

Multi Year Tariff (MYT) Petition Executive Summary Tata Power-Transmission

Case No. 185 of 2024

Lighting up Lives!



Executive Summary

1.1. Tata Power-Transmission Historical Perspective:

- 1. The Tata Power Company Limited ("Tata Power") is a company established in 1919. On 1st April, 2000, The Tata Hydro-Electric Power Supply Company Limited (established in 1910) and The Andhra Valley Power Supply Company Limited (established in 1916) were merged into Tata Power, to form one unified entity. Consequent to the merger, the Licences of the above-mentioned companies were also merged and Tata Power was granted a Licence by the Government of Maharashtra (GoM) for the supply of energy to the public in its Mumbai Licence Area and to supply energy in bulk to Distribution Licensees, vide resolution No: IEA –2001/ CR-10509/NRG-1, dated 12th July, 2001.
- 2. The above-mentioned Licences were valid till 15th August, 2014. Thereafter, an application was made by the Transmission Business of Tata Power (Tata Power-T) for grant of Transmission Licence in Case No. 112 of 2014. The Hon'ble Commission on 14th August, 2014 granted Transmission Licence to Tata Power for the Transmission Lines and the Receiving Stations (or Transmission Receiving Stations) located in and outside the Mumbai area, owned by Tata Power or proposed to be constructed and owned by Tata Power in future and forming part of the Intra-State Transmission System of Maharashtra for a period of 25 years effective from 16th August, 2014.
- 3. The Hon'ble Commission had amended the Transmission Licence No. 1 of 2014 (First Amendment) of Tata Power-T by their Order in Case No. 137 of 2016 dated 1st August, 2018.
- Subsequently the Hon'ble Commission has amended the Transmission Licence No. 1 of 2014 (Second Amendment) of Tata Power-T by their Order in Case No. 249 of 2019 dated 11th March, 2021.



5. Further, the Hon'ble Commission has amended the Transmission Licence No. 1 of 2014 (Third Amendment) of Tata Power-T by their Order in Case No. 89 of 2022 dated 30th May, 2023 and thereafter amended for Fourth Amendment through Order in Case No. 13 of 2024 dated 20th November, 2024.

1.2. Operations of Tata Power Transmission

- 6. The Transmission Business of Tata Power (Tata Power-T) is one of the Transmission Licensees of Maharashtra and has completed over 100 years of operations in Mumbai. During these years of operation, Tata Power-T has continually ensured that a reliable, technologically advanced and best-in-class transmission network is available for the consumers in and around Mumbai.
- 7. Further, Tata Power-T has been a partner of the State Transmission Utility (STU) to ensure expeditious completion of projects to maintain grid stability, reliability and capacity enhancement of the transmission network, overcoming the severe right of way issues, legal issues, expediting the statutory approvals, working out the best fit solutions to overcome topographical issues of hill & forest crossing, CRZ restrictions, Railway crossings, Flight path restrictions etc.
- 8. A Transmission network forms the vital link between the Generating stations and load centres for distribution of electricity to the consumers. A Transmission Business unit comprises of Receiving Stations and Transmission Lines. The Receiving Stations of Tata Power-T are located in and around Mumbai. Transmission Lines at various high voltages including EHV underground cables / lines are spread in and around Mumbai and are connected to Thermal as well as Hydro-electric power plants of Tata Power in Maharashtra. The Receiving stations and Transmission Line network including EHV cables are operated and maintained by skilled & trained engineers and staff of Tata Power-T.



- 9. The Transmission system for Mumbai licence area is provided with "Islanding" facility which ensures isolation of Mumbai grid in case of grid failure outside Mumbai thereby ensuring uninterrupted power supply to Mumbai consumers.
- 10. Latest technology is deployed for protection of key elements of transmission network such as Lines, switchgear and transformers etc. The Transmission line network of Tata Power-T is around 1315 circuit km and comprises of 110 kV and 220 kV overhead lines and Underground cables with N-1 support. There are 29 Transmission Receiving Stations installed, with a combined Transformation capacity of 11119 MVA as on date of filing the MYT Petition.
- 11. Keeping safety of people at utmost priority, Tata Power-T has always kept pace with technology change and load growth. The enhancement of capacity of transmission lines and transformers, addition of switchgear, introduction of updated operating IT systems, replacement of long-standing assets before their failure are well planned and engineered in advance. The same is implemented to ensure highest level of safety in operation and reliability of the transmission network.
- 12. In addition to local & manual operations of transmission lines and equipment, Tata Power has installed "Supervisory Control and Data Acquisition System" (SCADA) across the transmission network which is operated by Power System Control Centre (PSCC) for real time remote monitoring and control of its all receiving stations. This facilitates faster operations and reduction in the downtime to Transmission System Users (TSUs) in case of power shutdowns through remote operations.
- 13. Tata Power-T is committed to Safety, Social Responsibility and Environment Sustenance. Various initiatives on these fronts are being successfully organised and implemented every year at various operating locations in Mumbai.
- 14. Tata Power-T strives to manage disruptive incidents with utmost care and maximum speed with focus on saving human life followed by environmental damage and then addressing the economic loss. A Disaster Management Plan and Disaster Management



Team is in place for handling emergencies during disaster such as earthquake, flooding, fire, catastrophic failure of major equipment, riots and terrorist attack.

15. The broad synopsis of the extent and spread of the transmission system of Tata Power-T is as follows:

Table 1: Tata Power-T Network Details

Parameters	FY 2022-23	FY 2023-24	FY 2024-25
rarameters	(Actual)	(Actual)	(Estimated)
Transmission Line Length (Ckt-Km.)	1268.59	1315.37	1317.52
No. of Substations (Nos.)	29	29	29
220 kV	13	13	13
110 kV	16	16	16
Total No. of Bays (Nos.)	1567	1604	1648
>66 kV and $<$ 400 kV	493	496	491
66 kV and less	1074	1108	1157
Transformation Capacity (MVA)	10368.5	10618.5	11118.5
220 kV	5130	5380	5880
110 kV	5239	5239	5239

16. Transmission Line Availability - Tata Power-T has been achieving Grid Availability equal to or more than 99.45% consistently over the years. Higher Grid Availability results in higher level of reliability of power supply to TSUs and consequently to the end consumers in Mumbai Licence Area. The Grid Availability at Tata Power-T is achieved through co-ordination with TSUs for planned outages, effective preventive maintenance of lines and equipment to avoid forced outages and repeat outages.



 Table 2: Transmission Grid Availability of Tata Power-T Network

cial Year	Tata Power-T Grid Availability in %
FY 2019-20	99.75%
FY 2020-21	99.89%
FY 2021-22	99.87%
FY 2022-23	99.92%
FY 2023-24	99.92%

1.3. Filings under submitted MYT Petition

- 17. Tata Power-T, in this petition, has presented the following for different years as given below:
 - Truing up of FY 2022-23 and FY 2023-24 as per MERC (MYT) Regulations, 2019
 - Provisional Truing Up for FY 2024-25 as per MERC (MYT) Regulations, 2019
 - Gap / (Surplus) at the end of FY 2024-25
 - ARR Projections from FY 2025-26 to FY 2029-30 as per MERC (MYT) Regulations,
 2024
 - Status of Compliance to Regulations and Orders

1.4. Capitalisation

18. The actual capital expenditure for FY 2022-23, FY 2023-24 and estimated capital expenditure for FY 2024-25 and the projected capital expenditure from FY 2025-26 to FY 2029-30 for Tata Power-T is as shown in the Tables below:

Table 3: Capital Expenditure

	Capital Expenditure in Rs. Crore					
Category	FY 2022-23	FY 2023-24	FY 2024-25			
	(Actual)	(Actual)	(Estimated)			
DPR	464.29	695.14	1367.12			
Non-DPR	90.59	89.26	90.45			
Total	554.88	784.40	1457.57			



Cata	Capital Expenditure in Rs. Crore (Projection)					
Category	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30	
DPR	4106.00	3161.55	953.00	1215.00	1290.00	
Non-DPR	0.00	15.00	0.00	0.00	0.00	
Total	4106.00	3176.55	953.00	1215.00	1290.00	

19. The actual capitalisation for FY 2022-23, FY 2023-24 and estimated capitalisation for FY 2024-25 and the projected capitalisation from FY 2025-26 to FY 2029-30 for Tata Power-T is as shown in the Tables below:

Table 4: Capitalisation

Category	Capitalisation in Rs. Crore					
	FY 2022-23 FY 2023-24 FY 2024-25					
	(Actual)	(Actual)	(Estimated)			
DPR	738.56	648.26	474.24			
Non-DPR	103.38	97.52	91.08			
Total	841.94	745.78	565.33			

Category	Capitalisation in Rs. Crore						
	FY 2025-26 FY 2026-27 FY 2027-28 FY 2028-29 FY 2029						
DPR	2337.00	4393.55	2306.00	615.00	2090.00		
Non-DPR	0.00	15.00	0.00	0.00	0.00		
Total	2337.00	4408.55	2306.00	615.00	2090.00		

- 20. The major projects to be executed from FY 2025-26 to FY 2029-30 are being proposed mainly under follows major categories in line with the latest 10 Year plan published by STU:
 - a. Installation of new EHV Substations
 - b. Installation/replacement of Power Transformers
 - c. Installation of interconnections, Reactors for system reliability requirements
 - d. Replacement of aged Oil filled EHV cables with XLPE cable.
 - e. Conversion of AIS to GIS for operational Reliability.
 - f. Installation of Centralized BESS



1.5. Truing up of FY 2022-23

21. The break-up of expenditure for FY 2022-23 for Tata Power-T along with the adjustments on account of sharing of gains and losses is as follows:

Table 5: Net Annual Transmission Charges and Gap for FY 2022-23

Rs. Crores

			FY 2022-23		
Sr.	Particulars -	(a) 218.84 223.60 130.96 - 16.15 - 12.65 602.19	April-March	True-Up	
No.	rarucuiars	MIK Order	(Audited)	requirement	
		(a)	(b)	(c) = (b)-(a)	
1	Operation & Maintenance Expenses	218.84	264.21	45.37	
2	Depreciation Expenses	223.60	220.13	(3.47)	
3	Interest on Loan Capital	130.96	142.42	11.47	
3.1	Refinancing and Other Finance Charges	-	-	-	
4	Interest on Working Capital and on Consumer	16.15	5.36	(10.79)	
	Security Deposits	10.13	5.50	(10.79)	
5	Income Tax	-	-	-	
6	Contribution to contingency reserves	12.65	12.71	0.06	
7	Total Revenue Expenditure	602.19	644.83	42.64	
8	Add: Return on Equity Capital	240.49	269.07	28.58	
9	Aggregate Revenue Requirement	842.68	913.90	71.22	
10	Less: Non Tariff Income	43.68	51.32	7.64	
11	Aggregate Revenue Requirement from	799.01	862.58	63.58	
11	Transmission	////	002.50	05.50	
12	Revenue from Transmission Tariff	816.23	816.03	-0.19	
13	Revenue Gap/(Surplus) [17-18]	-17.22	46.55	63.77	

22. As can be seen from the Table above, the Gap for FY 2022-23 stands at **Rs. 46.55 Crores** which is computed as the difference between the Revenue earned during FY 2022-23 and the expenditure of FY 2022-23 alone.

1.6. Truing up of FY 2023-24

23. The break-up of expenditure for FY 2023-24 for Tata Power-T along with the adjustments on account of sharing of gains and losses is as follows:



Table 6: Net Annual Transmission Charges and Gap for FY 2023-24

			FY 2023-24	
Sr.	Particulars	MTR Order	April-March	True-Up
No.	Tarticulars .	(Approved)	(Audited)	requirement
		(a)	(b)	(c) = (b)-(a)
1	Operation & Maintenance Expenses	228.38	272.81	44.43
2	Depreciation Expenses	252.02	254.45	2.43
3	Interest on Loan Capital	149.45	190.88	41.43
3.1	Refinancing and Other Finance Charges	-	0.22	0.22
4	Interest on Working Capital and on Consumer Security Deposits	18.29	20.50	2.20
5	Income Tax	-	-	-
6	Contribution to contingency reserves	14.71	14.68	(0.03)
7	Total Revenue Expenditure	662.85	753.54	90.69
8	Add: Return on Equity Capital	269.69	304.17	34.48
9	Aggregate Revenue Requirement	932.54	1,057.71	125.16
10	Less: Non Tariff Income	48.04	34.39	(13.65)
11	Add: Impact of Review Order	4.78	4.78	-
12	Add: Reimbursement towards 400 kV Kharghar Vikhroli	54.87	54.87	-
13	Add: Past Recoveries	(18.46)	(18.46)	-
17	Aggregate Revenue Requirement from Transmission	925.70	1,064.51	138.82
18	Revenue from Transmission Tariff	925.70	940.79	15.09
19	Revenue Gap/(Surplus) [17-18]	0.00	123.72	123.72

24. As can be seen from the above Table, there is a Gap of **Rs. 123.72 Crores** for FY 2023-24 which is computed as the difference between the Revenue earned during FY 2023-24 and the expenditure of FY 2023-24 alone.



1.7. Provisional Truing up of FY 2024-25

25. The provisional Gap / (Surplus) for FY 2024-25 is worked out as given below:

Table 7: Net Annual Transmission Charges and Gap for FY 2024-25

			FY 2024-25		
Sr.	D 41 1	MTR Order	April-March	True-Up	
No.	Particulars	(Approved)	(Audited)	requirement	
		(a)	(b)	(c) = (b)-(a)	
1	Operation & Maintenance Expenses	239.25	261.37	22.12	
2	Depreciation Expenses	268.97	280.72	11.75	
3	Interest on Loan Capital	151.68	208.09	56.41	
3.1	Refinancing and Other Finance Charges	-	-	-	
4	Interest on Working Capital and on Consumer	18.92	21.36	2.44	
	Security Deposits	16.92	21.30	2.44	
_5	Income Tax	-	-	-	
6	Contribution to contingency reserves	16.13	16.48	0.35	
7	Total Revenue Expenditure	694.94	788.02	93.08	
8	Add: Return on Equity Capital	287.12	301.76	14.64	
9	Aggregate Revenue Requirement	982.06	1,089.78	107.72	
10	Less: Non Tariff Income	52.85	34.39	(18.46)	
13	Add: Past Recoveries	(3.52)	(3.52)	-	
17	Aggregate Revenue Requirement from	925.70	1.051.97	126.17	
1/	Transmission	923.70	1,051.87	120.17	
18	Revenue from Transmission Tariff	925.70	925.71	0.01	
19	Revenue Gap/(Surplus) [17-18]	0.00	126.16	126.16	

26. As can be seen from the Table above, there is a Gap of **Rs. 126.16 Crores**, computed as the difference between the Revenue projected for FY 2024-25 and the projected expenditure of FY 2024-25 alone.

1.8. ARR including the Past Recoveries

27. Considering the actual Gap / (Surplus) of FY 2022-23, FY 2023-24, Provisional Gap / (Surplus) of FY 2024-25, the total amount of past recoveries for future Tariff is presented below:



Table 8: Amount of past recoveries for future tariff

Rs. Crores

					TG. Crores
Particulars		FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
Opening Balance	A		46.55	187.49	313.65
Gap/(Surplus) Addition during	В	46.55	123.72	126.16	-
the year					
Provisional Revenue	C	-	(17.22)	-	-
Gap/(Surplus) of FY 2022-23					
adjusted in ARR of FY 2023-					
24 in MYT Order 217 of 2022					
Interest on past recovery	D				56.72
Closing Balance	E=(A+B-C+D)	46.55	187.49	313.65	370.37
Total of past recoveries	F=(D+E)				370.37
in FY 2025-26					

28. The Interest computation is represented in the Table below:

Table 9: Interest computation for past recoveries

Rs. Crores

Particulars		FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
Carrying Cost Rate	A	9.30%	10.07%	10.50%	10.50%
Opening Balance	В	-	46.55	187.49	313.65
Addition during the year	С	46.55	140.94	126.16	(313.65)
Less Incentive	D	-	-	-	-
Closing Balance	E=(B+C-D)	46.55	187.49	313.65	-
Average Balance	F= Average (A,E)	23.28	117.02	250.57	156.83
Carrying Cost	G=A*F	2.16	11.78	26.31	16.47
Total Carrying Cost #	Н				56.72

[#] Summation of Carrying Cost from FY 2022-23 to FY 2025-26

1.9. Aggregate Revenue Requirement Projections from FY 2025-26 to FY 2029-30

29. Based on the projections on the various elements given in the submitted petition and considering the Gap / (Surplus) of the previous years as computed in the previous section the Aggregate Revenue Requirement of Tata Power-T from FY 2025-26 to FY 2029-30 is as given below:



Table 10: Aggregate Revenue Requirement Projections from FY 2025-26 to FY 2029-30

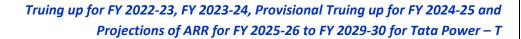
Rs. Crores

Particulars	FY 2025-	FY 2026-	FY 2027-	FY 2028-	FY 2029-
	26	27	28	29	30
	(Proposed)	(Proposed)	(Proposed)	(Proposed)	(Proposed)
O&M Expenditure	300.61	340.42	380.36	412.42	445.72
Interest on Long-term Loan	271.60	447.39	609.76	643.51	665.23
Interest on Working Capital	33.53	37.29	49.05	54.41	57.66
Other Finance Charges	0.00	0.00	0.00	0.00	0.00
Depreciation	342.31	480.59	618.23	678.11	733.56
Return on Equity	401.57	558.40	714.52	782.43	845.32
Contribution to Contingency Reserves	18.03	23.87	34.89	40.66	42.20
Annual Transmission Charges	1367.64	1887.96	2406.82	2611.54	2789.68
Less: Non Tariff Income	36.11	37.92	39.81	41.80	43.89
Total Transmission Charges	1331.53	1850.05	2367.01	2569.73	2745.79
Impact of Review Order	66.97				
Impact of past disallowed capitalisation re	8.46				
Past Recovery upto FY 2024-25	370.37				
Total ARR	1777.34	1850.05	2367.01	2569.73	2745.79

1.10. Prayers to the Hon'ble Commission

In view of the above, the Petitioner respectfully prays that the Hon'ble Commission may:

- Approve the Truing-up of FY 2022-23, FY 2023-24 and Provisional Truing-up of FY 2024-25 and past Gap / (Surplus) as worked out in this Petition in accordance with the MYT Regulations, 2019;
- Approve the Projections of Aggregate Revenue Requirement for FY 2025-26 to FY 2029-30 as worked out in this Petition in accordance with MYT Regulations, 2024;
- Allow the past recovery as worked out in the Petition on account of





- Review Order dated 7th March 2024 in Case No. 91 of 2023;
- Capitalisation disallowed in previous Tariff Orders but as mentioned as reinstated in this Petition;
- Condone any inadvertent omissions / errors / rounding off differences / shortcomings and permit Tata Power- T to add / change / modify / alter this filing and make further submissions as may be required at a future date;
- Pass such further and other orders, as the Hon'ble Commission may deem fit and proper,
 keeping in view the facts and circumstances of the case.

-Sd-

(Vidyadhar H Wagle)

Chief-Regulatory (WR)

The Tata Power Company Limited-Transmission