Submitted to Ministry of Power

April 2020

SUGGESTIONS ON "DRAFT ELECTRICITY (AMENDMENT) ACT 2020" BY MINISTRY OF POWER, GOVT. OF INDIA

CENTRE FOR ENERGY, ENVIRONMENT & PEOPLE

The Ministry of Power vide Public Notice No. 42/6/2011-R&R (Vol-VIII) dated 17th April 2020 and 27th April 2020 uploaded on ministry's website has invited comments and suggestions from all stakeholders on Draft Electricity (Amendment) Act 2020. The present submission is in response to the notice and the draft amendment act published thereunder. We request the Ministry of Power to accept this submission on record.

Stranded Capacity

CEEP appreciates the initiative of RERC to utilise stranded capacity to promote electric mobility by offering discounted tariffs. However, Discoms do plan to add further capacity in their power procurement portfolio and hence the issue of stranded capacity may continue in absence of prudent power procurement planning. Moving forwards Discoms need to suitably account for electric vehicle load for power procurement planning.

It may be noted here that it may not be feasible for Discoms to provide discounted tariffs for an unlimited period. Hence, for the benefit of businesses engaged in electric mobility and user planning to buy electric vehicles, it shall provide a certain assurance if RERC explicitly mentions the period for which discounted tariffs shall be offered. Discounted tariffs may also be capped based on EV demand in megawatts (MW) and million units (MU). A period of 3-5 years is recommended for the same, and this may be reviewed 12 months before the expiry of the mentioned period or when the demand quota crosses 60%, whichever is earliest.

Growth Of Electric Mobility In Jaipur

During a consultations exercise carried out last year by CEEP, stakeholders expressed interesting insights on likely patterns of EV adoption in India and in Jaipur. These insights shall have a direct impact on the need for public charging stations (especially fast charging), and hence should be duly noted.

i. For intra city travel, mobility transition shall largely be led by electric buses. With predictable routes and sufficient docking time at bus stations, likelihood of comprehensive public charging infrastructure for same is unlikely.

ii. In the personal vehicle space, electric cars are likely to be adopted as a second vehicle. This may imply that during early years, the need for fast public charging for privately owned two and four wheelers is likely to be low.

iii. Fleet operators have the necessary fiscal capacity to lead the transition of electric mobility. To ensure high utilisation of assets they are likely to need fast charging infrastructure.

iv. Similarly, two and three wheelers are likely to be early adopters of electric vehicles but do not require dedicated fast charging infrastructure as slow charging infrastructure for four wheelers can serve as fast charging infrastructure for them.

Socialisation Of Costs

One of the main concerns with electricity mobility transition is about who is going to bear the costs of transition. During the early years, Discoms will have to invest in power procurement as well as augmentation of distribution infrastructure to meet the demand for EV charging. There are relevant concerns regarding utilisation of assets and power procurement contracts.

Moreover, it needs to be understood that electric mobility transition is unlikely to benefit all consumers equally, if at all the benefits are able to reach all consumers. More urbanised centers like Jaipur are likely to become early adopters. Hence, it is recommended that socialisation of additional costs is restricted to regions where E-mobility transition has started. Socialisation of costs amongst consumer categories shall also be done after due consideration of socio-economic impact on low paying consumers.

Definition Of Public Charging Station

RERC may define 'Public Charging Stations' as charging stations at any place wherein common public can access the facility for at least 12 hours in a day. Under this definition, facilities such as shopping malls, religious institutions, academic institutions, sports complexes, parking spaces, etc may set-up stations under the public charging category with declaration to make it available to all public without any restrictions or discrimination. However, concerned facilities may make appropriate arrangements to address security concerns, apply nominal parking charges and limit parking time based on minimum charging time needed for full charge.

Investments By Discom for Public Charging

A typical investor does detailed due diligence while investing in any new venture. While dealing with public money and government mandates, the same may be the case with investments made by Discoms. Stranded capacity is an obvious example of this. CEEP Research expresses concerns regarding the ability of Discoms to make prudent investments in the electric mobility space. To address such concerns, following guidelines are recommended:

i. Unless it is a matter of grants, Discoms shall establish public charging infrastructure by co-investing with private entities or PSUs such as NTPC, etc. In case of con-investment with PSUs, it shall be ensured that equity contribution is not backed by grants as in such cases business prudence is often undermined.

ii. Discoms shall be required to separately report capital investments in distribution infrastructure for electric charging, electric charging stations, operations costs of each station,

utilisation, record of accidents and breakdowns. The information shall be made available publicly as it shall facilitate learning across stakeholders.

iii. Wherever, public funds are invested via Discom, in case the utilisation of assets is less than 50%, transfer of cost to consumers shall not be allowed.

Demand Side Management

According to a report published by Brookings Institute, "if National Electric Mobility Mission Plan (NEMMP) sales targets for the year 2020 were met, the electricity demand from these EVs would be less than 10 billion units (bus), which is 1 percent of current electricity demand. However, in terms of aggregate loading capacity, these would contribute almost 10 percent."

It is quite evident that demand side management measures and peak management shall be extremely critical for integration of electric mobility into the grid. DSM measures shall be implemented across all sectors and not just electric mobility. Developing effective DSM measures is an evolutionary process, and it is critical that the same are deployed and refined at the earliest. This is especially important for staggering EV charging demand. For this purpose, it is essential that Discoms are mandated to record and report electricity demand patterns for at least 15-minute time slots, for all electric charging stations.