

### **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 Licence Area and to supply energy in bulk to Distribution Licensees, vide resolution No: IEA –2001/ CR-10509/NRG-1, dated July 12, 2001. Thereafter, the Hon'ble Commission on 20<sup>th</sup> August, 2008, issued specific conditions for Licence to Tata Power – D, which inter-alia specified that the term of the licence would be till 15<sup>th</sup> August, 2014.

The Hon'ble Commission, on the application of Tata Power-D for the grant of Distribution Licence in Mumbai and the area covered under the Mira Bhayandar Municipal Corporation in Case 90 of 2014 granted a Distribution Licence to The Tata Power Company Ltd. The extract of the Order is as given below:

7.1.7 The Commission, therefore, in exercise of the power vested in the Commission under Section 14 of the 2003 Act, grants Distribution Licence to TPC to supply electricity in the proposed area of supply for a period of 25 years from August 16, 2014.

Further, the Hon'ble Commission issued Distribution Licence No. 1 of 2014 to Tata Power on 14<sup>th</sup> August, 2014. The salient features of the Licence are reproduced below:

- This Licence may be called the Distribution Licence for The Tata Power Company Ltd. (Distribution Licence No. 1 of 2014)
- 3.1 The Licence authorises the Distribution Licensee to distribute electricity in the entire Mumbai District, part of Mumbai Suburban District and entire Mira Bhayandar Municipal Corporation.

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4.1 The Licence shall come into force from the 16<sup>th</sup> day of August, 2014 and unless revoked earlier by the Commission in accordance with the provisions of the Electricity Act, 2003, shall remain in force upto 15<sup>th</sup> August, 2039, i.e. for the period specified under sub-section 8 of Section 15 of the Electricity Act, 2003.

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In view of the above, Tata Power-D continues to operate as a Distribution Licensee during the Control Period FY 2016-17 to FY 2019-20.

#### 2.2 Distribution Business in Mumbai Area

The area of supply for Tata Power as per the Distribution Licence is Colaba to Mahim, falling under the Mumbai City Revenue District, Bandra to Dahisar falling under Western suburban parts of Mumbai Suburban Revenue District, Chunabhatti to Vikhroli and Mankhurd in Eastern Suburban parts of Mumbai Suburban Revenue District and area of Mira Bhayander Municipal Corporation.

The Distribution Business of Tata Power (Tata Power-D) provides power supply to consumers in various sectors of industrial, commercial and residential including SRA schemes. The current consumer base of Tata Power-D upto FY 2015-16 is around 6.62 Lakhs.

Further, the Distribution Licence area of Tata Power-D is common with two other Distribution Licensees in Mumbai:

- (i) Tata Power-D and BEST have Distribution Licence in Mumbai City Area and
- (ii) Tata Power-D and R-Infra have Distribution Licence in Mumbai Suburban and area under Mira Bhayander Municipal Corporation.

Further, the consumers of Tata Power-D has been segregated as

- (i) Consumers who are supplied using Tata Power-D's network
- (ii) Consumers who are supplied using other Licensees network

## 2.3 Filings under MYT Regulations, 2011

The Hon'ble Commission issued the MYT Regulations, 2011 on 4<sup>th</sup> February, 2011. In line with the Regulations, the various petitions made by Tata Power-D to the Hon'ble Commission and the Orders of the Hon'ble Commission are listed below:



Table 2-1: Tata Power-D Petitions under MYT Regulations, 2011

Sr. No.	Filing	Filing Date	Order Date
1	APR for FY 2010-11	16th September 2011 (Revised)	14 <sup>th</sup> February, 2012
2	Business Plan	30th September, 2011	28th June, 2012
3	MYT Filing as per MYT Regulations,	30th November, 2011 (Original) &	30th March, 2013
	2011	Revised Petition on 23rd October,	
		2012	
4	MTR Filing as per MYT Regulations,	12th January, 2015(Original) &	26th June, 2015
	2011	Revised Petition on 23rd February,	
		2015	

### 2.4 Filings under Present Petition

Tata Power-D, in this petition, has presented the Aggregate Revenue Required for the different years as follows:

## 1) As per MYT Regulations, 2011

- Truing up of FY 2014-15 based on actual performance;
- Provisional Truing up of FY 2015-16;
- (Gap) / Surplus at the end of FY 2015-16 including past recoveries;
- Status of Compliance to Directives.

## 2) As per MYT Regulations, 2015

- Projections for FY 2016-17 to FY 2019-20 & ARR for each year of the Control Period
- Revenue from the sale of power at existing Tariffs and charges and projected Revenue (Gap) / Surplus for each year of the Control Period;
- Proposed Category-wise Tariffs or Fees & Charges for each year of the Control Period

The brief summary of the submission has been presented below:

### 2.5 Distribution Wires and Retail Supply Business for FY 2014-15



### 2.5.1 Category-wise Sales

The actual category-wise sales for FY 2014-15 and a comparison over approved energy sales for FY 2014-15 is provided in the Table below:

Table 2-2: Category wise Sales for FY 2014-15

Mus Sr. No. As per MTR Tariff Order Category Actual Direct Changeover Total Direct Changeover Total % Change Consumers Consumers Consumers Consumers FY 2014-15 FY 2014-15 FY 2014-15 FY 2014-15 FY 2014-15 FY 2014-15 HIGH TENSION CATEGORIES 1 HT I - Industry 1346.02 10.96 1356.98 1346.02 10.96 1356.98 0% 2 HT II - Commercial 604.86 21.66 626.52 604.86 21.66 626.53 0% 3 HT III - Public & Govt. - 22kV - 100kV 4 HT III Group Housing 0.00 5 44 5.44 0.00 5.44 5.44 0% 5 HT IV - Temporary Supply 8.47 0.00 8.47 8.47 0.00 8.47 0% 6 HT V - Railways 925.51 0.00 925.51 0.00 925.51 925.51 0% - 22/33 kV 297.86 295.90 297.86 0.00 297.86 1% 100kV 629.62 627.65 0.00 627.65 0% 7 HT VI - Public services 224.14 224.14 1.92 226.06 1% 224.14 II LOW TENSION CATEGORIES 0.00 1 LTI - Residential (BPL) 0.00 2 LTI - Residential 188.89 1484.35 1673.24 188.88 1499.11 1687.99 1% - S1 (0-100 units) 46.81 510.46 557.27 46.88 515.55 562.42 1% - S2 (101-300 units) 57.00 580.49 56.99 643.26 637.49 586.27 1% 24.29 - S3 (> 301-500 Units) 179.76 204.05 24.28 181.54 205.82 1% 60.79 274.43 60.74 215.75 - S4 (Above 500 units (balance units) 213.64 276.49 1% 304.51 304.51 476.45 780.95 1% 3 LT II - Commercial 471.72 776.22 - Upto 20 kW 38.60 272.28 310.88 38.60 275.01 313.61 1% - > 20 kW & ≤ 50kW 35.25 51.39 86.64 35.25 51.91 87.16 1% - > 50kW 230.65 148.05 378.70 230.65 149.53 380.18 0% LT III - Industry < 20 kW 24.64 53.73 78.37 24.64 54.26 78.91 1% 147.29 228.44 147.29 81.96 229.24 0% LT IV - Industry > 20kW 81.15 LT V - Advertisement & Hoardings, incl. 0.02 0.02 0.04 0.02 0.02 0.04 9% floodlights & neon signs 7 LT VI – Streetlights 0.18 0.00 0.18 0.01 0.00 0.01 92% 8 LT VII – Temporary Supply 18.24 0.17 18.41 18.13 0.15 18.28 -1% - TSR – Temporary Supply Religious 0.01 0.00 0.01 0.00 0.00 0.00 100% TSO – Temporary Supply Others 18.23 0.17 18.40 18.13 0.15 18.28 LT VIII – Crematoriums and Burial 0.00 0.31 0.31 0.00 0.31 0.31 Grounds 10 LT IX - Public Services 13.36 10.44 23.80 13.36 10.54 23.90 15 day adjustments 2.99 12.84 15.83 -0. 15 -0.15 -0.30 **GRAND TOTAL** 3809.11 2152.79 5961.59 3805.70 2162.64 5968.34 0.11%

### 2.5.2 Energy Balance

The Energy Balance for FY 2014-15 is provided in the Table below. The net Energy Requirement for Tata Power-D works out to **6249.80 MUs** for FY 2014-15. The Transmission Loss for FY 2014-15 have been worked out to **3.90%** based on the Grid Transmission loss statement issued by the Maharashtra State Load Despatch Centre (MSLDC). This Loss would be revised once the final FBSM Bills are issued by MSLDC.



Table 2-3: Energy Balance for FY 2014-15

				MUs
Particulars		Approved	FY 2014-15	Diff
Tata Power D-Sales (Retail) with 15	а	3809.11	3805.70	-3.41
days Adjustments				
Bill Credit given to OA consumers	b		47.01	
Total Sale	С		3852.71	
Distribution Losses	d	1.02%	0.59%	0.43%
ABT meter readings @ T <> D	е		3875.65	
Interface				
OA Wind Credit @ T <>D Interface	f		45.96	
Energy Requirement for Tata Power	g	3848.37	3829.69	18.68
consumers at T<>D interface				
Settled Energy on Monthly basis to	h	2152.79	2177.20	24.41
Changeover consumers				
Bill Credit given to OA consumers	i		1.22	
Sale to Changeover consumers after	j		2175.99	
adjusting for OA wind				
Wheeling Loss R-Infra D Network	k	0%	0%	0%
Energy Requirement for Changeover	1	2152.79	2175.99	23.20
consumers				
	m			
Total Energy Requirement at T<>D	n	6001.16	6005.67	4.51
Transmission Loss	0	3.89%	3.90%	0.01%
Total Energy Requirement at G<>T	р	6234.61	6249.42	14.81
Sale/ (Purchase) to Imbalance Pool	q		0.39	0.39
Less: Reduction in Sales DSM	r			
Total Energy Requirement at G<>T	S	6234.61	6249.80	15.20
Interface				

### 2.5.3 Power Purchase for FY 2014-15:

The Power Purchase Cost is a function of Energy Requirement and the rate of available power from different sources for meeting the requirement. The summary of the approved and actual Power Purchase cost for FY 2014-15 is given in the Table below:



<b>Table 2-4</b> :	Power	Purchase	Cost for	r FY	2014-15

Power Purchase for FY 2014-15		Approved			Actual	
Particulars (Actual)	MUs	Rs Cr	Rs/kWh	MUs	Rs Cr	Rs/kWh
Power Purchase Expenses (Tata Power-G)	3461.97	1824.11	5.27	3245.85	1559.69	4.81
Unit 6 (Tata Power-G)				215.85	285.69	13.24
Power Purchase Expenses (RPS)	310.80	164.00	6.65	311.25	163.70	5.26
Power Purchase Expenses (REC)		42.83			42.83	1.57
Power Purchase Expenses (Bilateral	2462.21	752.32	3.06	1960.71	614.19	3.13
Power Purchase)						
Energy under Standby				24.60	11.19	4.55
Unscheduled Interchange				491.54	128.82	2.62
Sale to Outside Licence Area	-0.39	-0.16	4.15	-0.39	-0.16	4.15
Standby Charges Payable		149.67			149.67	
Transmission & MSLDC Charges Payable		439.02			439.06	
Total Power Purchase	6234.60	3371.79	5.41	6249.42	3394.68	5.43

### 2.5.4 Capitalisation for FY 2014-15

The actual capex and capitalisation for FY 2014-15 for the Distribution Wires Business was **Rs. 394.63 Crores** and **Rs. 464.82 Crores** respectively. Further, for the Retail Supply Business, the actual capex and capitalisation for FY 2014-15 was **Rs. 26.49 Crores** and **Rs. 29.45 Crores.** The actual capitalisation of FY 2014-15 is higher as compared to the approved capitalisation. However, the Non DPR capitalisation is **5%** of the DPR capitalisation, which is well within the norm of 20% stipulated by the Hon'ble Commission. We therefore, request the Hon'ble Commission to consider the entire capitalisation for FY 2014-15.

Table 2-5: Actual Capitalisation for Distribution Wires & Retail Supply for FY 2014-15

**Rs.Crore** 

Particulars	FY 2014-15		FY 2014-15		
	V	Wire		ıpply	
	Capital	Capitalisation	Capital	Capitalisation	
	Expenditure		Expenditure		
Non-DPR Schemes	21.29	20.85	0.40	0.58	
Total Carry Forward Schemes	8.47	8.73	0.40	0.51	
New Schemes	12.83	12.12	0.00	0.07	
DPR Cases	373.34	440.48	26.08	28.64	
Total Carry Forward Schemes	166.46	261.74	15.69	19.70	
New Schemes	206.88	172.31	10.39	8.52	
SAP DPR	6.43	6.43		0.43	
Total	394.63	461.33	26.49	29.22	
HO & SS Allocation		3.48		0.23	
Total	394.63	464.82	26.49	29.45	



### 2.5.5 Operation and Maintenance Expenditure

The actual O&M expenditure for the Distribution Wires Business is **Rs 85.66 Crores** while for the Retail Supply Business is **Rs 104.65 Crores**. The detail break-up of the same is given in the Table below. The adjustments in the O & M based on the previous Tariff Orders have been shown separately.

Table 2-6: O&M Expenditure for Distribution Wires & Retail Supply for FY 2014-15

			Rs Crore
Particulars	Wires	Supply	Total
	Business	Business	
Approved by the Hon'ble Commission	81.96	71.25	153.21
Actual FY 2014-15			
Employee Expenses	38.36	37.62	75.98
Administration & General Expenses (Incl	29.53	67.15	96.67
Brand Equity & Excl Bad Debt)			
Repairs and Maintenance	17.84	2.84	20.68
Total	85.73	107.61	193.34
Less			
Brand equity Considered in Account	1.92	3.56	5.48
DSM Expenses		2.82	2.82
Add:			
Allocation of Brand Equity Expenses to	1.84	3.42	5.27
Tata Power-D as per MERC methodology			
Net O & M expenditure	85.66	104.65	190.31

In this regards we wish to submit that the consumer base of Tata Power-D has increased significantly in past few years. This has increased the Supply related cost of Tata Power-D however, there is no specific norms based on the number of consumers for Tata Power-D. This has been explained in detailed in the Section related to O & M expenditure for truing up of FY 2014-15. We request the Hon'ble Commission to consider the actual O & M expenditure for FY 2014-15.

## 2.5.6 Aggregate Revenue Requirement

The ARR for the Distribution Wires & Retail Supply Business of Tata Power-D for FY 2014-15 is tabulated below:



# Table 2-7: Aggregate Revenue Requirement for Distribution Business for FY 2014-15

Rs Crore

Sr. No.	Particulars	Approved by Commission	Wires	Supply	Total
1	Power Purchase Expenses	2935.07		3385.20	3385.20
1.1	Power Purchase Expenses (Tata Power - G) including interest	2333.07		1835.90	1835.90
	on FAC			1000.00	1000.00
1.2	Power Purchase Expenses (Other External Sources, Infirm etc)			754.04	754.04
1.3	Power Purchase Expenses (RPS)			163.70	163.70
1.4	Power Purchase Expenses (REC)			42.83	42.83
1.5	Transmission Charges Payable (Including MSLDC Charges)	436.72		439.06	439.06
1.6	Standby Charges Payable			149.67	149.67
2	Operation & Maintenance Expenses	153.21	85.66	104.65	190.31
2.1	Employee Expenses		38.36	37.62	75.98
2.2	Administration & General Expenses		29.45	64.19	93.65
2.3	Repair & Maintenance Expenses		17.84	2.84	20.68
3	Depreciation	80.89	78.58	8.89	87.47
4	Interest on Long-term Loan Capital	76.56	74.67	5.49	80.17
5	Finance Charges		0.77	0.06	0.82
6	Interest on Working Capital	53.08	13.32	42.08	55.39
7	Interest on Security Deposit	14.51	0.00	13.20	13.20
8	Bad Debts Written off		0.00	0.93	0.93
9	Income Tax	30.02	49.41	0.00	49.41
10	Contribution to Contingency Reserves	3.53	3.31	0.22	3.53
11	Return on Equity Capital	76.21	72.99	6.73	79.71
12	DSM Expenses	5.33		2.82	2.82
13=sum	Aggregate Revenue Requirement	3865.13	378.71	3570.26	3948.97
(1to12)					
14	Less: Non Tariff Income	29.14	7.97	17.87	25.84
15=13- 14	Aggregate Revenue Requirement for Retail Tariff	3835.99	370.74	3552.39	3923.13

# 2.5.7 Revenue (Gap) / Surplus

The Revenue (Gap) / Surplus of Tata Power-D for FY 2014-15 taking into account the Revenue at Existing Tariffs, Non-Tariff Income, and sharing of gains and losses are presented as follows:



# Table 2-8: Revenue (Gap) / Surplus for the Distribution Wires Business for FY 2014-15

Sr. No.	Particulars	Approved in the MTR T.O.	Actual Wires ARR for FY 2014- 15	Efficiency Gains / (Loss) from Controllable factors shared with consumers	Net Entitlement after impact of Gains / (Losses) from Controllable factors	Difference between MTR T.O. and actuals
ı	Revenue	485.04	474.46	0.00	474.46	-11
1	Revenue from Wheeling Charges	466.39	466.49		466.49	0
2	Non Tariff Income	18.65	7.97		7.97	-11
II II	Expenditure					
1	Operation and Maintenance	81.96	85.66	0.00	85.66	4
2	Depreciation	75.65	78.58		78.58	3
3	Interest on Long-term Loan	71.12	74.67		74.67	4
4	Interest on Working Capital	13.51	13.32		13.32	0
5	Interest on Security Deposit		0.00		0.00	0
6	Other Finance Charges		0.77		0.77	1
7	Bad Debts written off		0.00		0.00	0
8	Contribution to Contingency Reserves	3.29	3.31		3.31	0
9	Return on Equity	70.57	72.99		72.99	2
10	Income Tax	28.83	49.41		49.41	21
III	Total Expenditure	344.93	378.71	0.00	378.71	34
IV=I-III	(Gap) / Surplus	140.11	95.75	0.00	95.75	-44



Table 2-9: Revenue (Gap) /Surplus for the Retail Supply Business for FY 2014-15

Rs. Crore

Sr No	Particulars	Annroyed in	Actuals for FY	Efficiency Gains /	Net Entitlement	Difference
31. NO.	raiticulais		2014-15			
		the MTR T.O.	2014-15	(Loss) from	after impact of	between
				Controllable	Gains / (Losses)	MTR T.O.
				factors shared	from Controllable	and actuals
				with consumers	factors	
1	Revenue	3388,27	3366.91	0.00	3366.91	21.36
1	Revenue from Sale of Power	3377.78	3347.02	0.00	3347.02	30.76
2	Non Tariff Income	10.49	17.87		17.87	-7.38
3	OA Transmission Charge	10.43	2.02		2.02	-2.02
 	Expenditure		2.02		2.02	-2.02
1	Power Purchase Expenses	2785.40	2796.47		2796.47	-11.07
2	Transmission & SLDC Charges	436.72	439.06		439.06	-2.34
3	Standy Charges	149.67	149.67		149.67	0.00
4	Operation and Maintenance	71.25	104.65	0.00	104.65	-33.40
 5	Depreciation	5.24	8.89	0.00	8.89	-3.65
6	Interest on Long-term Loan Capital	5.44	5.49		5.49	-0.05
7	Interest on Working Capital	39.57	42.08		42.08	-2.51
8	Interest on Security Deposit	14.51	13.20		13.20	1.31
9	Other Finance Charges	0.00	0.06		0.06	-0.06
10	Bad Debts written off	0.00	0.93		0.93	-0.93
11	Contingency Reserves	0.24	0.22		0.22	0.02
12	Return on Equity	5.64	6.73		6.73	-1.09
13	Income Tax	1.19	0.00		0.00	1.19
14	DSM Expenses	5.33	2.82		2.82	2.51
15	Past Recoveries allowed to be	585.55	585.55		585.55	0.00
	recovered as per MYT T.O. dated 28th					
	June 2013 Case 179 of 2011					
III	Total Expenditure	4105.75	4155.81	0.00	4155.81	-50.06
IV=I-III	(Gap)/ Surplus	-717.48	-788.90	0.00	-788.90	-71.42

### 2.6 Distribution Wires Business for FY 2015-16

## 2.6.1 Capitalisation

The Hon'ble Commission, in its MTR Tariff Order in Case 18 of 2015 dated 26<sup>th</sup> June, 2015 had approved the capital expenditure and capitalisation of **Rs. 250.12 Crores** and **Rs. 244.31 Crores** for FY 2015-16 respectively. Against this, the capital expenditure and capitalisation estimated for FY 2015-16 is **Rs. 238.60 Crores** and **Rs. 236.69 Crores** respectively as shown in the Table below:



Table 2-10: Capitalisation in Distribution Wires Business for FY 2015-16

		Rs. Crore
Particulars	Capex	Capitalisation
Approved in MTR T.O	250.12	244.31
DPR	207.82	208.78
Non-DPR	30.78	27.90
TOTAL	238.60	236.69
Non/DPR Ratio		13%

### 2.6.2 Operations and Maintenance Expenditure

In this regards, Tata Power-D submits that as per the direction of the Hon'ble Commission, Tata Power-D has significantly increased its distribution network in Mumbai. On account of this O & M expenditure related to network has also increased; eg. statutory expenditures like Rent towards cable laid in PWD area payable to PWD which is around Rs. 6.84 Crores, and levy of access charges for cable which is around Rs. 2.5 Crores, etc. Further, the norms provided for Tata Power-D are lower as compared to the other Distribution Utilities in Mumbai.

Tata Power-D, for provisional truing up has considered normative expenditure based on the number of Units and % GFA. However, we request the Hon'ble Commission to approve the actual O & M expenditure at the time of truing up of FY 2015-16.

Table 2-11: O&M Expenditure for Wires Business for FY 2015-16

		Estimated O&M			
Approved by the Hon'b	98.07				
FY 2015-16 Estimation					
Norms					
A&G & Employee	Paise / unit	15.28			
R&M	% of Opening GFA	2.00%			
<b>Operating Parameters</b>					
Sales	Mus	3707.49			
Opening GFA	Rs. Crore	1789.08			
O&M					
A&G and Employee	Rs. Crore	56.65			
R&M	Rs. Crore	35.78			
Total O & M	Rs. Crore	92.43			

### 2.6.3 Aggregate Revenue Requirement

Based on the above, the summary of the ARR and its comparison with that considered in the MTR Order is presented as follows:



Table 2-12: ARR for Wires Business for FY 2015-16

Rs Crore

		110 01010
Particulars	As per MTR T.O	Estimated
RoE	84.85	89.05
Depreciation	90.03	97.25
O&M	98.07	92.43
Interest on Long Term Loans	85.40	91.74
Interest on Working Capital	11.61	7.25
Contribution to Contingency Reserve	4.21	4.47
Income Tax	28.85	1.65
Total Annual Fixed Charges	403.02	383.85
Non Tariff Income	-21.65	-21.65
Total Fixed Charges	381.37	362.20

# 2.6.4 Revenue (Gap) / Surplus

Considering the estimated Revenue for FY 2015-16, the Revenue (Gap) / Surplus for FY 2015-16 for the Distribution Wires Business is as follows:

Table 2-13: Revenue (Gap) /Surplus for Wires Business for FY 2015-16

Rs. Crore

Sr. No.	Particulars	Considered in the MTR T.O.	Estimated Wire ARR for FY 2015-16 without Gain/ (losses)	Diff
I	Revenue	474.92	231.29	244
1	Revenue from Wheeling Charges	453.27	209.64	244
2	Non Tariff Income	21.65	21.65	0
П	Expenditure			
	Operation and Maintenance	98.07	92.43	6
	Depreciation	90.03	97.25	-7
	Interest on Long-term Loan	85.40	91.74	-6
	Capital			
	Interest on Working Capital	11.61	7.25	4
	Contingency Reserves	4.21	4.47	0
	Return on Equity	84.85	89.05	-4
	Income Tax	28.85	1.65	27
III	Total Expenditure	403.03	383.85	19
IV=I-III	Estimated (Gap) / Surplus	71.89	-152.56	



## 2.7 Retail Supply Business for FY 2015-16

## 2.7.1 Category Wise sales

The estimated Sales based on the actual sale of Tata Power-D up to January, 2016 & estimated Sales for the remaining two months of Q4, FY 2015-16 has been presented as given below:

Table 2-14: Sales Projections for FY 2015-16 as compared to FY 2014-15

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Sr. No.	Category	Direct Sales	Changeover	Total Sales	Direct Sales	Changeover	Total Sales	% Change
		Actual	Sales Actual	Actual		Sales		
		FY 2014-15	FY 2014-15	FY 2014-15	FY 2015-16	FY 2015-16	FY 2015-16	%
	HIGH TENSION CATEGORIES							
1	HT I - Industry	1346	11	1357	1146.78	10.46	1157.24	-15%
2	HT II - Commercial	605	22	627	612.68	11.53	624.21	-0.4%
3	HT III Group Housing	0	5	5	0.30	3.25	3.55	-34.8%
4	HT IV - Temporary Supply	8	0	8	8.21	0.00	8.21	-3.1%
5	HT V - Railways	926	0	926	776.54		776.54	-16.1%
	- 22/33 kV	298	0	298	297.32		297.32	-0.2%
	- 100kV	628	0	628	479.22		479.22	-23.6%
6	HT V(B) - Railways Metro & Monorail				6.01		6.01	0.0%
7	HT VI(A) - Public Services	224	2	226	226.91	0.05	226.96	0.4%
	(A) - Public Service Government				41.67	0.04	41.71	0.0%
	Hospital & Educational Institutes							
	(B) - Public Services Others				185.24	0.01	185.25	0.0%
П	LOW TENSION CATEGORIES							
1	LT I - Residential (BPL)				0.02	0.02	0.04	0.0%
2	LT I - Residential	189	1484	1673	232.02	1704.73	1936.76	15.7%
3	LT II - Commercial	305	472	776	324.45	361.25	685.70	-11.7%
	- Upto 20 kW	39	272	311	44.53	218.43	262.96	-15.4%
	- > 20 kW & <u>&lt;</u> 50kW	35	51	87	40.33	38.73	79.06	-8.8%
	- > 50kW	231	148	379	239.59	104.09	343.68	-9.2%
4	LT III - Industry < 20 kW	25	54	78	25.23	46.20	71.43	-8.9%
5	LT IV - Industry > 20kW	147	81	228	152.24	49.96	202.20	-11.5%
6	LT V - Advertisement & Hoardings incl.	0	0	0	0.04	0.01	0.05	21.7%
	floodlights & neon signs							
7	LT VI – Streetlights	0	0	0	0.55		0.55	206.8%
8	LT VII – Temporary Supply	18	0	18	19.28	0.01	19.29	4.8%
	- TSR – Temporary Supply Religious	0	0	0	0.05		0.05	432.5%
	- TSO – Temporary Supply Others	18	0	18	19.23	0.01	19.24	4.6%
9	LT VIII – Crematoriums and Burial	0	0	0	0.00	0.35	0.35	14.1%
10	LT IX - Public Services	13	10	24	14.19	9.63	23.82	0.1%
	(A) - Public Service Government				0.25	0.16	0.42	0.0%
	Hospital & Educational Institutes							
	(B) - Public Services Others				13.94	9.47	23.41	0.0%
	15 day adjustments	0	-0.15	0	3.9	8.47	12.35	
	GRAND TOTAL	3805.70	2162.64	5968.34	3549.30	2205.96	5755.23	-3.6%

As can be seen from the Table above, the total estimated power sale of Tata Power–D is expected to be around 5755.23 MUs.



## 2.7.2 Distribution and Energy Input Requirement

For computing the Distribution loss for FY 2015-16, Tata Power-D has considered the actual loss upto January, 2015 while normative loss of 1.02% for the month February and March 2016. Based on the Distribution Loss arrived at and considering the Transmission Loss, the energy requirement for FY 2015-16 is worked out as given below:

Table 2-15: Energy Input requirement for FY 2015-16

ΝЛ	11	
IVI	u	3

Particulars		Approved	FY 2015-16	Diff
Tata Power D-Sales (Retail) with 15	а	4169.14	3549.30	619.84
days Adjustments				
Bill Credit given to OA consumers	b		120.38	
Total Sale	С		3669.68	
Distribution Losses	d	1.02%	0.41%	0.61%
ABT meter readings @ T <> D Interface	е		3684.97	
OA Wind Credit @ T <> D Interface	f		125.31	
Energy Requirement for Tata Power	g	4212.11	3559.66	652.44
consumers at T<>D interface				
Sales to Changeover consumers	h	2386.79	2205.96	180.83
Bill Credit given to OA consumers	i		1.45	
Sales to Changeover consumers after	j		2204.50	
adjusting for OA wind				
Total Energy Requirement at T<>D	k	6598.90	5764.16	834.73
Transmission Loss	Ī	3.89%	3.96%	-0.07%
Total Energy Requirement at G<>T	р	6865.98	6001.93	864.05
Interface				

### 2.7.1 Power Purchase Cost

The summary of power purchase cost based on actuals for FY 2015-16 H1 & estimated requirement for FY 2015-16 H2 excluding Standby, Transmission & MSLDC charges is as given in the Table below:



Table 2-16: Estimated Power Purchase Cost for FY 2015-16

	FY 2015-16 H1		FY 20	FY 2015-16 H2		Total FY	2015-16
Source	Mus	Rs Crores	Mus	Rs Crores	Rs Crores	Mus	Rs Crores
Tata Power-G	1960.84	543.74	1678.90	413.92	623.85	3639.73	1581.52
Tata Power-G Unit-6	8.67	6.83	0.00	0.00		8.67	6.83
Bilateral Power	939.33	301.75	435.01	132.32		1374.35	434.08
Purchase							
Renewable Energy	241.63	126.51	107.80	64.46		349.43	190.97
Renewable Energy	0.00	12.61	0.00	26.75		0.00	39.36
Certificate							
Energy from Stand By	0.00	0.00	0.00	0.00		0.00	0.00
OLA Sale	-1.77	-0.71	0.00	0.00		-1.77	-0.71
UI	144.91	42.58	486.61	128.02		631.52	170.60
Total	3293.61	1033.32	2708.32	765.66	623.85	6001.93	2422.65

### 2.7.2 Capitalisation

The details of the capex and capitalisation approved by the Hon'ble Commission in its MTR Tariff Order and details of the revised capex and capitalisation proposed for FY 2015-16 for Retail Supply Business is presented as follows:

Table 2-17: Capitalisation for Retail Supply Business for FY 2015-16

Particulars	FY 2015-16		
	Retail Supply		
	Capital	Capitalisation	
	Expenditure		
Non-DPR Schemes	1.44	1.47	
Total Carry Forward Schemes	1.44	1.47	
New Schemes	0.00	0.00	
DPR Cases	19.88	16.45	
Total Carry Forward Schemes	9.15	10.07	
New Schemes	10.72	6.38	
NDPR/DPR Ratio		9%	
Total	21.32	17.92	

## 2.7.3 Operations and Maintenance Expenditure

For provisional truing up, Tata Power-D has considered the normative O & M expenses based on the estimated Sales and GFA based on the projected capitalisation as given in the Table below:



Table 2-18: Operations and Maintenance Expenditure of Retail Supply Business for FY 2015-16

		Rs Crores
		FY 2015-16
Approved by the Ho	n'ble Commission	82.83
FY 2015-16 Estimation	on	
Norms		
A&G & Employee	Paise / unit	12.59
R&M	% of Opening GFA	0.25%
<b>Operating Paramete</b>	ers	
Sales	Mus	5755.23
Opening GFA	Rs. Cr	117.02
O&M		
A&G and Employee	Rs. Cr	72.46
R&M	Rs. Cr	0.29
Total O & M	Rs. Cr	72.75

However, as the number of consumers has gone up significantly for Tata Power-D, the O&M expenditure as per norms is inadequate for the Retail Supply Business of Tata Power-D. Considering the change in operational parameters for Tata Power-D, which have been explained in detail in the petition, we request the Hon'ble Commission to approve the O&M expenditure for the Retail Supply Business for Tata Power-D for FY 2015-16 at actuals. The estimated actual O&M expenditure for FY 2015-16 for the Retail Supply Business is around Rs. 96.51 Crores.

### 2.7.4 Aggregate Revenue Requirement for Retail Supply Business for FY 2015-16

The detailed computation of the elements of Aggregate Revenue Requirement, the summary of the ARR and its comparison with that considered in the MTR Tariff Order is presented as follows:



## Table 2-19: Fixed Cost for Retail Supply Business for FY 2015-16

Rs Crore

	FY 2015-16				
	As per MTR T.O.	Projected			
RoE	6.47	7.14			
Depreciation	6.26	6.02			
O&M	82.83	72.75			
DSM Cost	5.56	5.56			
Interest on Long Term Loans	6.01	6.46			
Interest on Working Capital	37.01	59.46			
Interest on Security Deposit	15.02	13.20			
Contingency Reserve	0.29	0.29			
Less: Non tariff Income	11.56	11.56			
Total Annual Fixed Charges	147.89	159.32			
Income Tax	1.17	19.60			
Total Fixed Charges	149.06	178.92			

# 2.7.5 Revenue (Gap) / Surplus:

The estimated Revenue (Gap) / Surplus of Retail Supply Business for FY 2015-16 takes into account the Revenue apportioned to Wheeling Charges and is as given in Table below:



# Table 2-20: Revenue (Gap) / Surplus for Supply Business for FY 2015-16

Rs. Crore

				Rs. Crore
Sr. No.	Particulars	Approved	Estimated ARR	Difference
		in the MTR	excluding Gains /	
		T.O	(Losses) for FY 2015-16	
1	Revenue	4420.20	3917.40	-502.80
1	Revenue from Sale of Power	4408.64	3905.84	-502.80
2	Non Tariff Income	11.56	11.56	0.00
ll ll	Expenditure			
3	Power Purchase Expenses	2703.05	2418.39	-284.66
	including interest on FAC			
4	Transmission Charges &	217.44	264.13	46.69
	MSLDC Charges			
5	Standy Charges	117.17	122.59	5.42
6	Operation and Maintenance	82.83	72.75	-10.08
7	Depreciation	6.26	6.02	-0.24
8	Interest on Long-term Loan	6.01	6.46	0.45
	Capital			
9	Interest on Working Capital	37.01	59.46	22.45
10	Interest on Security Deposit	15.02	13.20	-1.82
11	Other Finance Charges			
12	Bad Debts written off	0.00	0.00	0.00
13	Contribution to Contingency	0.29	0.29	0.00
	Reserves			
14	Return on Equity	6.47	7.14	0.67
15	Income Tax	1.17	19.60	18.43
16	DSM Expenses	5.56	5.56	0.00
17	Past Recoveries allowed to be	515.34	515.34	0.00
	recovered as per MYT T.O.			
	dated 28th June 2013 Case 179			
	of 2011			
III	Total Expenditure	3713.62	3510.92	-202.70
IV=III-I	Net (Gap)/ Surplus	706.58	406.48	



#### 2.8 ARR for Distribution Wires Business for the Control Period FY 2016-17 to FY 2019-20

### 2.8.1 Capitalisation

The Hon'ble Commission vide its Order dated 14<sup>th</sup> August, 2014 in Case No.90 of 2014, had granted Distribution Licence No. 1 of 2014 and directed Tata Power-D to submit a revised Network Rollout Plan separately for approval. Further, the Hon'ble Commission through its Interim Order dated 9<sup>th</sup> November, 2015 in Case 182 of 2014 constituted a Committee to make certain recommendations with regards to the roll out plan. The recommendations made by this Committee would be considered by the Hon'ble Commission. Until then, Tata Power-D requests the Hon'ble Commission to consider the capital expenditure and capitalisation submission for the Control Period as per the Network Rollout Plan. The projected capital expenditure and capitalisation from FY 2016-17 to FY 2019-20 has been provided in the Table below:

Table 2-21: Capitalisation for Distribution Wires Business for the Control Period

Rs. Crores

Particulars	Capital Expenditure				Capitalisation			
	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
DPR	231.06	219.07	246.26	263.58	164.77	169.81	196.25	196.58
Non-DPR	25.96	42.97	15.23	5.92	30.54	33.08	25.15	5.72
Total	257.02	262.05	261.49	269.50	195.31	202.89	221.40	202.30

#### 2.8.2 Operations and Maintenance Expenditure for the Control Period

Although the Hon'ble Commission has specified the norms for the O&M expenditure based on previous year expenditure, Tata Power-D wishes to submit that the expenditure arrived at based on these norms is grossly insufficient for Tata Power-D.

We are proposing the O&M expenditure norm corresponding to the CAGR of GFA over a period of six years starting from FY 2014-15. Once network rollout plan is approved and the Distribution Wires Business network reaches a particular level, a more prudent approach could be adopted for arriving at the norms. The O&M expenditure arrived at thus, is presented in the Table below:



Table 2-22: O & M Expenses for the Control Period

Rs. Crs

	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
Opening GFA	2025.76	2221.08	2423.97	2645.37
Escalated O&M costs	112.94	129.69	148.92	171.00

## 2.8.3 Aggregate Revenue Requirement for the Control Period

The projection for the Fixed Cost of the Distribution Wires Business have been tabulated below.

Table 2-23: Aggregate Revenue Requirement from FY2016-17 to FY 2019-20

Rs. Crores

Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
O&M Expenses	112.94	129.69	148.92	171.00
Depreciation	106.80	115.28	123.94	130.40
Interest on Long Term Loans	97.07	100.14	103.26	105.55
Interest on Working Capital	9.01	9.93	10.94	11.98
Bad and Doubtful Debt	0.00	0.00	0.00	0.00
Contribution to Contingency Reserve	5.06	5.55	6.06	6.61
RoE	99.10	108.36	118.22	128.07
Income Tax	21.88	24.47	27.22	29.98
Less:				
Non Tariff Income	21.65	21.65	21.65	21.65
Total Fixed Charges	430.21	471.77	516.91	561.95

### 2.8.4 Aggregate Revenue Requirement including Past Recovery

Based on the detailed computation of the elements of Aggregate Revenue Requirement, the summary of the Distribution Wires ARR to be recovered in FY 2016-17 is as given below:



#### Table 2-24: ARR for Distribution Wires Business for the Control Period

Rs. Crores

Sr. No	Particulars	As per MTR Tariff Order	Consideried in this ARR Petition
1	Revenue (Gap)/Surplus for FY 2013-14	46	46
2	Carrying Cost	14	14
1	(Gap) / Surplus for FY 2014-15	140	96
2	Provisional (Gap) / Surplus for FY 2015-16	72	-152
3	Total (Gap) / Surplus upto FY 2014-15	272	3
4	Wires ARR for FY 2016-17		430
5	Total		427

### 2.9 Distribution Retail Supply Business for the Control Period FY 2016-17 to FY 2019-20

## 2.9.1 Category Wise sales

The Licence Area of Tata Power-D spreads across Mumbai (except few wards) and the Mira Bhayander Municipal Corporation as per the Distribution Licence granted on 14<sup>th</sup> August, 2014. Tata Power-D has carried out its Sales Projections for the Control Period FY 2016-17 to FY 2019-20 considering the various operating parameters for Tata Power-D as a Distribution Licensee.

Tata Power-D has projected Sales for the following: (i) Direct Sales (on the Wires of Tata Power-D) and (ii) Changeover Sales (on the Wires of Other Utility). Further, while working out the Sales projections, it has been considered that Changeover is allowed only in the Mumbai Suburban Area and in Mumbai City Area, Tata Power-D can supply power on its Wires alone. In addition to the above, the impact of Open Access and Railways ceasing to be a consumer of Tata Power-D has been taken into consideration while determining the Sales of Tata Power-D.

The Direct Sales have been projected considering the CAGR based on the actual Sales since FY 2011-12, while the Changeover Sales have been projected considering a CAGR based on the fact that majority of these consumers are in the Residential Category.

As per the estimated Direct and Changeover Sales arrived at based on the above, the total projected Sales for the Control Period is as shown in the Table below:



Table 2-25: Projected Sales for the Control Period

Mus

Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
Projected Direct Sales	2644	2892	3197	3532
Projected Changeover Sales	2224	2251	2278	2306
Overall Sale	4867	5143	5476	5838

### 2.9.2 Distribution Loss and Energy Input Requirement

In this regard, we wish to submit that Railways who contributed a significant amount of sale of Tata Power –D has been granted the status of deemed Distribution Licensee. Consequently the sale of Tata Power-D has reduced and the Distribution Loss has increased. In addition to the above, the LT network of Tata Power-D is also expected to increase during the control period. Considering all this, we have projected an increase of 0.10% annually in the Distribution Loss over and above the approved distribution loss of 1.02 % for the year FY 2015-16. The Distribution Loss considered during the MYT period is as given in the Table below:

Table 2-26: Distribution Loss for FY 2016-17 to FY 2019-20

Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
Distribution Loss for the Control Period	1.12%	1.22%	1.32%	1.42%

Considering the projected Distribution Loss and the Transmission Loss of 3.89%, the Energy Input requirement at the InSTS for the Control Period is provided as follows:



# Table 2-27: Energy Input requirement for FY 2016-17 to FY 2019-20

MUs

Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
Tata Power D-Sales (Retail)	2643.77	2891.55	3197.18	3531.69
Distribution Losses	1.12%	1.22%	1.32%	1.42%
Energy Requirement for Tata Power	2673.71	2927.26	3239.94	3582.56
consumers at T<>D interface				
Energy Requirement for Changeover	2223.52	2251.44	2278.35	2306.09
consumers				
Wheeling Loss R-Infra D Network	0%	0%	0%	0%
Energy Requirement for Changeover	2223.52	2251.44	2278.35	2306.09
consumers				
Total Energy Requirement at T<>D	4897.24	5178.71	5518.29	5888.65
Transmission Loss	3.89%	3.89%	3.89%	3.89%
Total Energy Requirement at G<>T	5095.45	5388.31	5741.64	6126.99
Sale/ (Purchase) to Imbalance Pool				
Sale Outside License Area	464.93	464.93		
Total Energy Requirement at InSTS	5560.38	5853.24	5741.64	6126.99

The energy requirement estimated in the above Table would be met by procuring power from the following sources and at the corresponding costs

Table 2-28: Power Purchase Cost for FY 2016-17 to FY 2019-20

Particulars	F	Y 2016-1	7	ı	Y 2017-18	3	F	Y 2018-19	)	F	Y 2019-20	0
	Mus	Rs/kWh	Rs Cr	Mus	Rs/kWh	Rs Cr	Mus	Rs/kWh	Rs Cr	Mus	Rs/kWh	Rs Cr
Tata Power-G- Energy Charge	3844.2	2.4	923.4	3867.7	2.5	956.5	3832.9	2.6	986.0	3883.8	2.6	1025.1
Non Solar	406.8	5.0	203.1	451.7	5.1	230.3	504.3	5.2	261.7	562.6	5.3	296.4
Solar	47.4	9.8	46.5	86.2	8.4	72.7	126.3	7.9	99.7	171.6	7.6	130.2
Mini Micro Hydro	1.0	5.7	0.6	1.1	5.9	0.7	1.3	6.0	8.0	1.4	6.2	0.9
REC			16.5			24.5			30.0			36.1
Bilateral Power Purchase +	1260.9	3.2	403.2	1446.5	3.8	545.1	1276.9	3.9	500.6	1507.7	3.9	591.7
UI												
OLA Sale	-464.9	4.2	-193.9	-464.9	4.2	-193.9						
Tata Power-D Variable	5095.4	2.7	1399.3	5388.3	3.0	1635.8	5741.6	3.3	1878.7	6127.0	3.4	2080.4
Charges												
Tata Power-G- Fixed Charge			666.0			675.3			608.2			613.9
MSLDC Charges			0.9			1.1			1.3			1.5
Standby Charges			88.9			94.0			100.1			106.7
Transmission Charges			207.6			263.2			336.3			430.2
Total Power Purchase Cost	5095.4	4.6	2362.7	5388.3	5.0	2669.4	5741.6	5.1	2924.5	6127.0	5.3	3232.6



### 2.9.3 Capitalisation

The projected capitalisation for the Control Period is as follows:

Table 2-29: Capitalisation for Retail Supply Business for FY 2016-17 to FY 2019-20

Rs. Crores

Particulars	ulars Capex Estimation Capitalisation Estimation							
	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
DPR	10.37	15.84	12.10	13.29	10.91	17.54	13.21	14.49
Non-DPR	1.00	0.74	0.34	0.56	1.00	0.74	0.34	0.56
TOTAL	11.37	16.58	12.44	13.85	11.91	18.28	13.55	15.05

### 2.9.4 Operations and Maintenance Expenditure

Although the Hon'ble Commission has specified the norms for the O&M expenditure based on previous year expenditure, Tata Power-D wishes to submit that the expenditure arrived at based on these norms is grossly insufficient for Tata Power-D.

We are proposing the O&M expenditure norm corresponding to the CAGR of Consumer Nos. over a period of six years starting from FY 2014-15. Once the consumer base reaches a particular level, a more prudent approach could be adopted for arriving at the norms. The O&M expenditure arrived at is presented in the Table below:

Table 2-30: O & M Cost for Retail Supply Business

	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
Consumer Numbers	718115	768833	818541	872541
Escalated O&M Cost	117.70	125.94	134.75	144.19

### 2.9.5 Aggregate Revenue Requirement for FY 2016-17 to FY 2019-20

Based on the above power purchase cost & the proposed capitalisation for the Control Period the summary of Aggregate Revenue Requirement, is presented as follows:



Table 2-31: ARR for Retail Supply Business for FY 2016-17 to FY 2019-20

Rs Crores

Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
Cost of own power generation	2065.29	2311.09	2486.93	2694.25
/power purchase expenses;				
Inter-State Transmission Charges	207.57	263.20	336.26	430.21
Intra-State Standby Charges	88.95	93.99	100.07	106.69
MSLDC Fees & Charges	0.92	1.07	1.26	1.48
O&M Expenses	117.70	125.94	134.75	144.19
Depreciation	6.58	7.23	7.76	8.15
Interest on Long Term Loans	6.90	7.28	7.67	7.89
Interest on Working Capital	15.95	16.43	16.22	16.71
Interest on Security Deposit	12.42	14.01	15.33	16.91
Provision of Doubtful Debts	0.00	0.00	0.00	0.00
Contribution to Contingency	0.34	0.37	0.41	0.45
Reserves				
RoE	7.93	8.72	9.55	10.30
Income Tax	1.19	2.24	3.67	3.42
DSM Cost	7.79	10.92	12.50	13.13
<u>L ess</u>				
Non tariff Income	11.56	11.56	11.56	11.56
Total Annual Fixed Charges	2527.97	2850.93	3120.82	3442.20

# 2.10 Past Recoveries allowed by the Hon'ble Commission in Case 18 of 2015

The Hon'ble Commission had approved the past recoveries pertaining to Tata Power-D prior to FY 2014-15 as follows:

The cumulative ARR and net Revenue Gap/ (Surplus) approved by the Commission for FY 2015-16 for the Wires Business and the Supply Business are shown in the following Table:



Table 6-91: Cumulative Revenue Gap/ (Surplus) for FY 2015-16 approved by the Commission (Rs. Crore)

Sr.	36-110V N		C-D Petitio	n	Appro	ved in the (	Order
No.	Particulars	Wires Business	Supply Business	Total	Wires Business	Supply Business	Total
1	Revenue Gap/(Surplus) for FY 2012-13	161.82	323.37	485.19	0.00	408.53	408.53
2	Revenue Gap for FY 2012- 13 already allowed in MYT Order	0.00	0.00	0.00	0.00	385.68	385.68
3	Balance Revenue Gap for FY 2012-13 yet to be recovered	161.82	323.37	485.19	0.00	22.85	22.85
4	Carrying cost on Stand- alone Revenue Gap/(surplus) of FY 2012- 13	47.47	94.85	142.32	0.00	10.06	10.06
5	Revenue Gap/(Surplus) for FY 2013-14	(7.09)	24.04	16.95	(46.06)	686.61	640.55
6	Carrying cost on Stand- alone Revenue Gap/(surplus) of FY 2013- 14	(1.05)	3.55	2.50	(13.55)	201.98	188,43
7	Revenue Gap/(Surplus) for FY 2014-15	(148.86)	(74.90)	(223.76)	(140.11)	717.49	577.38
8	Impact of amount pertaining to prior period	0.00	919.06	919.06	0.00	78.18	78.18
9	Carrying cost on the impact of amount pertaining to prior period	0.00	269.58	269.58	0.00	23.00	23.00
10	Impact of ATE Judgments	0.00	145.93	145.93	0.00	41.60	41.60
11	Carrying cost on the impact of ATE Judgment	0.00	89.25	89.25	0.00	0.74	0.74
12	TPC-G Gap for FY 2012- 13, FY 2013-14 and FY 2014-15 including carrying cost & ATE Judgment	0.00	415.07	415.07	0.00	(44.46)	(44.46)
13	Stand-alone ARR for FY 2015-16	380.12	3300.68	3680.80	381.38	3702.07	4083.45
14	Cumulative ARR for FY 2015-16	432.41	5510.49	5942.89	181.67	5440.11	5621.78
15	Revenue at Existing Tariff for FY 2015-16	449.01	3821.32	4270.33	453.27	4408.64	4861.91
16	Cumulative Revenue Gap/(Surplus) for FY 2015-16	(16.60)	1689.16	1672.57	(271.60)	1031.48	759.87
17	Average Tariff Increase Required (%)			39.17%			15.63%
18	Total Sales (MU)			5880.38			6555.93
19	Average Cost of Supply (Rs/kWh)			10.11			8.58



Thus, the Commission has approved a cumulative Revenue Surplus of Rs. 271.60 crore for the Wires Business and a cumulative Revenue Gap of Rs. 1031.48 crore for the Supply Business for FY 2015-16.

Based on the above, considering the final truing up of FY 2014-15 and provisional truing up of FY 2015-16, the revised (Gap) / Surplus to be recovered in the tariff of FY 2016-17 works out as follows:

## 2.10.1 Revised Revenue (Gap) / Surplus for FY 2014-15

The revised Revenue (Gap) /Surplus for FY 2014-15 based on the revised ARR and Revenue considered in the earlier paragraphs is as shown in the Table below:

Table 2-32: Revised Revenue (Gap) / Surplus for FY 2014-15

Rs Crores

			As per MTR T.O.		Actuals as submitted in this petition			
Particulars		Wires Business	Supply Business	Total	Wires Business	Supply Business	Total	
Net ARR	1	326.28	4095.27	4421.55	370.74	4137.94	4508.68	
Revenue	2	466.39	3377.78	3844.17	466.49	3349.04	3815.53	
Revenue (Gap) /	3=2-1	140.11	-717.49	-577.38	95.75	-788.90	-693.15	
Surplus								

The above Revenue (Gap)/Surplus for FY 2014-15 has been considered for computing the past recoveries to be recovered in FY 2016-17.

## 2.10.2 Revised Revenue (Gap) / Surplus for FY 2015-16

The revised Revenue (Gap) / Surplus for FY 2015-16 based on the revised estimated ARR and Revenue considered in the earlier paragraphs is as shown in the Table below:

Table 2-33: Revised Revenue (Gap) / Surplus for FY 2015-16

Rs Crores

			As per MTR T.O		Revised Estimated in this petition				
Particulars		Wires	Supply	Total	Wires	Supply	Total		
		Business	Business		Business	Business			
Net ARR	1	381.38	3702.07	4083.45	362.20	3499.36	3861.56		
Revenue	2	453.27	4408.64	4861.91	209.64	3905.84	4115.48		
Revenue (Gap) /	3=2-1	71.89	706.57	778.46	-152.56	406.48	253.92		
Surplus									



## 2.10.3 Regulatory asset allowed to be recovered in FY 2015-16 to FY 2018-19

The Hon'ble Commission had allowed the provisional (Gap) / Surplus of Rs 759.87 Crores to be recovered from FY 2015-16 to FY 2018-19. The extracts of the Tariff Order is as given below:

Taking all these considerations into account, the Commission has decided to spread the recovery of the Regulatory Assets for TPC-D over the same four years as are remaining for RInfra-D's recovery, i.e., FY 2015-16 to FY 2018-19. This would require an average tariff increase of 3.9%.

Tata Power-D proposes to continue recovery of the same as a separate RAC charge as approved for the year FY 2016-17 to FY 2018-19 & hence, has considered only the amount pertaining to FY 2016-17 along with carrying cost for computing the cumulative revenue requirement for FY 2016-17

### 2.10.4 Cumulative Revenue Gap

Based on the above, the revised Revenue (Gap) / Surplus for FY 2014-15 & FY 2015-16 along with the past recoveries allowed to be recovered in FY 2015-16 & RAC allowed to be recovered separately, the cumulative revenue requirement for FY 2016-17 works out as follows:



## Table 2-34: Cumulative Revenue (Gap) / Surplus for FY 2016-17

Rs Crores

	Rs Cro As per MTR Tariff Order Consideried in this ARR Petit									
		_	1							
Sr. No	Particulars	Wire	Supply	Total	Wire	Supply	Total			
1	Past recovery pertaining to FY 2012-13	0	-23	-23	0	-23	-22.86			
2	Carrying Cost	0	-10	-10	0	-10	-10.06			
3	Revenue (Gap)/Surplus for FY 2013-14	46	-687	-641	46	-687	-640.55			
4	Carrying Cost	14	-202	-188	14	-202	-188.43			
5	Impact of Review petition FY 2011-12	0	-78	-78	0	-78	-78.18			
	Case No 99 of 2013									
6	Carrying Cost	0	-23	-23	0	-23	-23.00			
7	Impact of ATE judgment	0	-42	-42	0	-42	-41.60			
8	Carrying Cost on ATE	0	-1	-1	0	-1	-0.74			
9 = 1 to 8	Total Past recovery prior to FY 2014-15 -I	60	-1065	-1005	60	-1065	-1005.42			
10	Past Gap inadvertently considered twice	0	0	0	0	214	214.16			
	in the MYT T.O. pertaining to FY Prior to									
	MYT Period									
11=10	Adjustment in Past Recovery considered	0	0	0	0	214	214.16			
	twice-II									
12	(Gap) / Surplus for FY 2014-15	140	-717	-577	96	-789	-693.15			
13	(Gap) / Surplus for FY 2015-16	72	707	778	-153	406	253.92			
14	(Gap)/ Surplus for Tata Power-G		44	44		-10	-10.21			
	pertaining to Past Period									
15=12 to 14	Revised Total Past Recoveries - III	212	34	246	-57	-393	-449.44			
16	Total (Gap) / Surplus prior to FY 2016-17	272	-1031	-760	3	-1244	-1240.70			
17	RAC allowed to be recovered seperately			-570		-570	-569.90			
	for FY 2016-17, FY 2017-18 & FY 2018-19									
18=16-17	(Gap) / Surplus to be recovered upto FY	272	-1031	-190	3	-674	-670.80			
-0 -0 -1	2016-17 excluding RAC for FY 2016-17, FY	_,_		_50		<b>V</b>	070.00			
	2017-18 & FY 2018-19									
19	Carrying cost excluding RAC recovery					-102	-101.81			
13	given seperately in the MTR T.O					102	101.01			
20	Past Recovery to be recovered in FY 2016-			-190		-190	-189.97			
	17 seperately as RAC						103.57			
21=18 to 20	(Gap) / Surplus to be recovered upto FY	272	-1031	-380	3	-965	-962.58			
11 10 10 10	2016-17 along with the carrying cost		1001			303	302.00			
22	Pure ARR for FY 2016-17				430	2528	2958.18			
23=21+22	Total ARR Requirement for FY 2016-17				427	3493	3920.77			
	including past recoveries/ adjustment					0,100	5520,			
24	Revenue at existing tariff				132	3677	3809.02			
25	Revenue from OA Consumers				22	91	112.41			
	Cumulative Revenue (Gap)/Surplus for FY				-274	274	0.67			
20 20 .24 25	2016-17						0.07			
27	Average tariff increase required in FY				178%	-7%	0.00			
-	2016-17 for full recovery of ARR				1,070	, ,,,	0.00			
28	Total Sales (Mus)						4867.29			
	Average Cost of Supply (Rs/kWh)						8.06			
29-23/20 10	Average cost of Supply (NS/ KVVII)						0.00			

As seen from the above the cumulative (Gap) / Surplus upto FY 2015-16 works out to **Rs 1240.55 Crores** in comparison with the approved (Gap) / Surplus of Rs 760 Crores in the MTR Tariff Order. Further, as explained in the above paragraph Tata Power-D proposes to Recover RAC of Rs. 190 Crores as a separate charge as approved in the MTR Tariff Order.



Thus, considering the above past recoveries and pure ARR for FY 2016-17 of **Rs 2958 Crores** the revenue to be recovered in FY 2016-17 works out to **Rs 3921 Crores**. Based on the same, and estimated sales of **4867.29 Mus**, the ACoS works out to **Rs. 8.06 per kWh**. The main reason of lower recovery of revenue is change in Sales mix of Tata Power-D in comparison with the estimated by the Hon'ble Commission.

Further, in this regard, we wish to submit that there are certain ongoing litigations in various Courts of Law. The outcome of these litigations are likely to come during the Control Period and the outcomes may have a Tariff impact during the Control Period. In view of this, we have presented in the Table below the likely impact of the ongoing litigations in case their judgments are out during the Control Period.

Table 2-35: Likely Impact of Ongoing Litigations on Tariff

Sr. No.	Case / Appeal	Filed with	Description in brief	Likely Tar	riff Impact Rs. C	rores	Remarks
				Principle Amount	Interest till FY 2015-16	Total	
1	CA 2902 of 2012	Supreme Court	MSLDC has filed an appeal with the Hon'ble Supreme Court against the Hon'ble ATE to compensate Tata Power for not scheduling its tied up power.	-31.57	-22.93	-54.50	In case the Hon'ble Supreme Court judgment is in favour of Tata Power, Tata Power would receive Rs. 31.57 Crores + interest
2	117 of 2014	MERC	As per the directions of the Hon'ble Supreme Court, Tata Power-D has filed a petition for determination of compensation for non scheduling of power				since FY 2011-12, which would reduce the net ARR of Tata Power-D
3	43 of 2016	АТЕ	Appeal filed by Tata Power Renewable Energy Ltd. regarding applicability of generic tariff to Palaswadi Solar Project	17.70	2.47	20.17	In case the judgment is in favour of TPREL, Tata Power-D would have to pay the amount as shown till FY 2015-16
4	244 of 2016	ATE	Tata Power-G Appeal against the MTR Tariff Order in Case 6 of 2015 regarding various issues	94.45	35.83	130.28	In case the entire appeal is in favour of Tata Power-G, the impact is as shown. There are certain issues wose impact cannot be
5	245 of 2016	ATE	Tata Power-D Appeal against the MTR Tariff Order in Case 18 of 2015 regarding various issues	164.69	63.39	228.08	In case the entire appeal is in favour of Tata Power-D, the impact is as shown. There are certain issues wose impact cannot be
	Total					324.05	
	Sale of Tata Powe	r-D in FY 2016	5-17			4867	
	Tariff Impact					0.67	



### 2.11 Tariff Philosophy & Proposal

While developing the tariff philosophy for the Control Period, Tata Power-D has carried out a detailed analysis of the important issues, such as:

- 1. Learnings from the past Control Period;
- 2. Developments in the market place;
- 3. Capacity to pay;
- 4. Prevalent Regulatory Practices and developments;
- 5. Uniform Tariff for Residential Consumers with consumption of 0-300 units per month;
- 6. The emphasis on 'Make in India' initiative.

The salient learnings impacting the tariff philosophy for the Control Period are:

- ACoS of Distribution Wires Business and Retail Supply Business to be considered separately in order to maintain transparency in the system;
- Energy charge should truly reflect the energy costs and efficiency of the supplier and therefore ACoS of Retail Supply business may only be considered;
- Cross subsidy structure should appropriately consider the energy charge recoveries from Changeover and Direct consumers and should be set in a way that ensures regulatory assets will be recovered and not getting further created;
- Subsidy to residential customers should be in line with the guidelines prescribed in the Tariff Policy, 2016; and
- Cost recovery levels of Residential Consumers may be raised to a level as seen in other utilities across the country;

Tata Power – D has presented an illustration of the tariff structure based on the tariff philosophy and principles. Accordingly, Tata Power – D has computed the cross subsidy structure for the control period as per the above principles, considering the cross subsidy structure as approved by the Hon'ble Commission in the MTR Order in Case No. 18 of 2015 as the base as per the following methodology:



- 1. To arrive at the Retail Supply Business ABRs for each category, approved RAC and Wheeling Charges have been deducted from the approved ABRs. This has been done by removing the RAC and WC from the respective ABR of each category.
- 2. To compute the Retail Supply Business ACoS, Tata Power D has deducted the approved Cumulative Revenue (Gap)/Surplus for FY 2015-16 (Rs. 759.87 Crores) from the approved Retail Supply Business ARR (Rs. 5440.11 Crores). This was then divided by the approved sales (6555.93 MUs).
- 3. Finally, the cross subsidy structure has been arrived at by dividing the respective category supply ABRs by the Retail Supply Business ACoS as computed above.
- i. The cross subsidy structure considering the above has been represented in the table below:



Table 2-36: Cross Subsidy Structure - FY 2015-16

Consumer Categories	FY 2015-16	FY 2015-16	FY 2015-16
	AS per MERC	Based on correct methodology	CS for supply Business MERC
HT CUSTOMERS			
HT   - Industry	120%	120%	118%
HT II - Commercial	126%	125%	124%
HT III - Group Housing Society	124%	123%	133%
HT IV - Temporary Supply	164%	163%	167%
HT V(A) - Railways			
- 22/33 kV	119%	119%	117%
- 100kV			
HT V(B) - Railways Metro & Monorail	118%	118%	118%
HT VI - Public Services			
a) Govt. Edu. Inst. & Hospitals	110%	110%	113%
b) Others	111%	111%	108%
LT CUSTOMERS			
LT I - Residential (BPL)	18%	18%	18%
LT I - Residential			
- S1 (0-100 units)	31%	19%	20%
- S2 (101-300 units)	58%	49%	51%
- S3 (> 301-500 Units)	112%	99%	104%
- S4 (Above 500 units (balance units)	139%	126%	132%
LT II - Commercial			
- Upto 20 kW	120%	104%	110%
- > 20 kW & < 50kW	125%	111%	113%
- > 50kW	130%	124%	123%
LT     -  ndustry < 20 kW	109%	97%	99%
LT IV - Industry > 20kW	121%	118%	116%
LT V - Advertisement & Hoardings,	0%	453%	489%
incl.floodlights & neon signs	0.00/	0.00/	0.00/
LT VI – Streetlights	86%	86%	86%
LT VII – Temporary Supply	6.20/	00/	620/
- TSR – Temporary Supply Religious	63%	0%	63%
- TSO – Temporary Supply Others	195%	194%	192%
LT VIII – Crematoriums and Burial	57%	46%	50%
Grounds			
LT IX - Public Services	1070/	1070/	1070/
a) Govt. Edu. Inst. & Hospitals	107%	107%	107%
b) Others	107%	103%	102%

Tata Power-D has applied the tariff philosophy on the cross subsidy structure determined above to arrive at the proposed cross subsidy structure for the third control period. The proposed cross subsidy structure for the Retail Supply Business for FY 2016-17 to FY 2019-20 is as shown below:



Table 2-37: Cross Subsidy Structure – MYT Period

		Supply C	5	
FY 16 MTR	FY 17	FY 18	FY 19	FY 20
118%	119%	117%	116%	115%
124%	130%	123%	121%	117%
133%	125%	124%	122%	116%
167%	169%	167%	165%	165%
117%	120%	117%	116%	110%
118%	120%	117%	116%	110%
113%	109%	104%	102%	100%
108%	113%	106%	104%	102%
18%	7%	2%	3%	5.401%
20%	30%	37%	43%	50%
51%	71%	86%	91%	99%
104%	107%	103%	100%	100%
132%	129%	124%	119%	111%
110%	110%	105%	102%	101%
113%	114%	108%	106%	102%
123%	118%	111%	110%	104%
99%	103%	100%	100%	100%
116%	108%	105%	104%	103%
489%	237%	220%	218%	218%
86%	90%	89%	86%	86%
63%	67%	63%	63%	63%
192%	187%	183%	178%	175%
50%	55%	52%	50%	48%
107%	107%	99%	99%	99%
				100%
	MTR  118%  124%  133%  167%  117%  118%  108%  20%  51%  104%  132%  110%  113%  123%  99%  116%  489%  86%  63%  192%	FY 16 MTR         FY 17           118%         119%           124%         130%           133%         125%           167%         169%           117%         120%           118%         120%           113%         109%           108%         113%           18%         7%           20%         30%           51%         71%           104%         107%           132%         129%           110%         110%           113%         114%           123%         118%           99%         103%           116%         108%           489%         237%           86%         90%           63%         67%           192%         187%           50%         55%	FY 16 MTR         FY 17 FY 18           118%         119%         117%           124%         130%         123%           133%         125%         124%           167%         169%         167%           117%         120%         117%           118%         120%         117%           113%         109%         104%           108%         113%         106%           18%         7%         2%           20%         30%         37%           51%         71%         86%           104%         107%         103%           132%         129%         124%           110%         110%         105%           113%         114%         108%           123%         118%         111%           99%         103%         100%           116%         108%         105%           489%         237%         220%           86%         90%         89%           63%         67%         63%           192%         187%         183%           50%         55%         52%           107%	MTR         FY 17         FY 18         FY 19           118%         119%         117%         116%           124%         130%         123%         121%           133%         125%         124%         122%           167%         169%         167%         165%           117%         120%         117%         116%           118%         120%         117%         116%           113%         109%         104%         102%           108%         113%         106%         104%           18%         7%         2%         3%           20%         30%         37%         43%           51%         71%         86%         91%           104%         107%         103%         100%           132%         129%         124%         119%           110%         110%         105%         102%           113%         114%         108%         106%           123%         118%         111%         110%           99%         103%         100%         100%           116%         108%         105%         104%           489%

On the basis of the above cross subsidy structure, the proposed tariff for the MYT Control Period for various categories has been presented in the below table.

Tata Power – D has proposed the tariffs for wires business and supply business in this section. As a part of the proposal, Tata Power –D has proposed uniform tariff for the residential consumers in the slabs of 0-100 Units and 101-300 Units consumption.



## 2.12 Wheeling Charges for FY 2016-17 to FY 2019-20

We have proposed that wheeling charges for HT Category Consumers should be apportioned based on cumulative demand of each category instead of the MUs as per the existing practice. Hence it should be calculated and recovered based on Demand for those categories for which Demand Charges are applicable. Further, the over/under recovery from the wheeling charges of HT consumers have been adjusted with that of wheeling charges of LT consumers. Accordingly, the wheeling charges for the HT category have been calculated as below:

Table 2-38: Wheeling Charges proposed for HT Category for FY 2016-17 to FY 2019-20

Year	Demand including Open Access (In MVA)	Network Cost	Wheeling Cost
		Rs. Crores	Rs/kVA/month
FY 2016-17	603	237	340
FY 2017-18	585	240	350
FY 2018-19	616	251	350
FY 2019-20	650	271	350

For the LT categories, the wheeling charges will continued to be recovered on the basis of total units consumed and in line with the method adopted in the MTR order of Case No. 18 of 2015. Accordingly, the Wheeling Charges of LT category for FY 2016-17 to FY 2019-20 is as shown in the Table below:

Table 2-39: Wheeling Charges proposed for LT Category for FY 2016-17 to FY 2019-20

Year		Sales	% of	% of GFA	Network	Wheeling	Wheeling
			Sales		Cost	Cost	Charges
		Mus	%		Rs Crore	Rs Crore	Rs/kWh
FY 2016-17	LT	901	28%	23%	99	185	2.05
FY 2017-18	LT	1063	33%	24%	115	226	2.13
FY 2018-19	LT	1260	35%	25%	129	258	2.05
FY 2019-20	LT	1475	41%	29%	164	289	1.96

## 2.13 Aggregate Revenue Requirement for Retail Supply Business



The ARR of Retail Supply Business for FY 2016-17 to FY 2019-20 is represented in the table below. The same includes the past recoveries proposed to be recovered in FY 2016-17 and the Regulatory Assets allowed in the MTR order.

Table 2-40: ARR of Retail Supply Business for FY 2016-17 to FY 2019-20

Rs Crores

Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
Total Supply ARR	2527.97	2850.93	3120.82	3442.20
Past Recovery proposed to be recovered	775.41	30.77	10.25	0.00
Total Annual Revenue Requirement (incl OA Consumers)	3303.38	2881.70	3131.08	3442.20

## 2.14 Average Cost of Supply for Retail Supply Business

The Average Cost of Supply for the Retail Supply Business has been computed by reducing the revenue from open access consumers. The Average Cost of Supply calculated for the MYT years are as follows:

Table 2-41: Retail Supply Business Average Cost of Supply

Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
Total Annual Revenue Requirement (incl OA Consumers)	3303.39	2881.70	3131.08	3442.20
Less- Revenue from OA consumers				
Income from Transmission Charges	24.38	17.94	21.51	25.78
Receipts on account of Cross- Subsidy Surcharge	124.15	27.94	27.69	27.07
Receipts on account of Additional Surcharge	85.55	47.47	38.70	34.51
Total	234.08	93.34	87.90	87.36
Total Annual Revenue Requirement (excluding OA Consumers)	3069.30	2788.36	3043.18	3354.84
Estimated Sales	4867.29	5142.99	5475.52	5837.78
Average Cost of Supply for Retail Supply Business	6.31	5.42	5.56	5.75

Based on the above projected ARR the tariffs for various categories have been determined as below.



# 2.15 Proposed Tariff

On the basis of the cross subsidy structure proposed in the Tariff Philosophy section, the proposed Tariff structure for the Control Period for various categories has been presented in the tables below.



Table 2-42: Category wise Overall ABR for Control Period

Consumer Categories			FY 2016-17					FY 2017-18		
					:					
	CS for supply	Supply ABR	Wheeling Charge (In Rs/kVA/month for HT)	RAC	Overall	CS for supply	Supply ABR	Wheeling Charge (In Rs/kVA/month for	RAC	Overall ABR
	%	Rs/kWh	Rs/kVA/month for HT Rs/kWh for LT	Rs/kWh	Rs/kWh	%	Rs/kWh	Rs/kVA/month for HT Rs/kWh for LT	Rs/kWh	Rs/kWh
HTI - Industry	119%	7.49	350	0.63	9.14	117%	6.37	350	0.77	8.23
HT II - Commercial	130%	8.20	350	0.64	9.85	123%	69.9	350	0.72	8.51
HT III - Group Housing Society	125%	7.88	350	0.59	9.48	124%	6.72	350	0.68	8.50
HT IV - Temporary Supply	169%	10.66	350	0.91	12.58	167%	9.05	350	1.16	11.31
HT V(A) - Railways										
- 22/33 kV	120%	7.57	350	0.56	9.14	117%	6.35	350	0.64	8.08
- 100kV						%0	00.00	00.00	00.00	0.00
HT V(B) - Railways Metro & Monorail	120%	7.57	350	0.55	9.14	117%	6.37	350	0.62	8.08
HT VI - Public Services										
a) Govt. Edu. Inst. & Hospitals	109%	6.87	350	0.54	8.42	104%	5.64	350	0.59	7.32
b) Others	113%	7.13	350	0.59	8.72	106%	5.75	350	0.68	7.52
LT CUSTOMERS										
LT I - Residential (BPL)	7%	0.44	1.02	0.03	1.49	7%	0.11	1.59	00.00	1.70
LT I - Residential						%0	0.00	00.00	00.00	00.00
- S1 (0-100 units)	30%	1.91	2.05	0.13	4.09	37%	2.02	2.13	0.20	4.34
- S2 (101-300 units)	71%	4.46	2.05	0.32	6.83	%98	4.68	2.13	0.50	7.31
- S3 (> 301-500 Units)	107%	6.75	2.05	0.55	9.35	103%	5.56	2.13	0.67	8.35
- S4 (Above 500 units (balance units)	129%	8.14	2.05	0.68	10.87	124%	6.72	2.13	0.83	9.68
LT II - Commercial										
- Upto 20 kW	110%	6.94	2.05	0.53	9.52	105%	5.67	2.13	09.0	8.39
- > 20 kW & < 50kW	114%	7.19	2.05	0.44	9.68	108%	5.86	2.13	0.43	8.41
- > 50kW	118%	7.43	2.05	0.53	10.01	111%	6.02	2.13	0.57	8.71
LT III - Industry < 20 kW	103%	6.51	2	0.54	9.10	100%	5.39	2.13	99'0	8.18
LT IV - Industry > 20kW	108%	6.81	2.05	0.49	9.35	105%	5.69	2.13	0.55	8.37
LT V - Advertisement & Hoardings,	237%	14.95	2.05	00.00	16.99	220%	11.93	2.13	1.19	15.25
incl.floodlights & neon signs										
LT VI —Streetlights	%06	5.68	2.05	0.47	8.20	%68	4.83	2.13	0.42	7.37
LT VII – Temporary Supply										
- TSR – Temporary Supply Religious	%29	4.23	2.05	0.34	6.62	%89	3.42	2.13	0.42	5.96
- TSO – Temporary Supply Others	187%	11.79	2.05	0.99	14.83	183%	9.92	2.13	1.25	13.30
LT VIII – Crematoriums and Burial	22%	3.47	2.05	0.00	5.52	25%	2.82	2.13	00.00	4.94
Grounds										
LT IX - Public Services										
a) Govt. Edu. Inst. & Hospitals	107%	6.75	2.05	0.55	9.35	%66	5.39	2.13	0.65	8.17
b) Others	105%	6.62	2.05	0.55	9.22	101%	5.49	2.13	0.69	8.31



								07 0707		
	CS for supply Business	Supply ABR	Wheeling Charge	RAC	Overall	CS for supply Business	Supply ABR	Wheeling Charge	RAC	Overall
	%	Rs/kWh	Rs/kVA/month for HT Rs/kWh for LT	Rs/kWh	Rs/kWh	%	Rs/kWh	Rs/kVA/month for HT Rs/kWh for LT	Rs/kWh	Rs/kWh
HTI - Industry	116%	6.47	350	0.65	8.21	115%	6.62	350	00.00	7.74
HT II - Commercial	121%	6.72	350	0.59	8.40	117%	6.73	350	00.00	7.85
HT III - Group Housing Society	122%	6.78	350	0.55	8.41	116%	6.67	350	00.00	7.78
HT IV - Temporary Supply	165%	9.17	350	1.02	11.28	165%	9.48	350	00.00	10.60
HT V(A) - Railways										
- 22/33 kV	116%	6.45	350	0.53	90'8	110%	6.30	350	00.00	7.42
- 100kV	%0	00.00	0.00	00:00	00.00	%0	00.00	00:00	00.00	0.00
HT V(B) - Railways Metro & Monorail	116%	6.47	350	0.50	8.06	110%	6.31	350	00.00	7.43
HT VI - Public Services										
a) Govt. Edu. Inst. & Hospitals	102%	5.69	350	0.47	7.25	100%	5.75	350	00.00	98'9
b) Others	104%	5.77	350	0.57	7.43	102%	5.83	350	00.00	6.95
LT CUSTOMERS										
LT I - Residential (BPL)	3%	0.17	2.05	0.01	2.22	2%	0.31	1.96	00:00	2.27
LT I - Residential	%0	00:00	0.00	00.00	00:00	%0	00.00	0.00	00.00	00.00
- S1 (0-100 units)	43%	2.39	2.05	0.20	4.64	20%	2.87	1.96	00.00	4.83
- S2 (101-300 units)	91%	5.06	2.05	0.46	7.57	%66	2.67	1.96	00.00	7.63
- S3 (> 301-500 Units)	100%	5.56	2.05	0.57	8.18	100%	5.77	1.96	00:00	7.73
- S4 (Above 500 units (balance units)	119%	6.61	2.05	0.71	9.37	111%	6.41	1.96	00.00	8.37
LT II - Commercial										
- Upto 20 kW	102%	2.67	2.05	0.48	8.20	101%	5.80	1.96	00.00	7.76
- > 20 kW & < 50kW	106%	5.92	2.05	0.32	8.29	102%	5.83	1.96	00.00	7.79
- > 50kW	110%	6.11	2.05	0.47	8.63	104%	6.00	1.96	00.00	7.96
LT III - Industry < 20 kW	100%	5.53	2	0.59	8.17	100%	5.75	1.96	00.00	7.71
LT IV - Industry > 20kW	104%	5.78	2.05	0.45	8.28	103%	5.94	1.96	00.00	7.90
LTV - Advertisement & Hoardings,	218%	12.12	2.05	1.03	15.20	218%	12.53	1.96	00.00	14.49
incl.floodlights & neon signs										
LT VI – Streetlights	%98	4.78	2.05	0.52	7.35	%98	4.94	1.96	00.00	6.90
LT VII - Temporary Supply										
- TSR – Temporary Supply Religious	93%	3.50	2.05	0.37	5.92	63%	3.62	1.96	00.00	5.58
- TSO – Temporary Supply Others	178%	68.6	2.05	1.08	13.02	175%	10.06	1.96	00:00	12.02
LT VIII – Crematoriums and Burial	20%	2.78	2.05	00.00	4.83	48%	2.76	1.96	0.00	4.72
Grounds										
LT IX - Public Services										
a) Govt. Edu. Inst. & Hospitals	%66	5.50	2.05	0.58	8.13	%66	5.72	1.96	00:00	7.68
b) Others	101%	5.59	2.05	0.61	8.24	100%	5.75	1.96	0.00	7.71



Tata Power – D

Further, we have in the Table below presented the % change in the ABR of each year as compared to that of the previous year for each category of consumer.

Table 2-43: % Change in ABR during the Control Period

Particulars	FY 15-16	FY 16-17	% Change over	FY 17-18	% Change over	FY 18-19	% Change over	FY 19-20	%Change over
	Existing	Proposed ABB	506	Proposed ABB	in a contract	Pronosed	in a constant	Proposed ABB	
	ABR					ABR			
HT I - Industry	9.28	9.14	-1.55%	8.23	-10%	8.21	%0	7.65	-2%
HT II - Commercial	6.67	9.85	1.81%	8.51	-14%	8.40	-1%	7.75	-8%
HT III - Group Housing Society	68.6	9.48	-4.17%	8.50	-10%	8.41	-1%	7.69	%6-
HT IV - Temporary Supply	12.62	12.58	-0.34%	11.31	-10%	11.28	%0	10.50	-2%
HT V(A) - Railways									
- 22/33 kV	9.19	9.14	-0.56%	80.8	-12%	8.06	%0	7.32	%6-
- 100kV									
HTV(B) - Railways Metro & Monorail	9.19	9.14	-0.59%	80.8	-12%	8.06	%0	7.33	%6-
HT VI - Public Services									
a) Govt. Edu. Inst. & Hospitals	8.51	8.42	-1.06%	7.32	-13%	7.25	-1%	6.77	-2%
b) Others	8.56	8.72	1.87%	7.52	-14%	7.43	-1%	6.85	-8%
LT CUSTOMERS									
LT I - Residential (BPL)	1.40	1.49	8.67%	1.70	14%	2.22	30%	2.27	2%
LT I - Residential									
RESIDENTIAL									
- S1 (0-100 units)	2.39	4.09	71.27%	4.34	%9	4.64	2%	4.83	4%
- S2 (101-300 units)	4.47	6.83	52.81%	7.31	7%	7.57	4%	7.63	1%
- S3 (> 301-500 Units)	8.61	9.35	8.61%	8.35	-11%	8.18	-2%	7.73	%9-
- S4 (Above 500 units (balance units)	10.71	10.87	1.52%	9.68	-11%	9.37	-3%	8.37	-11%
LT II - Commercial									
- Upto 20 kW	9.22	9.52	3.28%	8.39	-12%	8.20	-2%	7.76	-5%
- > 20 kW & < 50kW	9.62	9.68	0.59%	8.41	-13%	8.29	-1%	7.79	%9-
- > 50kW	66.6	10.01	0.19%	8.71	-13%	8.63	-1%	7.96	-8%
LT III - Industry < 20 kW	8.36	9.10	8.86%	8.18	-10%	8.17	%0	7.71	%9-
LT IV - Industry > 20kW	9.30	9.35	0.55%	8.37	-10%	8.28	-1%	7:90	-5%
LT V - Advertisement & Hoardings,	15.85	17.00	7.23%	15.25	-10%	15.20	%0	14.49	-5%
incl.floodlights & neon signs									
LT VI – Streetlights	6.64	8.20	23.50%	7.37	-10%	7.35	%0	06:9	%9-
LT VII – Temporary Supply									
- TSR – Temporary Supply Religious	4.84	6.62	36.74%	5.96	-10%	5.92	-1%	5.58	%9-
- TSO – Temporary Supply Others	15.02	14.83	-1.25%	13.30	-10%	13.02	-2%	12.02	-8%
LT VIII – Crematoriums and Burial Grounds	4.37	5.52	26.29%	4.94	-10%	4.83	-2%	4.72	-2%
LT IX - Public Services									
a) Govt. Edu. Inst. & Hospitals	8.51	9.35	898.6	8.17	-13%	8.13	%0	7.68	%9-
b) Others	8.26	9.22	11.63%	8.31	-10%	8.24	-1%	7.71	%9-



# Table 2-44: Category wise Tariff Components for the Control Period

### FY 2016-17

Consumer Categories	Fixed Charge	Demand Charge	Energy Charge	HT Wheeling Charge	LT Wheeling Charge	RAC
	Rs/Connection/month	Rs/KVA/Month	Rs/kWh	Rs/kVA/month	Rs/kWh	Rs/kWh
HT CUSTOMERS						
HT   -  ndustry		300	7.50	340		0.63
HT    - Commercial		300	7.63	340		0.64
HT III - Group Housing Society		300	6.98	340		0.59
HT IV - Temporary Supply	500		10.75	340		0.91
HT V(A) - Railways						
- 22/33 kV		300	6.57	340		0.56
- 100kV		300		340		
HT V(B) - Railways Metro &		300	6.60	340		0.55
Monorail						
HT VI - Public Services						
a) Govt. Edu. Inst. & Hospitals		300	6.39	340		0.54
b) Others		300	6.98	340		0.59
LT CUSTOMERS						
LT   - Residential (BPL)	30		0.44		2.05	0.03
LT   - Residential						
- S1 (0-100 units)	75		1.63		2.05	0.13
- S2 (101-300 units)	100		3.91		2.05	0.32
- S3 (> 301-500 Units)	100		6.55		2.05	0.55
- S4 (Above 500 units (balance units)	150		8.07		2.05	0.68
LT    - Commercial						
- Upto 20 kW	325		6.34		2.05	0.53
- > 20 kW & < 50kW		300	5.30		2.05	0.44
- > 50kW		300	6.33		2.05	0.53
LT     -  ndustry < 20 kW	325		6.43		2.05	0.54
LT IV - Industry > 20kW		300	5.87		2.05	0.49
LT V - Advertisement & Hoardings,	500		14.95		2.05	0.00
incl.floodlights & neon signs						
LT VI – Streetlights		300	5.68		2.05	0.47
LT VII – Temporary Supply						
- TSR – Temporary Supply Religious	275		4.13		2.05	0.34
- TSO – Temporary Supply Others	500		11.70		2.05	0.99
LT VIII – Crematoriums and Burial	275		3.47		2.05	0.00
Grounds						
LT IX - Public Services						
a) Govt. Edu. Inst. & Hospitals	300		6.58		2.05	0.55
b) Others	300		6.59		2.05	0.55



### FY 2017-18

Consumer Categories	Fixed Charge	Demand Charge	Energy Charge	HT Wheeling Charge	LT Wheeling Charge	RAC
	Rs/Connection/month	Rs/KVA/Month	Rs/kWH	Rs/kVA/month	Rs/kVA/month	Rs/kWH
HT CUSTOMERS						
HT I - Industry		380	6.09	350		0.77
HT II - Commercial		380	5.74	350		0.72
HT III - Group Housing Society		380	5.38	350		0.68
HT IV - Temporary Supply	550		9.13	350		1.16
HT V(A) - Railways						
- 22/33 kV		380	5.05	350		0.64
- 100kV		380		350		
HT V(B) - Railways Metro &		380	4.95	350		0.62
Monorail						
HT VI - Public Services						
a) Govt. Edu. Inst. & Hospitals		380	4.71	350		0.59
b) Others		380	5.39	350		0.68
LT CUSTOMERS						
LT I - Residential (BPL)	50		0.11		2.13	0.00
LT I - Residential						
- S1 (0-100 units)	100		1.63		2.13	0.20
- S2 (101-300 units)	125		3.99		2.13	0.50
- S3 (>301-500 Units)	125		5.30		2.13	0.67
- S4 (Above 500 units (balance units)	200		6.61		2.13	0.83
LT II - Commercial						
- Upto 20 kW	375		4.75		2.13	0.60
- > 20 kW & < 50kW		380	3.45		2.13	0.43
- > 50kW		380	4.54		2.13	0.57
LT III - Industry < 20 kW	375		5.25		2.13	0.66
LT IV - Industry > 20kW		380	4.42		2.13	0.55
LT V - Advertisement & Hoardings,	550		9.40		2.13	1.19
incl.floodlights & neon signs						
LT VI – Streetlights		380	3.37		2.13	0.42
LT VII – Temporary Supply						
- TSR — Temporary Supply Religious	325		3.34		2.13	0.42
- TSO – Temporary Supply Others	550		9.83		2.13	1.25
LT VIII – Cre matoriums and Burial	325		2.82		2.13	0.00
Grounds						
LT IX - Public Services						
a) Govt. Edu. Inst. & Hospitals	325		5.20		2.13	0.65
b) Others	325		5.46		2.13	0.69



## FY 2018-19

Consumer Categories	Fixed Charge	Demand Charge	Energy Charge	HT Wheeling Charge	LT Wheeling Charge	RAC
	Rs/Connection /month	Rs/KVA/Month	Rs/kWH	Rs/kVA/month	Rs/kVA/month	Rs/kWH
HT CUSTOMERS						
HT I - Industry		460	5.94	350		0.65
HT II - Commercial		460	5.43	350		0.59
HT III - Group Housing Society		460	5.00	350		0.55
HT IV - Temporary Supply	600		9.25	350		1.02
HT V(A) - Railways						
- 22/33 kV		460	4.86	350		0.53
- 100kV		460		350		
HT V(B) - Railways Metro &		460	4.62	350		0.50
Monorail						
HT VI - Public Services						
a) Govt. Edu. Inst. & Hospitals		460	4.33	350		0.47
b) Others		460	5.22	350		0.57
LT CUSTOMERS						
LT I - Residential (BPL)	70		0.17		2.05	0.01
LT I - Residential						
- S1 (0-100 units)	125		1.89		2.05	0.20
- S2 (101-300 units)	150		4.23		2.05	0.46
- S3 (> 301-500 Units)	150		5.25		2.05	0.57
- S4 (Above 500 units (balance units)	250		6.46		2.05	0.71
LT II - Commercial						
- Upto 20 kW	425		4.45		2.05	0.48
- > 20 kW & < 50kW		460	3.01		2.05	0.32
- > 50kW		460	4.29		2.05	0.47
LT III - Industry < 20 kW	425		5.36		2.05	0.59
LT IV - Industry > 20kW		460	4.18		2.05	0.45
LT V - Advertisement & Hoardings,	600		9.39		2.05	1.03
incl.floodlights & neon signs						
LT VI – Streetlights		460	4.78		2.05	0.52
LT VII – Temporary Supply						
- TSR – Temporary Supply Religious	375		3.43		2.05	0.37
- TSO – Temporary Supply Others	600		9.80		2.05	1.08
LT VIII – Crematoriums and Burial	375		2.78		2.05	0.00
Grounds						
LT IX - Public Services						
a) Govt. Edu. Inst. & Hospitals	350		5.30		2.05	0.58
b) Others	350		5.55		2.05	0.61



FY 2019-20

Consumer Categories	Fixed Charge	Demand Charge	Energy	HT Wheeling	LT Wheeling Charge	
			Charge	Charge		
	Rs/Connection/month	Rs/KVA/Month	Rs/kWH	Rs/kVA/month	Rs/kVA/month	
HT CUSTOMERS			,			
HTI - Industry		540	5.84	350		
HT II - Commercial		540	5.11	350		
HT III - Group Housing Society		540	4.45	350		
HTIV - Temporary Supply	650		9.56	350		
HT V(A) - Railways						
- 22/33 kV		540	4.42	350		
- 100kV		540		350		
HT V(B) - Railways Metro &		540	4.02	350		
Monorail						
HT VI - Public Services						
a) Govt. Edu. Inst. & Hospitals		540	3.96	350		
b) Others		540	5.09	350		
LT CUSTOMERS						
LT I - Residential (BPL)	70		0.17		1.96	
LT I - Residential						
- S1 (0-100 units)	150		2.27		1.96	
- S2 (101-300 units)	175		4.70		1.96	
- S3 (> 301-500 Units)	175		5.41		1.96	
- S4 (Above 500 units (balance units)	300		6.21		1.96	
LT II - Commercial						
- Upto 20 kW	475		4.24		1.96	
- > 20 kW & < 50kW		540	2.43		1.96	
- > 50kW		540	3.84		1.96	
LT III - Industry < 20 kW	475		5.56		1.96	
LT IV - Industry > 20kW		540	4.02		1.96	
LT V - Advertisement & Hoardings,	650		12.53		1.96	
incl.floodlights & neon signs						
LT VI – Streetlights		540	4.94		1.96	
LT VII – Temporary Supply						
- TSR – Temporary Supply Religious	425		3.56		1.96	
- TSO – Temporary Supply Others	650		9.96		1.96	
LT VIII – Crematoriums and Burial	425		2.76		1.96	
Grounds						
LT IX - Public Services						
a) Govt. Edu. Inst. & Hospitals	375		5.50		1.96	
b) Others	375		5.72		1.96	

Note: No RAC is proposed for FY 2019-20

We request the Hon'ble Commission to consider our proposal.