



No.12/2/2018-EV
Government of India
Ministry of Power
Shram Shakti Bhawan, Rafi Marg,

New Delhi, the 14th December, 2018

To,

1. The Secretaries of all the Ministries/Departments of Government of India.
2. The Chief Secretaries of the States/UTs.

Sub: Charging Infrastructure for Electric Vehicles – Guidelines and Standards -reg.

Sir/Madam,

Government of India have undertaken multiple initiatives to promote manufacturing and adoption of electric vehicles in India. With support of the Government, electric vehicles have started penetrating in the Indian market. However, availability of adequate Charging Infrastructure is one of the key requirements for accelerated adoption of electric vehicles in India. It is proposed to encourage this by laying down an enabling framework.

Objectives

- To enable faster adoption of electric vehicles in India by ensuring safe, reliable, accessible and affordable Charging Infrastructure and eco-system
- To promote affordable tariff chargeable from EV owners and Charging Station Operators/Owners
- To generate employment/income opportunities for small entrepreneurs
- To proactively support creation of EV Charging Infrastructure in the initial phase and eventually create market for EV Charging business
- To encourage preparedness of Electrical Distribution System to adopt EV Charging Infrastructure.

In light of the above, it has been decided as follows:

1. Private charging at residences / offices shall be permitted. DISCOMs may facilitate the same.
2. Setting up of Public Charging Stations (PCS) shall be a de-licensed activity and any individual/entity is free to set up public charging stations, provided that, such stations meet the technical as well as performance standards and protocols laid down below as well as any further norms/standards/specifications laid down by Ministry of Power and Central Electricity Authority from time to time.

- 2.1 Any person seeking to set up a Public Charging Station may apply for connectivity and he shall be provided connectivity on priority by the Distribution Company licensee to supply power in the area.
- 2.2 Any Charging Station/ Chain of Charging Stations may also obtain electricity from any generation company through open access.

3. **Public Charging Infrastructure (PCI)- Minimum Requirements:**

- 3.1 Every Public Charging Station (PCS) shall have the following minimum infrastructure:
- i. An exclusive transformer with all related substation equipment including safety appliance.
 - ii. 33/11 KV line/cables with associated equipment including as needed for line termination/metering etc.
 - iii. Appropriate civil works.
 - iv. Adequate space for Charging and entry/exit of vehicles.
 - v. Current international standards that are prevalent and used by most vehicle manufacturers internationally are CCS and CHadeMO. Hence, Public Charging Stations shall have, one or more electric kiosk/boards with installation of all the charger models as follows:

Charger Type	Charger Connectors*	Rated Voltage (V)	No. of Charging Points/No. of Connector guns (CG)
Fast	CCS (min 50 kW)	200-1000	1/1 CG
	CHAdEMO (min 50 kW)	200-1000	1/1 CG
	Type-2 AC (min 22 kW)	380-480	1/1 CG
Slow/Moderate	Bharat DC-001 (15 kW)	72-200	1/1 CG
	Bharat AC-001 (10 kW)	230	3/3 CG of 3.3 kW each

*In addition, any other fast/slow/moderate charger as per approved BIS standards whenever notified.

- vi. The kiosk/board may have options for installation of additional chargers if required.
- vii. The Public Charging Station Providers are free to create Charging Hubs and to install additional number of Kiosk/Chargers in addition to the minimum number of chargers prescribed above.
- viii. Tie up with at least one online Network Service Providers (NSPs) to enable advance remote/online booking of charging slots by EV owners. Such online information to EV owners should also include information regarding location, types and numbers of chargers installed/available etc.
- ix. Share charging station data with appropriate DISCOM and to maintain appropriate protocols as prescribed by such DISCOM for this purpose. CEA shall have access to this database.
- x. Appropriate public amenities.

