

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@mercindia.org.in
Website: www.mercindia.org.in

Case No. 86 of 2006

IN THE MATTER OF

**Determination of Transmission Tariff for Intra-State Transmission System (InSTS)
for the first year of the MYT Control Period (FY 2007-08 to FY 2009-10)**

Dr Pramod Deo, Chairman
Shri A. Velayutham, Member
Shri S.B.Kulkarni, Member

ORDER

Dated: April 2, 2007

The Commission had issued an Order on June 27, 2006 in the matter of development of Transmission Pricing Framework for the State of Maharashtra and other related matters (Case 58 of 2005). As per clause 4.2 of the said Order, the Commission is required to determine Transmission Tariff to be applicable for use of Intra-State Transmission system (InSTS) in accordance with the principles outlined under said Order. The relevant extract of the said Order is as under:-

- 4.2.1 *“Intra-State transmission system shall comprise composite transmission network of MSETCL, TPC, REL and any other transmission licensee, in future.*
- 4.2.2 *Each transmission licensee including existing transmission licensees (i.e. MSETCL, TPC and REL) shall submit its ARR Petition to the Commission in accordance with the MERC (Terms and conditions of Tariff) Regulations, 2005 and seek its approval thereof.*
- 4.2.3 *Aggregate of Annual Revenue Requirement of all licensees, as approved by the Commission, shall form “Pooled Cost” (or hereinafter termed as “Total Transmission System Cost – TTSC) of the intra-State transmission system, to be recovered from the Transmission System Users (TSUs).*



- 4.2.4 *The 'Base Transmission Capacity Rights' for 'capacity utilisation' shall be denominated in terms of 'kW'. The TTSC shall be shared amongst the TSUs based on the 'contribution to co-incident peak demand' (CPD) by each TSU. However, the Commission recognises that until adequate metering arrangement is put in place, it may not be possible to ascertain 'CPD' by various TSUs. Hence, for FY2006-07, until adequate metering arrangement is put in place, transmission tariff shall be based on share of 'peak demand' of concerned TSU during each month of the previous year. For this purpose, average of such 12-monthly contributions to peak demand by each TSU shall form basis for arriving at 'Base TCR' and overall share/contribution of each TSU thereof. The Commission **directs** the licensees to submit data pertaining to their peak demand for consumption in their area during each month for FY2005-06 within two weeks from date of issue of this Order. Further, the Commission re-iterates that existing TSUs will have to execute Bulk Power Transmission Agreement with concerned transmission licensee in accordance with Regulation 5.1 and Regulation 5.2 of MERC (Transmission Open Access) Regulations, 2005.*
- 4.2.5 *Accordingly, 'Base Transmission Tariff' for each financial year shall be derived as 'TTSC' of intra-State transmission system divided by 'Base Transmission Capacity Rights' and denominated in terms of "Rs/kW/month" or "Rs/MW/day"*

2. Accordingly, the Commission had determined Transmission Tariff for Intra-State Transmission System (InSTS) under its Order dated September 29, 2006 (Case 31 of 2006) for FY 2006-07 which is valid upto March 31, 2007.

3. Subsequently, the transmission licensees in the State of Maharashtra, viz., Maharashtra State Electricity Transmission Co. Ltd (MSETCL), The Tata Power Company Ltd (TPC-T) and Reliance Energy Ltd (REL-T) filed their Multi-Year Tariff (MYT) applications for approval of their annual revenue requirement over the first Control Period from FY 2007-08 to FY 2009-10.

4. The Commission has determined the Annual Revenue Requirement of the above transmission licensees over the first Control Period upon detailed scrutiny of their MYT applications and following due regulatory process vide its Orders dated April 2, 2007 in respect of MSETCL (Case 67 of 2006), TPC-T (Case 71 of 2006) and REL-T (Case 73 of 2006).

5. In view of the above, the Commission hereby determines Transmission Tariff for Intra-State Transmission System (InSTS) for the first year of the MYT Control Period from FY 2007-08 to FY 2009-10 as under:



A] Total Transmission System Cost (TTSC) for InSTS for the first Control Period (FY 2007-08 to FY 2009-10)

6. The Annual Revenue Requirement approved by the Commission over the first Control Period for MSETCL, TPC-T and REL-T is summarised in the Table below, which amounts to approval of **Total Transmission System Cost (TTSC) of Rs 1800.40 Crore (FY 2007-08), Rs 1916.15 Crore (FY 2008-09) and Rs 1991.70 Crore (FY 2009-10)** for the intra-State transmission system (InSTS):

Transmission Licensee	(Commission)			
	FY 2007-08	FY 2008-09	FY 2009-10	TOTAL over MYT period
MSETCL	1546.95	1647.47	1700.09	4894.51
TPC-Transmission	211.72	225.41	247.32	684.45
REL-Transmission	41.73	43.27	44.30	129.30
TTSC (InSTS)	1800.40	1916.15	1991.70	5708.26

B] Co-incident Peak Demand and Base Transmission Capacity Utilisation

7. The Commission, under its Transmission Pricing Framework Order dated September 29, 2006 (Case 58 of 2005) had specified that while for FY 2006-07 base transmission capacity utilisation would be based on 'non-coincident peak demand' of transmission system users (TSUs) in the absence of adequate metering arrangements, such transmission capacity utilisation should actually be based on 12-monthly average of contribution to 'co-incident peak demand' by each transmission system user.

8. As per MSETCL's submission, the Commission notes that installation of meters covering all interface points (G<>T and T<>D) over intra-State transmission system would be completed by September 30, 2007. However, MSETCL has provided month-wise co-incident peak demand details for all licensees (TSUs) from April 2005 to October 2006 in its MYT Petition based on certain assumptions. The co-incident demand data for distribution licensees within Mumbai is based on recorded meter readings for energy supply received at their periphery (T<>D interface), whereas co-incident demand data for MSEDCL is derived based on ex-bus generation of State Generating Stations as well as power purchase from Central Generating Stations and other sources. Further, above information is based on information as captured by SCADA for the purpose of system operations and monitoring and could be at variance as compared to demand data as recorded by energy meters. However, in the absence of more reliable source of information, the Commission has considered above information as submitted by MSETCL for determination of month-wise 'co-incident peak demand' for further computations.



9. The Commission recognises that there are several constraints in arriving at contribution to Co-incident Peak Demand by each TSU of the intra-State Transmission system, as Peak Demand of each transmission system user will have to be referred to common reference point (say, ex-generation bus), after taking into account transmission losses. For this purpose, the Commission has considered the composite transmission loss of 4.85% as already approved by the Commission.

10. Accordingly, the Commission has approved Base Transmission Capacity of **11827 MW** based on average co-incident peak demand of Transmission System Users for the first Control Period for use of Intra-State Transmission System by various TSUs (distribution licensees), based on 12-monthly average Coincident Peak Demand from November 2005 to October 2006 as summarized in the following Table:

Months	Contribution to Coincident Peak Demand by each TSU				
	MSEDCL	TPC-D	REL-D	BEST-D	SUM
	(MW)	(MW)	(MW)	(MW)	(MW)
Nov 05	9534	370	1217	656	11777
Dec 05	9622	294	1081	582	11579
Jan 06	9342	364	1167	618	11491
Feb 06	9390	323	1250	637	11600
Mar 06	9730	346	1262	644	11982
Apr 06	9888	362	1233	650	12133
May 06	9708	389	1266	655	12018
Jun 06	9458	319	1284	625	11686
Jul 06	8636	385	1270	643	10934
Aug 06	9598	329	1272	661	11860
Sep 06	9969	364	1256	600	12189
Oct 06	10177	387	1384	726	12674
Average	9588	353	1245	641	11827

C] Determination of Transmission Tariff for the first year of the MYT Control Period (FY 2007-08 to FY 2009-10)

11. In line with clause 4.2.5 of the Commission's Order for Transmission Pricing Framework and based on approved TTSC (Para 6 of this Order) and approved Base Transmission Capacity Utilisation (Para 10) of this Order, the Commission hereby determines Transmission Tariff for use of intra-State Transmission System for the first year of the MYT Control Period, i.e., FY 2007-08, as under:



Item Description	Units	FY 2007-08
TTSC	Rs Cr	1800.40
Average Coincident Peak Demand (CPD)	MW	11827
Transmission Tariff (long term)	Rs/kW/mth	126.86
Transmission Tariff (long term)	Rs/MW/day	4171
Transmission Tariff (short term)	Rs/MW/day	1042.75

12. Further, it is clarified that Transmission Tariff in case of short term open access transactions shall be 25% of that applicable for long term open access transactions as stipulated under Para 3.2.5.6 of the Commission's Order dated June 27, 2006 (Case 58 of 2005). The relevant extract of said Order is as under:

“3.2.5.6 The transmission charge in case of short term transmission open access transactions shall be denominated in Rs/MW/day or Rs/MW/Hr and shall be 25% of that applicable for long term transmission open access transactions. The short term transmission charges shall be payable for minimum 6 hours duration within a day and shall be accordingly 1/4th of short term transmission open access charge per day. The recovery from short term transmission open access charges shall be used to reduce total transmission system charge (TTSC) for the intra-State transmission system and in turn benefit long term transmission system users.”

13. Accordingly, Transmission Tariff for short term open access transactions for the first year of the MYT Control Period, i.e., FY 2007-08 shall be **Rs 1042.75 per MW per day or Rs 43.45 per MW per hour** Further, it is clarified that as stipulated under clause 3.2.5.6 of Order for Transmission Pricing Framework, the short term transmission charges shall be payable for minimum 6 hours duration within a day and shall be accordingly 1/4th of short term transmission open access charge per day. The recovery from short term transmission open access charges shall be used to reduce total transmission system charge (TTSC) for the intra-State transmission system and in turn benefit long term transmission system users.



D] Sharing of TTSC amongst Transmission System Users (TSUs)

14. The total transmission system cost (TTSC) shall be shared amongst the long term transmission system users comprising distribution licensees such as MSEDCL, TPC-D, REL-D and BEST-D in accordance with their contribution to coincident peak demand as summarised in the following Table:

Item Description	Share of CPD	% share of CPD	FY 2007-08
TSU - Distribution Licensees	(MW)	(%)	(Rs Cr)
MSEDCL	9588	81.1%	1459.52
TPC-D	353	3.0%	53.69
REL-D	1245	10.5%	189.55
BEST-D	641	5.4%	97.64
TOTAL	11827	100.0%	1800.40

15. As outlined under paragraph 23 below, this Transmission Tariff Order shall be applicable with effect from April 1, 2007, and shall be valid till March 31, 2008. The STU shall collect Transmission Tariff from Transmission System Users on monthly basis at the end of each calendar month with first monthly period commencing from April 1, 2007, in the following manner:

Item Description	FY 2007-08	
TSU - Distribution Licensees	Annual (Rs Cr)	Monthly (Rs Cr / month)
MSEDCL	1459.52	121.63
TPC-Distribution	53.69	4.47
REL-Distribution	189.55	15.80
BEST-Distribution	97.64	8.14
TOTAL	1800.40	150.03

16. It is clarified that above Transmission charges are payable by all long term transmission system 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 exceeds the allocated transmission capacity then, the same shall be governed as per MERC (Transmission Open Access) Regulations, 2005. Further, it is clarified that the usage, assignment and surrendering of un-utilised transmission capacity by transmission system user shall be governed by Regulation 9 of MERC (Transmission Open Access Regulations) 2005. The transmission



system users shall be entitled to use surplus transmission capacity through short term open access subject to payment of short term open access charges and governed by MERC (Transmission Open Access) Regulations, 2005 and other Regulations, as applicable. Additional penal charges shall be levied for excess utilisation of transmission capacity in accordance with Regulation 11.4 of MERC (Transmission Open Access) Regulations 2005.

E] Recovery of ARR of Transmission Licensees for FY 2007-08

17. As per Clause 4.2.3 and Clause 4.2.14 of the Commission’s Order for Transmission Pricing Framework (Case 58 of 2005), the ARR of transmission licensees is pooled together to form TTSC for intra-State transmission system and each transmission licensee is entitled to recover its approved ARR from the transmission tariff collected by STU from transmission system users (i.e., distribution licensees). The relevant extract of said Order is as under:

“4.2.3 Aggregate of Annual Revenue Requirement of all licensees, as approved by the Commission, shall form “Pooled Cost” (or hereinafter termed as “Total Transmission System Cost – TTSC) of the intra-State transmission system, to be recovered from the Transmission System Users (TSUs).

4.2.14 Each transmission licensee shall be entitled to recover its approved ARR from intra-State transmission system charges (InSTS charges) collected by STU.”

18. As outlined under paragraph 23 below, this Transmission Tariff Order shall be applicable with effect from April 1, 2007. The STU shall collect Transmission Tariff from transmission system users on monthly basis at the end of each calendar month with first monthly period commencing from April 1, 2007. Thus, each Transmission licensee, in turn, shall be entitled to recover its approved ARR from Transmission Tariff collected by STU on monthly basis at the end of each calendar month with first monthly period commencing from April 1, 2007, and should claim recovery of its ARR by way of raising monthly bill on STU covering its component of intra-State transmission charges in the following manner:

Transmission Licensees	Approved ARR (Rs Cr)	Monthly recovery of ARR (Rs. Crore/month)
	FY 2007-08	FY 2007-08
MSETCL	1546.95	128.91
TPC-Transmission	211.72	17.64
REL-Transmission	41.73	3.48
TTSC (InSTS)	1800.40	150.03



19. As regards due date for payment for transmission tariff by TSUs, MSEDCL under its review petition (Case 36 and 41 of 2006) had pleaded that the Commission may permit payment of monthly bill in three equal instalments in view of cashflow considerations. It had also cited the minutes of 5th Grid Co-ordination Committee meeting held on October 13, 2006, wherein all transmission licensees have agreed to the proposal of MSEDCL to stagger monthly transmission tariff payment in three instalments. The Commission disposed off MSEDCL's Review Petition vide its Order dated February 13, 2007 as not being maintainable for review and has stated that minutes of GCC cannot be taken as consent of TSUs and distribution licensees. However, the Commission permitted MSEDCL to file fresh petition seeking consent of TSUs.

20. All transmission system users shall ensure timely payment of Transmission Tariff to STU so as to enable STU for timely settlement of claims raised by transmission licensees. All payments related to transmission charges shall be due for payment within 7 days from due date. In case, 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. The Commission recognises that modalities of 'Pooling' necessitate appropriate payment security arrangement to be put in place and procedure for disbursement to settle claims of various transmission licensees, in case of shortfall in payment by any of the TSU for a particular month. The Commission is of the opinion that the Grid Co-ordination Committee (GCC) should propose a suitable payment security mechanism and procedure of payment disbursement in case of shortfall in collection in any particular month, after due consultation amongst transmission licensees and transmission system users. The GCC should propose appropriate mechanism for Commission's approval within one month from date of this Order.

F] Energy Accounting and Treatment of transmission loss

21. The Commission hereby rules that the principles enunciated under Transmission Pricing Framework Order (Case 58 of 2005) for State-wide accounting of energy over InSTS and treatment of transmission loss shall continue to be applicable over the first MYT Control Period. Further, the mechanism for accounting of transmission loss and modalities for treatment of energy exchange (over-drawal/under-drawal) amongst transmission system users including distribution licensees as elaborated under Commission's Order dated September 29, 2006 (Case 31 of 2006) and Order dated February 13, 2007 (Case 36 and 41 of 2006) shall continue to be applicable over the first MYT Control Period as well, till such time as the intra-State ABT mechanism is implemented in the State.

22. The Commission notes that even after six months from issuance of earlier Order (Case 31 of 2006) MSLDC has failed to operationalise 'centralised pooling mechanism'. The Commission expresses its dissatisfaction over the lackadaisical attitude of MSLDC in implementing 'centralised pooling mechanism', essential for financial settlement of energy exchange (over-



drawal/under-drawal) amongst distribution licensees. The Commission directs MSLDC to submit month-wise settlement statement of energy exchange (over-drawal/under-drawal) under 'centralised pooling mechanism' from October 2006 to March 2007 within one month from the date of issuance of this Order.

G1 Applicability of Order

23. This Order shall be applicable for the first Control Period under MYT regime with effect from April 1, 2007, and shall be valid till March 31, 2008. Above transmission tariff shall be reviewed at the time of annual performance review of transmission licensees based on applications as may be filed by transmission licensees.

(S B Kulkarni)
Member

(A. Velayutham)
Member

(Dr. Pramod Deo)
Chairman, MERC



(Malini Shankar)
Secretary, MERC

