDC are unduly burdensome. This minimum size is much too big, especially for new market participants. Additionally, because the current system requires aggregators to create data sharing systems with each utility, it will be very hard for them to be able to aggregate 1 MW, in year one, by zone and LDC.</p>	<p><i>Changes to the participation of RDR are not in the DRWG work plan at this time.</i></p> <p><i>The minimum size of 1 MW is common to all resources (load and generation) submitting bids and offers into the energy market. Any changes to this minimum threshold require a broader conversation with stakeholders which is beyond the scope of the DRWG but may be considered as part of the Market Renewal Program. In the longer term, the IESO can investigate whether the threshold can be reduced from 1 MW to a lower threshold and whether a different baseline approach could help to facilitate this.</i></p>
	Duration of Activation	Energy Hub/Whisker Labs	<p>This is a really important factor for including a wider range of possible participants, especially residential customer load resource aggregations. Weather sensitive loads are</p>	<p><i>This is useful feedback and will be discussed further in upcoming DRWG meetings as part of the 2017 Work Plan item, "Improved Utilization of DR".</i></p>

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			<p>variable, but predictable, coincident with peak, but of limited duration. The IESO should think of them as a peaking product, or limited duration product. These loads can help manage the peak, and may not truly be required for the 4 hour minimum for any one event.</p>	
	<p>Varying DR Capacity Obligations/New Peak Resource</p>	<p>Energy Hub/Whisker Labs</p>	<p>Monthly commitment variability will provide the IESO with the most load reduction possible and will most efficiently utilize the IESO's DR resources. In the current construct, demand response providers must bid the minimum load reduction they are able to achieve for the entire six-month delivery period. Meaning, a seasonal resource that may be able to provide more load drop in August must bid the amount they are able to provide in May. As a result, the IESO is not taking advantage of the entire resource available and will be spending more money than necessary to achieve its DR goals.</p>	<p><i>This will be considered as part of the 2017 DR Work Plan item "Varying DR Capacity Obligations/New Peak Resource". Results of that review will inform any IESO recommendation.</i></p>
	<p>Peaksaver transition to the energy market</p>	<p>Nest</p>	<p>The peaksaver PLUS program has been very successful in engaging Ontario customers who are early adopters of energy efficiency technology and in delivering significant load shifting capacity for the Province. As this program is being phased out, there is an opportunity to retain the engaged customer base in order to continue delivering demand response resource. After all, the participating</p>	<p><i>Thank you for this feedback. As previously noted, the DR auction is technology neutral.</i></p>

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			<p>customers are the key assets of the peaksaver Plus, not the (outdated) technology. In order to maximize customer retention and load shed capability, the pager-based thermostats and direct load control devices can be transitioned to smart thermostats.</p> <p>1) Nest is supportive of transitioning the peaksaver Plus customers to a DR auction model. peaksaver Plus customer are a resources that could be leveraged in a DR auction.</p> <p>2) Nest is supportive of replacing old devices with smart technology and allowing remaining functional peaksaver Plus devices to form part of the DR auction model.</p> <p>3) Nest promotes a collaborative approach where aggregators and LDCs can participate.</p> <p>4) Nest is interested in participating the future design and decision making process as peaksaver Plus is phased out.</p>	
	Standby Notice	Resolute	<p>Eliminating the standby notices would mean the HDR resources would be available for activation every day within the availability window without first receiving a standby notice. The result of doing this would limit the ability to provide the full amount of contracted Demand Response and under some circumstances no HDR would be available for activation.</p>	<p><i>Thank you for your feedback; this will be considered when forming recommendations at a future DRWG meeting</i></p>

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	Activation Notice Time	Resolute	For the activation notice time, if the IESO shortens the window from 2.5 hours to a closer time in advance of real-time, this would create the potential for a market rule violation on the embedded generator as the unit requires the 2.5 hour window to change the quantity of the offer, which would be a requirement if the load were to be reduced for the activation.	<i>Thank you for your feedback. At this moment in time the IESO is not looking to decrease the Activation notice time from its current 2.5 hours.</i>
	Duration of Activations	Resolute	It is understood that shortening the DR activation duration will increase the precision in which the IESO would be able to dispatch HDR. From an operational standpoint, there would be no negative impact reducing the duration of activations from 4 hours to 1 or 2 hours and from a market perspective, this flexibility would be an improvement to system needs. Resolute fully supports this option.	<i>The IESO is looking into the difference that reducing the duration of activation from 4 to 1 or 2 hours would have on the number of DR activations. Our recommendations from this analysis will be communicated at a later DRWG.</i>