

Demand Response Working Group – *Feedback Form*

Meeting Date: November 12, 2019

<u>Date Submitted:</u> 2019/12/10 2	<u>Feedback Provided By:</u> Organization: Advanced Energy Management Alliance Main Contact: Katherine Hamilton Email: [REDACTED]
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Following the November 12, 2019 meeting of the Demand Response Working Group (DRWG), the Independent Electricity System Operator (IESO) is seeking feedback from participants on the following items discussed during the meeting. The presentation can be accessed from the [DRWG webpage](#).

Please submit feedback to engagement@ieso.ca by December 10, 2019. To promote transparency, this feedback will be posted on the engagement webpage unless otherwise requested by the sender.

Stakeholder Feedback Table

Table 1: HDR Meter Data Authentication

Requests	Stakeholder Feedback
<p>What other proven methods are there to authenticate meter data back to the LDC meter? If possible, please provide details on methods used in other jurisdictions.</p>	<p>AEMA recommends reviewing the processes for data submission/auditing rules for PJM and NYISO.</p> <p>PJM:</p> <ul style="list-style-type: none"> • Whenever there is an emergency dispatch, after aggregators have submitted interval data for the dispatch day and 60-days prior, PJM creates a task for LDCs to review the submitted meter readings. • LDC's have 10 business days to either approve the data or flag it as being incorrect. If they do not review it within 10 business days, it is auto-approved. Once it's approved, the data can be settled on. • If the data is flagged as being incorrect, aggregators can either re-submit data (i.e. fix the error), dispute the claim by the LDC that the data is incorrect, or withdraw the data submission (in which case that resource's performance is zero) • This process continues iteratively until all data has been accepted/withdrawn or the event data submission deadline as passed, whichever is sooner <p>NYISO:</p> <p>The NYISO conducts periodic meter data audits whereby they request (at the service account level):</p> <ul style="list-style-type: none"> • Six months of interval data from the LDC • Confirmation from the LDC that the interval data is for the account in question • Confirmation from the LDC that they are not aware of any issues with the interval data <p>The NYISO then compares this interval data with the data we submitted</p>

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	<p>AEMA recommends that aggregators either send measurement data to LDCs or ask them to provide their own meter data for the same premise IDs. This way, there is no concern about whether the data has originated from the LDC. If LDCs do not want to undertake this activity, then the IESO should be fine with an email from the LDC confirming that the meter data provided in lieu of a bill originated from the LDC and that they are not aware of any issues.</p> <p>An important feature of meter data collection is that if there are issues flagged by the LDC or the IESO then aggregators should have the ability to respond to the claims.</p> <p>Until there is greater access to data for customers and their third-party suppliers, the LDC should assist the aggregators and the IESO in data verification.</p>

Table 2: In-day Adjustment Factor (IDAF)

Requests	Stakeholder Feedback
<p>Please provide details and examples wherein the IDAF is more/less accurate for C&I HDR baselines. What are the key factors to consider that lead to those increases/decreases in accuracy?</p> <p>Is there data that can be shared?</p>	<p>The AEMA strongly supports the DRWG looking into the Baseline calculations and, specifically the impact of the IDAF on the accuracy of HDR baselines and the impact on the performance of DR resources.</p> <ul style="list-style-type: none"> • Currently, the IESO is using a “one-size-fits-all” baseline calculation. • Research on other market designs generally conclude that a single baseline calculation is not the most accurate way to measure performance across different load profiles. • When the Adjusted Baseline is not accurately calculating a specific HDR’s load reduction due to the “one-size-fits-all” methodology, it impacts test results making DR appear less reliable than it actually is.

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	<p data-bbox="785 196 1703 228"><u>Scenario where the IDAF can improve the accuracy of HDR baseline:</u></p> <ol data-bbox="785 233 1856 342" style="list-style-type: none"> <li data-bbox="785 233 1856 342">1. Some studies on DR M&V methodology indicate that an in-day adjustment has shown to improve accuracy in estimating certain types of load (weather sensitive). <p data-bbox="785 391 1856 461"><u>Scenarios where the IDAF results in a less accurate HDR baseline or operational outcomes not desired by the IESO:</u></p> <ol data-bbox="785 466 1787 623" style="list-style-type: none"> <li data-bbox="785 466 1787 623">1. The application of the IDAF is effectively requiring all DR participants to have capacity available in the hours that are outside of the DR window for which they are not being compensated. This can significantly reduce a participant’s operational flexibility on the DR Test/Activation day. <p data-bbox="831 667 957 699"><i>Examples:</i></p> <ul data-bbox="831 704 1843 1208" style="list-style-type: none"> <li data-bbox="831 704 1843 818">• Limits operational flexibility for resources to “test” the capabilities of their contributors prior to an activation event for the purpose of improving reliability during the event. <li data-bbox="831 862 1803 1013">• Scheduled maintenance of a contributor in the in-day adjustment hours on the day of an activation or in the baseline adjustment period can negatively impact baseline. HDRs have no capacity obligation during these hours and should be free to operate however they want. <li data-bbox="831 1057 1803 1208">• A manufacturing plant may respond to a DR notice by canceling a shift that is scheduled to start well before the DR window. If the adjustment window includes part of the cancelled shift, the plant’s baseline can be significantly reduced. <ol data-bbox="785 1261 1751 1338" style="list-style-type: none"> <li data-bbox="785 1261 1751 1338">2. The application of the IDAF may enable participants to intentionally or unintentionally impact the baseline calculation: <p data-bbox="785 1382 911 1414"><i>Examples:</i></p> <ul data-bbox="831 1419 1709 1451" style="list-style-type: none"> <li data-bbox="831 1419 1709 1451">• A manufacturing plant may have a morning shift work overtime,

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	<p>increasing load during the in-day adjustment, in order to ensure ability to curtail during DR hours. This is a reasonable action for participation but would inflate the adjusted baseline.</p> <ul style="list-style-type: none"> • A building is pre-cooled from the time of event notification up until activation event. This is a reasonable action that makes program participation more viable for the building. However, the adjusted baseline may become inflated. • A participant can take action to increase load during the in- day adjustment period to inflate the baseline. This won't change the actually amount of load reduction that occurs upon activation but will improve the performance results for that participant.
<p>Please provide any details on baseline methodologies and in-day adjustment factors used in other jurisdictions.</p>	<p>Research on PJM and MISO show that these markets allow for multiple methodologies for determining the appropriate baseline for different participants. The AEMA encourages the IESO to consider allowing for more than one type of baseline determination in order to most accurately represent the different types of loads that participate as HDRs.</p> <p><u>Midcontinent Independent System Operator (MISO) Market</u> participants have the option of using various evaluation methodologies to determine a baseline:</p> <ol style="list-style-type: none"> (1) Metered Generation (2) Calculated Baseline^a (3) Direct Load Control (4) Custom Baseline^b <ol style="list-style-type: none"> a. The Market Participant will have the option to accept the unadjusted Consumption Baseline or to modify it by applying either a Symmetric Multiplicative Adjustment or a Weather Sensitive Adjustment. b. The Market Participant may develop a custom Consumption Baseline if none of the three standard baselines described above would produce reasonable estimates of the

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	<p>resource’s demand reductions. MISO must approve of the specific methodology to be employed before the Market Participant can utilize such a baseline.</p> <p><u>PJM Interconnection (PJM)</u></p> <p>PJM lists 7+ methods that participants can use to calculate baselines, depending on load characteristics</p> <ol style="list-style-type: none"> (1) Avg. of last 5 non-event days w/ Symmetric Additive Adjustment (SAA) (2) Avg. of last 5 non-event days w/ Weather Sensitive Adjustment (WSA) (3) Avg. of last 3 non-event days w/ SAA (4) Average of last 3 non-event days w/ WSA (5) Max Base Load (6) Metered Generation (7) Avg. of 3 hours before & 2 hours after the event

Table 3: Proposed 2020 DRWG Work Plan

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<p>What other initiatives should be considered for inclusion in the 2020 work plan?</p> <p>Please specify whether you see this as a separate issue or a sub-component of another initiative.</p>	<p>Uncoupling Priorities from the Auction Mechanism:</p> <p>AEMA recommends that key priority items be addressed in an expedited manner to target incorporation into the Market Rules/Market Manuals for the June 2020 and December 2020 Capacity Auctions (or DRA depending on the outcome of the AMPCO application). AEMA also recommends that the amendments be uncoupled from the procurement mechanism during the Market Rule development to ensure that the amendments, most of which improve operational efficiencies for the DR participants as well as the IESO, will continue to move forward. These priorities include:</p> <ul style="list-style-type: none"> • Obligation Transfers • 1 Hour Testing • Opt Out in Day Adjustment • HDR Data Audits • HDR Data Submissions • HDR Registration Edits

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<p>Please provide feedback on the impact that the underlying issues and opportunities of each of the proposed initiatives could have on DR resources. This will help the IESO identify priority of the initiatives.</p>	<p><u>In-Day Adjustment/Baseline Review:</u></p> <ul style="list-style-type: none"> • BL are fundamental to the value a given resource is worth to the IESO from a Capacity/Resource Adequacy standpoint • Current M&V impact actually removes MW from what is being counted/valued by the IESO – which is an inaccurate measurement of what is actually being provided to the province. <p><u>Separating Virtual and Physical HDR Resources:</u></p> <ul style="list-style-type: none"> • This issue is tied to the in-day adjustment points outlined above. • If the proposed solution is for a resource to opt-in or opt-out, then aggregators would split contributors into different resources to ensure the right BL is assigned to each customer type.

General Comments:

Points from November 12th DRWG:

1. VEE Process to Address Meter Data Issues Outside DRMP Control:

AEMA supports the change to 60 days to submit data for non-activation months, as recommended by AEMA that was discussed at the September 4th, 2019 DRWG meeting.

For the estimation of data at the contributor level for intervals where meter data is unavailable because of issues outside of the DRMP control, the IESO has proposed that:

- ‘0’ be estimated for any interval outside of the activation hours
- 90-day peak interval value be used for any interval within the activation hour(s)

AEMA appreciates the IESO staff recognition that an alternative approach is warranted to account for the missing data by way of estimation. However, AEMA disagrees with the use of a 90-day peak interval outside the activation hours. If data does not exist, then the resource should be treated as if they did not or were not included in the dispatch. A 90-day highest value is actually not an accurate reflection of a customer contribution and would impact the results of the resources dispatch settlement.

2. DR Audit:

As provided in previous comments, AEMA members continue to disagree with the use of LDC statements as the source available to the IESO to authenticate the traceability of contributor meter data back to the LDC meter. This includes the retention of statements for 7 years from a record retention perspective.

As well, AEMA does not support the +/- 1% error rate for peak kW, as this goes far beyond their mandate from Measurement Canada and is a poor measure of accuracy. It is easily possible that a single data point could be off by more than 1% while the average error is well within 1%. Rather than 1% of peak, AEMA recommend that the IESO should be looking at mean absolute error on an interval-by-interval basis between meter data from the LDC and submitted measurement data.

Advanced Energy Management Alliance (AEMA):

AEMA is a North American trade association whose members include distributed energy resources, demand response (“DR”), and advanced energy management service and technology providers, as well as some of Ontario’s largest consumer resources, who support advanced energy management solutions due to the electricity cost savings those solutions provide to their businesses. The comments herein reflect those of the organization as a whole, not those of any individual members.