

13. Information about the database of Public Charging Stations:

- (1) The Bureau of Energy Efficiency (BEE) has created National online database of all public charging stations across India. This will help EV owners to easily locate nearby Public charging stations.
- (2) Public Charge Point Operators (CPOs) are advised to adopt open communication standards/protocols for data sharing like Unified Energy Interface (UEI), Open Charge Point Protocol (OCPP), Open Charge Point Interface (OCPI) & Open Automated Demand Response (open ADR).

(i) Centralized Platform:

- a. **National Database:** BEE, in collaboration with State Nodal Agencies (SNAs), will maintain a database of public charging stations nationwide.
- b. **Open APIs for third party developers:** BEE will provide open APIs to third party developer for integrating value added services to the National database. Open APIs shall be restricted to non-confidential information.
- c. **Standardized Information:** A common data format using minimal fields will ensure consistent information across all EV charging stations.

(ii) **Simple Registration:** Public Charge Point Operators will register their EV charging stations on the National database using minimal fields.

(iii) **Energy Data Sharing:** Public Charge Point Operators will share annual data on energy sold per EV charger on National database.

(3) Bureau of Energy Efficiency will provide awareness using the EV Yatra Portal.

14. Charging at Office/Commercial buildings

- (1) **New Connection:** Building/Office owner can request for a separate metered connection from Distribution Licensee with a dedicated EV charging tariff. This will be installed within the timelines specified in Electricity (Rights of Consumers) Rules, 2020 as amended from time to time.
- (2) **Existing Connections:** Building/Office owner may use their existing electricity connections to charge employee EVs at the workplace.
- (3) **Increased Load:** If necessary, Building/Office owner can apply to their electricity distribution licensee for a higher power load to accommodate EV charging stations.
- (4) **EV Charger Selection:** In consultation with the distribution licensee, commercial building owners can choose the types and number of workplace EV chargers to install based on employee needs.

17.03.2024

15. Charging at Residence

- (1) **New Connection:** Owners can request for a separate metered connection from Distribution Licensee with a dedicated EV charging tariff. This shall be granted within the timelines specified in Electricity (Rights of Consumers) Rules, 2020 as amended from time to time.
- (2) **Existing Connection:** Owners can use their existing electricity connection to charge their EVs at home.
- (3) **Increased Load:** If EV charging station requires more power than the current sanctioned load, the owner will apply to the distribution licensee for seeking increase in the sanction load.
- (4) **Charging Rates:** Domestic electricity rates will apply to charging EVs at home.

16. Community Charging for Residents

- (1) **New Connection:** Resident Welfare Association, Group Housing Society, an owner of a flat, house in an Association, any other consumer within a GHS, can request for a separate metered connection from Distribution Licensee with a dedicated EV charging tariff. This will be installed within the timelines specified in Electricity (Rights of Consumers) Rules, 2020 as amended from time to time.
- (2) **Group Housing Societies (GHS):** In consultation with the distribution licensee, Residential Welfare Associations (Society) can establish EV charging stations within their premises.
- (3) **Choice of EVChargers:** Residents can decide on the types and number of community EVchargers to be installed.
- (4) **Visitor Charging:** Community stations can be equipped to allow charging for authorized visitor vehicles.
- (5) **Private Charging Points:** Residents can install private EVcharging stations in their designated parking spaces. The Distribution Licensee will ensure electricity supply through the resident's existing meter or a separate sub-meter depending on consumer's choice.
- (6) **Increased Load:** If community EV charging stations requires more power than the current sanctioned load, then GHS will apply to the distribution licensee for seeking increase in the sanctioned load.
- (7) **Community Charging Rates:** GHS will determine the charging fees for community charging based on the applicable electricity tariff and service ceiling limits laid down under these guidelines.

69
17.09.2024

17. Charging Stations for E-Buses

Electricity Connections:

- (1) **Distribution Licensee Connection:** Bus depot operators can apply for electricity connections with their Distribution Licensee, following the process outlined in **ANNEXURE - III** of these guidelines.
- (2) **Open Access Option:** E-Bus depots can also choose to obtain electricity through open access within 15 days of submitting a complete application. This option involves paying a surcharge (not exceeding 20% of the tariff applicable to the category of the consumers seeking open access as per Tariff Policy 2016), transmission charges, and wheeling charges. No additional fees will be applied beyond these.
- (3) State Transport Undertakings may explore potential integration of renewable energy sources (example solar) in bus depots.

Charging Station Equipment for E-Buses:

- (4) **High-Power EV Chargers:** E-Bus depots must install EV chargers with a minimum capacity of 240 kW, complying with Power Level 3 or 4 as defined in **ANNEXURE - I**.
- (5) **Liquid Cooled Cables (Optional):** For depots with e-buses equipped with liquid-cooled batteries (common in some long-range models), appropriate cables for high-speed charging of such batteries can be installed at the EV charging stations, if needed.

18. Implementation of Vehicle to Grid

- (1) EV fleets act as vast electricity storages, flexible loads and decentralised energy resources capable of providing flexibility to support power system operations. V2G may be enabled as per the requirements of respective Distribution Licensee.
- (2) Tariff for electricity under V2G operation will be as determined by the appropriate Electricity Regulatory Commission.
- (3) Public Charge Point Operators may maximise amount of smart charging instead of uncontrolled/unmanaged charging in consultation with aggregators/distribution licensee.
- (4) Public Charge Point Operators may compliment EV charging stations with storages and facilitate bi-directional flow of electricity between grid and electric vehicles.
- (5) Vehicle and EVSE OEMs may explore capabilities of V2G enabled electric vehicles and EV chargers to allow grid services while protecting the vehicle batteries against overcharging and discharging.

62
17-09-2024