

***Re: Electricity Delivery Rates for Electric Vehicle (EV) Charging (EB-2023-0071) – June 13 2024
Webinar Feedback***

To whom it may concern,

As transportation undergoes a paradigm shift toward electrification there are increasing public, political and economic pressures to ensure there is sufficient, cost effective and equitable access to public EV charging infrastructure across Ontario. As an owner and operator of public facing Level 3 fast electric vehicle (“EV”) charging infrastructure at 16 locations and counting across Ontario, Quebec and BC, we are very supportive of the Ontario Energy Board’s (the “OEB”) work to manage the implications of delivery charges associated with public EV charging. Regarding the OEB’s current rate relief proposal for EV charging installations, please find our feedback below.

Thank you,

James Ratcliffe
General Manager
Baseload Power Corp.

1. Load Factor Threshold:

We appreciate and commend the work the OEB has conducted to date to identify 3 options that would provide discounts on transmission delivery costs for EV charging providers (the “**Discounting Options**”). Ontario needs to make fast and ultra-fast EV charging a viable business case on a pervasive scale covering all areas of the province, including urban, suburban, and rural areas. Unfortunately, the current electricity delivery rates are putting the province at a competitive disadvantage compared to other provinces across Canada.

For instance, Quebec and New York have developed an EV charging specific rate class that provides the same notable assistance to all EV charging installations in these jurisdictions. This notable assistance applies during times when the load factor of EV charging installations is less than 25%. The implementation of this special EV charging rate class has resulted in: (a) a market price for EV charging, which is at a reasonable level so there is continued incentive to buy EVs; and (b) EV charging operators being able to earn a positive net operating income that translates into a break-even point somewhere between 7 to 10 years. For the purposes of this feedback letter, we have defined net operating income as gross revenue minus electricity, transaction, networking, and servicing costs (“**Net Operating Income**”).

In Ontario, under the current electricity rate structure, positive Net Operating Income for EV charging installations in Hydro One’s rural areas occurs at around a 30% load factor. For these rural EV sites, under each of the Discounting Options using a 15% load factor, Net Operating Income is well below zero. To further understand the impact of the Discounting Options on rural EV charging locations versus urban/suburban EV charging locations, we modelled how all Discounting Options affect two of our EV charging locations in Ontario, one in Hydro One’s rural service territory (“**HONI EV Installation**”) and the other in Alectra’s urban/suburban service territory (“**Alectra EV Installation**”). The results of our modelling showed that the Discounting Options applied to the HONI EV Installation provided a discount on transmission delivery costs that was **50%** less than the discount on transmission delivery costs for the urban/suburban Alectra EV Installation.

Given this analysis, we strongly urge the OEB to increase the load factor threshold for the application of the Discounting Options from 15% to 30%, especially for rural based EV charging installations, as it will spur a more substantial and wider-spread investment in fast and ultra-fast EV charging at key transit routes across all of Ontario.

2. Calculating Load Factors:

The following points apply to the calculation of load factors as they apply to EV charging installations:

1. As EV charging demand is extremely seasonal, we strongly urge the OEB to ensure that the load factor use to calculate the Discounting Option that would apply to each monthly electricity bill be **based on a rolling 12 consecutive month average**. This approach provides stability and some more certainty for EV charging operators as they manage throughout the variations in demand that occur for EV charging during each year and helps to simplify the administrative process for local distribution companies (“LDCs”).
2. As monthly delivery costs are based on a mixture of peak demand occurring during certain business hours and maximum demand being the highest total demand that occurs during all hours of the month, we strongly urge the OEB to ensure that the load factor use to calculate the Discounting Option that would apply to each monthly electricity bill be **based on the maximum demand** and not the peak demand. This approach provides stability and some more certainty for EV charging operators as they manage throughout the variations in peak demand vs. maximum demand that occur for EV charging during each year and helps to simplify the administrative process for LDCs.

3. Eligible Loads:

We strongly recommend that for an EV charging installation to be eligible for the Discounting Options to apply to their electricity bills, such EV charging installation’s primary purpose should be to provide public EV charging services.

We also strongly recommend that all EV charging related electricity rate reductions should apply to both Level 2 and Level 3 EV chargers.

Furthermore, we strongly recommend that all EV charging related electricity rate reductions should not be limited, restricted, or conditioned because of any station services and auxiliary loads that are associated with an EV charging installation. Additional loads that are installed to properly operate EV charging installations in a safe and reliable manor, and that are complimentary to EV charging installations include cellular modems, cooling fans, lights, cameras, batteries, lit signage, tire inflation, windshield washer fluid dispensers, vacuums and other minimal loads that would commonly be found at today’s gas station installations. With fast and/or ultra-fast EV charging at a site, in almost all cases, the minimum load needs to be 500 kW and we have seen EV installations that are 2 MW and more, so even with adding the loads listed above, the load required for EV charging will still represent the vast majority of the total load of the entire EV charging installation.

4. Opt-In Vs Opt-Out:

Regarding opting in vs opting out of any EV charging related electricity rate reductions, we recommend that EV charging companies that identify themselves to the relevant LDC as primarily providing EV charging services within such LDC’s service territory should automatically have such EV charging related electricity rate reductions applied to their electricity bill. This opt in process can be achieved by including EV charging as a load category on each LDC’s new customer intake forms (eg. Hydro One’s NCCI form).

5. **Further Rate Design Considerations to Support EV Charging:**

Reduce Class A Threshold to 500 kW

With much needed fast and/or ultra-fast EV charging in Ontario, a typical site, in almost all cases, will need a minimum load of 500 kW and we have seen EV charging installations that are 2 MW and more. To keep the market price for EV charging at these sites at a reasonable level so there is continued incentive to buy EVs, EV charging operators will need to implement all possible cost management measures. With this in mind, we strongly encourage the Ministry of Energy, the OEB and the IESO to allow EV charging installations greater than or equal to 500 kW to qualify for Class A, as this will provide EV charging installations with a mechanism to help lower the cost of charging for EV drivers and further stimulate EV adoption, which, in turn, will help make EV manufacturers in Ontario more competitive.

Distribution Rates

Currently in rural areas along major transit corridors, public direct current fast EV charging infrastructure is greatly needed. Hydro One Distribution (“**HONI**”) is the LDC in most of these rural areas. Under HONI’s “50–4,999kW General Service Demand Rates” the transmission portion of the delivery cost on the electricity bill is a small portion of the total delivery cost compared to the distribution portion of the delivery cost, which means that the rate relief regarding the transmission portion of the delivery cost currently contemplated by the OEB will not have much of an impact on lowering the cost of EV charging for EV drivers in rural and high transit corridors.

We encourage the OEB to continue to work with LDCs to review the impacts of public EV charging on LDC electrical grids considering the EV charging load factors and the timing of peaking events associated with operating EV charging stations and the extent to which EV charging impacts the overall capacity and peaking events of the LDC’s grids, with the goal of developing further rate relief tied to the distributors’ portion of the cost of delivery.

Application of the Ontario Electricity Rebate

We encourage the OEB to allow EV charging providers that are receiving a benefit under the Discounting Options to automatically have the Ontario Electricity Rebate applied against their monthly bill without having to wait to prove that the EV chargers use less than 250,000kWh.

6. **Follow-up Question:**

- Can the OEB provide a bill calculator like the existing small business bill calculator to help EV charging providers compare the implications for the Discounting Options?