

## 1. EXECUTIVE SUMMARY

### 1.1 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.

### 1.2 Installed Capacity of Thermal and Hydro Generation

The existing installed generation capacity of Tata Power-G is 2027 MW comprising of 447 MW of Hydro Generation and 1580 MW of Thermal Generation. However, 150 MW Unit 4 Generating Capacity is no longer in use, hence for operational purpose, the Thermal Generating Capacity considered is 1430 MW. The station-wise and unit-wise break up of total capacity of Tata Power-G is given in the following Table:

**Table 1-1: Installed Capacity of Generating Stations**

Generation Unit	Type of Fuel	Capacity
Unit 5	Coal, Oil and Gas	500
Unit 6	Oil and Gas	500
Unit 7	Gas	180
Unit 8	Coal	250
<b>Total Thermal Capacity</b>		<b>1430</b>
Bhira	Hydro	300
Bhivpuri	Hydro	75
Khopoli	Hydro	72
<b>Total Hydro Capacity</b>		<b>447</b>
<b>Total Generation Capacity</b>		<b>1877</b>

The entire generation capacity is tied up on a long term basis with two Distribution Utilities in Mumbai:

- (i) Brihan Mumbai Electric Supply and Transport (BEST)
- (ii) The Tata Power Company Ltd. - Distribution Business (Tata Power-D)

The share of the operating generation capacity excluding Unit 4, tied up with the Distribution Licensees for each of the above mentioned capacities is as follows:

**Table 1-2: Power Purchase Agreements of Tata Power-G with Distribution Utilities**

Generation Unit	Capacity	BEST		Tata Power-D	
		%	MW	%	MW
Unit 5	500	51.17%	256	48.83%	244
Unit 6	500	51.17%	256	48.83%	244
Unit 7	180	51.17%	92	48.83%	88
Unit 8	250	40%	100	60%	150
<b>Total Thermal Capacity</b>	<b>1430</b>		<b>704</b>		<b>726</b>
Bhira	300	51.17%	154	48.83%	146
Bhivpuri	75	51.17%	38	48.83%	37
Khopoli	72	51.17%	37	48.83%	35
<b>Total Hydro Capacity</b>	<b>447</b>		<b>229</b>		<b>218</b>
<b>Total Generation Capacity</b>	<b>1877</b>		<b>933</b>		<b>944</b>

The above mentioned long term capacity tie up agreement / arrangement is valid till the end of FY 2017-18 i.e. up to 31<sup>st</sup> March, 2018. Tata Power-D has requested off-take on a long term basis post the expiry of the PPA period. Actual tie ups will be formalised in due course. In view of this, we request the Hon'ble Commission to determine Tariff for the entire Control Period FY 2016-17 to FY 2019-20 considering that certain percentage of power will be tied up with Tata Power-D in the future.

### 1.3 Filings under Present Petition

Tata Power-G, in this petition, has presented the following for different years as given below:

- As per MERC (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
  - Status of Compliance to Directives

- As per MERC (MYT) Regulations, 2015:
  - Projections for FY 2016-17 to FY 2019-20
  - Fixed Cost and Energy Charge for FY 2016-17 to FY 2019-20

The brief summary of the submission for the period FY 2014-15 to FY 2019-20 has been presented below. The actual performance for FY 2014-15 has been presented, whereas projections have been presented for the period FY 2015-16 to FY 2019-20.

#### 1.4 Operational Performance of Tata Power-G

- **Availability and PLFs of Generating Units**

The Availability and the Plant Load Factors (PLFs) of the Generating Units over the period FY 2014-15 to FY 2019-20 is presented in the Table below:

**Table 1-3: Availability & PLF of Generating Units**

Unit	Availability (%)						PLF (%)					
	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
	<i>Actual</i>	<i>Estimate</i>	<i>Projections</i>				<i>Actual</i>	<i>Estimate</i>	<i>Projections</i>			
Unit 5	85.07%	94%	87%	97%	88%	97%	75.71%	80%	85%	85%	85%	85%
Unit 6	99.96%	90%	97%	92%	97%	92%	4.61%	1%	0%	0%	0%	0%
Unit 7	77.34%	93%	97%	97%	87%	97%	72.84%	68%	56%	56%	50%	56%
Unit 8	36.61%	95%	93%	97%	93%	97%	32.67%	89%	85%	85%	85%	85%
Bhira	99.46%	91%	98%	96%	98%	98%						
Bhivpuri	99.47%	96%	99.6%	98%	98%	99.6%						
Khopoli	96.99%	99.6%	99.5%	99.6%	99.6%	98%						

- **Generation from Tata Power-G**

The actual generation during the period FY 2014-15 from the various Generating Units of Tata Power - G and proposed generation for the period FY 2015-16 to FY 2019-20 is as given in the Table below:

**Table 1-4: Gross & Net Generation of Tata Power Generating Stations**

MUs

Unit	Gross Generation						Net Generation					
	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
	Actual	Estimate	Projections				Actual	Estimate	Projections			
Unit 5	3316.29	3496.31	3723.00	3723.00	3722.76	3723.00	3127.66	3291.36	3512.99	3512.78	3516.41	3520.76
Unit 6	838.20	42.13	0.00	0.00	0.00	0.00	770.18	13.59	-23.73	-23.73	-23.73	-23.79
Unit 7	1148.48	1078.61	884.12	884.12	782.86	884.12	1119.27	1048.62	853.15	853.15	753.52	853.15
Unit 8	715.47	1959.51	1862.59	1863.00	1863.00	1863.00	669.14	1838.82	1741.47	1743.72	1744.60	1744.56
Hydro	1442.75	1111.84	1425.00	1470.00	1470.00	1470.00	1403.59	1079.18	1390.45	1435.96	1435.92	1436.12
<b>Total</b>	<b>7461.18</b>	<b>7688.39</b>	<b>7894.70</b>	<b>7940.12</b>	<b>7838.62</b>	<b>7940.12</b>	<b>7089.85</b>	<b>7271.56</b>	<b>7474.34</b>	<b>7521.89</b>	<b>7426.73</b>	<b>7530.81</b>

- **Heat Rates & Auxiliary Consumption**

The actual Heat Rates and Auxiliary Consumption for FY 2014-15 and provisional figures for FY 2015-16 have been presented in the Table below. For the period FY 2016-17 to FY 2019-20, the normative values as per MYT Regulations, 2015 have been considered.

**Table 1-5: Heat Rates for Generating Units**

Unit	Heat Rate (kcal / kWh)			
	FY 2014-15		FY 2015-16	
	Normative	Actual	Normative	Actual
Unit 5	2573	2507	2581	2526
Unit 6	2647	2846	2539	2944
Unit 7	2021	1968	2025	2192
Unit 8	2450	2275	2450	2290

**Table 1-6: Auxiliary Consumption for Generating Units**

Unit	Auxiliary Consumption			
	FY 2014-15		FY 2015-16	
	Normative	Actual	Normative	Actual
Unit 4		2.11		1.77
Unit 5	6.00%	5.69%	6.00%	5.86%
Unit 6	3.50%	6.88%	3.50%	28.54
Unit 7	3.00%	2.54%	3.00%	2.78%
Unit 8	8.50%	6.48%	8.50%	6.16%
Hydro	1.78%	2.54%	1.78%	2.93%

\* Note : Auxiliary Consumption for U6 for FY 2014-15 is for Regulated Business.  
 Auxiliary Consumption for Unit 4 and 6 for FY 2015-16 is shown in MUs  
 Hydro Auxiliary Consumption is without considering Colony Consumption

## 1.5 Financial Performance of Tata Power-G

- **Capital Expenditure and Capitalisation**

Tata Power – G has presented in the Table below, the actual capital expenditure and capitalisation for FY 2014-15, estimated capital expenditure and capitalisation for FY 2015-16 and the projected capital expenditure and capitalisation for the Control Period FY 2016-17 to FY 2019-20.

**Table 1-7: Capital Expenditure & Capitalisation (Thermal & Hydro)**

*Rs crores*

Particulars	Capital Expenditure						Capitalisation					
	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
<b>Thermal and Hydro</b>												
DPR	220.72	111.69	176.94	188.80	198.06	130.27	134.91	155.24	176.24	200.90	187.25	41.94
Non DPR	20.04	31.45	19.62	26.55	30.31	6.05	29.05	26.09	23.28	26.19	31.25	5.44
<b>Total Trombay Station &amp; Hydro</b>	<b>240.77</b>	<b>143.14</b>	<b>196.56</b>	<b>215.35</b>	<b>228.36</b>	<b>136.32</b>	<b>163.96</b>	<b>181.33</b>	<b>199.52</b>	<b>227.09</b>	<b>218.50</b>	<b>47.38</b>
DPR:Non DPR Ratio							22%	17%	13%	13%	17%	13%
<b>Unit 8</b>												
DPR	8.74	1.80	0.90	0.02	9.81	0.00	40.00	22.25	2.04	0.00	10.86	0.00
Non DPR	1.75	0.69	0.43	0.00	0.00	0.00	6.89	1.70	0.00	0.00	0.00	0.00
HoSS												
<b>Total Unit 8</b>	<b>10.50</b>	<b>2.49</b>	<b>1.33</b>	<b>0.02</b>	<b>9.81</b>	<b>0.00</b>	<b>46.89</b>	<b>23.95</b>	<b>2.04</b>	<b>0.00</b>	<b>10.86</b>	<b>0.00</b>
<b>Total Tata Power-G</b>	<b>251.27</b>	<b>145.63</b>	<b>197.89</b>	<b>215.37</b>	<b>238.17</b>	<b>136.32</b>	<b>210.85</b>	<b>205.29</b>	<b>201.56</b>	<b>227.09</b>	<b>229.36</b>	<b>47.38</b>
DPR:Non DPR Ratio							17%	8%				

- **Annual Fixed Charges**

The Annual Fixed Charges have been arrived at for Trombay Station , Hydro and Unit 8 by using the principles laid down in MYT Regulations, 2011 for FY 2014-15 and FY 2015-16 and MYT Regulations, 2015 for FY 2016-17 to FY 2019-20 and are as shown in the Table below:

**Table 1-8: Annual Fixed Charges (Thermal and Hydro)**

	<i>Rs Crore</i>					
	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
O&M Charges	490.52	503.08	506.27	511.77	517.33	522.95
Interest on Long Term Loans	82.38	81.45	80.22	80.10	80.35	73.87
Interest on Working Capital	72.51	54.83	39.31	40.07	42.03	43.26
Interest and Finance Charges	0.21					
Depreciation	117.29	141.39	147.86	152.83	154.51	150.14
Income Tax	99.24	85.85	124.24	127.21	131.51	151.25
Return on Equity	228.82	236.01	249.08	259.00	269.36	275.54
<b>Annual Fixed Charges</b>	<b>1090.96</b>	<b>1102.61</b>	<b>1146.98</b>	<b>1170.98</b>	<b>1195.09</b>	<b>1217.02</b>
<b>Less:</b>						
Non Tariff Income	31.64	16.73	18.28	19.04	19.83	20.66
Unit 4 Fixed Charges	12.86	12.75	12.03	11.77	11.44	10.96
Unit 8 allocation towards shared capacity	12.50	12.50	12.50	12.50	12.50	12.50
<b>Net Annual Fixed Charges</b>	<b>1033.96</b>	<b>1060.63</b>	<b>1104.17</b>	<b>1127.67</b>	<b>1151.33</b>	<b>1172.91</b>

**Table 1-9: Annual Fixed Charges (Unit 8)**

	<i>Rs Crore</i>					
Particulars	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
O&M Charges	51.99	46.25	59.50	62.48	65.60	68.88
Interest on Long Term Loans	60.95	56.92	50.73	43.58	36.77	30.06
Interest on Working Capital	16.28	15.29	11.41	11.59	11.89	12.07
Interest and Finance Charges	0.02					
Depreciation	57.69	64.62	65.31	65.24	65.23	63.40
Income Tax	25.03	40.32	64.44	67.93	70.50	72.37
Return on Equity	51.02	53.18	54.34	54.39	54.64	54.90
Add: Shared Capacity Allocation from Unit 4 to 7	12.50	12.50	12.50	12.50	12.50	12.50
<b>Annual Fixed Charges</b>	<b>275.49</b>	<b>289.09</b>	<b>318.24</b>	<b>317.70</b>	<b>317.13</b>	<b>314.17</b>
<b>Less:</b>						
Non Tariff Income	1.45	2.26	2.40	3.17	4.24	5.72
<b>Net Annual Fixed Charges</b>	<b>274.05</b>	<b>286.83</b>	<b>315.84</b>	<b>314.5</b>	<b>312.89</b>	<b>308.46</b>

- Fuel Prices**

Tata Power-G uses Imported Coal, Domestic Natural Gas (under APM mechanism), Oil (LSHS) and Imported RLNG (Re-Gasified Liquid Natural Gas) for its Generating Units at Trombay. The Coal is imported from Indonesia under long term contracts. The Gas and RLNG is supplied by GAIL whereas Oil (LSHS) is sourced from local oil refineries.

Tata Power-G in the past has been procuring coal from two suppliers viz., (I) PT Adaro, (II) Samtan Co Ltd. and has arranged for the supplies under various contracts till 31<sup>st</sup> December, 2018. For the purpose projection, Tata Power-G has assumed that the required quantities would be available under these contracts till the end of the Control Period.

Tata Power has been procuring LSHS through imports or through local refineries. The quantity of imports as well as local off-take has been reducing over a period of time as generation from Unit 6 has reduced. For the purpose of projection of Oil prices, Tata Power G has considered that such LSHS would be supplied through Local suppliers. However, such supply would be available at an Import Parity price. The final projected price of the Oil has been calculated after considering the impact of inventorisation of existing Oil stock.

For APM gas, MOPNG pricing mechanism is expected to be same as that of last year i.e. the variation in six monthly weighted average of four indices i.e. Henry hub, Alberta, NBP Gas, Russian natural gas shall be applied to existing price. With the current movement in the International Gas prices, it is estimated that the variation in Gas prices shall be nominal +/- 3%.

As regards the RLNG rates, the RLNG (Imported) gas prices are linked to Crude. With the fall in crude the RLNG prices has also followed the trend. The RLNG prices are based on the prevalent RLNG Contract available, which are subject to change depending on the market conditions. Long term contracts are based on Take or Pay methodology.

The projections of the fuel prices for the Control Period from FY 2016-17 to FY 2019-20 therefore work out to be as given in the Table below:

**Table 1-10: Fuel Prices Projections from FY 2016-17 to FY 2019-20**

Fuel	FY 2016-17		FY 2017-18		FY 2018-19		FY 2019-20	
	Rs/MT	Rs/Mkcal	Rs/MT	Rs/Mkcal	Rs/MT	Rs/Mkcal	Rs/MT	Rs/Mkcal
APM	16138	1231	17965	1370	19145	1460	20381	1555
RLNG	25393	1955	28895	2225	31565	2430	34281	2639
Oil	47211	4513	46930	4486	47073	4499	47582	4548
Coal	4747	987	4831	1009	4992	1047	5080	1070

- **Energy Charges**

Considering the projected fuel prices for the Control Period FY 2016-17 to FY 2019-20, the Energy Charges (in Rs./kWh) are projected in the Table below for each of the Thermal Generating Units 5 to 8 fuel wise:

**Table 1-11: Energy Charges Trombay Station and Unit 8**

Unit		FY 2016-17 (Proj)	FY 2017-18 (Proj)	FY 2018-19 (Proj)	FY 2019-20 (Proj)
Unit 5	APM	3.31	3.69	3.95	4.22
Unit 5	Oil	12.12	12.09	12.16	12.33
Unit 5	Coal	2.65	2.72	2.83	2.90
Unit 6	RLNG	5.40	6.16	6.74	7.33
Unit 6	Oil	12.47	12.42	12.48	12.64
Unit 7	APM	2.57	2.86	3.06	3.26
Unit 8	Coal	2.66	2.72	2.82	2.88
Unit 8	Oil	0.02	0.02	0.02	0.02
Unit 7	RLNG	4.08	4.65	5.09	5.54

It may be noted that as explained above, Unit 6 energy charge shown in the Table above is reflecting the price of existing oil stock which was procured earlier at the prevailing rates then. However, in case the Unit 6 is required to generate, the energy charge will factor in the projected oil prices to the extent of the level of generation. Considering the projected oil prices, the energy charge may accordingly reduce.

The Capacity and Energy Charge for Hydro for the Control period from FY 2016-17 to FY 2019-20 are as shown in the Table below:

**Table 1-12: Capacity and Energy Charge for Hydro Stations for FY 2016-17 to FY 2019-20**

Particulars	Unit	FY 2016-17				FY 2017-18				FY 2018-19				FY 2019-20				
		Khopoli	Bhivpuri	Bhira	Total	Khopoli	Bhivpuri	Bhira	Total	Khopoli	Bhivpuri	Bhira	Total	Khopoli	Bhivpuri	Bhira	Total	
Fixed Cost for Hydro	a	Rs Cr	101	70	113	285	102	70	116	288	103	64	124	291	103	64	127	294
NAPAF	b	%	90%	90%	90%		90%	90%	90%		90%	90%	90%		90%	90%	90%	
Projected Availability	c	%	100%	100%	98%		100%	98%	96%		100%	98%	98%		98%	100%	98%	
Capacity Charges	d=0.5*a*c/b	%	55.86	39	62	156	56.19	38	62	157	56.81	35	68	159	56.18	36	69	161
Design Energy	b	MUs	175	193	744	1112	175	193	744	1112	175	193	744	1112	175	193	744	1112
Auxiliary Consumption	c	%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Net Designed Energy	d=b*(1-c)	MUs	173	191	737	1101	173	191	737	1101	173	191	737	1101	173	191	737	1101
Energy Charge Rate	e = 0.5*a/d	Rs/kWh	2.92	1.83	0.77		2.94	1.83	0.79		2.97	1.66	0.84		2.98	1.68	0.86	

- Incentives, Uncontrollable Expenditure and Sharing of Gains and Losses**

Tata Power-G is entitled to earn incentives in the event of the operational performance being better than the norms set by the Hon'ble Commission. Similarly, any approved uncontrollable expenditure has to be passed on to the consumers, whereas any approved gain or loss in the controllable factors has to be shared with the consumers in the ratio as specified in the Regulations. Accordingly, Tata Power-G has worked out the applicable incentives, identified the



uncontrollable expenditures and calculated the gain / (loss) on controllable factors for FY 2014-15.

The truing up for FY 2014-15 has been carried out considering the above mentioned principles set under the MYT Regulations 2011. The Net Gain / (Loss) for FY 2014-15 is presented in the Table below:

**Table 1-13: Sharing of Gain / (Loss) for FY 2014-15**

*Rs. Crores*

	<b>Gain / (Loss)</b>	<b>Gain / (Loss) Passed on to Distribution Licensees</b>
Heat Rate	43.60	14.53
Auxiliary Consumption	3.69	1.23
O&M Expenditure	-9.48	-3.16
<b>Net Gain / (Loss)</b>	<b>37.82</b>	<b>12.61</b>

As can be seen from the above Table, the consumers would be benefitted on account of efficient operations of the Generating Units.

The Net Gap / (Surplus) for FY 2014-15 has been presented below:

**Table 1-14: Net Entitlement for FY 2014-15 for Trombay Station and Hydro Stations**

Rs. Crores

Sr. No.	Particulars	Approved in the MTR	Entitlement as per the Regulations	Efficiency Gains / (Loss) from Controllable factors shared with Consumers	Net Entitlement after Impact of Gains / (Loss) from Controllable factors
<b>I</b>	<b>Revenue</b>		<b>2641.56</b>		<b>2641.56</b>
	- Power Supply		2609.92		2609.92
	- Non-Tariff Income	16.00	31.64		31.64
<b>II</b>	<b>Expenditure</b>				
1	Fuel Related Expenses		1380.23	7.46	1372.76
2	Aux. Consumption Benefit		-1.88	-0.63	-1.26
3	Operation & Maintenance Expenses with uncontrollable expenditure	475.87	488.72	-0.41	489.13
4	Depreciation	126.37	117.29		117.29
5	Interest on Long-term Loan Capital	72.49	82.38		82.38
6	Other Charges		0.21		0.21
7	Interest on Working Capital	78.46	72.51		72.51
8	Add Colony Consumption of Hydro		0.56		0.56
9	Income tax	104.17	99.24		99.24
10	Return on Equity	224.30	228.82		228.82
<b>11</b>	<b>Total Expenditure</b>	<b>1081.66</b>	<b>2468.06</b>	<b>6.42</b>	<b>2461.64</b>
12	Incentive (PLF, Hydro Incentive.)		39.70		39.70
<b>13</b>	<b>Total Including Incentive</b>	<b>1081.66</b>	<b>2507.76</b>	<b>6.42</b>	<b>2501.34</b>
	<u>Less:</u>				
<b>14</b>	<b>Fixed cost portion of Unit 4</b>	<b>10.36</b>			<b>12.86</b>
<b>15</b>	<b>Allocation for Unit 8 for Shared Capacity</b>	<b>12.50</b>	<b>12.50</b>	0.00	<b>12.50</b>
<b>III</b>	<b>Total ARR for FY 2014-15</b>	<b>1058.80</b>	<b>2495.26</b>	<b>6.42</b>	<b>2475.98</b>
IV	Reduction in fixed cost due to lower availability of Unit 7				10.76
<b>V</b>	<b>Net ARR for FY 2014-15</b>				<b>2465.22</b>
<b>VI</b>	<b>Net Gap/(Surplus)</b>		<b>146.29</b>	<b>-6.42</b>	<b>-176.34</b>

**Table 1-15: Net Entitlement for FY 2014-15 for Unit 8**

*Rs. Crores*

Sr. No.	Particulars	Approved in the MTR T.O.	Entitlement as per the Regulations	Efficiency Gains / (Loss) from Controllable factors shared with Consumers	Net Entitlement after Impact of Gains / (Loss) from Controllable factors
<b>I</b>	<b>Revenue</b>				<b>477.00</b>
	- Power Supply		475.55		475.55
	- Non-Tariff Income	2.22	1.45		1.45
<b>II</b>	<b>Expenditure</b>				
1	Fuel Related Expenses	174.92	196.78	7.07	189.71
2	Auxiliary Consumption Benefit		5.58	1.86	3.72
3	Operation & Maintenance Expenses	43.75	43.75	-2.75	46.50
4	Depreciation	59.95	57.69		57.69
5	Interest on Long-term Loan Capital	59.89	60.95		60.95
6	Interest on Working Capital	15.75	16.28		16.28
7	Other Finance Charges		0.02		0.02
8	Income tax	20.25	25.03		25.03
9	Return on Equity	50.71	51.02		51.02
<b>10</b>	<b>Total Expenditure</b>	<b>425.22</b>	<b>457.11</b>	<b>6.19</b>	<b>450.93</b>
11	Reduction in Annual Fixed Charge on account of lower availability		-82.55		-82.55
<b>12</b>	<b>Total Including Incentive</b>	<b>425.22</b>	<b>374.56</b>	<b>6.19</b>	<b>368.37</b>
<b>III</b>	<b>Gap / (Surplus)</b>				<b>-108.62</b>
	<u>Add:</u>				
<b>IV</b>	<b>Expenditure towards shared capacity of Unit 4 to 7</b>	<b>12.50</b>			<b>12.50</b>
<b>V</b>	<b>Net Gap/(Surplus)</b>				<b>-96.12</b>

**Table 1-16: Net Entitlement for FY 2015-16 for Trombay Station and Hydro Stations**

*Rs. Crores*

Sr. No.	Particulars	Approved in the MTR	Net Entitlement after Impact of Gains / (Loss) from Controllable factors
<b>I</b>	<b>Revenue</b>		<b>2313.88</b>
	- Power Supply		2297.15
	- Non-Tariff Income	16.73	16.73
<b>II</b>	<b>Expenditure</b>		
1	Fuel Related Expenses		1215.68
2	Operation & Maintenance Expenses with uncontrollable expenditure	503.08	503.08
3	Depreciation	132.05	141.39
4	Interest on Long-term Loan Capital	72.72	81.45
5	Interest on Working Capital	56.85	54.83
6	Add Colony Consumption of Hydro	0.00	0.00
7	Income tax	104.17	85.85
8	Return on Equity	229.60	236.01
<b>9</b>	<b>Total Expenditure</b>	<b>1098.47</b>	<b>2318.29</b>
	<u>Less:</u>		
<b>10</b>	<b>Fixed cost of Unit 4</b>	<b>9.31</b>	<b>12.75</b>
<b>11</b>	<b>Allocation for Unit 8 for Shared Capacity</b>	<b>12.50</b>	<b>12.50</b>
<b>III</b>	<b>Total ARR for FY 2015-16</b>		<b>2293.04</b>
<b>IV</b>	<b>Net Gap/(Surplus)</b>		<b>-20.84</b>

**Table 1-17: Net Entitlement for FY 2015-16 for Unit 8**

*Rs. Crores*

Sr. No.	Particulars	Approved in the MTR T.O.	Net Entitlement after Impact of Gains / (Loss) from Controllable factors
<b>I</b>	<b>Revenue</b>		<b>779.39</b>
	- Power Supply		777.13
	- Non-Tariff Income	2.26	2.26
<b>II</b>	<b>Expenditure</b>		
1	Fuel Related Expenses		456.02
2	Operation & Maintenance Expenses	46.25	46.25
3	Depreciation	60.73	64.62
4	Interest on Long-term Loan Capital	54.77	56.92
5	Interest on Working Capital	15.28	15.29
6	Income tax	20.25	40.32
7	Return on Equity	52.46	53.18
<b>8</b>	<b>Total Expenditure</b>	<b>249.74</b>	<b>732.61</b>
	<u>Add:</u>		
<b>IV</b>	<b>Expenditure towards shared capacity of Unit 4 to 7</b>	<b>12.50</b>	<b>12.50</b>
<b>V</b>	<b>Net Gap/(Surplus)</b>		<b>-34.28</b>

- **Net Gap / (Surplus) for FY 2014-15 to FY 2015-16**

Based on the ARR arrived at after the Truing Up exercise of FY 2014-15, the Revenue earned during the year, the provisional truing up of FY 2015-16, the amount already recovered from Distribution Utilities and the Carrying cost, the Net Gap / (Surplus) to be recovered from / shared with Distribution Licensees is brought out in the Table below:

**Table 1-18: Gap / (Surplus) of Tata Power-G for FY 2014-15 & FY 2015-16**

*Rs. Crores*

Sr. no.	Particulars		BEST	Tata Power-D	R Infra	Total
1	Gap / (Surplus) of Trombay Station & Hydro for FY 2014-15	Trombay Station & Hydro	-90.23	-86.11		-176.34
2	Gap / (Surplus) of Unit 6 based on Revenue Billed as per MTR petition for Unit 6 generation based on MSLDC directions	Unit 6 (under MSLDC directive)	1.79	2.35	24.52	28.67
3	Entry Tax amount to be recovered pertaining to past period	Trombay Station & Hydro	13.61	8.03	12.36	34.01
4	Gap / (Surplus) of Unit 8	Unit 8	-38.45	-57.67		-96.12
<b>5= 1 to 4</b>	<b>Total Gap / (Surplus) for FY 2014-15</b>		<b>-113.26</b>	<b>-133.40</b>	<b>36.89</b>	<b>-209.78</b>
6	Amount already recovered from Distribution Licensees in the T.O. in Case 06 of 2015	Trombay Station & Hydro	-90.38	-86.26	0.00	-176.64
7	Amount already recovered from Distribution Licensee in the T.O. in Case 06 of 2015	Unit 8	-45.60	-68.39		-113.99
<b>8=6+7</b>	<b>Total Gap/(Surplus) for Provisional Truing up for FY 2014-15 allowed to recovered in T.O.</b>		<b>-135.98</b>	<b>-154.65</b>	<b>0.00</b>	<b>-290.63</b>
<b>9=5-8</b>	<b>Net Gap / (Surplus) to be recovered for FY 2014-15</b>		<b>22.72</b>	<b>21.25</b>	<b>36.89</b>	<b>80.85</b>
10	Carrying Cost on Gap / (Surplus) of FY 2014-15 (for 06 Months)	14.75%	1.68	1.57	2.72	5.96
11	Carrying Cost for FY 2015-16	14.29%	3.25	3.04	5.27	11.55
<b>12=9 to 11</b>	<b>Total Recovery for FY 2014-15 including carrying Cost</b>		<b>27.64</b>	<b>25.85</b>	<b>44.88</b>	<b>98.36</b>
13	Gap / (Surplus) of Trombay Station & Hydro for FY 2015-16	Trombay Station & Hydro	-11.43	-10.91		-22.33
14	Gap / (Surplus) of Unit 6 based on Revenue Billed as per MTR petition for Unit 6 generation based on MSLDC directions	Unit 6 (under MSLDC directive)	0.97	1.79	0.74	3.50
15	Entry Tax amount to be recovered pertaining to past period	Trombay Station & Hydro	13.39	15.56	7.36	36.31
16	Gap / (Surplus) of Unit 8 for FY 2015-16	Unit 8	-14.72	-22.08		-36.81
<b>17=13 to 16</b>	<b>Total Recovery for FY 2015-16 w/o carrying Cost for future period</b>		<b>-11.79</b>	<b>-15.64</b>	<b>8.10</b>	<b>-19.33</b>
<b>18=12+17</b>	<b>Total Past Recovery for Tata Power-G</b>		<b>15.84</b>	<b>10.21</b>	<b>52.98</b>	<b>79.03</b>

As can be seen from the above Table there is a Net Overall Gap for FY 2014-15 and FY 2015-16 together which is required to be recovered from the Distribution Licensees. This amount is proposed to be recovered from the Distribution Licensees immediately within one month of the Order. In case the Hon'ble Commission deems fit to recover this amount in instalments, we request the Hon'ble Commission to apply appropriate interest as has been done in the previous Tariff Order.

Further, Tata Power-G wishes to submit that it has filed an Appeal No. 244 of 2015 against the MERC Order dated 26<sup>th</sup> June 2015, in Case No. 06 of 2015. The judgement of the same is awaited and the impact of the same (approximately **Rs. 189.13 crores** excluding impact due to disallowance of Income Tax) would be considered in the filings for future period along with the carrying cost as applicable.

- **Overall Generation tariff determination in FY 2016-17 to FY 2019-20**

Tata Power – G has regulated generation capacity at Trombay and across various Hydro stations. Though the two existing PPAs with the distribution companies (Tata Power-D and BEST) for 'Unit 4-7 and Hydro' and 'Unit 8' each, Tata Power-G intends to segregate the capacity on the basis of the fuel used for the generation of energy while entering into PPAs beyond FY 2017-18. Therefore, Unit-wise Tariff has been proposed for the following types of Generating Capacities for FY 2018-19 and FY 2019-20:

Coal	Unit 5 and Unit 8
Gas	Unit 7
Hydros	Bhivpuri, Bhira and Khopoli
Oil	Unit 6

Considering the above submission, the Unit wise Fixed cost for the Control Period is presented below:

**Table 1-19: Annual Fixed Charges**

Particulars	Fixed Cost (Rs. Crore)			
	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
Unit-5	470.91	489.42	499.02	502.97
Unit-6	157.98	158.29	158.82	161.54
Unit-7	190.76	192.26	202.73	214.26
Unit-8	315.84	314.5	312.89	308.47
Bhivpuri	70.07	70.12	63.58	64.33
Khopoli	101.02	101.58	102.69	103.06
Bhira	113.43	115.99	124.48	126.75

Further, the Energy Charge for the Control Period is presented in the Table below:

**Table 1-20: Energy Charges**

Unit		FY 2016-17 (Proj)	FY 2017-18 (Proj)	FY 2018-19 (Proj)	FY 2019-20 (Proj)
Unit 5	APM	3.31	3.69	3.95	4.22
Unit 5	Oil	12.12	12.09	12.16	12.33
Unit 5	Coal	2.65	2.72	2.83	2.90
Unit 6	RLNG	5.40	6.16	6.74	7.33
Unit 6	Oil	12.47	12.42	12.48	12.64
Unit 7	APM	2.57	2.86	3.06	3.26
Unit 8	Coal	2.66	2.72	2.82	2.88
Unit 8	Oil	0.02	0.02	0.02	0.02
Unit 7	RLNG	4.08	4.65	5.09	5.54

We request the Hon'ble Commission to accept the submissions made through this Petition.