



nationalgrid

# EV Phase-In Rate Guide

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## Table of Contents

1. Introduction .....	3
a) What is the EV Phase-In Rate? .....	3
b) Why Enroll in the EV Phase-In Rate? .....	3
c) How much will customers save on the EV Phase-In Rate? .....	3
d) What is a Demand Charge?.....	3
e) How to Apply.....	3
2. Eligibility .....	4
3. Meters .....	4
4. EV Phase-In Rate Impact to Bill .....	4
a. Demand Charge under EV Phase-In Rate.....	4
b. Time-Of-Use Energy Charge under EV Phase-In Rate.....	4
c. Time-Of-Use Periods .....	4
5. EV PIR Tier Calculation.....	5
a. How to Estimate Demand Tier .....	6
6. Customer Bill Example .....	6
7. Rate Tables .....	7

## **1. Introduction**

### **a) What is the EV Phase-In Rate?**

The Electric Vehicle Phase-In Rate (EV PIR) is a new commercial electric rate available to help offset demand charges. EV PIR is available on electric accounts with EV charging that are on a demand rate (SC-2D, SC-3, SC-3A) with certain load factors. It replaces standard demand charges with a combination of reduced demand charges and offsetting time-of-use (TOU) energy charges.

### **b) Why enroll in the EV Phase-In Rate?**

The EV PIR helps customers save money as they build up EV charging usage at their site. Medium-to-large commercial customers are often billed on demand rates where the largest bill component is often the Distribution Delivery Demand Charge, which is based on peak demand (kW) in the billing period. New EV charging sites may have a low load factor, meaning they have high demand (kW) during the billing period but don't experience that demand very often. This can lead to higher costs relative to the amount of energy (kWh) used. The EV Phase-In Rate is designed to offer cost relief for customers as they grow their EV charger use over time. The EV Phase-In Rate utilizes four Demand Charge tiers based on load factor where customers will gradually move from mostly time-of-use energy charges to fully demand-based charges for their Distribution Delivery Demand Charge. The other components of the bill retain the same structure as all other rates.

### **c) How much will customers save on the EV Phase-In Rate?**

National Grid estimated that most customers will see a 15% to 45% savings by switching to the EV Phase-In Rate from an otherwise-applicable service rate. This is estimated as the difference between the demand charge and TOU components of an EV Phase-In Rate bill against the corresponding demand charge component of the otherwise-applicable general service bill. Cost savings will vary depending on rate class, EV charging utilization, the time-of-day charging is occurring, and impacts from other on-site electrical demand. More details on exactly how the bill is impacted are below.

### **d) What is a Demand Charge?**

The distribution delivery charges on an electric bill are designed to recover the utility's transmission and distribution costs (amongst other costs). The demand on a customer bill uses the customer's highest (peak) measured demand over any 15-minute interval during the billing period. The demand charge rate is displayed as dollars per kW (\$/kW) and is multiplied by the measured demand for the period to get the distribution delivery demand charge. In the example bill below, the peak demand was 411 kW, and the demand charge rate was \$13.08 / kW, so the total distribution delivery demand charge for that month was  $411 \text{ kW} \times \$13.08 \text{ per kW} = \$5,382$ .

Demand charge components change from month to month. The demand charge rate varies based on variations in the utility's distribution costs, and the peak demand can change dramatically for a customer site depending on the peak power demand of the EV chargers on site and/or other site loads during that month. This can lead to variation in a customer's total electricity costs from month to month or season to season.

### **e) How to apply**

Stay tuned for the application portal to become live. Want an email when the portal becomes live? Email the National Grid EV Team at [EVNationalGridUNY@nationalgrid.com](mailto:EVNationalGridUNY@nationalgrid.com)

## 2. Eligibility

To be eligible for the EV Phase-In Rate, the customer must be:

- A commercial electric customer of National Grid in New York State
- Being billed on a demand-based rate (SC-2D, SC-3, SC-3A)
- Customer must have on-site EV charging, with a charging ratio of 50% or greater
  - Charging Ratio: Fraction of max site load that is EV Charging

$$\text{Charging Ratio} = \frac{\text{Nameplate kW of chargers or load management limit}}{\text{Nameplate kW of all onsite equipment or load limit}}$$

## 3. Meters

To participate in the EV Phase-In Rate the electric service associated with the account must have a meter that can measure both demand and interval energy usage. If a meter change is required, the standard fee for acquiring this meter will be waived for participating customers. If needed, the meter change will be scheduled as part of the EV PIR application and enrollment process. Note that meter change outs can take roughly four weeks to complete.

## 4. EV Phase-In Rate Impact to Bill

The EV Phase-In Rate will only change the Demand line item of the Delivery Services section of the bill. See the example bill on page 6, with the Demand line highlighted in yellow. The Customer Charge, relevant delivery surcharges, tax rate, Supply Services<sup>1</sup>, and Other Charges will all be unchanged from the otherwise-applicable service rate.

In the EV Phase-In Rate, the Demand Charge will be replaced with a combination of a Demand Charge and a Time-Of-Use (TOU) Energy Charge.

### a. Demand Charge under EV Phase-In Rate

- Demand Charge will be calculated like a standard demand charge, as a rate (\$/kW) multiplied by the peak demand (kW) measured during the billing period.
- EV PIR customers on Tier 1 will have no demand charge, and EV PIR customers on Tiers 2, 3, and 4 will have a demand charge that is reduced from their standard applicable rate (SC-2D, SC-3, SC-3A)

### b. Time-Of-Use Energy Charge under EV Phase-In Rate

- The time-of-use energy charge is applied, in \$/kWh, and varies throughout the day and week.
- The time-of-use energy charge will be calculated as a rate (\$/kWh) multiplied by the energy used (kWh) during the rate's time period.<sup>2</sup>

### c. Time-Of-Use Periods

The rates during super-peak are the highest, followed by on-peak and off-peak rates. Moving energy usage to off-peak hours can provide significant savings for a customer.

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<sup>1</sup> Depending on a customer's service classification and electricity rate, Supply Services may also be an hourly rate. The EV Phase-In-Rate does not change this volumetric Supply Services charge. More details are on specific bills and on the NY Service Rates page at <https://www.nationalgridus.com/upstate-ny-business/Rates/Service-Rates.aspx>.

<sup>2</sup> The time-of-use energy charge is in addition to the Supply Charges (also calculated on a \$ / kWh basis) on a customer's bill – see the example on page 6.

As the demand charge rates increase for higher tiers, the time-of-use energy charge rates will be correspondingly reduced (see rate tables at the end of the document).

**Table 1: EV PIR Time-of-Use Framework**

Rate Time Period	Summer (June to September)	Winter (October to May)
On-Peak	8 a.m. to 3 p.m. on weekdays and 7 p.m. to 10 p.m. on weekdays	8 a.m. to 10 p.m. on weekdays
Off-Peak	10 p.m. to 8 a.m. on weekdays, all weekends and holidays	10 p.m. to 8 a.m. on weekdays, all weekends and holidays
Super-Peak	3 p.m. to 7 p.m. on weekdays	N/A
Holidays are Off-Peak and defined as New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.		

## 5. EV PIR Tier Calculation

Accounts enrolled in the EV PIR will be assigned to a Tier based on their Load Factor as shown in table 2, below. New electric accounts without 12 months of historical data will be put into Tier 1, then recalculated at the next recalculation date (June or December) when the account has at least 6 months of data.

If an account falls out of demand rates (its rate class is switched to SC-2 non-demand) or is recalculated with a load factor above 25%, then the account is placed in the appropriate standard rate. Load factor recalculations will continue for 2 years, bringing the account back into EV PIR if its load factor comes back below 25% or it is switched back to a demand rate.

**Table 2: EV PIR Tiers**

Tier	Load Factor
Tier 1	$\leq 10\%$
Tier 2	$>10\% \text{ and } \leq 15\%$
Tier 3	$>15\% \text{ and } \leq 20\%$
Tier 4	$>20\% \text{ and } \leq 25\%$

An account's Load Factor and EV PIR tier is recalculated every June and December based on the last 12 months of activity.

Load Factor is calculated using the formulas below.

If the site is separately metered (the only load is EV chargers):

$$\text{Load Factor} = \frac{\text{Total kWh used in the 12-month period}}{[\text{Nameplate kW of chargers or load management limit}] \times [\text{hours in 12-month period}]}$$

If the site is not separately metered (there is non-EV charger load on the account):

$$\text{Load Factor} = \frac{\text{Total kWh used in the 12-month period}}{[\text{maximum demand reading during the 12-month period}] \times [\text{hours in 12-month period}]}$$

### a. How to Estimate Demand Tier

Customers may want to estimate how the EV PIR may impact their specific bill. If available, use historical usage and the design of the additional EV charging site design load.

If creating a new EV charging site, use the site design to determine the denominator. For the numerator, use a forecast for the number of charging sessions in the time period with an estimate of the energy per charging session. Previous National Grid data suggests an appropriate average charging session across many use cases can be between 30 and 50 kWh per session for passenger vehicle charging and can be significantly higher for larger fleet vehicles.

## 6. Customer Bill Example

Below is an example of how a customer's bill may change on the EV Phase-In Rate. All the charges from the EV Phase-In Rate would replace the line highlighted in yellow on the sample bill, which represents the customer's demand charge.

<b>DETAIL OF CURRENT CHARGES</b>		
<b>Delivery Services</b>		
Metered Usage	<b>Energy</b> 61785 kWh	<b>Demand</b> 411.5 kW
Billed Usage	<b>61785 kWh</b>	<b>411.5 kW</b>
METER NUMBER	NEXT SCHEDULED READ DATE ON OR ABOUT Jun 18	
SERVICE PERIOD	Apr 16 - May 14	NUMBER OF DAYS IN PERIOD 29 METERING TYPE Secondary
RATE	Electric SC3	VOLTAGE DELIVERY LEVEL 0 - 2.2 kv
TRANSFORMER OWNERSHIP		
Customer		699.71
<b>Demand</b>	<b>13.07896549 x 411.5 kW</b>	<b>5,382.01</b>
SBC	0.007485 x 61785 kWh	462.46
Legacy Transition Chrg	0.002079 x 61785 kWh	128.45
Transmission Rev Adj	-0.0031 x 61785 kWh	-191.53
RDM	-0.08 x 411.5 kW	-32.92
Sales Tax	8.75 %	564.18
<b>Total Delivery Services</b>		<b>\$ 7,012.36</b>
<b>Supply Services</b>		
SUPPLIER	National Grid	
Hourly Electricity Supply		2,345.31
Merchant Function	0.00040314 x 61785 kWh	24.91
ESRM	0.010031 x 61785 kWh	619.77
Capacity Tag Charge	4.99256 x 167.86 kW	838.05
Capacity Reconciliation	0.24742 x 167.86 kW	41.53
Sales Tax	8.75 %	338.59
<b>Total Supply Services</b>		<b>\$ 4,208.16</b>
<b>Other Charges/Adjustments</b>		
Paperless Billing Credit		-0.41
<b>Total Other Charges/Adjustments</b>		<b>-\$ 0.41</b>

## 7. Rate Tables

Below is a table of sample rates to compare the differences between charges on a general service rate and the EV Phase-In Rate. Other than the Demand Charge Line Item, all other components of the bill are unchanged and applied as if the account was in the normally applicable general service class (i.e., SC-2D, SC-3, SC-3A).

The rates below are illustrative only and are updated monthly on customer bills. The tables below are as of July, 2025. These rates apply only to the Demand Charge Line in the example bill – the other components of the bill (the Customer Charge, relevant delivery surcharges, tax rate, Supply Services, and Other Charges) are not shown below, and vary from month to month.

Note that the rates displayed here are sample rates for comparison between general service rates and the EV Phase-In Rate. For additional rate information and current rates visit:

<https://www.nationalgridus.com/upstate-ny-business/Rates/Service-Rates.aspx>.

### *Small General SC-2D (SC-2 Demand)*

**Customers whose monthly demand is less than 100 kW and use greater than 2,000 kWh in each of four consecutive months.**

	SC-2D	EV Phase-In Rate			
Charge	Standard	Tier 1	Tier 2	Tier 3	Tier 4
Demand (per kW)	\$16.99	\$ -	\$4.25	\$8.50	\$12.74
On-Peak Energy (per kWh)	\$ -	\$0.07420	\$0.05565	\$0.03710	\$0.01855
Off-Peak Energy (per kWh)	\$ -	\$0.03710	\$0.02783	\$0.01855	\$0.00928
Super-Peak Energy (per kWh)	\$ -	\$0.11131	\$0.08348	\$0.05565	\$0.02783

### *Large General SC-3 Secondary*

**Customers whose monthly demand is greater than 100 kW in each of the previous 12 months and take service up to 2.2 kV**

	SC-3 Sec	EV Phase-In Rate			
Charge	Standard	Tier 1	Tier 2	Tier 3	Tier 4
Demand (per kW)	\$14.28	\$ -	\$3.57	\$7.14	\$10.71
On-Peak Energy (per kWh)	\$ -	\$0.04805	\$0.03604	\$0.02403	\$0.01201
Off-Peak Energy (per kWh)	\$ -	\$0.02403	\$0.01802	\$0.01201	\$0.00601
Super-Peak Energy (per kWh)	\$ -	\$0.07208	\$0.05406	\$0.03604	\$0.01802

*Large General SC-3 Primary*

**Customers whose monthly demand is greater than 100 kW in each of the previous 12 months and take service between 2.2 and 15 kV**

	SC-3 Primary	EV Phase-In Rate			
Charge	Standard	Tier 1	Tier 2	Tier 3	Tier 4
Demand (per kW)	\$12.88	\$ -	\$3.22	\$6.44	\$9.66
On-Peak Energy (per kWh)	\$ -	\$0.03984	\$0.02988	\$0.01992	\$0.00996
Off-Peak Energy (per kWh)	\$ -	\$0.01992	\$0.01494	\$0.00996	\$0.00498
Super-Peak Energy (per kWh)	\$ -	\$0.05976	\$0.04482	\$0.02988	\$0.01494

*Large General SC-3 Sub-T or Transmission*

**Customers whose monthly demand is greater than 100 kW in each of the previous 12 months and take service over 22 kV**

	SC-3 SubT/Trans	EV Phase-In Rate			
Charge	Standard	Tier 1	Tier 2	Tier 3	Tier 4
Demand (per kW)	\$4.07	\$ -	\$1.02	\$2.04	\$3.05
On-Peak Energy (per kWh)	\$ -	\$0.01257	\$0.00943	\$0.00629	\$0.00314
Off-Peak Energy (per kWh)	\$ -	\$0.00629	\$0.00472	\$0.00314	\$0.00157
Super-Peak Energy (per kWh)	\$ -	\$0.01886	\$0.01415	\$0.00943	\$0.00472

*Large General, TOU SC-3A Secondary or Primary*

**Customers whose monthly demand is greater than 2,000 kW in six consecutive months of the previous 12 months and take service up to 2.2 kV (Secondary) or between 2.2 and 15 kV (Primary)**

	SC-3A Sec/Pri	EV Phase-In Rate			
Charge	Standard	Tier 1	Tier 2	Tier 3	Tier 4
Demand (per kW)	\$14.07	\$ -	\$3.52	\$7.04	\$10.55
On-Peak Energy (per kWh)	\$ -	\$0.04033	\$0.03025	\$0.02017	\$0.01008
Off-Peak Energy (per kWh)	\$ -	\$0.02017	\$0.01512	\$0.01008	\$0.00504
Super-Peak Energy (per kWh)	\$ -	\$0.06050	\$0.04537	\$0.03025	\$0.01512

*Large General, TOU SC-3A Sub-Transmission*

**Customers whose monthly demand is greater than 2,000 kW in six consecutive months of the previous 12 months and take service between 22 and 50 kV**

	SC-3A SubT	EV Phase-In Rate			
Charge	Standard	Tier 1	Tier 2	Tier 3	Tier 4
Demand (per kW)	\$4.97	\$ -	\$1.24	\$2.49	\$3.73
On-Peak Energy (per kWh)	\$ -	\$0.01329	\$0.00997	\$0.00664	\$0.00332
Off-Peak Energy (per kWh)	\$ -	\$0.00664	\$0.00498	\$0.00332	\$0.00166
Super-Peak Energy (per kWh)	\$ -	\$0.01993	\$0.01495	\$0.00997	\$0.00498

*Large General, TOU SC-3A Transmission*

**Customers whose monthly demand is greater than 2,000 kW in six consecutive months of the previous 12 months and take service over 60 kV**

	SC-3A Trans	EV Phase-In Rate			
Charge	Standard	Tier 1	Tier 2	Tier 3	Tier 4
Demand (per kW)	\$4.36	\$ -	\$1.09	\$2.18	\$3.27
On-Peak Energy (per kWh)	\$ -	\$0.01194	\$0.00895	\$0.00597	\$0.00298
Off-Peak Energy (per kWh)	\$ -	\$0.00597	\$0.00448	\$0.00298	\$0.00149
Super-Peak Energy (per kWh)	\$ -	\$0.01790	\$0.01343	\$0.00895	\$0.00448