

2. EXECUTIVE SUMMARY

2.1 Overall Approach to the Present Filing

Historical Perspective:

The Tata Power Company Limited (“Tata Power”) is a company established in 1919. On April 1, 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 License Area and to supply energy in bulk to Distribution Licensees, vide resolution No: IEA – 2001/ CR-10509/NRG-1, dated July 12, 2001.

This Licence granted to Tata Power was valid till 15th August, 2014. Thereafter, Tata Power-T made an application for grant of Transmission Licence 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 in Case No. 112 of 2014. The Hon’ble Commission, after due scrutiny as per the EA-2003 and the relevant Regulations, granted a Transmission Licence to The Tata Power Company Ltd. for a period of 25 Years effective from 16th August, 2014.

2.2 Filings under Present Petition

Tata Power, in this petition, has presented the Aggregate Revenue Required for the different years of the Second Control Period.

- Truing up of FY 2012-13 and FY 2013-14 based on actual performance.
- Performance Review of FY 2014-15 with actual performance for H1 of FY 2014-15 and estimated performance for H2 of FY 2014-15.
- Projections for FY 2015-16.
- Impact of judgments of Hon’ble ATE in Appeal No. 104 of 2012, Appeal No. 158 of 2012 (based on which revised ARR for FY 2011-12 has been presented) and Appeal No. 133 of 2013.
- Reconciliation of capitalization, loan, refinancing of loans and RoE in view of the various judgments of the Hon’ble ATE and the Hon’ble Commission.

2.2.1 Capitalisation during the Control Period

Tata Power – T has presented in the Table below the actual capital expenditure and capitalization for FY 2011-12, FY 2012-13 & FY 2013-14 and the estimated capital expenditure and capitalisation for the period FY 2014-15 to FY 2015-16.

Table: 2-1: Capital Expenditure & Capitalization

Rs. Crores

Category	Capital Expenditure					Capitalisation				
	FY 2011-12 (Actuals)	FY 2012-13 (Actuals)	FY 2013-14 (Actuals)	FY 2014-15	FY 2015-16	FY 2011-12 (Actuals)	FY 2012-13 (Actuals)	FY 2013-14 (Actuals)	FY 2014-15	FY 2015-16
DPR	344.72	302.68	224.32	311.74	462.75	228.32	323.87	271.43	325.50	303.97
Non-DPR	26.18	31.19	32.63	41.40	60.39	20.46	17.78	30.25	46.06	62.64
HO/SS	3.81	4.56	0.00	0.00	0.00	3.81	4.56	9.40	0.00	0.00
TOTAL	374.72	338.43	256.95	353.15	523.13	252.59	346.21	311.08	371.56	366.62

2.2.2 Return on Equity (RoE):

With reference to MYT Regulations 2011, Tata Power - T has evaluated Return on Equity for the period FY 2011-12 to FY 2013-14 based on actual capitalization and for FY 2014-15 and FY 2015-16 based on the projected capitalization. The RoE for the period FY 2011-12 to FY 2015-16 based on the same is worked out as given below:

Table: 2-2: Return on Equity

Rs. Crores

Sr. No.	Particulars	FY 2011-12 (Actuals)	FY 2012-13 (Actuals)	FY 2013-14 (Actuals)	FY 2014-15	FY 2015-16
1	Regulatory Equity at the beginning of the year	532.40	607.75	710.75	802.94	914.41
2	Less: Equity Portion of Asset de-capitalised / retired during the Year	(0.43)	(0.86)	(1.14)	-	-
3	Capitalisation	252.59	346.21	311.08	371.56	366.62
4	Equity portion of capitalisation	75.78	103.86	93.32	111.47	109.98
5	Regulatory Equity at the end of the year	607.75	710.75	802.94	914.41	1,024.39
	Return Computation					
6	Return on Regulatory Equity at the beginning of the year	82.52	94.20	110.17	124.46	141.73
7	Return on Equity portion of capitalisation	5.84	7.98	7.14	8.64	8.52
8	Total Return on Regulatory Equity	88.36	102.18	117.31	133.09	150.26

2.2.3 Interest and Finance Charges

The Interest costs have been captured under the following three heads:

- Interest on Loan
- Interest on Working Capital
- Other Finance Charges

- **Interest on Loan:**

The details of the loans taken for funding the capitalisation for the period from FY 2011-12 to FY 2015-16 have been presented in **Sections 5.4.1, 6.4.1 and 7.5** The Interest on Loan Capital at actuals for FY 2011-12, FY 2012-13, FY 2013-14 and projected for FY 2014 - 15 to FY 2015 - 16 is as follows:

Table: 2-3: Interest on Loan Capital

Particulars	<i>Rs. Crores</i>				
	FY 2011-12 (Actuals)	FY 2012-13 (Actuals)	FY 2013-14 (Actuals)	FY 2014-15	FY 2015-16
Opening Balance	327.66	475.34	649.97	782.88	944.13
Additions	194.97	242.34	217.76	260.09	256.63
Repayments	(47.28)	67.71	84.85	98.83	117.41
Closing Balance	475.34	649.97	782.88	944.13	1,083.35
Interest Rate	10.86%	10.96%	10.89%	10.80%	10.79%
Total Interest Expense	43.61	61.68	77.99	93.30	109.42

- **Interest on Working Capital:**

The Interest on working capital has been computed based on the elements specified in the MYT Regulations, 2011 for the period starting from FY 2011-12 to FY 2015-16.

Table: 2-4: Interest on Working Capital

Sr. No.	Particulars	<i>Rs. Crores</i>				
		FY 2011-12 (Actuals)	FY 2012-13 (Actuals)	FY 2013-14 (Actuals)	FY 2014-15	FY 2015-16
1	One-twelfth of the amount of Operations & Maintenance Expenses	11.34	10.82	10.52	15.84	18.28
2	One-twelfth of the sum of the book value of stores, materials & supplies	16.98	13.92	12.65	12.65	12.65
3	One and a half months equivalent of the transmission charges	45.88	30.85	97.56	68.70	79.20
4	Total Working Capital	74.19	55.59	120.73	97.19	110.13
Computation of working capital interest						
5	Interest Rate (%)	14.39%	14.61%	14.58%	14.75%	14.75%
6	Interest on Working Capital	10.68	8.12	17.61	14.34	16.24

2.2.4 Depreciation:

Tata Power - T has computed the Depreciation by applying the rates specified under the MERC MYT Regulations, 2011 for the period FY 2011-12 to FY 2015-16. Based on the same, the Depreciation works out as shown in the Table below:

Table: 2-5: Depreciation

Particulars	<i>Rs. Crores</i>				
	FY 2011-12 (Actuals)	FY 2012-13 (Actuals)	FY 2013-14 (Actuals)	FY 2014-15	FY 2015-16
Opening GFA	1,472.80	1,723.95	2,067.29	2,374.58	2,746.14
Total Depreciation	47.28	67.71	84.85	98.83	117.41
Avg Depreciation (%)	3.21%	3.93%	4.10%	4.16%	4.28%

2.2.5 O&M Expenditure:

The O&M expenditure for the period FY 2011-12 to FY 2013-14 has been calculated by applying the norms given in the MYT Regulations, 2011 and considering the actual number of bays and line lengths in operation. The O&M Expenditure for FY2014-15 and FY 2015-15 is projected by applying the norms given in the MYT Regulations, 2011 and estimated number of bays and line lengths those would be in operations.

Based on the above, the O&M expenditure during the Control Period are as given in the table below:

Table: 2-6: O&M Expenditure

O&M Expenditure	<i>Rs. Crores</i>				
	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
Norm -Bays (Rs Lakhs/Bay)					
>400 KV	0.00	99.11	104.78	110.78	117.11
Between 66 and 400 KV	28.49	30.12	31.85	33.67	35.60
Less than 66 KV	5.96	6.30	6.66	7.04	7.44
Norms Transmission Lines (Rs Lakhs/Ckt Km)					
>400 KV	0.00	0.56	0.59	0.63	0.66
Between 66 KV and 400 KV	1.09	1.16	1.22	1.29	1.37
O&M Expenditure	136.04	151.08	170.17	190.13	219.42

2.2.6 Income Tax:

The Income Tax has been computed for FY 2011-12 to FY 2013-14 considering the Business of Tata Power-T as isolated Business from other Businesses of Tata Power as per the judgment of the Hon'ble ATE. The Income Tax for FY 2014-15 to FY 2015-16 has been considered same as provisionally approved in the MYT Tariff Order dated 30th March, 2013.

Based on the above, the Income Tax for the period from FY 2011-12 to FY 2015-16 is as shown in the Table below:

Table: 2-7: Income Tax

Particulars	Rs. Crores				
	FY 2011-12 (Actuals)	FY 2012-13 (Actuals)	FY 2013-14 (Actuals)	FY 2014-15	FY 2015-16
Income Tax	40.99	53.43	55.86	32.20	32.20

2.2.7 Contribution to Contingency Reserves:

The contribution to Contingency Reserves has been computed at **0.25 %** of opening GFA for the period FY 2011-12 to FY 2015-16 subject to not exceeding 5% of the GFA. The Contribution to Contingency Reserves for the period starting from FY 2011-12 to FY 2015-16 works out to be as shown in the Table below:

Table: 2-8: Contribution to Contingency Reserves

Particulars	Rs. Crores				
	FY 2011-12 (Actuals)	FY 2012-13 (Actuals)	FY 2013-14 (Actuals)	FY 2014-15	FY 2015-16
Contribution to Contingency Reserves	3.68	4.31	5.17	5.94	6.87

2.2.8 Non-Tariff Income:

For FY 2011-12 to FY 2013-14, Tata Power - T has provided the actual Non-Tariff Income and comprises of Recurring items and Non-Recurring items. For the period FY 2014-15 to FY 2015-16, the Non-Tariff Income has been considered at the same level as that of the actual Non-Tariff Income of FY 2013-14.

The Non-Tariff Income is as shown in the Table below:

Table: 2-9: Non-Tariff Income

Particulars	Rs. Crores				
	FY 2011-12 (Actuals)	FY 2012-13 (Actuals)	FY 2013-14 (Actuals)	FY 2014-15	FY 2015-16
Non-Tariff Income	14.18	12.48	18.24	18.24	18.24

2.2.9 Incentive on Transmission Availability:

The Availability of the Transmission System of Tata Power for FY 2011-12 to FY 2013-14 has been presented as certified by MSLDC. For the period FY 2014-15 to FY 2015-16, no incentive has been considered. However, the same shall be computed and presented at the time of

submission of True-up of the respective years. The Incentives considered for the Control Period are shown in the Table below:

Table: 2-10: Incentive for the Control Period

Particulars	<i>Rs. Crores</i>				
	FY 2011-12 (Actuals)	FY 2012-13 (Actuals)	FY 2013-14 (Actuals)	FY 2014-15	FY 2015-16
Incentive	4.69	6.00	7.16	-	-

2.2.10 Annual Revenue Requirement:

Based on the actuals for the years starting from FY 2011-12 to FY 2013-14 and the projections of the various elements for FY 2014-15 & FY 2015-16, the ARR for different years is shown in the Table below:

Table: 2-11: ARR for FY 2011-12 to FY 2013-14 and Annual Transmission Charges from FY 2014-15 and FY 2015-16

Particulars	<i>Rs. Crores</i>				
	FY 2011-12 (Actuals)	FY 2012-13 (Actuals)	FY 2013-14 (Actuals)	FY 2014-15	FY 2015-16
O&M Charges	118.29	129.85	126.30	190.13	219.42
Interest on Long-term Loan	43.61	61.68	77.99	93.30	109.42
Interest on Working Capital	9.20	8.12	17.61	14.34	16.24
Other Finance Charges	0.01	0.08	0.03	0.00	0.00
Depreciation	47.28	67.71	84.85	98.83	117.41
Return on Equity	88.36	102.18	117.31	133.09	150.26
Income Tax	40.99	53.43	55.86	32.20	32.20
Statutory Appropriations	3.68	4.31	5.17	5.94	6.87
Annual Transmission Charges	351.43	427.37	485.11	567.83	651.82
Add: Incentive	4.69	6.00	7.16	0.00	0.00
Total Transmission Charges	356.12	433.37	492.27	567.83	651.82
Less: Non Tariff Income	14.18	12.48	18.24	18.24	18.24
Net Aggregate Revenue Requirement from Transmission Tariff	341.94	420.89	474.04	549.59	633.58

2.2.11 Net Annual Transmission Charges and (Gap) / Surplus for the period starting from FY 2011-12 to FY 2013-14:

Based on the above calculations, the net entitlement and the gap for the period from FY 2011-12 to FY 2013-14 is shown in the Table below:

Table: 2-12: Net Annual Transmission Charges & Gap for FY 2011-12

Sr. No.	Particulars	Approved Figures of FY 2011-12 in MYT T.O. Case 178 of 2011	Entitlement as per the Regulations	Efficiency Gains / (Loss) from Controllable factors shared with Consumers	Uncontrollable Factors	Net Entitlement (Including Transfer to Reserves) after Impact of Gains / (Loss) from Controllable factors	Net Impact
I	Revenue	313.82				310.91	2.91
	-Transmission Charges	296.73				296.73	0.00
	- Non Tariff Income	17.09				14.18	2.91
II	Expenditure						
1	Operation & Maintenance Expenses	118.3	136.04	9.33	10.25	136.96	18.66
2	Depreciation	33.1	47.28			47.28	14.18
3	Interest on Long-term Loan Capital	42.05	43.61			43.61	1.56
4	Interest on Working Capital	9.26	9.20			9.20	-0.06
5	Other Finance Charges	0.01	0.01			0.01	0.00
6	Incentive	4.51	4.69			4.69	0.18
7	Contingency Reserve	3.7	3.68			3.68	-0.02
8	Income Tax	32.2	40.99			40.99	8.79
9	Return on Equity	80.92	88.36			88.36	7.44
10	Total Expenditure	324.05	373.87			374.79	50.74
III	Pure Gap / (Surplus) for FY 2011-12 (I - II)	10.23				63.88	53.65

Table: 2-13: Net Annual Transmission Charges & Gap for FY 2012-13

<i>Rs. Crores</i>						
Sr. No.	Particulars	Approved Figures of FY 2012-13	Entitlement as per the Regulations	Efficiency Gains / (Loss) from Controllable factors shared with Consumers	Uncontrollable Factors	Net Entitlement (Including Transfer to Reserves) after Impact of Gains / (Loss) from Controllable factors
I	Revenue					259.24
	-Transmission Charges					246.76
	- Non Tariff Income	32.84				12.48
II	Expenditure					
1	Operation & Maintenance Expenses	151.14	151.08	7.72	1.93	145.29
2	Depreciation	73.63	67.71			67.71
3	Interest on Long-term Loan Capital	76.70	61.68			61.68
4	Interest on Working Capital	11.69	8.12			8.12
5	Other Finance Charges		0.08			0.08
6	Incentive		6.00			6.00
7	Contingency Reserve	4.33	4.31			4.31
8	Income Tax	32.20	53.43			53.43
9	Return on Equity	112.99	102.18			102.18
II	Total Expenditure	462.68	454.59			448.81
III	Pure Gap / (Surplus) for FY 2012-13 (I - II)					189.56

Table: 2-14: Net Annual Transmission Charges & Gap for FY 2013-14

<i>Rs. Crores</i>						
Sr. No.	Particulars	Approved Figures of FY 2013-14	Entitlement as per the Regulations	Efficiency Gains / (Loss) from Controllable factors shared with Consumers	Uncontrollable Factors	Net Entitlement (Including Transfer to Reserves) after Impact of Gains / (Loss) from Controllable factors
I	Revenue					798.72
	Transmission Charges					780.48
	Non Tariff Income	34.56				18.24
II	Expenditure					
1	Operation & Maintenance Expenses	171.83	170.17	15.23	1.83	156.76
	Employee Expenses					
	R&M					
	A&G					
2	Depreciation	98.34	84.85			84.85
3	Interest on Long-term Loan Capital	112.15	77.99			77.99
4	Interest on Working Capital	13.97	17.61			17.61
5	Other Finance Charges		0.03			0.03
6	Incentive		7.16			7.16
7	Contingency Reserve	6.21	5.17			5.17
8	Income Tax	32.20	55.86			55.86
9	Return on Equity	139.59	117.31			117.31
10	Total Expenditure	574.29	536.14			522.74
III	Pure Gap / (Surplus) for FY 2013-14 (I - II)					-275.98

2.3 Impact of Hon'ble ATE'S Judgements:

Impact of following ATE judgments have been considered in the present filing –

- Appeal No. 104 of 2012 dated 28th November, 2013
- Appeal No. 158 of 2012 dated 28th November, 2013
- Appeal No. 133 OF 2013 dated 9th April, 2014

The impact of the ATE judgements are as follows:

Table: 2-15: Impact of ATE Judgements

<i>Rs Crores</i>		
Sr. No.	Particulars	Amount
1	Amount due to the impact of Hon'ble ATE Judgment Appeal No.158 with Carrying Cost + Impact of Appeal No 133 of 2013 dated 9th April, 2014	91.95
2	Appeal No 104 of 2012 dated 28th November, 2013 with Carrying Cost	143.30
3	Total ATE Impact to be passed on in FY 2015-16	235.25

2.4 Net Gap / (Surplus) including the Impact of Hon'ble ATE Judgements and past recoveries approved in the MYT Order:

The Hon'ble Commission in its MYT T.O. (Page No. 92 of 103) has approved the past recoveries to be recovered in the FY 2013-14 as follows:

The summary of the revenue (gap)/surplus approved by the Commission and total ARR to be considered for Transmission Charge Recovery under TTSC Order for subsequent year is tabulated below:

*Table 4.40: ARR including Past Period Recovery as approved by the Commission
(Rs Crore)*

Particulars	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
ARR for the year (A)	429.84	539.73	683.45	921.25
Past Period Recovery				
Net (Gap)/Surplus for FY 2010-11		9.76		
Net (Gap)/Surplus for FY 2011-12		(11.70)		
Net (Gap)/Surplus for FY 2012-13		(205.21)		
Particulars	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
Impact of ATE Judgment dated August 31, 2011		(33.60)		
Total Past period Recovery (gap)-(B)		(240.75)		
Net ARR to be considered for Transmission Charge Recovery under TTSC Order for the year (A+B)	*	780.49	683.45	921.25

*Note: *(As discussed in the subsequent section of "Recovery of Transmission charges", ARR for FY 2012-13 and past period recovery shall be included along with ARR of FY 2013-14 for recovery under the TTSC Order to be issued for subsequent year)*

Based on the above Gap approved by the Hon'ble Commission, considering the revised Gap for FY 2011-12 computed on the basis of MERC (MYT) Regulations, 2011, and by considering the revised Gap / (Surplus) computed for FY 2012-13, the total amount to be recovered in the FY 2015-16 is worked out to **Rs. 194.57 Crores** as given in the Table below:

Table: 2-16: Total Gap / (Surplus) to be recovered in FY 2015-16

				<i>Rs Crores</i>
Sr. No.	Particulars	Year	Interest Rate	Amount
1	Total Gap allowed in the T.O. 178 of 2011 excluding provisional Gap for FY 2012-13			23.84
2	Total impact prior to FY 2013-14 (i.e on 31st March, 2013)			23.84
3	Carrying Cost	FY 2013-14	14.58%	3.48
4	Carrying Cost	FY 2014-15	14.75%	3.52
5 = 3+4	Total impact of the amount prior including carrying			6.99
6	Amount due to the impact of Hon'ble ATE Judgment Appeal No.158 with Carrying Cost + Impact of Appeal No 133 of 2013 dated 9th April, 2014			91.95
7	Appeal No 104 of 2012 dated 28th November, 2013 with Carrying Cost			143.30
8 = 6 + 7	Total ATE Impact to be passed on in FY 2015-16			235.25
9	Truing up gap for FY 2012-13			189.56
10	Carrying Cost	FY 2013-14	14.58%	27.64
11	Carrying Cost	FY 2014-15	14.75%	27.96
12 =9 to 11	Total with Carrying Cost			245.17
13	Truing up gap for FY 2013-14			-275.98
14	Carrying Cost	FY 2014-15	14.75%	-40.71
15 =13+14	Total with Carrying Cost			-316.69
16	Total amount to be passed on in FY 2015-16			194.57
=2+5+8+12+15				

Thus, the total amount to be recovered works out to **Rs. 194.57 Crores** which is proposed to be recovered in the ARR for FY 15-16. Hence, the total ARR for FY 2015-16 is presented as follows -

Table: 2-17: Annual Revenue Requirement for FY 2015-16

Particulars	FY 2015-16
ARR for the Year	633.58
Impact of Total ATE Judgements	194.57
Total ARR to be recoved	828.15

The Hon'ble Commission is requested to kindly approve the above ARR for FY 2015-16.