#### Before the

## MAHARASHTRA ELECTRICITY REGULATORY COMMISSION World Trade Centre, Centre No.1, 13<sup>th</sup> Floor, Cuffe Parade, Mumbai – 400 005 Tel. 022 - 22163964/65/69

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## **CASE No. 239 of 2022**

#### In the matter of

Case of State Transmission Utility (STU) for Truing-up of Intra-State Transmission System Tariff (InSTS) for FY 2020-21 and FY 2021-22 and determination of revised InSTS Tariff for FY 2023-24 and FY 2024-25

<u>Coram</u> Sanjay Kumar, Chairperson I. M. Bohari, Member Mukesh Khullar, Member

#### **ORDER**

**Date: 31 March 2023** 

Maharashtra State Electricity Transmission Company Limited (**MSETCL**) is a company incorporated under the provisions of the Companies Act, 1956 having its registered office at "Prakashganga", Plot No. C-19, E-Block, Bandra-Kurla Complex, Mumbai-40005. MSETCL, being State Transmission Utility (**STU**), has filed the Petition on 30 November 2022 for Truing-up of Intra-State Transmission System(**InSTS**) Tariff for FY 2020-21 and FY 2021-22 and determination of revised InSTS Tariff for the remaining two years of Fourth Control period from FY 2023-24 and FY 2024-25 for Long Term as well as short term InSTS Users.

STU has filed this Petition under provisions of Regulations 64.5 of the MERC (Multi Year Tariff) Regulations, 2019 ("MYT Regulations, 2019") for determination of the share of Total Transmission System Cost (TTSC) to be recovered from Transmission System Users (TSUs) in the State.

MSETCL has been designated as STU for Maharashtra. STU, being responsible for planning, developing, operating and maintaining the Transmission System, has filed the Mid-Term Review Petition (MTR).

The Commission, in exercise of the powers vested in it under Sections 61 and 62 of the Electricity Act (EA), 2003 and all other powers enabling it in this behalf, and after taking into consideration the submissions made by STU approves the Intra-State Transmission System Tariff for the balance period of the Fourth Control Period from FY 2023-24 to FY 2024-25.

## **TABLE OF CONTENTS**

1	INTRODUCTION	6
1.1	Background	6
1.2	MYT Regulations	6
1.3	Framework for determination of Transmission tariff for 4th Control Period:	7
1.4	Filing of MTR Petition under MYT Regulations, 2019	8
1.5	Admission of the Petition and Public Consultation Process	8
1.6	Organisation of the Order	9
2	SUGGESTIONS/OBJECTIONS, STU'S RESPONSE AND COMMISSION RULINGS	
2.1	Additional Transmission Charges (ATC) sharing for True Up for FY 2020-21 a 2021-22:	
2.2	Estimated Base TCR for FY 2022-23.	13
2.3	Higher Tariff for Control Period 2023-2024 to 2024-2025	15
2.4	Projected Demand for FY 2023-24 and FY 2024-25	16
2.5	Truing up of FY 2019-20.	17
2.6	ATC Adjustment amount for FY 2020-21 and FY 2021-22 with True-up and F reduction in ATC:	
2.7	Truing up of FY 2020-21 and FY 2021-22	19
2.8	Details of outstanding payment	21
2.9	Signing of Bulk Power Transmission Agreement (BPTA)	23
2.10	Percentage share of Average of CPD & NCPD of MSEDCL and inclusion of D of Partial Open Access consumers:	
2.11	Transmission Loss computation:	29
2.12	Regarding the $400\mathrm{kV}$ GMR Warora Energy Ltd.(GWEL) SS for evacuation of $30$	power:
2.13	Recovery of transmission infrastructural cost spent for Mumbai utilities consumer's Mumbai Distribution Licensees.	
2.14	Study report for Optimum Utilisation of Transmission Capacity:	32
3	TRUE-UP OF SHARE OF InSTS TARIFF FOR FY 2020-21 AND FY 202	1-2234
3.1	Background	34

Detem	illiation of Mid-Term Tarm of his 13 for 4 Control Ferrod for F1 2023-24 and F1 2024-23	
3.2	Framework for Truing for FY 2020-21 and FY 2021-22	34
3.3	Truing-up of Share of InSTS Tariff of FY 2020-21 and FY 2021-22	34
4	INTRA-STATE TRANSMISSION TARIFF FOR BALANCE PERIOD OF 4 CONTROL PERIOD i.e. FOR FY 2023-24 AND FY 2024-25	
4.1	Background	42
4.2	Framework for determination of Transmission tariff for 4th Control Period	42
4.3	Constituents for Determination of TTSC for balance period of the 4th Control Pe 43	riod.
4.4	Determination of Base TCR	52
4.5	Energy Projection for FY 2023-24 to 2024-25.	63
4.6	Transmission Tariff for FY 2023-24 and FY 2024-25	64
5	SHARING OF TTSC AMONG TSUS AND RECOVERY	67
5.1	Sharing of TTSC among TSUs	67
5.2	Recovery of ARR of Transmission Licensees for FY 2023-24 and FY 2024-25	71
6	TRANSMISSION LOSS FOR FY 2023-24 AND FY 2024-25	73
6.1	Transmission Loss	73
7	COMPLIANCE OF DIRECTIVES OF THE COMMISSION	75
7.1	Directive 1: Efforts to reduce Transmission Losses	75
7.2	Directive 2: Variation in actual and approved CPD and NCPD	76
7.3	Directive 3: Distribution Licensees shall not retain the transmission charges colle from partial open access consumers and shall arrange to remit the same to STU	
7.4	Directive- 4: Optimum Utilisation of Transmission Capacity the STU is directed submit a status report:	
7.5	Directive: 5: Compliance by STU to Directives under MERC (State Grid C Regulations 2020	
8	APPLICABILITY OF THE ORDER	82

## LIST OF TABLES

Table 1: True-up for FY 2020-21 as submitted by STU	35
Table 2: True-up for FY 2021-22 as submitted by STU	
Table 3: Outstanding payment as on 30 <sup>th</sup> Nov. 2022, as submitted by STU (Rs. Crore)	
Table 4: Truing-up for FY 2020-21, as approved by the Commission (Rs. Crores)	
Table 5: True-up for FY 2021-22, as approved by the Commission (Rs. Crores)	
Table 6: Transmission charges of KVTL as submitted by STU (Rs. Crore)	
Table 7: ARR of Transmission Licensees, as submitted by STU (Rs. Crores)	
Table 8: ARR of Transmission Licensees, as approved by the Commission (Rs. Crores)	
Table 9: Summary of new Deemed Distribution Licensees Post MYT Order	
Table 10: Demand Projections submitted by Distribution Licensees	
Table 11: Re-Estimation of Base TCR for FY 2022-23, as submitted by STU (in MW)	
Table 12: Revised Demand Projection for FY 2023-24 and FY 2024-25, as submitted by STU (in MW)	
Table 13: Month wise Average of CPD and NCPD for Distribution Licensees in Calendar Year 202	2
(MW)	59
Table 14: Base TCR for FY 2022-23, as approved by the Commission (MW)	60
Table 15: Base TCR for FY 2023-24, as approved by the Commission (MW)	62
Table 16: Base TCR for FY 2024-25, as approved by the Commission (MW)	62
Table 17: Energy Input/ Output H1 & H2 trend for FY 2018-19 to 2021-22	63
Table 18: Energy Input and Projections approved by Commission	64
Table 19: Transmission Tariff for FY 2023-24 and FY 2024-25, as approved by the Commission	65
Table 20: Annual Sharing of TTSC among TSUs for FY 2023-24 as approved by the Commission	67
Table 21: Annual Sharing of TTSC among TSUs for FY 2024-25 as approved by the Commission	68
Table 22: Monthly TTSC payable by TSUs submitted by STU (Rs. Crore)	68
Table 23: TTSC share of True-up for FY 2020-21 and FY 2021-22 as approved by the Commission (Rs. 0	Crore)
	69
Table 24: Monthly TTSC payable by TSUs approved by the Commission (Rs. Crore)	70
Table 24: Recovery of ARR of Transmission Licensees submitted by STU	71
Table 25: Recovery of ARR of Transmission Licensees as Approved by the Commission (Rs. Crore)	72
Table 26: Monthly InSTS Grid Loss for FY 2022-22 and FY 2022-23 till Sept. 23	73
Table 27: Monthly InSTS Grid Loss for FY 2022-22 and FY 2022-23 till Sept. 23	74
Table 28: State Transmission Loss for past period	75
Table 29: Transmission Capacity Utilization-List of Under-Utilized Substation	79
Table 30:Transmission Canacity Utilization-List of Under-Utilized Lines	79

## **LIST OF ABBREVIATIONS**

ARR	Aggregate Revenue Requirement
ATE	Appellate Tribunal for Electricity
Commission/MERC	Maharashtra Electricity Regulatory Commission
CSR	Corporate Social Responsibility
EA, 2003	Electricity Act, 2003
FY	Financial Year
GFA	Gross Fixed Assets
InSTS	Intra-State Transmission System
IoWC	Interest on Working Capital
JPTL	Jaigad Power Transco Limited
Km	Kilometre
kV	Kilo Volt
MSETCL	Maharashtra State Electricity Transmission Company Limited
MTR	Mid Term Review
MYT	Multi Year Tariff
O&M	Operation and Maintenance
R&M	Repair and Maintenance
RoE	Return on Equity
SBI	State Bank of India
TSU	Transmission System User
TTSC	Total Transmission System Cost

#### 1 INTRODUCTION

#### 1.1 Background

1.1.1 The Commission in InSTS Tariff Order dated 27 June 2006 in Case No. 58 of 2005 has set out the Transmission System Pricing Framework for the State of Maharashtra in accordance with the principles outlined in that Order.

#### 1.2 MYT Regulations

- 1.2.1 The Commission notified the MYT Regulations, 2019 on 1 August 2019. These Regulations are applicable for the 4<sup>th</sup> MYT Control Period from FY 2020-21 to FY 2024-25.
- 1.2.2 Regulations 64, 65 and 66 of the MYT Regulations, 2019 specifies the methodology and principles for the determination of InSTS Tariff.
- 1.2.3 Up to the 3<sup>rd</sup> MYT Control Period ending in FY 2019-20, InSTS Tariff was determined on a Suo-motu basis by the relevant Orders of the Commission. However, Regulation 64.5 of the MYT Regulations, 2019 requires STU to file a Petition for determination of the InSTS Tariff for the 4<sup>th</sup> MYT Control Period. The relevant extract of the regulation is as provided below:
  - 64.5 The State Transmission Utility shall file the Petition for determination of Intra-State Transmission Tariff for the MYT Control Period latest by November 30, 2019, and latest by November 30, 2022 at the time of Mid-term Review for modification of intra-State transmission tariff for the fourth and fifth year of the Control Period, on the basis of Base Transmission Capacity Rights of each TSU, and the summation of the Aggregate Revenue Requirement projected by the Transmission Licensees for each Year of the Control Period:

Provided that the State Transmission Utility shall file the Petition for true-up of share of intra-State transmission tariff for FY 2020-21 and FY 2021-22 along with the Petition for Mid-term Review, on the basis of the actual CPD and NCPD of Transmission System Users in the respective years, or the quantum of Short-term/Medium-Term Open Access applied for by the Deemed Distribution Licensee for the available period, as applicable.

- 1.2.4 Accordingly, STU had filed a Petition in Case No 327 of 2019, which was disposed of by the Commission by determining the InSTS Tariff for 4<sup>th</sup> Control Period for FY 2020-21 to FY 2024-25 vide it Order dated 30 March 2020.
- 1.2.5 The Regulation 64.5 of the MYT Regulations, 2019 also requires STU to file a Petition for Mid-Term Review for true-up of share of InSTS Tariff for FY 2020-21 and FY 2021-22 and modification of the InSTS tariff for fourth and fifth year of MYT control period i.e., FY 2023-24 and 2024-25.

#### 1.3 Framework for determination of Transmission tariff for 4th Control Period:

- 1.3.1 Regulation 64 of MYT Regulations, 2019 specifies the methodology and principles for determining the Transmission Tariff for the use of the InSTS and Base Transmission Capacity Rights (**Base TCR**) of Transmission System Users (**TSUs**).
- 1.3.2 Regulation 65 of MYT Regulations, 2019 specifies the methodology and principles for sharing of Total Transmission System Cost (TTSC) among the TSUs. Regulation 66 of MYT Regulations, 2019 outlines the treatment for usage of InSTS by long term TSUs and Regulation 69 specifies the treatment of Transmission Losses of InSTS to be borne by TSUs.
- 1.3.3 The Fourth proviso of the Regulation 64.2 Specifies, the determination of Base TCR during the beginning of the control period, on the basis for which the demand projections for the future years of the control period would be made. The relevant extract of the proviso is as provided below:

"64.2

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Provided also that the Yearly CPD and NCPD or the Allotted capacity, as the case may be, to be considered for determination of the subsequent yearly Base Transmission Capacity Rights shall be computed at the beginning of the Control Period based on the past trend and on the basis of demand projections made by various TSUs connected to the Intra-State transmission system as part of their MYT Petitions for the Control Period:"

1.3.4 For the deemed distribution licensees as TSUs and for whom the 12-month CPD and NCPD data is not available, the Base TCR for the beginning of the MYT control period is determined in accordance with the 3<sup>rd</sup> proviso of Regulation 64.2 of MYT Regulations, 2019. The relevant provisions of Regulation is given below:

*"64.2* 

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Provided also that in case of a Deemed Distribution Licensee whose monthly CPD and NCPD data is not available for 12 months at the time of determination of Base TCR, the monthly CPD and NCPD data if available for at least 4 months, or the quantum of Short-term/Medium-Term Open Access applied for by the Deemed Distribution Licensee for the available period, shall be considered in lieu of the average monthly CPD and NCPD for calculating the Base Transmission Capacity Rights:"

1.3.5 Proviso 3 of Regulation 64.3 specifies that, in case of addition of new Transmission Licensee, Base TCR, TTSC and transmission Tariff shall be re-determined for each remaining year of the control period. The relevant provisions are as follows:

Provided also that in case new Transmission Licensees are added to the intra-State transmission network during the Control Period, then the TTSC, Base Transmission Capacity Rights and Base Transmission Tariff as referred under Regulations 64.1, 64.2 and 64.3 shall be re-determined <u>for each remaining</u> <u>Year</u> of the Control Period.

## 1.4 Filing of MTR Petition under MYT Regulations, 2019

- 1.4.1 STU has filed the present Petition on 30 November 2022. On 11 December 2022, the Commission conveyed the preliminary data gaps. STU submitted the replies to the Data Gaps on 17 December 2022. Further, the Technical Validation Session (**TVS**) was held on 24 December 2022. During the TVS the Commission asked for the additional clarifications to STU vide Data Gaps- Set 2. STU submitted its response to the Data Gap Set 2 on 5 January 2023. The list of persons who attended the TVS is provided at **Appendix 1.**
- 1.4.2 Thereafter, STU submitted a revised Petition on 12 January,2023 incorporating replies to the data gaps submitted to the Commission.
- 1.4.3 STU's main prayers in the revised Petition are as follows:
  - a. "Admit this Mid-Term Review (MTR) Petition for determination of Intra-State Transmission Tariff (InSTS) for the balance Control Period from FY 2023-24 to FY 2024-25 as per MERC (MYT) Regulations, 2019;
  - b. Approve the true-up of share of InSTS for FY 2020-21 and FY 2021-22 on the basis of actual CPD and NCPD of TSUs in their respective years;
  - c. Approve new distribution licensees as proposed in this petition as Transmission System Users (TSU) from FY 2023-24 onwards and direct them to execute BPTA;
  - d. Approve the InSTS transmission tariff forecast for Long-term, Medium-term and Short-term transmission system users for FY 2023-24 and FY 2024-25 as provided in the Petition according to the principle of the Hon'ble Commission set out in MERC (MYT) Regulations, 2019;
  - e. Approve the Intra-State Transmission Loss for FY 2023-24 and FY 2024-25.
  - f. Provide the workable excel model used by the Hon'ble Commission for approval of the Petition for determination of Intra-State Transmission Tariff for the balance Control Period from FY 2023-24 and FY 2024-25;----"

## 1.5 Admission of the Petition and Public Consultation Process

- 1.5.1 The Commission admitted the Petition on 12 January, 2023 and directed STU to publish a Public Notice in accordance with Section 64 (2) of the Electricity Act, 2003 in the prescribed abridged form and manner. The Commission also directed STU to reply expeditiously to all the suggestions and comments received.
- 1.5.2 STU issued a Public Notice inviting comments/suggestions from the public on its Petition. The notice was published in two English language newspapers, viz. The Indian Express and Free Press Journal, and two Marathi language newspapers viz. Loksatta

and Navshakti on 13 January, 2023. The copies of the Petition and its summary were made available for inspection/purchase at STU's offices and website (www.mahatransco.in). The Public Notice and executive summary of the Petition were also made available on the website of the Commission (www.merc.gov.in) in a downloadable format.

- 1.5.3 The Commission received written suggestion/objections on the Petition from 19 January 2023 to which STU has responded. The details of the suggestions/objections, STU reply and Commission's rulings is summarised in subsequent part of this Order.
- 1.5.4 The e-Public Hearing was held on 9 February, 2023 through virtual mode on MS-Teams platform. During the Public Hearing, the Commission directed STU to submit note for clarification on few points viz., utilisation of transmission network, consideration of demand of partial Open Access consumers while computing the demand of distribution Licensees, Status of pending transmission projects etc. STU vide its submission dated 12 February, 2023 filed its replies. The Commission has considered the same appropriately.
- 1.5.5 The list of persons who participated in the Public Hearing is appended as **Appendix II.**
- 1.5.6 The Commission has ensured the due process contemplated under the law to ensure transparency and public participation followed at every stage and adequate opportunity was given to all concerned to express their views.

## 1.6 Organisation of the Order

1.6.1 This Order is organised in the following Six Sections:

**Section 1:** of the Order provides a brief history of the quasi-judicial regulatory process undertaken by the Commission.

**Section 2:** of the Order details suggestions, objection received, STU's replies and Commission's Analysis on the same.

**Section 3:** of the Order details the True-up of FY 2020-21 and FY 2021-22

**Section 4:** of the Order details the Intra-State Transmission Tariff For balance period of 4th Control Period

**Section 5**: of the Order details the Transmission Loss

**Section 6:** deals with the applicability of this Order.

# 2 SUGGESTIONS/OBJECTIONS, STU'S RESPONSE AND COMMISSION'S RULINGS

# 2.1 Additional Transmission Charges (ATC) sharing for True Up for FY 2020-21 and FY 2021-22:

#### **Objections**

- 2.1.1 AEML-D submitted that, MSEDCL has not paid its share of ATC. The bill may have been raised by the STU, but the payment has not been made in both FY 2020-21 and FY 2021-22. Therefore, MSEDCL is not liable for any refund on account of ATC. The revised additional share of transmission charges (either debit or credit) will be worked out. The share of TTSC is based on actual CPD/NCPD. The ATC will have to be refunded. However, the method proposed by STU for refund of ATC is not correct. There is no need to have any separate adjustment for ATC. The ATC actually received by the transmission licensees from STU Pool account will automatically be included in their actual revenue for the year. Consequently, the revenue gap of the corresponding year will have reduced because revenue gap of past years is added to the stand-alone ARRs of Transmission Licensees for FY 2023-24. The reduction in TTSC on account of ATC receipt will already figured in the TTSC for FY 2023-24. Therefore, the credit on account of ATC revenue will pass back to the Transmission Licensees in FY 2023-24 through their respective revised shares of TTSC.
- 2.1.2 AEML-D also submitted that, ideally only the distribution licensees who have paid ATC should be getting the refund. Making ATC as part of TTSC will mean that other distribution licensees will also obtain the same and in any case in a ratio different from the one in which they paid. In this regard, adjustment suggested by STU is incorrect. AEML-D requested to consider a mechanism for adjustment of ATC as suggested by it. The proposed mechanism ensures that ATC paid by the distribution licensees is adjusted in the concerned distribution licensee's TTSC only.
- 2.1.3 During framing of the MYT Regulations,2019, AEML-D had commented that when TTSC is being trued-up on the basis of actual CPD/NCPD, there is no reason why ATC should be levied, because both reflect the same additional usage of transmission system. However, the issue was not considered. In view of complication of adjusting ATC at the time of true-up, the Commission may rethink and direct that ATC may not be levied in future, because in any case actual usage based transmission charges shall be recovered through true-up of each Licensee's share, as is being done for FY 2020-21 and FY 2021-22.

#### STU's Response

2.1.4 In reply to AEML-D's above comments, STU submitted that Monthly Transmission Charges (MTC) & ATC shown in the Petition are on billed basis and not on collection basis. Actual collection will have no impact. STU further clarified that, there are following two aspects on this issue:

- i. Booking of income by all Transmission Licensees Whenever STU raises the ATC bill on TSUs, a copy of the same is shared with all Transmission Licenses to book pro-rata income in their books in the corresponding month & year.
- ii. The proposed adjustment in True-up is Inter-se adjustment amongst TSUs. AEML-D has submitted that ATC will automatically get considered in ARR of respective transmission licensees and trued- up in subsequent years. STU prima face thinks the suggestion may be apt to adopt however the Commission may take a holistic view on the same considering suggestions/ objections of other TSUs and balancing their interest.

## Commission's Analysis and Ruling

- 2.1.5 The Commission notes that the TSUs have made payment of transmission charges for Base TCR for FY 2020-21 and FY 2021-22 based on the projections basis as per the Order dated 30 March 2020 in Case No. 327 of 2019. Further, the actual data of CPD and NCPD for FY 2020-21 and FY 2021-22 is now available. Therefore, truing up of transmission charges paid by TSUs for both the years is required, as outlined under MYT Regulations, 2019. As STU's transmission charges pool account is zero sum account, truing up needs to be zero sum among all the TSUs. Hence, truing up is interse adjustments between the TSUs.
- 2.1.6 Further, the Commission notes that STU has levied ATC to TSUs for positive deviation of Drawal during actual operation based on 15 min Drawal data. The ATC has been levied on the TSUs for excess Drawal than the Base TCR. As per Regulation 66 of MYT Regulation, 2019, the ATC is to be levied for excess Drawal than TCR and short-term transmission charges are to be levied for Drawal exceeding Base TCR but less than TCR. The relevant abstract of the MYT Regulation is as follows:

#### 66 Usage of Intra-State Transmission System

The charges for intra-State transmission usage shall be shared among various TSUs in the following manner:

- a) Long-term TSU with recorded demand up to Base TCR shall not be subjected to payment of short-term transmission charges.
- b) <u>Long-term TSU with recorded demand greater than Base TCR but lower than</u> <u>Contracted Capacity shall make payment of short-term Transmission charges for the recorded demand in excess of Base TCR.</u>
- c) Where the recorded demand of long-term TSU is greater than Contracted Capacity, the TSU shall bear additional transmission charges as specified in the Regulations of the Commission governing Transmission Open Access:

Provided that short-term transmission charges and additional transmission charges, if payable or paid by long-term TSUs in accordance with the clauses (a), (b) and (c) above, shall be adjusted during subsequent billing period upon availability of information regarding actual recorded demand by such long-term TSUs.

- 2.1.7 Further, ATC is applicable and to be levied only for Drawal exceeding TCR at penal rate as 25% over and above normal charges for Base TCR in accordance with the Regulation 14.5 of MERC Transmission Open Access (TOA) Regulations 2016. Relevant abstract of the TOA Regulation 2016 is as follows:
  - 14.5. A Transmission System User availing Open Access shall also be liable to pay an additional Regulatory Charge at the rate of twenty-five percent of the Transmission Charges for the use of an Intra-State Transmission System in excess of its Transmission Capacity Rights.
- 2.1.8 Further the Commission vide its Order dated 18 October 2020 in Case No. 52 of 2020 filed by STU for removal of difficulties in implementation of some of the provisions of the MERC (Multi Year Tariff) Regulations, 2015 and 2019 and MERC (Transmission Open Access) Regulations, 2016 has ruled as below:

#### "11.3 Commission's Analysis and Rulings:

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- r) On the issue of revenue neutrality of STU, it is clear that, in any case, STU's account remains revenue neutral as Short Term Transmission Charges (STTC), Additional Transmission Charges(ATC) or Additional Regulatory Charges(ARC) recovered from TSUs as per Regulation 63 of the MYT Regulations, 2015 and TOAR 2016 will be reduced from TTSC. Levy of such charges will benefit TSU who follow the grid discipline and impose additional charges to TSU who will use InSTS over and above its Base TCR/CC. Further, the treatment as per the Regulation is uniform to all the TSUs without any discrimination.
- s) The case laws cited by AEML-D relating to interpretation of the statutes provide that while interpreting the particular provision of the Act, the purpose and intention of the provisions need to be considered. In this case the intention of provisions of the Regulation 63 (b) &(c) of the MYT Regulations, 2015 and Regulation 14.1 and 14.5 of the TOAR, 2016 is that the TSUs shall utilise InSTS as per their allocation as far as possible. If any TSU uses the InSTS over and above its allocation, it shall pay the additional charges as prescribed in the Regulations."

#### "12.3 Commission's Analysis and Rulings:

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xiv. It is to note that only STTC are applicable for the Regulations 66 (b) of the MYT Regulations, 2019 as quoted above. Also, STTC as well as ARC is applicable in case of provisions of the Regulation 66 (c). STTC will be applicable for RMD> Base TCR and ARC will be applicable for RMD>CC as there is double violation. ARC will be 25 % of LTTC as per Regulation 14.5 of the TOAR,2016 (ARC= 25% of LTTC). -----

xviii. Application of charges as per Regulation 66 (a) (b) (c) of MYT Regulations 2019 shall be as shown in the **Table 6** above from 1 April, 2020 on 15-minute time block basis as per data submitted by SLDC i.e. for 4th Control Period till the amendment of the MYT Regulations 2019"

- 2.1.9 The above ruling of the Commission in Case No. 52 of 2020, clarifies the requirement of applicability of Short-Term Transmission Charges levied by STU for Drawal over and above the Base TCR so long as recorded demand is lower than TCR/CC. It needs to be noted that ATC as levied on MSEDCL and referred in the objection by stakeholders is not really Additional (penal) Transmission Charges but levy of Short Term Transmission Charges for recorded demand/drawal of MSEDCL exceeding its Base TCR, as has been confirmed by STU/MSLDC and covered in subsequent paragraph. Hence, it is necessary to consider these charges at the time of Truing up for inter-se adjustments among TSUs as per the provisions of the MYT Regulations 2019.
- 2.1.10 The Commission further notes that, STU vide its additional submission dated 23 February, 2023 clarified that, it has levied the ATC (rather STC i.e., Short Term Transmission Charges) as per the clause (b) of Regulation 66 of MYT Regulation 2019 at the rate of short term transmission charges based on the 15 min Drawal data provided by MSLDC on the drawal exceeding Base TCR. The Commission notes that, STU has applied short term transmission charges, however, it has used the terminology as Additional Transmission Charges with Abbreviation as "ATC". The Commission is of the view that, these charges shall be called as short-term transmission charges (STC) and not as Additional Transmission Charges or "ATC".
- 2.1.11 Further the Commission also notes that, AEML-D had submitted similar objection at the time of finalising MYT Regulations, 2019 and the Commission had clarified its view in Para 6.12.3 of Statement of Reasons (SOR) to MYT Regulations, 2019. Relevant part of the SOR is as under:

#### "6.12.3 Analysis and Commission's Decision

The approach adopted by the Commission is same as that specified in MYT Regulations, 2015, and is working satisfactorily. It is also not certain as to how the suggestion would affect different TSUs, as it would depend on the difference between the average and maximum of monthly values of CPD and NCPD for each TSU. Hence, no modification has been made in these clauses of Regulation 66."

2.1.12 In view of the above discussion, contention raised by AEML-D that methodology adopted by STU is not proper and without merit.

#### 2.2 Estimated Base TCR for FY 2022-23

2.2.1 AEML-D submitted that, STU has to project the Base TCR for FY 2023-24 and FY 2024-25 for which FY 2022-23 Base TCR needs to be determined. While determining the Base TCR for FY 2022-23, STU has taken the data of FY 2022-23(H1) only and

same is increased by 1% to arrive at the annual Base TCR for FY 2022-23. The Demand of Licensees varies from season to season and month to month. Lots of diversity is seen in the demand of H1 and H2 as well. Hence the methodology adopted by STU is not correct and actual relation between H1 and Base TCR seen from past trend needs to be used to arrive at the estimated Base TCR of FY 2022-23. For example, the demand in H2 for AEML-D is generally lower than H1. Hence Base TCR is lower than H1 CPD/NCPD average.

2.2.2 Therefore, the estimation for Base TCR FY 2022-23 needs to be corrected which is used as base for deriving the Base TCR for FY 2023-24 and FY 2024-25. To derive the Base TCR, the demand of available 12 months can be used or alternatively, relation between the H1 average of CPD/NCPD and Base TCR of past period can be used to arrive at the Base TCR instead of considering H1 data. In MSEDCL's case, 1% factor may be correct, because of agriculture demand coming in H2. But for urban licensees, like AEML-D the H2 demand is always lower than H1, resulting in lower overall Base TCR as compared to H1 avg. of CPD/NCPD. Therefore, appropriate correction in Base TCR for FY 2022-23 ought to be made.

#### STU's Response

- 2.2.3 STU submitted that, any approach undertaken may have pros & cons or vary slightly and TSUs may have their own views / suggestions on the same.
- 2.2.4 STU has mentioned that TSUs themselves are in best position to estimate / project demand for next two (2) years taking into account various factors related to their distribution licensee area. STU has requested the Commission to seek submission from all TSUs for next 2 years who have alternate views/ suggestions on the revised base TCR projected by STU. This may avoid any contradictory views by TSUs on working/ assumptions in MTR Order for Revised Base TCR. Any variation on actual basis can be taken up for true-up at a later date as per regulatory provisions.

#### Commission's Analysis and Ruling

2.2.5 Regarding estimated Base TCR for FY 2022-23, AEML-D has mentioned that for urban licensees, like AEML-D the H2 demand is always lower than H1, resulting in lower overall Base TCR as compared to H1 and estimation based on H1 actual data and increasing it by 1% for H2 is not correct. The Commission has noted the submissions of AEML-D and has considered estimation of Base TCR for FY 2022-23 on the basis of average of actual CPD and NCPD for the period January 2022 to December 2022 (i.e., past 12-months prior to filing of Petition , depending on availability of such data) as per 1<sup>st</sup> proviso to Regulation 64.2 of MYT Regulations 2019 and approach adopted in the MYT Order.

## 2.3 Higher Tariff for Control Period 2023-2024 to 2024-2025

- 2.3.1 Bajaj FinServ has submitted that, the proposed tariff hike for FY 2023-24 and FY 2024-25 is nothing but "Tariff shock" with 80% hike over existing rate. It has challenged the amendment in DOA Regulations before the Hon'ble Bombay High Court. If the Commission approved such huge charges (Rs.0.72/kVAh) then same charges for RE transaction will be Rs.1.44/ kVAh which will make it onerous for open access. Also purchase of Green energy would be non-available. Since last two years, sale of wind power to third party in Maharashtra is drastically reduced due to heavy open access charges. The RE open access business in Maharashtra is already severely reduced. Total OA charges for FY 2023-24 works out to be Rs. 6.07 /Unit against tariff of MSEDCL Tariff of Rs. 6.85/unit.
- 2.3.2 EON Kharadi a DDL has submitted that, projection of its InSTS charges appears to be higher as compared to the other distribution licensee namely Mindspace (DDL) & Gigaplex (DDL) as these licensees have similar quantum (MW) compared to EON SEZ Phase- I & II.
- 2.3.3 NUPLLP submitted that MSETCL, MEGPTCL and TPC-T MTR Petition need to be scrutinized thoroughly to avoid sharp increase in Transmission charges. The transmission tariff for STOA is proposed at 72 paise per unit as against approved number of 40 paise per unit in the MYT Order for FY 2023-24 and 58 paise per unit as against approved number of 39 paise per unit in the MYT Order for FY 2024-25 which is steep hike in Transmission Tariff.

#### STU's Response

- 2.3.4 With regards to Bajaj FinServ's submission, STU replied that for the purpose of determination of InSTS charges, STU compiles transmission ARR of all transmission licensees and proposes to recover it from transmission system users i.e., distribution licensees based on their transmission capacity rights. ARR of transmission licensees for FY 2023-24 and FY 2024-25 is based on projections including past revenue gap under true-up, which the Commission would approve based on the prudence check and regulatory provisions. STU as such does not have its own ARR and for the purpose of InSTS Transmission Charges only compiles the ARR of all Transmission licensee and purposes to recover it from all TSUs.
- 2.3.5 STU has not responded to the comments of NUPLLP.
- 2.3.6 Further, with regards to OA for RE, STU as a planning body is taking necessary steps to ensures evacuation of all such power from RE projects. STU also clears the applications of all Green Energy Open Access on timely basis.
- 2.3.7 With regards to EON Kharadi's objection, STU submitted that, due to true up exercise for FY 2020-21 and FY 2021-22 the variation of actual and approved Base TCR of

Mindspace and Gigaplex is negative. They will receive as part of inter-se adjustment. The true up exercise is zero sum method between all TSUs.

#### Commission's Analysis and Ruling

- 2.3.8 The Commission notes the submissions of Bajaj Finserv, EON Kharadi, NUPLLP and STU.
- 2.3.9 InSTS charges are determined by pooling of the ARR of the transmission licensees. The transmission charges proposed by STU are as per the submission of ARR by transmission licensees and not approved by the Commission. The Commission approves the ARR of the transmission licensees upon detailed scrutiny and prudence check and also upon taking into consideration the objections/suggestion filed by stakeholders through public consultation process as per the provisions of the MYT Regulations 2015 and 2019. The Commission allows the recovery of only reasonable ARR upon prudence check and in accordance with regulatory principles elaborated through respective MYT/MTR Orders of transmission licensees. Hence, post approval of the ARR, the transmission tariff/charges shall be determined to recover such approved ARR of all transmission licensee which forms part of total transmission system cost as elaborated in the subsequent part of this Order.
- 2.3.10 The Commission notes that EON Kharadi (Phase-I and Phase-II) was not pool participant in InSTS MYT Order issued for 4<sup>th</sup> Control period on 30 March 2020 as these distribution licensees were not operational then. However, M/s Mindspace and M/s Gigaplex were part of TSUs being already under operation and have been considered for sharing of TTSC at the time of MYT 4<sup>th</sup> control period.
- 2.3.11 The sharing of TTSC is on the basis of projections of demand considering baseline average CPD and NCPD for base year i.e., 2022-23 as covered in subsequent paragraph. Further, as elaborated under subsequent paragraph, the demand projections of EON Kharadi (Phase-I and Phase-II) have been considered appropriately for determining of transmission charges for FY 2023-24 and FY 2024-25.

## 2.4 Projected Demand for FY 2023-24 and FY 2024-25

2.4.1 Gigaplex Estate Pvt. Ltd. (GEPL), and Mindspace Business Parks Pvt Ltd (MBPPL), have submitted that, the demand of GEPL and MBPPL has severely got impacted subsequent to imposition of lockdown on account of COVID-19 pandemic and restrictions imposed by Government from time to time. Both GEPL and MBPPL serve the specific load requirement of IT and ITeS consumers within its notified SEZ area. The Work from Home culture is being continuously adopted by IT and ITeS consumers during COVID-19 pandemic. GEPL in MTR Petition in Case No. 215 of 2022 has requested the Commission to consider peak demand of 5.5 MW for computation of TCR for FY 2023-24 and FY 2024-25. Similarly, MBPPL in its MTR Petition in Case No 216 of 2022 has submitted the projected

demand for FY 2023-24 and FY 2024-25 as 13 MW and 14.00 MW respectively.

- 2.4.2 KRC Infrastructure & Projects Pvt. Ltd. (KRCIPPL) has submitted that, it has commenced its operations as a Distribution Licensee with effect from 1 June 2019. Since start of the operation, KRCIPPL has been observing gradual increase in its demand. However, due to eruption of COVID19 pandemic and lockdowns, expected growth in demand could not be achieved. KRCIPPL has requested to consider, the Base TCR of 6.0 MW for FY 2023-24 and 6.50 MW for FY 2023-24 and FY 2024-25. KRCIPPL further requested the Commission not to consider the Peak Demand catered by KRCIPPL during FY 2022-23 as yardstick for computation of TCR.
- 2.4.3 **Nidar Utilities Panvel LLP (NUPLLP)** has submitted to consider Base TCR of 4.00 MW and 5.50 MW for FY 2023-24 and FY 2024-25 respectively.

#### STU's Response

2.4.4 STU has not submitted any specific comments on demand pattern submitted by Gigaplex, MBPPL and KRCIPPL. STU requested the Commission to consider the projections of these utilities while determining the Base TCRs.

## Commission's Analysis and Ruling

2.4.5 The Commission notes that with drop in demand during the Covid-19 pandemic and uncertainty of regular operations due to work from home culture being adopted by IT industries, there is difficulty in estimating future demands. Accordingly, the Commission for purpose of Base TCR determination for ensuing years, in case of deemed distribution licensees, has considered the same demand projections by such utilities for FY 2023-24 and FY 2024-25 as summarised below. In any case, variation in the projection would be trued up in the next regulatory cycle of InSTS Tariff determination and also as per Regulation 66 of MYT Regulations 2019 and Order in Case No. 52 of 2020 as discussed in preceding part of the Order, in case actual drawl exceeds Base TCR the short-term transmission charges would be applicable.

	Projected Demand in MW								
Financial Year	GEPL	KRCIPPL	MBPPL	NUPLLP					
FY 2022-23	5.5	5.5	12.0	3.0					
FY 2023-24	5.5	6.0	13.0	4.0					
FY 2024-25	5.5	6.5	14.0	5.5					

#### 2.5 Truing up of FY 2019-20

- 2.5.1 GEPL and MBPPL have requested the Commission to come up with Suo Motu Order for True-up of FY 2019-20 by considering the data submitted by STU for True-up of FY 2019-20.
- 2.5.2 NUPPLP has submitted that, STU has provided the data for approval of TTSC, Actual

billed and Actual CPD/NCPD. It is observed that Indian Railways has more share of Actual of average of CPD and NCPD of TTSC then the billed TCR in the MYT Order. Therefore, Indian Railways and many other Distribution Licensee have to pay the difference of the same to the Distribution Licensee who have paid higher amount than actual TCR utilized by them. The billing should be as per the actual usage of the Transmission Capacity. The Commission is requested to consider truing up of FY 2019-20 based on share of TTSC as per the actual TC utilized.

## STU's Response

2.5.3 STU requested the Commission to consider the true-up for FY 2019-20 using its powers available under MYT Regulations 2015.

- 2.5.4 The Commission notes the submissions of GEPL, MBPPL and NUPPL and STU. The FY 2019-20 is governed by MYT Regulations, 2015 for 3<sup>rd</sup> MYT control period. As per the MYT Regulations 2015 (Prior to 4<sup>th</sup> control period) applicable for the period upto FY2019-20, the Commission was Suo-moto determining sharing of transmission charges among TSUs. There is no provision for truing up of share of InSTS tariff under MYT Regulations 2015. Hence, the Commission does not find it appropriate to true up FY 2019 -20 as sought by stakeholders, as it would not be in line with the MYT Regulations 2015. Further, Commission does not find appropriate to reopen the accounts of transmission tariff for 3rd control period. Hence, truing up of transmission tariff for FY 2019-20 shall not be undertaken by the Commission.
- 2.5.5 The STU in its Petition regarding true up of FY 2019-20 has submitted as follows:
  - " 3.1 Truing-up for FY 2019-20
  - 3.1.1 STU submits that Hon'ble Commission vide order No. 265 of 2018 dated 12th September 2018 had approved TTSC for FY 2019-20 as per MERC MYT Regulations 2015. However, there is no provision for true-up and it is requested to Hon'ble Commission to take appropriate decision on the same.—"
- 2.5.6 For the reasons cited under earlier paragraphs, the Commission is not inclined to invoke the power to amend as suggested by STU. Further, STU has not provided any valid justification for true up of FY 2019-20 and to invoke the powers to amend the Regulations retrospectively.
- 2.5.7 The Commission further notes that STU is a Nodal Agency to deal with the InSTS issues. STU shall have to reply to the queries of the stakeholder based on the merit with various option and pros and cons of its implementation. It would have helped the Commission to arrive at appropriate decision. However, STU has not replied to most of the queries of the stakeholders and left to the Commission for the decision.

## 2.6 ATC Adjustment amount for FY 2020-21 and FY 2021-22 with True-up and Prorata reduction in ATC:

#### Objection/Comments

- 2.6.1 GEPL and MBPPL have submitted that, STU in its Model in "Form 6" sheet while calculating the Final True-up amount for FY 2020-21 and FY 2021-22 has shown the adjustment of ATC amounting to Rs. 83.65 Cr for FY 2020-21 and Rs. 85.58 Cr for FY 2021-22, paid by few distribution licensees, with the calculated "Difference payable/ (receivable)" amount by each Distribution Licensee for both the true-up years.
- 2.6.2 STU in its Petition has stated that ATC amount is adjusted on pro-rata basis. In this regard GEPL and MBPPL have requested the Commission to recheck the methodology adopted by the STU for Pro rata reduction to ATC.

#### STU's Response

2.6.3 STU has no comments to offer on proposed ATC pro-rata allocation to all TSUs. The Commission may take a holistic view on the same balancing the interest of all stakeholders.

- 2.6.4 The Commission notes that, STU has levied Additional Transmission charges on the TSUs for positive deviation of Drawal during actual operation based on the 15 min Drawal data.
- 2.6.5 As per MYT Regulation, 2019, the Additional Transmission charges is to be levied for Drawal in excess of TCR and short-term transmission charges are to be levied for Drawal exceeding Base TCR but less than TCR. Additional Transmission charges is to be levied for Drawal exceeding TCR at penal rate as 25% over and above normal charges for Base TCR.
- 2.6.6 As outlined under Commission's Analysis and Ruling in <u>Para 2.1.5 to Para 2.1.11</u>, the clarification on issue of applicability and levy of ATC and true-up thereof shall also be applicable in this case to address the concerns raised by GEPL and MBPPL.
- 2.7 Truing up of FY 2020-21 and FY 2021-22.
- 2.7.1 NUPLLP has submitted that, since Base TCR is trued-up based on the actual average of CPD/NCPD, ATC billed by STU should also be revised based on the actual Base TCR as per the Order in Case No. 52 of 2020. Further, NUPLLP and other SEZs, purchase all the power in short Term. NUPLLP even being a pool Participant has to apply for STOA for each month. In case STOA is applied for particular quantum in advance, so while calculating the ATC, STU should

consider the total quantum of the transmission corridor booked by the Deemed Distribution Licensee. Since there is provision of truing up of InSTS Charges as per provisions of MYT Regulations, 2019 and that the charges will be computed and shared on the basis of actual CPD/NCPD or short term Open Access booked by DDL. Hence, there should not be any levy of additional charges (25%) and any such charges collected by STU for FY 2020-21 and FY 2021-22 shall be adjusted against NUPLLP's account.

- 2.7.2 In the alternative, it is also submitted that the Base TCR of NUPLLP was 0.53 MW in MYT Order and it applied for STOA of 3 MW. Hence, calculation of 25% ATC should be over and above 3 MW and not above 0.53 MW which is the Base TCR. Additional Transmission Charges is levied for the actual usage which is over and above the Capacity rights booked by a DDL in 15 min time block.
- 2.7.3 Therefore, NUPLLP requested to direct STU to bill ATC to NUPLLP for the quantum over and above the STOA quantum applied for. Further, in case ATC is presently billed based on the base TCR of MYT Order, ATC bill may be revised based on the actual of Average of CPD/NCDP.

#### STU's Response

- 2.7.4 With regards to the suggestion for revision of ATC based on actual Base TCR, STU submitted that Base TCR considered in computation of MTC/TTSC at the time of ARR/TTSC is "Average BTCR on annual basis". However, computation of ATC on Real time basis it is difference of "Average vs Actual on 15 minutes' time block". However, STU requested to take a considerate view on this issue & provide necessary guidance in the interest of all stakeholders.
- 2.7.5 Further, STU submitted that it is coordinating with SLDC & Nidar for the meeting to look into reconciliation matter at the earliest.

- 2.7.6 The Commission notes the submission of NUPLLP and STU. The Commission clarifies that, ATC (i.e., penal transmission charges) is to be levied only if the drawal exceeds TCR of TSU in accordance with the Regulation 14.5 of MERC TOA Regulations 2016 and as per principles further elaborated through Order in Case 52 of 2020. The Commission in Case No. 52 of 2020, has also clarified the requirement of applicability of Short-Term Transmission Charges levied by STU for Drawal over and above the Base TCR.
- 2.7.7 The Commission notes that, approved Base TCR of NUPPLP as per MYT Order is 0.53 MW and it has paid monthly transmission charges to STU accordingly as per the MYT Order. Further, NUPLLP has signed short term PPA and is availing short term open access to source the power and it is yet to execute BPTA. The Commission is of the view that, NUPLLP (being a distribution licensee), is long term TSU and entitled

- to transmission capacity right equivalent to its Base TCR in the absence of the long term/medium term PPA. Its Base TCR which is linked to its contribution to CPD/NCPD for past period (true-up years) would be restated based on its actual recorded demand and contribution to CPD/NCPD, which would be revised for the purpose of true-up, as covered under subsequent chapter.
- 2.7.8 In this context, the Commission notes that, STU has levied the Short-term transmission charges for NUPLLP as per the clause (b) of Regulation 66 of MYT Regulations 2019 and in accordance with Regulation 14.5 of MERC Transmission Open Access (TOA) Regulations 2016, based on 15 min Drawal data provided by MSLDC on the drawal exceeding Base TCR.
- 2.7.9 In the present case of NUPLLP, the Commission while truing up the Base TCR of TSU, has considered the actual CPD and NCPD of NUPLLP as recorded by MSLDC and submitted by STU in this Petition and recomputed its Base TCR, which is 1.38 MW for FY2020-21 (as against 0.53 MW under MYT Order for FY2020-21) and 2.30 MW for FY2021-22 (as against 0.53 MW under MYT Order for FY2021-22). Accordingly, the Commission has revised inter-se sharing of TTSC based on true-up for these years (i.e., FY2020-21 and FY2021-22) as elaborated under Para 3.3.14 of this Order. Further, while Truing-up the amount of TTSC payable/ receivable by NUPLLP, the Commission has considered the short-term transmission charges levied on NUPLLP for the respective years and net TTSC payable/receivable by NUPLLP has been considered as part of overall TTSC payable in FY 2023-24 as part of this Order. Accordingly, the Commission is of the view that, the concerns raised by NUPLLP have been addressed by the Commission in this Order.
- 2.7.10 Further, the Commission observes that, MSLDC has wrongly applied provisions of MERC OA Regulations 2016 as regards applicability of Short Term Transmission Charges without considering the provisions of the MERC MYT Regulations, 2019 and clarifications issued through its Order in Case No. 52 of 2020. Further, STU was also expected to clarify to MSLDC regarding the relevant provisions of the MYT Regulations and clarifications issued through Order in Case 52 of 2020 when dispute was raised by NUPLLP regarding applicability of STOA charges. The Commission hereby directs STU/MSLDC to follow the provisions of MYT Regulations, 2019, Open Access Regulations, 2016 and clarifications issued in Case 52 of 2020, as regards levy of the monthly transmission charges, short term transmission charges and additional (penal) transmission charges, as applicable.

#### 2.8 Details of outstanding payment

2.8.1 NUPLLP stated that, MTC principal amount and MTC DPC amount is arising out of an Appeal filed by NUPLLP against the Commission's Order dated 12 September 2018 in Case No. 265 of 2018 and Order dated 01 January2019 in Case No. 280 of 2018 before the Hon'ble APTEL. The Hon'ble APTEL vide its Daily Orders (APL No. 135 of 2019 & IA No. 963 OF 2019 & IA No. 464 OF 2019) dated 18 December 2019 and 30 January 2020 directed NUPLLP to pay Rs. 13 Lakh per month. The matter is sub-

- judice before the Hon'ble ATE.
- 2.8.2 As regards to ATC principal amount and ATC DPC, STU has billed NUPLLP on 30 November 2022 an amount of Rs. 60,18,742/-. NUPLLP has paid an amount of Rs. 47,11,432/- on 28 December 2022. In November 30, 2022 ATC bill, for (April 2022 to October 2022) NUPLLP has replied to STU vide its letter dated 31 January, 2023 for reconciliation as there was no pending amount with NUPLLP.
- 2.8.3 NUPLLP stated that it has already raised the dispute of Rs 7,08,988/ towards payment of Transmission Charges to STU through STOA application from November 2020 to January 2021. During discussions, it was understood that InSTS charges which are collected by MSLDC is directly deposited to MSETCL's account and settled on the daily basis. Thus, the aforementioned InSTS charges of Rs. 7,08,988/-paid by NUPLLP via STOA is deposited by MSLDC to MSETCL's account instead of STU's Pool account. Hence, STU has no record of the receipt of such monthly payments of InSTS Charges paid via STOA. Irrespective of any accounts, the requisite InSTS charges are paid by NUPLLP and thus the adjustment of the same should be done with the STU's books.
- 2.8.4 NUPLLP also suggested to STU as well as MSLDC that, in future if the InSTS charges are being collected by MSLDC from the State TSU's or any other beneficiaries, the same shall be linked to the STU Pool account and not with the MSETCL's account in order to avoid such reconciliations and discrepancies ahead.
- 2.8.5 InSTS charges were also paid to STU, while procuring power through IEX. Thus, out of the total invoiced amount of Rs. 50,33,517/-, NUPLLP has paid the ATC of Rs. 42,56,642/- post adjusting the transmission charges of Rs. 7,08,988/- paid via STOA to STU and the transmission charges of Rs. 63,262/- paid to STU through IEX. NUPLLP has also adjusted the Late Payment Surcharge of Rs. 4,625/- levied against the Transmission charges that were already paid to STU via STOA. This has been communicated to STU with a copy of MSLDC vide its letter dated 9 June, 2022.
- 2.8.6 NUPLLP requested to direct STU to change Bank A/c of MSETCL with MSLDC as STU pool account for State Pool Participant like NUPLLP.

#### STU's Response

2.8.7 Since NUPLLP has requested to undertake prudence check, STU has no comments to offer on the same.

#### Commission's Analysis and Ruling

2.8.8 The Commission notes the concerns raised by NUPLLP and past correspondences with STU. Further, the Commission notes the current methodology of collection of STOA Transmission charges from utilities by MSLDC and depositing the same in MSETCL's account instead of STU's pool account. Further, the Commission also understands that at the end of every month same amount is transferred in the income

head Short Term Open Access Charges of MSETCL.

- 2.8.9 The Commission is of the view that current methodology of depositing the STOA charges collected from TSU into MSETCL's account is not appropriate and it is creating issues of reconciliation of the amount between two account heads.
- 2.8.10 The Commission notes that the genesis of the dispute between STU and NUPLLP lies in the levy of ATC by STU and payment of STOA charges by it to SLDC. The Commission is of the view that, the clarification provided in above Para 2.7.7 to 2.7.10 of this Order regarding applicability of ATC/STC charges, addresses the concerns raised by NUPLLP. The STU is required to adjust the amount paid by NUPLLP accordingly.
- 2.8.11 The perusal of the documents shows that, in the past there is correspondence between STU and NUPLLP regarding reconciliation of the payments made by NUPLLP. Hence, STU and NUPLLP shall resolve the issues amicably and in case of unresolved disputes, if any, the Parties are free to seek remedy for adjudication through separate regulatory process, which cannot be addressed as part of present MTR petition process.
- 2.8.12 Further, the Commission directs STU to explore issue of mode of collection of various transmission charges (long term, medium term, short term and additional transmission charges) and accounting of such transmission charges collected from TSUs including collection through separate Bank A/c of MSETCL with MSLDC for the purpose of STU pool account to avoid issues of reconciliation in future. The Commission hereby directs STU to submit report in this respect alongwith necessary actions taken within three months from issuance of this Order.

#### 2.9 Signing of Bulk Power Transmission Agreement (BPTA)

2.9.1 NUPLLP submitted that it is willing to sign the BPTA for 4 MW starting from 1 April 2023 to 31 March 2024. NUPLLP does not have a medium or long term PPA in place.

#### STU's Response

2.9.2 STU has submitted that, signing of BPTA is pending for NUPLLP and KRCPPL. Further, STU has mentioned that NUPLLP has approached for BPTA however, NUPLLP is currently operating under STOA, and it does not have medium term/long term PPA in place. Further, STU has requested the Commission to guide on BPTA execution in absence of MT/LT PPA in place which is required to consider injection and drawl points.

#### Commission's Analysis and Ruling

2.9.3 The Commission notes the submission of NUPLLP and concerns of STU regarding NUPPL's willingness to sign BPTA. However, in the absence of Medium Term or

- Long Term PPA, STU is not able to execute the BPTA.
- 2.9.4 In this regard the Commission would like to highlight the definitions of BPTA, TCRs and TSUs from the MYT Regulations 2019, reproduced as below;
  - (14) "Bulk Power Transmission Agreement" means an executed Agreement that contains the terms and conditions under which a <u>Transmission System User is entitled to access to an intra-State transmission system</u> of a Transmission Licensee;
  - (85) "Transmission Capacity Rights" means the right of a Transmission System User to transfer power in MW, under normal circumstances, between such points of injection and drawal as may be set out in the Bulk Power Transmission Agreement;
  - (87) "Transmission System User" for the purpose of these Regulations means the <u>Distribution Licensees and long-term Open Access Users</u>, but excludes partial Open Access Users;
- 2.9.5 The Commission also notes that, STU has developed the InSTS system for NUPLLP with approval of Grid Connectivity. In this regard, the Commission vide its Order dated 1 January 2019 in Case No. 280 of 2018, a case of NUPLLP seeking review of the Commission's Order dated 12 September, 2018 in Case No. 265 of 2018 regarding InSTS tariff has observed that it has not signed the BPTA despite availing connectivity and development of 110 kV Infrastructure. Also, the Commission in the said Order had directed NUPLLP to sign the BPTA as sought by STU. The relevant rulings of the Commission's Order are as follows:

"

- b) STU vide its letter No. 4523 dated 29 April, 2017, on application of NUPLLP dated 23 January, 2017 has granted the grid connectivity for 15.63 MW.
- c) STU vide its letter No. 2495 dated 7 March, 2018, has granted final grid connectivity for 15.63 MW.
- d) In the application of grid connectivity, NUPLLP has submitted the following documents to STU:
  - i) Application for connection;
  - ii) Connection Agreement executed between TPC-T and NUPLLP
  - iii) Site Responsibility Schedule
  - iv) Work Completion Report
  - v) Visibility of NUPLLP to SLDC through SCADA/RTU-DC etc. ----
- 11.6 Further, the Commission directs NUPLLP to open the LC and sign the BPTA in line with the prevailing Rules and Regulations.
- 2.9.6 It is observed that inspite of the directives of the Commission as sought by the STU,

neither NUPLLP nor STU has acted for signing the BPTA.

- 2.9.7 The Commission is of the view that, cogent reading of above definitions and the Commission's Order clarifies that, distribution licensees are expected to have long term/medium term PPAs in place to operate as TSUs and BPTA is mandatory document that entitles such TSUs to access and avail facilities to transmit power over InSTS. NUPLLP has short term PPAs and willing to sign BPTA. The Commission is of the view that, as NUPLLP is long term TSU (being distribution licensee) and its Base TCR linked to its contribution to CPD/NCPD is determined by the Commission in this Order, Under the circumstances, until NUPLLP executes long term/medium term PPA, its transmission capacity rights for the purpose of levy of transmission tariff are equivalent to its Base TCR. Accordingly, STU and NUPLLP may proceed with execution of the BPTA for the capacity equal to Base TCR as approved by the Commission in this Order. Upon execution of long term/medium term PPA by NUPLLP in future, its transmission capacity right (TCR) under BPTA needs to be modified or amended equal to its approved Base TCR or contracted capacity under long term/medium term contracted capacity, whichever is higher. Further, similar approach can be taken by STU for signing of BPTA with other existing TSUs, where similar situation prevails for the remaining duration of the 4th MYT control period.
- 2.9.8 Further, the Commission also expects that, STU needs to treat signing BPTA as priority, while considering any utility as TSU as per the definitions of the MYT Regulations and implement the provisions of the Regulations and this Order in letter and spirit. STU to complete it within six months from the date of this Order for all the TSUs which has not signed BPTA. The Commission further cautions that any non-compliance to the signing of BPTA as clarified in this Order would be treated as non-compliance as per provisions of the EA 2003 and appropriate action would be initiated.
  - **2.10** Percentage share of Average of CPD & NCPD of MSEDCL and inclusion of Demand of Partial Open Access consumers:
- 2.10.1 MSEDCL has submitted that, STU while claiming true up of FY 2020-21 & FY 2021-22 has submitted % share of Avg. of CPD & NCPD as 86.560% & 86.449% for MSEDCL as against 83.530% & 83.699% as approved by the Commission in MYT Order for FY 2020-21 & FY 202122 respectively. Further, % share of Avg. of CPD & NCPD of nearly all the Discoms, have been reduced except that for MSEDCL. Accordingly, the TTSC of nearly all Discoms got reduced except MSEDCL.
- 2.10.2 Further, MSEDCL submitted that its CPD and NCPD demands seems to be inclusive of partial open access consumers' demand. Wheeling charges recovered from partial open access consumers are being reimbursed to STU as per the Commission's Order dated 30 March 2020 in Case No. 322 of 2019. Inclusive of such demand in MSEDCL's CPD and NCPD demand will result in double payment of transmission

charges to STU. Hence, requested to review MSEDCL's CPD and NCPD demand to avoid double payment of transmission charges to STU towards demand of partial open access consumers.

2.10.3 Further, MSEDCL requested to direct STU/MSLDC to submit month wise demand data for the past period from FY 2018-19 onwards and direct the concerned to publish above monthly data regularly on their website.

#### STU's Response

2.10.4 STU submitted that MSLDC vide letter dated 17.2.2023 has informed that CPD-NCPD data for MSEDCL is derived from Daily System report generated at MSLDC which is based on operational data. MSEDCL demand mentioned in the report is including all the Bilateral power purchases in which quantum of partial open access users also included. STU stated that that MTC determined as per the InSTS Order is based on average CPD and NCPD which includes POA demand. The relevant provisions of the MYT Regulations 2019 are as follows:

(87)"Transmission System User" for the purpose of these Regulations means the Distribution Licensees and long-term Open Access Users, but excludes partial Open Access Users;

2.10.5 Further, the Regulation 64.2 of the MYT Regulations 2019 provides as follows:

"(64.2) .....Provided further that the Allotted Capacity for long-term Open Access Users <u>excluding partial Open Access Users</u> shall be considered in lieu of the average monthly CPD and NCPD for calculating the Base Transmission Capacity Rights:

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Provided also that on completion of each year of the Control Period, MSLDC shall submit the recorded CPD and NCPD data or the Allotted capacity, as the case may be, for past 12 months in respect of each Transmission System User and on the basis of the same, the Base TCR shall be suitably revised at the time of Mid-Term Review and at the end of the Control Period for the subsequent years. ... Emphasis supplied

- 2.10.6 STU submitted that clarity is needed to understand whether Average CPD & NCPD data to be used should be excluding POA data or Allotted Capacity for LTOA users excluding POA is to be used for calculating BTCR as specified under 2nd Proviso to Regulation 64.2 of MYT Regulations.
- 2.10.7 Based on above information the average CPD NCPD considered earlier in MYT Petition and now in the MTR Petition both include demand of the POA users and to that extent transmission charges of such POA users are being borne to great extent by TSUs (MSEDCL, AEML-D and TPC-D). Further, TSUs/ Distribution licensees also

- collect transmission charges from POA users and remit back the amount to transmission licensees as per the provision of Distribution Open Access Regulations 2016. Transmission licensees are considering the same as a non-tariff income in ARR.
- 2.10.8 STU acknowledges the current mechanism whereby POA data is part of Average CPD and NCPD data and hence being paid by TSU as monthly transmission charges determined in MYT Order. STU requested Commission to guide on the matter of remittance of the amount to transmission licensees or suitable treatment while determining TTSC for TSUs.
- 2.10.9 MSLDC collects STOA Transmission charges from utilities and deposit in the MSETCL's Non-op A/C No.20130401710 bank account. Further same day these charges are transferred to MSETCL bank's account and by end of every month these charges are transferred in the income head Short Term Open Access Charges (in GL 370010) of MSETCL.

- 2.10.10As per submission of STU to additional data gaps, the Commission notes that, CPD-NCPD data for MSEDCL is derived from Daily System report generated at MSLDC which is based on operational data. MSEDCL demand mentioned in the report is including all the Bilateral power purchases in which quantum of partial open access users is also included.
- 2.10.11 Post query of MSEDCL and receipt of above confirmation from MSLDC, it reveals that that Monthly Transmission Charges determined by STU is based on average CPD and NCPD which includes POA demand data. The Commission observes that the methodology used for determination of Base TCR under MYT Order (i.e., at the beginning of control period) and that for the MTR petition process is consistent. As a part of MTR process, no revision in the methodology and/or principles is envisaged during the control period and any review and revision in the principles for determination of Base TCR and/or determination of transmission tariff thereof, can be taken up for the next control period. However, as elaborated under subsequent paragraphs, it is clarified that there is no double counting or double payment of transmission charges on account of partial open access users as the benefit of such transmission charges is passed on to distribution licensees by way of overall reduction in the TTSC.
- 2.10.12The Commission notes that, STU has calculated sharing percentage based on the average of CPD and NCPD recorded as per MYT Regulations 2019. The higher share of MSEDCL indicates that MSEDCL's demand is increased compared to that was considered as projections at the time of issuing Order in Case No. 327 of 2019.
- 2.10.13 Further, in the past, the Commission vide its Order dated 14 June 2019 in Case No. 361 of 2018 filed by Tata Power Co. Ltd. seeking review of the Commission's Order dated 12 September,2018 in Case No. 265 of 2018, regarding Mid-Term Review of

InSTS Tariff for FY 2018-19 and FY 2019-20 has clarified its view on the inclusion of Partial OA consumers in TSU's demand and treatment to the STOA charges collected from Partial OA consumers by TSU. Relevant extract of the Order is reproduced as below:

- 9.35. Further, Total Transmission System Charges (TTSC) of Intra-State Transmission System (InSTS) is the result of capital investment made by all the Transmission Licensees to meet the demand of TSUs as a pool. As per principles of pooled ARR, such TTSC is shared by all the consumers of Maharashtra, irrespective of calculating the benefits to the consumers of particular TSU. It means capital investment made by TPC-T is shared by all the consumers of Maharashtra including MSEDCL, AEML-D, BEST etc. The demand of partial OA consumers for transmission usage and units consumed by them are catered by InSTS network. Hence, the transmission charges collected by DL from the partial OA consumers as a nodal agency under DOA Regulations 2016 shall have to be remitted to STU and so deduced from TTSC at the time of determining transmission tariff as per MYT Regulations 2015, which in turn benefits consumers of all the DLs in the Maharashtra as well as LTOA users. If transmission charges collected from OA consumers are not paid/remitted to STU and instead is kept with the DL, it will benefit the consumers of that DL only. Further, Regulation 14.1 of the DOA, Regulations, 2016 clearly specifies that the partial OA consumers have to pay the transmission charges to the DLs and in-turn DLs have to remit the same to STU. Hence, TPC-T's claim to allow it to retain the transmission charges collected from OA consumers is unjustified and will be injustice to the other consumers of TSUs."
- 2.10.14In view of the above ruling, the Commission clarifies that, the Charges collected from OA consumers should help to reduce the overall transmission charges which will benefit all the consumers in the InSTS instead of limited consumers in Distribution Licensee area.
- 2.10.15Further, the partial open access transmission charges are recovered by MSEDCL and deposited in MSETCL account. MSETCL is considering these charges as 'Non-Tariff Income' and MSETCL ARR is reduced to that extent. This results in reduction in TTSC reflecting in reduction in transmission charges of TSUs. Hence, there is no double payment of transmission charges as stated by MSEDCL.
- 2.10.16 As regards, MSEDCL's request for publication of the monthly demand data (CPD/NCPD) on its website, the Commission observes that as per Regulation 64.2 of MYT Regulations, 2019, STU is required to submit the recorded CPD/NCPD data at the end of each year of the Control Period for the past 12 months in respect of each transmission system user for the purpose of true-up. Thus, monthly publication of such data is not envisaged, however, MSEDCL's suggestion is welcome step in the interest of transparency and would facilitate regular scrutiny of such data for verification by stakeholders, before it is considered for purpose of true-up. Hence, STU/MSLDC

should explore possibility of web-publication of such data and take necessary steps in this respect within three months from issuance of this Order.

#### 2.11 Transmission Loss computation:

#### **MSEDCL Submission**

2.11.1 The Transmission Loss as computed by the SLDC for FY2020-21 & FY2021-22 is 2.94% and 3.19% respectively. However, the efficiency parameters such as Transmission Loss shall have downward trend. The reverse trend as submitted by STU shall not be allowed. The Commission in MYT Order has directed STU/Transmission Licenses to take the efforts to reduce the Transmission Losses. In this petition STU has stated that it has made efforts for the same. However, the Transmission Loss figures mentioned in the petition do not reveal the same.

#### STU's Response

- 2.11.2 STU has suggested continuing MYT approved trajectory for Transmission losses. Further regarding efforts pertaining to loss reduction as per the directive issued by the Commission, STU has requested all transmission licensees to take concerted efforts and inform STU for the action plan for reducing the transmission losses. Further STU through the implementation of its five-year plan has taken efforts for reduction in transmission losses through:
  - 1. Large scale Integration of RE generation,
  - 2. Addition of EHV substations at Load centres.
  - 3. Provision of Reactors and Capacitors for reactive compensation in the Transmission system..
  - 4. Replacement of ACSR conductor to High Ampacity conductor.
  - 5. Improving metering efficiency by implementation of AMR.
  - 6. Provision of IEMs during Execution of AMR Project & commissioned = 6046.
  - 7. Nos. of Spare IEMs Procured during the execution of AMR Project & utilized & commissioned = 154
  - 8. Provision of IEMs for interface locations which are commissioned during execution/implementation of AMR project = 152
  - 9. Provision of IEMs made as per 5-Year STU plan = 448
- 2.11.3 A quantitative analysis of the reduction in the transmission losses of state due to above efforts & the expected transmission loss reduction through the effective implementation of STU plan is as below:

particulars	Energy (Input)	Energy (Sent out)	Transmission Loss (%)	Reduction (%)
FY2017-18	150,341	145,385	3.30%	-

FY 2021-22   168,307   162,931   3.19%   (0.11%	FY 2021-22	168,307	162,931	3.19%	(0.11%)
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## Commission's Analysis and Ruling

2.11.4 The Commission notes the submission of MSEDCL and reply submitted by STU. STU in its reply has stated that the transmission loss is having downward trend. Transmission loss depends on several factors including network configuration, utilization of network elements and demand pattern variation on seasonal basis, change in composition injection over transmission of augmentation/addition of transmission network capacity. Over the control period, there has been significant increase in the transmission capacity through various transmission licensee, coupled with load growth and generation capacity addition, particularly from renewable energy sources. It is also important to note that implementation of DSM framework in Maharashtra with AMR based metering and energy accounting of all G<>T and T<>D interface points across intra-state transmission system has only facilitated accurate accounting and reporting of the transmission losses over the intra-state transmission network with weekly publication of the DSM accounts, with verification/validation checks through institutionalising standard process in place. Nonetheless, STU should be vigilant and investigate the causes of increase in transmission losses in areas, network elements and monitor performance of transmission licensees on this important parameter and guide them to adopt corrective measures through forum of Grid Coordination Committee from time to time.

# 2.12 Regarding the 400 kV GMR Warora Energy Ltd.(GWEL) SS for evacuation of power:

#### MSEDCL Submission

2.12.1 MSEDCL submitted that, in the absence of STU connectivity to GWEL for evacuation of 200 MW power, MSEDCL has to bear a burden of approximately Rs. 8 Cr./month as per the current CERC (Sharing of Interstate Transmission charges and losses) Regulations, 2020. Considering the poor progress of the scheme by MSETCL and as stated by the Commission in Order dated 31.12.2020 in Case No. 215 of 2020, MSEDCL requested the Commission to allow MSEDCL to recover Rs. 8 Cr. per month from MSETCL towards burden in this regard, from April 23 onwards till the time GWEL STU connectivity is established by MSETCL.

## STU's Response

- 2.12.2 STU submitted the status of the project as under:
  - The scheme was sanctioned on 05 September 2019 and the Commission has given In-principle approval on 30 December 2020.
  - The Commission vide Order dated 31 December 2020 directed MSETCL to execute the work of GWEL connectivity within stipulated timeframe of FY 2022-

- 23 as part of STU plan. As per the request from MSEDCL, the scheme for construction of 400/220kV switchyard at GWEL for evacuation arrangement for MSEDCL's share of 200 MW power from 2\*300MW Thermal power plant is included in the STU plan for year 2023-24. MSETCL has already issued LOA dated 16 November 2021 to the agency for the establishment of said substation. The work will be started immediately after handing over of land by M/s. GWEL with all clearance.
- The Commission in the In-principle approval letter had directed that M/s. GWEL shall not claim any cost for utilization of its plot for 400kV switchyard. Accordingly, MSETCL has requested M/s. GWEL to handover the plot. However, the land admeasuring 4.21 Ha. proposed by M/s. GWEL for establishment of MSETCL switchyard is having nearly 2508 trees. M/s. GWEL was insisting to get permission from forest authorities. However, as the plot is in MIDC area, MSETCL requested MIDC to permit tree cutting as per rules. Accordingly, MIDC has permitted M/s. GWEL to cut 2508 Nos. of trees in the said plot for establishment of MSETCL substation subject to payment of Rs.2.5 Crore as security deposit and replantation of 12540 No. of trees.
- Accordingly, M/s. GWEL on 18 October 2022 requested MSETCL to deposit Rs.2.5 Crore to GWEL to be paid to MIDC. GWEL has proposed an MOU for the same which is under scrutiny by MSETCL legal cell. After clearance of legal cell statutory charges will be paid and site will be handed over to execute project on priority.
- M/s. GWEL is not co-operating to the extent desired for, which is leading to delay in the project execution.
- As desired by MSEDCL, MSETCL/STU has provided the progress of the scheme vide letter dated 3 October 2022. STU submitted the copy letter issued to agency on 31 October 2022 instructing to take proactive steps to complete the scheme in stipulated timeframe as permission to tree cutting being granted. Also agency was asked to take over the site. Further, MSETCL conducted various meeting to pursue the matter for early execution of project.
- With respect to request of MSEDCL to allow recovery of charges from April 2023 till GWEL STU connectivity is established, STU submitted that the Commission may take a view on the same as the delay in project completion is beyond MSETCL's control.

- 2.12.3 The Commission noted that the issue of delay in providing the InSTS connectivity to MSEDCL by MSETCL at Warora Substation and the cost recovery thereof. The matter is not relevant in the present Tariff proceedings for determination of InSTS charges.
- 2.12.4 Further, the Commission notes that, similar objection has been raised by MSEDCL in the MTR Petition of MSETCL in Case No.232 of 2022. The Commission has dealt

with this issue in the Order of MSETCL in Case No 232 of 2022.

# 2.13 Recovery of transmission infrastructural cost spent for Mumbai utilities from consumer's Mumbai Distribution Licensees.

#### MSEDCL Submission

- 2.13.1 MSEDCL submitted that considering the special status of Mumbai and its suburban area from electricity supply reliability point of view under N-2 mechanism, various transmission Licensees are developing transmission network for Mumbai utilities for the benefit of Mumbai consumers.
- 2.13.2 Further, these new transmission lines will relieve the transmission constraints of Mumbai utility area and will allow the Mumbai distribution licensees to procure cheaper power from outside Mumbai area through Long term/Medium term/Short term PPA. It will ultimately reduce the Power purchase cost of the Mumbai distribution licensees and thereby benefitting to Mumbai consumers.
- 2.13.3 Hence, instead of socializing, charges for strengthening of Infrastructure for Mumbai Utilities shall be recovered from Mumbai Consumers only.

#### STU's Response

2.13.4 Regarding the suggestion of recovery of transmission infrastructural cost spent for Mumbai utilities from consumers of Mumbai Distribution licensees, STU request the Commission to take appropriate decision on this aspect.

#### Commission's Analysis and Ruling

2.13.1 The Commission notes the submission of MSEDCL and STU reply. Similar objection is raised by MSEDCL on MTR Petition of AEML-T in Case No. 230 of 2022 and the Commission has dealt with this issue in the Order for AEML-T in Case No. 230 of 2022.

#### 2.14 Study report for Optimum Utilisation of Transmission Capacity:

#### MSEDCL Submission

2.14.1 The Commission in MYT Order dated 30 March 2020 had directed STU to submit a status report on the extent of infrastructure created so far in the State and its utilization at present and as envisaged when approval was accorded to the plan. However, STU has not yet submitted any study report on the same.

#### STU's Response

2.14.2 As per the directive issued by the Commission, a detailed status report vide letter no. dated 30/06/2022 has been submitted to the Commission. In order to optimise the utilisation of the Transmission capacity STU adheres to the following set of actions:

- i. The demand / requirement of the new substation/ feeders is not considered unless the existing substations/ feeders are utilized.
- ii. Efforts are made for diverting loads through inter-utilization of spare capacity with distribution licensees. For e.g. Diversion of load from 220 kV Jalana sub-station to 220 kV Nagewadi sub-station.
- iii. Augmentation schemes of transformers are being approved after the due consideration of present loading as per sanction criteria (P1, P2, and P3).
- iv. Further STU follows the guidelines regarding InSTS planning & Augmentation of Transmission system in the planning code under MEGC 2020.
- 2.14.3 The List of substations having overall loading less than 25% of the substation capacity and List of Underutilized Lines is provided in the report.
- 2.14.4 As per the directives of the Commission, STU had requested all Transmission Licensees to provide information regarding their transmission capacity utilisation in respect to power catered and energy units transmitted during FY 2019-20, FY 2020-21 and FY 2021-22, However, the information has not been received from them except ATIL, MEGPTCL & JPTL.

- 2.14.5 STU has submitted the report for utilization of transmission network, which is under detailed scrutiny by Commission. However, upon preliminary scrutiny, it can be seen that substantial transformation capacity and transmission lines are underutilized. The invariably STU and Maharashtra Transmission Committee (MTC) should thoroughly scrutinize proposals for addition of transmission infrastructure in accordance with Capex Regulations 2022 before proposing new schemes. It should be seen that the infrastructure being created is utilized to its rated capacity.
- 2.14.6 Further, the Commission directs STU that while recommending DPRs for future infrastructure, it should ascertain that existing loading of underloaded infrastructure can be enhanced to its rated capacity, before planning for new infrastructure or augmentation of existing transmission infrastructure. The Commission directs STU to undertake forthcoming project or plan based on the optimum utilization of InSTS network which will result in reduction of InSTS charges.

#### 3 TRUE-UP OF SHARE OF InSTS TARIFF FOR FY 2020-21 AND FY 2021-22

#### 3.1 Background

3.1.1 STU has sought for Truing-up of share of InSTS for FY 2020-21 and FY 2021-22 based on actual TTSC billed on annual basis with respect to approved TTSC in MYT Order dated 30 March 2020 in Case No. 327 of 20219 due to the deviation in the actual CPD & NCPD and the drawal of the transmission capacity.

#### 3.2 Framework for Truing for FY 2020-21 and FY 2021-22

- 3.2.1 Regulation 64 of MYT Regulations 2019 specifies the methodology and principles for determining the Transmission Tariff for the use of InSTS and Base TCR of TSUs.
- 3.2.2 Further, the 1<sup>st</sup> proviso of the Regulation 64.5 specifies the true up of share of intra-State transmission tariff for FY 2020-21 and FY 2021-22 as referred above.
- 3.2.3 The new distribution licensees which were not approved in the MYT Order date 30 March 2020 are not considered for the truing up of base TCR for FY 2020-21 and FY 2021-22, However, the Commission has redetermined the TTSC, Base TCR and the Base Transmission Tariff considering new distribution licensees for FY 2023-24 and FY 2024-25. The relevant provision of the Regulation 64.2 of MYT Regulations is reproduced as below:

"64.2

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Provided also that in case new Transmission Licensees are added to the intra-State transmission network during the Control Period, then the TTSC, Base Transmission Capacity Rights and Base Transmission Tariff as referred under Regulations 64.1, 64.2 and 64.3 shall be re-determined for each remaining Year of the Control Period.

3.2.4 Accordingly, the Commission has carried out the truing up of share of InSTS Tariff among the existing TSUs as approved in MYT Order dated 30 March 2020, based on actual CPD and NCPD in the subsequent paragraphs of this Section.

## 3.3 Truing-up of Share of InSTS Tariff of FY 2020-21 and FY 2021-22

#### STU's Submission

- 3.3.1 As per MYT Order dated 30 March 2020, in Case No.327 of 2019 for InSTS Tariff, there were eight transmission licensees for whom ARR for 4<sup>th</sup> control period was approved by the Commission.
- 3.3.2 According to the transmission pricing framework, all the Transmission Licensees in the State form part of the InSTS, and their projected ARR for MYT Control Period for FY

2023-24 and FY 2024-25 is being considered for determining the TTSC. The ARR have been arrived as per the 'MTR Petition of each of the Transmission Licensees for FY 2020-21 and FY 2021-22 and Provisional Truing-up of FY 2022-23 and Projections of Revised ARR for FY 2023-24 and FY 2024-25. True-up for FY 2020-21 and FY 2021-22 as submitted by STU is provided in the Table 1 and 2 below.

Table 1: True-up for FY 2020-21 as submitted by STU

	FY 2020-21											
Sr. No.	Particulars	MYT Order	Actual TTSC billed	Share of Avg of CPD and NCPD (%)	Share of TTSC as per Actual TCR	Difference payable/ (receivable)	ATC (Rs. Cr)	ATC amount with True-up - Prorata reduction to ATC (Rs.Cr) (g) = (f) - (e)	Final True-up (Rs. Cr) (h) = (e) + (g)			
1	MSEDCL	5,671.59	5,671.56	86.560%	5,877.21	205.65	83.541	122.11	122.11			
2	TPCL-D	258.03	258.00	3.217%	18.44	-39.56	-	16.09	-23.47			
3	AEML-D	472.95	472.92	5.956%	404.41	-68.51	=	27.87	-40.65			
4	BEST	258.80	258.84	3.016%	204.79	-54.05	-	21.98	-32.07			
5	Indian Railways	115.65	115.68	1.137%	77.18	-38.50	0.0002	15.66	-22.84			
6	Mindspace	5.04	5.04	0.033%	2.24	-2.80	-	1.14	-1.66			
7	Gigaplex Properties	2.31	2.28	0.015%	1.02	-1.26	-	0.51	-0.74			
8	MADC	3.72	3.72	0.050%	3.41	-0.31	-	0.12	-0.18			
9	Nidar Utilities	0.17	0.12	0.007%	0.46	0.34	0.0999	-0.24	0.10			
10	KRC Infrastructure	1.60	1.56	0.008%	0.56	-1.00	=	0.41	-0.59			
11	EON Phase-1	-	-	-	1	-	-	-	-			
12	EON Phase-2	-	-	-	İ	-	-	_	-			
13	JNPT	-	1	1	1	-	-	-	-			
14	Laxmipati Balaji	-	-	-	-	-			-			
	Total	6,789.86	6,789.72	100.000%	6,789.72	0.00	83.65	205.65	0.00			

Table 2: True-up for FY 2021-22 as submitted by STU

Sr.	Particulars	culars FY 2021-22								
No.		MYT Order	Actual TTSC billed	Share of Avg of CPD and NCPD (%)	Share of TTSC as per Actual TCR	Difference payable/ (receivable)	ATC (Rs.Cr)	ATC amount with True-up (Rs.Cr) - Prorata reduction to ATC	Final True- up (Rs.Cr)	
		(a)	(b)	(c)	(d)	$(\mathbf{e}) = (\mathbf{d}) + (\mathbf{c})$	<b>(f)</b>	(g) = (f) - (e)	(h) = (e) + (g)	
1	MSEDCL	5,782.39	5782.44	86.449%	5,972.42	189.98	4.9890	105.00	105.00	
2	TPCL-D	258.79	258.84	3.174%	219.26	-39.58	0.0199	17.81	-21.77	
3	AEML-D	477.90	477.84	5.753%	397.46	-80.38	0.0024	36.20	-44.18	
4	BEST	257.96	258	2.984%	206.14	-51.86	-	23.36	-28.50	
5	Indian Railways	118.43	118.44	1.528%	105.58	-12.86	0.0565	5.74	-7.12	
6	Mindspace	4.99	5.04	0.029%	2.01	-3.03	-	1.37	-1.67	
7	Gigaplex	2.53	2.52	0.015%	1.06	-1.46	-	0.66	-0.80	

8	MADC	3.79	3.84	0.047%	3.27	-0.57	0.0000	0.26	-0.32
9	Nidar Utilities	0.17	0.12	0.010%	0.68	0.56	0.5073	-0.76	-0.20
10	KRCIPPL	1.58	1.56	0.011%	0.77	-0.79	-	0.36	-0.44
11	EON Phase-1	-	1	0.000%	-	-	-	-	-
12	EON Phase-2	-	-	0.000%	-	-	-	-	-
13	JNPT	-	-	0.000%	-	-	-	-	-
14	LBSCML	-	-	0.000%	-	-	-	-	-
	Total	6,908.53	6,908.64	100.000%	6,908.64	0.00	85.58	189.98	0.00

- 3.3.3 1<sup>st</sup> proviso to the Regulation 64.5 of the MYT Regulations 2019 specifies that, truing-up of share of InSTS for FY 2020-21 and FY 2021-22 shall be on the basis of actual CPD and NCPD of TSUs in respective years.
- 3.3.4 STU has submitted that, it has billed for ATC (as clarified/corrected in reply to data gaps, it is Short Term Transmission Charges(STC) as per the Order dated 18 October 2020 in Case No.52 of 2020) for the deviation in the drawl of the transmission capacity based on 15 Minutes time block drawl data of TSUs. The true-up computation is based on annual basis for deviation with respect to approved and actual CPD & NCPD. The Additional Transmission Charges (rather STC) are levied on real-time basis for deviation in 15 Minutes time block. So, such charges for deviation forms the part of true-up exercise. Hence, STU has adjusted the amount on pro-rata basis and ensured the deviations are inter-se adjustment only. These charges are carried forward in FY 2023-24 and overall TTSC are revised to take care of adjustments in true-up.
- 3.3.5 STU has also provided details of Monthly Payment received from TSUs against the bills raised by it to TSUs as per approved TTSC.
- 3.3.6 With regards to Monthly Payment made to Transmission Licensees, STU has submitted that based on the billing and payment procedure/mechanism adopted by STU, the amount received from each TSU is disbursed to transmission licensees in the approved ratio. The monthly actual payments made to transmission licensees from FY 2019-20 onwards are submitted by STU.
- 3.3.7 Further, STU has submitted the details of outstanding payments from TSUs, as outstanding principal amount of MTC, DPC, principal amount of ATC and its DPC as summarised in the Table below:

Table 3: Outstanding payment as on 30<sup>th</sup> Nov. 2022, as submitted by STU (Rs. Crore)

Sr. No	Particular	MTC Principal Amount	MTC DPC	ATC Principal Amount	ATC DPC	Outstanding Balance as on 30/11/2022
1	MSEDCL	3,094.24	2323.99	232.04	13.04	5663.31
2	TPCL-D	-	-	0.87		0.87
3	AEML-D	-	1	0.19		0.19
4	BEST	-	-	0.05		0.05

Sr. No	Particular	MTC Principal Amount	MTC DPC	ATC Principal Amount	ATC DPC	Outstanding Balance as on 30/11/2022
5	Indian Railways	1	1	0.41		0.41
6	MADC	1	1	0.02	0.00	0.02
7	Nidar Utilities	0.95	0.28	0.60	0.01	1.83
8	Total	3,095.19	2,324.27	234.17	13.05	5,666.68

Note: Indian Railway, Mindspace, Gigaplex, KRC, MADC, Nidar, EON, JNPT are deemed distribution licensee

## Commission's Analysis and Ruling

- 3.3.8 The Commission notes that the TSUs have made payment of transmission charges for Base TCR for FY 2020-21 and FY 2021-22 based on the approved monthly transmission charges as per the Order dated 30 March 2020 in Case No. 327 of 2019. Further, the actual data of CPD and NCPD for FY 2020-21 and FY 2021-22 is now available. Therefore, truing up of transmission charges paid by TSUs for both the years needs to be undertaken as per MYT Regulations 2019. As, STU's transmission charge pool account is zero sum account, truing up needs to be zero sum among all the TSUs. Hence, truing up is inter-se adjustments between the TSUs.
- 3.3.9 Further, the Commission notes that, STU has levied ATC (as clarified in reply to data gaps, it is STC) on the TSUs for positive deviation of Drawal during actual operation based on the 15 min Drawal data. The Additional Transmission charges (rather STC) are levied on to the TSUs for excess Drawal than the Base TCR. As per MYT Regulations, 2019 and Order in Case No. 52 of 2020, the Additional Transmission charges is to be levied for excess Drawal than TCR and short-term transmission charges are to be levied for Drawal exceeding Base TCR but less than TCR. Further, Additional Transmission charges is to be levied for Drawal exceeding TCR at penal rate as 25% over and above normal charges for Base TCR. The relevant abstract of Regulation 66 of MYT Regulation 2019 is reproduced as below:

"66 Usage of Intra-State Transmission System

The charges for intra-State transmission usage shall be shared among various TSUs in the following manner:

- a) Long-term TSU with recorded demand up to Base TCR shall not be subjected to payment of short-term transmission charges.
- b) Long-term TSU with recorded demand greater than Base TCR but lower than Contracted Capacity shall make payment of short-term Transmission charges for the recorded demand in excess of Base TCR.
- c) Where the recorded demand of long-term TSU is greater than Contracted Capacity, the TSU shall bear additional transmission charges as specified in the Regulations of the Commission governing Transmission Open Access:

Provided that short-term transmission charges and additional transmission charges, if payable or paid by long-term TSUs in accordance with the clauses (a), (b) and (c) above, shall be adjusted during subsequent billing period upon availability of information regarding actual recorded demand by such long-term TSUs.

- 3.3.10 Further, Additional Transmission Charges are to be levied in accordance with the Regulation 14.5 of the TOA Regulations 2016. Relevant provisions of the TOA Regulations 2016 are as follows:
  - 14.5. A Transmission System User availing Open Access shall also be liable to pay an additional Regulatory Charge at the rate of twenty-five percent of the Transmission Charges for the use of an Intra-State Transmission System in excess of its Transmission Capacity Rights.
- 3.3.11 STU vide its additional submission dated 23 February, 2023 clarified that, it has levied the ATC as per the clause (b) of Regulation 66 of MYT Regulation 2019 at the rate of short term transmission charges based on the 15 min Drawal data provided by MSLDC on the drawal exceeding Base TCR. The Commission notes that, STU has applied short term transmission charges, however, it has used the terminology as Additional Transmission Charges with Abbreviation as "ATC". The Commission is of the view that, these charges shall be called as short-term transmission charges and not as Additional Transmission Charges or "ATC".
- 3.3.12 As the charges levied by STU are for Drawal over and above the Base TCR and not above TCR for FY 2020-21 and FY 2021-22 is being trued up. These charges form the part of charges for revised Base TCR. Hence, it is necessary to consider these charges at the time of Truing up for inter-se adjustments among TSUs.
- 3.3.13 Accordingly, the Commission approves the Truing up of FY 2020-21 and FY 2021-22 as below:

Table 4: Truing-up for FY 2020-21, as approved by the Commission (Rs. Crores)

						FY 2020-21				
			MYT Orde	er		Actual		ŗ	Гruing Up	
Sr. No.	Particulars	MYT Order	TTSC billed	Share of Avg of CPD and NCPD (%)	Share of TTSC as per Actual TCR	Share of Avg of CPD and NCPD (%)	Difference payable/ (receivable)	Short Term Charges (STC)	Short Term Charges Adjustment Amount with True- up - Pro rata Reduction to Short Term Charges	Final True- up
		(a)	<b>(b)</b>	(c)	( <b>d</b> )	(e)	$(\mathbf{f}) = (\mathbf{d}) + (\mathbf{b})$	(g)	(h)=(f)-(g)	(i) = (f) + (h)
1	MSEDCL	5,671.59	5,671.56	83.53%	5,877.21	86.560%	205.65	83.5461	122.11	122.11
2	TPCL-D	258.03	258.00	3.80%	218.44	3.217%	(39.56)	=	16.09	(23.47)
3	AEML-D	472.95	472.92	6.97%	404.41	5.956%	(68.51)	=	27.87	(40.65)
4	BEST	258.80	258.84	3.81%	204.79	3.016%	(54.05)	-	21.98	(32.07)
5	Indian Railways	115.65	115.68	1.70%	77.18	1.137%	(38.50)	0.0002	15.66	(22.84)
6	Mindspace	5.04	5.04	0.07%	2.24	0.033%	(2.80)	=	1.14	(1.66)
7	Gigaplex Properties	2.31	2.28	0.03%	1.02	0.015%	(1.26)	-	0.51	(0.74)
8	KRC Infrastructure	1.60	1.56	0.02%	0.56	0.008%	(1.00)	-	0.41	(0.59)
9	Nidar Utilities	0.17	0.12	0.00%	0.46	0.007%	0.34	0.0999	-0.24	0.10
10	MADC	3.72	3.72	0.05%	3.41	0.050%	(0.31)	-	0.12	(0.18)
11	EON Phase-1	-	=	0.00%	-	0.000%	-	=	-	=
12	EON Phase-2	-	=	0.00%	-	0.000%	-	=	-	-
13	JNPT	-	=	0.00%	-	0.000%	-	=	-	=
14	Laxmipati Balaji	-	=	0.00%	-	0.000%	-	=	-	-
	Total	6,789.86	6,789.72	100.00%	6,789.72	100.000%	0.00	83.65	205.65	0.00

Note: Indian Railway, Mindspace, Gigaplex, KRC are deemed distribution licensee

Table 5: True-up for FY 2021-22, as approved by the Commission (Rs. Crores)

						FY 2021-22				
			MYT Order			Actual		Tr	uing Up	
Sr. No.	Particulars	MYT Order	Actual TTSC billed	Share of Avg of CPD and NCPD (%)	Share of TTSC as per Actual TCR	Share of Avg of CPD and NCPD (%)	Difference payable/ (receivable)	Short Term Charges (STC)	Short Term Charges Adjustment Amount with True-up - Pro rata Reduction to Short Term Charges	Final True- up
		(a)	(b)	(c)	( <b>d</b> )	(e)	$(\mathbf{f}) = (\mathbf{d}) + (\mathbf{b})$	(g)	(h)=(f)-(g)	$(\mathbf{i}) = (\mathbf{f}) + (\mathbf{h})$
1	MSEDCL	5,782.39	5782.44	83.70%	5,972.42	86.449%	189.98	84.9890	105.00	105.00
2	TPCL-D	258.79	258.84	3.75%	219.26	3.174%	-39.58	0.0199	17.81	(21.77)
3	AEML-D	477.90	477.84	6.92%	397.46	5.753%	-80.38	0.0024	36.20	(44.18)
4	BEST	257.96	258	3.73%	206.14	2.984%	-51.86	-	23.36	(28.50)
5	Indian Railways	118.43	118.44	1.71%	105.58	1.528%	-12.86	0.0565	5.74	(7.12)
6	Mindspace	4.99	5.04	0.07%	2.01	0.029%	-3.03	-	1.37	(1.67)
7	Gigaplex	2.53	2.52	0.04%	1.06	0.015%	-1.46	-	0.66	(0.80)
8	KRCIPPL	1.58	1.56	0.02%	0.77	0.011%	-0.79	-	0.36	(0.44)
9	Nidar Utilities	0.17	0.12	0.00%	0.68	0.010%	0.56	0.5073	-0.76	(0.20)
10	MADC	3.79	3.84	0.05%	3.27	0.047%	-0.57	0.0000	0.26	(0.32)
11	EON Phase-1	-	-	0.00%	-	0.000%	-	-	-	-
12	EON Phase-2	-	-	0.00%	-	0.000%	-	-	-	-
13	JNPT	-	-	0.00%	-	0.000%	-	-	-	-
14	LBSCML	-	-	0.00%	-	0.000%	-	-	-	-
	Total	6,908.53	6,908.64	100.00%	6,908.64	100.000%	0.00	85.58	189.98	0.00

Note: Indian Railway, Mindspace, Gigaplex, KRC are deemed distribution licensee

- 3.3.14 The Commission approves the truing up of Rs.205.65 Crore including short term transmission charges of Rs. 83.65 Crore for FY 2020-21 and Rs. 189.98 Cr. including short term transmission charges of Rs. 85.58 Cr. for FY 2021-22 respectively which are further adjusted in TTSC for FY 2023-24 as discussed in Para 5.1.4 of this Order.
- 3.3.15 The Commission notes STU's submission regarding outstanding payments of transmission charges and Short-Term Transmission Charges. It is observed that (as indicated in Table 3), the amount of Rs.5,666.68 Crore is outstanding (as on 30.11.2022) on account of transmission charges, short term transmission charges and DPC which is almost 70% of standalone TTSC. The Commission would like to emphasise that Transmission system is backbone of entire power sector in the state and the transmission licensees which are operating and maintain InSTS. These licensees need to be paid for the recovery of their ARR on regular basis as approved by Commission. As it is seen that there is huge outstanding payment of transmission charges from TSU, the TSUs cannot expect the reliable and uninterrupted service from Transmission Licensees, if they face difficulties in managing their cash flows. The Commission expects that, all TSUs need to pay Transmission Charges in a timely manner and take the benefit of rebates offered by transmission licensees instead of paying delayed payment charges.
- 3.3.16 TSUs are Long Term and Medium-Term users of transmission system and Long Term and Medium Terms open access is deemed to have been granted to all TSUs as per their Bulk Power Transmission Agreement. The Regulation 24 of MERC Transmission Open Access Regulations, 2016 provides payment security mechanism as below:
  - The Applicant for Long-term or Medium-term Open Access shall open an irrevocable revolving Letter of Credit in favour of the Nodal Agency to the extent of the estimated amount of various charges payable for a period of two months.
- 3.3.17 Accordingly, all TSUs are required to open or update an irrevocable revolving Letter of Credit in favour of STU i.e., Nodal Agency. Further, Regulation 68.3 of MYT Regulation 2019 mandate all TSUs as below:
  - All TSUs shall ensure timely payment of Transmission Tariff to STU so as to enable STU to make timely settlement of claims raised by Transmission Licensees.
- 3.3.18 In view of the above discussions, Commission directs all defaulting TSUs to make outstanding payment to STU and ensure timely payments of transmission tariff to STU.
- 3.3.19 STU is directed to take appropriate actions to recover outstanding transmission charges from defaulting TSUs as per the provisions of the Regulations and submit the compliance report within three (3) months from the date of this Order.

# 4 INTRA-STATE TRANSMISSION TARIFF FOR BALANCE PERIOD OF 4<sup>TH</sup> CONTROL PERIOD i.e. FOR FY 2023-24 AND FY 2024-25

## 4.1 Background

4.1.1 In accordance with Regulation 64 of MYT Regulations, 2019, STU has sought for redetermination of the Transmission Tariff for the use of InSTS in FY 2023-24 and FY 2024-25.

## 4.2 Framework for determination of Transmission tariff for 4th Control Period

- 4.2.1 The MYT Regulation, 2019 are applicable for the 4th MYT control period from FY 2020-21 to FY 2024-25. Regulation 64 of MYT Regulations 2019 specifies the methodology and principles for determining the Transmission Tariff for the use of the InSTS and Base TCR of TSUs.
- 4.2.2 Further, the fourth proviso of the Regulation 64.2 specifies the determination of Base TCR during the beginning of the control period, on the basis for which the demand projections for the future years of the control period would be made. The relevant extract of the proviso is as provided as below:

"Provided also that the Yearly CPD and NCPD or the Allotted capacity, as the case may be, to be considered for determination of the subsequent yearly Base Transmission Capacity Rights shall be computed at the beginning of the Control Period based on the past trend and on the basis of demand projections made by various TSUs connected to the Intra-State transmission system as part of their MYT Petitions for the Control Period:"

4.2.3 For TSUs that are deemed distribution licensees for whom the 12-month CPD and NCPD data is not available, the Base TCR for the beginning of the control period shall be determined in accordance with the 3<sup>rd</sup> proviso of Regulation 64.2 of MYT Regulations, the relevant extract of which is given below:

"Provided also that in case of a Deemed Distribution Licensee whose monthly CPD and NCPD data is not available for 12 months at the time of determination of Base TCR, the monthly CPD and NCPD data if available for at least 4 months, or the quantum of Short-term/Medium-Term Open Access applied for by the Deemed Distribution Licensee for the available period, shall be considered in lieu of the average monthly CPD and NCPD for calculating the Base Transmission Capacity Rights:"

4.2.4 Proviso 3 of Regulation 64.3 of MYT Regulations states that in case of addition of new Transmission Licensee, the Base TCR, TTSC and transmission Tariff shall be redetermined for each remaining year of the control period.

Provided also that in case new Transmission Licensees are added to the intra-State transmission network during the Control Period, then the TTSC, Base Transmission Capacity Rights and Base Transmission Tariff as referred under Regulations 64.1, 64.2 and 64.3 shall be re-determined for each remaining Year of the Control Period.

- 4.2.5 Regulation 65 of MYT Regulations 2019 specifies the methodology and principles for sharing of TTSC among the TSUs and Regulation 66 outline the treatment for usage of InSTS by long term TSUs. Regulation 69 specifies the treatment of Transmission Losses of InSTS to be borne by TSUs.
- 4.3 Constituents for Determination of TTSC for balance period of the 4th Control Period.

## STU's Submission

## **Existing Transmission Licensees:**

- 4.3.1 According to the transmission pricing framework, all the Transmission Licensees in the State form part of the InSTS, and their projections ARR for MYT Control Period for FY 2023-24 and FY 2024-25 are being considered for determining the TTSC.
- 4.3.2 These figures have been arrived on considering the "MTR Petition of each of the Transmission Licensees for FY 2020-21 and FY 2021-22 and Provisional Truing-up of FY 2022-23 and Projections of Revised ARR for FY 2023-24 and FY 2024-25.
- 4.3.3 As per MYT Order dated 30 March 2020 in Case No. 327 of 2019 for InSTS, there were eight (8) transmission licensees for whom ARR for 4<sup>th</sup> control period was approved.
- 4.3.4 M/s. MEPGPTCL has indicated in its current ARR Petition a cumulative gap of Rs.1902.86 Cr and standalone ARR of Rs.998.81 Cr for FY 2023-24. With regards MEGPTCL's Petition, STU has referred the pending Appeals filed by MEGPTCL before the Hon'ble APTEL and requested the Commission to consider this aspect, while finalizing the ARR of MEGPTCL.

## **New Transmission Licensee for MTR period:**

- 4.3.5 Kharghar Vikhroli Transmission Limited (**KVTL**) is a Special Purpose Vehicle (SPV) incorporated for the purpose of implementing the 400 kV Vikhroli receiving station and associated incoming transmission lines for strengthening of Mumbai Transmission System (Vikhroli Project).
- 4.3.6 Adani Transmission Ltd. (ATL) was selected as successful bidder under the Tariff Based Competitive Bidding (TBCB) process executed by STU under Sections 63 of the Electricity Act, 2003. Accordingly, the Commission adopted the Transmission Charges

for the Project with validity throughout the period covered in the Transmission Service Agreement vide Case No. 142 of 2020 dated 23 January, 2021.

- 4.3.7 KVTL comprises of about 74 Ckm of 400 kV and 200 kV transmission lines along with 1500 MVA 400kV GIS substation at Vikhroli in Mumbai. This Project is Critical to the city of Mumbai as the existing transmission corridor has constraints to carry further power into the city. This Project would enable additional sources of power to be brought into Mumbai and would thus help in meeting the future demand of the city.
- 4.3.8 Further, KVTL had filed a Petition for seeking extension of Scheduled Commercial Operation Date (SCOD) as per the provisions of the Transmission Service Agreement dated 14 August 28.2019. The Commission vide its Order dated 1 November 2022 in Case No. 53 of 2022 has allowed extension to SCOD of the 400 kV Vikhroli Project from 12 March 2022 to 31 July 2023.
- 4.3.9 Upon request from MSETCL, KVTL has provided the details of the transmission charges to be considered as part of InSTS for FY 2023-24 and FY 2024-25 in line with above Orders of the Commission as under:

Commenc e date of contract Year	End date of Contract year	Quoted Non- escalable Transmissio n Charges ##	Increase of 5.112% in quoted Non- escalable Transmission charges due to Change in law @@	Revised Quoted Non- escalable Transmission Charges	Quoted escapable Transmissio n Charges ##
a	b	c	d = c * 5.112%	e = c + d	f
01 April,23	31	287.79	14.71	302.50	0.00
	March,24				
01 April,24	31	287.79	14.71	302.50	0.00
_	March,25				

Table 6: Transmission charges of KVTL as submitted by STU (Rs. Crore)

## MERC Tariff Adoption Order dated 23.01.2021 in Case No. 142 of 2020.

@ @ MERC by Order dated 02.08.2022 in Case No. 142 of 2021 allowed change in acquisition price of Rs. 71.70 Crore as change in law event. (Please refer page no. 51 of Oder). As per Article 12.2.1 of TSA and as provided in point no. 18.24 of MERC order dated 02.08.2022 in Case No. 142 of 2021, KVTL is eligible for adjustment in transmission charges.

The relevant part of Article 12.2.1 of TSA is reproduced here below:

## "12.2.1 During Construction Period

During the Construction Period, the impact of increase/ decrease in the cost of the Project in the Transmission Charges shall be governed by the formula given below:

For every cumulative increase/decrease of Rupees Four Crore Thirty-Nine Lakh (Rs. 4.39/-) in the cost of the Project up to the Scheduled COD of the Project, the

increase/decrease in non-escalable Transmission Charges shall be an amount equal to zero point three one three percent (0.313%) of the Non-Escalable Transmission Charges....."

As per above formula provided in Transmission Service Agreement and change in acquisition price of Rs. 71.70 Crore approved by the Commission; year wise non-escalable transmission charges will increase by 5.112%.

Increase in non-escalable Transmission Charges

= Rs. 71.70 Crore \* 0.313% = Rs. 4.39 Crore = **5.112%** 

# Assessment of the KVTL project by STU:

4.3.10 The Commission vide its data gaps directed STU to assess the actual progress of KVTL project and submit its own assessment report. KVTL was asked to assess and submit the tentative date of commissioning of its project during in the MYT control period and recovery of Transmission Charges in the remaining years of the control period. Accordingly, STU has carried out its own assessment and submitted that, based on the monthly progress reports submitted by KVTL, regular meetings/ discussions & last meeting for assessment of the project on 27 December 2022, following is the latest status of the project.

**400 kV GIS S/sn at Vikhroli** – Most of the foundation & erection works completed except for Equipment Erection of 18 out of 68 nos which are linked to outage work. Follow-up is being made with SLDC & the outage on 220kV circuits has been availed on 03.01.2023. Line wise status report for major elements is as under:

## 400 kV Kharghar Vikhroli T/L

Out of 71 towers (foundation & tower erections) - 3 locations pending for Access approval from MCGM, 5 towers due to ROW(Godrej) and 7 locations pending for permissions from Forest & Wildlife/ESZ

Out of total stringing of 21.72 kms - 6 km is under hold for tree cutting permission and 2.3 km for Forest & Wildlife/ESZ

# LILO of 400 kV Talegaon-Kalwa at Vikhroli

Out of 39 towers (foundation & tower erections) – 5 locations under hold for tree cutting, 5 locations pending for Access approval from MCGM, 11 towers due to ROW (Godrej) and 38 locations pending for permissions from Forest & Wildlife/ESZ

Out of total stringing of 12 kms - 1.27 km is under hold for tree cutting permission and entire 12 km is pending for permission from for Forest & Wildlife/ESZ

## LILO of 220 kV Trombay Salsette I, II, III & IV at Vikhroli

Out of 4 tower erection  $-4^{th}$  Tower erection has been completed after the outage has been availed on 03.02.2023. Further multiple outages are required in interval for work completion of LILO of 220kV circuits & 110kV diversion. The same is being coordinated with MSLDC & TPC.

## **KVTL** has sought various interventions / support from GoM:

**Forest Clearance** (LILO Talegaon -Kalwa(T-K) at Vikhroli & Kharghar-Vikhroli Extended Portion): Early recommendation of compliances from State Forest Dept. for final approval from MoEF&CC (Stage-I compliance submitted by KVTL on 18.12.2022).

**Wildlife Clearance** (LILO T-K at Vikhroli): State Government to write letter for conveying of meeting of NBWL, Wildlife Advisory Committee in Jan, 2023 and approve wildlife clearance to KVTL project in Jan, 2023 itself (GoM has forwarded proposal on 13.12.2022)

**Mangrove Felling Permission** from Hon'ble High Court: KVTL needs support of GoM & MSETCL to facilitate early approval by Hon'ble High Court. (as per directions given by HC on 14.12.2022, GoM & MSETCL to file responses on the same)

**Tree Felling Permission** for construction of Kharghar-Vikhroli line (Phase-II) from CIDCO: Proposal is under recommendation from CIDCO, Tree Authority to State Tree Authority for final approval. GoM to issue advisory for early recommendations / permissions by CIDCO.

**400KV Kharghar Vikhroli line locations clearance from MCGM**: Re-alignment issue at 3 locations for which MCGM approval awaited. Immediate Support needed.

**RoW**(Godrej) under Jurisdiction of District Collector, Mumbai Suburban: Clearance awaited from Godrej. GoM to issue advisory for early resolution to RoW.

**Tapping Arrangement for 400KV LILO on Talegaon-Kalwa at Vikhroli**: Original proposal was approved by MSETCL. Due to NMMC & MMRDA issue. Revised feasibility of tapping arrangement is required. Revised proposal submitted by KVTL is under consideration of MSETCL.

Line outages for 220KV LILO on Trombay - Salsette & 110KV Diversion – MSLDC: Applied in month of Nov & Dec'22. The outage on 220kV circuits has been availed on 03.01.2023. Further multiple outages are required in interval for work completion of LILO of 220kV circuits & 110kV diversion. The same is being coordinated with MSLDC & TPC.

4.3.11 Considering that the above statutory proposals being in the advanced stages of approval & if all the approvals are in place by end of January 2023 with a further period of grant of working permission period of 30 days, KVTL would require 6-8 months of working period (excluding three months of monsoon) to complete the project. Thus, considering above pending permissions/ approvals from various authorities and timely intervention / push from GoM; SCOD of the project may get shifted by another 6-7 months beyond the approved SCOD of 31 July 2023 taking into consideration the thinnest margin of error. Hence there may be two scenarios for SCOD considering issues highlighted above & STU requested the Commission to approve accordingly. STU has considered the ARR as per its assessment as Rs.302.50 Crore for FY 2024-25.

- 4.3.12 STU further submitted that in case project gets commissioned in the February end of FY 2023-24 as assessed above, the Commission may approve the transmission tariff to be recovered by STU from TSUs and allow to reimburse to Transmission licensees in same proportion/ share as normal TTSC approved for FY 2023-24. Non-consideration of KVTL ARR in TTSC for FY 2023-24 may result in variation of transmission charges for TSUs which the Commission may allow them to recover appropriately in tariff.
- 4.3.13 STU has also submitted that the projected ARR of all the Transmission Licensees in the state that form a part of InSTS have been considered for determining the TTSC and the figures of ARR have been arrived from MTR Petition filed by each of the Licensees for Projection of ARR for balance period of the 4<sup>th</sup> Control Period from FY 2023-24 to FY 2024-25.
- 4.3.14 The TTSC to be recovered from all the TSUs in the state as the sum of ARRs of the all the transmission licensees has been computed in accordance with Regulation 64 of MYT Regulations, 2019.
- 4.3.15 The details of Transmission Licensees and the ARRs projected for balance period of the 4<sup>th</sup> Control Period from FY 2023-24 and FY 2024-25 is provided in the Table below:

Sr.	Name of Transmission	Reference	FY 2	023-24	FY 2	024-25
No.	Licensee	(Petition No. of Licensee)	MYT Order	Revised Projections	MYT Order	Revised Projections
1	MSETCL	232/MT/2022	4,801.66	8,724.56	4,858.81	8,753.61
2	ATIL	238/MT/2022	124.74	189.90	118.50	121.26
3	MEGPTCL	237/MT/2022	881.59	2,901.67	849.18	935.50
4	VIPL-T	224/MT/2022	3.98	4.93	3.82	3.83
5	AEML-T	230/MT/2022	341.02	424.23	333.72	458.26
6	TPC-T	217/MT/2022	850.25	1,459.75	861.27	1,085.33
7	JPTL	213/MT/2022	65.46	69.03	62.79	64.10
8	APTCL	234/MT/2022	46.06	49.83	44.07	42.43
9	9 KVTL 53/2022		-	-	-	302.50
	C of all Licensees proposed to	7,114.76	13,823.90	7,132.16	11,766.82	

Table 7: ARR of Transmission Licensees, as submitted by STU (Rs. Crores)

# Commission's Analysis and Ruling

4.3.16 STU has considered projected ARR of following transmission licensees forming part of TTSC for projections under balance period of 4<sup>th</sup> Control Period as under:

## 4.3.17 Maharashtra State Electricity Transmission Co. Ltd. (MSETCL):

The Commission has approved MSETCL's Truing-up of ARR for FY 2019-20, FY 2020-21 and FY 2021-22, Provisional True-up ARR for FY 2022-23, ARR projection for FY 2023-24 and FY 2024-25 vide Order dated 31 March 2023 in Case No. 232 of 2022. The Commission has considered the revised ARR projections for FY 2023-24

and FY 2024-25 in Case No. 232 of 2022 for the determination of Transmission Tariff in the present Order.

## 4.3.18 Tata Power Co. (Transmission Business) (TPC-T):

The Commission has approved TPC-T's Truing-up of ARR for FY 2019-20, FY 2020-21 and FY 2021-22, Provisional True-up ARR for FY 2022-23, ARR projection for FY 2023-24 and FY 2024-25 vide Order dated 31 March 2023 in Case No. 217 of 2022. The Commission has considered the revised ARR projections for FY 2023-24 and FY 2024-25 in Case No. 217 of 2022 for the determination of Transmission Tariff in the present Order.

# 4.3.19 Adani Mumbai Electricity Limited (Transmission Business) (AEML-T):

The Commission has approved AEML-T's Truing-up of ARR for FY 2019-20, FY 2020-21 and FY 2021-22, Provisional True-up ARR for FY 2022-23, ARR projection for FY 2023-24 to FY 2024-25 vide Order dated 31 March 2023 in Case No. 230 of 2022. The Commission has considered the revised ARR projections for FY 2023-24 and FY 2024-25 in Case No. 230 of 2022 for the determination of Transmission Tariff in the present Order.

# 4.3.20 Jaigad Power Transmission Ltd. (JPTL):

The Commission has approved JPTL's Truing-up of ARR for FY 2019-20, FY 2020-21 and FY 2021-22, Provisional True-up ARR for FY 2022-23, ARR projection for FY 2023-24 and FY 2024-25 vide Order dated 31 March 2023 in Case No. 213 of 2022. The Commission has considered the revised ARR projections for FY 2023-24 and FY 2024-25 in Case No. 213 of 2022 for the determination of Transmission Tariff in the present Order.

## 4.3.21 Adani Transmission (India) Ltd. (ATIL)

The Commission has approved ATIL's Truing-up of ARR for FY 2019-20, FY 2020-21 and FY 2021-22, Provisional True-up ARR for FY 2022-23, ARR projection for FY 2023-24 and FY 2024-25 vide Order dated 31 March 2023 in Case No. 238 of 2022. The Commission has considered the revised ARR projections for FY 2023-24 and FY 2024-25 in Case No. 238 of 2022 for the determination of Transmission Tariff in the present Order.

## 4.3.22 Maharashtra Eastern Grid Power Transmission Co. Ltd. (MEGPTCL):

The Commission has approved MEGPTCL' Truing-up of ARR for FY 2019-20, FY 2020-21 and FY 2021-22, Provisional True-up ARR for FY 2022-23, ARR projection for FY 2023-24 and FY 2024-25 vide Order dated 31 March 2023 in Case No. 237 of 2022. The Commission has considered the revised ARR projections for FY 2023-24

and FY 2024-25 in Case No. 237 of 2022 for the determination of Transmission Tariff in the present Order.

# 4.3.23 Vidarbha Industries Power Ltd. (VIPL-T):

The Commission has approved VIPL-T's Truing-up of ARR for FY 2019-20, FY 2020-21 and FY 2021-22, Provisional True-up ARR for FY 2022-23, ARR projection for FY 2023-24 and FY 2024-25 has been approved vide Order dated 31 March 2023 in Case No. 224 of 2022. The Commission has considered the revised ARR projections for FY 2023-24 and FY 2024-25 in Case No. 224 of 2022 for the determination of Transmission Tariff in the present Order.

# 4.3.24 Amaravati Power Transmission Co. Ltd. (APTCL):

The Commission has approved APTCL's Truing-up of ARR for FY 2019-20, FY 2020-21 and FY 2021-22, Provisional True-up ARR for FY 2022-23, ARR projection for FY 2023-24 to FY 2024-25 vide Order dated 31 March 2023 in Case No. 234 of 2022. The Commission has considered the revised ARR projections for FY 2023-24 and FY 2024-25 in Case No. 234 of 2022 for the determination of Transmission Tariff in the present Order.

## 4.3.25 Kharghar Vikhroli Transmission Limited (KVTL):

The Commission notes the submission of STU. The Commission vide its Order dated 1 November 2022 in Case No. 53 of 2022 has allowed extension to the SCOD of the 400 kV Vikhroli Project from 12 March 2022 to 31 July 2023 as per the provisions of the Transmission Service Agreement (TSA) dated 14 August 2019. During TVS, the Commission directed STU to assess the expected commissioning date of KVTL project. Accordingly, STU has submitted its on-ground assessment based on the progress report and discussion/ meeting with KVTL and status of pending permissions/ approvals. STU has submitted that, the project may get commissioned in April 2024 (FY 2024-25) as against SCOD 31 July 2023. Accordingly, STU has not considered any ARR projections for KVTL in FY 2023-24, however it has considered the ARR projections of Rs.302.50 Crore for FY 2024-25 as approved by the Commission in Order dated 23 January 2021 in Case No. 142 of 2020 for adoption of Tariff and allowed change in acquisition price of Rs. 71.70 Crore as change in law event in Order dated 02 August 2022 in Case No. 142 of 2021. Accordingly, the Commission considers the same for determination of Transmission Tariff for FY 2024-25.

4.3.26 Further, the Commission notes the STU's submission that in case KVTL project gets commissioned in the February 2024 i.e., end of FY 2023-24, STU may be allowed to recover transmission charges corresponding to KVTL charges for proportionate period in FY 2023-24 and in proportion of sharing of transmission charges for FY 2023-24 from TSUs and reimburse the same to KVTL. The Commission accepts the submission of STU and allowed STU to recover transmission charges corresponding to KVTL

charges for proportionate period in FY 2023-24 as approved by the Commission in Order dated 23 January 2021 in Case No. 142 of 2020 and in Order dated 02 August 2022 in Case No. 142 of 2021 and in proportion of sharing of transmission charges for FY 2023-24 from TSUs and reimburse the same to KVTL.

4.3.27 Further, the Commission directs that, in case KVTL project gets commissioned after 01 April 2025, the transmission charges collected by STU from TSUs on account of KVTL shall be considered as surplus for FY 2024-25 and shall be set off in TTSC for first year of next Control Period i.e., FY 2025-26.

## 4.3.28 Sinner Power Transmission Co. Ltd (SPTCL):

SPTCL is yet to achieve CoD of its Transmission System and has not filed its Petition for Capital Cost and ARR approval for the 4<sup>th</sup> Control Period. Accordingly, it has not been considered in the present Order.

4.3.29 Regulation 64 of the MYT Regulations, 2019 specifies mechanism of determination of transmission tariff as following:

64 Determination of Intra-State Transmission Tariff

64.1 The aggregate of the yearly revenue requirement for all Transmission Licensees shall form the "Total Transmission System Cost" (TTSC) of the Intra-State transmission system, to be recovered from the Transmission System Users (TSUs) for the respective year of the Control Period, in accordance with the following Formula:

$$TTSC(t) = \sum ARRi \ n \ i=1$$

Where,

TTSC(t) = Pooled Total Transmission System Cost of year (t) of the Control Period;

n = Number of Transmission Licensee(s);

ARRi = Yearly revenue requirement approved by the Commission for ith Transmission Licensee for the yearly period (t) of the Control Period:

Provided that in case of transmission system projects undertaken in accordance with the Guidelines for competitive bidding for transmission under Section 63 of the Act, the Aggregate Revenue Requirement as per the annual Transmission Service Charges (TSC) quoted for such projects, shall be considered, for aggregation under the TTSC."

4.3.30 The Commission has approved (adopted in TBCB under Section 63 of EA2003- KVTL) the ARR of nine (9) out of ten (10) Transmission Licensees in the State for the balance period of 4<sup>th</sup> Control Period, which forms part of the TTSC. Further, the Commission

has considered the submission of STU with respect to SPTCL and KVTL projects. Accordingly, the ARR of all existing Transmission Licensees as approved in MTR Orders and adopted annual cost of KVTL (for 2024-25) is considered for arriving at TTSC of InSTS for FY 2023-24 and FY 2024-25 as below:

Table 8: ARR of Transmission Licensees, as app	proved by the Commission (Rs. Crores)
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	Name of	Reference		FY 2023-24		]	FY 2024-25	
Sr. No.	Transmissi on Licensee	(Order No. of Licensee)	MYT Order	STU Petition	Approved in this Order	MYT Order	STU Petition	Approved in this Order
1	MSETCL	232/MT/2022	4,801.66	8,724.56	6,480.14	4,858.81	8,753.61	6,483.43
2	ATIL	238/MT/2022	124.74	189.90	140.94	118.50	121.26	139.55
3	MEGPTCL	237/MT/2022	881.59	2,901.67	1,667.25	849.18	935.50	1,666.17
4	VIPL-T	224/MT/2022	3.98	4.93	3.65	3.82	3.83	3.62
5	AEML-T	230/MT/2022	341.02	424.23	373.04	333.72	458.26	374.71
6	TPC-T	217/MT/2022	850.25	1,459.75	925.70	861.27	1,085.33	925.71
7	JPTL	213/MT/2022	65.46	69.03	66.54	62.79	64.10	64.28
8	APTCL	234/MT/2022	46.06	49.83	47.54	44.07	42.43	44.55
9	KVTL	53/2022	-	-	-	_	302.50	302.50
TTSC of all Licensees proposed to be recovered in resp. year			7,114.76	13,823.90	9,704.80	7,132.16	11,766.82	10,004.52

- 4.3.31 All transmission licensees (governing under Section 62 of EA 2003) have submitted their Petitions for truing up of FY 2019-20, FY 2020-21 and FY 2021-22, provisional true up for FY 2022-23 and revised projected ARR for FY 2023-24 and FY 2024-25. The Commission has approved the ARR of all transmission licensees (governing under Section 62 of EA 2003) after due prudence check. During true up process cumulative past period gap of Rs. 3594.73 Crore. is required to be recovered from the ARR of ensuing period. Major portion of the cumulative revenue gap of Rs. 1526.78 Crore is on account of the impact of the Hon'ble APTEL judgement dated 03 June 2021 and 18 November 2022 in Case of MEGPTCL. Also, there is past period cumulative revenue gap of Rs. 1939.58 Crore mainly on account of the impact of the Hon'ble APTEL judgement dated 29 August 2022 and prior period disallowed capitalisation in ARR of MSETCL. Also, there is past period cumulative revenue gap of Rs. 36.42 Crore in the ARR of TPC-T and Rs. 82.65 Crore for ATIL.
- 4.3.32 Further, the Commission while approving the past period recoveries of transmission licensees in their respective MTR Orders, has evenly spread out the cumulative revenue gap over FY 2023-24 and FY 2024-25 to avoid tariff shock in the transmission tariff for FY 2023-24. However, spreading of cumulative revenue gap for two years has attracted carrying cost in FY 2023-24 which has also been considered by the Commission in respective MTR Orders of Transmission Licensees. The overall impact of carrying cost on account of spreading of cumulative revenue gap for FY 2023-24 and FY 2024-25 is Rs. 85.02 Crore considered in this TTSC Order.

#### 4.4 Determination of Base TCR

#### STU's Submission

- 4.4.1 The Commission in the MYT Order of InSTS in Case No. 327 of 2019 dated 30 March 2020 had considered ten (10) TSUs for the purpose of payment of TTSC namely; MSEDCL, TPCL-D, AEML-D, BEST, Indian Railways (IR) (Mumbai & Rest of Maharashtra Combined), MBPPL, Gigaplex Properties (Gigaplex), MADC, Nidar Utilities, and KRC Infrastructure (KRCIPPL)
- 4.4.2 STU has submitted that, Bulk Power Transmission Agreement (**BPTA**) signing is pending for KRCIPPL, MADC and Nidar. STU has already sent reminders to them to execute BPTA at the earliest and also provided them Draft BPTA. STU submitted that, NIDAR/NUPPL has requested to execute BPTA for lower figures which is under consideration by STU.
- 4.4.3 Post MYT Order dated 30 March 2020, there have been four (4) new deemed distribution licensees which have been issued special conditions of License by the Commission and two (2) other deemed distribution licensee which were issued Special Conditions of distribution licence prior to MYT Order have started operation. The summary of the same is as under:

Table 9: Summary of new Deemed Distribution Licensees Post MYT Order

Sr. No	Name of Deemed Distribution Licensee and Type	Date of Issue of Licensee	Whether Operationalized as on date of filling this petition (Yes/No)	BPTA signing states	Whether LTOA/MTOA applied for	PPA
1	Laxmipati Balaji Supply Chain Management Ltd. (SEZ)	27-02-2019	Yes	No	-	Yes
2	Jawaharlal Nehru Port Trust (SEZ)	13-11-2018	Yes	No	-	Yes
3	EON Kharadi Infrastructure Pvt. Ltd. (Phase-I) (SEZ)	15-06-2021	Yes	No	-	Yes
4	EON Kharadi Infrastructure Pvt. Ltd. (Phase-II) (SEZ)	15-06-2021	Yes	No	-	Yes
5	Aurangabad Industrial Township Ltd. (AITL) for Shendra Industrial Area (Distribution Licence Exemption Local Authority)	02-08-2022	No	AITL Informed vide Email dt-21/11/2022	-	-
6	Aurangabad Industrial Township Ltd. (AITL) for Bidkin Industrial Area (Distribution Licence Exemption Local Authority)	02-08-2022	No	exempted Distribution Licensee	-	-

4.4.4 As submitted in above table, except AITL' Shendra and Bidkin Industrial areas, all deemed distribution licensees are operationalised and have power purchase arrangements in place. Hence, STU has proposed to consider EON-I, EON-II, JNPT and Laxmipati Balaji as deemed transmission system users akin to the treatment provided earlier to MADC and NIDAR in MYT Order dated 30 March 2020. Further

STU has requested the Commission to direct EON-I, EON-II, JNPT and Laxmipati Balaji to execute BPTA at the earliest.

4.4.5 The 2<sup>nd</sup> proviso to Regulation 64.2 of MYT Regulations 2019 states that,

Provided further that the Allotted Capacity for long-term Open Access Users excluding partial Open Access Users shall be considered in lieu of the average monthly CPD and NCPD for calculating the Base Transmission Capacity Rights:

As per the above provision, STU has considered average of monthly CPD and NCPD for projection purpose and not the allotted capacity for long term open access (LTOA) users minus partial open access users.

4.4.6 The 5<sup>th</sup> proviso to Regulation 64.2 of MYT Regulations 2019 states that,

Provided also that on completion of each year of the Control Period, MSLDC shall submit the recorded CPD and NCPD data or the Allotted capacity, as the case may be, for past 12 months in respect of each Transmission System User and on the basis of the same, the Base TCR shall be suitably revised at the time of Mid-Term Review and at the end of the Control Period for the subsequent years.

- 4.4.7 Base TCR has been calculated as the average of CPD and NCPD of TSUs from the monthly data for 12 months available for FY 2020-21 and FY 2021-22 and for 8 months from April 2022 to November 2022.
- 4.4.8 Similarly, information for 12 months available for FY 2018-19 and FY 2019-20 is provided as an additional information. The CPD and NCPD data since FY 2018-19 was made available to the STU by Maharashtra State Load Dispatch Centre (MSLDC).
- 4.4.9 The Base TCR for FY 2019-20, FY 2020-21 and FY 2021-22 of all TSUs on actual basis are provided in terms of MW & percentage contribution.
- 4.4.10 STU submitted that, based on the historic data it has projected the demand data, however; the results were absurd due to covid-19 period. Various scenarios such as year on year growth rate, 3-year CAGR were computed but finally it was deemed fit as per fifth proviso of Regulation 64.2 of MYT Regulations 2019 to rationalise (suitably revise) the growth rate to align with the present average CPD and NCPD data and to ensure that it is also in line with current 8 months' average data.
- 4.4.11 STU had sought the projected demand data from all TSUs for FY 2022-23, FY 2023-24 and FY 2024-25 for the purpose of this petition. All the TSUs have provided the information pertaining to Base / Peak demand data and same is tabulated as under:

**Table 10: Demand Projections submitted by Distribution Licensees** 

Sr.	Name of Distribution	Demand projections	by distribution Li	censees (in MW)
No.	Licensee / TSU	FY 2022-23	FY 2023-24	FY 2024-25
1	MSEDCL	24,432.00	25,617.00	26,860.00
2	TPCL-D	940.00	965.00	1,000.00
3	AEML-D	1,828.00	1,856.00	1,885.00
4	BEST	905.00	923.00	942.00
5	Indian Railways	407.30	419.21	427.59
6	Mindspace	12.00	13.00	14.00
7	Gigaplex	5.50	5.50	5.50
8	MADC	14.00	15.00	16.00
9	Nidar Utilities	3.00	4.50	5.5
10	KRCIPPL	5.50	6.00	6.50
11	EON Phase-1	8.00	9.00	10.00
12	EON Phase-2	6.00	7.00	8.00
13	JNPT	1.20	1.50	2.00
14	Laxmipati Balaji	0.65	0.80	0.95
15	AITL	0.00	25.00	30.00
	Total – Existing	28,568.15	29867.51	31216.54
	TSUs / Distribution			
	Licensees			

4.4.12 Though FY 2022-23 is not subject to provisional true-up, it is necessary to re-estimate the base TCR figures for FY 2022-23 to enable for computation of revised Base TCR of FY 2023-24 and FY 2024-25. STU has considered 8 months actual data available for FY 2022-23; however, for re-estimation purpose it has considered H2 data. Further, STU had captured figures of FY 2021-22 into H1 and calculated growth rate over 6 months. The growth rate appears to be varying to a large extent and hence STU has applied adhoc nominal growth rate of 1% across all TSUs to re-estimate FY 2022-23 TCRs. It is submitted that 1% adhoc growth rate is applied on FY 2022-23 H1 figures. STU has also tabulated 8 months (April-Nov 22) figures for reference to ensure that revised estimates are in sync with past and present data.

Table 11: Re-Estimation of Base TCR for FY 2022-23, as submitted by STU (in MW)

		or FY 2022-23						
Sr. No	Particulars	FY 21-22 (H1)	FY 21-22 (Total)	Increase over H1	FY 22-23 (H1)	FY 22-23 (Up to Nov 22 Average of CPD &NCPD)	Nominal/ Adhoc Growth Rate	Estimate d FY 22- 23
1	MSEDCL	19,167.77	20,236.83	5.58%	20,904.21	20,709.15	1.00%	21,113.25
2	TPCL-D	715.84	742.92	3.78%	898.65	876.96	1.00%	907.64
3	AEML-D	1,359.13	1,346.74	-0.915	606.02	1,573.09	1.00%	1,622.08
4	BEST	703.34	698.5	-0.69%	817.19	802.05	1.00%	825.37
5	Indian Railways	341.17	357.75	4.86%	412.13	413.83	1.00%	416.26
6	Mindspace	6.56	6.81	3.84%	9.35	9.23	1.00%	9.45
7	Gigaplex	3.24	3.58	10.50%	5.37	5.39	1.00%	5.42

		Projection/Estimation for FY 2022-23									
Sr. No	Particulars	FY 21-22 (H1)	FY 21-22 (Total)	Increase over H1	FY 22-23 (H1)	FY 22-23 (Up to Nov 22 Average of CPD &NCPD)	Nominal/ Adhoc Growth Rate	Estimate d FY 22- 23			
8	MADC	11.97	11.06	-7.60%	13.62	13.12	1.00%	13.76			
9	Nidar Utilities	2.26	2.3	1.79%	3.26	3.26	1.00%	3.3			
10	KRCIPPL	2.22	2.6	17.04%	4.46	4.43	1.00%	4.5			
11	EON Phase-1	5.59	5.82	4.06%	7.88	7.85	1.00%	7.96			
12	EON Phase-2	2.15	2.44	13.56%	4.29	4.31	1.00%	4.33			
13	JNPT	0.07	0.28	275.53%	0.85	0.88	1.00%	0.85			
14	Laxmipati Balaji	0.59	0.57	-2.63%	0.65	0.64	1.00%	0.66			
	Total Transmission Capacity	22,322	23,418	4.91%	24,688	24,424		24,935			

4.4.13 STU has rationalised the growth rate to project the revised demand for FY 2023-24 and FY 2024-25. The computation of the same is provided in the table below:

Table 12: Revised Demand Projection for FY 2023-24 and FY 2024-25, as submitted by STU (in MW)

		<b>Existing Aver</b>	age of CPD an	d NCPD Data a	and Growth (	Computation	Proj	ection
Sr. No.	Particulars	FY 22-23 (Estimation STU) (1% growth on Apr 22- Sep 22)	Last 3 FY CAGR% (FY 2018- 19/FY 2021- 22) (Scenario 1)	Growth over Previous year %age (FY22 over FY 21) (Scenario2)	Growth Rate Considere d over FY 2022-23 (%)	Remarks / Rationalis ation	FY 2023-24	FY 2024-25
1	MSEDCL	21,113	3.97%	14.33%	3.97%	3year CAGR	21,952	22,825
2	TPCL-D	908	-2.41%	12.93%	3%	Mumbai	935	963
3	AEML-D	1,622	-2.14%	10.57%	3%	Growth Trend in general	1,671	1,721
4	BEST	825	-4.79%	13.25%	3%		850	876
5	Indian Railways	416	1.13%	53.90%	1.13%	3year CAGR	421	426
6	Mindspace	9.45	-20.22%	1.06%	5%	All SEZ	9.92	10.42
7	Gigaplex	5.42	-9.49%	16.01%	5%	5% growth they are	5.70	5.98
8	MADC	4.50	0.00%	54.82%	5%	operational and have	4.73	4.96
9	Nidar Utilities	3.30	0.00%	67.15%	5%	positive	3.46	3.63
10	KRCIPPL	13.76	0.00%	7.57%	5%	and increasing	14.45	15.17
11	EON Phase-1	7.96	0.00%	144.03%	5%	trend as average of	8.36	8.77
12	EON Phase-2	4.33	0.00%	1298.56%	5%	GDD 1	4.55	4.77
13	JNPT	0.85	0.00%	0.00%	5%	in line with	0.90	0.94

14	Laxmipati Balaji	0.66	0.00%	508.00%	5%	their projections	0.69	0.72
	Total Transmission Capacity	24,935	3.02%				25,882	26,865

# Commission's Analysis and Ruling

- 4.4.14 The Commission, in the MYT Order, has considered all 10 nos. of TSUs which are Transmission Pool Participants for determination of transmission charges. Additionally, STU has proposed four SEZs viz. LBSCML, JNPT, EON Phase-I and EON Phase-II as TSUs to be covered under transmission pricing mechanism as below:
- 4.4.15 The Commission has issued SEZ Deemed Licensee to Laxmipati Balaji Supply Chain Management Limited (LBSCML) on 27.02.2019, Jawaharlal Nehru Port Trust (JNPT) on 13.11.2018, EON Kharadi Infrastructure Pvt. Ltd. (Phase-I) on 15.06.2021 and EON Kharadi Infrastructure Pvt. Ltd. (Phase-II) on 15.06.2021. All these four (4) deemed distribution licensees are operational at the time of filing petition by STU. Hence, Commission approves inclusion of these deemed distribution licensees in transmission pricing mechanism. Further, Commission directs these licenses to execute Bulk Power Purchase Agreement (BPTA) with STU within six months from the date of this Order so as establish their Base TCR in InSTS.
- 4.4.16 In respect of Aurangabad Industrial Township Ltd. (AITL) for Shendra and Bidkin Industrial Area, as directed by APTEL, the Commission has issued Order and granted an exemption to AITL under Section 13 of the EA, 2003 for 25 years from availing a Distribution License for its notified area. The Commission vide Order dated 03 September 2021 in Case No. 29 of 2019 has upheld that Section 12 of the EA, 2003 shall not apply to AITL Further, the Commission vide Order dated 02 August 2022 in Case No. 161 of 2021 directed AITL to file a Petition for approval of Power Procurement Agreement within three months of the issuance of the Licence exemption to AITL.
- 4.4.17 Accordingly, AITL has filed Petition for in-principle approval of Short-Term Power Purchase for one year period starting from 01 April 2023 to 31 March 2024. The Commission vide Order dated 20 January 2023 in Case No. 206 of 2022 has accorded in-principle approval for Power Procurement Plan for the period of 01 April 2023 to 31 March 2024 and directed to issue a tender for short-term power procurement as per the MoP Guidelines of 2016 & its amendments and to file a Petition for the adoption of the short term PPA arrived at on that basis. However, AITL has not filed Petition for approval for adoption of tariff and has not commenced its operation as distribution licensee. Hence, STU has not considered AITL's Shendra and Bidkin Area in this Order for determination of transmission tariff for FY 2023-24 and FY 2024-25.
- 4.4.18 However, if AITL commences its distribution licence during the remaining period of 4th MYT control period and avails open access during the year, or starts operation

prior to issuance of the MYT Order, AITL shall be liable to pay the Transmission Charges as applicable at the rate of short term Transmission Tariff determined as per this Order, corresponding to the energy units procured.

- 4.4.19 The Commission notes that STU has calculated Base TCR as the average of coincident peak demand (CPD) and non-coincident peak demand (NCPD) of the TSUs from the monthly data for 12 months available for FY 2020-21 and FY 2021-22 and for 8 months from April 2022 to November 2022.
- 4.4.20 STU has submitted that though FY 2022-23 is not subject to provisional true-up it is necessary to re-estimate the Base TCR figures for FY 2022-23 to enable for computation of revised Base TCR of FY 2023-24 and FY 2024-25. For re-estimation purpose STU has considered H2 data. Further, STU had captured figures of FY 2021-22 into H1 and total and calculated growth rate over 6 months. The growth rate appears to be varying to a large extent and hence STU has applied adhoc nominal growth rate of 1% across all TSUs to re-estimate FY 2022-23 TCRs. However, the Commission notes that, some of the TSU's have specifically objected to the method used by STU for re-estimation of Base TCR for FY 2022-23. Hence, the Commission is of opinion that there is need to have different approach for re-estimation of Base TCR.
- 4.4.21 The Commission has noted the objections raised by objectors and replies provided by STU on the issue of Base TCR and projection of Base TCR.
- 4.4.22 As regards the projection of Base TCR, the Commission observes that Regulation 64.2 specifies as under:

## Base TCR of latest 12 months

Regulation 64.2 of the MYT Regulations, 2019 specifies the provision for determination of Base TCR as under.

64.2 The Commission shall approve yearly 'Base Transmission Capacity Rights' as average of Coincident Peak Demand and Non-Coincident Peak Demand for TSUs as projected for 12 monthly period of each year (t) of the Control Period, representing the 'Capacity Utilisation' of Intra-State transmission system and accordingly determine yearly 'Base Transmission Tariff', in accordance with the following formula:

"Base Transmission Capacity Rights (Base TCR) for the yearly period (t)

$$= \sum_{u=1}^{n} ([\mathbf{CPD}(t) + \mathbf{NCPD}(t)]/2)$$

Where,

 $CPD(t) = Average \ of \ projected \ monthly \ Coincident \ Peak \ Demand \ for \ the \ yearly$   $period \ (t) \ of \ Control \ Period \ for \ each \ Transmission \ System \ User \ (u) \ NCPD(t) =$ 

Average of projected monthly Non-Coincident Peak Demand for the Yearly period (t) of Control Period for each Transmission System User (u): Provided that for the first year of the Control Period, the Base Transmission Capacity Rights for all Transmission System Users shall be determined based on average monthly CPD and NCPD of the Transmission System Users prevalent during the 12 months prior to date of coming into effect of these Regulations or 12 months prior to filing of the Petition by the Transmission Licensees, depending on availability of such data:

. . .

"Provided also that the Yearly CPD and NCPD or the Allotted capacity, as the case may be, to be considered for determination of the subsequent yearly Base Transmission Capacity Rights shall be computed at the beginning of the Control Period based on the past trend and on the basis of demand projections made by various TSUs connected to the Intra-State transmission system as part of their MYT Petitions for the Control Period (Emphasis Added)"

4.4.23 STU has provided month-wise CPD and NCPD details for the various TSUs for FY 2019-20 to FY 2022-23 (up to Dec 2022) including new Deemed Distribution Licensees added after MYT Order. The Commission has considered the Base TCR based on the 12 Monthly Average of CPD and NCPD of TSUs from January 2022 to December, 2022, as latest available, including all Deemed Distribution Licensees which are operational as summarised in the following Table. The same has been considered as the base line for redetermination of base TCR for remaining years of the 4<sup>th</sup> Control Period:

Table 13: Month wise Average of CPD and NCPD for Distribution Licensees in Calendar Year 2022 (MW)

Particulars	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Average of 12 Months
MSEDCL	21,932.46	22,540.73	23,618.05	22,785.48	23,327.36	22,118.18	18,612.50	20,164.96	18,416.77	18,548.01	21,699.90	22,214.77	21,331.60
TPCL-D	650.71	728.16	864.30	970.95	946.46	955.53	838.88	846.27	833.82	849.07	774.74	730.33	832.43
AEML-D	1,196.09	1,228.92	1,496.42	1,828.43	1,643.06	1,721.07	1,422.65	1,488.15	1,532.75	1,546.83	1,401.78	1,332.72	1,486.57
BEST	593.63	635.07	784.62	915.71	864.67	893.21	733.33	758.29	737.96	796.86	716.35	642.60	756.02
Indian Railways*	366.00	368.00	401.50	402.50	415.50	418.00	404.50	419.00	413.31	430.76	407.06	452.06	408.18
Mindspace	5.99	6.20	8.69	9.62	10.19	10.09	8.42	9.04	8.76	9.09	8.60	7.80	8.54
Gigaplex	3.41	3.51	4.71	5.15	5.47	5.47	5.48	5.63	5.02	5.93	4.97	5.07	4.99
KRCIPPL	2.13	2.80	4.03	4.50	4.69	4.71	4.28	4.48	4.08	4.63	4.05	3.62	4.00
Nidar Utilities	2.32	2.45	3.20	3.25	3.18	3.20	2.97	3.19	3.78	3.06	3.42	3.11	3.09
MADC	8.39	10.03	11.67	13.41	14.80	14.78	12.56	13.97	12.21	12.45	10.80	10.57	12.14
EON Ph-1	4.93	5.92	7.59	7.10	8.99	9.01	7.37	7.64	7.18	7.93	7.59	4.15	7.11
EON Ph-2	1.86	2.89	4.06	4.78	3.58	4.72	4.07	4.55	4.04	4.47	4.28	3.97	3.94
JNPT	0.48	0.55	0.66	0.82	0.67	1.01	0.85	0.91	0.82	0.91	1.09	0.87	0.80
LBSCML	0.48	0.58	0.61	0.73	0.79	0.67	0.59	0.57	0.56	0.63	0.57	0.47	0.60
Total	24,768.86	25,535.80	27,210.10	26,952.42	27,249.41	26,159.64	22,058.43	23,726.66	21,981.06	22,220.61	25,045.20	25,412.07	24,860.02

<sup>\*(</sup>In accordance with Order in Case No. 53 of 2017, for the purpose of sharing of standby charges for Mumbai, disaggregated value of 'Average of CPD & NCPD' of Indian Railways amongst its Mumbai Operations and rest of Maharashtra Operations, shall be considered in the respective MTR Orders for such Licensees)

- 4.4.24 In view of above, the Commission has considered the Average of CPD and NCPD as shown in the above Table as baseline for the purpose of redetermination of Base TCR for remaining years of the 4<sup>th</sup> Control Period.
- 4.4.25 Accordingly, the Commission has approved the base TCR for FY 2022-23 as tabulated below:

Table 14: Base TCR for FY 2022-23, as approved by the Commission (MW)

	MYT Ap	proved	STU P	etition	Approved in	n this Order
Particular	TCR	TCR (%)	TCR	TCR (%)	TCR	TCR (%)
MSEDCL	18,858.34	83.86%	21,113.25	84.721%	21,331.60	85.850%
TPCL-D	830.26	3.69%	907.64	3.642%	832.43	3.350%
AEML-D	1,544.70	6.87%	1,622.08	6.509%	1,486.57	5.983%
BEST	822.52	3.66%	825.37	3.312%	756.02	3.043%
Indian Railways	387.97	1.73%	416.26	1.670%	408.18	1.643%
Mindspace	15.80	0.07%	9.45	0.038%	8.54	0.034%
Gigaplex	8.00	0.04%	5.43	0.022%	4.99	0.020%
KRCIPPL	8.50	0.04%	4.50	0.018%	4.00	0.016%
Nidar Utilities	0.53	0.00%	3.30	0.013%	3.09	0.012%
MADC	12.36	0.05%	13.76	0.055%	12.14	0.049%
EON Phase-1	1	0.00%	1	0.000%	-	0.000%
EON Phase-2	-	0.00%	-	0.000%	-	0.000%
JNPT	1	0.00%	1	0.000%	-	0.000%
LBSCML	-	0.00%	-	0.000%	-	0.000%
TTSC	22,488.98	100.00%	24,921.02	100.000%	24,847.57	100.000%

# Projection of Base TCR over 4th Control Period

4.4.26 Regulation 64.2 of the MYT Regulations, 2019 specifies the provision for projection of Base TCR, for each years of the Control Period as following

"Provided also that the Yearly CPD and NCPD or the Allotted capacity, as the case may be, to be considered for determination of the subsequent yearly Base Transmission Capacity Rights shall be computed at the beginning of the Control Period based on the past trend and on the basis of demand projections made by various TSUs connected to the Intra-State transmission system as part of their MYT Petitions for the Control Period:"

4.4.27 The Commission notes the submission of STU, that, based on the historic data it has projected the demand data. However; the results were absurd due to Covid-19 period. Various scenarios such as year on year growth rate, 3-year CAGR were computed but finally STU concluded that, as per fifth proviso of Regulation 64.2 of MYT Regulations 2019 to rationalise (suitably revise) the growth rate to align with the present average CPD and NCPD data and to ensure that it is also in line with current monthly average data.

- 4.4.28 As per above referred Regulations, the base TCR for the remaining years of the 4<sup>th</sup> Control Period has to be projected considering both past trend and future demand projections by TSUs in the respective MTR Petitions and suggestions and objections of TSU on the methodology proposed by STU. Considering extent of availability of data of CPD and NCPD, the Commission has adopted the following approach for redetermination of Base TCR for 4<sup>th</sup> Control Period.
- 4.4.29 Projections based on base year demand and growth rate is suitable for big distribution licensees as they have different categories of consumer mix and net result of consumption by different categories of consumer mix. However, deemed distribution licensees are catering to specific type of demand mostly IT sector demand. Many deemed distribution licensees had submitted that the demand pattern was badly influenced by Covid-19 effect and even after Covid-19, demands are not picking appreciably due to work from home culture being adopted in IT sector. Hence, these licensees have submitted their own projections for FY 2023-24 and FY 2024-25.
- 4.4.30 For MSEDCL and Indian Railway, the Commission has considered the escalation rate as average of 3-year CAGR of actual Base TCR. Accordingly, base data as shown in table 13 above, is escalated y-o-y to arrive at base TCR of remaining years of the 4<sup>th</sup> Control Period.
- 4.4.31 For Mumbai Area, the Commission has considered the general growth rate of 3% as proposed by STU while redetermining the Base TCR for Mumbai Distribution Licensees i.e. BEST, AEML-D and TPC-D of remaining years of the 4<sup>th</sup> Control Period.
- 4.4.32 For MBPPL, GEPL, KRC, and MADC revised demand projection is made for remaining period of the 4<sup>th</sup> Control Period as per their respective MTR Petition has been considered by the Commission.
- 4.4.33 Further, the Commission notes that, STU in its Petition has considered the NUPLLP's demand projection as 3.46 MW for FY 2023-24 and 3.63 MW for FY 2024-25. However, NUPLLP in its objections on STU's Petition has requested to consider Base TCR of 4.00 MW and 5.50 MW for FY 2023-24 and FY 2024-25 respectively, which is accepted by STU in its reply. Accordingly, the Commission has considered 4.00 MW for FY 2023-24 and 5.50 MW for FY 2024-25 for Nidar Utilities.
- 4.4.34 For KRCIPPL, EON Phase-I, EON Phase-II and LBSCML, the Commission has considered the revised demand projection made by them in their MTR Petitions. Accordingly, the projection of Base TCR for TSUs for the remaining period of 4th Control Period has been approved by the Commission as shown in the Table below:

Table 15: Base TCR for FY 2023-24, as approved by the Commission (MW)

	MYT A	pproved	STU I	Petition	Approved	in this Order
Particular	TCR	TCR (%)	TCR	TCR (%)	TCR	TCR (%)
MSEDCL	19,424.14	84.022%	21,952.24	84.818%	22,179.26	85.894%
TPCL-D	841.24	3.639%	934.87	3.612%	857.41	3.320%
AEML-D	1,576.88	6.821%	1,670.74	6.455%	1,531.17	5.930%
BEST	828.27	3.583%	850.13	3.285%	778.70	3.016%
Indian Railways	401.40	1.736%	420.94	1.626%	412.77	1.599%
Mindspace	15.80	0.068%	9.92	0.038%	13.00	0.050%
Gigaplex	8.00	0.035%	5.70	0.022%	5.50	0.021%
KRCIPPL	9.00	0.039%	4.73	0.018%	6.00	0.023%
Nidar Utilities	0.53	0.002%	3.46	0.013%	4.50	0.017%
MADC	12.73	0.055%	14.45	0.056%	15.00	0.058%
EON Phase-1	-	0.000%	8.36	0.032%	9.00	0.035%
EON Phase-2	-	0.000%	4.55	0.018%	7.00	0.027%
JNPT	-	0.000%	0.90	0.003%	1.50	0.006%
LBSCML	-	0.000%	0.69	0.003%	0.80	0.003%
Total Transmission Capacity	23,117.99	100.000%	25,881.65	100.000%	25,821.62	100.00%

Table 16: Base TCR for FY 2024-25, as approved by the Commission (MW)

	MYT A <sub>l</sub>	proved	STU	Petition	Approved i	n this Order
Particular	TCR	TCR (%)	TCR	TCR (%)	TCR	TCR (%)
MSEDCL	20,006.90	84.19%	22,824.57	84.960%	3,060.61	86.019%
TPCL-D	852.38	3.59%	962.91	3.584%	883.13	3.294%
AEML-D	1,609.73	6.77%	1,720.86	6.406%	1,577.10	5.883%
BEST	834.06	3.51%	875.63	3.259%	802.07	2.992%
Indian Railways	415.28	1.75%	425.68	1.584%	417.42	1.557%
Mindspace	15.80	0.07%	10.42	0.039%	14.00	0.052%
Gigaplex	8.00	0.03%	5.98	0.022%	5.50	0.021%
KRCIPPL	9.50	0.04%	4.96	0.018%	6.50	0.024%
Nidar Utilities	0.53	0.00%	3.63	0.014%	5.50	0.021%
MADC	13.12	0.06%	15.17	0.056%	16.00	0.060%
EON Phase-1	-	0.00%	8.77	0.033%	10.00	0.037%
EON Phase-2	-	0.00%	4.77	0.018%	8.00	0.030%
JNPT	-	0.00%	0.94	0.004%	2.00	0.007%
LBSCML	-	0.00%	0.72	0.003%	0.95	0.004%
Total Transmission Capacity	23,765.30	100.00%	26,865.02	100.000%	26,808.78	100.000%

4.4.35 STU is directed to submit, at the time of filing of the MYT Petition for the 5<sup>th</sup> Control Period, variation in actual and approved CPD and NCPD so that revision in Base TCR and Base Transmission Tariff could be made at the end of the 4th Control Period as per the provisions of the Regulations 64.3 of MYT Regulations 2019.

# 4.5 Energy Projection for FY 2023-24 to 2024-25.

# STU's Submission

- 4.5.1 STU has carried out the Energy projections for FY 2023-24 and FY 2024-25 as under:
  - Year on year (annual) Growth rate for historic energy input / sent out was worked out from FY 2018-19 to FY 2021-22 and it was observed trend was uneven due to 2 years of covid-19 pandemic.
  - The energy input and sent out for H2 of FY 2022-23 has been considered equal to H1 of FY 2022-23 and the same is in line with previous trends of H1 & H2.

The energy Input and Output trend from FY 2018-19 to 2021-22 is as follows.

**Energy Input (MU) Energy Output (MU) Particulars** H1 **H2** Total H1:H2 ratio H1 **H2 Total** H1:H2 ratio FY 2017-18 74,990 75,351 1,50,341 49.88:50.12 72,443 72,943 49.83:50.17 1,45,385 FY 2018-19 79,587 79,211 1,58,798 50.12:49.88 77,181 76,684 1,53,865 50.16:49.84 FY 2019-20 77,733 | 77,441 | 1,55,174 50.09:49.91 | 75,236 | 75,025 | 1,50,261 50.07:49.93 45.34:54.66 FY 2020-21 68,812 82,967 1,51,779 66,842 80,480 1,47,322 45.37:54.63 FY 2021-22 82,084 86,223 1,68,307 48.77:51.23 79,451 83,481 1,62,931 48.76:51.24

Table 17: Energy Input/ Output H1 & H2 trend for FY 2018-19 to 2021-22

- Hence growth rate for FY 2018-19 over FY 2017-18, FY 2021-22 over FY 2018-19 and FY 2022-23 over FY 2021-22. The average of these 3 years growth is 6.22% which is taken for energy input projections as the same are excluding COVID -19 period. The details of calculations are provided in Format / Model under 'Energy' worksheet.
- The growth rate assumed for the projection period is considered @ 6.22% for the FY 2023-24 over FY 2022-23 and so on to project the total energy to be transmitted by the system in the respective years. The energy transmitted (input) has been further used to compute the short-term transmission tariff.
- 4.5.2 The Long- term and Medium-Term Transmission Tariff for MTR period is calculated at Rs.445.10 per kW per month for FY 2023-24 and Rs. 365 per kW per month for FY 2024-25.
- 4.5.3 The Short- term Transmission Tariff for MTR period is calculated at Rs. 0.72 per kWh for FY 2023-24 and Rs. 0.58 per kWh for FY 2024-25.

# Commission's Analysis and Ruling

4.5.4 The Commissions accepts the energy projections made by STU, as 3 years growth rate of 6.22% which is taken for energy input projections excluding COVID -19 period. The growth rate assumed for the projection period is considered as @ 6.22% for the FY 2023-24 over FY 2022-23 and so on to project the total energy to be transmitted by the system in the respective years.

**Particulars Energy (Input) Energy (Sent out)** Transmission Loss (%) FY 2017-18 1,50,341 1,45,385 3.30% FY 2018-19 1,58,798 1,53,865 3.11% FY 2019-20 1,55,174 1,50,261 3.17% FY 2020-21 1,51,779 1,47,322 2.94% FY 2021-22 1,68,307 1,62,931 3.19% FY 2022-23 (H1) 90,076 87,065 3.34% FY 2022-23 (H2) 90,076 87,065 3.34% FY 2022-23 1,74,130 1,80,151 3.34% FY 2023-24 1,91,351 1,85,266 3.18% FY 2024-25 2,03,247 1,96,784 3.18%

Table 18: Energy Input and Projections approved by Commission.

## 4.6 Transmission Tariff for FY 2023-24 and FY 2024-25

#### STU's Submission

4.6.1 Base Transmission Tariff for each year has been determined as ratio of projected 'TTSC' for InSTS and calculated 'Base Transmission Capacity Rights' and has been denominated in terms of "Rs/kW/month" (for long-term/medium-term usage) or in terms of "Rs/kWh" (for short-term bilateral open access transactions usage, short-term collective transactions over Power Exchange and for Renewable Energy transactions) in accordance with Regulation 64.3 of the MERC (MYT) Regulations, 2019.

# Commission's Analysis and Ruling

4.6.2 Regulation 64.3 of the MYT Regulations, 2019 specifies the formula for the determination of Base Transmission Tariff of each year for Long, Medium and Short Term transactions as follows:

"Base Transmission Tariff for each Year shall be determined as ratio of approved 'TTSC' for intra-State transmission system and approved 'Base Transmission Capacity Rights' and shall be denominated in terms of "Rs/kW/month" (for long-term /medium-term usage) or in terms of "Rs/kWh" (for short-term bilateral open access transactions usage, short-term collective transactions over Power Exchange and for Renewable Energy transactions) in accordance with the following formula:

Base Transmission Tariff (t) (long-term/medium-term) = TTSC(t) / Base  $TCR(t)(Rs/kW/month \ or \ Rs/MW/day)$ 

Base Transmission Tariff (t) (Short-term) = TTSC (t)/ $\sum n i=1$ (Energy Transmitted by Tx (i) (Rs/kWh)

Where,

TTSC(t) = Pooled cost for InSTS for yearly period(t) of the Control Period;

Base TCR(t) = Base Transmission Capacity Rights for the yearly period(t);

 $n = Total \ number \ of \ Transmission \ Licensee(s) \ in \ that \ particular \ year \ of \ Control \ Period:$ 

Txi = ith Transmission Licensee:

Provided that the energy units transmitted by the Transmission Licensees shall be based on the energy input requirement of the Distribution Licensees at Generation-InSTS interface point, as projected by each Distribution Licensee as part of its MYT Petition for the Control Period and as approved by the Commission:"

4.6.3 In line with Regulation 64.3 and based on the revised TTSC and revised Base TCR approved in this Order, the Commission has redetermined the Transmission Tariff for use of the InSTS from FY 2023-24 and FY 2024-25. For Energy Units handled, the same has been considered as approved in the respective MTR Orders for such TSUs and for others submission of STU has been considered.

Table 19: Transmission Tariff for FY 2023-24 and FY 2024-25, as approved by the Commission

Sr.			FY 2023-2	4		FY 2024-25		
No.	Particulars		MYT Order	STU Petition	Approved in this Order	MYT Order	STU Petition	Approved in this Order
1	Total Transmission System Cost (TTSC)	Rs. Crore	7,115	13,824	9,705	7,132	11,767	10,005
2	Base Transmission Capacity Rights	MW	23,118	25,882	25,822	23,765	26,865	26,809
3	Transmission Tariff (LT/ MT)	Rs./kW/mth	256.47	445.10	313.20	250.09	365.00	310.98
4	Transmission Tariff (ST/ST-collective/ RE)	Rs./kWh	0.40	0.72	0.51	0.39	0.58	0.49
5	Energy Units Transmitted	MUs	1,76,777	1,91,351	1,91,351	1,81,940	2,03,247	2,03,247

4.6.4 For the purpose of billing for short term/collective/renewable energy open access transactions of consumers where kVAh billing is applicable, Transmission Tariff in (Rs/kVAh) as determined below, shall be applicable, considering a power factor of 0.98 as power factor shall be closer to unity at transmission level.

Sr.		Unit	FY 2	023-24	FY 2	FY 2024-25		
No.	Particulars		MYT Order	Approved in this Order	MYT Order	Approved in this Order		
1	Transmission Tariff (ST/ST-collective/ RE*)	Rs./kWh	0.40	0.51	0.39	0.49		
	Transmission Tariff (ST/ST-collective/ RE*) Where kVAh billing is applicable	Rs./kVAh	0.39	0.50	0.38	0.48		

<sup>\*(</sup>subject to provisions of DOA Regulations, 2019 (First Amendment) and TOA Regulations, 2019 (First Amendment)

## 5 SHARING OF TTSC AMONG TSUS AND RECOVERY

## 5.1 Sharing of TTSC among TSUs

## STU's Submission

- 5.1.1 The share of the TTSC by the long-term TSUs shall be in the proportion of Base TCR of each TSU to the total Base TSRs allotted in the intra-State transmission system. The same is in line with Regulation 65.2 of the MERC (MYT) Regulations, 2019.
- 5.1.2 Above Transmission Charges are payable by all long-term TSUs irrespective of their actual utilisation recorded during their period of operation. Any difference between the actual utilization of Transmission Capacity by a long-term TSU and the allocated Transmission Capacity (i.e., Base TCR) shall be governed by Regulation 66 of the MERC (MYT) Regulations, 2019.

# Commission's Analysis and Ruling

5.1.3 TTSC for FY 2023-24 and FY 2024-25, has to be shared among the Long-Term TSUs comprising Distribution Licensees in accordance with their contribution to Base TCR as summarised in the following Table:

Table 20: Annual Sharing of TTSC among TSUs for FY 2023-24 as approved by the Commission

Sr.	Particulars		MYT Order			STU Petition		Аррі	oved in this (	Order
No.			Share of Avg of CPD and NCPD (%)			Share of Avg of CPD and NCPD (%)	Share of TTSC (Rs. Crore) #	Share of Avg of CPD and NCPD (MW)	Share of Avg of CPD and NCPD (%)	Share of TTSC (Rs. Crore) #
1	MSEDCL	19,424.14	84.022%	5,977.95	21,952.24	84.818%	11,725.12	22,179.26	85.894%	8,335.86
2	TPCL-D	841.24	3.639%	258.90	934.87	3.612%	499.33	857.41	3.320%	322.25
3	AEML-D	1,576.88	6.821%	485.30	1,670.74	6.455%	892.38	1,531.17	5.930%	575.47
4	BEST	828.27	3.583%	254.91	850.13	3.285%	454.07	778.70	3.016%	292.67
5	Indian Railways	401.40	1.736%	123.53	420.94	1.626%	224.83	412.77	1.599%	155.14
6	Mindspace	15.80	0.068%	4.86	9.92	0.038%	5.30	13.00	0.050%	4.89
7	Gigaplex	8.00	0.035%	2.46	5.70	0.022%	3.04	5.50	0.021%	2.07
8	KRCIPPL	9.00	0.039%	2.77	4.73	0.018%	2.52	6.00	0.023%	2.26
9	Nidar Utilities	0.53	0.002%	0.16	3.46	0.013%	1.85	4.50	0.017%	1.69
10	MADC	12.73	0.055%	3.92	14.45	0.056%	7.72	15.00	0.058%	5.64
11	EON Phase-1				8.36	0.032%	4.46	9.00	0.035%	3.38
12	EON Phase-2	-	-	-	4.55	0.018%	2.43	7.00	0.027%	2.63
13	JNPT	1	-	-	0.90	0.003%	0.48	1.50	0.006%	0.56
14	LBSCML	1	-	-	0.69	0.003%	0.37	0.80	0.003%	0.30
	Total	23,117.99	100%	7,114.76	25,881.65	100%	13,823.90	25,821.62	100%	9,704.80

# TTSC without share of True-up for FY 2020-21 and FY 2021-22

Table 21: Annual Sharing of TTSC among TSUs for FY 2024-25 as approved by the Commission

Sr.	Particulars		MYT Order			STU Petition		Ap	proved in this O	der
No.			Share of Avg of CPD and NCPD (%)			Share of Avg of CPD and NCPD (%)	Share of TTSC (Rs. Crore) #	Share of Avg of CPD and NCPD (MW)	Share of Avg of CPD and NCPD (%)	Share of TTSC (Rs. Crore) #
1	MSEDCL	20,006.90	84.185%	6,004.23	22,824.57	84.960%	9,997.11	23,060.61	86.019%	8,605.77
2	TPCL-D	852.38	3.587%	255.81	962.91	3.584%	421.75	883.13	3.294%	329.57
3	AEML-D	1,609.73	6.773%	483.09	1,720.86	6.406%	753.73	1,577.10	5.883%	588.54
4	BEST	834.06	3.510%	250.31	875.63	3.259%	383.52	802.07	2.992%	299.32
5	Indian Railways	415.28	1.747%	124.63	425.68	1.584%	186.45	417.42	1.557%	155.77
6	Mindspace	15.80	0.066%	4.74	10.42	0.039%	4.56	14.00	0.052%	5.22
7	Gigaplex	8.00	0.034%	2.40	5.98	0.022%	2.62	5.50	0.021%	2.05
8	KRCIPPL	9.50	0.040%	2.85	4.96	0.018%	2.17	6.50	0.024%	2.43
9	Nidar Utilities	0.53	0.002%	0.16	3.63	0.014%	1.59	5.50	0.021%	2.05
10	MADC	13.12	0.055%	3.94	15.17	0.056%	6.64	16.00	0.060%	5.97
11	EON Phase-1				8.77	0.033%	3.84	10.00	0.037%	3.73
12	EON Phase-2	-	-	-	4.77	0.018%	2.09	8.00	0.030%	2.99
13	JNPT	-	-	-	0.94	0.004%	0.41	2.00	0.007%	0.75
14	LBSCML	-	-	-	0.72	0.003%	0.32	0.95	0.004%	0.35
	Total	23,765.30	100.000%	7,132.16	26,865.02	100.000%	11,766.82	26,808.78	100.000%	10,004.52

# TTSC without share of True-up for FY 2020-21 and FY 2021-22

5.1.4 **The Commission vide Para** No. 3.3.13 of this Order has approved the TTSC share of True-up for FY 2020-21 and FY 2021-22 which Commission has considered while approving the Annual/Monthly TTSC payable by TSUs for FY 20223-24 and FY 2024-25 as discussed Para 5.1.8 below.

## STU's Submission

5.1.5 STU has submitted that, based on revised TCR for FY 2023-24 and FY 2024-25 and adjustment pertaining to True-up of FY 2020-21 and FY 2021-22, the Monthly TTSC payable by TSUs given in the table below:

Table 22: Monthly TTSC payable by TSUs submitted by STU (Rs. Crore)

Sr.	Particulars	FY 2023	FY 2024	-25	
No.		Revised Projections (in on account of true-up of 21 & FY 2	f Share for FY 2020-	Revised Pro	jections
		Annual	Annual	Monthly	
1	MSEDCL	11,952.22	996.02	9,997.11	833.09
2	TPCL-D	454.09	37.84	421.75	35.15
3	AEML-D	807.55	67.30	753.73	62.81
4	BEST	393.51	32.79	383.52	31.96
5	Indian Railways	194.87	16.24	186.45	15.54
6	Mindspace	1.97	0.16	4.56	0.38
7	Gigaplex	1.49	0.12	2.62	0.22

Sr.	Particulars	FY 202	3-24	FY 2024	-25
No.		Revised Projections (in on account of true-up of 21 & FY 2	f Share for FY 2020-	Revised Pro	jections
		Annual	Monthly	Annual	Monthly
8	MADC	7.22	0.60	6.64	0.55
9	Nidar Utilities	1.75	0.15	1.59	0.13
10	KRCIPPL	1.49	0.12	2.17	0.18
11	EON Phase-1	4.46	0.37	3.84	0.32
12	EON Phase-2	2.43	0.20	2.09	0.17
13	JNPT	0.48	0.04	0.41	0.03
14	LBSCML	0.37	0.03	0.32	0.03
	TTSC in Rs. Cr	13,823.90	1,151.99	11,766.82	980.57

# Commission's Analysis and Ruling

- 5.1.6 The share of the TTSC by the long-term/Medium Term TSUs shall be in the proportion of Base TCRs of each TSU to the total Base TCRs allotted in the InSTS.
- 5.1.7 The Transmission Charges are payable by all long-term/medium term TSUs irrespective of their actual utilisation recorded during their period of operation. Any deviation between the actual utilization of Transmission Capacity by a long-term TSU and the allocated Transmission Capacity (i.e., Base TCR) shall be governed by Regulation 66 of the MYT Regulations, 2019 as elaborated above in detail.
- 5.1.8 The Commission vide Para No. 3.3.13 of this Order has approved the TTSC share of True-up for FY 2020-21 and FY 2021-22 as below.

Table 23: TTSC share of True-up for FY 2020-21 and FY 2021-22 as approved by the Commission (Rs. Crore)

		FY 202	20-21	FY 2	021-22
Sr. No.	Particulars	STU Petition	Approved in this Order	STU Petition	Approved in this Order
1	MSEDCL	122.11	122.11	105.00	105.00
2	TPCL-D	(23.47)	(23.47)	(21.77)	(21.77)
3	AEML-D	(40.65)	(40.65)	(44.18)	(44.18)
4	BEST	(32.07)	(32.07)	(28.50)	(28.50)
5	Indian Railways	(22.84)	(22.84)	(7.12)	(7.12)
6	Mindspace	(1.66)	(1.66)	(1.67)	(1.67)
7	Gigaplex Properties	(0.74)	(0.74)	(0.80)	(0.80)
8	KRC Infrastructure	(0.59)	(0.59)	(0.44)	(0.44)
9	Nidar Utilities	0.10	0.10	(0.20)	(0.20)
10	MADC	(0.18)	(0.18)	(0.32)	(0.32)
11	EON Phase-1	-	-	-	-
12	EON Phase-2	-	-	-	-
13	JNPT	-	1	-	-
14	LBSCML	-	-	-	-

		FY 2020-21		FY 2021-22	
Sr. No.	Particulars	STU Petition	Approved in this Order	STU Petition	Approved in this Order
	Total	0.00	0.00	0.00	0.00

5.1.9 Based on revised TCR for FY 2023-24 and FY 2024-25 and adjustment pertaining to True-up of FY 2020-21 and FY 2021-22, as approved in this Order (shown in Table 23 above are considered by the Commission while approving the monthly /annual TTSC payable by TSUs for FY 2023-23 and FY 2024-25. Accordingly, the sharing of Transmission charges by the licensees on Annual and monthly basis as approved by the Commission is as shown in Table 24 below.

Table 24: Monthly TTSC payable by TSUs approved by the Commission (Rs. Crore)

		FY 20	23-24	FY 2024-25	
Sr. No.	Particulars	Revised Project difference on acco Share for FY 2020	Revised Projections		
		Annual	Monthly	Annual	Monthly
1	MSEDCL	8,562.96	713.58	8,605.77	717.15
2	TPCL-D	277.00	23.08	329.57	27.46
3	AEML-D	490.65	40.89	588.54	49.05
4	BEST	232.10	19.34	299.32	24.94
5	Indian Railways	125.18	10.43	155.77	12.98
6	Mindspace	1.56	0.13	5.22	0.44
7	Gigaplex Properties	0.52	0.04	2.05	0.17
8	KRC Infrastructure	1.22	0.10	2.43	0.20
9	Nidar Utilities	1.59	0.13	2.05	0.17
10	MADC	5.14	0.43	5.97	0.50
11	EON Phase-1	3.38	0.28	3.73	0.31
12	EON Phase-2	2.63	0.22	2.99	0.25
13	JNPT	0.56	0.05	0.75	0.06
14	LBSCML	0.30	0.03	0.35	0.03
	Total	9,704.80	808.73	10,004.52	833.71

- 5.1.10 STU, i.e. MSETCL, shall collect the Transmission Charges from the respective TSUs on monthly basis as provided in the Regulations, with the first monthly period commencing from 1 April 2023, as provided in the above table.
- 5.1.11 In case any new TSU (including deemed distribution licensees such as SEZs) avails open access during the year, or starts operation prior to issuance of the MYT Order, such TSU shall be liable to pay the Transmission Charges as applicable at the rate of short term Transmission Tariff determined as per this Order, corresponding to the energy units procured.
- 5.1.12 Further with regards to transmission charges collected from the Partial Open Access (POA) consumers, the Commission notes clarification of STU that, CPD and NCPD

- are inclusive of demand of POA consumers. However, the Short-Term Transmission Charges recovered from POA consumers by MSLDC are being deposited in MSETCL's account.
- 5.1.13 Further, MSETCL in its MTR Petition has considered these charges under Non-Tariff income and to that effect, the ARR of MSETCL has been reduced. The reduction in ARR of MSETCL ultimately result in reduction of TTSC to that effect. Hence, reduction in TTSC results in lowering the transmission charges of TSUs.
- 5.1.14 In view of the above, the Commission is not giving separate treatment to transmission charges of POA and OA consumers as it is being considered in TTSC by way of reduction of ARR of MSETCL.
- 5.1.15 However, the Commission clarifies that, in accordance with the ruling of the Commission in the Order in Case No. 361 of 2018 dated 14 June, 2019 and Regulation 14 (1) (v) of the DOA Regulations, 2019 (First Amendment), Distribution Licensees shall not retain the transmission charges collected from partial open access consumers and shall arrange to remit the same to STU in the immediate next billing cycle alongwith late payment surcharge and timelines as specified under DOA Regulations 2016, as and when levied/collected from such open access consumers. STU shall maintain separate account of such revenue from transmission charges (month-wise and distribution licensee-wise) and shall publish such monthly statement along with quarterly reconciliation statement on its website.

# 5.2 Recovery of ARR of Transmission Licensees for FY 2023-24 and FY 2024-25

## STU's Submission

5.2.1 STU has submitted that each Transmission Licensees according to Regulation 64 of MYT Regulations, 2019 are entitled to recover the TTSC obtained by pooling the ARR of all the Transmission Licensees in the state for the remaining period of the 4th Control Period from FY 2023-24 and FY 2024-25 from the Transmission Charges collected by the STU from the TSUs. The allocation charges to be recovered from the TTSC collected by STU on a monthly and annual basis is provided in the table below:

Table 25: Recovery of ARR of Transmission Licensees submitted by STU

Sr.	D4:l	FY 2023-24		FY 2024-25		
No.	Particulars	Annual	Monthly	Annual	Monthly	
1	MSETCL	8,724.56	727.05	8,753.61	729.47	
2	ATIL	189.90	15.83	121.26	10.11	
3	MEGPTCL	2,901.67	241.81	935.50	77.96	
4	VIPL-T	4.93	0.41	3.83	0.32	
5	AEML-T	424.23	35.35	458.26	38.19	

MERC Mid-Term Review Order for Truing-up of InSTS Tariff for FY 2020-21 and FY 2021-22 and determination of revised InSTS Tariff for FY 2023-24 and FY 2024-25

	Total	13,823.90	1,151.99	11,766.82	980.57
9	KVTL	-	-	302.50	25.21
8	APTCL	49.83	4.15	42.43	3.54
7	JPTL	69.03	5.75	64.10	5.34
6	TPC-T	1,459.75	121.65	1,085.33	90.44

## Commission's Analysis and Ruling

- 5.2.2 The approved ARR of all transmission licensees are pooled to derive the TTSC, and each transmission licensee is entitled to recover its approved projected ARR for the balance control period FY 2023-24 and FY 2024-25 from the Transmission Charges collected by the STU from the TSUs in accordance with the Regulation 64 of MYT Regulation 2019.
- 5.2.3 This Transmission Tariff Order is applicable from 1st April 2023. The STU shall collect Transmission Tariff for each calendar month from the TSUs as per the timelines provided in the Regulations, with the first monthly period commencing from 1st April 2023. Each Transmission Licensee shall be entitled to recover its ARR, as considered in these TTSC workings, from the Transmission Tariff collected by the STU, on a monthly basis. The Transmission Licensees should claim recovery of their respective ARRs by raising monthly bills on the STU covering their component of InSTS Charges. The recovery of ARR of transmission licensees as follows:

Table 26: Recovery of ARR of Transmission Licensees as Approved by the Commission (Rs. Crore)

Sr.	Particulars	FY 2023-24		FY 2024-25		
No		Annual	Monthly	Annual	Monthly	
1	MSETCL	6,480.14	540.01	6,483.43	540.29	
2	ATIL	140.94	11.75	139.55	11.63	
3	MEGPTCL	1,667.25	138.94	1,666.17	138.85	
4	VIPL-T	3.65	0.30	3.62	0.30	
5	AEML-T	373.04	31.09	374.71	31.23	
6	TPC-T	925.70	77.14	925.71	77.14	
7	JPTL	66.54	5.55	64.28	5.36	
8	APTCL	47.54	3.96	44.55	3.71	
9	KVTL	-	-	302.50	25.21	
	Total ARR	9,704.80	808.73	10,004.52	833.71	

#### 6 TRANSMISSION LOSS FOR FY 2023-24 AND FY 2024-25

#### 6.1 Transmission Loss

#### STU's Submission

- 6.1.1 The Commission in Order No.327 of 2019 dated 30 March 2020 has approved the weighted average Transmission Loss for the InSTS for the 4th Control Period at 3.18%.
- 6.1.2 STU submitted that actual transmission losses as computed and uploaded by MSLDC are available on website for current and past period. The Transmission Loss as computed by the MSLDC for FY2020-21 & FY2021-22 is 2.94% and 3.19% respectively. Further the losses for FY 2022-23 H1 period are estimated at 3.34%.

FY 2021-22 FY 2022-23 Energy **Energy Provisional Month Energy Energy Input (Mus) Energy Output (Mus) Provisional Tr. Loss** Input Output Tr. Loss (Mus) (Mus) 15447 14955.5 3.18% 17288 16690.9 3.45% Apr 14349 13937.7 2.87% 17323 16742.8 3.35% May 12729 12312.1 14725.7 3.34% 3.27% 15235 June 13239 12785.8 3.42% July 13058 12618.6 3.36% August 13914 13441.2 3.40% 13727 13307.8 3.05% 3.19% 13264 12811.9 3.41% 12587 12185.7 September 3.12% October 13670 12185.7 November 13854 13435.3 3.02% December 13689 13277.9 3.00% January 14124 13671.3 3.21% 13417.6 3.37% February 13886 17001 16434.7 3.33% March 90,075 **Total** 1,68,307 1,62,931 3.19% 87,065 3.34%

Table 27: Monthly InSTS Grid Loss for FY 2022-22 and FY 2022-23 till Sept. 23

- 6.1.3 The present approved transmission loss for FY 2023-24 and FY 2024-25 as per Order No.327 of 2019 are 3.18%.
- 6.1.4 STU requested the Commission to consider the energy projections as submitted and as being approved by the Commission in the MTR Orders for Transmission and Distribution licensees and accordingly approve the transmission loss for FY 2023-24 and FY 2024-25

### Commissions Analysis and Ruling

6.1.5 The Commission notes that, actual annual average loss for FY 2021-22 is 3.19%. Further, the STU has submitted the loss computation for FY 2022-23 for H1 whereas now the loss computation is available till January 2023 and same has been considered by the Commission as shown in the table.

Table 28: Monthly InSTS Grid Loss for FY 2022-22 and FY 2022-23 till Sept. 23

	FY 2021-22			FY 2022-23		
Month Energy	Energy Input (Mus)	Energy Output (Mus)	Provisional Tr. Loss	Energy Input (Mus)	Energy Output (Mus)	Provisional Tr. Loss
Apr	15447	14955.5	3.18%	17288	16690.9	3.45%
May	14349	13937.7	2.87%	17323	16742.8	3.35%
June	12729	12312.1	3.27%	15235	14725.7	3.34%
July	13058	12618.6	3.36%	13239	12785.8	3.42%
August	13914	13441.2	3.40%	13727	13307.8	3.05%
September	12587	12185.7	3.19%	13264	12811.9	3.41%
October	13670	12185.7	3.12%	13359	12943	3.12%
November	13854	13435.3	3.02%	14741	14276.5	3.15%
December	13689	13277.9	3.00%	15864	15386.5	3.01%
January	14124	13671.3	3.21%	15738	15252.6	3.09%
February	13886	13417.6	3.37%			
March	17001	16434.7	3.33%			
Total	168307	162931	3.19%	149779	144924	3.24%

- 6.1.6 The Commission observes that there is downward trend of InSTS loss from October 2022 and the average loss for the period April 2022 to January 2023 i.e. for 10 months is 3.24%
- 6.1.7 In view of above analysis, Commission approves average annual loss of InSTS for balance control period from FY 2023-24 and FY 2024-25 as 3.18% same as MYT Order dated 30 March 2020.

#### 7 COMPLIANCE OF DIRECTIVES OF THE COMMISSION

#### 7.1 Directive 1: Efforts to reduce Transmission Losses.

7.1.1 The Commission directs STU/Transmission Licenses to take the efforts to reduce the Transmission Losses which benefits the TSUs and the consumers. The Commission clause No. 3.4.37 of MYT order No 327 of 2019 has directed STU as below:

#### STU's submission

- 7.1.2 As per the directive issued by the Commission, STU vide its Letter dated 11 November 2021 has requested all transmission licensees to take concerted efforts and inform STU for the action plan for reducing the transmission losses. The same was informed to the Commission vide Letter dated 18/11/2021. Further STU through the implementation of its five-year plan has taken efforts for reduction in transmission losses through:
  - Large scale Integration of RE generation,
  - Addition of EHV substations at Load centres. The details are provided in Annexure 12\_1 of Petition.
  - Provision of Reactors and Capacitors for reactive compensation in the Transmission system. The details are provided in Annexure 12\_1A.
  - Replacement of ACSR conductor to High Ampacity conductor.
  - Improving metering efficiency by implementation of AMR.
  - Provision of IEMs during Execution of AMR Project & commissioned 6046
     IEMs. Nos. of Spare IEMs Procured during the execution of AMR Project & utilized & commissioned 154 IEMs
  - Provision of IEMs for interface locations which are commissioned during execution/implementation of AMR project of 152 interface locations
  - Provision of IEMs made as per 5-Year STU plan for 448 IEMs
- 7.1.3 A quantitative analysis of the reduction in the transmission losses of state due to above efforts & the expected transmission loss reduction through the effective implementation of STU plan is as shown in table below.

Table 29: State Transmission Loss for past period

Particulars Energy (Input)	Energy (Sent out)	Transmission Loss (%)	Reduction (%)
FY 2017-18 -	1,50,341	1,45,385	3.30%
FY 2021-22	1,68,307	1,62,931	3.19% (0.11%)

7.1.4 STU submitted that considering various loss reduction initiatives, transmission schemes and the quantum of load to be carried on system, transmission loss may reduce marginally to 3.157% for FY2023-24 and 3.126% for FY2024-25. STU further submitted that, the Commission may kindly consider transmission loss as approved in MYT for the purpose of MTR (3.18%) which may be further subject to true-up on actuals.

# Commission's Analysis and Ruling

- 7.1.5 The Commission notes STU's reply that the transmission loss is showing downward trend over control period. Transmission loss depends on several factors including network configuration, utilization of network elements and demand pattern variation on seasonal basis, change in composition of injection over transmission network, augmentation/addition of transmission network capacity. Over the control period, there has been significant increase in the transmission capacity through various transmission licensee, coupled with load growth and generation capacity addition, particularly from renewable energy sources. It is also important to note that implementation of DSM framework in Maharashtra with AMR based metering and energy accounting of all G<>T and T<>D interface points across InSTS has only facilitate accurate accounting and reporting of the transmission losses over the InSTS network with weekly publication of the DSM accounts, with verification/validation checks through institutionalising standard process in place. Nonetheless, STU should be vigilant and investigate the causes of increase in transmission losses in areas, network elements and monitor performance of transmission licensees on this important parameter and guide them to adopt corrective measures through forum of Grid Coordination Committee from time to time.
- 7.1.6 Further, the Commission is of the view that, efforts are to be made at the time of planning of transmission lines for optimum utilisation and ensure that, infrastructure would not be underloaded. At the time of recommending DPR for new infrastructure, the impact of new project on the existing network needs to be invariably recorded in STU recommendations. Any project shall not be recommended in isolation, but its overall impact shall be studied and recorded.

# 7.2 Directive 2: Variation in actual and approved CPD and NCPD

7.2.1 STU is directed to submit, at the time of filing of the MTR Petition for the 4th Control Period, variation in actual and approved CPD and NCPD so that revision in Base TCR and Base Transmission Tariff could be made at the time of Mid-Term Review as per the provisions of the Regulations 64.3 of MYT Regulations, 2019.

#### STU's submission

7.2.2 STU submitted that necessary information is provided in the current petition and formats.

# Commission's Analysis and Ruling

- 7.2.3 The Commission noted that as directed in MYT order, STU has filed petition for remaining years of 4<sup>th</sup> Control Period, considering variations in actual and approved CPD and NCPD for FY 2020-21 and FY 2021-22. Accordingly Base TCR and Base Transmission Tariff is revised in this order.
- 7.2.4 As regards, MSEDCL's request for publication of the monthly demand data (CPD/NCPD) on its website, the Commission observes that as per Regulation 64.2 of MYT Regulations, 2019, STU is required to submit the recorded CPD/NCPD data at the end of each year of the Control Period for the past 12 months in respect of each transmission system user for the purpose of true-up. Thus, monthly publication of such data is not envisaged. However, MSEDCL's suggestion is welcome step in the interest of transparency and would facilitate regular scrutiny of such data for verification by stakeholders, before it is considered for purpose of true-up, hence, STU/MSLDC should explore possibility of web-publication of such data and take necessary steps in this respect within three months from issuance of this Order.

# 7.3 Directive 3: Distribution Licensees shall not retain the transmission charges collected from partial open access consumers and shall arrange to remit the same to STU

7.3.1 In accordance with the ruling of the Commission in the Order in Case No. 361 of 2018 dated 14 June, 2019 and Regulations 14 (1) (v) of the DOA Regulations, 2019 (First Amendment), Distribution Licensees shall not retain the transmission charges collected from partial open access consumers and shall arrange to remit the same to STU in the immediate next billing cycle, as and when levied/collected from such open access consumers. STU shall maintain separate account of such revenue from transmission charges (month-wise and distribution licensee-wise) and shall publish such monthly statement along with quarterly reconciliation statement on its website.

# STU's submission

7.3.2 The details with respect to the same was informed to the Commission vide Letter dated 18/11/2021. STU vide its Letter dated 31/01/2022 also informed to the Commission about the Additional Transmission Charges levied as per Order no.52 of 2020 along with summary of ATC bills raised and payments received.

## Commission's Analysis and Ruling

7.3.3 According to the reply submitted by STU to the data gaps, the Commission observed that the transmission charges of partial open access consumers recovered by Distribution Licensees are being deposited in MSETCLs account and not in STU account. Similarly, from reply to data gap it is observed that transmission open access charges recovered by MSLDC from STOA applicants are also deposited in MSETCL's account. Distribution licensees and MSLDC shall deposit transmission

- charges recovered from the OA consumers and STOA applicants in STU transmission pool account.
- 7.3.4 Further, the Commission directs STU to explore issue of mode of collection of various transmission charges (long term, medium term, short term and additional transmission charges) and accounting of such transmission charges collected from TSUs including collection through separate Bank A/c of MSETCL with MSLDC for the purpose of STU pool account to avoid issues of reconciliation in future. The Commission hereby directs STU to submit report in this respect alongside necessary actions taken within three months from issuance of this Order.

# 7.4 Directive- 4: Optimum Utilisation of Transmission Capacity the STU is directed to submit a status report:

7.4.1 The Commission has directed the STU to submit a status report on the extent of infrastructure created so far in the State and its utilization at present and as envisaged when approval was accorded to the plan. The report should cover reasons for any under-utilisation, possibility of optimisation of the transmission network, alternate transmission pricing framework to balance the tendency of over capitalisation without its optimal utilisation while complying with the provisions of the new MEGC, 2020 which will be duly notified shortly. The report shall be submitted to the Commission within 3 months from the date of notification of MEGC, 2020.

#### STU's submission

- 7.4.2 As per the directive issued by the Commission, a detailed status report vide letter dated 30/06/2022 has been submitted to the Commission. In order to optimise the utilisation of the Transmission capacity STU adheres to the following set of actions:
  - The demand / requirement of the new substation/ feeders is not considered unless the existing substations/ feeders are utilized.
  - Efforts are made for diverting loads through inter-utilisation of spare capacity with distribution licensees. For eg. Diversion of load from 220 kV Jalna substation to 220 kV Nagewadi sub-station.
  - Augmentation schemes of transformers are being approved after the due consideration of present loading as per sanction criteria (P1, P2, and P3).
  - Further STU follows the guidelines regarding InSTS planning & Augmentation of Transmission system in the planning code under MEGC 2020. The List of substations having overall loading less than 25% of the substation capacity and List of Under-Utilized Lines are already provided in the report submitted to Hon'ble Commission vide letter dated 30th June 2022.
- 7.4.3 As per the directives of the Commission, STU had requested all Transmission licensees to provide information regarding their transmission capacity utilisation in

respect to power catered and energy units transmitted during FY 2019-20, FY 2020-21 and FY 2021-22.

# Commission's Analysis and Ruling

7.4.4 The Commission notes that, STU has submitted report on Under-utilized substations and transmission lines of transmission licensees in InSTS. As per the report submitted by STU it is observed that substantial infrastructure created so far in the state is underutilized. The details of network elements such as Transformers capacity in EHV substation and Transmission lines which are underutilized is as below:

Table 30: Transmission Capacity Utilization-List of Under-Utilized Substation

Utility	Substation	Capacity	Percentage Loading (%)
MSETCL			
Aurangabad	220/132/33 kV Nagewwadi,	50 MVA	8.4
Karad	132 KV Chimangaon Gota	50 MVA	17.96
	220kV Insuli	75 MVA	24.22
Nagpur	220 kV Ghuggus	25 MVA	0.0
	220 kV Pegasus	50 MVA	4.16
	220 kV Flagship	100 MVA	17.978
	220 kV Hinjewadi-2	150 MVA	22.60
	132 kV Varasgaon	50 MVA	12.72
	100 kV Pawana	25 MVA	15.37
	100 kV Lonavala	100 MVA	18.84
	132kV Pimpalgaon	100 MVA	20.45
Vashi	220/33 kV Viraj	50 MVA	11.32
	220kV Bhaveghar	200 MVA	14.5
Nasik	NIL		
TPC-T	110 KV Bhokarpada	120 MVA	0.8
	110 KV Kurla	250 MVA	13.0
AEML-T	NIL		

Table 31:Transmission Capacity Utilization-List of Under-Utilized Lines

Substation	Line	Thermal	Percentage
		Capacity MW	Loading
Amravati Zone			
220 kV Amravati	220 kV Amravati-Nandgaonpeth	560	23.0
132 Arni(Jawala)	132 Arni(Jawala)-Digras	366	15.0
132 kv Balapur	132 kv Balapur- Jalgaon Jamod line-I	366	11.0
	132 kv Balapur- Jalgaon Jamod line-II	366	11.0
132kV Akola	132kV Akola-Murtizapur Line I	366	19.0
	132kV Akola-Murtizapur Line II	366	19.0
Aurangabad Zone			
400 kV Thaptitanda	400KVThaptitandaDeepanagar	2100	6.00
220kV Shendra	220kV Shendra-Chite Pimpalgaon	560	18.0
	PGCIL Ckt-I		
	220kV Shendra-Chite Pimpalgaon	560	18.0
	PGCIL Ckt-II		
	220 kV Kumbhargaon Krishnoor-I	560	6.0

Substation	Line	Thermal	Percentage
Substation	Diffe	Capacity MW	Loading
400 kV R S	220 kV Kumbhargaon Krishnoor-II	560	13.0
Kumbhargaon			
220 KV Bhokar	220 kV Kumbhargaon-Bhokar-I	560	22.0
	220 kV Kumbhargaon-Bhokar-II	560	22.0
Tuljapur	220 kV Tuljapur - Lamboti line	560	14.0
Karad Zone	J		
400kV Talandge	220kV Talandge-Sawantwadi I	557	11.0
	220kv Talandge-Bidari	557	13.0
220/110/33 kV	220 kV Wathar - Mudshingi Ckt III	560	24.0
S/S, Mudshingi			
132-110/33 kV	110 KV Chambukhadi-Shiroli	366	21.0
S/S, Chambukhadi			
220 kV S/S, Bidr	220KV Bidri- Sawantwadi	560	9.0
220kV Insuli S/s	220kV Talandage - Insuli	557	8.0
	220kV Bidri - Insuli Line	557	6.0
Nagpur Zone	==on + Bion Inson Bin		0.0
220kV Kanhan	220 KV Kanhan-Umred 2	560	12.0
	220 KV Kanhan-Umred 2	560	12.0
132 KV Morgaon	132 KV Morgaon Arjuni - Lakhanur 1	560	4.0
Arjuni	132 KV Morgaon Arjuni - Lakhanur 2	560	4.0
Nasik Zone	10211 Horgani Injum Zamana 2		
400 kV Khadka	220kV Khadka -Bhadli I	560	10.36
100 H V TIMUM	220kV Khadka -Bhadli II	560	9.46
Pune Zone	22011 India Diadi	000	71.0
220 kV Bale	132 kV Bale - Omerga	366	0.0
220kV Barshi	110 kV Pandharpur - Barshi	366	0.0
220 kV Vairag	220 kV Lamboti - Vairag	560	15.0
220kV Baramati	110kV Baramati-Baramati (220 kV)	366	13.0
220kV Theur	220kV Theur- Jejuri	560	0.0
	132kV Theur-Phursungi 1	366	0.0
220kV Serum S/s	220kV Magarpatta - Serum	560	21.0
132 kV Phursungi	132 kV Phursungi-Mundhawa	366	0.0
132KV	132kV Panshet-Varasgaon	366	10.0
VARASGAON	132K Tunshet Varasgash	300	10.0
220kV Chakan PH-II	CHAKAN Ph 2-400KV CHAKAN	560	11.0
132KV Kawathe	132kV Kawathe YemaiKathapur	366	8.0
Yemai	132kV Kawathe -Pimpalgaon	366	8.0
220kV Flagship	220 KV Flagship- Nanded City line	560	6.0
Vashi Zone	NIL		
TPC-T	1		
220/110 kV Dharavi	110 KV Dharavi Kurla 1	150	21.0
132 kV Phursungi	110 KV Dharavi Kurla 2	150	21.0
AEML-T	NIL		
MEGPTCL	NIL		
ATIL	NIL		
APTCL			
Amravati S/s	400kV ATPP to Akola II Line I	2525	20.0
	400kV ATPP to Akola II Line I	2525	20.0
JPTL	•	•	,
400 kV Jaigad	400KV Karad - Jaigad-1	3192	18.0
	400KV Karad - Jaigad-2	3192	18.0
L		î.	L

7.4.5 From above Tables it can be seen that substantial transformation capacity and transmission lines are underutilized. The STU and Maharashtra Transmission Committee (MTC) is directed to thoroughly scrutinize proposals for addition of transmission infrastructure in accordance with Capex Regulations 2022. It shall be invariably seen that the infrastructure being created is utilized to its rated capacity. Further, it also directed that while recommending DPRs or preparing scheme for STU Plan for future infrastructure, it shall be seen that existing loading of underloaded infrastructure can be enhanced to its rated capacity.

# 7.5 Directive: 5: Compliance by STU to Directives under MERC (State Grid Code) Regulations 2020

### STU's submission

7.5.1 As per above regulations, following detailed of Procedure / Guidelines / Codes / Plans are to be prepared by STU/ STU in consultation with SLDC in stipulated timeline. STU has filed the petition seeking relaxation of timelines for preparation of various procedures under Regulation 99 of the MERC (State Grid Code) Regulations, 2020. The order for the same was issued by the Commission vide dated 6 October, 2022.

# Commission's Analysis and Ruling

7.5.2 The Commission has allowed Case No. 85 of 2022 and vide its Order dated 06 October 2022 STU / MSLDC to approach the Commission within one month through separate Petition in case there is any difficulty in compliance of the State Grid Code as per extended timelines sought in the Petition (i.e., 31 December 2022). Accordingly, STU has filed a Petition before the Commission and same is under process at the Commission's office.

## 8 APPLICABILITY OF THE ORDER

- 8.1.1 This Order on approval of the Truing-up of InSTS Tariff for FY 2020-21 and FY 2021-22 and determination of revised InSTS Tariff for FY 2023-24 and FY 2024-25 as per MYT Regulations 2019 shall come into force from 1 April, 2023.
- 8.1.2 The Petition of State Transmission Utility in Case No. 284 of 2022 stands disposed of accordingly.

Sd/(Mukesh Khullar)
Member

Member

Member

(Abhijit Deshpande)
Secretary

# APENDIX – 1 List of persons who attended the TVS on 24 November 2022

Sr. No.	Name	Organization
1	Shri. Peeyush Sharma	Chief Engineer, STU, MSETCL
2	Shri. Suradkar	Superintending Engineer, STU, MSETCL
3	Shri. Bangale	Engineer, STU, MSETCL
4	Smt. Anuja Dharmadhikari	Engineer, STU, MSETCL
5	Shri. Ajit Pandit	Consultant, Idam Infra,
6	Shri. Vasant Pande	Consultant, Idam Infra,
7	Shri. Anant Sant	Consultant, Idam Infra,

# $\label{eq:APENDIX-2} \textbf{List of Persons at the Public Hearing held on 24 January 2023}$

Sr. No.	Name	Organisation
1	Shri. Peeyush Sharma	Chief Engineer, STU, MSETCL
2	Shri. Suradkar	Superintending Engineer, STU, MSETCL
3	Shri. Bangale	Engineer, STU, MSETCL
4	Smt. Anuja Dharmadhikari	Engineer, STU, MSETCL
5	Shri. Ajit Pandit	Consultant, Idam Infra,
6	Shri. Vasant Pande	Consultant, Idam Infra,
7	Shri. Anant Sant	Consultant, Idam Infra,