

# **Executive Summary**

## **Mid Term Review (MTR) Petition Tata Power-Transmission**

**Case No. 217 of 2022**

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 1<sup>st</sup> 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 12<sup>th</sup> July, 2001.
2. The above-mentioned Licences were valid till 15<sup>th</sup> 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 14<sup>th</sup> 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 16<sup>th</sup> 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 1<sup>st</sup> August, 2018.
4. 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 11<sup>th</sup> March, 2021.

## 1.2. Tata Power Transmission Network and Grid Availability

5. 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 2019-20 * (Actual)	FY 2020-21* (Actual)	FY 2021-22* (Actual)	FY 2022-23 (Estimated)	FY 2023-24 (Revised)	FY 2024-25 (Revised)
Transmission Line Length (Ckt-Km.)	1218	1236	1241	1259	1265	1269
Total No. of Bays (Nos.)	1458	1517	1540	1548	1597	1626
>66 kV and <400 kV	426	460	466	473	513	520
66 kV and less	1032	1057	1074	1075	1084	1106

\*As per latest Transmission Licence Amendment Application of Tata Power-T

6. **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 Transmission System Users (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**

Financial Year	Tata Power-T Grid Availability in %
FY 2017-18	99.48
FY 2018-19	99.50
FY 2019-20	99.75
FY 2020-21	99.89
FY 2021-22	99.87

### 1.3. Filings under MTR Petition

7. Tata Power-T, in this Petition, has presented the following for different years as given below:
- Truing up of FY 2019-20 as per MERC (MYT) Regulations, 2015
  - Truing up of FY 2020-21 and FY 2021-22 as per MERC (MYT) Regulations, 2019
  - Provisional Truing Up for FY 2022-23 as per MERC (MYT) Regulations, 2019
  - Gap / (Surplus) at the end of FY 2021-22
  - Revised Projections ARR for FY 2023-24 to FY 2024-25 as per MERC (MYT) Regulations, 2019
  - Status of Compliance to Directives
  - ARR including Past Recoveries
  - Deemed closure of 400 kV Vikhroli Project - Balance Claims
  - Impact of Review Order in Case No. 95 of 2020

### 1.4. Capital Expenditure and Capitalisation

8. The actual capital expenditure and capitalization for FY 2019-20, FY 2020-21 and FY 2021-22, estimated capital expenditure and capitalization for FY 2022-23 and the revised capital expenditure and capitalization from FY 2023-24 to FY 2024-25 for Tata Power-T are as shown in the Tables below:

**Table 3: Capital Expenditure**

Category	Capital Expenditure (Rs. Crore)					
	FY 2019-20 (Actual)	FY 2020-21 (Actual)	FY 2021-22 (Actual)	FY 2022-23 (Estimated)	FY 2023-24 (Revised)	FY 2024-25 (Revised)
DPR	509.01	425.54	571.69	520.87	790.27	485.34
Non-DPR	27.61	36.61	63.11	90.87	6.30	21.82
<b>Total</b>	<b>536.62</b>	<b>462.15</b>	<b>634.80</b>	<b>611.74</b>	<b>796.57</b>	<b>507.16</b>

**Table 4: Capitalisation**

Category	Capitalisation (Rs. Crore)					
	FY 2019-20 (Actual)	FY 2020-21 (Actual)	FY 2021-22 (Actual)	FY 2022-23 (Estimated)	FY 2023-24 (Revised)	FY 2024-25 (Revised)
DPR	368.54	662.22	365.29	747.49	672.61	660.34
Non-DPR	37.63	38.12	59.66	94.20	0.00	15.00
<b>Total</b>	<b>406.17</b>	<b>700.34</b>	<b>424.95</b>	<b>841.69</b>	<b>672.61</b>	<b>675.34</b>

9. The Capex and Capitalization for FY 2023-24 and FY 2024-25 is based on projects to be executed under following major categories:

- a. Installation of new EHV Substations
- b. Installation 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.

### **1.5. Truing up of FY 2019-20**

10. The break-up of expenditure for FY 2019-20 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 2019-20**

*Rs. Crores*

Sr.	Particulars	Approved Figures of FY 2019-20	Entitle ment as per the Regulatio ns	Efficiency Gains / (Loss) from Controllable factors shared with Consumers	Uncontrol lable Factors	Net Entitlement after Impact of Gains / (Loss) from Controllabl e factors
<b>I</b>	<b>Revenue</b>					
	-Transmission Charges	703.20	703.72			703.72
	- Less Cash Discount		-0.66			-0.66
	- Add Non Tariff Income	12.89	14.98			14.98
<b>II</b>	<b>Total Revenue</b>	<b>716.09</b>	<b>718.04</b>			<b>718.04</b>
<b>II</b>	<b>Expenditure</b>					
1	Operation & Maintenance Expenses	216.09	221.46	-1.03	10.53	233.03
1.1	Energy Charges for EHV Aux. Consumption	14.03	12.13			12.13
2	Depreciation	155.52	150.03			150.03
3	Int. on Long-term Loan Capital	109.64	98.57			98.57
4	Interest on Working Capital	13.58	14.01	3.46		10.55
5	Refinancing and Other Finance Charges	0.00	3.22			3.22
6	Incentive	0.00	5.58			5.58
7	Contingency Reserve	9.08	9.15			9.15
8	Income Tax	33.40	36.34			36.34
9	Return on Equity	197.71	193.62			193.62
<b>II</b>	<b>Total Expenditure</b>	<b>749.06</b>	<b>744.11</b>			<b>752.21</b>
<b>III</b>	<b>Pure Gap / (Surplus) for FY 2019-20 (II - I)</b>	<b>32.95</b>				<b>34.17</b>

11. As can be seen from the Table above, the Gap for FY 2019-20 stands at **Rs. 34.17 Crores** which is computed as the difference between the Revenue earned during FY 2019-20 and the expenditure of FY 2019-20 alone.

### 1.6. Truing up of FY 2020-21

12. The break-up of expenditure for FY 2020-21 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 2020-21**

*Rs. Crores*

Sr. No.	Particulars	Approved Figures of FY 2020-21	Entitlement as per the Regulations	Efficiency Gains / (Loss) from Controllable factors shared with Consumers	Uncontrollable Factors	Net Entitlement after Impact of Gains / (Loss) from Controllable factors
<b>I</b>	<b>Revenue</b>					
	-Transmission Charges	636.60	636.60			637.12
	- Less Cash Discount		-0.85			-0.85
	- Non Tariff Income	13.58	10.30			23.88
<b>I</b>	<b>Total Revenue</b>	<b>650.18</b>	<b>646.05</b>			<b>660.15</b>
<b>II</b>	<b>Expenditure</b>					
1	Operation & Maint. Expenses	171.94	177.31	-22.88	0.00	200.19
1.1	Energy Charges for EHV Aux. Consumption	14.02	7.84			7.84
2	Depreciation	176.46	179.87			179.87
3	Int. on Long-term Loan Capital	128.05	108.70			108.70
4	Interest on Working Capital	13.14	11.61	1.53		10.09
5	Other Finance Charges	0.00	0.15			0.15
6	Contingency Reserve	10.64	10.13			10.13
7	Return on Equity	243.43	264.85			264.85
<b>II</b>	<b>Total Expenditure</b>	<b>757.68</b>	<b>760.47</b>			<b>781.82</b>
<b>III</b>	<b>Pure Gap / (Surplus) for FY 2020-21 (II - I)</b>					<b>121.67</b>

13. As can be seen from the above Table, there is a Gap of **Rs. 121.67 Crores** for FY 2020-21 which is computed as the difference between the Revenue earned during FY 2020-21 and the expenditure of FY 2020-21 alone.

### 1.7. Truing up of FY 2021-22

14. Subsequent to the issuance of MYT Order of Tata Power-T, the Hon'ble Commission while issuing its Order dated 11<sup>th</sup> March 2021, on Application of Tata Power-T for 2<sup>nd</sup> Amendment of its Transmission Licence in Case No. 249 of 2019 has approved the transfer of certain assets from Generation and Distribution Business of Tata Power to the Transmission Business of Tata Power.
15. In view of the above, Tata Power-T has completed the transfer of the Assets from its Generation and Distribution Business. Total GFA transferred to Tata Power-T comprises of GFA worth Rs. 47.08 Crores and Rs. 5.37 Crores from Tata Power-G and Tata Power-D respectively.
16. As a result, the closing levels of GFA, Regulatory Equity and Loan of FY 2020-21 as worked out in above section, have been revised to arrive at revised Opening levels of GFA, Regulatory Equity and Loan of FY 2021-22 including the impact of Transfer of Assets as shown in the Table below:

**Table 7: Revised Opening GFA, Equity and Loan for FY 2021-22**

*(Rs. Crores)*

Particulars	Closing of FY 2020-21	Addition due to Transfer	Revised Opening for FY 2021-22
GFA	4726.08	52.46	4778.54
Regulatory Equity	1509.90	15.74	1525.64
Loan	1548.08	15.32	1563.40

17. Tata Power-T for the computation of Truing up for FY 2021-22 has considered revised Opening GFA, Equity and Loan as mentioned in above paragraph.
18. Accordingly, The break-up of expenditure for FY 2021-22 for Tata Power-T along with the adjustments on account of sharing of gains and losses is as follows:



**Table 8: Net Annual Transmission Charges and Gap for FY 2021-22**

*Rs. Crores*

Sr.	Particulars	Approved Figures of FY 2021-22	Entitlement as per the Regulations	Efficiency Gains / (Loss) from Controllable factors shared with Consumers	Uncontrollable Factors	Net Entitlement after Impact of Gains / (Loss) from Controllable factors
<b>I</b>	<b>Revenue</b>					
	-Transmission Charges	782.48				782.52
	- Less Cash Discount	0.00				0.94
	- Non Tariff Income	14.38				30.08
<b>II</b>	<b>Total Revenue</b>	<b>796.86</b>				<b>811.66</b>
<b>II</b>	<b>Expenditure</b>					
1	Operation & Maint. Expenses	178.88	202.78	-18.15	56.66	277.59
1.1	Energy Charges for EHV Aux. Consumption	14.02	13.47			13.47
2	Depreciation	188.12	202.85			202.85
3	Int. on Long-term Loan Capital	130.25	119.63			119.63
4	Interest on Working Capital	15.36	14.21	1.96		12.25
5	Other Finance Charges	0.00	0.16			0.16
6	Contingency Reserve	11.74	11.95			11.95
8	Return on Equity	258.47	297.31			297.31
<b>II</b>	<b>Total Expenditure</b>	<b>796.86</b>	<b>862.35</b>			<b>935.20</b>
<b>III</b>	<b>Pure Gap / (Surplus) for FY 2021-22 (II - I)</b>	<b>0.00</b>				<b>123.54</b>

19. As can be seen from the above Table, there is a Gap of **Rs. 123.54 Crores** for FY 2021-22 which is computed as the difference between the Revenue earned during FY 2021-22 and the expenditure of FY 2021-22 alone.

### 1.8. Provisional Truing up of FY 2022-23

20. The provisional Gap / (Surplus) for FY 2022-23 is worked out as per MYT Regulations, 2019 as given below:

**Table 9: Net Annual Transmission Charges and Gap for FY 2022-23**

*Rs. Crores*

Sr. No.	Particulars	Approved Figures of FY 2022-23	Net Entitlement after Impact of Gains / (Loss) from Controllable factors
<b>I</b>	<b>Revenue</b>		
	-Transmission Charges	816.21	816.24
	- Less Cash Discount	0.00	0.00
	- Non Tariff Income	15.21	30.08
<b>II</b>	<b>Total Revenue</b>	<b>831.42</b>	<b>846.32</b>
<b>II</b>	<b>Expenditure</b>		
1	Operation & Maint. Expenses	184.44	211.28
1.1	Energy Charges for EHV Aux. Consumption	14.02	12.31
2	Depreciation	199.82	225.87
3	Int. on Long-term Loan Capital	131.48	136.62
4	Interest on Working Capital	15.95	16.27
5	Other Finance Charges	0.00	0.00
6	Contingency Reserve	12.12	12.88
8	Return on Equity	273.58	299.14
<b>II</b>	<b>Total Expenditure</b>	<b>831.42</b>	<b>914.38</b>
<b>III</b>	<b>Pure Gap / (Surplus) for FY 2022-23 (II-I)</b>		<b>68.06</b>

21. As can be seen from the Table above, there is a Gap of **Rs. 68.06 Crores**, computed as the difference between the Revenue projected for FY 2022-23 and the expenditure of FY 2022-23 alone.

### 1.9. ARR including the Past Recoveries

22. Provisional Gap of Rs. 32.98 crores for FY 2019-20 was considered by the Hon'ble Commission for recovery in FY 2020-21, however, no carrying cost was allowed in the recovery. Accordingly, the differential between Actual and Provisional Truing up needs to be recovered / passed on as a part of total ARR that is to be recovered during FY 2023-24. Thus considering the actual Gap / (Surplus) of FY 2019-20, FY 2020-21, FY 2021-22, Provisional Gap / (Surplus) of FY 2022-23, the total amount of past recoveries for future Tariff is presented below:

**Table 10: Amount of past recoveries for future tariff**

		<i>Rs. Crores</i>				
Particulars		FY 2019- 20	FY 2020- 21	FY 2021- 22	FY 2022- 23	FY 2023- 24
Opening Balance	A		34.17	122.85	246.40	314.46
Gap/(Surplus) Addition during the year	B	34.17	121.67	123.54	68.06	-
Provisional Revenue Gap/(Surplus) of FY 2019-20 adjusted in ARR of FY 2020-21 in MYT Order 299 of 2019	C	-	32.98	-	-	-
Interest on past recovery	D					56.99
Closing Balance	E=(A+B-C+D)	34.17	122.85	246.40	314.46	371.44
<b>Total of past recoveries in FY 2023-24</b>	<b>F=(D+E)</b>					<b>371.44</b>

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

**Table 11: Amount of past recoveries for future tariff**

		<i>Rs. Crores</i>				
Particulars		FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
<b>Carrying Cost Rate*</b>	<b>A</b>	<b>9.66%</b>	<b>8.57%</b>	<b>8.50%</b>	<b>9.45%</b>	<b>9.45%</b>
Opening Balance	B	-	28.58	117.27	240.81	240.81
Addition during the year	C	34.17	88.69	123.54	-	(240.81)
Less Incentive	D	5.58	-	-	-	-
Closing Balance	E=(B+C-D)	28.58	117.27	240.81	240.81	-
Average Balance	F= Average (A,E)	14.29	72.93	179.04	240.81	120.41
<b>Carrying Cost</b>	<b>G=A*F</b>	<b>1.38</b>	<b>6.25</b>	<b>15.22</b>	<b>22.76</b>	<b>11.38</b>
<b>Total Carrying Cost #</b>	<b>H</b>					<b>56.99</b>

\* SBI 1 year MCLR Rate + 150 Basis Points

# Summation of Carrying Cost from FY 2019-20 to FY 2023-24

#### **1.10. Deemed Closure of 400 kV Vikhroli Project- Balance Claims**

24. As per directions issued by Hon'ble Commission, the claims pertaining to the deviations to the pre-development expenses pertaining to 400 kV Vikhroli Project have been included in this petition.

- a. One time premium for 35 year lease of plot of 1591.03 sq. M. below existing transmission lines at Vikhroli **(Rs. 20.50 Crores)**
- b. Compensation towards utilising of the Right of Way (RoW) below existing Transmission Line between Nerul and Vashi **(Rs. 13.45 Crores)**
- c. 10% GST component on the part of the pre-development expenditure and IDC **(Rs. 10.32 Crores)**
- d. Expenditure to be incurred against short closure of three Contracts. **(Rs. 10.00 Crores).**
- e. Stamp Duty Charges for lease Deed of Vikhroli Plot B **(Rs. 0.62 Crores)**

- f. Stamp Duty for lease Deed of Right of Way (RoW) for EHV Transmission Lines along Darave Vashi **(Rs. 0.41 Crores)**
- g. Land Transfer Charges of CIDCO Kharghar Plot **(Rs. 0.42 Crores)**
- h. Return on Investment for the period January-19 to May-19 – **(Rs. 7.72 Crores)**

**1.11. Revised Aggregate Revenue Requirement from FY 2023-24 to FY 2024-25**

25. 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 for FY 2023-24 to FY 2024-25 is as given below:

**Table 12: Annual Transmission Charges for FY 2023-24 to FY 2024-25**

Sr. No	Particulars	FY 2023-24	FY 2024-25
1	Operation & Maintenance Expenses	235.37	248.75
2	Depreciation	256.57	283.89
3	Interest on Long-term Loan Capital	158.07	173.04
4	Interest on Working Capital	24.76	21.08
5	Contribution to Contingency Reserves	14.98	16.66
<b>A</b>	<b>Total Revenue Expenditure</b>	<b>689.75</b>	<b>743.43</b>
6	Return on Equity	337.68	371.98
<b>B</b>	<b>Total Aggregate Revenue Requirement</b>	<b>1027.43</b>	<b>1115.41</b>
	<b>Revenue other than from InSTS Tariff</b>		
7	Non-Tariff Income	30.08	30.08
8	Income from Other Business	0.00	0.00
<b>C</b>	<b>Total Revenue</b>	<b>30.08</b>	<b>30.08</b>
<b>D</b>	<b>ARR (B-C)</b>	<b>997.35</b>	<b>1085.33</b>
E	Impact of Review Order	4.78	
F	Impact of past disallowed capitalisation restored in this Petition	7.89	
G	Balance claims on account of Deemed Closure of 400 kV Vikhroli project	78.28	
H	Past Recoveries	371.44	
<b>F</b>	<b>Net Aggregate Revenue Requirement (D+E+F+G+H)</b>	<b>1459.75</b>	<b>1085.33</b>

### **1.12. 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 2019-20 as worked out in this Petition in accordance with the guidelines & principles outlined in MYT Regulations, 2015 and its First Amendment dated 29<sup>th</sup> November, 2017;
- Approve the Truing-up of FY 2020-21, FY 2021-22, Provisional Truing-up of FY 2022-23 and past Gap / (Surplus) as worked out in this Petition in accordance with the guidelines & principles outlined in MYT Regulations, 2019;
- Approve the Revised Projections of Aggregate Revenue Requirement for FY 2023-24 and FY 2024-25 as worked out in this Petition in accordance with the guidelines & principles outlined in MYT Regulations, 2019;
- Allow the past recovery as worked out in the Petition on account of
  - Deemed closure of 440 kV Vikhroli capex scheme;
  - Review Order dated 17<sup>th</sup> June 2020 in Case No. 95 of 2020;
  - Capitalisation disallowed in previous Tariff Orders but 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-

**(Swati Mehendale)**

Chief-Regulatory

The Tata Power Company Limited