

August 17, 2022

**Registrar
Ontario Energy Board**

RE: EB - 2021-0118

Dear Sir/madam:

Attached please find Comments of Demand Power Group Inc. filed pursuant to the Boards invitation to comment on the Report of the Framework for Energy Innovation Work Group.

Respectfully submitted,
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**BEFORE THE
ONTARIO ENERGY BOARD**

Report of the Framework for Energy Innovation
Working Group to the Ontario Energy
Board – Invitation to Comment

Reference No. EB-2021-0118

Comments of Demand Power Group Inc.

Demand Power Group Inc. (Demand Power) submits these comments on the Framework for Energy Innovation Work Group Report pursuant to the Board’s invitation to comment issued on July 6, 2022. Demand Power was a member of the Work Group and submits these comments so as to suggest reasonable solutions to some of the issues identified in the Report which could not be resolved by the Work Group due to the need for consensus during the collaboration process.

1. **Utilization of a Broad Cost-Benefit Analysis Will Provide Ontario Ratepayers With a Greater Quantity of Benefits from Distributed Energy Resources.**

One of the unresolved issues surfaced by the Work Group was whether the benefit-cost analysis used to review the suitability of a specific distributed energy solution should consider province-wide benefits or should be limited to benefits enjoyed by the customers of the distribution utility hosting the distributed resource. The Board set forth this issue in its July 6th letter as follows: “What is the appropriate scope of a BCA Framework? In other words, should a narrow or broad set of benefits and costs be considered with respect to deployment of DERs as alternatives to traditional solutions to meet electricity distribution system needs?” (Board Letter at 3). As discussed below, a broad set of benefits can and should be employed for purposes of reviewing DERs as alternatives to traditional solutions.

If the Board were to apply a narrow set of benefits, it would in some circumstances reject a DER solution which would be accepted if a wider set of benefits were considered. That is, a specific DER project may fail a cost-benefit test if benefits are narrowly defined yet would be accepted if the pool of benefits considered was expanded. In this scenario, customers would be deprived of benefits which

would be made available and which they could profit from in the form of lower rates and more reliable service, if the latter test were applied, and the DER solution was deployed.

An example of the scenario described above is as follows: A developer proposes a storage project to be deployed in a location which suffers from congestion; the Board employs a cost-benefit analysis limited to local benefits (for example, elimination of the distribution system congestion issue) but the storage project is rejected because the benefit of local congestion relief is not sufficient for approval. However, the project also provides benefits in terms of transmission capacity, generation capacity, and environmental benefits. If the Board takes these benefits into account, it would approve the project. Of course, these benefits will likely extend province-wide and well beyond the service territory of the distribution company where the storage is deployed. Thus, equity recovers a means by which the benefits can be allocated appropriately and recovered from the correct group of ratepayers.

If the Board finds that a particular distributed resource provides benefits (such as a capacity benefit) beyond the service territory of the hosting distribution utility, it could allocate the cost of the distributed resource to all distribution utilities subject to its jurisdiction that experience the benefit, on some reasonable basis, such as based upon the load of each utility. The Board could then authorize rates for each utility that would allow it to recover from its end use customers the cost allocated to it. In this manner, the Board can ensure that customers can receive the benefit of all competitively procured resources that pass a cost benefit test and that no worthwhile projects are rejected due to their location on the distribution system of a particular utility.

2. The Board Can Ensure that Competitive Procedures are Employed By Regulated Utilities.

The surest way to ensure that customers receive the benefit of competitively procured distributed energy resources is to direct the distribution companies to conduct a competitive solicitation for specified distribution company projects. For example, the Board could direct the utilities to conduct a Request for Proposals any time the distribution utility is planning a capital project that exceeds some appropriate dollar value.

If a competitive offer provides the required technical services specified (such as relief of a congested line or substation) at a cost which is less than the cost of the distribution company solution, then the competitively procured solution would be constructed pursuant to a contract between the

developer and the utility, with the cost of the project recovered from customers rather than the higher cost of the utility project.

If the competitive offer is more costly than the utility project, the broad cost/benefit analysis described above should come into play. The Board would consider all the benefits provided by the competitive solution, including those provided beyond the territory of the host distribution company. If the benefits of the proposed project exceed its costs, the Board would authorize the project and provide cost recovery to all beneficiary utilities.

3. **Behind the Meter installations and Class B Customers Were Not Considered by the Work Group**

Two significant omissions from the FEI Work Group's report are the absence of any discussion regarding the potential for behind the meter installations and the absence of a discussion regarding solutions directed at Class B customers. These omissions are significant because behind the meter installations of distributed resources are a growing percentage of the total, and Class B customers can make a significant contribution to grid reliability if properly designed rules are in place.

The inadequacy of rules designed to enhance the deployment of behind the meter distributed resources is illustrated by the following example. Regulation 429/04 provides that an electric storage device can be a Class B customer and is exempt from Global Adjustment charges if the storage device injects the stored electricity back into the IESO-controlled grid or a distribution system of a licensed distributor. That is, the storage device must be in front of the meter.

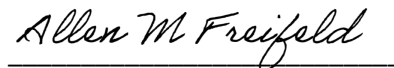
This rule illustrates the importance of developing revised rules that address deployment of behind the meter resources. For example, the rule cited above refers to stand-alone electric storage facilities that are grid-connected. The market reality is, however, that Class B customers (such as smaller commercial or industrial customers) can also deploy storage facilities and will do so behind the meter. They do so for two good reasons. First, they employ storage resources to provide service to their own electricity consuming devices for a variety of reasons. Second, these customers primary business is not electricity generation so they are not likely to search out appropriate locations on the transmission or distribution grid. If the Board is to encourage deployment of distributed resources behind the meter, it should develop rules which address the factors that will actually affect the decision-making by smaller commercial and industrial customers.

Behind the meter installations are deployed for a number of purposes. They may provide back-up power in the event of grid outages or, in some configurations may provide power quality

beyond that available from the grid. Also, behind the meter installations can meaningfully reduce the electric bill of the end -use customer, if the rules are properly drawn. For example, a behind the meter storage device which provides electricity to the customer's load during the province's peak hours could provide for Global Adjustment avoidance, if the rules provided this option. Of course, as noted above this option is not available to behind the meter storage, even though it is available to grid connected storage. The rule, as currently constituted, treats behind the meter storage differently than grid connected storage, even though they can and do provide the same service to the grid.

A behind the meter storage device which is discharged to load during peak hours will reduce load on the grid, and therefore will reduce the need for generation. This reduction in load is physically and financially the same as injecting generation. A negawatt has the same value to the grid as a megawatt in terms of providing reliability and peak capacity to the grid. Thus, they should be treated similarly. That is, a behind the meter storage facility that is deployed to reduce grid load during peak hours, should have the same opportunity to be exempt from Global Adjustment charges, as are grid-connected storage devices. The Board should consider adopting a rule which allows Class B customers with behind the meter storage devices sited at their facilities to be exempt from Global Adjustment charges if they discharge during peak hours. Such a rule change will provide Class B customers with a financial reason to install storage, and will, in the process, provide much needed peaking generation capacity, that the IESO has indicated will be needed as early as 2025.

Respectfully submitted,



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