VOLTALIS

The e-Power Company

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Priorities assessment following January 31st DRWG Meeting

As a new member of the DRWG, Voltalis would like to thank IESO for providing this opportunity to comment on priority items to be addressed to develop residential DR.

Voltalis already aggregates 100,000 homes in France and operates this demand-side resource in real time and on a daily basis since 2010, first to provide services to the French TSO (ancillary services such as balancing market) and now to all market players (on wholesale energy markets).

We believe that the residential sector could provide a huge demand-side capacity to Ontario using the flexibility of the 800,000 homes equipped with electrical heating, in addition to what has already been developed with air-conditioners in summer through the peaksaver program.

Therefore, Voltalis welcomes IESO initiative to develop residential DR through its auction mechanism.

Based on our large-scale experience, we see two major issues to adapt this DR auction to the specificities of the main residential flexible load: electrical heating.

1- *Weather sensitiveness of loads should be taken into account*

Electrical heating (and aircons) loads are very flexible and very well correlated to the grid constraints (peaks annual). But such thermal loads are weather-sensitive, and the demand-side capacity (in MW) that they can provide will vary within a 6 month period. Therefore, the commitment to propose the same amount of MW every day from November to April would prevent such thermal loads to participate and limit the residential DR potential.

One possible solution would that activations occur only if the outside temperature goes under a certain limit (or if Ontario consumption goes above a limit). As these parameters are correlated, residential DR operator could evaluate their loads under such conditions.

An alternative way would be to extrapolate the capacity to extreme temperature. The French Capacity Mechanism started in 2017 chooses this solution to evaluate weather-sensitive capacities.

2- *Measurement*

Like most of DRWG participants, we strongly believe that measurement and data access is a priority to address. Third-party DR aggregators should have a simple and scalable access to data from their residential customers, including the possibility to collect directly such data by themselves if measurement is compliant with, for example, smart meter standards.

Voltalis thanks IESO for considering these comments and looks forward to provide additional feedback if necessary.