



Regulatory and Government Affairs
11-1155 North Service Road, Oakville
ON Canada L6M 3E3
T 1 617 224 9900

April 5th, 2019

IESO Stakeholder Engagement
Submitted via email

Re: DRWG 2019 Work Plan

Enel X is a trusted partner helping enterprises develop, execute, refine customized energy management strategies to reduce costs, manage risk, and maximize the value of emerging energy technologies. Enel X is the global leader in demand-side flexibility services, providing large energy users access to more demand response and demand management programs worldwide than any other provider. Enel X is an active participant in the IESO's DRWG and is pleased to provide recommendations and proposals for the identified priorities for the 2019 DRWG.

The proposals are based on improving the value of the demand response resource by reducing the costs of delivery, while maintaining the reliability of the resource. Due to the newly introduced Transition Capacity Auction, which will now have non-demand response resources compete, it is necessary to implement changes to ensure a level playing field for all resources.

The proposals include changes to:

- Meter Data Submission
- Measurement and Verification
- Audit of demand response resources
- Testing of demand response resources

Enel X looks forward to discussing these items at the upcoming DRWG meeting.

Yours truly,

A handwritten signature in blue ink, appearing to read "S. Griffiths".

Sarah Griffiths
Director, Regulatory Affairs
Enel X



IESO DRWG – DRAFT Proposals, March 2019

Purpose of Proposed Changes

- Demand response (DR) is a valuable resource that will soon compete with traditional generation for the rights to provide capacity.
- In order for DR to be competitive on a level playing field, we need to streamline burdensome rules and limit unnecessary costs which aggregators are disproportionately exposed to compared with traditional generation.
- These changes will better prove the value of today's 850MW resource while reducing the cost of DR resource delivery by **tens of millions of dollars year**.
- Now is the time to adopt these changes so DR can be ready to compete in 2020 and beyond.

Summary of Proposed Changes – Key Takeaways

1. **Meter data submission:** the IESO should make data submission more granular and data should only be submitted if used. It must be possible to exclude unavailable data. Doing so would greatly simplify the data submission and auditing processes.
2. **Measurement & Verification:** Performance calculations as they stand today are discriminatory. Random fluctuations by large non-participating loads make DR's performance look much worse than it is. Customers should not be penalized for curtailing as soon as they receive a dispatch from the IESO.
3. **DR Auction Audit:** We need much more transparency into how auditing is conducted. Burdensome requirements for monthly LDC statements should be avoided. Instead, LDC meter data should be a source truth. Penalties should be proportional to their impact on the capacity obligation and/or resulting market harm. For example, a 100kW contributor in a 100MW portfolio should not nullify the value of the entire aggregation.
4. **DR Auction Testing:** Most DR, while very cost effective for capacity, is expensive in the energy market. Testing for four hours, four times per year adds up to **\$23M/year** to the delivery cost of DR when considering DR's marginal cost in the energy market. This total equates to *half* of the current DR Auction market size of **\$45M**. In addition, today's rules have a negative feedback loop where underperformance can lead to escalating testing costs and this leads to further underperformance. Punishing customers who perform within aggregations for the underperformance of others will lead to customer disengagement and defection from the energy market. Transparency into testing requirements and sensible testing rules will avoid such "tragedy of the commons" scenarios.

1. **Meter Data Submission**
 - a. Measurement data should only be required for months during which there are one or more DR activation(s)

- b. Measurement data should only be required for the intervals needed to assess performance in DR activations
- c. Measurement data should be submitted at the contributor-level rather than aggregation level
- d. The submission of data from KYZ pulses should be admissible if within the accuracy criteria described in (3. DR Auction Audit)
- e. Measurement data not submitted for a contributor should be considered zero for the purpose of computing performance against Demand Response Market Participant (DRMP)'s capacity obligation in an activation or test event
- f. The IESO should define a process for re-submitting or otherwise amending measurement data

2. Measurement & Verification

- a. Load reductions should be calculated at the contributor-level (both baseline and load reduction) in alignment with the measurement data submission process.
- b. Load reductions should be floored at zero kWh to eliminate the noise of non-participating customers.
- c. Resource performance in a DR activation or test should be equal to the sum of performance for each contributor in a resource.
- d. Capacity charges, Dispatch charges, etc. should be calculated based on this total resource performance value
- e. The baseline adjustment window for demand response activations and tests should be changed to hours-ahead 4-2. For example, the adjustment window for a 4PM EDT event should be from 12-2PM. This would align the M&V with the 2-hour activation notice.

3. DR Auction Audit

- a. The IESO must define explicit criteria for the accuracy tests to be implemented for measurement data (e.g. mean average error under 2% vs. utility interval data), including guidance on VEE protocols
- b. Meter data from an LDC billing interval meter should be deemed the source of truth for determining the accuracy of measurement data, unless there is a valid reason from the LDC why meter data is incorrect or incomplete
- c. Any non-revenue-grade measurement data meeting the criteria in (3a) should be acceptable.
- d. The IESO should establish a timeline for when the DR Auction audit will take place, clearly identifying when a settlement month has been "finalized"
- e. **Administration Charge:** if submitted Measurement Data is found to differ from Actual Data for a given contributor more than the criteria in (3a), the Administration Charge will apply as follows:
 - i. The *Registered MW* of contributors where measurement data differs from actual meter data will be set to zero for the settlement month in question
 - ii. The IESO shall calculate whether the total *Registered MWs* of other submitted contributors total enough to meet DRMP's net capacity obligation
 - iii. In the case of a shortfall, an Administration Charge shall apply equal to the shortfall in *Registered MW* compared with DRMP's total obligation, up to the total obligation, multiplied by the DR Auction Clearing Price (DRACP)

1. For example, if DRMP has a 100MW obligation and registers 100MW, differing data for 20MW of contributors would result in a charge based on 100MW – 80MW, or 20MW of shortfall multiplied by the DRACP.
 2. If DRMP has a 100MW obligation and registers **110MW**, differing data for 20MW of contributors would result in a charge based on 100MW – 90MW, or **10MW** of shortfall multiplied by the DRACP.
- iv. Performance in any activation will be re-calculated with corrected meter data, with contributors zeroed out where no correct meter data is available
- f. Measurement data that was flagged as not submitted at the time of measurement data submission will be considered zero for the purpose of meeting performance obligations, but will be considered as *Registered MW* for the purpose of the Administration Charge
 - g. The Administration Charge will apply *in addition* to other charges such as the Capacity Charge, and will apply to the month for which data was submitted
 - h. Failure in a DR Auction Audit may result in additional controls required by DRMP, or may result in removal from the program

4. DR Auction Testing

- a. Tests should be distinguished from actual activations by the IESO. If not via a phone call, the IESO should propose some other way to tell the difference between a test and activation (e.g. through DRMP's private reports) before removing phone notification.
- b. The IESO should formalize the "passing" criteria a test in the *Market Manuals*. A test that has been "passed" should not result in a re-test.
- c. The IESO should specify a date by which DRMP's must demonstrate performance in a scheduled test or market activation to avoid testing by the IESO.
- d. Testing by the IESO should not be required if DRMP uses the Capacity Obligation Buy-Out to reduce its commitment to its maximum demonstrated performance.
- e. A resource that successfully demonstrates performance via a four-hour test or activation should subsequently test for one-hour durations until failing a test or activation in a future season, upon which another requalifying four-hour test would be required.
- f. The IESO should allow partial re-testing.
- g. Multiple virtual DR resources should be allowed in a given DR Auction zone with commitment assigned across such resources. Performance requirements should apply at the resource-level.

5. DR Auction Obligation Transfer

- a. In addition to obligation transfer between DRMPs within the same zone, obligation transfer should be allowed across zones if doing so does not impact zonal constraints
 - i. For example, if TORONTO and SOUTHWEST both cleared at the same DR Auction price and transferring an obligation from TORONTO to SOUTHWEST would not cause SOUTHWEST to hit its zonal maximum, transferring MWs from TORONTO to SOUTHWEST should be possible
 - ii. Obligation transfer approval in this manner should be first come, first served
- b. Obligation transfer between zones should be allowed both within a given DRMP and across multiple DRMPs