

Before the

MAHARASHTRA ELECTRICITY REGULATORY COMMISSION
World Trade Centre, Centre No.1, 13th floor, Cuffe Parade, Mumbai 400 005.
Tel. No. 022 22163964/65/69 – Fax 022 22163976
E-mail: mercindia@merc.gov.in
Website: www.merc.gov.in / www.mercindia.org.in

Case No. 123 of 2014

IN THE MATTER OF

**Suo-motu amendment of Intra-State Transmission Tariff determined by the Commission in
Order dated 13 May, 2013 in Case No. 56 of 2013**

CORAM

**Smt. Chandra Iyengar, Chairperson
Shri Vijay L. Sonavane, Member
Shri Azeez M. Khan, Member**

ORDER

Dated: 14 August, 2014

In exercise of the powers conferred by the Electricity Act (EA), 2003, the Commission notified the Maharashtra Electricity Regulatory Commission (Multi Year Tariff) Regulations, 2011 (“MYT Regulations”) on 4 February, 2011. The first and second Amendments to these Regulations were notified on 21 October, 2011 and 17 February, 2014, respectively. The MYT Regulations are applicable for the second Control Period valid upto the Financial Year (FY) 2015-16. Vide Regulation 64, the Commission has specified the methodology and principles for determining the Transmission Tariff applicable for use of the Intra-State Transmission System (InSTS).

2. The Transmission Tariff for FY 2012-13 was notified by the Commission vide its Order dated 21 May, 2012 in Case No. 51 of 2012.
3. The Transmission Tariff for FY 2013-14 to FY 2015-16 of the second MYT Control Period was notified by the Commission vide Order dated 13 May, 2013 in Case No. 56 of 2013.
4. The methodology for determination of the Total Transmission System Cost (TTSC) for the new Control Period as specified under Regulation 64 is as follows:

“64. Determination of Intra-State Transmission Tariff

64.1 Determination of Total Transmission System Cost (TTSC)

64.1.1 The aggregate of the yearly revenue requirement for all Transmission licensees; less the deductions, as approved by the Commission over the Control Period, shall form the “Total Transmission System Cost” 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:

$$TTSC_{(t)} = \sum_{i=1}^n (ARR_i - NT_i - O_i) - STR_{(t-1)}$$

Where,

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

n = Number of Transmission Licensee(s)

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

NT_i = Approved level of non-Tariff income for ith Transmission Licensee for the yearly period (t) of the Control Period.

O_i = Approved level of income from other business of the ith Transmission Licensee for the yearly period (t) of the Control Period.

STR_(t-1) = Revenue from short term open access charges earned during previous yearly period (t-1).

Provided that the revenue from short term open access charges for each yearly period (t) of Control Period shall be taken same as that prevalent during the yearly period before commencement of the Control Period. However, the adjustments due to variation in actual revenue from short term open access charges shall be undertaken during mid-term review and at the end of Control Period.”

5. Further, Regulation 64.2 of the MYT Regulations specifies the formula for determination of base transmission capacity rights, based on the contribution to which TTSC is to be shared between the transmission system users, as follows:

“64.2 Base Transmission Capacity Rights

64.2.1 The Commission shall approve yearly ‘Base Transmission Capacity Rights’ as average of Co-incident 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’ for the same.

Base Transmission Capacity Rights (Base TCR) for the yearly period (t) = $\sum_{u=1}^n ((CPD(t) + NCPD(t))/2)$

Where,

CPD_(t) = Average of projected monthly Coincident Peak Demand for the yearly period (t) of Control Period for each long term Transmission System User (u).

NCPD_(t) = Average of projected monthly Non-Coincident Peak Demand for the yearly period (t) of Control Period for each long term Transmission System User (u).

Provided that for the first year of the Control Period, the Base Transmission Capacity Rights for all long term Transmission System Users shall be determined based on average monthly CPD and NCPD of the long term TSUs prevalent during the 12 months prior to date of effectiveness of these Regulations.

Provided further that the yearly CPD and NCPD 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 long term TSUs connected to the Intra-State transmission system as part of their Business Plans.

Provided further that on completion of the each year of the Control Period, SLDC shall submit the recorded CPD and NCPD data for past 12 monthly periods in respect of each long term Transmission System User and on the basis of the same, the Base TCR shall be suitably revised at the time of mid-term performance review and at the end of the Control Period.”

6. Regulation 64.3 specifies the formula for determination of the Transmission Tariff, as follows:

“64.3 Base Transmission Tariff

64.3.1 Base Transmission Tariff for each financial 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 following manner:

<i>Base Transmission Tariff_(t)</i> (long term/medium term) (Rs/kW/month or Rs/MW/day)	= $\frac{TTSC_{(t)}}{\sum_{u=1}^n ((CPD_{(t)} + NCPD_{(t)})/2)}$	/
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<i>Base Transmission Tariff_(t)</i> (Short term) (Rs/kWh)	= $\frac{TTSC_{(t)}}{\sum_{i=1}^n (\text{Energy Transmitted by Tx } i)}$
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Where,

TTSC_(t) = Pooled cost for InSTS for yearly period (t) of the Control Period.

CPD_(t) = Average of monthly Coincident Peak Demand of the long term Transmission System User (u) for the yearly period (t) of Control Period.

NCPD_(t) = Average of monthly Non-Coincident Peak Demand of the long term Transmission System User (u) for the yearly period (t) of Control Period.

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

Tx_i = *i*th Transmission Licensee

Provided that the energy units transmitted by each Transmission Licensee shall be based on the projections made by each Transmission Licensee as part of its Business Plan and as approved by the Commission.

Provided further that any revisions in Base Transmission Capacity Rights and Base Transmission Tariff as determined in the Regulations 64.2 and 64.3 due to the variation in the actual and approved CPD and NCPD or due to addition of new Transmission Licensees to the system shall be made at the time of Mid-term Performance Review and at the end of the Control Period.”

7. Regulations 64.2.1 and 64.3.1 of the MYT Regulations were amended by the Maharashtra Electricity Regulatory Commission (Multi Year Tariff) (First Amendment) Regulations, 2011 vide Notification dated 21 October, 2011 follows:

"4. Amendment to Regulation 64.2.1- In the Regulation 64.2.1 of the MYT Regulations, 2011, after the third proviso the following proviso shall be added namely:-

“Provided further that in case the determination of ARR of Transmission Licensee is exempted for a period from the Multi-Year Tariff framework under the first proviso to Regulation 4.1 of these Regulations, then for the period of such exemption, the Base

Transmission Capacity Rights for all Long Term Transmission System Users shall be determined based on average monthly CPD and NCPD of the long term TSUs prevalent during the 12 months prior to the period of such exemption.”

5. Amendment to Regulation 64.3.1- (i) In the Regulation 64.3.1 of the MYT Regulations, 2011, in the second proviso the words “or due to addition of new Transmission Licensee to the system” shall be deleted and shall be deemed to have been deleted with effect from April, 2011.

(ii) In the Regulation 64.3.1 of the MYT Regulations, 2011, after the above amended second proviso, the following proviso shall be added namely:-

“ Provided further that in case new Transmission Licensees are added to the intra-State Transmission network during the Control Period, then the Base Transmission Capacity Rights and Base Transmission Tariff as referred under Regulations 64.2 and 64.3 shall be determined for each year of the Control Period.”

8. In accordance with the provisions of the MYT Regulations, the Commission has determined the Transmission Tariff for InSTS vide Order dated 13 May, 2013 in Case No. 56 of 2013 for FY 2013-14 to FY 2015-16 of the second MYT Control Period.
9. The Annual Revenue Requirement (ARR) of the following Transmission Licensees were considered for determination of the TTSC of FY 2013-14 to FY 2015-16 and the corresponding Transmission Tariff for the year:
 - i) Maharashtra State Electricity Transmission Co. Ltd (MSETCL),
 - ii) Transmission business of The Tata Power Co. Ltd (TPC-T),
 - iii) Transmission business of Reliance Infrastructure Ltd (RInfra-T).
 - iv) Transmission business of Jaigad Power Transco Ltd (JPTL).
 - v) Transmission business of Adani Power Maharashtra Limited (APML-T)
10. At the time of issuance of the InSTS Order in Case No. 56 of 2013, MYT Orders had been issued only for two Transmission Licensees, viz. TPC-T and APML-T. Hence, the Commission had considered the ARR allowed in the Business Plan Orders of MSETCL, RInfra-T and JPTL for determining the Transmission Tariff for FY 2013-14 to FY 2015-16 of the second MYT Control Period. The other Transmission Licensees, namely MEGPTCL, APTCL and SPTCL, were yet to achieve COD of their transmission projects and were thus not considered for determination of InSTS Transmission Charge in Case No.56 of 2013.

11. Subsequent to issuance of the InSTS Tariff Order (Case No. 56 of 2013), the Commission has issued MYT Tariff Orders/Mid Term Review (MTR) Orders in respect of the following Licensees:

- a) MSETCL: MYT Order dated 13 February, 2014 (Case No. 39 of 2013)
- b) RInfra-T: MYT Order dated 13 June, 2013 (Case No. 141 of 2012)
- c) JPTL: MYT Order dated 16 August, 2013 (Case No. 27 of 2013)
- d) APML-T: MTR Order dated 3 July, 2014 (No. 190 of 2013)
- e) MEGPTCL: MYT Order dated 8 August, 2014 (Case No. 66 of 2014)

12. As mentioned above, the Commission has now approved the MYT Order for MEGPTCL, which is a new Transmission Licensee added to the Intra-State Transmission System. Regulations 64.3.1 of the MYT Regulations, as amended vide Notification dated 21 October, 2011, specifies that the Base Transmission Tariff shall be determined for each year of the Control Period in case a new Transmission Licensee is added to the InSTS. It provides as follows:

(ii) In the Regulation 64.3.1 of the MYT Regulations, 2011, after the above amended second proviso, the following proviso shall be added namely:-

“ Provided further that in case new Transmission Licensees are added to the intra-State Transmission network during the Control Period, then the Base Transmission Capacity Rights and Base Transmission Tariff as referred under Regulations 64.2 and 64.3 shall be determined for each year of the Control Period.” (Emphasis added)

13. Thus, considering the addition of the new Transmission Licensee, MEGPTCL, to the system, and the MYT Order (Case No. 66 of 2014) issued with regard to it, the TTSC and Transmission Tariff for FY 2013-14 to FY 2015-16 determined in Case No. 56 of 2013 will now have to be amended. The Commission had also clarified in its Order in Case No. 56 of 2013 that, upon issuance of MYT Orders for Transmission Licensees, the TTSC and the Transmission Tariff as determined under that Order shall be amended in due course. Accordingly, the Commission has considered amending the TTSC for FY 2013-14 to FY 2015-16. However, since FY 2013-14 is already over, it has decided to revise the Transmission Tariff for the FY 2014-15 and FY 2015-16, after considering the impact of the latest revisions in the TTSC for FY 2013-14 (i.e. revisions made after the MYT Orders for various Transmission Licensee and the ARR addition of MEGPTCL).

14. In order to determine the TTSC for FY 2013-14 to FY 2015-16 and the Transmission Tariff thereof for FY 2014-15 to FY 2015-16, the latest approved ARR under the MYT /MTR

Orders of the respective Transmission Licensees forming the existing InSTS have been considered in the present Order. The Orders considered for this purpose are the following:

Table-1: List of relevant Orders for Transmission Licensees

Transmission Licensees	Order from which ARR considered for TTSC of FY 2013-14 to FY 2015-16
MSETCL	Approved MYT Tariff Order for FY 2011-12 to FY 2015-16 (Case No. 39 of 2013)
RInfra-T	Approved MYT Tariff Order for FY 2011-12 to FY 2015-16 (Case No. 141 of 2012)
TPC-T	Approved Trued up ARR of FY 2011-12 and ARR for MYT of FY 2012-13 to FY 2015-16 (Case No.178 of 2011)
JPTL	Approved MYT Tariff Order for FY 2012-13 to FY 2015-16 (Case No. 27 of 2013)
APML-T	Mid-Term Performance Review for Second Control Period from FY 2012-13 to FY 2015-16 (Case No. 190 of 2013)
MEGPTCL	Approved MYT Order for FY 2013-14 to FY 2015-16 (Case No. 66 of 2014)

15. In addition to considering the approved ARR of the respective years from FY 2013-14 to FY 2015-16, any amounts arising from the approved gaps of previous years /past period recoveries and to be recovered in FY 2013-14 have also been considered while computing the TTSC for FY 2013-14. The details of the revenue gap/ past period recovery considered for TTSC computation are set out subsequently in this Order.
16. Thus, in accordance with the provisions of the MYT Regulations and the considerations discussed above, the Commission hereby proceeds to re-determine the TTSC for FY 2013-14 to FY 2015-16 and the Transmission Tariff thereof for FY 2014-15 to FY 2015-16.

A] TTSC for InSTS for FY 2013-14 to FY 2015-16

17. The ARRs for FY 2013-14 to FY 2015-16 for MSETCL, TPC-T, RInfra-T, JPTL and APML-T, as approved in the Commission's Order dated 13 May, 2013 in Case No.56 of 2013, are summarised below.

Table-2: TTSC allowed as per Case No. 56 of 2013 for FY 2012-14 to FY 2015-16 (Rs Crore)

Transmission licensee	Commission allowed TTSC in Case No. 56 of 2013		
	FY 2013-14	FY 2014-15	FY 2015-16
MSETCL	5152.23	4963.98	5652.39
TPC-T	780.49	683.45	921.25
RInfra-T	417.51	326.15	410.78
JPTL	236.78	105.98	102.53
APML-T	232.96	137.68	133.33
TTSC for FY 2013-14 to FY 2015-16	6819.97	6217.24	7220.28

18. The ARR for FY 2013-14 to FY 2015-16 for MSETCL, TPC-T, RInfra-T, JPTL, APML-T and MEGPTCL as approved in the Commission's latest MYT/MTR Orders which are now being considered for arriving at the revised TTSC for that period are as follows:

Table-3: ARR approved in MYT/MTR

(Rs. crore)

Transmission licensee	Commission approved*			Reference Orders
	FY 2013-14	FY 2014-15	FY 2015-16	
MSETCL	4200.55	4883.37	5535.95	Case No. 39 of 2013
TPC-T	539.73	683.45	921.25	Case No. 178 of 2011
RInfra-T	326.73	318.23	399.75	Case No. 141 of 2012
JPTL	105.01	101.94	98.85	Case No. 27 of 2013
APML-T	141.06	136.81	132.57	Case No. 190 of 2013
MEGPTCL	53.71	571.83	570.71	Case No. 66 of 2014
Total of ARRs for FY 2013-14 to FY 2015-16 (InSTS)	5366.79	6695.63	7659.08	

**(Revenue gap/Past period recovery/carrying cost in the ARR approved in the MYT Order has been separated out and is considered in the subsequent table)*

19. As regards MEGPTCL, the Commission has considered only the approved ARR pertaining to assets which are already commissioned for the purpose of this Order. The MYT Order in respect of MEGPTCL (dated 8 August, 2014 in Case No. 66 of 2014) has approved ARRs for FY 2013-14, 2014-15 and 2015-16 to the extent of Rs. 53.71 crore, Rs. 571.83 crore and Rs. 1197.50 crore, respectively, based on various phases, viz. Set 1, Set 2a, Set 2b and Set 3 of its transmission assets which are commissioned and proposed to be commissioned during that period. It is observed that the 'Set 3' phase of MEGPTCL's transmission system is not yet commissioned. The proposed CoD is

31 March, 2015, for which an ARR component of to Rs 626.79 crore has been allowed in FY 2015-16 under the MYT Order. However, the TTSC Order in Case No. 56 of 2013 provides that the recovery of revenue through InSTS Transmission Tariff Orders shall be allowed to Licensees once their transmission systems have achieved CoD and the ARR towards their assets are approved. The Order reads as follows:

“34. The transmission assets of APTCL, SPTCL and MEGPTCL are yet to be commissioned. Hence, the Commission has not considered the recovery of revenue by such licensees vide the present Order but would however allow recovery of revenue through the InSTS transmission Tariff Orders for subsequent years once the transmission system of such licensees have achieved COD and the ARRs towards the assets are approved by the Commission.” (Emphasis added)

Thus, the ARR for FY 2015-16 considered in this TTSC order in respect of MEGPTCL is only Rs. 570.71 Crore, corresponding to set-1, Set-2a and Set-2b as approved in Case No. 66 of 2014. The Commission will consider allowing recovery of the ARR component of ‘Set 3’ assets during the mid-term review/final trueing up of InSTS Tariff Orders for the present Control Period after achievement of COD.

20. The Revenue Gap/past period amounts in respect of MSETCL, TPC-T, RInfra-T, JPTL and APML-T, which are to be recovered in FY 2013-14 and as approved in the ARR/True-up /MYT/MTR Orders, as the case may be, are as follows:

Table-4: Revenue Gap/Past period recovery till FY 2012-13- to be recovered in FY 2013-14

(Rs. crore)

Transmission licensee	Revenue Gap/Past Period Recovery till FY 13
MSETCL	1136.81
TPC-T	240.76
RInfra-T	84.79
JPTL	131.59
APML-T	98.94
Total gap/past period recovery	1692.89

21. The TTSC computed for FY 2013-14 to FY 2015-16 considering the approved ARR and revenue gaps/ past period recovery for MSETCL, TPC-T, RInfra-T, JPTL, APML-T and MEGPTCL is set out below:

Table-5: TTSC for FY 2013-14 to FY 2015-16 (Rs. crore)

Transmission licensee	Commission approved (After considering recovery till FY 13)		
	FY 2013-14	FY 2014-15	FY 2015-16
MSETCL	5337.36	4883.37	5535.95
TPC-T	780.49	683.45	921.25
RInfra-T	411.52	318.23	399.75
JPTL	236.60	101.94	98.85
APML-T	240.00	136.81	132.57
MEGPTCL	53.71	571.83	570.71
TTSC for FY 2013-14 to FY 2015-16 (InSTS)	7059.68	6695.63	7659.08

Table-6: Surplus/Gap for FY 2013-14 after considering ARR under latest MYT/MTR Orders (Rs. crore)

Transmission licensee	Commission approved in Case No. 56 of 2013 For FY 2013-14		
	Case No. 56 of 2013 (A)	Case No. 123 of 2014 (B)	(Surplus)/Gap (C)= (B)-(A)
MSETCL	5152.23	5337.36	185.13
TPC-T	780.49	780.49	0.00
RInfra-T	417.51	411.52	(5.99)
JPTL	236.78	236.60	(0.18)
APML-T	232.96	240.00	7.04
MEGPTCL	0.00	53.71	53.71
TTSC for FY 2013-14 to FY 2015-16 (InSTS)	6819.97	7059.68	239.71

22. As stated at para. 13 above, since FY 2013-14 is already over, the Commission hereby amends the Transmission Tariff for FY 2014-15 and FY 2015-16, after considering the impact of the following:
- Revision of TTSC for FY 2013-14 (owing to revision in approved ARRs for FY 2013-14, and revenue Gaps/past period recoveries to be considered in that year as per the latest MYT Orders). Its impact has been considered in FY 2014-15.

- b) Revision of approved ARR for FY 2014-15 and FY 2015-16 vide the Commission's latest MYT/MTR Orders.

Table-7: TTSC amended after considering surplus/gap in ARR w.r.t. previous TTSC Order in Case No. 56 of 2013 for FY 2014-15 to FY 2015-16 (Rs. crore)

Transmission licensee	Commission approved TTSC after Surplus/gap and revisions in approved ARR for FY 2014-15 to FY 2015-16	
	FY 2014-15	FY 2015-16
MSETCL	5068.50	5535.95
TPC-T	683.45	921.25
RInfra-T	312.24	399.75
JPTL	101.76	98.85
APML-T	143.85	132.57
MEGPTCL	625.54	570.71
TTSC for FY 2014-15 to FY 2015-16 (InSTS)	6935.34	7659.08

23. At para. 10 of its Order in Case No. 56 of 2013, the Commission had stated that the TTSC determined in that Order was based on the ARRs allowed in various Business Plan Orders in respect of the Transmission Licensees. When MYT Orders in respect of such Licensees are issued, the TTSC and the Transmission Tariff would be amended in due course. **The adjustments of over-recovery/under-recovery, if any, along with interest cost, due to the difference in the ARRs approved for such Transmission Licensees in their respective MYT Orders vis-a-vis the ARRs considered as per the Business Plan Orders** for the purpose of determining TTSC would be suitably accounted for while making such amendment.
24. In view of the above, the Commission has computed the quantum of over-recovery/under-recovery owing to difference in ARR considered for FY 2013-14 forming TTSC for the year as per Case No. 56 of 2013 and ARR considered for FY 2013-14 forming TTSC for the year as per the present Order. The details are presented in Table 6 above. Table 8 below shows the difference in ARR and the TTSC thereof for FY 2013-14 which is to recovered/ passed on during FY 2014-15.

Table-8: Difference between ARRs considered in Case 56 of 2013 and present Order for FY 2013-14

(Rs Crore)

Transmission Licensee	Difference (Annual)
MSETCL	185.13
TPC-T	0.00
RInfra-T	(5.99)
JPTL	(0.18)
APML-T	7.04
MEGPTCL	53.71
TTSC for FY 2013-14	239.71

25. Further, the Commission has computed the carrying cost on the above difference (surplus/deficit) amount. It has done so considering that such difference is passed on/recovered over the next 7 months from this Order (i.e., from September, 2014 to March, 2015). Further, the interest rate for computing carrying cost has been considered the same as the SBI PLR prevailing in FY 2013-14, which were 14.45% (Apr. to Sep. 2013), 14.55% (Oct. 2013) and 14.75% (Nov. 2013 till date). The interest cost/benefit computed by the Commission for each Transmission Licensee is as below.

Table-9: Interest cost/benefit computed for passing on/recovery of difference in ARR during FY 2013-14

(Rs Crore)

Interest Cost/Benefit for each Utility (for deferred recovery)	Interest Cost/benefit on ARR difference to be passed on/recovered in FY 15*
MSETCL	32.90
TPC-T	0.00
RInfra-T	(1.06)
JPTL	(0.03)
APML-T	1.25
MEGPTCL	5.94
Total	38.99

**(For MEGPTCL, the interest on delayed recovery has been allowed only from the month subsequent to COD of its 1st phase- 'Set 1' i.e., from March 2014 [the asset was operational only for about a month in FY 2013-14] whereas, for all other Licensees, the interest has been allowed from the beginning of FY 2013-14.)*

26. Accordingly, the revised TTSC for FY 2014-15 and FY 2015-16 after considering the additional impact of variation in ARRs for FY 2013-14 (passed on to FY 2014-15) and of the carrying cost computed as above (passed on to the TTSC of FY 2014-15) is as shown in Table 10 below.

Table-10: Revised TTSC for FY 2014-15 to FY 2015-16

(Rs Crore)

Transmission Licensee	Revised TTSC for FY 2014-15	Revised TTSC for FY 2015-16
MSETCL	5101.40	5535.95
TPC-T	683.45	921.25
RInfra-T	311.18	399.75
JPTL	101.73	98.85
APML-T	145.10	132.57
MEGPTCL	631.48	570.71
TTSC	6974.33	7659.08

B] Coincident, Non-Coincident Peak Demand and Base Transmission Capacity Utilisation

27. Regulation 64.2 of the MYT Regulations specifies that the base transmission capacity rights (Base TCR) shall be approved as the average of co-incident peak demand and non-coincident peak demand for Transmission System Users (TSUs) as projected for the 12 monthly period of each year of the Control Period. For the first year of the Control Period, it is to be determined on the basis of available historical data. For future years of the Control Period, it is to be based on the past trend and demand projections made by long term TSUs connected to the InSTS as part of their Business Plans. Since this TTSC Order involves the period from FY 2013-14 to FY 2015-16, the base TCR has to be projected for the said period.
28. In this context, for the projection of base TCR for FY 2013-14 to FY 2015-16, the approved Energy Projections (MUs) by TSUs in their MYT Orders (in case of MSEDCL, admitted MYT Petition numbers are considered excluding surplus energy since its MYT Order is yet to be issued) have been taken into account. Further, the capacity/load factor was derived from the past trend and was applied to the energy projections of each TSU to derive the base TCRs for the period (FY 2013-14 to FY 2015-16).

29. For deriving the capacity/load factor, the energy requirement details and the data on average CPD and NCPD of the latest year for which it is available (FY 2013-14) has been considered. The energy requirement of the State for FY 2013-14 is based on actual requirement at the State transmission periphery as submitted by the Maharashtra State Load Despatch Centre (MSLDC), which works out to 122273.41 MU.
30. MSLDC provided month-wise coincident and non-coincident peak demand details for all TSUs from April, 2013 to March, 2014. The 12-monthly averages are as summarized in Table 10:

Table-11: Month-wise Average CPD/NCPD for DISCOMs for FY 2013-14

Months	Average of Coincident Peak Demand and Non-Coincident Peak Demand by each TSU (MW)				
	MSEDCL	TPC-D*	RInfra-D*	BEST-D	Total
Apr-13	13724	1159	1023	833	16739
May-13	13537	1199	1064	884	16684
Jun-13	12666	1149	1173	842	15829
Jul-13	11357	1139	1003	796	14295
Aug-13	11999	1180	931	824	14933
Sep-13	13369	1210	1004	817	16398
Oct-13	12929	1148	1136	848	16061
Nov-13	13722	753	1137	780	16391
Dec-13	14228	981	1209	805	17222
Jan-14	14978	876	1057	687	17598
Feb-14	15161	870	1128	729	17887
Mar-14	15205	962	1220	789	18175
Average	13573	1052	1090	803	16517
Ratio	82.17	6.37	6.60	4.86	100

**(The CPD and NCPD data considered here already takes care of the impact of variations in load of TPC-D and of RInfra-D due to change over of consumers between them.)*

31. Based on the above, the base capacity factor for FY 2014-15 works out to 84.51%. This was applied to the future energy requirement projection of the State for FY 2014-15 to FY 2015-16 for deriving the base TCR. Table 12 below shows the projected base TCR for the period.

Table-12: Projection of CPD, NCPD figures through FY 2014-15 to FY 2015-16

Description	FY 2014-15	FY 2015-16
Total Energy Requirement (in MU)	125545	128673
Capacity Factor	84.51%	84.51%
Projection of Average of CPD and NCPD (in MW)	16959	17382

C1 Determination of Transmission Tariff for FY 2014-15 to FY 2015-16

32. In line with Regulation 64.3 of the MYT Regulations, and based on the TTSC and base transmission capacity utilisation approved in this Order, the Commission hereby determines the Transmission Tariff for use of InSTS for FY 2014-15 to FY 2015-16 as set out in the Tables below:

Table-13: Transmission Tariff Determination considering TTSC (excluding past period recovery of FY 2013-14 and consequent interest cost/benefit)

Item Description	Units	FY 2014-15	FY 2015-16
TTSC (excluding past period recovery of FY 2013-14 and consequent interest cost/benefit)	Rs Cr	6695.63	7659.08
Average of CPD and NCPD	MW	16959	17382
Transmission Tariff (long term/medium term)	Rs/kW/ month	329.00	367.19
Transmission Tariff (short term/short term collective/renewable energy)	Rs/kWh	0.44	0.49

Table-14: Transmission Tariff Determination considering TTSC (including past period recovery of FY 2013-14)

Item Description	Units	FY 2014-15	FY 2015-16
TTSC(including past period recovery of FY 2013-14)	Rs Cr	6974.33	7659.08
Average Coincident Peak Demand (CPD)	MW	16959	17382
Transmission Tariff (long term/medium term)	Rs/kW/ month	342.70	367.19
Transmission Tariff (short term/short term collective/renewable energy)	Rs/kWh	0.46	0.49

Thus, the Transmission Tariff for FY 2014-15 and FY 2015-16 under the second MYT Control Period is approved by the Commission as set out in Table 14 above.

33. In accordance with Regulation 64.3.1, the Transmission Tariff is to be denominated in terms of “Rs/kW/month” for long and medium term usage or in terms of “Rs/kWh for short term bilateral Open Access transactions, short term collective transactions over power exchange, and for Renewable Energy transactions. No other distinction can be made in transmission charges as between long term/medium term usage and short term usage. Regulation 66.2 reads as follows:

“66.2 No distinction in charges shall exist in terms of long term, medium term or short term access to the intra-State Transmission System;

Provided that, the transactions for long term and medium term shall be denominated in Rs/kW/month or any suitable denomination as may be stipulated by the Commission, derived from transmission Tariff for long term/medium term access as specified in Regulation 64.3.”

34. The recovery from short term transmission Open Access charges is to be used to reduce TTSC for the InSTS and benefit long term transmission system users. Regulation 64.1.1 allowing deduction of TTSC to the extent of recovery from short term transmission Open Access charges reads as follows:

“64. Determination of Intra-State Transmission Tariff

64.1 Determination of Total Transmission System Cost (TTSC)

64.1.1 The aggregate of the yearly revenue requirement for all Transmission licensees; less the deductions, as approved by the Commission over the Control Period, shall form the “Total Transmission System Cost” 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:

$$TTSC_{(t)} = \sum_{i=1}^n (ARR_i - NT_i - O_i) - STR_{(t-1)}$$

Where,

TTSC_(t) = Pooled Total Transmission System Cost of year (t) of the Control Period.

n = Number of Transmission Licensee(s)

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

NT_i = Approved level of non-Tariff income for i^{th} Transmission Licensee for the yearly period (t) of the Control Period.

O_i = Approved level of income from other business of the i^{th} Transmission Licensee for the yearly period (t) of the Control Period.

$STR_{(t-1)}$ = Revenue from short term open access charges earned during previous yearly period (t-1).

Provided that the revenue from short term open access charges for each yearly period (t) of Control Period shall be taken same as that prevalent during the yearly period before commencement of the Control Period. However, the adjustments due to variation in actual revenue from short term open access charges shall be undertaken during mid-term review and at the end of Control Period. (Emphasis Added)”

35. The approved net ARR of the respective Transmission Licensees already take into account the revenue from short term Open Access charges for the previous year. Thus, it does not need to be separately deducted for computing the TTSC. The non-Tariff and other income of the Licensees have also been considered while approving their net ARR. Thus, such charges have not been deducted while computing the TTSC for FY 2013-14 to FY 2015-16.

D1 Sharing of TTSC amongst Transmission System Users

36. Under Regulation 65.1 of the MYT Regulations, the TTSC has to be shared between the long-term TSUs (comprising Distribution Licensees such as MSEDCL, TPC-D, RInfra-D and BEST) in accordance with their respective contributions to the average of coincident and non-coincident peak demand. For the purposes of this Order, the Commission has assumed such sharing of TTSC for FY 2014-15 to FY 2015-16 to be in the same ratio as in FY 2013-14, the latest year for which data is available. The proportionate contributions of MSEDCL, TPC-D, RInfra-D and BEST are **82.17%, 6.37%, 6.60% and 4.86%, respectively**. The Commission will revise the allocation ratio based on the actual contribution of each Distribution Licensee at during the mid-term performance review or final review during the present Control Period. Accordingly, the sharing of TTSC among TSUs for FY 2014-15 and FY 2015-16 will be as summarised in the following Tables:

Table-15: Sharing of TTSC among TSUs for FY 2014-15

Particulars	Share of avg. of CPD and NCPD	% share of avg. of CPD and NCPD	% share of TTSC for FY 2014-15
TSU - Distribution Licensees	(MW)	(%)	(Rs Cr)
MSEDCL	13936	82.17%	5730.99
TPC-D	1080	6.37%	444.16
RInfra-D	1119	6.60%	460.33
BEST	824	4.86%	338.85
TOTAL	16959	100%	6974.33

Table-16: Sharing of TTSC among TSUs for FY 2015-16

Particulars	Share of avg. of CPD and NCPD	% share of avg. of CPD and NCPD	% share of TTSC for FY 2015-16
TSU - Distribution Licensees	(MW)	(%)	(Rs Cr)
MSEDCL	14283	82.17%	6293.67
TPC-D	1107	6.37%	487.77
RInfra-D	1147	6.60%	505.53
BEST	845	4.86%	372.12
TOTAL	17382	100%	7659.08

37. This Transmission Tariff Order shall be applicable with effect from 1 September, 2014. The State Transmission Utility (STU), i.e., MSETCL, shall collect transmission charges from TSUs on a monthly basis at the end of each calendar month, with the first monthly period commencing from 1 September, 2014, in the following manner:

Table-17: Sharing of TTSC among TSUs for FY 2014-15 and FY 2015-16

Particulars	FY 2014-15		FY 2015-16	
	Annual (Rs Cr)	Monthly* (Rs Cr / month)	Annual (Rs Cr)	Monthly* (Rs Cr / month)
MSEDCL	5730.99	477.58	6293.67	524.47
TPC-D	444.16	37.01	487.77	40.65
RInfra-D	460.33	38.36	505.53	42.13
BEST-D	338.85	28.24	372.12	31.01
TOTAL	6974.33	581.19	7659.08	638.26

(* applicable from 1 September, 2014)

38. The above transmission charges are payable by all long-term TSUs users irrespective of their actual utilisation (peak demand) recorded during the period of operation. In case actual utilisation of transmission capacity by any long-term TSU differs from the allocated transmission capacity (i.e., Base TCR), it shall be governed as per Regulation 66.4 of the MYT Regulations, which reads as follows:

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

- a) Existing long term TSU with recorded demand upto Base TCR (i.e., average of CPD and NCPD) 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 (termed as Transmission Capacity Right - TCR), the TSU shall bear additional transmission charges as specified in MERC (Transmission Open Access) Regulations, 2005, as amended from time to time:*

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

E] Recovery of ARR of Transmission Licensees for FY 2013-14 to FY 2015-16

39. Under Regulation 64.1 of the MYT Regulations, the ARRs of the Transmission licensees is pooled to derive the TTSC for InSTS, and each Licensee is entitled to recover its approved ARR from the transmission charges collected by the STU from TSUs.
40. This Transmission Tariff Order is applicable from 1 September, 2014. The STU shall collect the Transmission Tariff from TSUs on a monthly basis at the end of each calendar month, with the first monthly period commencing from 1 September, 2014. Each Transmission Licensee shall be entitled to recover its ARR, as considered in these TTSC workings, from the Transmission Tariff collected by STU on a monthly basis at the end of each calendar month. The first monthly period will commence from 1 September, 2014, and the Transmission Licensee should claim recovery of its ARR by raising a monthly bill on the STU covering its component of intra-State transmission charges in the following manner:

Table 18: Recovery of ARR of Transmission Licensees for FY 2014-15 to FY 2015-16

Particulars	FY 2014-15		FY 2015-16	
	Annual (Rs Cr)	Monthly (Rs Cr / month)	Annual (Rs Cr)	Monthly (Rs Cr / month)
MSETCL	5101.40	425.12	5535.95	461.33
TPC-T	683.45	56.95	921.25	76.77
RInfra-T	311.18	25.93	399.75	33.31
JPTL	101.73	8.48	98.85	8.24
APML-T	145.10	12.09	132.57	11.05
MEGPTCL	631.48	52.62	570.71	47.56
TOTAL	6974.33	581.19	7659.08	638.26

41. The surplus/deficit in revenue on account of levy of Transmission Charges during the first 5 months of the current year (i.e., April to August, 2014) will be computed at the rate applicable for FY 2014-15 as per Case No. 56 of 2013, instead of the amended monthly transmission charges FY 2014-15 determined by the present Order as in Table 18 above, which shall be considered at the time of the next mid-term performance review/true-up of TTSC for the Transmission Licensees.
42. The monthly recovery now approved for the Control Period is subject to further amendment based on the revision in TTSC for the Control Period upon issuance of MTR Orders for the concerned Transmission Licensees. Any under-recovery or over-recovery by them owing to such amendment shall be adjusted with the applicable carrying cost.
43. As regards payment of transmission Tariff, each TSU shall make payment in accordance with the modalities specified under Regulation 68 of the MYT Regulations. Accordingly, all payments relating to transmission charges for a particular calendar month shall be due for payment on the 14th day of the subsequent calendar month. Regulation 58 reads as follows:
- “ 68.1 State Transmission Utility (STU) shall raise monthly bill for Intra-State Transmission Charges on every Transmission System User (TSU) on 1st working day of the Month for the Transmission Charges of preceding month.*
- 68.2 The monthly bill for transmission Tariff for each calendar month shall be payable on 14th day of subsequent calendar month by the TSUs.*
- 68.3 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.*

68.4 Where there is delay in payment by any TSU, late payment surcharge at the rate of 1.25% per month or part thereof shall be applicable. (Emphasis added)”

F] Energy Accounting and Treatment of Transmission Loss

44. The principles enunciated in the Transmission Pricing Framework Order in Case No. 58 of 2005 for State-wide accounting of energy over InSTS shall continue to be applicable for the period from FY 2013-14 to FY 2015-16. The mechanism for accounting of transmission loss and modalities for treatment of energy exchange (increment/decrement) amongst TSUs, including Distribution Licensees, as elaborated in the Commission’s Orders dated 29 September, 2006 in Case No. 31 of 2006 and Order dated 13 February, 2007 in Case Nos. 36 and 41 of 2006, intra-State ABT Order in Case No. 42 of 2006 dated 17 May, 2007, and other related Orders shall continue to be applicable during this second Control Period (from FY 2013-14 to FY 2015-16), in line with the final balancing and settlement mechanism (FBSM) for energy accounting and settlement on 15-minute basis under the Intra-State ABT regime implemented in the State.
45. The Intra-State transmission loss as recorded as available from April, 2013 to March, 2014 has been submitted by SLDC. Based on this data, the weighted average transmission loss for the intra-State Transmission System for that period amounts to **4.08 %** for a total energy input of 122273.41 MU and an energy output of 117,279.62 MU, and is hereby approved by the Commission for the second Control Period from FY 2013-14 to FY 2015-16.

G] Recovery of ARR for new Transmission Licensee

46. By the end of the first Control Period ending 31 March, 2011, the Commission had granted Transmission Licences to various new private entrants in accordance with the provisions of Section 14 of EA, 2003 after due regulatory process. These are listed below:

Table 19: New Transmission Licensees forming part of InSTS

Sl. No.	Transmission Licensee	Licence No.

Sl. No.	Transmission Licensee	Licence No.
1	Jaigad Power Transco Limited (JPTL)	License No 1 of 2009
2	Adani Power Maharashtra Limited – Transmission (APML-T)	Licence No. 2 of 2009
3	Maharashtra Eastern Grid Power Transmission Company Ltd.(MEGPTCL)	Licence No. 1 of 2010
4	Sinnar Power Transmission Company Limited (SPTCL)	Licence No. 2 of 2010
5	Amravati Power Transmission Company Limited (APTCL)	Licence No. 3 of 2010

47. The transmission assets of APTCL, SPTCL are yet to be commissioned. Hence, the Commission has not considered the recovery of revenue by such Licensees in the present Order. It would, however, allow recovery of revenue through the InSTS Transmission Tariff Orders for subsequent years once the transmission systems of these Licensees have achieved COD and the ARR are approved by the Commission.

H] Preparedness for Evolutionary POC Based Transmission Pricing Methodology

48. The existing framework of transmission pricing of Maharashtra at the Intra-State level is based on the postage stamp method. The mechanism has served the needs of the system well. However, the National Electricity Policy and Tariff Policy mandate that the national Transmission Tariff framework should be sensitive to distance, direction and related to quantum of power flow. After considering the alternative methodologies for sharing of transmission system costs and comments from stakeholders, the Central Electricity Regulatory Commission (CERC) has adopted the Point of Connection (PoC) methodology for sharing of Inter-State Transmission System (ISTS) cost.
49. The MYT Regulations have enabling provisions for changing the existing transmission pricing framework and for introducing the transmission pricing framework now followed by CERC at an appropriate time, as follows:

“67.1 The Commission may, after conducting a detailed study and due regulatory process, change the existing transmission pricing framework to the one adopted at the Central level, during this Control Period, or afterwards, whenever the Commission may deem appropriate.”

50. For adoption of the POC methodology at the State level, several Intra-State level transmission system data inputs are required. STU should initiate preparatory actions to explore the introduction of PoC based Transmission pricing methodology at the Intra-State level in line with Tariff Policy principles and similar to the CERC methodology for Inter-State transmission pricing. In this context, the Commission, in its Order in Case 56 of 2013 had directed STU to undertake a detailed study for introduction of the POC methodology in Maharashtra, The study was to be completed within six months. The study is to cover the preparatory work required for implementation of the PoC methodology, the data requirements, timeline, and the approach and methodology for collection and collation of the data. STU was also asked to consult with the Transmission Licensees, SLDC and TSUs. STU has initiated the study. At its request for more time, the Commission, vide letter dated 9 December, 2013, has asked STU to submit its study by June, 2015. Earlier this month, the STU informed the Commission that it has appointed the Indian Institute of Technology, Mumbai to carry out the study and apprised it of the key activities already undertaken. STU has also sought a further extension of 3 months. The Commission has noted the progress made so far, and directs STU to submit its report by 15 November, 2014.

II **Applicability of Order**

51. This Order shall be applicable with effect from 1 September, 2014. The Transmission Tariff approved in this Order shall remain in effect till any subsequent revision during the mid-term or final performance review.

Sd/-
(Azeez M. Khan)
Member

Sd/-
(Vijay L. Sonavane)
Member

Sd/-
(Chandra Iyengar)
Chairperson