

June 13, 2023

Registrar Ontario Energy Board
P.O. Box 2319
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Toronto, ON
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Submitted via email: registrar@oeb.ca
Copy: Justin Malecki: evintegration@oeb.ca

RE: Electric Vehicle Integration (EVI) Initiative (EB-2023-0071) Electric Delivery Rates for Electric Vehicle (EV) Charging Report

Dear Ms. Marconi,

Thank you for the opportunity to comment on the Electric Delivery Rates for Electric Vehicle (EV) Charging Report released April 23, 2023.

Energy Storage Canada (ESC) is the national voice for energy storage in Canada today. We focus exclusively on energy storage and speak for the entire industry. We represent the full value chain range of energy storage opportunities in our own markets and internationally.

ESC offers the following comments on the report prepared by Ontario Energy Board's Consultant Power Advisory.

The Electric Delivery Rates for Electric Vehicle (EV) Charging Report is well written, provides excellent analysis, as well as several potential demand cost reduction options to consider for non-residential EV Charging Systems.

ESC strongly recommends if the OEB moves forward with Time of Use (TOU) demand charges on non-residential EV Charging Systems that the eligibility be extended to include stand-alone energy storage.

As outlined in the example below the current demand charge rate structure utilized by local Utilities significantly impacts the ongoing operational costs for these types of installations connected to the distribution system.

The AMERESCO Newmarket BESS is a 5 MW-20MWH, Wholesale Market participant is connected to a local Utility distribution system 44KV feeder. This project is the result of an RFP issued by the IESO to demonstrate the reliability and capability of distributed connected energy storage to participate in the wholesale market. The BESS is operated on a daily basis and has been operational since 2019.

From an IESO operational point of view, this project has been and continues to be a success story. However, from financial model perspective this project has and continues to be very challenging. The primary concern is centered around the local distribution demand charges and impact on the financial viability of these projects.

The delivery cost portion of monthly power invoice includes transmission elements (Network and Line & Transformation) as well as demand charges for NT Power.

A portion of the total transmission cost can be avoided if recharge of the BESS is completed between the hours of 7PM and 7AM, Monday through Friday. Recharging during off peak period avoids 57% of potential overall transmission charges. The same opportunity to lower distribution demand costs is not available at the distribution level. The distribution demand charge is applied to highest kW level regardless of time of day.

In addition, in the Ontario Energy Board (OEB) released a Report Framework for Energy Innovation: Setting a Path Forward for DER Integration (the FEI Report) which invited distributors to apply for an incentive mechanism to encourage the use of third-party DERs as non-wires alternatives. Energy Storage Systems such as Battery Energy Storage connected at the distribution level can be a very cost-effective alternative to the traditional poles and wires solutions if the business case could be improved with lower delivery costs, such as demand charges.

The Electric Delivery Rates for Electric Vehicle (EV) Charging Report provided several potential options to lower overall demand charges for non-residential charging stations. ESC encourages the Ontario Energy Board when reviewing and evaluating potential options include battery storage energy systems in this research and analysis.

Additional research and analysis by the Ontario Energy Board should be conducted to determine if for battery energy storage systems connected to the distribution system have access to a demand rate structure similar to the current Transmission Network Charge and Line & Transformation rate schedules. This would provide an additional opportunity to reduce a portion of distribution delivery costs by recharging in the off-peak hours. Energy Storage can reduce costs for customers if operated efficiently and should be treated like a grid resource rather than a typical load customer. It is appropriate to send price signals to energy storage to ensure their efficient operations in the distribution system. In the above noted 5MW/20MWH project which recharges off peak at a rate 2.9MW would see an estimated 57% reduction, \$8,500 on a typical \$15,000 Distribution monthly demand charge.

These options as well as other possible solutions should be considered to ensure battery energy storage facilities have the same cost saving opportunity as non-residential EV charging stations.

Yours truly,



Robert Tremblay
Policy Manager
Energy Storage Canada