

**BEFORE THE HARYANA ELECTRICITY REGULATORY COMMISSION
BAYS No. 33-36, SECTOR-4, PANCHKULA- 134112, HARYANA**

Case No. HERC/PRO 67 of 2020

**Date of Hearing : 22.09.2021
Date of Order : 20.12.2021**

IN THE MATTER OF:

Charging Infrastructure, Tariff and other regulatory issues for Electric Vehicles

Interveners:

1. Haryana Vidyut Prasaran Nigam Limited (HVPNL)
2. Uttar Haryana Bijli Vitran Nigam Limited (UHBVNL)
3. Haryana Renewable Energy Development Agency (HAREDA)

Quorum

**Shri R.K. Pachnanda
Shri Naresh Sardana**

**Chairman
Member**

ORDER

Statement of Object and Reasons

1. The Government of India launched National Electric Mobility Mission Plan (NEMMP), 2020 to enhance national fuel security and provide affordable and environment-friendly transportation in the Country. Under this mission 'Faster Adoption and Manufacturing of Electric and Hybrid Vehicle in India' (FAME) Scheme Phase 1 and 2 was launched by Department of Heavy Industry (DHI) on 13.03.2015 and 08.03.2019 respectively to promote faster transformation from Internal Combustion Engines (ICEs) to Electric Vehicles (EVs). Also, the Ministry of Power (MoP) issued revised guidelines and standards for Charging Infrastructure for Electric Vehicles on 01.10.2019 and subsequently amended the same vide notification dated 08.06.2020. Considering the significance given by the Central Government for promotion of EVs, substantial growth is expected in the number of EVs and EV Charging Infrastructure in the State thereto.
2. In line with the aforesaid national objective, the Commission prepared a staff paper for inviting comments/suggestions in the matter of Charging Infrastructure, Tariff and other Regulatory issues for Electric Vehicles.
3. Taking suo-motu cognizance of the above matter under Section 3 of the Haryana Electricity Regulatory Commission (Procedure to be followed in suo-motu proceedings) Regulations, 2013, the Commission got prepared the ibid staff paper. Under the said regulation, the State

Commission is empowered to take suitable measures conducive to the development of electricity industry in the State.

4. The draft staff paper in the matter of Charging Infrastructure, Tariff and other regulatory issues for Electric Vehicles, placed in the public domain for inviting comments / suggestions / objections is reproduced as under:-

Section 1: Background

- 1.1. The Government of India launched the National Electric Mobility Mission Plan (NEMMP), 2020 to enhance national fuel security and provide affordable and environment-friendly transportation in the Country. Under this mission the scheme for 'Faster Adoption and Manufacturing of Electric and Hybrid Vehicle in India' (FAME) was launched by Department of Heavy Industry (DHI) on 13th March 2015. The policy aimed to promote manufacturing of electric and hybrid vehicle technology and to ensure its sustainable growth. The total outlay of the scheme was Rs. 795 Crore. The scheme focuses on four key areas such as Technological Development, Demand Creation, Pilot Projects and Charging Infrastructure. The scheme was initially approved for 2 years, commencing from 1st April 2015 and was extended from time to time up to 31st March 2019. The total outlay was also increased from Rs. 795 Crore to Rs. 895 Crore.
 - 1.2. After review of FAME I, based on the outcome and experience gained during the implementation of the Scheme, the Department of Heavy Industries recently notified Phase-II of the FAME India Scheme on 8th March 2019. The scheme is proposed to be implemented over a period of three years with effect from 1st April 2019. The scheme is proposed to be implemented through the following verticals.
 - i. Demand Incentives
 - ii. Establishment of Network of Charging Stations
 - iii. Administration of Scheme including Publicity, IEC (Information, Education & Communication) activities.
 - 1.3. The Scheme provides upfront incentives for purchase of Electric Vehicles and for setting up necessary Charging Infrastructure for Electric Vehicles. The Scheme also talks about required supplemental support from State governments to offer bouquet of fiscal and non-fiscal incentives to be notified separately in terms of waiver/concessional road tax, toll tax, parking fees, registration charges etc.
2. The Ministry of Power (MoP) issued revised guidelines and standards for Charging Infrastructure for Electric Vehicles on 1st October 2019. The key features of the guidelines are stated below: -

2.1 General

- i. Private charging at residence/ offices shall be permitted. Distribution Companies (DISCOMs) may facilitate the same.

- ii. Setting up of Public Charging Stations (PCS) shall be a de-licensed activity and any individual/entity is free to set up public charging stations provided that, such stations meet the technical, safety as well as performance standards and protocols laid down below as well as any further norms/standards/ specifications laid down by Ministry of Power and Central Electricity Authority (CEA) from time to time.
- iii. Any person seeking to set up a Public Charging Station may apply for connectivity and he shall be provided connectivity on priority by the Distribution Company licensee to supply power in the area.
- iv. Any Charging Station/Chain of Charging Stations may also obtain electricity from any generation company through open access.
- v. For these guidelines, Electric Vehicle Supply Equipment (EVSE) shall mean an element in EV infrastructure that supplies electric energy for recharging the electric vehicles.

3. Public Charging Infrastructure (PCI)-Requirements:

Every Public Charging Station(PCS) will have the following infrastructure:

- i) An exclusive transformer with all related substation equipment including safety appliance, if required.
- ii) 33/11 KV line/cables with associated equipment including line termination etc, if required.
- iii) Appropriate civil works.
- iv) Appropriate cabling & electrical works ensuring safety.
- v) Adequate space for Charging and entry/exit of vehicles.
- vi) Public Charging Station shall have, any one or more chargers or any combination of chargers from the table given below in one or more electric kiosk/boards :

| Charger Type | S.No. | Charger Connectors* | Rated Output Voltage (V) | No. of No. of Connector guns (CG) | Charging vehicle type (W=wheeler) |
|---------------|-------|--|--------------------------|-----------------------------------|-----------------------------------|
| Fast | 1 | Combined Charging System (CCS) (min 50 kW) | 200-750 or higher | 1 CG | 4 W |
| | 2 | CHArge de Move (CHAdeMO) (min 50 Kw) | 200-750 or higher | 1 CG | 4 W |
| | 3 | Type -2 AC (min 22 kW) | 380-415 | 1 CG | 4 W, 3W, 2 W |
| Slow/Moderate | 4 | Bharat DC-001 (15 kW) | 48 | 1 CG | 4 W, 3W, 2 W |
| | 5 | Bharat DC-001 (15 kW) | 72 or higher | 1 CG | 4 W |
| | 6 | Bharat DC-001 (15 kW) | 230 | 3 CG of 3.3 kW each | 4 W, 3W, 2 W |

*In addition, any other fast/slow/moderate charger as per approved DST/BIS standards whenever notified.

Note: Type-2AC (min 22 kW) is capable of charging e-2W/3W with the provision of an adapter.

- vii) Charging Station for e-two/three wheelers shall be free to install any charger other than those specified above subject to compliance of technical & safety standards as laid down by CEA.

- viii) Tie up with at least one online Network Service Providers (NSPs) to enable advance remote/online booking of charging slots by EV owners. Such online information to EV owners should also include information regarding location, types and numbers of chargers installed/available, service charges for EV charging etc.
 - ix) Share charging station data with the appropriate DISCOM and adhere to protocols as prescribed by CEA for this purpose. CEA, Central Nodal Agency (CAN) and State nodal Agency (SNA) shall have access to this database.
- 3.1. Electric Vehicle Supply Equipment (EVSE) shall be type tested by an agency /lab accredited by National Accreditation Board for Testing and Calibration Laboratories (NABL) from time to time.
 - 3.2. The above minimum infrastructure equipment do not apply to Private charging Points meant for self-use of individual EV owners (non-commercial basis).
 - 3.3. Captive charging infrastructure for 100% internal use for a company's own /leased fleet for its own use will not be required to install chargers as per para 3.1 and to have NSP tie ups.
 - 3.4. Charging Station may also be installed by Housing societies, Malls, Office Complexes, Restaurants, Hotels etc. with a provision to allow charging of visitor's vehicles which are permitted to come in its premises.
4. Public charging Infrastructure (PCI) for long range EVs and /or heavy duty EVs:
 - 4.1. Fast Charging Stations (FCS) i.e. Public charging stations for long range EVs and /or heavy duty EVs (like trucks, buses etc) will have the following :
 - i. At least two chargers of minimum 100 kW (200-750 V or higher) each of different specifications (CCS/CHAdeMO or any fast charger as approved by DST/BIS for above capacity) with single connector gun each.
 - ii. Appropriate Liquid Cooled Cables for high speed charging facility as above [4.1 (i)], for onboard charging of Fluid Cooled Batteries (currently available in some long range EVs), if required.
 - 4.2. Such Fast Charging Stations (FCS) which are meant only for 100% in house/captive utilisation, for example buses of a company, would be free to decide the charging specifications as per requirement for its in-house company EVs.
5. Location of Public Charging Stations:
 - 5.1. In case of Public charging Stations, the following requirements are laid down with regard to density / distance between two charging points.
 - i. At least one Charging Stations shall be available in a grid of 3 KmX 3 Km. Further, one Charging Station shall be set up at every 25 Km on both sides of highways/roads.
 - ii. For long range EVs and /or heavy duty EVs like buses/rucks etc., there shall be at least one Fast Charging Station with Charging Infrastructure Specifications as per para 4.1 above at every 100 Kms, one on each side of the highways/road located preferable within/alongside the stations laid in para 3 above. Within cities, such charging facilities for heavy duty EVs may be located within Transport Nagars, bus depots.
 - 5.2. Additional PCS/FCS can be installed even if there exists a PCS/FCS in the required grid or distance.
 - 5.3. The above density/distance requirement shall be used by the concerned state/UT Governments/their Agencies for the purposes of land use planning for public charging

stations as well as for priority in installation of distribution network including transforms/feeders etc. This shall be done in all cases including where no central/state subsidy is provided.

- 5.4. The appropriate Government (Central /State/UTs) may also give priority to existing retail outlets (RoS) of Oil Marketing Companies (OMCs) for installation of Public EV Charging Stations (in compliance with safety norms) to meet the requirements as laid above. Further, within such RoS, Company Owned and Company Operated (COCO) Ros may be given higher preference.

6. Database of Public EV Charging Stations:

Central Electricity Authority (CEA) shall create and maintain a national online database of all the Public Charging Station through DISCOMs. Appropriate protocols shall be notified by DISCOMs for this purpose which shall be mandatorily complied by the PCS. This database shall have access as finalised by CEA and Ministry of Power.

7. Tariff for Supply of Electricity to EV Public Charging Stations:

- 7.1. The tariff for supply of electricity to EV Public Charging Station shall be determined by the appropriate commission in accordance with the Tariff Policy issued under section 3 of Electricity Act 2003 as amended from time to time.
- 7.2. The Tariff applicable for domestic consumption shall be applicable for domestic charging.
- 7.3. The Separate metering arrangement shall be made for PCS so that consumption may be recorded and billed as per applicable tariff for EV charging stations.

8. Service charges at PCS:

- 8.1. Charging of EVs is a service as already clarified by Ministry of Power vide letter No. 23/08/2018 – R & R dated 13.04.2018.
- 8.2. In such cases where the PCS/FCS has been installed with Government Incentives (financial or otherwise), State Nodal Agency/State Government/ Appropriate Commission shall fix the ceiling of Service Charges to be charged by such PCS/FCS.

9. Priority for Rollout of EV Public Charging Infrastructure:

After extensive consultations with State Governments and different Department/Agencies of Central Government, phasing as follows are laid down as national priority for rollout of EV Public Charging Infrastructure.

- 9.1. 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 attached at Annexure-1.
- 9.2. 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.
- 9.3. The above priorities for phasing of rollout may be kept in mind by all concerned, including, different agencies of Central/State Governments while framing of further policies /guidelines for Public Charging Infrastructure of EVs, including for declaring further incentives/subsidies for such infrastructure and for such other purpose.

10. Implementation Mechanism for Rollout:

- 10.1. 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 the Central Nodal Agency.
 - 10.2. Every State Government Shall nominate a Nodal Agency for that State for setting up charging infrastructure. The State DISCOM shall generally be the Nodal Agency for such purpose. However, State Government shall be free to select a Central / State Public Sector Undertaking (PSU) including Urban Local Bodies (ULBs), Urban/area Development Authorities etc as its Nodal Agency.
11. Selection of Implementation Agency for Rollout:
- 11.1. The Central Nodal Agency shall finalize the cities and expressways/ highways to be finally taken up from the priority as given at para 10 above, in consultation with the respective State Governments.
 - 11.2. An Implementation Agency may be selected by the respective State Nodal Agency and shall be entrusted with responsibility of installation, operation and maintenance of PCS/FCS for designated period as per parameters laid down in this policy and as entrusted by the concerned Nodal Agency. The Implementation Agency may be an Aggregator as mutually decided between Central and State Nodal Agencies. However, they may also decide to choose different PCS providers for bundled packages are carved for bidding, such packages may include at least one identified expressway/highway or part thereof to prepare a cohesive regional package; the selected identified cities may be divided into one or more parts as necessary for such purposes.
 - 11.3. In such cases where the PCS/FCS has been installed with Government Incentives (financial or otherwise), State Nodal Agency / State Government/Appropriate Commission shall fix the ceiling of Service Charges to be charged by such PCS/FCS. The appropriate agency as mentioned above shall have the option for giving subsidy such as bidding for lower service charges or bidding for quantum of subsidy for fixed service charges etc.

Section 2: Business Models for Setting up Public Charging Infrastructure

1. The Charging Infrastructure for Electric Vehicles shall be set up in the State based on the following models.
 - A. DISCOM owned Public Charging Stations
 - B. Privately owned Public Charging Stations
 - A. DISCOM owned Public Charging Station

DISCOM can set up Public Charging Station in their own premises or at any other location suitable for setting up Charging Station as part of other business in accordance with the provisions of Section 51 of the Act and relevant Regulations.
 - B. Privately owned Public Charging Station
 - i. Any interested party/private investor can set up Public Charging Station with the minimum technical requirements specified by MoP in its Guidelines and Standards for Charging Infrastructure for electric Vehicles.
 - ii. The privately-owned Public Charging station shall adhere to the norms/ standards/ specifications laid down by MoP and CEA from time to time.

- iii. The DISCOM shall publish on its website, a list of standard procedures and protocols to be followed by the Station owners/operators before and after setting up the Charging stations.
- iv. The Authorized Official of the Nodal Agency shall have the right to inspect/examine the procedures/protocols of privately-owned Charging station at all times.
- v. The Authorized Official designated by the Nodal Agency shall inspect and validate whether the Charging Station is adhering to the minimum Technical requirements of MoP/CEA and has followed standard procedure and protocols.
- vi. The privately-owned Public Charging station shall be operational to public only after receipt of Clearance certificate signed by Authorized Official designated by the Nodal Agency.

Section 3: Procedures to be followed by DISCOMs/ Nodal Agency to be nominated by the State Government (preferably the Discom)

- a. The DISCOM shall facilitate growth of Electric Vehicle Charging Infrastructure either by setting up charging stations on its own or through franchisee agreement and also release connections to privately owned Charging Stations on priority basis on payment of charges as per prevailing orders/ Regulations
- b. DISCOM shall facilitate slow/fast charging at residence/offices by increasing its system capacity to avoid grid disturbances and make necessary provision for this in the Investment Plan.
- c. The DISCOM shall publish 'Standard Procedures and Protocols for Charging Infrastructure' on its website and shall be made available in all its offices for access to public at large.
- d. All Charging Stations are required to adhere to the guidelines specified in the 'Standard Procedures and Protocols for Charging Infrastructure' published by DISCOM as well as the guidelines and standards notified by MoP/CEA.
- e. The Public Charging Station set up by Discom or privately-owned model, shall require a clearance certificate from the Authorized Official designated by the Nodal Agency for such purpose, before it is operational and accessible to the public.
- f. The connectivity shall be granted to the Public Charging Station only after the issuance of Clearance certificate from the Authorized Official designated by the Nodal Agency.
- g. The Authorized Official designated by the Nodal Agency shall have the right to inspect all Public charging Stations set up in the State. The Authorized Official shall verify that the standard guidelines and protocols are followed by the Public Charging Station at all times.
- h. The DISCOM shall set up a separate EV cell for monitoring of charging stations installed by individuals/private players. The EV cell shall be responsible for monitoring and facilitation of the functioning/operations/safety standards etc. adopted by charging station operator. The DISCOM may charge a fee for this purpose which shall be determined the Commission in respective Tariff Orders.
- i. An Implementation Agency may be selected by the State Nodal Agency and shall be entrusted with responsibility of installation, operation and maintenance of

PCS/FCS for designated period as per parameters laid down in this policy and as entrusted by the concerned Nodal Agency. The Implementation Agency may be an Aggregator as mutually decided between Central and State Nodal Agencies. However, they may also decide to choose different PCS providers for bundled packages are carved for bidding, such packages may include at least one identified expressway/highway or part thereof to prepare a cohesive regional package; the selected identified cities may be divided into one or more parts as necessary for such purposes.

- j. The Nodal Agency shall maintain a database of all the Public Charging Stations set up in its area of License. The database shall include details of type of connectors/rated voltage/ number of charging points and type of charging available at different locations. The database shall be accessible to CEA.

Section 4: Incentives to Public Charging Stations

- a. The Public Charging Stations may be allowed to purchase power from any source through open access route in accordance with the provisions of Terms and Conditions for Open Access Regulations, 2016.
- b. The Public Charging Station may also set up battery swapping stations with due intimation to the Distribution Licensee. The tariff applicable for Public Charging Stations shall also be applicable to Battery swapping Stations. However, the Commission may notify separate tariff for battery swapping stations in its subsequent Tariff Order.
- c. The Public Charging Stations may also be set up with rooftop solar facility under applicable Regulations.

Section 5: Tariff Structure for Public Charging Stations

- a. The tariff applicable for public charging stations shall be as per Commission's tariff order issued from time to time. The current position is as follows:
- b. The tariff for Electric Charging Station shall be Rs. 6.20/kWh or Rs. 5.58/kVAh and Rs. 100/kW/month as fixed charges.
- c. In such cases where the PCS/FCS has been installed with Government Incentives (financial or otherwise), State Nodal Agency/State Government/ Appropriate Commission shall fix the ceiling of Service Charges to be charged by such PCS/FCS.
- d. With smart charging and metering in place and growth in solar applications, the Discom shall review the ToD hours and propose variable time differentiated pricing to take maximum benefit of available day time power.

Section 6: Other consumers

- e. The consumers desirous of charging their private vehicles will be charged as per tariff applicable to their respective category or to say they need not to take a separate connection. They can charge Electric Vehicles within their respective connection, provided that load with EV charging does not exceed the Sanctioned connected/contracted load or demand as the case may be.

In case connected load or contract demand exceeds the sanctioned connected load or contracted demand as the case may be, the consumers shall apply to DISCOMs for increase in their connected /contract load on account of EV

charging in their premises. The DISCOM shall take utmost efforts to upgrade its system as per the requirements of load for EV charging in its area of supply.

- f. DISCOM shall propose Capital Investment Plan for upgrading its network for accommodating Charging Infrastructure in order to facilitate smooth and efficient EV Charging at respective Charging Stations. The Capital Investment Plan shall be prepared after rigorous discussions with investor/stakeholders/private players who are keen to set up charging stations in the License area of the DISCOM.
- g. DISCOMS may also encourage other energy companies (like IOCL, HPCL, IGL etc.) to invest in providing a charging network, specially the fast charging stations at inter-city routes like state and national highways.
- h. The DISCOM shall also promote Smart Charging features by optimizing the charging process according to distribution grid constraints and local renewable energy availability, whereby EV charging patterns could be controlled to flatten the peak demand and support real time balancing of the grid by adjusting their charging levels. For implementation of Smart Charging and to give benefit of ToD rebate, the DISCOM may install smart meter at all Public Charging Stations. Smart Charging will not only help DISCOM manage its load but also provide grid security in the long run.

The Commission, before finalizing the draft order, has invited comments/suggestions from the stakeholders including the State Government and the Discoms on the same.

Public Proceedings

5. The draft staff paper was hosted on the website of the Commission for inviting comments / objections from the stakeholders/General Public and a notice dated 30.10.2020, to this effect, was published in two Newspapers, namely Indian Express (English) and Dainik Jagran (Hindi). The last date for submission of comments/suggestions by the stakeholders was 01.12.2020.
6. In response to the public notice dated 30.10.2020 issued by the Commission for inviting comments / objections from the stakeholders / General Public, the following parties filed their comments/objections in the Commission:-
 1. Haryana Vidyut Prasaran Nigam Limited (HVPNL),
 2. Uttar Haryana Bijli Vitran Nigam Limited (UHBVNL),
 3. Haryana Renewable Energy Development Agency (HAREDA)
7. **HVPNL:** The comments filed by HVPNL vide letter memo no. Ch-68/SE/RAU/F-155/vol-III dated 09.12.2020, and Commission's decisions thereto are below.
8. **The Commission's analysis/order and decisions-**

| Sr. no. | Content of the Staff paper | Comments/Suggestions of HVPNL | Commission's Decision |
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| 1 | Section 1 2(iv) any charging Station/chain of Charging Stations may also obtain electricity from any generation company through open access. | Any Charging Station/ Chain of Charging Stations may also obtain electricity from any generation company through open access as per HERC Open Access Regulations, 2012 and its amendments from time to time. | Reference of Open Access Regulations, as suggested will provide clarity in the matter. |
| 2 | Section 4 (a) The Public Charging Stations may be allowed to purchase power from any source through open access route in accordance with the provisions of Terms and Conditions for Open Access Regulations | The public charging stations may be allowed to purchase power from any source through open access route in accordance with the provisions of terms and conditions of HERC Open Access Regulations, 2012 and its amendments from time to time. | As above |
| 3 | Additional comments | “Once the vehicle is purchased after confirmation of cost benefit considerations, the heart of electric vehicles is battery and charging. Popularity of these vehicles will hinge upon how we facilitate charging of these vehicles in open space. In this regard we may consider providing incentives to developers and commercial space owners who provide free charging stations. Urban local bodies may be requested to accommodate by providing incentives in their building by law. For underground charging station the incentives may be appropriately designed. | As far as providing financial incentives is concerned, the Commission is of the view that the State Government may decide or frame a policy for providing incentive / subsidy / subvention to the owners/prospective owners of privately-owned Charging Stations. |

9. **UHBVNL:** The Uttar Nigam submitted comments vide memo no. Ch-65/RA/F-194/Vol-III dated 21.12.2020. The comments filed by the Nigam and Commission’s decisions thereto , wherein some value addition has been made to the staff paper, are reproduced below for sake of brevity and to avoid prolixity:

| Sr. no. | Clause no. | Description | UHBVNL’s Comments | Commission’s Decision |
|---------|------------|--|--|---|
| 2. | 2.1.i | Private charging at residence/offices shall be permitted. Distribution companies (DISCOMs) may facilitate the same. | Agreed. The tariff charged shall be as per the domestic/non-domestic category. | The Commission will decide the tariff in the Discoms ARR / Tariff order |
| 4. | 2. 1. iii | Any person seeking to set up a Public Charging Station may apply for connectivity and he shall be provided connectivity on priority by the Distribution licensee(s) to supply power in the area. | Discoms shall release such connections on priority subject to the developers making all the related payments upfront as per relevant HERC Regulations. | The comment is acceptable as it would impart clarity to the fee / charges recoverable |

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| | | | | by the Discoms. |
| 5. | 2.1. iv | Any Charging Station/Chain of Charging Stations may also obtain electricity from any generation company through open access. | <p>A state specific policy for Electric Vehicle Haryana shall be prepared in accordance with NEMMP, 2020 and MNRE, GOI guidelines.</p> <p>The open access facility shall be allowed subject to fulfilment of all terms & conditions of open access Regulation and payment of applicable open access charges.</p> <p>Further, as there will be multi-dimensional impact (Nonlinear Loading, increase ohmic losses and accelerated degradation of network) on Discom network even in the case of charging station developers opting for open access, any deviation in scheduled drawl and actual drawl shall be dealt in accordance with the HERC Regulation No. 43/2019 on Deviation, Settlement Mechanism and Related Matters.</p> <p>It is pertinent to mention that in the earlier days of EV adoption, there may be substantial variation in the projected energy demand and the actual energy consumption. So there will be variation in drawl in case of open access consumers.</p> | It would suffice to say that EV charging Stations, for the purpose of Open Access shall be treated at par with all other Open Access customers, unless the Commission, vide an order, decides to introduce certain specific dispensation for EV Charging Stations. |
| 6. | 3 | <p>Public Charging Infrastructure (PCI)- Requirements: Every Public Charging Station (PCS) will have the following infrastructure</p> <p>I) An exclusive transformer with all related substation equipment including safety appliance, if required.</p> <p>II) 33/11 kV line/cables with associated equipment including line termination etc., if required.</p> <p>III) Appropriate civil works.</p> <p>IV) Appropriate cabling & electrical works ensuring safety.</p> <p>V) Adequate space for Charging and entry/exit of vehicles.</p> | <p>Nigam is already having infrastructure for release of connections subject to the condition of availability of Right of Way. Connection will be released as per the instructions of the Nigam.</p> | No changes required. |

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| 8. | 3.4 | Charging station may also be installed by Housing Societies, Malls, Office Complexes, Restaurants, Hotels etc. with a provision to allow charging of visitors vehicles which are permitted to come in its premises. | Agreed. The tariff charged shall be as per the domestic / bulk domestic / non-domestic category. | Tariff(s) and charges shall be as decided by the Commission in its ARR / Tariff order(s) of the Discoms. |
| 9. | 4. | Public Charging Infrastructure (PCI) for long range EVs and /or heavy duty EVs: 4.1 Fast Charging Stations (FCS) i.e. Public Charging Stations for long range EVs and/or heavy duty EVs (Like trucks, buses etc.) will have the followings i) At least two chargers of minimum 100 kw (200-750 V or higher) each of different specifications (CCs/CHAeMO or any fast charger as approved by DST/BIS for above capacity with single connector gun each. ii) Appropriate liquid Cooled Cables for high speed charging facility as above (4.1 (i), for on board charging of fluid cooled Batteries (currently available in some long range EVs), if required) | For long range EVs and/or heavy duty EVs the connections will be released on High Tension (HT) supply for which service provider may intimate to the Nigam in advance so that the Nigam may prepare for creation of their infra in time. | No changes required. However, additional expenses i.e. cost of transformer etc. shall be borne from the CSR fund of the Discoms to keep the cost of infrastructure to be recovered from EVs as low as possible. |
| 10 | 4.2 | Such Fast Charging Stations (FCS) which are meant only for 100% in house /Captive utilization, for example buses of a company, would be free to decide the charging specifications as per requirement for its in –house company EVs. | The charging specification may be notified by CEA/ BEE at the earliest. | No changes required. It goes without saying that in case CEA notifies charging specifications the same shall be applicable. |
| 11 | 5.1.i | In case of Public charging Stations, the following requirements are laid down with regard to density / distance between two charging points. i. At least one Charging Stations shall be available | A state specific roadmap for Haryana shall be prepared in accordance with NEMMP, 2020 and MoP, GOI guidelines. The roadmap shall contain gradual increase of the charging stations in the state based on a detailed study. Considering the present EV penetration rate in Haryana, This guideline may be modified to: <i>At least one Charging Stations shall be available in a</i> | No changes required. In case of any difficulty in implementation, the |

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| | | 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. | <i>grid of 5 Km X 5 Km. Further, one Charging Station shall be set up at every 50 Km on both sides of highways/roads.</i> This guideline may be modified from time to time based on projected EV registration. | affected person(s) are free to approach this Commission for removal of difficulties. |
| 12 | 5.1.ii | For long range EVs and / or heavy duty EVs like buses/rucks etc., there shall be at least one Fast Charging Station with Charging Infrastructure specifications as per para 4.1 above at every 100 Kms, one on each side of the highways/road located preferable within/alongside the stations laid in para 3 above. Within cities , such charging facilities for heavy duty EVs may be located within Transport Nagars , bus depots. | Considering the present EV penetration rate of Haryana and neighboring states also, this guideline may be modified to: For long range EVs and/or heavy duty EVs like buses, trucks etc., there should be at least one fast charging station at every 200 Km one on each side of highways/ roads. The distance of 200 KM on each side of highways /roads shall be made in such a manner that EV charging station should be available approx. 100 KM by considering both side of highways. This guideline may be modified time to time based on projected EV registration. | No changes required. EVs ought to be integrated rapidly to move towards net zero carbon. |
| 13 | 5.2 | Additional PCS/FCS can be installed even if there exists a PCS/FCS in the required grid distance. | The additional PCS/ FCS may be installed as per requirement, however the financial terms & conditions of already installed PCS/ FCS by service provider may also be looked into. | No changes required. |
| 15 | 5.4 | The appropriate Government (Central /State/UTs) may also give priority to existing retail outlets (Ros) of Oil Marketing Companies (OMCs) for installation of Public EV Charging Stations (in compliance with safety norms) to meet the requirements as laid above. Further, within such Ros, Company Owned and Company Operated (COCO) Ros may be given higher preference. | As per the existing policy, maximum 415 Volts is only allowed in fuel stations. Whereas, all fast charging stations have to operate at 11KV, therefore existing fuel stations are certainly not the ideal places for these range of fast chargers. | No changes required as the provision is advisory in nature. Needless to say that any electrical installation is subject to technical feasibility and safety audit. |
| 17 | 7.1 | The tariff for supply of electricity to EV public charging station shall be determined by the appropriate Commission in accordance with the Tariff policy issued under section 3 of Electricity Act, 2003 as amended from time to time. | Agreed. Any reduction in the tariff may be compensated by the State Govt./HERC in accordance to section 65 of the Electricity Act, 2003. | No changes required. Section 65 is applicable in case the State Govtt. desires to provide subsidy on the tariff determined by the Commission |

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| | | | | u/s 62 of the Act. |
| 19 | 7.3 | The separate metering arrangement shall be made by PCS so that consumption may be recorded and billed as per applicable tariff for EV charging stations. | Haryana Discoms envisage that providing separate metering arrangement will increase the likelihood of using connection dedicated for EV charging purpose for other purposes, to exploit the lower tariff rate for EV Charging Station. This will impact the Discoms' financial health adversely. Considering the above scenario, in case any existing consumer wants to install EV charging station within the same premises, Discoms propose that the tariff shall continue to be charged as per their existing category. | No changes required. |
| 21 | 9 9.1 9.2 9.3 | Priority for rollout of EV Public Charging Infrastructure. After extensive consultations with State Governments and different department/agencies of Central Government, phasing as follows are laid down as national priority for rollout of EV public charging infrastructure. 9.1 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 coverage. A list of mega cities and existing connected expressways is attached at annexure-1. 9.2 Phase-II (3-5 years) big cities like State Capitals, UT headquarters may also covered for distributed and demonstrative effect. Further, important highways connected with each of these mega cities may be taken up for coverage. 9.3 The above priorities for phasing of rollout may be kept mind by all concerned, including, different agencies of central/state Government while framing of further policies /guidelines for public charging infrastructure of EVs, including for declaring further incentives/ subsidies for such infrastructure and for such | MoP has issued revised guidelines and standards for charging infrastructure for Electric Vehicle. In the guidelines, list of corridors are given but there is no city of Haryana but the Highways of Haryana which are covered in Phase-1 are Delhi-Jaipur and Delhi-Agra. As such, Chairman-cum-Managing Director, UHBVN & DHBVN vide D.O. No. 27/XEN/R-II/F- 350 dated 18.10.2019 requested to Director General, Bureau of Energy Efficiency, New Delhi to include Gurugram and Faridabad cities in the revised guidelines of MoP for charging infrastructure for Electric Vehicle and the Delhi-Chandigarh Highway in Phase-I of the roll out of E-Charging Infrastructure Project to enable the state of Haryana to contribute in reducing pollution in the National Capital Region by adopting Electric vehicles. Response of BEE is awaited. | The guidelines is regarding fixing priority for the rollout. However, all important cities in Haryana, even if they may not fall within the definitions of priority cities including the National / State Highways ought to be targeted for proliferation of EVs and Charging Stations thereto. |

| | | other purpose | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 22 | 10 10.1 10.2 | <p>Implementation mechanism for rollout:</p> <p>Bureau of Energy Efficiency (BEE) 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.</p> <p>Every state government shall nominate Nodal Agency for that state for setting up charging infrastructure. The state DISCOM shall generally be the Nodal Agency for such propose. However, State government shall be free to select a Central/State Public Sector undertaking (PSU) including Urban Local Bodies (ULDs), Urban/Area Development Authorities etc as its Nodal agency.</p> | <p>Transport Deptt. Govt. of Haryana has forwarded draft electric vehicle policy and the draft consolidated policy having comments of all relevant departments for E-Vehicle is to be finalized by the Transport deptt. EESL Haryana has been requested vide letter dated 07.04.2020 to carry out the assessment for identifying the locations for setting up Public Charging Stations (PCS) for E-vehicle and type of chargers to be installed in both Discoms i.e. UHBVN & DHBVN in consultation with the Office of respective SEs/OP. on the highways as well as districts per detail given below:</p> <table border="1"> <thead> <tr> <th>Sr. No</th> <th>Project Sites</th> <th>Distance</th> <th>PCI (Public Charging Infrastructure) (Qty)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Chandigarh-Delhi Highway (Shambhu to Kundli Section)</td> <td>225 Kms</td> <td>18</td> </tr> <tr> <td>2</td> <td>Chandigarh-Hisar Highway (Ambala to Hisar section)</td> <td>150 Kms</td> <td>12</td> </tr> <tr> <td>3</td> <td>Hisar-Delhi Highway (Hisar to Bahadurgarh Section)</td> <td>200 Kms</td> <td>16</td> </tr> <tr> <td>4</td> <td>Districts (3 PCI Unit in each District)</td> <td>22 Nos</td> <td>66</td> </tr> <tr> <td colspan="3">Total</td> <td>112</td> </tr> </tbody> </table> <p>But due to COVID-19 the work has not been started by EESL.</p> <p>In the meantime, Department of Heavy Industry (DHI), Gol has authorized Rajasthan Electronics & Instruments Ltd. (REIL), PSU to install 1061 no. EV charging station in 45 cities across the country in which REIL has a mandate to establish 10 nos. each of slow charging stations in Karnal and Sonapat district in Haryana. REIL vide their letter dated 17.07.2020 had requested to provide the letter of Understanding (LoU) for creation of EV charging station in order to promote Green and Pollution free transportation in Karnal and the firm has approached MC directly for installation of EV charging station in Sonapat District. In the Karnal District, 1 no. location for setting up of Slow Charging Electric Vehicle Station under DISCOM building & administrative approval for setting up the PCS has been granted by the WTDs with following configuration.</p> | Sr. No | Project Sites | Distance | PCI (Public Charging Infrastructure) (Qty) | 1 | Chandigarh-Delhi Highway (Shambhu to Kundli Section) | 225 Kms | 18 | 2 | Chandigarh-Hisar Highway (Ambala to Hisar section) | 150 Kms | 12 | 3 | Hisar-Delhi Highway (Hisar to Bahadurgarh Section) | 200 Kms | 16 | 4 | Districts (3 PCI Unit in each District) | 22 Nos | 66 | Total | | | 112 | No changes required. |
| Sr. No | Project Sites | Distance | PCI (Public Charging Infrastructure) (Qty) | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Chandigarh-Delhi Highway (Shambhu to Kundli Section) | 225 Kms | 18 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | Chandigarh-Hisar Highway (Ambala to Hisar section) | 150 Kms | 12 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | Hisar-Delhi Highway (Hisar to Bahadurgarh Section) | 200 Kms | 16 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | Districts (3 PCI Unit in each District) | 22 Nos | 66 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | | | 112 | | | | | | | | | | | | | | | | | | | | | | | | | |

| | | | Charger | | | |
|--------------------------------------|-----------------|---|--|---------------------------|--|--------------------------------|
| | | | Charger | Charging Guns per charger | Total Chargers to be installed at each of the slow charging station | Total number of Charging Guns. |
| | | | AC0001 (10 kW) | 3 | 3 | 9 |
| | | | DC0001 (15 kW) | 1 | 1 | 1 |
| Total Number of charging guns | | | 10 | | | |
| 24 | Section 2. 1. A | DISCOM can set up Public Charging Station in their own premises or at any other location suitable for setting up Charging Station as part of other business in accordance with the provisions of Section 51 of the Act and relevant Regulations | Haryana Discoms are willing to set up Charging Infrastructure wherever land is available at the existing grid substations along the National highway/State highway. However, the Charging Stations may be treated as Asset Base for ARR calculation. | | No changes required. The asset base for the ARR of the Discoms shall continue to be as per the MYT Regulations in vogue. | |
| 25 | Section 2.1. B | <p>Privately owned Public Charging Station</p> <p>i. Any interested party/private investor can set up Public Charging Station with the minimum technical requirements specified by MoP in its Guidelines and Standards for Charging Infrastructure for electric Vehicles.</p> <p>ii. The privately-owned Public Charging station shall adhere to the norms/standards/ specifications laid down by MoP and CEA from time to time.</p> <p>iii. The DISCOM shall publish on its website, a list of standard procedures and protocols to be followed by the Station owners/operators before and after setting up the Charging stations.</p> <p>iv. The Authorized Official of the Nodal Agency shall have the right to inspect/examine the procedures/protocols of privately- owned Charging station at all times.</p> <p>v. The Authorized Official designated by the Nodal Agency shall inspect and</p> | <p>For Privately Owned Public Charging Stations, Discoms' role will be restricted to only providing electricity connections subject to payment of all the relevant charges as per HERC Regulations.</p> | | No changes required. | |

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| | | <p>validate whether the Charging Station is adhering to the minimum Technical requirements of MoP/CEA and has followed standard procedure and protocols.</p> <p>vi. The privately-owned Public Charging station shall be operational to public only after receipt of Clearance certificate signed by Authorized Official designated by the Nodal Agency.</p> | <p>Discoms shall charge a fee as may be decided by the Commission from the private charging station developer for inspection of the Charging Station and providing clearance certificate for operations.</p> | <p>Fees / Charges to be levied by the Nodal Agency, in addition to the applicable tariff(s), shall be determined by the Commission .</p> |
| 26 | Section 3 3 (b) 3 (c) | <p>Procedures to be followed by DISCOMS/Nodal Agency to be nominated by the State Government (Preferably the Discoms).</p> <p>DISCOM shall facilitate slow/fast charging at residence/offices by increasing its system capacity to avoid grid disturbances and make necessary provision for this in the Investment Plan.</p> <p>The DISCOM shall publish 'Standard Procedures and Protocols for Charging Infrastructure' on its website and shall be made available in</p> | <p>3 (b) It is pertinent to mention that there will be substantial incremental impact of Charging stations on future energy requirement. Accordingly, projection for power procurement and network infrastructure planning of the Discoms needs to be revised. HERC may allow the additional capex required for infrastructure upgradation related to Charging Stations as part of the Annual Capex plan. Initial Capex required for development of charging stations may be funded by State/Central Govt. as a grant.</p> <p>Policies may also be prepared by HERC on possibilities of reusing EV batteries as stationary storage systems. When the capacity of an EV battery drops below 70% (typically after 3-4 years of use in cars and autorickshaws), it is replaced with a new battery. The retired battery from an EV can be reused for several years for stationery applications such as storage for solar PV systems, solar PV based street lighting, UPS, energy storage for micro grids, ancillary services and other grid support applications. Deploying millions of EV batteries retired every year for grid applications would be the most cost-effective route to build GW scale energy storage systems for grid support services. Appropriate norms may also be prescribed by HERC for final disposal of the batteries at end of life.</p> <p>3 (c) An exhaustive guideline on "Standard Procedures and Protocols for Charging Infrastructure" may be published by BEE/CEA to ensure uniformity across states and to avoid any further operational issues at a later stage.</p> | <p>For the purpose of Section 3 herein, the responsibility should be that of the Nodal Agency as nominated / designate by the State Government instead of the Discoms.</p> <p>As far as demand for grid power is concerned including distribution system, the Discoms are free to revise its Business Plan and file the same for the consideration of the Commission .</p> |

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| | 3 (h) | <p>all its offices for access to public at large.</p> <p>The DISCOM shall set up a separate EV cell for monitoring of charging stations installed by individuals /private payers. The EV cell shall be responsible for monitoring and facilitation of the functioning /operations /safety standards etc. adopted by charging station operator. The DISCOM may charge a fee for this purpose which shall be determined the commission in respective tariff orders.</p> | 3(h) Creation of separate cell for E-Vehicle shall be considered after growth in the Business. | |
| 16 | 4.c. | Public charging stations may also be set-up with Rooftop Solar facility under applicable Regulations | Agreed. Subject to Net Metering Regulations. | At this stage, it would suffice to say under applicable regulations. Hence, no changes required. |
| 17 | Section 5 (a & b) | The tariff for Electric Charging Station shall be Rs. 6.20/kWh or Rs. 5.58/kVAh and Rs. 100/kW/month as fixed charges. | Separate tariff is required in case the charging station operator takes bulk supply at a single point and sells the same to the end users. Tariff for the Charging station operator as bulk user and tariff for end user may be fixed by HERC. This will ensure that the primary objective of the policies is reaching to the targeted end users. | The tariff issues shall be reckoned with at length while considering the ARR / Tariff petitions of the Discoms for the FY 2022-23. Till then, the Commission does not envisage electricity aggregator / bulk supplier who would procure electricity from the Discoms for onward distribution / sales. |

10. **Comments filed by HAREDA:** Vide letter no. DRE/NRE/2020/10369 dated 02.12.2020, HAREDA has submitted their comments as under:

| Proposal as per the staff paper | Comments | Commission's Decision |
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| Section 2: Business Models for Setting up Public Charging infrastructure | | |
| <p>The Charging Infrastructure for Electric vehicles shall be set up in the State based on the following models.</p> <p>A. DISCOM owned Public Charging Stations</p> <p>B. Privately owned Public Charging Stations</p> <p>A. DISCOM owned Public Charging Station Discoms can set up Public Charging Station in their own premises or at any other location suitable for setting up Charging Station as part of other business in accordance with the provisions of Section 51 of the Act and relevant Regulations.</p> <p>B. Privately owned Public Charging Station</p> <p>i. Any interested party/private investor can set up Public Charging Station with the minimum technical requirements specified by MoP in its Guidelines and Standards for charging Infrastructure for electric Vehicles,</p> <p>ii. The privately-owned Public charging station shall adhere to the norms/ standards/ specifications laid down by MoP and CEA from time to time.</p> <p>iii. The DISCOM shall publish on its website, a list of standard procedure and protocols to be followed by the station owners/ operators before and setting up the Charging stations.</p> <p>iv. The Authorized Official of the Nodal Agency shall have the right to inspect/ examine the procedures/ protocols of privately-owned Charging station at all times.</p> <p>v. The Authorized Official designated by the Nodal Agency shall inspect and validate whether the charging Station in adhering to the minimum Technical requirements of Mop/CEA and has followed standard procedure and protocols.</p> <p>vi. The privately-owned Public Charging station shall be operational to public only after receipt of Clearance certificate signed by Authorized Official designated by the Nodal Agency.</p> | <p>In addition to the proposed, Charging Stations in the State may also be set up by Energy Efficiency Services Limited (EESL) a Unit of Bureau of Energy Efficiency (BEE), GoI.</p> <p>Further, it is informed that New and Renewable Energy (NRE) Department, Haryana has been designated as State Nodal Agency for creation of charging infrastructure for electric vehicles in the State, so in addition to the proposed, New and Renewable Energy Department, Haryana/ HAREDA shall explore the other feasible business models for setting up of charging stations/ infrastructure for electric vehicles in the State by private entrepreneurs/ government agencies.</p> | <p>There is no embargo on EESL or any other organization / institutions for setting up Public Charging Infrastructure. However, such charging stations shall be covered under privately owned public charging stations.</p> <p>Further, the Nodal Agency for creation of charging infrastructure shall be the New and Renewable Energy Department, Haryana / HAREDA.</p> |
| Section 3: Procedures to be followed by DISCOMs/ Nodal Agency to be nominated by the State Govt. (Preferably the Discom) | | |
| a. The DISCOM shall facilitate growth of Electric Vehicle Charging Infrastructure either by setting up charging stations on its own or through franchisee agreement and also release | a. The Discoms/ NRE Department/ HAREDA shall facilitate growth of Electric Vehicle Charging Infrastructure either by setting up | NRE / HAREDA, being the nodal agency, shall be following the procedures |

| Proposal as per the staff paper | Comments | Commission's Decision |
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| <p>connections to privately owned Charging Stations on priority basis on payment of charges as per prevailing orders/ Regulations</p> <p>b. DISCOM shall facilitate slow/fast charging at residence /offices by increasing its system capacity to avoid grid disturbances and make necessary provision for this in the Investment Plan.</p> <p>c. The DISCOM shall publish 'Standard Procedures and Protocols for Charging Infrastructure' on its website and shall be made available in all its offices for access to public at large.</p> <p>d. All Charging Stations are required to adhere to the guidelines specified in the 'Standard Procedures and Protocols for Charging Infrastructure' published by DISCOM as well as the guidelines and standards notified by MoP/CEA.</p> <p>e. The Public Charging Station set up by Discom or privately -owned model, shall require a clearance certificate from the Authorized Official designated by the Nodal Agency for such purpose, before it is operational and accessible to the public.</p> <p>f. The connectivity shall be granted to the Public Charging Station only after the issuance of Clearance certificate from the Authorized Official designated by the Nodal Agency.</p> <p>g. The Authorized Official designated by the Nodal Agency shall have the right to inspect all Public charging Stations set up in the State. The Authorized Official shall verify that the standard guidelines and protocols are followed by the Public Charging Stations at all times.</p> <p>h. The DISCOM shall set up a separate EV cell for monitoring and facilitation of the functioning / operations/ safety standards etc. adopted by charging station operator. The DISCOM may charge a fee for this purpose which shall be determined the Commission in respective Tariff Orders.</p> <p>i. An Implementation Agency may be selected by the State Nodal Agency and shall be entrusted with responsibility of installation, operation and maintenance of PCS/FCS for designated period as per parameters laid down in this policy and as entrusted by the concerned Nodal Agency. The implementation Agency may be an Aggregator as mutually decided between Central and State Nodal Agency. The Implementation Agency may be an aggregator as mutually decided between Central and State Nodal Agencies. However, they may also decide to choose different PCS providers for bundled packages are craved for bidding, such packages may include at least one identified expressway/</p> | <p>charging stations on its own or through franchisee agreement. DISCOM shall release connections to privately owned Charging Stations on priority basis on payment of charges as per prevailing orders/ Regulations</p> <p>b. Discom shall facilitate slow/fast charging at residence/offices by increasing its system capacity to avoid grid disturbance and make necessary provision for this in the Investment Plan.</p> <p>c. The DISCOM/ NRE department shall publish 'Standard Procedures and Protocols for Charging Infrastructure' on its website and shall be made available in all its offices for access to public at large.</p> <p>d. All Charging Stations are required to adhere to the guidelines specified in the 'Standard Procedures and Protocols for Charging Infrastructure' published by DISCOM/ NRE Department as well as the guidelines and standards notified by MoP/CEA.</p> <p>e. The Public Charging Station set up by Discom/NRE/HAREDA or privately-owned model, shall require a clearance certificate from the Authorized Official designated by the Nodal Agency for such purpose, before it is operational and accessible to the public.</p> <p>f. The connectivity shall be granted the Public Charging Station only after the issuance of Clearance certificate from the Authorized official designated by the Nodal Agency.</p> <p>g. The Authorized Official designated by the Nodal Agency shall have the right to inspect all Public charging Stations set up in the State. The Authorized official shall verify that the standard guidelines and protocols are followed by the Public Charging Station at all times.</p> <p>h. The State Nodal Agency (NRE Department) shall set up a separate EV cell for monitoring of charging stations installed by individuals/ private players. The EV cell shall be responsible for monitoring and facilitation of the</p> | <p>as mentioned in Section 3.</p> |

| Proposal as per the staff paper | Comments | Commission's Decision |
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| <p>highway or part thereof to prepare a cohesive regional package; the selected identified cities may be divided in to one or more parts as necessary for such purpose.</p> <p>j. The Nodal Agency shall maintain a database of all the Public Charging Stations set up in its area of License. The database shall include details of type of connectors/ rated voltage/ number of charging points and type of charging available at different locations. The database shall be accessible to CEA</p> | <p>functioning/ operations/ safety standards etc. adopted by charging station operator. The NRE Department may charge a fee for this purpose which shall be determined the Commission in respective Tariff Orders.</p> <p>i. An Implementation Agency may be selected by the State Nodal Agency and shall be entrusted with responsibility of installation, operation and maintenance of PCS/FCS for designated period as per parameters laid down in this policy and as entrusted by the concerned Nodal Agency. The Implementation Agency may be an Aggregator as mutually decided between Central and State Nodal Agencies. However, they may also decide to choose different PCS providers for bundled packages are carved for bidding, such packages may include at least one identified expressway/ highway or part thereof to prepare a cohesive regional package; the selected identified cities may be divided into one or more parts as necessary for such purpose.</p> <p>j. The Nodal Agency shall maintain a database of all the Public Charging Stations set up in its area of License. The database shall include details of type of connectors/ rated voltage/ number of charging points and type of charging available at different locations. The database shall be accessible to CEA.</p> | |
| Section 4: Incentives to Public Charging Stations | | |
| <p>a.The Public Charging Stations may be allowed to purchase power from any source through open access route in accordance with the provisions of Terms and Conditions for Open Access Regulations in vogue.</p> <p>b.The Public Charging Station may also set up battery swapping stations with due intimation to the Distribution Licensee. The tariff applicable for Public charging Stations shall also be applicable to Battery swapping Stations. However, the Commission may notify separate tariff for battery swapping stations in its subsequent Tariff Order.</p> | <p>In addition to the proposed, it is proposed that:</p> <p>1.The prime objective of switching over to E-mobility on global level is to reduce the consumption of fossil fuels and also to reduce carbon emission. The charging of E-vehicles through conventional electricity shall fulfills the limited objective as generation of electricity shall again lead to carbon emission. Hence RE based Charging Stations are required to be promoted. So, State Govt. may provide incentive in terms of</p> | <p>It is up to the State Government to consider providing subsidy / subvention. Any exemptions would reduce the revenue of the Discoms and to that extent the gap would have to be bridged from subsidy either by the State Govt. or by the Central Govt.</p> |

| Proposal as per the staff paper | Comments | Commission's Decision |
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| <p>c. The Public Charging Stations may also be set up with rooftop solar facility under applicable Regulations.</p> | <p>exemptions of open access charges, if RE power is used through open access in these E-Vehicle Charging Stations.</p> <p>2. Also, some incentives may be provided by the Government to reduce of Public Charging Stations so that the reasonable benefit may be passed on to the end users in terms of reduced tariff for the charging of E-vehicles. Also, the setting up of EV Charging Station may be viable business.</p> | |
| Section 6: Other Consumers | | |
| <p>a. The consumers desirous of charging their private vehicles will be charged as per tariff applicable to their respective category or to say they need not to take a separate connection. They can charge Electric Vehicles within their respective connection, provided that load with EV charging does not exceed the sanctioned connected/contracted load or demand as the case may be.</p> <p>In case connected load or contract demand exceeds the sanctioned connected load or contracted demand as the case may be, the consumers shall apply to DISCOMs for increase in their connected/contract load on account of EV charging in their premises. The DISCOM shall take utmost efforts to upgrade its system as per the requirements of load for EV charging in its area of supply.</p> <p>b. DISCOM shall propose Capital Investment plan for upgrading its network for accommodating charging infrastructure in order to facilitate smooth and efficient EV Charging at respective charging stations. The capital investment plan shall be prepared after rigorous discussions with investor/stakeholders/private players who are keen to set up charging stations in the Licensee area of DISCOM.</p> <p>c. Discoms may also encourage other energy companies (like IOCL, HPGCL, IGL etc.) to invest in providing a charging network, specially the fast charging stations at inter-city routes like state and national highways.</p> <p>d. The DISCOM shall also promote Smart Charging features by optimizing the charging process according to distribution grid constraints and local renewable energy availability, where by EV charging patterns could be controlled of flatten the peak demand and support real time balancing</p> | <p>In addition to the proposed, it is submitted that:</p> <ol style="list-style-type: none"> 1. For Combo Charger C-122 (CCS+CHAdMo+AC-002) (122 kW). Contract demand of 122 KW is required. In the Combo Charger, there are three charges 2 of 50 KW each and one of 22KW. 2. In view of the above, for the E-Vehicle Charging Station, LT Connection may be provided instead of HT connection so as to reduce the cost of installation. It is informed that for HT connection separate/dedicated transformer is required which in turn increase the cost of installation of the Charging Station. 3. Also, for a series of Charging Stations set up in the same campus/nearby areas (approachable with single connection) shall be allowed to set up with single HT connection so that separate transformer is not required for each such charging station. 4. NRE Department being the State Nodal Agency may also encourage other energy companies (like IOCL, HPCL, IGL, EESL etc.) to invest in providing a charging network, specially the fast charging stations at inter-city routes like state and national highways and in cities. | <p>The guideline shall incorporate the additions suggested by HAREDA on Section 6 herein.</p> |

| Proposal as per the staff paper | Comments | Commission's Decision |
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| of the grid by adjusting their charging levels. For implementation of Smart Charging and to give benefit of ToD rebate, the DISCOM may install smart meter at all Public Charging Stations. Smart Charging will not only help DISCOM manage its load but also provide grid security in the long run. | | |

11. In order to afford an opportunity to the Interveners/General Public to present their views, the Commission held a public hearing through video conferencing, due to the pandemic, in the matter on 22.09.2021. The parties present mostly reiterated their comments / suggestions as already reproduced earlier in the present order.
12. The Commission has considered the written as well as oral objections raised by the interveners. The Commission, while issuing this order, in the matter of Charging Infrastructure, Tariff and other regulatory issues for Electric Vehicles on Suo Motu basis has considered the revised guidelines for Charging Infrastructure for Electric Vehicles notified by Ministry of Power (MoP) on 01.10.2019 and 08.06.2020 duly taking note of the comments/suggestions received from the stakeholders. Accordingly, the guidelines should be read in conjunction with the decisions of the Commission against each comment / suggestion of the intervener.
13. State Nodal Agency as designed by the State Government shall be NRE / HAREDA in Haryana.
14. The Regulations viz. Charging Infrastructure, Tariff and other Regulatory issues for Electric Vehicles, as approved by the Commission and placed at Annexure - A, shall be sent for Gazette Notification immediately.
15. The sou motu petition instituted by the Commission is accordingly disposed of.

This Order is signed, dated and issued by the Haryana Electricity Regulatory Commission on 20th December, 2021.

Date: 20.12.2021
Place: Panchkula

(Naresh Sardana)
Member

(R.K Pachnanda)
Chairman



ANNEXURE – A

HARYANA ELECTRICITY REGULATORY COMMISSION

Notification

Regulation No. HERC/ / 2021 :- In exercise of the powers conferred on it by section 181 (zp) of the Electricity Act, 2003 (Act 36 of 2003) and all other powers enabling it in this behalf and after previous publication, the Haryana Electricity Regulatory Commission makes the following regulations:-

1. Short title, commencement, extent of application and interpretation._

(1) These Regulations may be called the Haryana Electricity Regulatory Commission (Terms and Conditions for setting up Charging Infrastructure, Tariff and other Regulatory issues for Electric Vehicles), Regulations, 2021.

(2) These Regulations shall come into force from the date of their publication in the Haryana Government Gazette.

(3) These Regulations shall extend to all Charging Infrastructure, Tariff and other Regulatory issues for Electric Vehicles in the State of Haryana.

Statement of Objects and Reasons:-

1.1. The Government of India launched the National Electric Mobility Mission Plan (NEMMP), 2020 to enhance national fuel security and provide affordable and environment-friendly transportation in the Country. Under this mission the scheme for 'Faster Adoption and Manufacturing of Electric and Hybrid Vehicle in India' (FAME) was launched by Department of Heavy Industry (DHI) on 13th March 2015. The policy aimed to promote manufacturing of electric and hybrid vehicle technology and to ensure its sustainable growth. The total outlay of the scheme was Rs. 795 Crore. The scheme focuses on four key areas such as Technological Development, Demand Creation, Pilot Projects and Charging Infrastructure. The scheme was initially approved for 2 years, commencing from 1st April 2015 and was extended from time to time up to 31st March 2019. The total outlay was also increased from Rs. 795 Crore to Rs. 895 Crore.

1.2. The Charging Infrastructure, Tariff and other Regulatory issues for Electric Vehicles shall broadly be implemented through the following:-

- i. Demand Incentives
- ii. Establishment of Network of Charging Stations
- iii. Administration of Scheme including Publicity, IEC (Information, Education & Communication) activities.

1.3. The upfront incentives for purchase of Electric Vehicles and for setting up necessary Charging Infrastructure for Electric Vehicles available may be gainfully utilized. The Haryana Governments may offer appropriate fiscal and non-fiscal incentives.

2.1 General

- i. Private charging at residence/ offices / commercial complex shall be permitted. Distribution Companies (DISCOMs) may facilitate the same. The tariff charged shall be as determined by the Commission from time to time.

Provided, in the absence of specific tariff determined by the Commission, the domestic/LT / HT tariff and charges, as the case may be, shall be applicable. non-domestic category.

- ii. Setting up of Public Charging Stations (PCS) shall be a de-licensed activity and any individual/entity is free to set up public charging stations provided that, such stations meet the technical, safety as well as performance standards and protocols laid down below as well as any further norms/standards/ specifications laid down by Ministry of Power and Central Electricity Authority (CEA) from time to time.
- iii. Any person seeking to set up a Public Charging Station may apply for connectivity and he shall be provided connectivity on priority by the Distribution Company licensee to supply power in the area. Discoms shall release such connections on priority subject to the developers making all the related payments upfront as per relevant HERC Regulations.
- iv. Any Charging Station/ Chain of Charging Stations may also obtain electricity from any generation company through open access as per HERC Open Access Regulations, 2012 as may be amended from time to time.

The open access facility shall be allowed subject to fulfilment of all terms & conditions of open access Regulation and payment of applicable open access charges.

Further, as there will be multi-dimensional impact (Nonlinear Loading, increase ohmic losses and accelerated degradation of network) on Discom's network, even in the case of charging station developers opting for open access, any deviation in scheduled drawl and actual drawl shall be dealt with in accordance with the HERC Regulation No. 43/2019 on Deviation, Settlement Mechanism and Related Matters.

- v. For the purpose of these regulations, Electric Vehicle Supply Equipment (EVSE) shall mean an element in EV infrastructure that supplies electric energy for recharging the electric vehicles.

2. Public Charging Infrastructure (PCI)-Requirements: -

Every Public Charging Station (PCS) will have the following infrastructure:

- i) An exclusive transformer with all related substation equipment including safety appliance, if required.
- ii) 33/11 KV line/cables with associated equipment including line termination etc, if required.
- iii) Appropriate civil works.
- iv) Appropriate cabling & electrical works ensuring safety.
- v) Adequate space for Charging and entry/exit of vehicles.
- vi) Public Charging Station shall have, any one or more chargers or any combination of chargers from the table given below in one or more electric kiosk/boards :

| Charger Type | S.No. | Charger Connectors* | Rated Output Voltage (V) | No. of No. of Connector guns (CG) | Charging vehicle type (W=wheeler) |
|---|-------|--|--------------------------|-----------------------------------|-----------------------------------|
| Fast | 1 | Combined Charging System (CCS) (min 50 kW) | 200-750 or higher | 1 CG | 4 W |
| | 2 | CHArge de Move (CHAdeMO) (min 50 Kw) | 200-750 or higher | 1 CG | 4 W |
| | 3 | Type -2 AC (min 22 kW) | 380-415 | 1 CG | 4 W, 3W, 2 W |
| Slow/Moderate | 4 | Bharat DC-001 (15 kW) | 48 | 1 CG | 4 W, 3W, 2 W |
| | 5 | Bharat DC-001 (15 kW) | 72 or higher | 1 CG | 4 W |
| | 6 | Bharat DC-001 (15 kW) | 230 | 3 CG of 3.3 kW each | 4 W, 3W, 2 W |
| <p>*In addition, any other fast/slow/moderate charger as per approved DST/BIS standards whenever notified.</p> <p>Note: Type-2AC (min 22 kW) is capable of charging e-2W/3W with the provision of an adapter.</p> | | | | | |

- vii) Charging Station for e-two/three wheelers shall be free to install any charger other than those specified above subject to compliance of technical & safety standards as laid down by CEA.
- viii) Tie up with at least one online Network Service Providers (NSPs) to enable advance remote/online booking of charging slots by EV owners. Such online information to EV owners should also include information regarding location, types and numbers of chargers installed/available, service charges for EV charging etc.
- ix) Share charging station data with the appropriate DISCOM and adhere to protocols as prescribed by CEA for this purpose. CEA, Central Nodal Agency (CAN) and State nodal Agency (SNA) shall have access to this database.

- 2.1. Electric Vehicle Supply Equipment (EVSE) shall be type tested by an agency /lab accredited by National Accreditation Board for Testing and Calibration Laboratories (NABL) from time to time.
- 2.2. The above minimum infrastructure equipment does not apply to Private charging Points meant for self-use of individual EV owners (non-commercial basis).
- 2.3. Captive charging infrastructure for 100% internal use for a company's own /leased fleet for its own use will not be required to install chargers as per para 3.1 and to have NSP tie ups.
- 2.4. Charging Station may also be installed by Housing societies, Malls, Office Complexes, Restaurants, Hotels etc. with a provision to allow charging of visitor's vehicles which are permitted to come in its premises. The tariff charged shall be as per order of the Commission in its ARR/Tariff order.

3. Public charging Infrastructure (PCI) for long range EVs and /or heavy duty EVs:

- 4.1 Fast Charging Stations (FCS) i.e. Public charging stations for long range EVs and /or heavy duty EVs (like trucks, buses etc) will have the following:
 - i. At least two chargers of minimum 100 kW (200-750 V or higher) each of different specifications (CCS/CHAdeMO or any fast charger as approved by DST/BIS for above capacity) with single connector gun each. The charging specification may be notified by CEA/ BEE at the earliest.
 - ii. Appropriate Liquid Cooled Cables for high speed charging facility as above [4.1 (i)], for onboard charging of Fluid Cooled Batteries (currently available in some long range EVs), if required.
- 4.2 Such Fast Charging Stations (FCS) which are meant only for 100% in house/captive utilisation, for example buses of a company, would be free to decide the charging specifications as per requirement for its in-house company EVs.

5. Location of Public Charging Stations:

- 5.1 In case of Public charging Stations, the following requirements are laid down with regard to density / distance between two charging points.
 - i. At least one Charging Stations shall be available in a grid of 3 KmX 3 Km. Further, one Charging Station shall be set up at every 25 Km on both sides of highways/roads.
 - ii. 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 as per para 4.1 above at every 100 Kms, one on each side of the highways/road located preferable within/alongside the stations laid in para 3 above. Within cities, such charging facilities for heavy duty EVs may be located within Transport Nagars, bus depots.

A state specific roadmap for Haryana shall be prepared in accordance with NEMMP, 2020 and MoP, GOI guidelines by the nodal agency.

The roadmap shall contain gradual increase of the charging stations in the state based on a detailed study.

5.2 Additional PCS/FCS can be installed even if there exists a PCS/FCS in the required grid or distance.

5.3 The above density/distance requirement shall be used by the concerned state/UT Governments/their Agencies for the purposes of land use planning for public charging stations as well as for priority in installation of distribution network including transforms/feeders etc. This shall be done in all cases including where no central/state subsidy is provided.

5.4 The Haryana Government may also give priority to existing retail outlets (Ros) of Oil Marketing Companies (OMCs) for installation of Public EV Charging Stations (in compliance with safety norms) to meet the requirements as laid above. Further, within such Ros, Company Owned and Company Operated (COCO) ROs may be given higher preference.

6. Database of Public EV Charging Stations:

HAREDA shall create and maintain a database of all the Public Charging Station through DISCOMs and make the same available on its website. Appropriate protocols shall be notified by DISCOMs for this purpose which shall be mandatorily complied by the PCS.

7. Tariff for Supply of Electricity to EV Public Charging Stations:

7.1 The tariff for supply of electricity to EV Public Charging Station shall be determined by the HERC in accordance with the Tariff Policy issued under section 3 of Electricity Act 2003 as may be amended from time to time.

Provided in its absence the tariff applicable for Domestic Consumption, including the slab benefit, shall be applicable for domestic charging and / HT / LT tariff, as the case may be for others.

7.2 The separate metering arrangement shall be made for PCS so that consumption may be recorded and billed as per applicable tariff for EV charging stations.

8. Service charges at PCS:

8.1 Charging of EVs is a service, as also clarified by Ministry of Power vide letter No. 23/08/2018 – R & R dated 13.04.2018.

8.2 In such cases where the PCS/FCS has been installed with Government Incentives (financial or otherwise), State Nodal Agency i.e. HAREDA shall fix the ceiling of Service Charges to be charged by such PCS/FCS.

9. Priority for Rollout of EV Public Charging Infrastructure:

Phasing shall be as follows for rollout of EV Public Charging Infrastructure in Haryana.

9.1 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 attached at Annexure-1.

9.2. 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.

9.3. The above priorities for phasing of rollout may be kept in mind by all concerned, including, different agencies of Central/State Governments while framing of further policies /guidelines for Public Charging Infrastructure of EVs, including for declaring further incentives/subsidies for such infrastructure and for such other purpose.

10. Implementation Mechanism for Rollout:

10.1. Shall be in line with the policies of Bureau of Energy Efficiency (BEE) for rollout of EV Public Charging Infrastructure.

10.2. HAREDA shall be the Nodal Agency for the purpose of these regulations.

11. Selection of Implementation Agency for Rollout:

11.1 The State Nodal Agency shall finalize the cities and expressways/ highways to be taken up on priority.

11.2. HAREDA may select an Implementation Agency to be entrusted with responsibility of installation, operation and maintenance of PCS/FCS for designated period as per parameters laid down in these regulations.

Provided that the Implementation Agency may be an Aggregator as mutually decided between Central and State Nodal Agencies. However, they may also decide to choose different PCS providers for bundled packages are carved for bidding, such packages may include at least one identified expressway/highway or part thereof to prepare a cohesive regional package; the selected identified cities may be divided into one or more parts as necessary for such purposes.

Provided where the PCS/FCS has been installed with Government Incentives (financial or otherwise), State Nodal Agency shall fix the ceiling of Service Charges to be charged by such PCS/FCS. The appropriate agency as mentioned above shall have the option for giving subsidy such as bidding for lower service charges or bidding for quantum of subsidy for fixed service charges etc.

Section 2: Business Models for Setting up Public Charging Infrastructure:

1. The Charging Infrastructure for Electric Vehicles shall be set up in the State based on the following models.

- A. DISCOM owned Public Charging Stations
- B. Privately owned Public Charging Stations

Further, State Nodal Agency for creation of charging infrastructure for electric vehicles in the State shall be New and Renewable Energy Department/ HAREDA.

A. DISCOM owned Public Charging Station:

DISCOM can set up Public Charging Station in their own premises or at any other location suitable for setting up Charging Station as part of other business in accordance with the provisions of Section 51 of the Act and relevant Regulations.

B. Privately owned Public Charging Station

- i. Any interested party/private investor can set up Public Charging Station with the minimum technical requirements specified by MoP in its Guidelines and Standards for Charging Infrastructure for electric Vehicles.
- ii. The privately-owned Public Charging station shall adhere to the norms/ standards/ specifications laid down by MoP and CEA from time to time.
- iii. The DISCOM shall publish on its website, a list of standard procedures and protocols to be followed by the Station owners/operators before and after setting up the Charging stations.
- iv. The Authorized Official of the Nodal Agency shall have the right to inspect/examine the procedures/protocols of privately-owned Charging station at all times.
- v. The Authorized Official designated by the Nodal Agency shall inspect and validate whether the Charging Station is adhering to the minimum Technical requirements of MoP/CEA and has followed standard procedure and protocols.
- vi. The privately-owned Public Charging station shall be operational to public only after receipt of clearance certificate signed by Authorized Official designated by the Nodal Agency.

Section 3: Procedures to be followed by HAREDA, Nodal Agency nominated by the State Government

Being the State Nodal Agency, HAREDA is primarily responsible to follow the procedures mentioned in this section.

- a. The NRE Department/ HAREDA shall facilitate growth of Electric Vehicle Charging Infrastructure either by setting up charging stations on its own or through franchisee agreement. DISCOM shall release connections to privately owned Charging Stations on priority basis on payment of charges as per prevailing orders/ Regulations.
- b. DISCOM shall facilitate slow/fast charging at residence/offices by increasing its system capacity to avoid grid disturbances and make necessary provision for this in the Investment Plan.
- c. The NRE department shall publish 'Standard Procedures and Protocols for Charging Infrastructure' on its website and shall be made available in all its offices for access to public at large.
- d. All Charging Stations are required to adhere to the guidelines specified in the 'Standard Procedures and Protocols for Charging Infrastructure' published by NRE department as well as the guidelines and standards notified by MoP/CEA.
- e. The Public Charging Station set up by NRE/HAREDA or privately-owned model, shall require a clearance certificate from the Authorized Official designated by the

Nodal Agency for such purpose, before it is operational and accessible to the public.

- f. The connectivity shall be granted to the Public Charging Station only after the issuance of Clearance certificate from the Authorized Official designated by the Nodal Agency.
- g. The Authorized Official designated by the Nodal Agency shall have the right to inspect all Public charging Stations set up in the State. The Authorized Official shall verify that the standard guidelines and protocols are followed by the Public Charging Station at all times.
- h. The State Nodal Agency (NRE Department) shall set up a separate EV cell for monitoring of charging stations installed by individuals/private players. The EV cell shall be responsible for monitoring and facilitation of the functioning/operations/safety standards etc. adopted by charging station operator. The NRE Department may charge a fee for this purpose which shall be determined the Commission in respective Tariff Orders.
- i. An Implementation Agency may be selected by the State Nodal Agency and shall be entrusted with responsibility of installation, operation and maintenance of PCS/FCS for designated period as per parameters laid down in this policy and as entrusted by the concerned Nodal Agency. The Implementation Agency may be an Aggregator as mutually decided between Central and State Nodal Agencies. However, they may also decide to choose different PCS providers for bundled packages are carved for bidding, such packages may include at least one identified expressway/highway or part thereof to prepare a cohesive regional package; the selected identified cities may be divided into one or more parts as necessary for such purposes.
- j. The Nodal Agency shall maintain a database of all the Public Charging Stations set up in its area of License. The database shall include details of type of connectors/rated voltage/ number of charging points and type of charging available at different locations. The database shall be accessible to CEA.

Section 4: Incentives to Public Charging Stations

- a. The public charging stations may be allowed to purchase power from any source through open access route in accordance with the provisions of terms and conditions of HERC Open Access Regulations, 2012 and its amendments from time to time.
- b. The Public Charging Station may also set up battery swapping stations with due intimation to the Distribution Licensee. The tariff applicable for Public Charging Stations shall also be applicable to Battery swapping Stations. However, the Commission may notify separate tariff for battery swapping stations in its subsequent Tariff Order.
- c. The Public Charging Stations may also be set up with rooftop solar facility under applicable Regulations.

Section 5: Tariff Structure for Public Charging Stations

- a. The tariff applicable for public charging stations shall be as per Commission's tariff order issued from time to time.

- b. As of now, the Commission in its recent tariff order dated 30.03.2021 has approved the concessional tariff for Electric Vehicles Charging Station of Rs. 5.55 / kWh or Rs. 5.00 / kVAh. The Fixed Charges shall be Rs. 100 / kW / kVA per month
- c. Additionally, the energy charges as per TOD / TOU tariff shall also be applicable during the off-peak demand period (November to March) between 9.00 P.M. and 05.30 A.M as applicable to the HT Supply consumers on the total consumption, instead of incremental consumption, during the said time period.
- d. In such cases where the PCS/FCS has been installed with Government Incentives (financial or otherwise), State Nodal Agency shall fix the ceiling of Service Charges to be charged by such PCS/FCS.
- e. With smart charging and metering in place and growth in solar applications, the Discom shall review the ToD hours and propose variable time differentiated pricing to take maximum benefit of available day time power.

Section 6: Other consumers

- a. The consumers desirous of charging their private vehicles will be charged as per tariff applicable to their respective category or to say they need not to take a separate connection. They can charge Electric Vehicles within their respective connection, provided that load with EV charging does not exceed the Sanctioned connected/contracted load or demand as the case may be.

In case connected load or contract demand exceeds the sanctioned connected load or contracted demand as the case may be, the consumers shall apply to DISCOMs for increase in their connected /contract load on account of EV charging in their premises. The DISCOM shall take utmost efforts to upgrade its system as per the requirements of load for EV charging in its area of supply.

- b. DISCOM shall propose Capital Investment Plan for upgrading its network for accommodating Charging Infrastructure in order to facilitate smooth and efficient EV Charging at respective Charging Stations. The Capital Investment Plan shall be prepared after rigorous discussions with investor/stakeholders/private players who are keen to set up charging stations in the License area of the DISCOM.
- c. DISCOMS may also encourage other energy companies (like IOCL, HPCL, IGL etc.) to invest in providing a charging network, specially the fast charging stations at inter-city routes like state and national highways.
- d. The DISCOM shall also promote Smart Charging features by optimizing the charging process according to distribution grid constraints and local renewable energy availability, whereby EV charging patterns could be controlled to flatten the peak demand and support real time balancing of the grid by adjusting their charging levels. For implementation of Smart Charging and to give benefit of ToD rebate, the DISCOM may install smart meter at all Public Charging Stations. Smart Charging will not only help DISCOM manage its load but also provide grid security in the long run.

- e. For Combo Charger C-122 (CCS+CHAdeMo+AC-002) (122 kW). Contract demand of 122 KW is required. In the Combo Charger, there are three charges 2 of 50 KW each and one of 22KW.
- f. In case of HT connection for E-Vehicle Charging Station(s) for load more than 50 kW, the cost of separate / dedicated transformer along with allied equipment shall be borne out of CSR fund of Discoms to rein in cost of installation(s).
- g. Also, for a series of Charging Stations set up in the same campus/nearby areas (approachable with single connection) shall be allowed to set up with single HT connection so that a separate transformer is not required for each such charging station.
- h. NRE Department being the State Nodal Agency may also encourage other energy companies (like IOCL, HPCL, IGL, EESL etc.) to invest in providing a charging network, specially the fast charging stations at inter-city routes like state and national highways and in cities.

Section 7: Other

- a. State Nodal Agency- HAREDA shall be responsible for deciding the ceiling of Service Charges to be charged by PCS/FCS, where PCS/FCS has been installed with Government Incentives. For all other PCS/FCS, a range for service charges may be fixed by the approval of Commission, on the proposal of State Nodal Agency.
- b. With smart charging and metering in place and growth in solar applications, the Discom shall review the ToD hours and propose variable time differentiated pricing to take maximum benefit of available day time power.
- c. As far as providing financial incentives is concerned, the Commission is of the view that the State Government may decide or frame a policy for providing incentive / subsidy / subvention to the owners/prospective owners of privately-owned Charging Stations.
- d. In view of Regulation 9 of HERC (Duty to supply electricity on request, Power to recover expenditure incurred in providing supply and Power to require security) Regulations, 2016, as a special case for EV, the Commission allows as under: -
 - i. tariff applicable for charging of Electric Vehicle at premises other than charging stations shall be the same as applicable for the relevant category of connection at such premises.
 - ii. tariff for electric vehicle charging stations on single point delivery shall be applicable for charging of batteries at swapping facilities provided that such swapping facilities are exclusively used for swapping of batteries of E-Rickshaw/E-Vehicle only.

- iii. at electric vehicle charging station, a separate electricity connection shall be taken by the applicant for other associated purposes such as office of charging station, public amenities, consumption of other equipment etc. The applicant shall ensure a separate metering arrangement for such purposes and tariff as applicable to relevant category shall be applicable to the same.
 - iv. permit a separate connection for electric vehicle charging in Retail outlets of Oil Marketing Companies, Housing Societies, Malls, Office Complexes, Restaurants, Hotels, Parking of Metro Stations or its premises etc.
 - v. further, in cases where single point connection has been provided in the premises, and a separate electric vehicle connection is desired at LT level, distribution licensee in such cases may adopt minus metering by providing separate wiring and metering for electric vehicle charging activities.
 - vi. applicant must be having the approval for safety and/or fire clearance for the electric vehicle charging station wherever applicable from the concerned department such as Petroleum and Explosives Safety organization (PESO), fire department, etc.
- e. In case of HT connection for E-Vehicle Charging Station(s) for load more than 50 kW, the cost of separate / dedicated transformer along with allied equipment shall be borne out of CSR fund of Discoms to rein in cost of installation(s).

12. Power to Relax. – The Commission may by general or special order, for reasons to be recorded in writing, and after giving an opportunity of hearing to the parties likely to be affected may suo moto relax any of the provisions of these regulations or on an application made before it by an interested person.

13. Issue of orders or directions. – Subject to the provisions of the Act and these regulations, the Commission may, from time to time, issue orders and procedural directions with regard to the implementation of these regulations and specify the procedure to be followed on various matters, which the Commission has been empowered by the regulations to direct and matters incidental thereto.

14. Power to amend. – The Commission may, at any time, add, vary, modify or amend any of the provisions of these regulations.

15. Power to remove difficulties. – If any difficulty arises in giving effect to any of the provisions of these regulations, the Commission may, by general or special order, make such provisions, which in the opinion of the Commission are necessary or expedient to do so.

16. Savings. – Nothing in these Regulations shall limit the inherent power of the Commission to make such orders as may be necessary to meet the ends of justice or to prevent abuses of the process of law / statutes. Nothing in these Regulations shall bar the Commission from adopting, any other procedure, which may be at

variance with any of the provisions of these Regulations, as long as they are in conformity with the provisions of the Electricity Act, 2003 and the policies framed by the Central / State Government thereto.

Provided that the reasons for any such deviating shall be recorded in writing.

Provided also that nothing in these Regulations shall, expressly or implicitly, bar the Commission from dealing with any matter under these Regulations or exercising any power under the Act for which no regulations have been framed.

Date: 20.12.2021
Place: Panchkula

(Naresh Sardana)
Member

(R.K. Pachnanda)
Chairman