



BANGALORE ELECTRICITY SUPPLY COMPANY LIMITED

(Wholly Owned by Government of Karnataka)

BESCOM

No.: BESCOM/BC-53/CGM(OP)/DGM(EV)/2023-24/ 311

Encl:



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FAQs on EVCS

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1. Does Charging of batteries of electric vehicle through charging station require any kind of licence?

Charging of batteries of electric vehicles through charging station does not require any licence under the provisions of the Electricity Act, 2003.

2. Are there any standard guidelines defined for Electric Vehicle Charging infrastructure?

Yes, the ministry of Power has defined a standard guideline for Electric Vehicle Charging Infrastructure (EVCI). The same may be downloaded from Ministry of Power, GoI website.

3. What is an Electric Vehicle Supply Equipment (EVSE)?

As defined in clause 2.1 of the Amendments in Model Building Bye-Laws for EV Charging Infrastructure (EVCI), an EVSE is defined as follows:

2.1 Electric Vehicle Supply Equipment (EVSE):

An EVSE is a wall mounted box that supplies electric energy for recharging of electric vehicle batteries. Also EVSEs have a safety lock-out feature that does not allow current to flow from the device until the plug is physically inserted into the car.

EVSEs can be customized with added features like:

- Authentication
- Integrated payment gateways
- Software for remote monitoring.

4. What is Private Charging?

As per clause 2.2 of the Amendments in Model Building Bye-Laws for EV Charging Infrastructure (EVCI), **Private Charging** is defined as follows - Charging batteries of privately owned cars through domestic charging points. Billing is mostly part of home/domestic metering.

5. What is AC "Slow Charging"?

The home private chargers are generally used with 230V/15A single phase plug which can deliver a maximum of up to about 2.5KW of power. The EVSE supplies AC

current to the vehicle's on-board charger which in turn converts the AC power to DC allowing the battery to be charged.

6. What is Public Charging?

For charging outside the home premises, electric power needs to be billed and payment needs to be collected. The power drawn by these chargers may need to be managed from time to time.

7. Can EV Owners charge their Electric Vehicles at their residence/offices using their existing electricity connections?

As per **clause 1.0** of the Revised and consolidated EVCI guidelines published by Ministry of Power, Owners may charge their Electric Vehicles at their residence/offices using their existing electricity connections.

Scenario-1: For Individual / self-use.

As per M.O.P guidelines, Owners may charge their Electric Vehicles at their residence/offices using their existing electricity connections.

As per 10.4.1 of Amendments in Model Building Bye-Laws for EV Charging Infrastructure (EVCI), The charging infrastructure installed by a home owner shall be construed as a Private CI meant for self-use (non-commercial basis).

10.4.1 Residential Buildings (plotted house)

Table 1: Charging Infrastructure requirements for individual house/ self-use

Building Type	Plotted House
Ownership of Station	Private (Owner)
Connection and Metering	Domestic meter
Type of Charger	Slow chargers as per owner's specific requirements
Modes of Charging	AC (Single charging gun)
Norms of Provisions	Min. 1 SC and additional provisions as per the owner individual.

Scenario-2: For All other buildings (including Group Housing)

Any PCS installed at Public/Private areas or building premises of any category that caters to commercial mode of charging of EVs shall be deemed as a Public Charging Station and shall have to install the minimum requirements of chargers as specified in the Ministry of Power Guidelines.

Please Refer to **Clause 10.4.2** of Amendments in Model Building Bye-Laws for EV Charging **Infrastructure**.

Table 2: Charging Infrastructure requirements for PCS (commercial use)

Building Type	Any building type			
Ownership of Station	Service provider			
Connection and Metering	Commercial Metering and Payment			
Types of Charger	as per min. requirements specified in MoP Guidelines (refer Annexure IV)			
Additional chargers	PCS service providers shall install additional number of kiosk/chargers beyond the minimum specified requirements to meet the ratio of charging points as prescribed below (by the type of vehicles).			
Norms of Provisions for charging points	4Ws 1 SC - each 3 EVs 1 FC - each 10EVs	3Ws 1 SC - each 2 EVs	2Ws 1 SC - each 2 EVs	PV (Buses) 1 FC - each 10 EVs

Please refer to Amendments in Model Building Bye-Laws for EV Charging Infrastructure (EVCI) for more details.

8. What is the Tariff applicable for domestic charging?

Clause 7.2 of Revised and Consolidated EVCI guidelines published by Ministry of Power states that the tariff applicable for domestic consumption shall be applicable for domestic charging.

9. Is there any special tariff defined for EV Charging Stations ?

Clause 7.3 of Revised and Consolidated EVCI guidelines published by Ministry of Power states as follows - "The separate metering arrangement shall be made for PCS so that consumption may be recorded and billed as per applicable tariff for EV charging stations."

As per Retail Supply Tariff for FY24 approved by KERC in Tariff Order 2023 Dated: 12.05.2023 for BESCOM, the power supply may be availed under LT6 (c) tariff for EV Charging Stations.

10. What is the Rate Schedule of LT-6(c) tariff?

The tariff details are as tabulated below:

Tariff	Category Description	Load	F.C Rs.	Slab	E.C (Ps./kWh)
LT 6 (c)	E vehicle charging	Per KW up to 50 KW	70/-	All Units	450/-
		Every addl. KW above 50 KW	170/-		
		For HT Installations (per KVA)	200/-		

Please refer to K.E.R.C Tariff order 2024 for more details.

11. Is No Objection Certificate (N.O.C) required from BESCOM for installing Charging Points in Individual Parking lots of Apartment?

The installation of charging points in individual parking lots of apartment is at the discretion of consumers. No N.O.C required from BESCOM in this regard.

12. Is it mandatory to avail additional load for Domestic charging points for Individual house / self-use?

Scenario-1: If the sanctioned load meets the load demand (including charging of EV), then no load enhancement is required.

Scenario-2: If the sanctioned load is lesser than the load demand, then load enhancement may be obtained and the consumer may approach the concerned Sub-Divisional Officer (SDO) of BESCOM for further needful.

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Different sub-scenarios under this category is as tabulated below:

Sl. No	Sanctioned Load (KW)	Additional Load required	Total Load (Including EV Charging requirement)	Remarks
1	Example: 7 KW (3 Phase)	Example : 3.3 KW	10.3 KW	Application may be submitted to concerned SDO for load enhancement and NO changes in energy meter type is needed.
2	Example: 15 KW	Example: 3.3 KW	18.3 KW	Application may be submitted to concerned SDO for load enhancement and if total load demand exceeds 18 KW (inclusive of 18 KW), then existing meter shall be replaced with a CT operated energy meter in the premises and additional load may be provided as per the prevailing guidelines of Cos of K.E.R.C.
3	Example: 22 KW	7.2 KW	29. 2 KW	Application may be submitted to concerned SDO for load enhancement and if total load demand exceeds 25 KW or built-up area is more than 500 square meters, then additional load may be availed as per the prevailing guidelines of Cos of K.E.R.C.
4	Example: 32 KW	7.2 KW	39. 2 KW	Application may be submitted to concerned SDO for load enhancement and if total load demand exceeds 35 KW or built up area more than 800 square meters, then additional load may be availed as per the prevailing guidelines of Cos of K.E.R.C.

13. Is it required to submit any documents for availing additional load for Individual charging points for self-use?

The relevant documents as requested by SDO shall be submitted to the concerned SDO along with the application as per the Conditions of Power Supply of K.E.R.C.

14. What is the maximum load that can be obtained under Low Tension (LT) for EV Charging Infrastructure?

As per prevailing norms, the maximum load that can be obtained under LT for the purpose of EV Charging station is 150 KW (inclusive of 150 KW).

15. If existing installation is serviced under HT, is there any provision to avail sub-meter for EV Charging Station?

If existing HT installation is serviced under HT2(a), HT2(b), HT2(c), HT4 tariffs then, sub-meter shall be provided on LT side for the load not exceeding 150 KW and power supply restricted to 150 KW for single installation as per prevailing norms.

16. If the total requested contract demand is more than 150 KW exclusively for EV Charging how should I avail power supply?

If the total load exceeds more than 150 KW exclusively for EV Charging Infrastructure, power supply should be availed on HT Basis and as per prevailing norms.

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Reference Links

1. Clarification on Charging of a battery :
https://powermin.gov.in/sites/default/files/uploads/Clarification_EV.pdf
2. Revised and consolidated EVCI guidelines:
https://powermin.gov.in/sites/default/files/webform/notices/Final_Consolidated_EVCI_Guidelines_January_2022_with_ANNEXURES.pdf
3. Amendments in Model Building Bye-Laws for EV Charging Infrastructure -
[https://mohua.gov.in/upload/whatsnew/5c6e472b20d0aGuidelines%20\(EVCI\).pdf](https://mohua.gov.in/upload/whatsnew/5c6e472b20d0aGuidelines%20(EVCI).pdf)
4. K.E.R.C Tariff order 2024 - <https://bescom.karnataka.gov.in/storage/pdf-files/RA%20section/ElectricityTariff-2024.xlsx>


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