**Ministry of Power**

**Revised Consolidated Guidelines & Standards for Charging Infrastructure for Electric Vehicles (EVs)**

**Relevant to LMM**

The Union Ministry of Power has promulgated the revised consolidated Guidelines & Standards for Charging Infrastructure for Electric Vehicles (EV) on 14th January,2022.

**Objectives**

* To enable a faster adoption of electric vehicles in India by ensuring safe, reliable, accessible, and affordable Charging Infrastructure and eco-system.
* To promote energy security and reduction of emission intensity of the country by promotion of entire EV ecosystem.

**Key Points**

* Owners may charge their Electric Vehicles at their residence/offices using their existing electricity connections.
* Infrastructure requirements for Public Charging Infrastructure as well as for Public Charging Infrastructure for long range EVs and/or heavy duty EVs have been outlined.
* Any individual/entity is free to set up public charging stations without the requirement of a license provided that, such stations meet the technical, safety as well as performance standards and protocols laid down under the guidelines as well as norms/ standards/ specifications laid down by Ministry of Power, Bureau of Energy Efficiency (BEE) and Central Electricity Authority (CEA) from time to time.
* An exhaustive list of compliance requirements for Public Charging Station (PCS) have also been outlined. These include norms for “appropriate” infrastructure for civil, electricity and safety requirements.
* The guidelines have been made further technology agnostic by providing for not only the prevailing international charging standards available in the market but also the new Indian charging standards.
* In order to address the challenge of making a charging station financially viable in the period of growth of Electric Vehicles, a revenue sharing model has been put in place for land used for the same.
* Timelines have been prescribed as per the Electricity (Rights of Consumers). Accordingly, PCS shall be provided connection within seven days in metro cities, fifteen days in other municipal areas and thirty days in rural areas. Within these timelines the distribution licensees shall provide new connection or modify an existing connection.
* The tariff for supply of electricity to Public EV Charging Stations shall be a single part tariff and shall not exceed the “Average Cost of Supply” till 31st March 2025. The same tariff shall be applicable for Battery Charging Station (BCS).   The tariff applicable for domestic consumption shall be applicable for domestic charging.
* As electricity is being provided at concessional rates and also considering the fact that subsidy is being provided by the Central/State Governments in many cases for setting up Public Charging Stations, the State Government shall fix the ceiling of Service Charges to be charged by such Charging Stations.
* Any Public Charging Station/ Chain of Charging Stations may obtain electricity from any generation company through open access.
* Bureau of Energy Efficiency (BEE) shall create and maintain a national online database of all the Public Charging Stations in consultation with State Nodal Agencies (SNAs). Bureau of Energy Efficiency shall create a Web-Portal/Software/Mobile Application for the database of Public Charging Stations throughout the country.

* Public Charging Station will be required to tie up with at least one online Network Service Providers (NSPs) to enable advance remote/online booking of charging slots by EV owners.
* To alleviate the range anxiety of the potential EV owners, guidelines provides that at least one Charging Station shall be available in a grid of 3 Km X 3 Km. Further, one Charging Station shall be set up at every 25 Km on both sides of highways/roads. For long range EVs and/or heavy duty EVs like buses/trucks etc., there shall be at least one Fast Charging Station with Charging Infrastructure Specifications every 100 Kms, one on each side of the highways/road located preferably within/alongside the Public Charging Stations
* **Rollout of EV Public Charging Infrastructure: A phase wise installation has been envisaged under the guidelines as below:**
  + - **Phase I (1-3 Years): All Mega Cities with population of 4 million plus as per census 2011, all existing expressways connected to these Mega Cities & important Highways connected with each of these Mega Cities may be taken up for coverage. A list of these Mega Cities and existing connected expressways is prepared**
    - **Phase II (3-5 Years): Big cities like State Capitals, UT headquarters may also be covered for distributed and demonstrative effect. Further, important Highways connected with each of these Mega Cities may be taken up for coverage.**
* Bureau of Energy Efficiency (BEE) shall be the Central Nodal Agency for rollout of EV Public Charging Infrastructure All relevant agencies including Central Electricity Authority (CEA) shall provide necessary support to Central Nodal Agency.   Every State Government shall nominate a Nodal Agency for that State for setting up charging infrastructure.
* These Guidelines and Standards shall supersede the Revised “Charging Infrastructure for Electric Vehicles – Guidelines and Standards” issued by Ministry of Power on 1st October 2019 and subsequent amendments dated 08.06.2020. The complete guidelines can be accessed on the website of Ministry of Power.

**Conclusion**

Well laid charging infrastructure is the key for the success of Electric Vehicles. The new guidelines and standards will go a long way to establish quality charging infrastructure in the EV ecosystem which would determine the future of EVs in India. It is remains to be seen how far the infrastructure created through these guidelines is going to help bringing EV revolution in India in the years to come.