**Before the**

**MAHARASHTRA ELECTRICITY REGULATORY COMMISSION**

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**Case No. 133 of 2020**

**Case filed by the Tata Power Company Limited (Distribution) seeking setting up of uniform principles across Distribution Licensees operating in the State of Maharashtra for allocation of Distribution Assets to different voltage levels (i.e. EHT, HT, LT) based on their usage for computation of Wheeling Charges**

**Coram**

**I.M.Bohari, Member**

**Mukesh Khullar, Member**

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| The Tata Power Company Limited (Distribution) | ….....Petitioner |

Vs

| | |
|---|---|
| 1) Adani Electricity Mumbai Limited | …….Respondent No 1 |
| 2) The Brihanmumbai Electric Supply & Transport Undertaking | …….Respondent No 2 |
| 3) Indian Railways | …….Respondent No 3 |
| 4) Mindspace Business Parks Private Limited | …….Respondent No 4 |
| 5) Gigaplex Estate Private Limited | …….Respondent No 5 |
| 6) Nidar Utilities Panvel LLP | …….Respondent No 6 |
| 7) KRC Infrastructure and Projects Private Limited | …….Respondent No 7 |
| 8) Maharashtra State Electricity Distribution Company Limited | …….Respondent No 8 |

**Appearance**

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|---|---|
| 1) Petitioner | Shri. Prashant Kumar (Rep) |
| 2) Respondent No 1 | Shri. Vivek Mishra (Rep) |
| 3) Respondent No 2 | Shri. N.N.Chougule (Rep) |
| 4) Respondent No 3 | None |
| 5) Respondent No 4,5, and 7 | None |
| 6) Respondent No 6 | None |
| 7) Respondent No 8 | Shri. Milind Digraskar (Rep) |

# **ORDER**

**Date:9 December , 2020**

1. The Tata Power Company Limited (Distribution) (**TPC-D**) has filed this Petition on 22 June, 2020 seeking setting up of uniform principles across Distribution Licensees operating in the State of Maharashtra for allocation of Distribution Assets to different voltage levels (i.e. EHT, HT, LT) based on their usage for computation of Wheeling Charges under Regulation 103 of Maharashtra Electricity Regulatory Commission (Multi Year Tariff) Regulations, 2019.

2. **TPC-D's main prayers are as under**:

   a) *Approve the proposed methodology or any other methodology as deemed fit by Hon'ble Commission and issue practice directions under Regulation 103 of "Maharashtra Electricity Regulatory Commission (Multi Year Tariff) Regulations, 2019" for standardization of the principle for allocation of cost of network related to higher voltage level among the consumers connected at such voltage level and consumers connected at lower voltage levels as per applicable regulations.*

   b) *Direct all the distribution licensees operating in the state to adopt the standard principle / methodology for allocation of cost to various voltage level for computation of tariff and other charges at respective voltage level in all the tariff petitions to be filed before the Hon'ble Commission from the date of approval.*

3. **TPC-D in its Petition has stated as follows:**

3.1 TPC-D in its MYT Petition in Case No. 326 of 2019 had submitted its allocation of Distribution Network Assets (GFA) into EHT:HT:LT voltage levels based on the utilization by consumers connected at respective voltage level for arriving at the Wheeling Charges at different voltage levels. The Commission, in its MYT Order dated 30 March 2020 has made following observation with respect to the allocation of assets:

> *"…….The Commission is of the view that these asset ratios cannot be modified every time, depending on the prevalent competitive strategies of the competing Distribution Licensees.* ***There has to be a proper study of the asset ratios being claimed by the Distribution Licensees****. In the absence of any proper justification for the modified HT:LT asset ratio, the Commission has computed the Wheeling Charges based on the HT:LT asset ratio of 77:23 considered in the MTR Order, modified to 1:76:23 for EHT:HT:LT."*

3.2 While rejecting the request of TPC-D for changing the asset ratios (which was incidentally made for the first time by TPC-D), the Commission, in the MYT Order dated 30 March, 2020 in Case No. 326 of 2019 has observed that the asset ratios cannot be modified every time, depending on the prevalent competitive strategies of the competing Distribution Licensees.

3.3 However, in the case of BEST, such change in allocation was allowed by the Commission in the very same competitive environment from HT: LT as 6:94 to HT: LT as 39.45:60.55 in the review Order of BEST (MTR Order Case No 203 of 2017) in Case No 337 of 2018 dated 30 November, 2018.

3.4 Considering the above, it is observed that there is no uniform policy for allocation of assets between different voltage levels in the State distribution network nor is there any Regulation to this effect. The GFA ratios as approved by the Commission for the 4 Distribution Licensees in Maharashtra are presented in the Table below:

| Licensee | Voltage Level | FY 2016-17 | FY 2017-18 | FY 2018-19 | FY 2019-20 | FY 2020-21 |
|---|---|---|---|---|---|---|
| Adani | EHV | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| | HT | 55.00% | 55.00% | 48.92% | 48.92% | 48.92% |
| | LV | 45.00% | 45.00% | 51.08% | 51.08% | 51.08% |
| BEST | EHV | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| | HT | 6.00% | 6.00% | 39.45% | 39.45% | 39.45% |
| | LV | 94.00% | 94.00% | 60.55% | 60.55% | 60.55% |
| MSEDCL | EHV | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| | HT | 70.00% | 70.00% | 70.00% | 70.00% | 70.00% |
| | LV | 30.00% | 30.00% | 30.00% | 30.00% | 30.00% |
| TPC-D | EHV | 0.00% | 0.00% | 0.00% | 0.00% | 1.00% |
| | HT | 77.00% | 77.00% | 77.00% | 77.00% | 76.00% |
| | LV | 23.00% | 23.00% | 23.00% | 23.00% | 23.00% |

3.5 GFA ratio for EHT:HT: LT of any Distribution Licensee may not be a static ratio to be applied in each year as it will depend on the category of new network (EHT, HT or LT) added during any financial year. Therefore, it is proposed that the underlying principle for accounting any asset in the distribution network to be categorized as EHT, HT or LT for determining the GFA ratio for EHT, HT and LT may be approved by the Commission instead of static ratio to be applied in every year Tariff Petition.

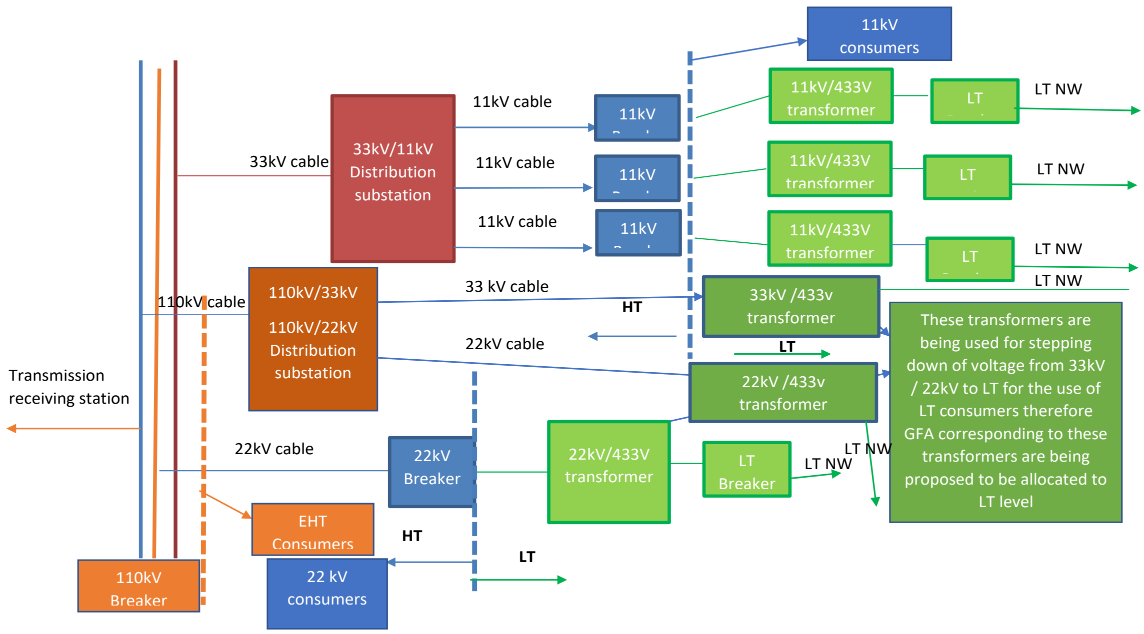
3.6 Considering the above, TPC-D proposes certain principles for voltage wise allocation of distribution assets as follows:

3.7 As per the definitions in the MYT Regulations, 2019, distribution network above 33 kV is EHT, between 33 kV and 650 volts is HT and below 650 volts is LT. Accordingly, as per definition, cable / line network will be segregated as per their respective voltages; for instance, a 33 kV cable would be categorized as HT asset whereas a 110 kV cable would be categorized as EHT asset.

3.8 In addition to the cable / line network, there are various Distribution substations forming part of the network which typically may have varying voltage levels i.e. 33 / 22 kV, 33 / 11 kV substation or a 11 kV / 433 V substation.

3.9 Considering this principle, in a substation, although the asset may fall under different voltage levels, these are being utilized by the consumers connected at lower voltage levels. For example, any transformer connected at a typical 33 kV / 433 V, 22kV / 433V or 11 kV / 433 V etc. voltage level in the distribution network of the licensee is utilized by the consumers connected at 433 V voltage level. Further, there may be consumers connected directly at any voltage level like 110 KV, 33 kV, 22kV or11kV but they may not require the services of a typical 33/22 kV, 22 kV/433 V transformer or 11 kV/433V transformer as these consumers would be installing their own transformer for voltage step down for their end use as per requirement and such transformers do not form part of the network asset of the Distribution Licensee. Therefore, the substation cost shall be to the account of those consumers who utilize the services of this asset i.e. the consumers connected at 433 V.

3.10 To bring clarity in understanding, TPC-D has presented a typical Distribution network below comprising of EHT, HT and LT network and sample of consumers connected at various voltage levels.




3.11 As can be seen from the above schematic, the services of a typical 11kV/433V transformer / substation is utilized by consumers connected at 433 V i.e. lower voltage level consumers. Hence, the cost attributable to these transformers / substations which are installed for stepping down the voltage to a lower level and serve the consumers connected at the lower voltage level shall be borne by the consumers at the lower voltage level. Similar approach may be followed for other transformer/substation configuration.

3.12 Accordingly, it is requested to allocate the substation cost to the lower voltage level of the substation while carrying out the GFA allocation to the EHT, HT, LT voltage levels.

3.13 Once, the network is assigned to the EHT, HT, LT voltage levels as proposed above, the further process of proportionate allocation of EHT network cost to HT and LT consumers (as LT and HT consumers require the EHT network for meeting their power requirement), HT network cost to HT and LT consumers (as LT consumers require the HT network as well for meeting their power requirement) and LT network cost to LT consumers (as LT consumers require LT network meeting their power requirement) in proportion of consumer sales may be continued.

3.14 The Commission may appropriately finalize the uniform methodology on its own or may seek the services of eminent institutions like Central Electricity Authority (**CEA**), Central Power Research Institute (**CPRI**), and National Power Training Institute (**NPTI**) etc. to study and recommend the uniform methodology to be followed by the distribution Licensees in the State of Maharashtra.

3.15 There is a possibility that some Distribution Licensees may not have the segregation of the Distribution Network assets. In such a scenario, the Commission may define a standard ratio which may be utilized initially however, going forward, the distribution asset segregation may have to be made in line the methodology approved by the Commission.

4. **Nidar Utilities Panvel LLP (NUPLLP) in its submission dated 5 August, 2020 has submitted as follows**:

4.1 Allocation of assets (GFA) to HT: LT voltage levels should be based on their utilization by consumers connected at respective voltage level so as to to arrive at Wheeling Charges to be made applicable to consumers.

4.2 The services of a typical 11kV/433 V transformer / substation are utilized by consumers connected at 433 V i.e. lower voltage level consumers. Hence, the cost attributable to these transformers / substations which are installed for stepping down the voltage to a lower level and serve the consumers connected at the lower voltage level shall be borne by the consumers at the lower voltage level.

4.3 GFA ratio for EHT:HT:LT of any Distribution Licensee may not be a static ratio to be applied in each year as it will depend on the category of new network (EHT, HT or LT) added during any financial year.

4.4 The Commission may issue a draft approach paper after the study of all issues involved and invites comments/suggestions from the Distribution Licensee on the said approach paper. Thereafter, the Commission may finalize the uniform methodology across all Distribution Licensee.

5. **Mindspace Business Parks Private Limited (MBPPL), KRC Infrastructure and Projects Private Limited (KRC) and Gigaplex Estate Private Limited (GEPL) in their common submission dated 13 August, 2020 have stated as follows:**

5.1 For the Distribution Licensee like MBPPL/KRC/GEPL which are operating within the notified SEZ area, the primary distribution voltage level is 22 kV and majority sales is from HT category consumers. Considering the same, MBPPL/KRC/GEPL had requested for approval of uniform Wheeling Charges for HT and LT consumers in the recent MYT submissions before the Commission. Considering the configuration of existing distribution network and primary distribution voltage of 22 kV, MBPPL/KRC/GEPL had also submitted that it would not be appropriate to segregate the assets among HT & LT voltage levels.

5.2 The example cited by TPC-D to allocate the asset based on the type of consumers who are utilizing the same is not relevant in the distribution licensee operating in the limited area like SEZ with predefined distribution network design which is in place to cater the specific IT /ITeS consumer's demand. Same may not be extended to Distribution Licensee like MBPPL operating within the notified SEZ area with pre-defined distribution network.

5.3 The Commission may decide to appoint a consultant or a third-party agency, to study the issues and methodologies of book-keeping of the asset by all the licensees. Distribution licensee's views may be sought out on the draft report submitted by the consultant or a third-party agency. After considering views of the distribution licensees on the draft report, the Commission may determine uniform principle of allocation.

6. **The Brihanmumbai Electric Supply and Transport Undertaking (BEST) in its submission dated 25 August, 2020 has stated as follows: -**

6.1 BEST, as part of its submission in the MYT Petition for the fourth Control Period in Case No. 324 of 2019, had provided allocation of its assets (GFA) to HT:LT voltage levels based on approved assets (GFA) to HT:LT voltage levels in MTR Order by the Commission. BEST had also submitted the details of Voltage wise assets for FY 2017-18 and FY 2018-19 for final truing up of FY 2017-18 and FY 2018-19. The Commission examined the details and has applied the ratio of GFA of HT: LT as 39.45%:60.55%, as submitted by BEST (i.e. approved in MTR Order in Case No. 203 of 2017), and the actual HT and LT sales as approved in the MYT Order.

6.2 Proper and uniform allocation policy of Distribution Network Assets into various voltage levels based on utilization would play a major role in providing a transparent and equitable competitive framework in Retail Supply Tariff. However, GFA is also dependent on the Distribution Network Design of Licensees, Quality and quantity of equipment's, Number of Consumers, Consumer Mix, Voltage level wise sale, Consumer specific requirements, etc.

6.3 BEST agrees with the submission of TPC-D that GFA ratio for EHT:HT:LT of any Distribution licensee may not be a static ratio to be applied each year as it will depend on the category of new network (EHT, HT or LT) added / removed during any financial year.

The segregation of cable / line network should be as per their respective voltages which are mentioned in definitions of MYT Regulations, 2019.

6.4 The proposal of TPC-D regarding the cost attributable to the transformers / substations which are installed for stepping down the voltage to a lower level and serve the consumers connected at the lower voltage level shall be borne by the consumers at the lower voltage level is complex in nature, practically very difficult for implementation and to maintain the data and accounts of Asset. Further, it requires maintaining the consumer wise assets as per the HT / LT connectivity. Also, the Distribution Network design of each Licensee is different to maintain the reliability of supply to the consumers. BEST has maximum number of LT consumers base and have typical ring type network design for both HT / LT level consumers.

6.5 BEST suggests that the Commission may classify the component of the Distribution Network such as band, Building, material, equipment, stations, controlling equipment, etc. based on voltage definitions mentioned in the regulations (similar to Annexure – I Depreciation scheduled mentioned in the MYT Regulations,2019 and consider the latest GFA ratio approved in truing up financial year for computation of wheeling Charges at the time of determination of tariff in subsequent MYT / MTR Order.

6.6 The Commission may give suitable practice guidelines for computation of Wheeling Charges by setting up of uniform principles and policies for allocation of Voltage level-based distribution system network assets of a Distribution Licensee as may be deemed appropriate.

7. **Adani Electricity Mumbai Limited (Distribution) (AEML-D) in its submission dated 5 August, 2020 has stated as follows:**

7.1 The only principle proposed by TPC-D is to allocate the cost of a substation to the lower voltage to which it steps down power. The logic relied upon by TPC for its suggestion is that the distribution transformer stepping down to LT exists for the use of end consumers at LT level only and hence the cost of such transformers should be assigned to LT.

7.2 One argument that can be given against the above reasoning is that, if the above logic is followed, then the cost of all 220/33 kV or 110/33kV or 440/33kV substations will have to be assigned to the Distribution business, because, using the same principle, it can be said that such transformers exist to step down power for distribution purposes only. If that principle is allowed, these assets will have to be transferred from the books of the Transmission Licensee to the corresponding Distribution Licensee. Therefore, using the principle of TPC, the magnitude of the issue cannot remain confined to HT/LT segregation within distribution system alone but will have ramifications on Transmission and Distribution segregation as well.

7.3 Even if the argument is stretched and it is theoretically assumed that the principle should be followed for transmission and distribution segregation as well, it would still be practically impossible to do so as there are many EHT substations of Transmission where outlets are assigned to more than one distribution licensee. In such case, it would not be possible to transfer such an EHT transformer to any one distribution licensee because asset transfer in the books could only be done where both transmission and distribution reside in the same company.

7.4 At present, the off-take point of a Distribution Licensee at T<>D interface is the LV side of the 220/33 kV or 110/33 kV or 400/33kV transformer, as the case may be. Even though the transformer is stepping down power for the utilization of the distribution licensee, it remains a transmission asset. AEML-D submits that, hypothetically, if a distribution company is bifurcated between a HT distribution company and a LT distribution company, then, by the same logic, it can be argued that the LT distribution company's off-take point would be the LV side of the 33/0.4 kV or 22/0.4kV or 11/0.4kV transformer and the transformer as such would remain with the HT Distribution company.

7.5 The argument relating to purpose of existence of a DT, as forwarded by TPC-D, can be considered to be captured in the second step of allocation of cost when the cost at HT is re-allocated to LT considering usage of system, which is represented by energy sales as per the current methodology of wheeling Charges. AEML-D submits that this step captures the fact that all HT assets are used by LT consumers as well.

7.6 In view of the above, it can be argued that the first step of asset allocation between HT and LT should be done on the basis of the primary voltage level of assets, as this step seeks to capture the assets that a HT distribution system / company and a LT distribution system / company would have owned/set up and the corresponding cost thereon. If the argument is that a HT distribution company would not have set up a distribution transformer stepping down to LT voltage, then, by the same logic, it can be argued that even a Transmission Company would not have set up EHT substations stepping down to distribution voltages, but that is not the case.

7.7 A 33/0.4 kV or a 22/0.4 kV or a 11/0.4 kV DT has both a HT side as well as a LT side. Hence, going by the criterion of voltage, it can also be argued that the cost of such DT can be allocated to both HT and LT in some defined ratio.

7.8 The issue is not as straightforward as TPC has sought to make it, as a DT is a boundary Asset i.e. it exists at the boundary of HT and LT distribution system. AEML-D submits that, in case of boundary assets, such debates, as to where the asset and its cost should be parked, normally arise and they need a wider study and a need to analyze all possible ramifications of the different approaches, before an informed decision can be reached. This is important as the issue has cost implications for HT and LT network consumers.

7.9 While TPC have raised only one dimension of the issue of allocation of distribution cost between HT and LT, there are other issues as well. For example, there are many common assets in a Distribution company's books such as common office buildings, furniture and fixtures, electrical appliances, common land on which buildings are erected, etc. for which there is no existing principle of allocation between HT and LT. In its MYT petition, AEML-D had attempted to allocate the cost of such common facilities between HT and LT based on the ratio of HT and LT employees as these facilities are used for employees. This approach led to change in allocation of asset ratio between HT and LT. However, the Commission continued with the existing asset ratio as approved in the MTR Order.

7.10 The larger issue is about allocation of distribution wires ARR into HT and LT. The HT/LT ratio of assets being used presently for the purpose is only a proxy, which is employed because it is assumed that no direct cost allocation between HT and LT levels is currently maintained by the Distribution Licensees. However, that may not be a correct assumption in all the cases and for all the cost elements. In case of some cost elements, such as employee cost, it may be possible to segregate the cost itself into HT, LT and Common based on the nature of job of the employees. Similarly, it may be possible to directly allocate R&M cost between HT and LT based on the types of jobs / repair and maintenance works carried out in a year, provided such details are maintained by the Licensee. Since the larger issue is fair allocation of cost for the purpose of wheeling charges, the Commission may want to assess the current status of such cost allocation, the feasibility of identifying direct and indirect costs and the readiness levels of the Distribution Licensees first, before venturing into any changes in the existing methodology of asset ratios.

7.11 In view of the above, the issue of allocation of assets and cost between HT and LT is, therefore, much more involved and cannot be decided merely on a single aspect presented by TPC in its petition. The various approaches with regard to allocation of direct assets and as well as common assets and direct and common costs between HT and LT need to be debated before any methodology could be formulated.

7.12 The Commission may kindly not decide this issue on the basis of the approach presented by TPC, but, considering the various dimensions of the issue, a third party or a Consulting Agency may be appointed to study the issue, assess the records and methodologies of maintaining asset and cost records by different Licensees and issue a draft report, on which views of all Distribution Licensees can be sought. On the basis of the same, uniform principles could be determined by the Commission considering the views of all Distribution Licensees.

7.13 As the regulatory principles for determination of tariff for the present MYT Control Period are fixed through the MYT Order, any changes arising in the methodology of allocation of assets / cost into HT/LT may be implemented only from the next Control Period. This is important for ensuring regulatory certainty, which is the fundamental principle of MYT. In fact, the Commission could use the results of the above-recommended study, as finalized after consultation with the Licensees, to frame appropriate Regulations for the MYT Regulations for the next Control Period.

8. **TPC-D in its rejoinder dated 4 September 2020 has stated as follows:**

8.1 As per Electricity Act 2003, Generation, Transmission and distribution are different entities. The segregation of these entities has already taken place wherein the utilities are required to maintain separate books of accounts. Hence, the comment of AEML-D for stretching the same argument for transmission and distribution segregation is infructuous.

8.2 Distribution entities are already paying the transmission charges to the transmission entity for the infrastructure developed by them, as approved by the Commission. Also, there is no provision for voltage wise cost allocation for transmission users as specified in MYT Regulations, 2019. Transmission charges are being determined based on the contracted capacity of the transmission users irrespective of voltage level of the transmission outlet allocated to the transmission users. Hence, the asset installed by transmission entity for power transmission cannot be further transferred to the distribution entity.

8.3 The Commission is approving separate Wheeling Charges for EHT, HT & LT voltage level of the distribution business. Therefore, there is clear intent of the MYT Regulations and other applicable laws / policy that the cost incurred by the distribution licensee for a particular voltage level should be charged to the consumers connected to such voltage level for their utilization of such asset. If they will be charged for the assets which are not being utilized by them then the whole purpose of segregation of wheeling cost among EHT, HT & LT will be defeated.

8.4 If there is no consideration of cost to be allocated to consumers connected at specific voltage level then there is no need to allocate the cost based on voltage. In the hypothetical case, it is considered that if a distribution company is bifurcated between a HT Distribution company and a LT Distribution company, then, both the distribution companies will get connectivity from the transmission utility at a specific voltage level and will pay the transmission charges for the contracted capacity irrespective of the connectivity at specific voltage level. However, in such case, the HT Distribution company may not be required to install 11kV transformer for supplying electricity to its consumers whereas LT Distribution Company will require to install 11kV substation in order to supply electricity to its consumers.

8.5 Further, it is also submitted that although a distribution transformer has both a HT side as well as a LT side, the cost of such distribution transformer cannot be allocated to both HT and LT in some defined ratio at first stage because the basic function of distribution transformer is to step down the higher voltage into lower voltage for supply to the consumers at required voltage level. Therefore, it is beyond imagination that how a distribution transformer, without the high voltage incoming feeder as input could step down into lower voltage level. Therefore, it is submitted that the HT side of distribution transformer is also utilized for serving the consumers connected at LT voltage level only. Accordingly, the Commission also approves the capitalization of distribution transformer only after the assets is put to use with the connection of LT consumers on it. Hence, based on this logic also, the substation should be considered with LT network of the Distribution Licensee.

8.6 There is no change proposed in any provision of the MYT Regulations or any other order of the Commission in the present petition. The objective of this petition is to bring uniformity in the principles adopted for filing the Petition by the Distribution Licensees so that it should be easier for the Commission to analyze and prescribe the underlying principles for filing of tariff petition. The Commission may use result of the petition filed during MTR filing of the Licensees in which the tariff for FY 2023-24 and FY 2024-25 will be finalized.

8.7 The infrastructure established by the Distribution Licensee operating in the limited area like SEZ, is governed by SEZ (Amendment) Act 2019, SEZ Rules 2006, IT policies of the State. In addition, the primary distribution voltage level in a typical SEZ is 22 kV thereby, its consumer base forms part of the HT tariff category. In line with the same, the Commission may take an appropriate decision for the deemed Distribution Licensees operating in Special Economic Zone.

8.8 NUPLLP is supporting the principles proposed in the Petition of TPC-D.

8.9 BEST is supporting the principles proposed in the Petition by TPC-D.TPC - D agrees that each distribution Licensee may have different distribution network design to maintain the reliability of supply to consumers. However, the Distribution Licensee would be definitely maintaining the details of consumers like connected load / Voltage Level etc. connected to a particular distribution transformer/substation. Else, it would be difficult to keep track of the loading levels of the particular distribution transformer/substation. Such details would be sufficient to allocate such distribution network asset into various voltage levels based on its utilization.

9. **MSEDCL in its submission dated 9 November, 2020 has stated as follows:**

9.1 Any change in the policy for allocation of assets between different voltage levels for determination of Wheeling Charge will have direct impact on the tariffs already determined by the Commission for the present MYT Control Period vide its MYT Order dated 30 March, 2020 for all Distribution Licensees. Therefore, it is imperative that any changes in the methodology for allocation of assets / cost into HT/LT may be implemented only from the next Control Period. After hearing all the Stakeholders, the methodology for allocation of assets / cost into HT/LT voltage levels may be introduced in the next MYT Regulations applicable for the next Control Period.

9.2 TPC-D in its Petition has suggested that cost of substation where step down occurs should be allocated to lower voltage level. It is pertinent to note that TPC-D in its Petition advocates methodology only for substation/DTC/DT cost allocation.

9.3 Before considering an ideal situation, one needs to see distribution network as a whole. Traditionally networks have been developed and strengthened as per the load growth in that particular area. Assets like substation/DTC/DT are boundary assets as it involves two voltage levels. Further, there are many common assets such as offices, furniture, land, SCADA and DMS, tools and inventory items which also get capitalised. For such assets presently there is no set principle of allocation between HT or LT and it is largely done as per conventional utility practices. In such case there will be still certain assumptions which may be used for computation. Therefore, it is necessary to understand present methodology adopted by Distribution Licensees for keeping the records of such expenses, possibility of identification of voltage wise cost specifically for common assets/services. The present Petition is also silent on the said issue.

9.4 MSEDCL suggests that while devising allocation between HT and LT levels, point of delivery needs to be considered for asset classification. It is necessary to consider that GFA is dependent upon distribution network design, number of consumers, consumer mix and consumer specific requirements. Further, infrastructure, HT:LT Ratio as well as Substation Capacity (HT/LT), Number of DTCs/DT capacity etc. need to be considered for deciding allocation factor for sharing of wheeling ARR instead of only GFA.

9.5 In view of the above stated issues, MSEDCL submits that present methodology as approved by the Commission in the MYT Order needs to be continued for the current control period i.e. from FY 20-21 to FY 24-25. In case the Commission is inclined to consider any change in existing methodology then same can be introduced from the next control period after following due Public consultation process.

10. **At the time of E-hearing held on 11 November 2020**

TPC-D, AEML-D, BEST and MSEDCL reiterated their respective submissions made in the Petition. AEML-D pointed out that the issue of uniform allocation of the assets is not limited to allocation of costs between the HT/LT transformers, but it involves the allied common assets such as office buildings, furniture and fixtures, electrical appliances, common land etc. Therefore, considering the complexities involved, it necessitates a detailed study in the matter through a draft paper prepared by Commission so that Licensees can share their views thereon. MSEDCL has also suggested the methodology in line with AEML-D and stated that implementation of the same should be enforced from the next control period. BEST has submitted that the proposed methodology involves complexities, and the current practice of allocation may be continued.

**Commission's Analysis and Ruling**

11. The Commission notes that TPC-D has filed the present Petition seeking uniform principles for allocation of distribution assets to different voltage levels (i.e. EHT, HT, LT) across all the Distribution Licensees. TPC-D has highlighted that its proposed GFA ratio (HT:LT) was rejected by the Commission in recent MYT Order dated 30 March 2020, on the ground of non-availability for a proper study. It has also highlighted that the

Commission while rejecting the proposal of TPC-D has on the other hand, allowed significant change in GFA ratio (HT:LT) to BEST Undertaking in the MTR Order dated 12 September 2018. In this background, TPC-D has proposed a methodology for maintaining voltage wise GFA and has requested the Commission to arrive at uniform methodology which can be used by all the Distribution Licensees.

12. All Distribution Licensees in the State have been made parties in this proceeding. All of them have stated that methodology for maintaining voltage wise GFA needs to be arrived at through a detailed study and following due consultation process. The Commission notes that this is not an adversarial proceeding. Based of TPC-D's proposal of accounting voltage wise GFA, all Distribution Licensees have commented / suggested approach to be adopted. Some of such suggestions are summarised below:

    a. Voltage wise GFA ratio should not be static but it needs to change each year to reflect addition/deletion of asset in that year.

    b. Asset can be accounted voltage wise and boundary level assets such as Transformer having two level of voltages can either be accounted at any one of the voltage levels or apportioned between two voltage levels.

    c. There are many common assets such as offices, furniture, land, SCADA and DMS, tools and inventory items which also get capitalised but are not linked to specific voltage level. These assets also need to be apportioned appropriately to various voltage levels. Further, other costs such as employee cost and maintenance costs can also be allocated to specific voltage levels.

    d. GFA depends upon network design, spread, consumer mix etc. which is unique to each of Distribution Licensee and hence before laying down any uniform principle of allocation of GFA across voltage level, these factors would need to be considered.

    e. Principles which are applicable to other Distribution Licensees may not be suitable for IT & ITeS based SEZs which have limited network spread and work on plug and play model.

    f. The Commission may undertake detailed study through due consultation process before coming out with uniform principles for voltage wise GFA. During that study other factors which affect voltage wise determination of Wheeling Charges should also be considered.

13. In this regard, it is important to note that MYT Regulations 2019 require the Commission to approve voltage wise (EHT, HT and LT) Wheeling Charges for consumers. For computing such voltage wise Wheeling Charges, Wheeling ARR of Distribution Licensee is first allocated to each voltage level based on contribution of such voltage level to the total GFA of Distribution Licensee. Thereafter, wheeling cost/ARR of each voltage level is further allocated to lower voltage level based on usage arrived at as per the energy sales

on each voltage level and thereafter based on total wheeling cost/ARR allocated to each voltage level, per unit rate of Wheeling Charge is determined. Therefore, in this process, GFA allocation across voltage level is critical input parameter which can change the resultant per unit Wheeling Charge.

14. The Commission is also cognisant of the fact that in Mumbai where parallel Distribution Licensees exist, any change in Wheeling Charge affects the competitiveness of the Distribution Licensee. Although average Wheeling Charge depends upon total Wheeling ARR and wheeled units (utilisation of distribution network), voltage wise wheeling charges which ultimately gets levied to end consumers depends upon voltage wise GFA and sales. While energy sale is a metered parameter, voltage wise GFA is currently based on practice adopted by the Distribution Licensee while accounting its distribution assets. The Commission is aware of the fact that some of the Distribution Licensees do not have practice of accounting its asset/GFA voltage wise and hence in their Tariff Order the Commission was compelled to make some assumption about GFA allocation so as to determine voltage wise Wheeling Charges. In the opinion of the Commission, continuing practice of assuming voltage wise GFA in future years without any efforts to correctly account voltage wise asset is not appropriate. Also, there are Distribution Licensees who claim to maintain voltage wise GFA, but principle used for accounting the asset to respective voltage level may not be necessarily the same as that of its competing licensee. This is because there is no standard practice available for its computation.

15. Therefore, the Commission is inclined to initiate a study to address various issues raised in the present Petition about voltage wise accounting of asset and come out with uniform principles/guidelines through public consultation process. While doing so, the Commission may also include other factors such as possibilities of allocating direct attributable cost to specific voltage levels or any other factors which has effect on consumer Tariff. In view of this, the Commission is not going into merits of suggestions given by Distribution Licensee in the present proceedings, as the same can be studied and deliberated during proposed study.

16. Also, there are varying suggestions as to the applicability of such methodology which will be arrived through above mentioned study. TPC-D has requested to implement it from the upcoming MTR Orders while APML-D and MSEDCL have suggested to implement it from the next MYT Control period. In the opinion of the Commission, it is premature to decide this issue at this point of time. It will be decided at the time of finalisation of methodology.

17. Hence, the following Order.

## ORDER

1. **Case No 133 of 2020 is allowed.**

2. **The Commission will initiate a study to address various issues raised in the present Petition about voltage wise accounting of asset and would come out with uniform principles/guidelines through public consultation process. While doing so, the Commission may also include other factors which affects consumer tariff.**

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|---|---|
| **Sd/-** | **Sd/-** |
| **(Mukesh Khullar)** | **(I.M. Bohari)** |
| **Member** | **Member** |

**(Abhijit Deshpande)**
**Secretary**