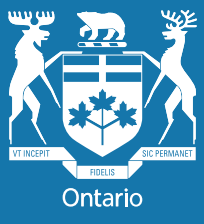
ONTARIO ENERGY BOARD

Electric Vehicle Charging Rate Overview – ~~Draft~~Final Report

EB-2023-0071 – Electric Vehicle Integration

~~JANUARY 7~~March 31, 2025



Ontario Energy Board

TABLE OF CONTENTS

1. ABOUT THIS DOCUMENT

The Ontario Energy Board (OEB) has prepared this document to provide an overview of the Electric Vehicle Charging Rate (EVC Rate).

The specific rules governing the new EVC Rate will be set out in each rate-regulated electricity distributor's rate order. The OEB has prepared standard terms and conditions which can be found at **Appendix A**. These standard terms and conditions (with approved variations if necessary) will be incorporated into rate orders starting in the 2026 rate year. In the event of any conflict between an approved rate order and this document, the rate order prevails.

2. CONTEXT FOR THE EVC RATE

The EVC Rate responds to direction from the Minister of Energy (now the Minister of Energy and ~~Electrification~~Mines) to the OEB to consider rate design options for Electric Vehicle (EV) charging. It aims to support the efficient integration of EVs in Ontario.

The EVC Rate reduces the Retail Transmission Service Rates (RTSRs) that participating EV charging stations pay. RTSRs are charges that electricity distributors apply to end-use customers to collect the wholesale transmission line connection, transformation and network charges that distributors owe to electricity transmitters.

The EVC Rate better aligns the RTSRs paid by participating EV charging stations ("customers") with the transmission system costs incurred to serve them. The EVC Rate fairly apportions the transmission delivery costs to be recovered from distribution customers by accounting for the lower contribution that low load factor EV chargers make to transmission system peak demands compared to other customers

The term "customer" in the context of the EVC ~~rate~~Rate refers to an EV charging station whose facilities are connected to or are intended to be connected to a distributor's distribution system. The term "customer" in the

context of the EVC Rate does not refer to the end-user of the EV charging service, such as the operator of the vehicle that uses the EV charging station. The EVC Rate will be updated from time to time in accordance with updates to Ontario's Uniform Transmission Rates (UTRs). Transmitter revenue requirements are recovered through UTRs, which are charged to wholesale market participants, including electricity distributors. The UTRs are inputs into electricity distributors' RTSRs.

The EVC Rate was informed by comments received from stakeholders on a Staff Discussion Paper that the OEB published in May 2024. The discussion paper proposed draft elements of an EVC Rate. The OEB held a webinar to review the discussion paper with stakeholders in June 2024 and invited written comments. The OEB extends its thanks to all stakeholders who participated in the webinar and those who provided written comments.

The OEB published a revised EVC Rate proposal in January 2025, incorporating stakeholder feedback. The materials related to the OEB's revised proposal included a draft overview report which summarized the EVC Rate, as well as a supplemental companion document. The materials also included additional analysis prepared in October 2024 by Power Advisory on charging station demand patterns at various types of charging station locations.

The OEB invited written comments from stakeholders on the OEB's revised EVC Rate proposal in January 2025. The OEB received written comments on its revised EVC Rate proposal in January and February 2025.

The final EVC Rate design is summarized in this final overview report. This final overview report updates the draft overview report issued in January 2025.

Materials related to the OEB's work on the EVC Rate are available on the Engage with Us EV Integration webpage.

3. ELIGIBILITY

EV charging stations must meet each of the following eligibility requirements to participate in the EVC Rate:

3.1. At least one DCFC charger

Charging stations must have at least one Direct Current Fast Charger (DCFC) stall to be eligible for the EVC Rate.

A DCFC is a charger with high-voltage, direct-current service up to 480 volts. A DCFC (sometimes referred to as a Level 3 charger) provides electricity to vehicles much faster than Level 1 or Level 2 chargers, which provide alternating current at lower voltages.

DCFC stations that participate in the EVC Rate may also include lower-level, non-DCFC chargers. Any lower-level, non-DCFC chargers that are included behind a participating EVC Rate meter will not be considered auxiliary loads for the purposes of determining EVC Rate eligibility. The total capacity of any lower-level, non-DCFC chargers at a station may not exceed the total DCFC charging capacity at the station.

3.2. At least 90% of the demand is for EV charging

At least 90% of the charging station's total monthly peak demand must relate to EV charging. The total auxiliary load at the charging station must not exceed 10% of its total monthly peak demand.

3.3. Demand between 50 kW and 4,999 kW

EV charging stations must have a monthly peak demand that is equal to or greater than 50 kW but less than 5,000 kW to be eligible for the EVC Rate.

3.4. Load factor up to 20%

EV charging stations must have ~~an annual~~a 12-month average load factor equal to or less than 20% to be eligible for the EVC Rate.

For clarity, customers are eligible for the EVC Rate even if their monthly load factors occasionally exceed 20%, so long as their ~~annual~~12-month average load factors are less than or equal to 20%.

3.5. Not for fleets

EV charging stations that primarily serve commercial and/or public sector EV fleets are not eligible for the EVC Rate.

3.6. DER capacity not greater than charging station demand

Charging stations that participate in the EVC Rate may include Distributed Energy Resources (DERs) behind the participating EVC Rate meter. For the purpose of the EVC Rate, DER refers to distribution-connected generation and distribution-connected energy storage.

Any DER load (e.g., energy storage load) behind a participating EVC Rate meter will not be considered auxiliary load for purposes of determining EVC Rate eligibility.

The total DER nameplate capacity behind a participating EVC Rate meter may not exceed the total annual peak demand of the charging station that is participating in the EVC Rate. For example, if a charging station that participates in the EVC Rate has a maximum peak demand of 1,000 kW, then the total DER nameplate capacity behind the meter of that charging station may not exceed 1,000 kW.

EVC Rate participants that include DERs behind their EVC Rate meter are not restricted from participating in net metering, subject to being otherwise eligible for net metering according to applicable net metering rules.

4. FURTHER DETAIL ON ELIGIBILITY

4.1. Measuring demand

Demand refers to the average value of power measured over an interval of time. Demand can be expressed in the unit of a kilowatt (kW). Peak demand and billing demand for the purposes of the EVC Rate are to be measured according to the applicable electricity distributor's methodology for customers in its applicable >50kW rate class or classes.

4.2. Load factor calculation

Load factor refers to the ratio of average demand over a period to the maximum demand occurring in that period. For the purposes of the EVC Rate, eligibility is to be determined based on a charging station's annual12-month average load factor.

A charging station's annual12-month average load factor shall be calculated using the following formula:

$$Load\ Factoryear = \frac{Electricity\ Consumed\ (kWh)_{year}}{Maximum\ Demand\ (kW)_{year} \times Number\ of\ Hours_{year}}$$

$$\text{12-month average load factor} = \frac{\sum_{i=1}^{n} Load\ Factor_i}{n}$$

Where:

$Load\ Factor_i$ is the load factor for the $i-th$ month

n is the number

As an illustration of months

The load factor for each month in the formula above is to be calculated using the following formula:

$$Load\ Factor_{\ month} = \frac{Electricity\ Consumed\ (kWh)_{month}}{Maximum\ Demand (kW)_{month} \times Number\ of\ Hours_{month}}$$

As an illustration, a charging station with a maximum demand of 1,000100 kW consuming 876,00014,880 kWh in a non-leap yearmonth that contains 31 days (744 hours) would have an annuala monthly load factor of 1020%:

$$\frac{876{,}000\ kWhyear}{1{,}000\ kWyear \times 8{,}760\ hoursyear} = 10\%\ Load\ Factoryear$$

$$\frac{14{,}880\ kWh_{month}}{100\ kW_{month} \times 744\ Hours_{month}} = 20\%\ \text{Load Factor}_{month}$$

To illustrate further, a charging station that has the monthly load factors that are listed in the numerator of the equation below would have a 12-month average load factor of 19.5%:

$$\text{12-month Average Load Factor} = \frac{20\% + 18\% + 18\% + 19\% + 15\% + 20\% + 25\% + 20\% + 19\% + 21\% + 19\% + 20\%}{12}$$

$$= 19.5\%$$

4.3. Universal service not required

A charging station does not have to offer charging service to all EV models to be eligible for the EVC Rate.

4.4. Not restricted to specific types of venues

The EVC Rate is not limited to EV charging stations that are located on specific types of sites or venues.

Charging stations that may participate in the EVC Rate include those that are located:

- on or near highways
- on the site of a retail establishment, plaza, shopping centre
- on the site of a municipal, university, school or hospital building
- on a site associated with a multi-unit residential building, such as a condominium
- on employee parking lots.

For clarity, a charging station's eligibility for the EVC Rate does not depend on the public or private nature of the site on which it is located or on whether the site has restricted or unrestricted access.

5. EVC RATE MANDATORY TO OFFER BY ELECTRICITY DISTRIBUTORS

All rate-regulated electricity distributors must make the EVC Rate available to eligible customers.

6. IMPLEMENTATION TIMING

Electricity distributors must begin to make the EVC Rate available to eligible customers in 2026, once their OEB-approved 2026 distribution rates become effective.

Electricity distributors whose OEB-approved 2026 distribution rates become effective on January 1, 2026, are to make the EVC Rate available to eligible customers on January 1, 2026. Distributors whose OEB-approved 2026 rates become effective on May 1, 2026, are to make the EVC Rate available on May 1, 2026.

Some distributors might have rates that become effective on dates other than January 1, 2026, or May 1, 2026. Those distributors are to make the EVC Rate available to eligible customers on whatever date their 2026 rates become effective. Distributors are encouraged to make the opt-in forms available at least 90 days in advance of the effective date of their 2026 rates.

The EVC Rate will not be applied to customers on a retroactive basis before they have opted in to the EVC Rate, or before the EVC Rate has become effective for them.

7. EVC RATE OPTIONAL FOR ELIGIBLE CUSTOMERS

Eligible customers who wish to have the EVC Rate applied to them must opt in to the EVC Rate.

8. PROCESS FOR OPTING IN

An eligible customer may opt in to the EVC Rate at any time by submitting a form to the distributor. The OEB will make available a template opt-in form for distributors to use ~~if~~as they wish. On the form, the customer will attest that it ~~expects to meet~~meets the eligibility requirements for the EVC Rate ~~for the following 12 months~~.

Where a distributor receives an opt-in form that is ~~not incomplete or otherwise deficient~~complete, it must begin charging the customer the EVC

Rate at the beginning of the next billing period or as soon as reasonably practicable thereafter. To be clear, however, although a distributor should begin accepting opt-in forms even before its 2026 rates have been approved, it must not begin charging any customers the EVC Rate until such approval.

To determine a customer's eligibility, the distributor is entitled to rely on the information provided by the customer on the opt-in form and in response to any questions from the distributor.

~~9. PERMITTED FREQUENCY OF OPTING IN AND OUT~~

~~A customer's eligibility is valid for 12 months from the beginning of the first billing period in which the customer is charged the EVC Rate. To remain on the EVC Rate beyond that 12-month period, the customer must submit a new opt-in form.~~

Once enrolled in the EVC Rate, the customer will remain enrolled for as long as they continue to meet the eligibility requirements or opt out of the rate. There is no need for the customer to re-submit the opt-in form. However, as a condition of enrollment, the customer will be required to notify the distributor within 30 days of ceasing to meet the eligibility requirements, in which case the distributor would remove the customer from the EVC Rate and revert to charging the regular RTSR.

The customer may opt out of the EVC Rate at any time.

~~10.~~9. MONITORING ONGOING ELIGIBILITY

If at any time a distributor determines that the customer no longer meets the eligibility requirements (for instance, if the annual rate classification review required under the Distribution System Code results in the reclassification of the customer outside the 50 kW-4,999 kW class), the distributor must remove the customer from the EVC Rate and revert to charging the regular RTSR.

If at any time the distributor becomes aware that the customer deliberately or recklessly provided false information concerning its eligibility in its opt-in form or in response to any other information requested by the distributor, or

deliberately or recklessly failed to notify the distributor within 30 days of ceasing to meet the eligibility requirements, the distributor must rebill the customer for the difference between the EVC Rate that was charged and the RTSR that should have been charged.

~~11.~~10. NO NEW RATE CLASSES

Charging stations that participate in the EVC Rate will be placed within the applicable General Service 50 kW to 4,999 kW rate class that has been established by their electricity distributor. Electricity distributors are not required to establish new rate classes specifically for charging stations that participate in the EVC Rate.

~~12.~~11. THE EVC RATE

The EVC Rate is a numerical parameter that the OEB will provide to electricity distributors. The value of the EVC Rate parameter is 0.17 and will be applied for the initial term of the EVC Rate. It does not change depending on a participant's load factor.

Electricity distributors will use the EVC Rate to reduce the base RTSRs that participating EV charging stations would otherwise pay. There are two RTSR charges: (i) network~~,~~ and (ii) transformation and line connection. Electricity distributors are to apply the EVC Rate to both charges: to a participating customer's network RTSR and to its transformation and line connection RTSR.

A customer's total monthly RTSR payment under the EVC Rate is to be calculated by multiplying the EVC Rate (0.17) by the base RTSR (including the network RTSR and the transformation and line connection RTSR) and then by the customer's billing period peak demand (kW).

At the EVC Rate of 0.17, participating EV customers will pay 17% of the base RTSR that other customers in a distributor's applicable General Service 50 kW to 4,999 kW class will pay. For example, if the sum of an electricity distributor's base network RTSR and transformation and line connection

RTSR were $1/kW, EVC Rate participants would pay $0.17/kW under the EVC Rate instead of $1/kW.

The OEB will provide the EVC Rate to electricity distributors through the RTSR workforms and Rate Generator Models that the OEB develops and updates from time to time, and which electricity distributors use in their rate applications to the OEB.

~~13.~~12. PROVINCEWIDE EVC RATE PARAMETER~~:~~

The value of the EVC Rate parameter (0.17) will be the same for all participating EVC Rate customers initially, regardless of which distribution service territory they are located in.

In the future, as electricity distributors gain more experience with EV charging stations, they might wish to propose EVC Rates to the OEB that are specifically tailored to their own service territories.

~~14.~~13. THE RTSR ~~WORKFORMS~~WORKFORM AND RATE GENERATOR MODEL

RTSRs are set through a cost of service process or an Incentive Rate-setting Mechanism (IRM) process. In a cost of service process, this is achieved through the RTSR workform. In an IRM process, this is achieved through the IRM Rate Generator Model. The RTSR workform and IRM Rate Generator Model are created and updated by the OEB and completed by distributors.

Some distributors have had multiple RTSRs applicable to the General Service > 50 kW rate class. For example, some distributors ~~have~~had a rate for interval metered customers, and a separate rate for non-interval metered customers. Similarly, the EVC Rate can be implemented as ~~an~~ additional ~~General Service over 50 kW rate~~rates, applicable only to charging station customers, but still within the General Service over 50 kW rate class.

The cost of service RTSR workform and IRM Rate Generator Model ~~incorporate Reporting and Record-keeping Requirement (RRR)~~require

historic volume data for setting rates. While ~~the RRR data is~~this has typically been collected at a rate class level, ~~the~~ volume data is needed ~~on a per-rate level.~~specifically for EV charging loads as well. Distributors will be required to identify in the models, the portion of general service volume associated with charging station customers.

~~The starting point~~To determine any revenue deficiency / sufficiency, the EVC Rates will then be calculated on the entry worksheet using the EVC Rate parameter (0.17) multiplied by the approved RTSRs for the rate class. This will enable the model to calculate the adjustment to all RTSRs required to achieve full recovery.

The RTSR workform and Rate Generator Model share a common set of worksheets, entries and outputs used for updating RTSRs. The same changes will be implemented in both.

~~15.~~14. RTSR DEFERRAL AND VARIANCE ACCOUNT (RTSR DVA)

The existing RTSR DVAs, accounts 1584 and 1586, will continue to be used without modification. Any variance resulting from the EVC Rates will accumulate with variances resulting from other causes and be recovered from all ratepayers.

~~16.~~15. NO SUNSET DATE, EVC RATE MIGHT BE REVIEWED IN THE FUTURE

No expiration or “sunset” date is being established for the EVC Rate.

The OEB ~~might~~intends to initiate a review of the EVC Rate within five years of its implementation. The timing and scope of any future review of the EVC Rate will be determined by the OEB in due course.

The review ~~might~~would consider electricity distributor and customer experiences, lessons learned and other relevant considerations. It is expected that the OEB’s decision on the timing and scope of any future review of the EVC Rate would be informed by stakeholder input.

~~17.~~16. DVA TO RECORD IMPLEMENTATION COSTS

The OEB proposes to issue a generic accounting order to establish a deferral account relating to incremental and material EVC Rate implementation costs. The deferral account will allow electricity distributors to track the revenue requirement impacts of their incremental and material costs of implementing the EVC Rate in a deferral account.

Electricity distributors will be expected to track costs at a sufficiently detailed level or category to assist in a prudence review of the costs incurred. The OEB will assess any claimed costs recorded in the account at the time the disposition of the account balances is requested, subject to the applicable disposition criteria including materiality.

~~18.~~17. REPORTING REQUIREMENTS

The OEB will establish a new Reporting and Record-keeping Requirement (RRR) related to the EVC Rate.

Specifically, the OEB will require electricity distributors to record information on the hourly kW demand of each of its participating EVC Rate customers by facility or metered service. The information would assist with any possible review of the EVC Rate and may support EVC Rate customization that electricity distributors might propose in the future. The OEB will work with electricity distributors to establish a template for recording this information and to ensure confidentiality as appropriate.

The OEB may also ask for the following information from electricity distributors from time to time, but will not establish a new RRR related to it:

a. Participant count:
- Number of participating customers in the EVC Rate

b. Participant ~~attributes~~demand:
- Total monthly demand (MW and MWh) of participating customers in the EVC Rate

c. Participant attributes:

- Chargers: number and capacity of chargers that each participating EVC Rate customer has by type (DCFC, Level 2, other)
- DERs: Total installed capacity and fuel type of any DER that a participating customer has behind the EVC Rate meter.

Electricity distributors should be prepared to provide this information to the OEB when asked for it by the OEB.

The OEB will work with stakeholders to establish a template for recording the information in item "c" above on the opt-in forms that customers submit to electricity distributors.

~~19.~~18. FURTHER INFORMATION

- Sample opt-in form to be developed.

APPENDIX A

Standard Conditions of Approval for Distribution Rate Orders under Section 78 of the *Ontario Energy Board Act, 1998*

Optional Electric Vehicle Charging Electricity Rate (EVC Rate)

Note: These standard conditions will be incorporated by reference into each distributor's rate order, beginning with the 2026 rate year. It is open to a distributor to request modifications to these standard conditions if the distributor believes special circumstances require them.

Distributor to Offer EVC Rate

1. [The Distributor] will provide eligible customers the option to elect to be charged the Retail Transmission Service Rate (RTSR) on the basis of the Electric Vehicle Charging Electricity Rate (EVC Rate) listed in [the Distributor's] Tariff of Rates and Charges for any billing period that begins on or after the effective date of this Rate Order.

Eligibility

2. To be eligible for the EVC Rate, a customer's account must meet the following eligibility requirements:

a. The account must relate to an electric vehicle (EV) charging station with **at least one Direct Current Fast Charger (DCFC)** stall (sometimes referred to as a Level 3 charger). The station may also include lower-level, non-DCFC chargers (e.g., Level 2 chargers). The total capacity of any lower-level, non-DCFC chargers at the station must not exceed the total DCFC charging capacity at the station.

b. At least **90% of the account's total monthly peak demand must relate to electric vehicle charging** (i.e., the DCFC and any lower level, non-DCFC chargers). Auxiliary loads (e.g., for vending

machines, tire inflation or restrooms) may not exceed 10% of the total monthly peak demand.

c. The account must have a **monthly peak demand that is equal to or greater than 50 kW but less than 5,000 kW**.

d. The account must have ~~an **annual**~~or be reasonably expected to have a **12-month average** **load factor equal to or less than 20%**. The ~~annual~~12-month average load factor must be calculated using the following formula:

$$\sim\sim Load\ Factor_{year} = \frac{Electricity\ Consumed\ (kWh)_{year}}{Maximum\ Demand\ (kW)_{year} \times Number\ of\ Hours_{year}}\sim\sim$$

$$\text{12-month average load factor} = \frac{\sum_{i=1}^{n} Load\ Factor_i}{n}$$

Where:
$Load\ Factor_i$ is the load factor for the $i-th$ month
n is the number of months

The load factor for each month in the formula above is to be calculated using the following formula:

$$Load\ Factor_{\ month} = \frac{Electricity\ Consumed\ (kWh)_{month}}{Maximum\ Demand(kW)_{month} \times Number\ of\ Hours_{month}}$$

e. **Charging stations that primarily serve commercial and/or public sector EV fleets are not eligible** for the EVC Rate.

f. If there are any distributed energy resources (DERs) behind the account's meter, the **total DER nameplate capacity may not exceed the total annual peak demand of the charging station**.

Opting In to the EVC Rate

3. [The Distributor] must make an EVC Rate opt-in form available to eligible customers. The form must be signed by an individual legally authorized by the customer to sign the form on the customer's behalf~~ and must specify that the customer expects the account to meet the eligibility requirements for the EVC Rate for the following 12 months.~~.

4. A customer may submit the opt-in form at any time.

5. Where [the Distributor] receives an opt-in form that is ~~not incomplete or otherwise deficient~~complete, [the Distributor] must begin charging the customer the EVC Rate at the beginning of the next billing period or as soon as reasonably practicable thereafter.

6. To determine a customer's eligibility, [the Distributor] may rely on the form provided by the customer and any other information requested by [the Distributor].

~~7. A customer's eligibility is valid for 12 months from the beginning of the first billing period in which the customer is charged the EVC Rate. To remain on the EVC Rate beyond that 12-month period, the customer must submit a new opt-in form.~~

Removing a Customer from the EVC Rate

~~8.~~7. A customer may opt out of the EVC Rate at any time by providing written notice to [the Distributor].~~ Upon receiving such notice, [the Distributor] must cease charging the customer the EVC Rate (and instead charge the regular RTSR) at the beginning of the next billing period or as soon as reasonably practicable thereafter.~~

8. If a customer ceases to meet the eligibility requirements, the customer must provide written notice to [the Distributor] no later than 30 days after the change.

9. Upon receiving notice under paragraphs [7] or [8], or if at any time [the Distributor] otherwise becomes aware that the customer no longer meets the eligibility requirements, [the Distributor] must cease charging the customer the EVC Rate (and instead charge the regular RTSR) at the

beginning of the next billing period or as soon as reasonably practicable thereafter.

10. If at any time [the Distributor] determines that the customer deliberately or recklessly provided false information concerning its eligibility in its opt-in form or in response to any other information requested by [the Distributor], or deliberately or recklessly failed to notify the distributor within 30 days of ceasing to meet the eligibility requirements, [the Distributor] must rebill the customer for the difference between the EVC Rate that was charged and the RTSR that should have been charged, plus interest equal to the prime rate charged by [the Distributor's ~~bank].]~~ bank, in accordance with section 7.7 of the Retail Settlement Code.