
Framework for rolling-out of Electric Vehicle Charging Business by Distribution Licensees

Project Webinar

Date: 07th December, 2020 (Monday)

Time: 3:00 PM to 4:30 PM

Background

A combination of energy security, environmental and technological trends besides resource efficiency is prompting the countries to electrify modes of transportation. A significant investment has been pledged by all the stakeholders in the Electric Vehicle (EV) market and a strong policy push can be seen from both Central and State government towards this. As a result, an eco-system for battery powered and plug-in hybrid EVs, EV supply equipment (EVSE) and associated infrastructure has begun to evolve. The influx of EVs in the mobility ecosystem will have a direct impact on Distribution Companies (DISCOM) as even a moderate level of EV adoption may require augmentation in the existing electrical infrastructure.

However, evolving EV market is likely to result in additional revenue to DISCOMS though requiring measures to be taken by DISCOMS pertaining to issues related to grid reliability and spur in demand resulting in unplanned cost. A better and reliable EV charging infrastructure will help in quick adoption of EVs by the consumers. EV Charging Station (EVCS) is a window of opportunity for DISCOMS having the potential to earn cost plus tariff and also get additional revenue by entering into the business of EVCS. The market for EV is evolving and there are agencies that are entering in the EVCS segment, to have early mover advantage. DISCOMS are well placed to cater to the EVCS requirement and can tie-up with project developers, planning agencies and other government departments/agencies for entering the business of EVCS. Clearly, this will require a meticulous planning and ideological clarity. Hence, a framework is felt necessary that can be developed by DISCOMS to capture nuances pertaining to market entry.

Against this backdrop Shakti Sustainable Energy Foundation (SSEF) mandated a study to iPartner and Meghraj Capital Advisors Private Limited with the objective to prepare a framework for the DISCOMs to roll-out EVCS business.

Objective

The proposed framework aims to lay down the strategy for DISCOMS to discharge the responsibility of Universal Service Obligation (USO) and also avail new business opportunity of entering into the EVCS business.

Outcomes

The study presents a context from the perspective of EV and EVCS development in the country, especially on the policy and regulatory fronts at the state level. It captures EV Growth taking into consideration the stock and sales (new registration) scenarios and also discussed the method to select locations for establishment of EVCS by DISCOMs. It details the technologies available for EV charging especially in the Indian context and as being promoted by government agencies in the country and presents various business models for getting into EVCS business by DISCOMs. A

snapshot of risks to DISCOMs due to EVCS is also added. A detailed commercial assessment to assess viability of EV businesses for DISCOMs is undertaken and presented.

The Webinar

Considering that the project is expected to develop a robust framework for the promotion of EVs that can be adopted by multiple DISCOMs, the webinar with key stakeholders is expected to achieve the following objectives:

- 1. What are the key attributes of a framework that can be readily adopted by a DISCOM?**
- 2. What kind of models is already adopted by DISCOMs, the key challenges faced by them and how the DISCOMs have overcome or plan to overcome the barriers faced in wide scale adoption of EV business?**
- 3. How the framework can help the DISCOMs in adopting EV business at a larger scale?**

The webinar is expected to discuss different aspects of the framework including business models, technology options, risks and others will help in creating a robust framework and can be utilized by any DISCOM across the country.