GOVERNMENT OF INDIA MINISTRY OF POWER

RAJYA SABHA UNSTARRED QUESTION NO.156 ANSWERED ON 03.02.2025

BATTERY SWAPPING STATIONS NETWORK GUIDELINES

156 SHRI NARAYANA KORAGAPPA:

Will the Minister of **POWER** be pleased to state:

(a) whether there are any strategies in place for the Central Government to collaborate with State Governments to implement battery swapping guidelines and ensure that battery-swapping stations are strategically located across;

(b) if so, the details thereof; and

(c) the manner in which the Ministry envisions the role of public-private partnerships in expanding the battery-swapping infrastructure?

ANSWER

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) & (b): The Ministry of Power has issued "Guidelines for Installation and Operation of Battery Swapping and Charging Stations", vide OM dated 10^{th} January 2025. These guidelines outline the standards and protocols to facilitate development of a nationwide network of Battery Charging Station (BCS) and Battery Swapping Stations (BSS). Key features involving State Governments in implementing these guidelines are:-

(i) A State level Steering Committee chaired by Secretary in-charge of Energy, comprising Secretaries of Transport, Municipal Administration and Urban Development, and other relevant officials, will plan and monitor the implementation of BCS and BSS Infrastructure at the State level.

(ii) Each state will designate aState Nodal Agency (SNA) responsible for coordinating with DISCOMs and the State Electricity Regulatory Commission (SERC) to facilitate electricity connections for BCS and BSS.

(iii) A Central Steering Committee chaired by the Additional Secretary, Ministry of Power including Members from relevant Ministries, State representative, Bureau of Energy Efficiency (BEE), and the Central Electricity Authority (CEA) will periodically review the implementation of the guidelines.

(iv) BEE will work collaboratively with DISCOMs and State Government entities for implementation of the guidelines.

(c): The guidelines emphasize the role of public-private partnerships (PPPs) in expanding the battery swapping infrastructure. Setting up BCS and BSS has been designated as a de-licensed activity, simplifying the process for businesses.

To make the land available at affordable rates, it has been suggested that public land be made available to Government or Public entities on a revenue-sharing model at $\gtrless 1$ per kWh. For private entities, the land may be made available through a competitive bidding process at a floor price of $\gtrless 1$ per kWh. Additionally, public tenders involving government land for the establishment of BCS/BSS have been suggested to be kept technology agnostic. State Governments have been advised to permit round-the-clock operations for BCS and BSS.

Copy of Guidelines is at Annexure A.

ANNEXURE REFERRED IN REPLY TO PART (c) OF UNSTARRED QUESTION NO.156 ANSWERED IN THE RAJYA SABHA ON 03.02.2025 *********

No.12/2/2018-EV Government of India Ministry of Power

> 2nd Floor, 'F' Wing, Nirman Bhawan, New Delhi, the 10th January, 2025

To,

1. The Secretaries of all Ministries/Departments of Government of India

2. The Chief Secretaries of the States/UT's

Subject: Guidelines for Installation and Operation of Battery Swapping and Charging Stations — reg.

Sir/Madam,

Ministry of Power has issued the Guidelines for Installation and Operation of Electric Vehicle Charging Infrastructure-2024. These guidelines are aimed at meeting the requirements of Electric vehicles (EV)with integrated batteries. The alternative method of powering electric vehicles is through swappable batteries which can be charged separately at dedicated battery charging stations. Battery swapping is a method of quickly replacing an EV's fully or partially discharged battery with a charged one. The following guidelines govern such battery charging systems:

1. **Short Title** These guidelines shall be called "Guidelines for Installation and Operation of Battery Swapping and Battery Charging Stations".

2. **Applicability.** These guidelines shall be applicable to swappable battery providers, and owners and operators of battery charging stations and battery swapping stations located anywhere.

3. **Objectives:** Main objectives of these guidelines are as follows:

i) To promote swapping of batteries as an alternate method of powering EVs.

ii) To promote battery as a service.

iii) To develop a battery swapping ecosystem.

4. **Definitions**:

1. **Battery as a Service (BaaS)** means a business model where manufacturer of battery swapping equipment or a third-party provider owns and manages swappable electric vehicle (EV) batteries, leasing or renting them to EV owners or fleet operators.

2. **Battery-swapping** means a method of quickly replacing an EV's fully or partially discharged swappable battery with a charged battery.

3. **Battery swapping ecosystem** means a network of infrastructure and services that enables quick and efficient exchange of swappable EV batteries.

4. **Battery Charging Station (BCS)** means a facility where fully or partially discharged swappable EV batteries are electrically recharged.

Note: Captive BCS are charging stations that are exclusively accessible to a specific group of users such as fleet operators, EV owners associated with a particular organization, community or building, and are not open to the public.

5. **Battery Swapping Station (BSS)** means a facility where fully or partially discharged swappable batteries are electrically charged and quickly replaced with recharged batteries.

Note. Captive BSS are swapping stations that are exclusively accessible to a specific group of users such as fleet operators, EV owners associated with a particular organization, community or building, and are not open to the public.

6. **Battery to grid(B2G)** refers to a system where swappable batteries, typically from electric vehicles (EVs) or Battery Swapping Station(BSS), can not only store energy for use but also supply electricity back to the power grid when needed.

7. **Battery Provider** refers to any entity which provides swappable EV batteries or BaaS to EV owners.

8. **Swappable battery** means a modular battery designed for use in EVs that can be quickly and easily detached and replaced with another battery, to extend the vehicle range and allow for efficient recharge of the depleted battery.

Note: In case of any conflict, definitions in respective Acts, Rules & Regulation and guidelines as amended from time to time shall prevail.

5. Clauses 5, 6 (except sub-clause 1), 7, 9, 11, sub-clause 5 of clause12, 13 (except sub-clause 2) and20 of the principal guidelines titled "Guidelines for Installation and Operation of Electric Vehicle Charging Infrastructure — 2024", shall also be applicable for Battery Charging Stations, Battery Swapping Stations and Battery Providers.

6. Extant provisions relating to safety shall be applicable to BSSs and BCSs.

7. Owners of BCS or BSS shall be permitted to use an existing electricity connection with or without seeking an increase in the connected load, for charging the swappable batteries.

8. Battery swapping or Battery charging stations may deploy liquid-cooled swappable batteries for larger vehicles such as trucks and buses.

Sd/-

(Under Secretary to GoI)

Copy to:-

As per list of Addressee



No. 12/2/2018-EV (Comp No. 241852) Government of India Ministry of Power

> 2nd Floor, 'F' Wing, Nirman Bhawan, New Delhi, the 10th January, 2025

То

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

Subject: Amendment in Guidelines for Installation and Operation of Electric Vehicle Charging Infrastructure-2024 – reg.

Sir/Madam,

Ministry of Power has issued Guidelines for Installation and Operation of Electric Vehicle Charging Infrastructure-2024 on 17th September, 2024. To provide an alternate facility for powering the Electric Vehicles, separate guidelines on Installation and Operation of Battery Swapping and Charging Stations have been issued. To bring further clarity, Ministry of Power hereby issues the following amendment to the Guidelines for Installation and Operation of Electric Vehicle Charging Infrastructure-2024:

Sub-clause (g) of Clause 4 shall be replaced as below:

g) Electric Vehicle Charging Infrastructure (EVCI) is a network of Electric Vehicle charging stations catering to diverse EV charging requirement and includes components such as EVSE, connection to DISCOM's supply system including electricity meter, Power Management System for energy optimization, energy distribution, grid stability and renewables integration, Communication network to assist data exchange in real time and remotely manage EV charging stations, cables, connectors, RFID tags, software applications, circuit breakers, solar panels (if connected), civil work, smart meter, transformer, etc.

Sub-clause (h) of Clause 4 shall be replaced as below:

h) **Electric Vehicle Charging Station**: An Electric Vehicle Charging Station is a facility for charging Electric Vehicles or swappable EV batteries, with or without supporting upstream infrastructure or amenities.

Following clause shall be inserted after sub-clause (3) of Clause 6:

(4) State Governments may ensure necessary permissions to Electric Vehicle Charging Stations to operate round the clock.

Following sub-clause shall be inserted after sub-clause (b) of Clause 7:

7(c) Government and Public entities should ensure that terms and conditions of bidding carried out for allotment of public land for setting up of EV charging stations are technology agnostic and allow wider participation.

Sub-Clause 2 of Clause 20 shall be replaced as below:

(2) **State Nodal Agencies:** Each state will designate a State Nodal Agency (SNA) responsible for coordinating with DISCOMs and State Electricity Regulatory Commissions (SERC) to facilitate electricity connections for public, community, workplace, and e-bus depot charging stations. State governments have the flexibility to choose their Nodal Agency. The state DISCOMs will be the default option. However, states can also designate State Public Sector Undertakings (SPSU), Urban local bodies (ULBs) or Urban Development Authorities. A state level steering committee chaired by Secretary in-charge of Energy and comprising secretaries of Transport, Municipal Administration and Urban Development, such other members as required shall be constituted to plan and monitor the implementation of EV Charging Infrastructure at the state level.

Yours faithfully,

Sd/-(Saket Kumar Sinha) Under Secretary to the Government of India

No. 12/2/2018-EV (Comp No. 241852) Government of India Ministry of Power

Shram Shakti Bhawan, Rafi Marg, New Delhi, the 17th September, 2024

To,

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

Subject: Guidelines for Installation and Operation of Electric Vehicle Charging Infrastructure-2024 – reg.

Sir/Madam,

Ministry of Power issued "Charging Infrastructure for Electric Vehicles – Guidelines and Standards" in 2018 which were amended from time to time. After careful consideration and suggestions received from various stakeholders, it has been decided that there is a need to bring greater clarity with regards to the applicability of these guidelines to public, semi-public and private charging stations, Power Utilities, Central & State agencies. Accordingly, revised consolidated guidelines titled "Guidelines for Installation and Operation of Electric Vehicle Charging Infrastructure-2024", as mentioned in the subsequent para of these guidelines, are hereby issued.

These guidelines shall supersede all the previous versions issued by Ministry of Power and shall be effective from date of its issuance.

1. Short Title: These guidelines shall be called "Guidelines for Installation and Operation of Electric Vehicle Charging Infrastructure-2024".

2. Applicability: These guidelines shall be applicable to

- (i) Manufacturers, Owners and Operators of EV Charging Infrastructure located
 - **a**) In private parking spaces,
 - **b**) In semi restricted places like office buildings, educational institutions, hospitals, Group Housing Societies, e-bus depots and
 - c) In public places like commercial complexes, railway stations, petrol pumps, airports, metro stations, shopping arcades, municipal parking and
 - **d**) On highways&expressways.

(ii) Power utilities and Central and State agencies.

3. Objectives:

- **a)** To drive EV adoption by making charging stationssafe, reliable and accessible.
- **b)** To develop a robust charging network across theNation initially prioritising the essential locations.
- **c)** To increase the viability of charging stations by facilitating public land at promotional rates, expeditious approval of electricity connections and standardising pricing of power supply.
- **d)** To encourage charging of EVs during solar hours.
- e) To prepare the electricity grid to handle the increased demand from EV charging.

4. Definitions:

- **a)** Captive Charging Station (CCS) means an exclusive facility for charging of EVs owned or controlled by the owner of charging station or governed by him under a business agreement. Example: Government Departments, Corporate entities, Bus Depots, fleet owners etc.
- **b)** Central Nodal Agency (CNA) means a Central Agency for the rollout of Public EV Charging Infrastructure across the country.
- **c)** Charge Point Operator (CPO) means any individual/entity operating the EV Charging Station.
- **d)** Charger Management System (CMS) means a system used by fleet operators, charge point operators, and others, to monitor and optimize electric vehicle charging operations.
- e) Community Charging Station means semi-public charging station installed at Group Housing Societies or other residential accommodations where only residents or authorized visitors can get their EV charged.
- **f) Electric Vehicle** means any vehicle propelled, partly or wholly, by an electric motor drawing current from a rechargeable storage battery, or other portable energy storage devices or other self-generating electric source, as defined by Central Electricity Authority (CEA) in Measures relating to Safety and Electric Supply" regulations 2023, as amended from time to time.
- **g)** Electric Vehicle Charging Infrastructure (EVCI) is a network of charging stations catering to diverse EV charging requirement and includes components such as EVSE, connection to DISCOM's supply system including electricity meter, Power Management System for energy optimization, energy distribution, grid stability and renewables integration, Communication network to assist data exchange in real time and remotely manage EV charging stations, cables, connectors, RFID tags, software applications, circuit breakers, solar panels (if connected), civil work, smart meter, transformer, etc.
- **h)** Electric Vehicle Charging Station: Premises having any one or more EVSEs or combination thereof, with or without supporting upstream infrastructureoramenities as specified in subsequent sections of these guidelines.
- i) Electric Vehicle Supply Equipment (EVSE) means an element in Electric Vehicle Charging Infrastructure (EVCI) that supplies electric energy for recharging the battery of electric vehicles as defined by Central Electricity Authority (CEA) in Measures relating to Safety and Electric Supply" regulations 2023, as amended from time to time.
- **j) Group Housing Society (GHS)** means a building unit constructed or to be constructed with one or more floors having more than two dwelling units having common service facilities where land is owned jointly (as in the case of co-operative societies or the public agencies, such as local authorities or housing boards, etc.) and the construction is undertaken by one Agency, as defined in Model Building Bye-Laws 2016, as amended from time to time.
- **k)** Network Service Provider (NSP) with respect to any electronic record is an intermediary which receives, stores or transmits or provides any service with respect to that record. This includes telecom service providers, internet service providers, webhosting service providers, search engines, online payment sites, online-auction sites, online-market places and cyber cafes.
- **I) Open Access** means non-discriminatory provision for use of transmission lines or distribution system or associated facilities with such lines or systems by any licensee or consumer or a person engaged in generation in accordance with the regulations specified by the Appropriate Commission.

- **m)** Open Automated Demand Response (Open ADR) is an open, highly secure, and two-way information exchange model and Smart Grid standard to standardize, automate, and simplify Demand Response (DR) and Distributed Energy Resources (DER) to enable utilities and aggregators to cost-effectively manage growing energy demand & decentralized energy production, and customers to control their energy future.
- **n) Open Charge Point Interface (OCPI)** means a communication protocol that supports information exchange between multiple network service providers (NSPs) and charge point operators to enable automated roaming between public charging networks for the ease of EV charging.
- **o) Open Charge Point Protocol (OCPP)** means an open protocol used for communication between EVSE and the Charger Management system.
- **p) Public Charging Station (PCS)** means EV charging station where any electric vehicle can get its battery recharged, without access restriction.
- **q) Resident Welfare Association(RWA)**means an association comprising all the property owners within a Co-operative Group Housing Society, Multi storied Building, Residential Colony, or a similar body registered with the State Government, as defined in Electricity (Rights of Consumers) Rules, 2020as amended from time to time.
- **r)** Smart Charging is a way to optimize the charging process according to distribution grid constraints, utilization of renewable energy sources and customer preference. This helps reducing transformer overloading requirement for enhancing capability of grid, mitigating voltage fluctuation in grids having high penetration of renewable energy sources. Smart charging includes bi-directional vehicle to grid integration.
- **s)** State Nodal Agency (SNA) means an agency designated by State Government for rollout of Public EV Charging Infrastructure in the state.
- t) Unified Energy Interface (UEI) is a standard and interoperable network based on open source Beckn Protocol, which facilitates interoperability among charging networks, flexible demand response, grid services and cloud storage.
- **u)** Vehicle to Grid (V2G) means a set of technologies which facilitates drawing unused electrical energy from electric vehicles into the grid. V2G can supply electricity to the grid during peak hours. V2G can enable electric vehicles toact as extra power source when weather-dependent renewable energy sources are not available.

Note: In case of any conflict, definitions in respective Acts, Rules & Regulation as amended from time to time shall prevail.

5. General Requirements

- (1) Setting up and operation of EV Charging Stations is a de-licensed activity and any entity is free to establish EV Charging Infrastructure by adhering to these guidelines.
- (2) Charge Point Operators may apply for an electricity connection for their EV charging stations. The Distribution Licensee must provide the required connection according to the following timelines specified under Electricity (Rights of Consumers) Rules, 2020 as amended from time to time:

Sl. No.	Агеа Туре	Maximum time period within which distribution licensee shall provide new connection	
1.	Metropolitan Area	3 days	
2.	Other Municipal Area	7 days	
3.	Rural Area	15 days	
4.	Rural Area having hilly terrain	30 days	

	If extension of distribution mains, or	
5.	commissioning of new substations is	90 days
	required	

In case of delay in supplying electricity within the period specified by the appropriate Commission, distribution licensee shall be liable for a penalty as may be determined by the Commission as per Electricity (Rights of Consumers) Rules, 2020 as amended from time to time.

To expedite the process, Distribution Licensees must establish a customer-friendly online single window clearance system, following the Standard Operating Procedure and application form outlined in **ANNEXURE - III.**

- (3) Appropriate Electricity Regulatory Commission must pre-specify connection charges up to 150 kW as perrule 4 (13) of Electricity (Rights of Consumers) Rules, 2020 as amended from time to time.Distribution Licensee must provide Low Tension (LT) connection up to 150 kW for charging stations provided, application for a separate LT electricity connection is made for EV charging station.
- (4) State Nodal Agencies and Municipal Commissioners will conduct a yearly assessment of potential EV charging demand across their geographical area to ensure strategic placement of EV Charging Stations. State Nodal Agency (SNA) shall publish this data for benefit of Charge Point Operator.
- (5) The Ministry of Housing and Urban Affairs (MoHUA) has amended relevant sections of the Model Building Bye-laws (2016) and the Urban and Regional Development Plans Formulation and Implementation Guidelines (URDPFI — 2014) to support the growth of electric mobility. These amendments take into account evolving charging technologies, EVs with different charging needs and have a 20-year vision. Local Development Authorities are encouraged to adopt these revisions and ensure adequate space is allocated for establishing EV charging stations in new buildings and urban development plans.
- (6) Charging Station owner may adopt newer technologies for charging of EVs such as induction charging, pantograph etc. compliant with safety and connectivity requirements stipulated by CEA and BIS from time to time.
- (7) Charging stations may also integrate solar energy for their stations.

6. Safety, Functionality and User Experience

- (1) All Electric Vehicle Supply Equipment shall comply with BIS standards indicated at **ANNEXURE I**.
- (2) Safety & Connectivity of Electric Vehicle Supply Equipment requirements shall be as specified in CEA "Measures relating to Safety and Electric Supply" Regulations 2023 as amended from time to time dnaCEA "Technical Standards for Connectivity of the Distributed Generation Resources" Regulation (2013) as amended from time to time.
- (3) Functionality and User Experience requirements specified in ANNEXURE II of these guidelines.

7. Provision of public land at promotional rates for Public Charging Stations

Initially, Public Charging Stations (PCS) may experience low usage due to the gradual increase in electric vehicles on the road. The combination of high land rent and uncertain future revenue streams can make setting up PCS financially unattractive. Therefore, the following provisions are made to lower the land cost.

a. Government/Public entities shall offer land for installation of PCS at a subsidized rate to Government/Public entity. This will be a revenue-sharing model where the land-owning agency receives ₹1 per kWh of electricity used for charging at the station, to be paid quarterly. The revenue sharing agreement may be initially entered by parties

for a period of 10 years. A model revenue sharing agreement is placed at **ANNEXURE - IV**.

b. The Revenue Sharing Model may also be adopted by the public Land-owning agency for providing the land to a private entity for installation of Public Charging Stations on bidding basis with floor price of ₹1 per kWh.

8. Charging Fee

The total fee charged by Charge Point Operators from customers shall comprise the following components: -

- a. Electricity supply tariff which will be considered as pass through (₹ per kWh).
- b. Service charge as per Clause 10.0 of these guidelines (₹ per kWh).
- c. Land cost which will be pass through as per registered land deed ($\overline{\mathbf{x}}$ per kWh).
- d. GST as applicable (\mathbf{X}) .

9. Tariff for supply of electricity to EV charging stations

- (1) The tariff for supply of electricity to EV Charging Stations shall be single part and shall not exceed "Average Cost of Supply" till 31st March 2028.
- (2) The Distribution Licensee will charge 0.7 times the Average Cost of Supply (ACoS) during solar hours (9:00 AM to 4:00 PM) and 1.3 times ACoS during non-solar hours (remaining hours of the day).
- (3) Each EV charging station must have separate metering arrangements to accurately record consumption and apply the appropriate tariff.
- (4) Distribution Licensee may provide sub metering for EV charger, behind-the-meter of an existing HT connection.

10. Service charges for EV Charging Stations

(1) The following ceiling limit for service charges (excluding GST & land cost) shall be applicable till 31st March, 2028for conductive AC/DC charging at PCS & Community EV Charging Stations setup on either public or private land. :-

S.No.	Charging Type	During Solar Hours (9:00 A.M 4:00 P.M.)	During Non-Solar Hours (4:00 P.M 9:00 A.M.)
1.	AC (Slow)	₹3.00 per unit	₹4.00 per unit
2.	DC (Fast)	₹11.00 per unit	₹13.00 per unit

*Note: These ceiling limit are subject to annual review.

- (2) Central and State governments may offer subsidies for setting up public charging stations.
- (3) **Transparent Pricing:** EV Charging Stations will prominently display:
 - a. Charging rates per unit.
 - b. Applicable service charges.
- (4) A committee under the Central Electricity Authority (CEA) will recommend service charges from time to time.

11. Charging Station Network

To ensure widespread availability, the following guidelines for Public Charging Station placement may be adopted.

- (1) **Density**:
 - **a.** Urban Areas: By FY 2030, there will be at least one charging station within a 1 km x 1 km grid in urban areas as notified by respective state governments.
 - **b. Highways**: Charging Stations will be located every 20 km on both sides of highways, expressways, and major roads.

- c. Long-Range & Heavy-Duty EVs: For long-range EVs and heavy-duty vehicles like buses and trucks, a fast-charging station (as per specifications in Clause 12 (7) of these guidelines will be located every 100 km on each side of the designated expressways, highways dnamajor roads. Ideally, these stations will be situated within or near existing public charging stations. Cities/Urban Development Authorities/States may locate these facilities in urban regions within areas such as transport hubs or bus depots.
- (2) **Flexibility**: Additional charging stations, both standard and fast-charging, can be installed beyond the minimum requirements.
- (3) **Infrastructure Planning**: State and UT governments will utilize these density/distance guidelines to:
 - a. Secure land for public charging stations.
 - b. Prioritize installation of supporting infrastructure like transformers and feeders for electricity distribution.
 - c. Implement these measures even in cases without central or state subsidies.
- (4) Partnerships: The government may prioritize existing fuel retail outlets operated by Oil Marketing Companies (OMCs) for installing public EV charging stations (meeting safety and connectivity standards as in ANNEXURE I and ANNEXURE II) to achieve the desired network coverage.
 - a. OMCs with charging facilities should prominently advertise this on their signage to inform EV owners.
 - b. Directional signs on nearby roads leading to charging stations will further enhance accessibility.
- (5) Additional Locations: EV Charging stations can also be installed at:
 - a. Group Housing Societies including Residential Societies
 - b. Shopping malls
 - c. Office complexes
 - d. Restaurants and Hotels
 - e. Educational institutions
 - f. Hospitals

These charging stations should allow charging for visitor vehicles and be strategically located near entrances, exits, or well-lit elevator areas for optimal accessibility.

12. Public Charging Stations – General Requirements

- EV Charger Specifications: EV Chargers shall be as per the Indian Standards mentioned at ANNEXURE – I. For small size EVs such as two wheelers, three wheelers, quadri-cycles, four wheelers etc. Charge Point Operators will preferably provide a minimum 7.4 kW AC or DC EV chargers.
- (2) User Convenience:
 - (i) **Online Booking (Optional):**Public Charging Stations may partner with network service providers for convenient selection of EV chargers and remote booking of charging slots.
 - (ii) **Real-Time Information:** Public Charging Stations will display user-friendly information including:
 - a. Location
 - b. EV Charger types (AC/DC, kW capacity)
 - c. Number of available EV chargers
 - d. Charging rates
 - e. Any additional fees
 - f. Information specified by the Central Nodal Agency (CNA)

- (3) **Communication Protocols**: Open Standards are recommended. PublicCharge Point Operators (CPOs) may adopt open communication protocols like UEI, OCPP, OCPI or open ADR for efficient communication with DISCOMs regarding demand response. The protocols must be compliant to extant provisions of cyber security.
- (4) **Payment Options**: Flexible Payment Methods must be offered. Public Charging Stations will offer (prepaid/postpaid) payment options, potentially with time-based rates and discounts during solar hours.

(5) Electricity Connections:

- (i) Distribution Licensee Connection: Owner of Public Charging Stations can apply for electricity connections with their Distribution Licensee following the process outlined in ANNEXURE – III of these guidelines.
- (ii) Open Access Option: Owner of the Public Charging Station can also choose to obtain electricity through open access within 15 days of submission of 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 fee will be applied beyond these.
- (iii) Owner of Public Charging Station may explore potential integration of renewable energy sources (example solar) in their charging stations.
- (6) **Station Amenities (Optional)**:Larger Public EV Charging stations i.e. stations with more than 10 EV chargers for four-wheeled vehicles may offer additional amenities like washrooms, drinking water, and covered waiting areas for customers. They may also be equipped with surveillance cameras with at least one month storage.
- (7) **Fast Charging for Long-Range and Heavy-Duty EVs**: Public Charging Stations equipped for fast charging long-range EVs and heavy-duty vehicles (like trucks and buses) must meet the following specifications:
 - (i) **High-Power EV Chargers:** At least two EV chargers with a minimum capacity of 240 kW each, complying with Power Levels 3 or 4 as defined in **ANNEXURE** –**I**.
- (ii) Liquid Cooled Cables (Optional): Public Charging Stations may also choose to provide Liquid Cooled Cables for high-speed charging of vehicles with compatible fluid-cooled batteries (a feature found in some long-range EVs).

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 data base 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.

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 EV Chargers**: Residents can decide on the types and number of community EV chargers 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 EV charging 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.

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-PowerEV Chargers**: E-Bus depots must install EVchargers 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 theEV 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 complimentEV 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 allowgrid services while protecting the vehicle batteries against overcharging and discharging.

19. Charging station as Solar Carport

Solar carport is a dual purpose, stand-alone structure that provides shelter for vehicles, whilst generating clean, renewable energy from the sun for use on-site including electric vehicle charging. Solar carports can be installed independently or integrated with grid. Solar carport with Battery Storage can be charged with solar energy and store energy onsite. This stored energy can subsequently be utilized to charge electric vehicles, providing an independent and sustainable alternative to traditional grid-dependent charging.

20. Implementation Mechanism

- (1) **Central Nodal Agency**: The Bureau of Energy Efficiency (BEE) will act as the Central Nodal Authority to monitor the implementation of these guidelines. All relevant agencies, including electricity distribution companies (DISCOMs), the Central Electricity Authority (CEA), and state government agencies, will be expected to cooperate and provide necessary support to the BEE.
- (2) State Nodal Agencies: Each state will designate a State Nodal Agency (SNA) responsible for coordinating with DISCOMs to facilitate electricity connections for public, community, workplace, and e-bus depot charging stations.State governments have the flexibility to choose their Nodal Agency. The state DISCOMs will be the default option.However, states can also designateState Public Sector Undertakings (SPSU),Urban local bodies (ULBs) or Urban Development Authorities. A state level steering committee chaired by Secretary in-charge of Energy and comprising secretaries of Transport, Municipal Administration and Urban Development, such other members as required shall be constituted to plan and monitor the implementation of EV Charging Infrastructure at the state level.
- (3) **Progress Review- Steering Committee**: A central steering committee chaired by the Additional Secretary of the Ministry of Power including members from relevant ministries, representative from states, BEE and CEAwill review the implementation of these guidelines.

Sd/-(Under Secretary to GoI)

Copy to

As per list of addressee

ANNEXURE - I

Indian Standards for EV Chargers notified by BIS:

Power Level	Type of EV Charger	EV Charger Capacity	Charging Device / Protocol	EV – EVSE Communication	Charge Point Plug / Socket	Vehicle Inlet / Connector
ver Level 1	Light EV AC Charge Point (for 2W, 3W and 4W – M1 Category)	Up to 7 kW	IS-17017-22-1	Bluetooth Low Energy	IS-60309	IS-17017-2-7, IS-17017-2-2
	Light EV DC Charge Point (for 2W, 3W Category)	Up to 12 kW	IS-17017-25 [CAN]		IS-17017-2-6	IS-17017-2-6
Po	Light EV AC/DC Combo (for 2W, 3W)	Up to 7 kW (AC) or up to 12 kW (DC)	IS-17017-31		IS-17017-2-7	IS-17017-2-7
Power Level 2	Parkbay AC Charge Point (for 3W and 4W – M1 Category)	Normal Power ~11kW/ 22 kW	IS-17017-1	IS-15118 [PLC]	IS-17017-2-2	IS-17017-2-2
Power Level 3	DC Charging Protocol (for 4W (M1 Category), Buses and Trucks (M3 Category))	DC 50 kW to 250 kW	IS-17017-23	IS-17017-24 [CAN] IS-15118 [PLC]	IS-17017-2-3	IS-17017-2-3
Power Level 4	DC High Power for e-Bus and Trucks Charging Station (M3 Category)	DC High Power (250 kW> 500 kW)	IS-17017-23	IS-17017-24 [CAN] IS-15118 [PLC]	IS-17017-2-3	IS-17017-2-3

Note: For the purpose of these guidelines, terminologies "Electric Vehicle Supply Equipment (EVSE)" and "EV Charger(s)" have been used inter-changeably.

ANNEXURE- II

<u>Checklist – A (Safety Requirements)</u>

- **Reliable Wiring**: Appropriate cabling and electrical work to ensure safety.
- Surge Protection: Type-1 and Type-2 protection (as per Indian Standard Code IS / IEC 62305-4/IEC 61643-12 © IEC: 2008 (Edition 2.0 2008-11) to safeguard against electrical surges implemented.
- **Fire Safety**: Adequate fire protection equipment and facilities installed as per relevant Indian Standards.
- Weather Protection: As per Clause 12.4 of BIS 17017 (Part 1) 2018.
- ✓ Compliances NationalRegulations: All electrical equipment installed in EVcharging station complies with Central Electricity Authority regulations, specifically the Technical Standards for Connectivity of Distributed Generation Resources (2013) and Safety and Electric Supply Measures (2023), as amended from time to time.
- ✓ Compliances Equipment Testing: Each EVSE model with different power ratings and communication protocols type tested by the Original Equipment Manufacturer in accordance with BIS standards specified in ANNEXURE I in atesting agency accredited by the National Accreditation Board for Testing and Calibration Laboratories (NABL), with a valid Type Test certificate.

<u>Checklist – B (Functionality and User Experience)</u>

- Station Design: The EV charging station is well-lit and has appropriate infrastructure to meet local regulations.
- **Vehicle Manoeuvring:** Adequate space for charging vehicles and easy entry/exit provided.
- **EV Charger Options:** Stations with one or more EV chargers, compliant with standards specified in **ANNEXURE I**.
- Clear Instructions: Public and semi-public EV charging stations display visual aids/pictorial narration in English/Hindi and Local Language to guide users through the charging process.
- **EV Charger Information:** Specifications of the available EV chargers displayed on EVSE for user reference in Public charging stations.
- ✓ **Trained Staff:** EV Charging stations with more than four EV chargers manned with trained personnel on hand for safe operation. (optional)
- Dedicated Parking: Clearly marked and unobstructed parking spaces reserved for EV charging at charging stations.
- **Digital Convenience:** Arrangements for usage tracking, automatic billing, and convenient payment options made.
- User Security: Customer care number of the CPO (Charge Point Operator), National Emergency Number (112), and Women's Helpline Number (1091) prominently displayed in Public charging stations.
- Security Cameras: Stations equipped with CCTV cameras with a month's worth of data storage. (optional)
- Minimum Parking Space: Offices, commercial buildings, resident welfare associations to set aside a minimum share of total common vehicle/parking capacity as specified in the building bye-laws of the state.

Standard Operating Procedure (SOP) for Single Window System and Standard Application Form:

S.No.	Action	Responsible Entity	Timeline
1.	Develop Online Portal for receiving application & granting of electricity connection to Charge Point Operators (CPOs) & integrate it with SNA/CNA portal for monitoring.	DISCOM/SNA/ CNA	As per Electricity (Rights of Consumers) Rules, 2020as amended from time to time.
2.	Fill & submit online application form seeking connection from DISCOM. Online forms maybe based on ANNEXURE – III (A) & ANNEXURE III - (B) of these guidelines.	CPOs	-
3.	Scrutinize and inform discrepancies in applications, if any, and provide details of concerned DISCOM official to the CPO.	DISCOM	3 days
4.	Re-submission of complete application addressing discrepancies pointed out by DISCOM.	CPOs	3 days
5.	Conduct technical feasibility assessment of location and issuance of demand note for release of electricity connection	DISCOM	As per Electricity (Rights of Consumers) Rules, 2020 as amended from time to time/ State ERC
6.	Electrical Inspectorate Safety clearance and other compliances to be shared by applicant before energization of connection and CPO to install EV charger and required electrical infrastructure.	СРО	-

ANNEXURE - III (A)

Application form (proposed)

S. No.	Particulars	Response		
1.	Name of Applicant / Organization			
	Company registered under (Indian Companies Act / Individual			
2	/ Co-operative Society / Any Other Corporate Entity)			
2.	Company Registration Certificate / Memorandum of Understanding to be			
	submitted as proof)			
3.	Company registration number			
4.	Registered Address			
5.	Present activity/business carried by the applicant/ organization			
Details o	f Authorised person			
6.	Name			
7.	Designation			
8.	Mobile Number			
9.	Email ID			
10.	ID number of any Government ID proof			
Location	Location details of proposed site			
11	Type of Location			
11.	(Retail Outlets / Public / Semi-public (Restricted)			
12.	Address of location along with Area Pin Code			
13.	City			
14.	District			
15	Geo-graphical co-ordinates of Location (Latitude and			
15.	Longitude)			
16.	Details of Network Service Provider			
17.	Existing load (kW / kVA), if any			
18.	Desired Load (kW / kVA)			
19.	Supply type (LT / HT)			
20.	Tariff category			
EV Charger details				
21.	Type of EV Charger (CCS / Type 2 / Bharat AC-001 / Others)			
22.	Number of EV chargers			
23.	Capacity of each EV charger (kW)			
24.	No. of connector guns			
25.	Total connected load			

Documents required from the CPO (Tentative list).

- 1) Registered land deed between Land Owning Agency and the CPO or between lessee and charge point operator in case of sub leased property.
- 2) Power of Attorney confirming powers on the person(s) who are competent to execute the MoU / agreement.
- 3) Certified copy of Company Registration Certificate.
- 4) Copy of PAN Card.
- 5) Copy of GST Registration.
- 6) Self-Attested copy of Govt. ID Proof of the Authorised Representative.
- 7) Petroleum & Explosives Safety Organization (PESO)Approval in case electricity connection required for installation of EV chargers at Petrol Pumps / Gas Stations, shall be sought by CPO.
- 8) NOC from fire department (if EV charger is to be installed in the basement of a building).
- 9) EV Charger typetest certificate fromNABL Accredited Lab.
- 10) Undertaking on Stamp Paper for using power supply only for public EV charging.

Model Revenue Sharing Agreement between Land-Owning Agency (LOA) and Charge Point Operator (CPO) for deployment of Public EV Charging Stations

BETWEEN

M/s. <Insert Name of Land Owning Agency>which expression shall unless repugnant to the context or meaning thereof, include successors and assigns of the FIRST PART.

AND

M/s. <Name of CPO>a Company registered under the 1956 Act, having its registered Office at <CPO registered address> (hereinafter referred to as "<CPO>" which expression shall mean and include its successor(s), administrator(s) and assigns) of the **SECOND PART.**

<LAND OWNING AGENCY> and <CPO> are hereinafter individually referred to as the "**Party**" and collectively as the "**Parties**".

WHEREAS:

- A. <Details of <LAND OWNING AGENCY> (Name & Address)>.
- B. <Details of CPO (Name & Address)>,
- D. In consideration of the above, this Agreement sets out the intent of the Parties in relation to the said proposal.

NOW THEREFORE, in consideration of the mutual covenants, terms, conditions and understandings set forth in this Agreement, the Parties hereby agree as follows:

1. Definitions

The following capitalized terms wherever used in this AGREEMENT shall have themeanings given hereunder:

"Public EV Charging Stations(s)" means a device or station that supplies power to charge the batteries of an electric vehicle;

"CPO" mean Charger Point Operator.

- "AC" shall mean Alternating Current Charging;
- "DC" shall mean Direct Current Charging;

"GST" shall mean Goods and Services Tax;

"Installation Work" means the construction and installation of the Public Charging stations and upstream supply, (if required) System and the operation and maintenance thereof, all performed by or for **<CPO NAME>** at the identified site.

"kW" shall mean rating of public EV Charger;

"**Operating Cost**" shall include direct electricity energy charge payment through payment gateway service provider appointed by **<CPO NAME>**, salary of supervisor or equivalent level person designated for managing the backend system, salary for semi-skilled/ skilled workers appointed by **<CPO NAME>** for maintenance of chargers, annual maintenance cost of chargers, telecommunication cost, IT System cost and customer support;

"Projects/ Charging Locations shall have a meaning ascribed in above Recital C hereof;

"SOL" means sites owned and/or operated by <LAND OWNING AGENCY>.

"**Term**" shall mean 10 years with Annual Maintenance Cost (AMC) starting from the earlier of: (a) six months from the Effective Date, or (b) the date of installation of the last Charging Point at the identified SOL in terms of this Agreement.

Effective Date: DD/MM/YYYY

"System" includes the Charging Points, assemblies, converters, switches, wiring devices and wiring, and all other material/civil works comprising the Installation Work.

2. Proposal

- a. M/s CPO Name has proposed to establish and operate up to no. of Public Electric Vehicle Charging Point(s) at SOL owned and/or operated by Land owning agency. For Setting up of such Public EV charging stations by M/s CPO, Landowning agency would provide the required space of about Sq. Ft within the premises of the identified locations subject to feasibility in order to develop the required infrastructure for charging of electric vehicles.
- b. The Parties are keen to develop partnership for the Projects/ Public EV Charging Locations at <Location Address> and may discuss further expansion at other locations, at the sole discretion of M/s <CPO Name>.
- c. The Parties shall jointly select the identified locations based on availability of space and feasibility of operation of the Public Charging Stations without affecting regular operation of the identified locations.
- d. M/s <CPO NAME> agrees to establish, setup and operate nos. of charging points at each public charging station. The Charging Station shall have chargers in accordance with Guidelines notified by the Ministry of Power. The charging infrastructure so installed shall comply with the government/ministry of power guidelines and regulations for performance, safety & quality from time to time.
- e. M/s <CPO NAME> agrees to invest in setting up and operating the public charging stations including separate power connection, transformer and meter, if required, at itsown cost, and shall upgrade and refurbish the Public Charging Stations, in line with the technology advancements and business needs, from time to time. The cost of electricity including surcharge, duty, contingency for power purchase adjustment charges, etc. and all operating

and maintenance expenses related to Charging Points shall be borne by M/s < CPO NAME>.

- f. The Parties agree that the Public Charging Stations may be operated through a cloud- based solution technology developed and owned by M/s <CPO NAME> and manpower deployed at the identified locations by M/s <CPO name>
- g. The Parties agree that all applicable statutory approvals/ permissions from the respective authorities for the Public Charging Stations shall be procured and obtained by M/s <CPO NAME>. <LAND OWNING AGENCY> shall provide all assistance to M/s <CPO NAME> to enable M/s <CPO NAME> to obtain the consents, clearances and permits, and the governmental approvals in a timely manner in connection with the Project. Further, <Land owning agency> agrees to assist in obtaining separate power connection or enhancing the power supply at each location, if required by M/s <CPO NAME> in connection with the Project.
- h. M/s <CPO NAME> shall arrange deployment of qualified and suitable manpower and required necessary tools, logistics, spares & consumables during installation, commissioning and O&M of Public EV charging stations at SOL. <LAND OWNING AGENCY> hereby grants to M/s <CPO NAME> a right, co-terminus with the term to ingress and egress the location and access to electrical panels and conduits to interconnect or disconnect the System with the SOL electrical wiring.
- i. Safety is of paramount importance and M/s <CPO NAME> shall take all safety precautions in connection with the setting up and operation of the Public Charging Stations to ensure safety to the user. <LAND OWNING AGENCY> agrees to ensure to provide safe and secure environment to install and operate the System. In the event of any damage to the land-owning agency facilities, property due to any fault in the M/s <CPO NAME>'s equipment, M/s <CPO NAME> will be liable to make good the losses to SOL for the same. <LAND OWNING AGENCY> shall be responsible for the loss incurred by M/s <CPO NAME> limited to Public Charging Stations and established infrastructure due to gross negligence or willful default on the part of <LAND OWNING AGENCY> or their agents/ employees.
- j. <LAND OWNING AGENCY> agrees and confirms that the Public Charging Locations (including the unfettered access to the identified space for the respective <LAND OWNING AGENCY>) shall be free from encumbrances or hindrances, and if during the installation and operation period, the same is identified by M/s <CPO NAME>, then <LAND OWNING AGENCY> shall remove the encumbrance or hindrance or provide suitable space for the System within the same location at the cost and expense of <LAND OWNING AGENCY> with immediate effect.
- k. The Parties agree to jointly undertake the planning, design, setting-up and implementing the Projects/ Public Charging Stations at the respective <LAND OWNING AGENCY>. The Parties, *inter-alia*, agree to ensure; (a) Planning and designing the charging infrastructure in relation to the Projects; (b) Investment in the Projects by M/s <CPO NAME>; (c) Operating and maintaining the Projects by <CPOName>; and (d) Managing the Projects using cloudbased solution system software.
- I. <LAND OWNING AGENCY> shall not directly or indirectly cause, create, incur, assume, or suffer to exist any lien on or with respect to the System or any interest therein. The Project and the System shall remain the property of M/s <CPO NAME> and shall not attach to or be deemed a part of, or fixture to the <LAND OWNING AGENCY>. Neither <LAND OWNING AGENCY> nor its lessees or tenants or any other Person shall have any right, benefit, or interest in the Project.
- m. <LAND OWNING AGENCY> shall provide sufficient space at the provided location for the temporary storage and staging of tools, materials, equipment and facilities reasonably necessary during the Installation Work, or Project removal, and access for rigging and material handling.

- n. Wherever separate power connection to Public EV Charging Stations is not mandated/not provided, <LAND OWNING AGENCY> shall provide required power to M/s<CPO NAME> for the maintenance and operation of its System at the rate <LAND OWNING AGENCY> is paying to the distribution utility at the relevant SOL and M/s<CPO NAME> shall reimburse the same to <LAND OWNING AGENCY> on actuals. In case, requires additional transformer or any expenses for providing the power, the same shall be incurred by M/s <CPO NAME>. In the event of the Govt. announcing apolicy for subsidized power charges for EV charging stations, then M/s <CPO NAME> shall make necessary arrangements including separate meter and approvals as required at their own cost to avail the lower tariff.
- O. Any other activities considered necessary for setting up Public Charging Stations for electric vehicles at provided locations or other suitable locations on mutually agreed covenants/commercials arrangements, which are not specifically set out herein, but which may be identified at a later date, shall be included by mutual discussion and consent of Parties.
- p. The number of identified locations considered for Public EV Charging Stations wouldnot be a binding number and could be amended seeing the potential, increase in business volume, less vehicle turnaround etc., if any.
- q. The number of Public EV Charging Stations in a cluster would be tentative and could increase / decrease subject to joint agreement between <LAND OWNING AGENCY> and M/s. <CPO NAME>. The addition or deletion of EV Charging Stations could be subsequently conveyed to each other in writing.
- r. Branding: <LAND OWNING AGENCY> and M/s. <CPO NAME> shall do joint branding of the venture so as to create positive long-term association, market penetration, to create synergies based on unique strengths of each parties/brand, gain market share and increase revenue and also to boost the reputation of the parties in thisproject.

3. Payment of License Fee, Revenue Share and Billing Cycle raising of invoices, release of payments, security deposit etc.

- a. M/s. <**CPO NAME>** to pay <LAND OWNING AGENCY> Rs. xxx/kWh which shall be ₹ 1.0 / kWh in case of such CPO being a Government/Public Entity or at discovered price through bidding with floor price of ₹ 1 / kWh in case CPO being a private entity of billed units(kWh) from charging business starting from 1st year, of billed units from charging business to <LAND OWNING AGENCY> within days after end of Quarter.
- b. For the purpose of revenue sharing, M/s **<CPO NAME>** shall furnish the complete details of accounting of the billed units to **<LAND OWNING AGENCY>** for transparency and shall be governed by confidentiality under this Agreement.

M/s <CPO NAME> shall promptly pay the bill on monthly basis within 10 days of demand for electrical energy consumed for charging electric vehicles at the said locations as per actual minimum charges /as per actual. The charges should be paid to the <LAND OWNING AGENCY> till such time a separate meter is obtained in the name of <CPO NAME>. After obtaining a separate meter in the name of <CPO NAME>, the electricity charges shall be directly paid by <CPO NAME> based on the electrical energy consumed for charging EVs at each SOL. Dispute resolution mechanism of electricity bills, if any, to be taken up with relevant Discom with support from land owning agency.

4. Payment of Taxes

M/s **<CPO NAME>** shall pay all the statutory levies and taxes imposed by the Government or any other authorities present or future on the operation of EV charging stations. Further, M/s **<CPO NAME>** shall also pay to **<LAND OWNING AGENCY>** increase in the taxes and/or any levies on

the land area used specifically for Public EV charging station, by any local authority including Municipal corporation/municipality/gram panchayat or any other statutory authority or by the government except property tax. <LAND OWNING AGENCY> shall pay property tax.

5. Insurance

M/s **<CPO NAME>** shall at all times and from time to time at its own cost and expense take out adequate and proper insurance during the continuance of this agreement from a well reputed insurance company against all risks including third party risk to persons and properties, fire and explosion risk and riot risks etc. covering operation of the Public Charging stations installed at SOL.

6. Standard Indemnification

Each party (indemnifying party) agrees to indemnify, defend and hold the other party(indemnified party) harmless from and against:

- a. Any third party claim (including intellectual property infringement claim), liability, obligation, loss, damage, deficiency, assessment, judgement, cost or expense (including, without limitation to costs and expenses incurred in preparing and defending against or prosecuting any third party litigation, claim, action, suit proceeding or demand) of any kind or character, arising out of or in any manner solely attributable to any failure of the indemnifying Party to perform its obligations described hereunder, gross negligence or wilful misconduct in the fulfilment of its obligations hereunder or for infringing the intellectual property rights of any third party.
- b. Any claim, liability, obligation, loss, damage, deficiency, assessment, judgement, cost or expense (including, without limitation to costs and expenses incurred in preparing and defending against or prosecuting any third party litigation, claim, action, suit proceeding or demand) of any kind or character arising from claims or sanctions or penalties imposed by any regulatory authority for failure by a Party or any of its respective officers, directors, employees, servants, sub-contractors or agents to comply with any applicable laws, rules and regulations.
- C. Any claim, liability, obligation, loss, damage, deficiency, assessment, judgement, cost or expense (including, without limitation to costs and expenses incurred in preparing and defending against or prosecuting any third party litigation, claim, action, suit proceeding or demand) of any kind or character with respect to any damage to or loss of property of a third party arising out of acts or omissions by a Party or any of its respective officers, directors, employees, servants, sub- contractors, or agents in the performance of its obligations under this agreement.

7. Term & Termination

7.1 This Agreement shall come into force from the Effective Date of this agreement and remain in force during the 'Term' as defined under Definitions above. The agreement shall be further extended for a period as decided and agreed mutually in writing by the Parties. The Agreement may be terminated / exited by the Parties prior to the scheduled validity period due to any one of the following reasons:

- a. Any misrepresentation, breach or violation of the terms of this Agreement by either of the Parties;
- b. If <LAND OWNING AGENCY> fails to provide the Charging Locations for locating the Charging Points at the identified SOL or M/s <**CPO NAME>** failing to install the charging Points at the identified SOL within a reasonable time as agreed mutually; and

c. With mutual consent of both the parties without assigning any reason.

7.2 Upon such early termination, M/s <CPO NAME> shall have the right to dismantle all the System, equipment and Charging Points and take control in its custody, the Charging Points, System and equipment. <LAND OWNING AGENCY> shall have noright to claim and recover any of the Charging Points and the System from any Charging Locations at the identified locations and the equipment/ infrastructureestablishment by M/s <CPO NAME>.

8. Representations and Warranties

Each Party represents and warrants to the other Parties that:

- (a) it has power to execute, deliver and perform its obligations under the Agreement and all necessary corporate and other actions have been taken to authorise such execution, delivery and performance;
- (b) it has all requisite power and authority, and does not require the consent of any thirdparty to enter into this AGREEMENT and grant the rights provided herein;
- (c) it is in compliance with all applicable laws and regulations, as may be applicable to it.
- (d) the execution, delivery and performance of its obligations under the Agreement doesnot and will not: (i) contravene any applicable law, or any judgment or decree of any court having jurisdiction over it; or (ii) conflict with or result in any breach or defaultunder any agreement, instrument, regulation, license or authorisation binding upon it or any of its assets.
- (e) violate the memorandum and articles of association, by-laws or other applicable organisational documents thereof; and
- (f) there is no litigation pending or, to the best of such Party's knowledge, threatened towhich it is a party that presently affects or which would have a material adverse effect on the financial condition or prospects or business of such Party in the fulfilment of its obligations under this AGREEMENT.

9. Confidentiality

9.1. During the subsistence of this Agreement and after termination or expiration of this Agreement for any reason whatsoever, the Party receiving any information and/or document which are marked as Confidential (hereinafter referred to as the "Confidential Information") shall:

- a. Keep the confidential Information confidential;
- b. Do not disclose the Confidential Information to any other person without the prior written consent of the Party disclosing such information (hereinafter referred to as the "Disclosing Party") except to its employees, agents, shareholders, investors, partners and advisors on a strictly need-to-know basis, and upon such person executing a non-disclosure undertaking in respect of theConfidential Information in a format reasonably satisfactory to the Disclosing Party;
- **c.** Do not use the Confidential Information for any purpose other than theperformance of its obligations under this Agreement; Without the prior writtenconsent of the Disclosing Party, not to make a public announcement or any other disclosure of the Confidential Information except as required by any legal stipulation applicable to it. In case of such disclosure required by legal stipulation, a Party which is required to make such disclosure shall, as soon aspracticable after it is made aware of the requirement to make such disclosure, inform the Disclosing Party of the need to disclose such Confidential Information, the content thereof and the legal stipulation which requires disclosure of such Confidential Information.

9.2. The obligations contained in the relevant clauses above shall not apply to any Confidential Information which:

- a. is at the date of this Agreement or at any time after the date of this Agreementcomes into the public domain other than through breach of this Agreement bysuch Party; can be shown by the Party receiving the information to thereasonable satisfaction of the Disclosing Party that the same was known to such Party prior to the disclosure;
- b. subsequently comes lawfully into the possession of the Party receiving such information from a person other than the Disclosing Party; or
- **c.** such information which any Party is required to disclose by law, by a court of competent jurisdiction or by another appropriate regulatory body, provided that the Party required to disclose shall use reasonable endeavors to consult with the Disclosing Party and take into consideration is reasonable requests inrelation to such disclosure.

10. Notice

All communication, demand and notices required to be sent under this Agreementshall be sent or delivered to the receiving Party at the address set forth herein, or at such other address as the Parties may from time to time designate in writing:

M/s <CPO NAME>: Address : -..... Fax No.: Email id :-LOA: Address: Email id:-

Any Notice, demand or other communication shall be sent by registered post / handdelivery.

11. Intellectual Property Rights

Intellectual Property Rights owned by each respective Party shall remain the property of such Party and nothing in this AGREEMENT shall be taken to represent an assignment, license or grant of other rights in or under such Intellectual Property Rightsto the other Party. All right, title and interest to all Intellectual Property of each Party as of the Effective Date of this AGREEMENT, including that which is or may become protectable by patent, copyright, trademark, trade secret or similar law, shall remain exclusively with that Party.

12. Governing Law and Jurisdiction

This AGREEMENT shall be governed by and construed in accordance with the lawsof India. Courts at <City, State>, India shall have exclusive jurisdiction in respect of matters arising out of or in relation to this AGREEMENT.

13. Dispute Settlement

The Parties hereby agree that they shall work together to resolve any disputes that mayarise under, in relation to or in connection with this Agreement (referred to in this clause as a "**Dispute**"). In the event such Dispute is not resolved amicably within 60 (sixty) days of the date of receipt of notice issued by disputing party with respect to same by the non- disputing party then in such case all Dispute shall be settled by binding arbitration pursuant to the Arbitration and Conciliation Act, 1996, as amended("**Arbitration Act**"), in following manner:

If any dispute or difference of any kind whatsoever shall arise between the Parties inconnection with or arising out of this agreement, such dispute or difference shall be resolved through arbitration as per the procedure mentioned herein below:

- **a**. The dispute or difference shall be referred to a sole arbitrator.
- b. The arbitration shall be through High Court Mediation and Arbitration Centre at High Court of Judicature at <city name> for the state of <state name>.
- **c.** The rules of the above mentioned Institutional Arbitration Forum shallbe applicable to the arbitral proceedings.
- d. The Indian Arbitration & Conciliation Act 1996 and Arbitration and Conciliation (amendment) Act 2015 or any statutory modification or re-enactment thereof and the rules made there under for the time being in force shall apply to the arbitration proceedings under the clause.
- e. The seat of arbitration shall be at <city name>, <state name>, India.
- f. The proceedings shall be conducted in English language.
- g. The cost of the proceedings shall be equally borne by the parties, unless otherwise directed by the sole arbitrator.
- h. The following shall not be referred to arbitration: Disputes having financial claims less than Rs. 5 Lakhs.

Notwithstanding anything contained herein above (except 'h') upon arising of dispute the parties may agree to refer the same to arbitration of mutually acceptable sole arbitrator.

14. Limitation of Liability

Notwithstanding anything in this AGREEMENT to the contrary and to the extent permitted by applicable law, in no event shall either Party, its officers, directors, or employees be liable for any form of incidental, consequential, indirect, special or punitive damages of any kind, or for loss of revenue or profits, loss of business, loss of information or data, or other financial loss, whether such damages arise in contract, tort or otherwise, irrespective of fault, negligence or strict liability or whether such Party has been advised in advance of the possibility of such damages. A Party will not be inbreach of the AGREEMENT or be liable to the other Parties if it fails to perform or delays the performance of an obligation as a result of an event beyond its reasonable control, including, legislation, regulation, order or other act of any Government or Governmental agency.

15. Waiver

Failure of a Party to require performance of any provision of this Agreement shall not affect such Party's right to full performance thereof at any time thereafter, and any waiver by a Party of a breach of any provision hereof shall not constitute a waiver of asimilar breach in the future or of any other breach. No waiver shall be effective unlessin writing and duly executed by the concerned Party.

16. Assignment

Except as provided in this Agreement, none of the Parties shall be entitled to assign their rights and obligations under the Agreement to a third party without the prior written consent of the other Party, except to its affiliate companies

17. Amendment

No modification or amendment to this Agreement and no waiver of any of the terms or conditions hereof shall be valid or binding unless made in writing and duly executed by the Parties.

18. Severability

If any provision of this Agreement is held to be invalid, illegal or unenforceable, such provision will be struck from the Agreement and the remaining provisions of this Agreement shall remain in full force and effect. Further, the Parties shall endeavour to replace such provision with a valid, legally enforceable provision that reflects the original intent of the Parties.

19. Entire Agreement

This Agreement supersedes all prior discussions and agreements (whether oral or written, including all correspondence) if any, between the Parties with respect to the subject matter of this Agreement, and this Agreement contains the sole and entire understanding and agreement between the Parties hereto with respect to the subject matter contained herein.

20. Force Majeure

Neither Party shall be held responsible for non-fulfillment of their respective obligations under this AGREEMENT due to the exigency of one or more of the force majeure events which are beyond the reasonable control of the Party concerned such as but not limited to acts of God, wars, floods, earthquakes, lawful strikes not confined to the premises of the Party, lockouts beyond the control of the Party claiming force majeure, epidemics, riots, civil commotions etc. provided on the occurrence and cessation of any such event, the Party affected thereby shall give a notice in writing to the other Party within one (1) month of such occurrence or cessation. If the force majeure conditions continue beyond six (6) months, the Parties shall jointly decide about the future course of action.

21. Survival

Those Clauses that by its nature should survive expiration or termination of this Agreement shall remain in effect after the expiration or termination of this Agreement. It specifically clarified that the provisions of Clauses 9 (*Representations and Warranties*), Clause 10 (*Confidentiality*), Clause 12 (*Intellectual Property Rights*), Clause 13 (*Governing Law and Jurisdiction*) and Clause 14 (*Dispute Settlement*) shallsurvive expiration or termination of this Agreement.

22. Counterparts

This Agreement may be signed in counterparts, each of which shall be deemed to be an original, and all of which together shall constitute the same instrument.

23. Miscellaneous

- a. It is agreed and understood by the Parties that this Agreement is a legally binding contract and under no circumstances shall stand terminated, except in terms of Clause 3 of this Agreement.
- b. This Agreement is on a principal-to-principal basis between the Parties hereto. Nothing contained in this Agreement shall be construed or deemed to create any association, partnership or joint venture or employer-employee relationship or principal-agent relationship in any manner whatsoever between the Parties.
- c. The Parties shall not use each other's name and/or trademark/logo or publicize or release any information about this Agreement or its contents or market, publish, advertise in any manner any information without prior written consent of the otherParty.

24. Rules of Interpretation

- a. Irrelevance of Gender and Plurality. The definitions in this Agreement shall applyequally to both the singular and plural forms of the terms defined. Whenever the context may require, any pronoun shall include the corresponding masculine, feminine and neuter forms.
- b. Internal References. All references herein to Clauses and Annexure shall be deemed to be references to Clauses of and Annexure to, this Agreement unless the context shall otherwise require. All Annexure attached hereto shall be deemed incorporated herein as if set forth in full herein. The terms "clause(s)" and "sub- clause(s)" shall be used herein interchangeably. The words "hereof," "herein" and "hereunder" and words of similar import when used in this Agreement shall refer to this Agreement as a whole and not to any particular provision of this Agreement. The words "include", "includes", and "including" shall be deemed to be followed by the words "without limitation".
- C. Default Rules. Unless expressly contradicted or otherwise qualified, (i) all references to a Person also refer to that Person's successors and permitted assigns, including permitted transferees, and (ii) all references to and definitions of any agreement, instrument or statute herein or in any agreement or instrument referred to herein mean such agreement, instrument or statute, including the Articles, as from time to time may be amended, modified, supplemented or restated, including(in the case of agreements or instruments) by waiver or consent and (in the case of statutes) by succession of comparable successor statutes and references to all attachments thereto and instruments incorporated therein.
- d. Drafting. The Parties have participated jointly in the negotiation and drafting of this Agreement; accordingly, in the event an ambiguity or a question of intent or interpretation arises, this Agreement shall be construed as if drafted jointly by the Parties, and no presumption or burden of proof shall arise favoring or disfavoring any Party by virtue of the authorship of any provisions of this Agreement.
- e. Clause Heading: The clause heading contained in this Agreement are for the convenience of the Parties and shall not affect the meaning or interpretation of this Agreement.

25. GENERAL PROVISIONS

a. If any provision of this AGREEMENT is held to be invalid or unenforceable to any extent, the remaining provisions of this AGREEMENT shall not be affected thereby and each remaining provision of this AGREEMENT shall be valid and enforceable to the fullest extent permitted by law. Any invalid or unenforceable provision of this AGREEMENT shall be replaced with a provision which is valid and enforceable and reflects, to the maximum extent possible, the original intent of the unenforceable provision.

- b. Each Party will be solely responsible for its own acts and omissions (and the acts and omissions of its employees and other agents) and neither Party will have the authority nor will purport to act for, or legally binding, the other Party in any transactions with a third party except as agreed in writing by the Parties.
- c. The release of any information and of all public announcements (other than when such disclosure is required under any applicable law) related to such projects by a Party shall be subject to the prior written approval of the other Party, unless required under stock exchange regulations/SEBI.
- d. This Agreement shall not be amended, modified or supplemented without prior written consent of the other Party.

In Witness Whereof The Parties Hereto Have Signed This MoU In Duplicate On The _____Day, ____Month and ____Year Herein Above Written In The Presence Of:

For <land agency="" owning="">For Signed & Sealed</land>	r M/s <cpo name=""></cpo>	Signed & Sealed
WITNESS:		WITNESS:
1.	1.	
2.	2.	
