

**Executive Summary of
Tata Power –Generation
True up Petition for FY 2011-12 as well as
MYT Petition for FY 2012-13 to FY 2015-16**

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LIST OF ABBREVIATIONS

Abbreviation	Description
A&G	Administration and General
APM	Administered Price Mechanism
APR	Annual Performance Review
ARR	Annual Revenue Requirement
AS	Accounting Standard
ATE	Appellate Tribunal for Electricity
BEST	Brihan Mumbai Electric Supply and Transport
CAGR	Compounded Average Growth Rate
Capex	Capital Expenditure
CBA	Cost Benefit Analysis
CPI	Consumer Price Index
CPP	Captive Power Plant
CPRI	Central Power Research Institute
Crs	Crores
CWIP	Capital Works In Progress
DPR	Detailed Project Report
EA 2003	The Electricity Act 2003
FAC	Fuel Adjustment Charge
FBSM	Final Balancing and Settlement Mechanism
FY	Financial Year
GFA	Gross Fixed Assets
GoM	Government of Maharashtra
HO	Head Office
IDC	Interest During Construction
IT	Income Tax
KV	Kilo Volt
kVA	Kilo Volt Ampere
kWh	Kilo Watt Hours
LA	Licensed Area
LCC	Load Control Centre
LT	Low Tension
MD	Maximum Demand
MERC	Maharashtra Electricity Regulatory Commission
MMSCMD	Million Metric Standard Cubic Metres per Day
MoD	Merit Order Despatch

Abbreviation	Description
MSEDCL	Maharashtra State Electricity Distribution Company Limited
MSETCL	Maharashtra State Electricity Transmission Company Limited
MSPGCL	Maharashtra State Power Generation Company Limited
MU	Million Units
MVA	Mega Volt Ampere
MW	Megawatt
MYT	Multi Year Tariff
OEM	Original Equipment Manufacturer
O&M	Operation and Maintenance
PF	Power Factor
PLR	Prime Lending Rate
PPA	Power Purchase Agreement
R&M	Repairs and Maintenance
R-Infra	Reliance Infrastructure/Reliance Energy Limited
RoE	Return on Equity
RPO	Renewable Purchase Obligation
Rs.	Rupees
SS	Support Services
STU	State Transmission Utility
Tata Power	The Tata Power Company Limited
Tata Power - G	Generation Business of The Tata Power Company Limited
Tata Power - D	Distribution Business of The Tata Power Company Limited
Tata Power - T	Transmission Business of The Tata Power Company Limited
TPTCL	Tata Power Trading Company Limited
USD	United States Dollars
VC	Variable Cost

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 licenses of the above mentioned companies were also merged and Tata Power was granted a license by the Government of Maharashtra (GoM) for the supply of energy to the public in its Mumbai License Area and to supply energy in bulk to Distribution Licensees, vide resolution No: IEA – 2001/ CR-10509/NRG-1, dated July 12, 2001.

Post enactment of the Electricity Act and the License Regulations notified by this Hon’ble Commission, Tata Power as a deemed Licensee has submitted its license for modifications as may be necessary to bring it in conformity with EA 2003.

1.2 Filings under MYT Regulations, 2011

The Hon’ble Commission issued the MYT Regulations, 2011 on 4th February, 2011. As per paragraph 7.1 of these MYT Regulations, a generating company who is supplying power to a Distribution company such as Tata Power – G is required to file a Business Plan for the Control Period of five financial years commencing from 1st April 2011 to 31st March 2016. Tata Power-G had filed such a Business Plan separately with the Hon’ble Commission. The Hon’ble Commission has issued an Order for the Business Plan on 9th August, 2012 (“Business Plan Order”), wherein it has directed to Tata Power to submit the MYT Petition for the Control Period FY 2012-13 to FY 2015-16 with the approved Business Plan as the basis. Further, the Hon’ble Commission has directed to file ARR petition for FY 2011-12 as per “Terms and Condition of Tariff Regulation 2005”.

1.3 ARR / MYT for the Second Control Period – FY 2011-12 to FY 2015-16

Tata Power, in this petition, has presented the Aggregate Revenue Required for the different years of the Second Control Period. In line with the directive of the Hon’ble Commission the ARR of FY 2011-12 has been arrived at using the old MERC Tariff Regulations, 2005 whereas the ARRs of the balance four years i.e. FY 2012-13 to FY 2015-16

have been arrived at as per the new MYT Regulations, 2011 and on the basis of the Business Plan approved by the Hon'ble Commission in its order dated 9th August 2012.

Further, The Hon'ble Commission, in their Business Plan approval had considered Capitalisation of only those Schemes which have been given 'In Principle' clearance. This has led to a vast difference between Capitalization which has been planned and projected in Business Plan submission of Tata Power and that which is approved by the Hon'ble Commission. We are making this submission considering only the approved Capitalisation in the Business Plan. However, subsequent to the submission of the Business Plan, there have been certain approvals received for capital expenditure schemes. We have included the impact of the same in our present MYT petition.

As the year FY 2011-12 has concluded, Tata Power – G is filing this Annual Revenue Requirement petition for the Generation function for the year FY 2011-12 based on the actual performance. Similarly projections for the period FY 2012-13 to FY 2015-16 have been modified (with respect to the amounts give in the Business Plan order) for incorporating the actual performance of FY 2011-12.

Tata Power- G has filed an appeal in the Appellate Tribunal of Electricity against the directive of filing the performance of FY 2011-12 on the basis of MERC Tariff Regulations, 2005. Tata Power – G reserves the right to seek appropriate adjustments in the cost based on the decision of Hon'ble ATE. The ARR for the Generation Business for FY 2011-12 and the rest of the Control Period i.e. FY 2012-13 to FY 2015-16 have been carried out separately and details of the same are presented in the **Section 5: Performance of FY 2011-12 and Section 6: Projection for Control Period FY 2012-13 to FY 2015-16.**

Tata Power –G had filed a petition for approval of truing up of Aggregate Revenue Requirement for FY 2009-10 and Annual Performance Review for FY 2010-11. The Hon'ble Commission had issued an order on the same dated 15th February, 2012 in Case 105 of 2011. However, Tata Power has appealed against this Order in the ATE for certain issues. Tata Power – G reserves the right to seek appropriate adjustments in the costs based on the decision of Hon'ble ATE.

1.4 Performance of Unit 4 to 8 and Hydro

The existing installed generation capacity of Tata Power is 2027 MW comprising of 447 MW of Hydro generation and 1580 MW of Thermal generation. The station-wise and unit-wise break up of total capacity of the Generation Business of Tata Power is given in the following Table:

Table 1-1: Tata Power Generating Station

Generating Unit	Type of Fuel Used	Capacity (MW)
Khopoli	Hydro	72
Bhivpuri	Hydro	75
Bhira	Hydro	300
Unit 4	Oil and Gas	150
Unit 5	Coal, Oil and Gas	500
Unit 6	Oil and Gas	500
Unit 7	Gas	180
Unit 8	Coal	250
Total		2027

Tata Power has in September, 2011, added 40 MW through a DG based project at Lodhivali in Raigad District of Maharashtra. Tata Power-D and BEST had requested standby arrangement from this unit. Accordingly, Tata Power-G in its Business Plan Petition had proposed standby charges and energy charges for this Unit during the Control Period. However, the Hon'ble Commission has directed Tata Power-D to file a separate petition for this requirement. Hence, we are not including the computations relating to Lodhivali in this petition.

- **Plant load Factor and Generation**

The PLF's and generation in FY 2011-12 by Tata Power - G and proposed to be generated after running MOD for the period FY 2012-13 to FY 2015-16 is as given in the table below. Further, Unit 8 performance and revenue is computed based on the 150 MW in H1 and 250 MW in H2 available for Mumbai i.e an average of 200 MW for FY 2011-12.

Table 1-2: Gross & Net Generation & PLF Tata Power Generating Stations

Generating Units	Gross Generation					Net Generation					PLF				
	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
	MUs	MUs	MUs	MUs	MUs	MUs	MUs	MUs	MUs	MUs	%	%	%	%	%
Hydro	1532.05	1360.00	1210.00	1360.00	1360.00	1485.33	1335.79	1188.46	1335.79	1335.79					
Unit 4	1.57	60.00	84.00	216.00	62.40	-4.14	48.60	71.28	193.92	51.41	0.12%	4.57%	6.39%	16.44%	4.74%
Unit 5	3542.69	4124.47	3724.25	4155.87	3881.76	3351.16	3889.38	3507.31	3918.99	3652.84	80.66%	94.17%	85.03%	94.88%	88.38%
Unit 6	2399.91	1873.14	2456.66	2137.32	3313.72	2291.52	1773.29	2328.40	2026.18	3109.77	54.64%	42.77%	56.09%	48.80%	75.45%
Unit 7	1567.89	1527.01	1360.19	1527.01	1527.01	1536.81	1487.30	1322.81	1487.29	1487.27	99.16%	96.58%	86.03%	96.58%	96.58%
Unit 8	1491.56	1710.40	1927.36	1850.00	1926.00	1395.86	1565.02	1763.53	1692.75	1762.29	84.90%	78.10%	88.01%	84.47%	87.70%
Total Trombay	9003.63	9295.03	9552.47	9886.20	10710.88	8571.22	8763.59	8993.33	9319.13	10063.57					
Tata Power-G	10535.68	10655.03	10762.47	11246.20	12070.88	10056.54	10099.38	10181.79	10654.92	11399.36					

* - For FY 2011-12, Unit 8 generation is for 150 MW for first six months

1.5 Norms for Operation

The Hon'ble Commission in the MYT Regulations, 2011 have specified certain norms for operation of the Thermal and the Hydro Generating Units. While most of the norms were accepted by Tata Power, there were certain deviations proposed through a separate petition and subsequently through the Business Plan petition in view of operational constraints beyond the control of Tata Power. Further, certain additional norms were also proposed which were not part of the MYT Regulations, 2011.

The Hon'ble Commission have given their directives regarding the various norms proposed in the Business Plan Order dated 9th August, 2012 except Heat Rate and Auxiliary Consumption of 500 MW Unit 6. These norms as per the approved Business Plan have been considered for the MYT Tariff Petition. Since, no norms have been approved by the Hon'ble Commission for Heat Rate and Auxiliary consumption of Unit 6, for the purpose of this petition, norms as proposed by Tata Power in Case 40 of 2012 (separate petition filed by Tata Power-G for relaxation of Norms) have been considered.

Further, for FY 2011-12 the Tariff Regulations, 2005 have to be made applicable; the operational norms for the generating units have not been discussed in the Business Plan Order. There were no norms specified for FY 2011-12 under the old Tariff Regulations, 2005 either. In view of this, the operational norms as given in the MYT Regulations, 2011 for FY 2011-12 have been considered for the purpose of this Petition.

The operational norms for the various Generating Units of Tata Power considered for this petition are as follows:

Table 1-3: Heat Rate & Auxiliary Consumption for Thermal Generating Units

Units	FY 2011-12		FY 2012-13		FY 2013-14		FY 2014-15		FY 2015-16	
	Heat Rate (Kcal/Kwh)	Aux Cons (%)	Heat Rate (Kcal/Kwh)	Aux Cons (%)	Heat Rate (Kcal/Kwh)	Aux Cons (%)	Heat Rate (Kcal/Kwh)	Aux Cons (%)	Heat Rate (Kcal/Kwh)	Aux Cons (%)
Unit 4*	2570	8.0%	2576	8.0%	2581	8.0%	2586	8.0%	2591	8.0%
Unit 5	2575	6.0%	2583	6.0%	2591	6.0%	2573	6.0%	2581	6.0%
Unit 6	2519	5.5%	2725	5.5%	2725	5.5%	2725	5.5%	2725	5.5%
Unit 7 - Combined Cycle	2009	3.0%	2013	3.0%	2017	3.0%	2021	3.0%	2025	3.0%
Unit 7 - Open Cycle	2900	1.0%	2900	1.0%	2900	1.0%	2900	1.0%	2900	1.0%
Unit 8**	2450	8.5%	2450	8.5%	2450	8.5%	2450	8.5%	2450	8.5%

* - For Unit 4, in addition to approval of Auxiliary Consumption norm during operation, Auxiliary Consumption norm during standby mode of operation at 0.426 MU per month has been approved. This norm has also been considered for FY 2011-12

** - The Auxiliary Consumption Norm for Unit 8 is excluding FGD consumption.

In addition, the norm for secondary fuel oil consumption for the 250 MW Unit 8 has been considered as 1 ml/kWh in line with the approved Business Plan.

For the Hydro Generating Units, the Design Energy and the Auxiliary Consumption norms as approved in the Business Plan are as follows:

Table 1-4: Design Energy & Auxiliary Consumption for Hydro Generating Units

Units	Design Energy	Aux Cons (%)
Bhira	744.12	
Bhivpuri	193.23	
Khopoli	174.68	
Total	1112.03	1.78%

While approving the auxiliary consumption for the Hydro Generating Station, the Hon'ble Commission has disallowed certain consumption under Auxiliary Consumption. We have discussed this separately under **Section Error! Reference source not found. Error! Reference source not found.** and **Section Error! Reference source not found. Error! Reference source not found.**. We request the Hon'ble Commission to revise the Auxiliary Consumption Norm upward to include this consumption.

1.6 Capital Expenditure and Capitalisation

For FY 2011-12, Tata Power – G has considered the actual audited capital expenditure and capitalisation figures. In line with the approved Business Plan, for the period FY 2012-13 to FY 2015-16, the capital expenditure and capitalisation of only those schemes have been considered which have been approved by the Hon'ble Commission. However, during the period the Business Plan Petition was being processed, there was one more capital expenditure scheme approved by the Hon'ble Commission. This approved scheme has also been considered for the computation of ARR for the Control Period.

Further, we request the Hon'ble Commission to consider any further schemes which get approved during the period this MYT Tariff Petition is under scrutiny.

The capital expenditure and capitalisation for the various years of the Control Period are as shown in the Table below:

Table 1-5: Capital Expenditure & Capitalisation (Unit 4 to Unit 7 & Hydro)

Rs. Crores

Particulars	Capital Expenditure					Capitalisation				
	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
DPR	107.72	271.08	414.71	657.19	11.40	103.96	211.37	442.46	760.89	12.40
Non-DPR	39.03	-	-	-	-	40.20	-	-	-	-
HO/SS	7.82	-	-	-	-	7.82	-	-	-	-
Additional 20% towards unplanned capital expenditure or capital expenditure yet to be approved		54.22	82.94	131.44	2.28		42.27	88.49	152.18	2.48
TOTAL	154.57	325.30	497.66	788.63	13.68	151.98	253.64	530.96	913.07	14.88

Table 1-6: Capital Expenditure & Capitalisation (Unit 8)

Particulars	Capital Expenditure					Capitalisation				
	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
DPR	12.69	47.61	47.58	2.76	1.39	13.30	39.54	49.36	25.41	1.39
Non-DPR	4.13	-	-	-	-	3.78	-	-	-	-
HO/SS		-	-	-	-		-	-	-	-
Additional 20% towards unplanned capital expenditure or capital expenditure yet to be approved		9.52	9.52	0.55	0.28		7.91	7.96	5.08	0.28
TOTAL	16.82	57.14	57.10	3.31	1.67	17.08	47.45	57.32	30.49	1.67

1.7 Annual Fixed Charges

- **Unit 4 to Unit 7 and Hydro**

The Annual Fixed Charges have been arrived at using the principles laid down in Tariff Regulations, 2005 for FY 2011-12 and MYT Regulations, 2011 and the Business Plan Order dated 9th August, 2012 in Case 166 of 2011 and are as shown in the Table below:

Table 1-7: Annual Fixed Charges (Unit 4 to 7 and Hydro)

	Rs. Crore				
	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
RoE	184.41	210.98	222.54	246.73	288.72
Depreciation	75.15	96.33	114.58	146.14	162.26
O&M	403.93	441.94	467.22	493.94	522.19
Interest on LT Loans	70.13	76.93	94.23	134.98	155.35
Interest on Working Capital	116.71	156.73	167.70	174.80	110.58
Interest and other Finance Charges	0.03				
Less Other Income	(15.06)	(13.94)	(15.60)	(16.00)	(16.73)
Income Tax	74.95	74.95	74.95	74.95	74.95
Total Fixed Charges to be recovered from Distribution Licensees	910.26	1043.93	1125.62	1255.55	1297.32
Less: Unit 4 Fixed Charges towards unallocated capacity	(2.63)	(3.73)	(4.31)	(7.50)	(4.01)
Less: Unit 8 allocation towards shared capacity	(12.50)	(12.50)	(12.50)	(12.50)	(12.50)
Total Annual Fixed Charges	895.13	1027.70	1108.81	1235.55	1280.81

- **Unit 8**

Similarly, the Annual Fixed Charges for the 250 MW Unit 8 have been arrived at using the principles laid down in Tariff Regulations, 2005 for FY 2011-12 and MYT Regulations, 2011 and the Business Plan Order dated 9th August, 2012 in Case 166 of 2011 and are as shown in the Table below:

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

	Rs. Crore				
	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
	(200 MW)				
RoE	35.50	49.93	52.13	54.80	56.22
Depreciation	32.17	57.96	59.98	62.15	62.59
O&M	36.63	39.15	41.38	43.75	46.25
Interest on LT Loans	60.02	72.16	70.31	67.12	61.60
Interest on Working Capital	13.36	20.49	20.02	20.18	20.24
Other Charges	0.01				
Less Other Income	(1.04)	(2.13)	(2.23)	(2.22)	(2.26)
Total Annual Fixed Charges	176.65	237.56	241.59	245.78	244.64
Income Tax	20.27	20.27	20.27	20.27	20.27
Total including Income Tax	196.92	257.83	261.86	266.05	264.91
Regulated Capacity (MW)	200.00	250.00	250.00	250.00	250.00
Share of Total for Regulated Cap		257.83	261.86	266.05	264.91
Add Cost of Shared Services	10.00	12.50	12.50	12.50	12.50
Total Fixed Charges to be recovered from Distribution Licensees	206.92	270.33	274.36	278.55	277.41

Further, as for the first half of FY 2011-12, since, only 150 MW of the total capacity of 250 MW was a regulated capacity, the fixed charges for FY 2011-12 have been reduced to that extent.

In addition, the allocation of shared services has been included in the ARR for Unit 8 on the basis of the Tariff Order dated 8th September, 2010 for Tata Power –G. The similar practice of allocating fixed cost towards shared services has been continued during the Control Period to reflect the true cost of Unit 8. This cost has been deducted from the Fixed Charges of Unit 4 to 7 and Hydro as shown in **Table 2 7** above.

1.8 Fuel Prices and Energy Charges Projections

The actual fuel prices for FY 2011-12 and the projections of the fuel prices in the Control Period are as given in the table below. The projections for fuel prices have been retained at the same level as the Business Plan. However, the prices have been modified to the extent of considering the current exchange rate as against that considered in the Business Plan as per the directive of the Hon’ble Commission.

Table 1-9: Actual Fuel Prices for FY 2011-12 and Projections for FY 2012-13 to FY 2015-16

<i>Rs. Crore</i>										
	FY 2011-12		FY 2012-13		FY 2013-14		FY 2014-15		FY 2015-16	
	Rs/Tonne	Rs./Mkcal	Rs/Tonne	Rs/MkCal	Rs/Tonne	Rs/MkCal	Rs/Tonne	Rs/MkCal	Rs/Tonne	Rs/MkCal
APM Gas	11,765.20	893.04	15,526.41	1,183.41	15,526.41	1,183.41	15,526.41	1,183.41	15,526.41	1,183.41
RLNG	26,583.73	2,030.39	38,135.33	2,923.20	46,774.54	3,585.42	46,774.54	3,585.42	46,774.54	3,585.42
Oil	44,814.36	4,289.62	50,748.14	4,842.75	52,962.02	5,054.01	52,962.02	5,054.01	52,962.02	5,054.01
Coal	6,079.95	1,258.67	7,828.64	1,561.27	7,521.77	1,500.07	7,521.77	1,500.07	7,521.77	1,500.07

Based on the actual fuel prices of FY 2011-12 and the projected fuel prices for FY 2012-13 to FY 2015-16, the Energy Charge for the Generating Units - Unit 4 to 8 have been determined using normative operating parameters as considered in this petition and is shown in the Tables below:

Table 1-10: Energy Charges (Unit 4 to Unit 8)

		Rs/Kwh				
Unit		FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
Unit 4	RLNG	5.67	-	-	-	-
Unit 4	Oil	11.98	13.56	14.18	14.21	14.23
Unit 5	Gas	2.45	3.25	3.26	3.24	3.25
Unit 5	RLNG	5.56	8.03	9.88	9.81	9.84
Unit 5	Oil	11.75	13.31	13.93	13.83	13.88
Unit 5	Coal	3.45	4.29	4.13	4.11	4.12
Unit 6	Gas	2.38	3.41	3.41	3.41	3.41
Unit 6	RLNG	5.41	8.43	10.34	10.34	10.34
Unit 6	Oil	11.43	13.96	14.57	14.57	14.57
Unit 6	Coal	-	-	-	-	4.33
Unit 7	Gas	1.85	2.46	2.46	2.47	2.47
Unit 7	RLNG	4.46	6.07	7.46	7.47	7.49
Unit 8	Coal	3.52	4.16	4.00	4.00	4.00
Unit 8	Sec Oil	0.05	0.06	0.06	0.06	0.06
Unit 8	Coal	3.57	4.22	4.06	4.06	4.06

The Actual Energy Cost for FY 2011-12 and the projected Energy Cost for the period FY 2012-13 to FY 2015-16 is given in the Table below:

Table 1-11: Energy Cost (Unit 4 to Unit 8)

Unit	Fuel	FY 2011-12			FY 2012-13			FY 2013-14			FY 2014-15			FY 2015-16		
		Energy Rate (Rs./kWh)	Net Gen (Mus)	Energy Cost (Rs. Crores)	Energy Rate (Rs./kWh)	Net Gen (Mus)	Energy Cost (Rs. Crores)	Energy Rate (Rs./kWh)	Net Gen (Mus)	Energy Cost (Rs. Crores)	Energy Rate (Rs./kWh)	Net Gen (Mus)	Energy Cost (Rs. Crores)	Energy Rate (Rs./kWh)	Net Gen (Mus)	Energy Cost (Rs. Crores)
Unit 4	RLNG	5.67	0.26	0.15	-	-	-	-	-	-	-	-	-	-	-	-
Unit 4	Oil	11.98	0.28	0.34	13.56	48.60	65.90	14.18	71.28	101.07	14.21	193.92	275.49	14.23	51.41	73.17
Unit 4		4.56	-3.44	-1.57												
Unit 5	Gas	2.45	17.34	4.24	3.25	20.27	6.59	3.26	134.78	43.97	3.24	20.24	6.55	3.25	20.18	6.56
Unit 5	RLNG	5.56	8.13	4.52	8.03	0.00	0.00	9.88	0.00	0.00	9.81	0.00	0.00	9.84	0.00	0.00
Unit 5	Oil	11.75	57.07	67.07	13.31	21.05	28.01	13.93	19.46	27.10	13.83	20.58	28.47	13.88	19.51	27.08
Unit 5	Coal	3.45	3268.61	1127.00	4.29	3848.06	1650.88	4.13	3353.07	1386.42	4.11	3878.17	1592.39	4.12	3613.15	1488.19
Unit 6	Gas	2.38	21.34	5.08	3.41	0.00	0.00	3.41	0.00	0.00	3.41	0.00	0.00	3.41	0.00	0.00
Unit 6	RLNG	5.41	1095.77	593.06	8.43	1222.84	1030.77	10.34	2095.56	2166.58	10.34	1823.56	1885.36	10.34	0.00	0.00
Unit 6	Oil	11.43	1174.41	1342.88	13.96	550.45	768.68	14.57	232.84	339.33	14.57	202.62	295.29	14.57	12.63	18.40
Unit 6	Coal	-	-	-	-	-	-	-	-	-	-	-	-	4.33	3097.14	1339.70
Unit 7	Gas	1.85	1349.84	249.67	2.46	1261.76	309.87	2.46	1231.45	303.03	2.47	1385.39	341.59	2.47	1388.69	343.08
Unit 7	RLNG	4.46	186.96	83.35	6.07	225.55	136.82	7.46	91.36	68.11	7.47	101.90	76.12	7.49	98.58	73.79
Unit 8	Coal & Sec Oil	3.57	1395.86	498.01	4.22	1565.02	660.78	4.06	1763.53	716.31	4.06	1692.75	687.56	4.06	1762.29	715.81
Total		4.64	8572.47	3973.80	5.32	8763.59	4658.32	5.73	8993.33	5151.92	5.57	9319.13	5188.83	4.06	10063.57	4085.77

1.9 Incentives

Tata Power is entitled to earn incentives in case the operational performance exceeds the norms set by the Hon'ble Commission. For the year FY 2011-12, Tata Power-G is entitled for the incentives listed in the Table below:

Table 1-12: Incentives for Unit 4 to 7 & Hydro for FY 2011-12

<i>Rs. Crores</i>	
Incentive	Capacity
Incentive on account of Capacity Index / PLF	29.80
Hydro - Capacity Index	21.75
Thermal-PLF	8.05
Incentive due to higher generation during peak from Hydro	0.62
Total Incentives (Unit 4 to 7 & Hydro)	30.42

Table 1-13: Incentives for Unit 8 for FY 2011-12

<i>Rs. Crores</i>	
Incentive	Capacity
Incentive on account of Higher PLF	1.95

1.10 Sharing of Gains and Losses for FY 2011-12

As per the Tariff Regulations, 2005 any approved uncontrollable expenditure has to be passed to the consumer whereas any approved gain or loss in the controllable factors has to be shared with the consumers in the ratio specified in the Regulations.

In this regards, the sharing of gains / loss for the various parameters is listed in the Table below:

Table 1-14: Sharing of Gains / (Losses) for Unit 4 to 7 & Hydro for FY 2011-12

<i>Rs. Crores</i>		
Particulars	Gain / (Loss)	Amount passed on to Distribution Licensee
Gain / (Loss) due to variation in Heat Rate	66.40	22.13
Gain / (Loss) due to variation in Auxiliary Consumption	28.13	9.38
Gain / (Loss) due to variation in O&M Expenditure	1.19	0.40
Total	95.72	31.91

Table 1-15: Sharing of Gains / (Losses) for Unit 8 for FY 2011-12

<i>Rs. Crores</i>		
Particulars	Gain / (Loss)	Amount passed on to Distribution Licensee
Gain / (Loss) due to variation in Heat Rate	28.49	9.50
Gain / (Loss) due to variation in Auxiliary Consumption	11.34	3.78
Gain / (Loss) due to variation in O&M Expenditure	(6.71)	(2.24)
Total	33.12	11.04

1.11 Net Annual Revenue Requirement and (Gap) / Surplus for FY 2011-12

The net entitlement and the gap for the FY 2010-11 on the basis of the discussions above is shown in the Table below:

Table 1-16: Net Entitlement for Unit 4 to 7 & Hydro for FY 2011-12

<i>Rs. Crores</i>					
Sr. No.	Particulars	Approved	Entitlement as per the Regulations	Efficiency Gains / (Loss) from Controllable factors shared with Consumers	Net Entitlement (Including Transfer to Reserves) after Impact of Gains / (Loss) from Controllable factors
I	Revenue				4,194.54
	- Power Supply				4,179.48
	- Non-Tariff Income		15.06		15.06
II	Expenditure				
1	Fuel Related Expenses		3,444.02	22.13	3,421.88
2	Aux. Benefit		28.13	9.38	18.75
3	Operation & Maintenance Expenses		402.46	0.40	402.06
4	Depreciation		75.15		75.15
5	Interest on Long-term Loan Capital		70.13		70.13
6	Other Charges		0.03		0.03
7	Interest on Working Capital		116.71		116.71
8	Add Colony Consumption of Hydro		2.66		2.66
9	Income tax		74.95		74.95
10	Return on Equity		184.41		184.41
12	Total Expenditure		4,398.66	31.91	4,366.75
13	Incentive (PLF, Hydro Cap. Index, Hydro Peak Gen.)		30.42		30.42
14	Total Incl. Incentive		4,429.08		4,397.17
III	(Gap)/Surplus				(202.63)
IV	Less Unallocated fixed cost portion of Unit 4				2.63
V	Less Allocation from Unit 8 for Shared Capacity				12.50
V	Net (Gap)/Surplus				(187.50)

Table 1-17: Net Entitlement for Unit 8 for FY 2011-12

Rs. Crores					
Sr. No.	Particulars	Approved	Entitlement as per the Regulations	Efficiency Gains / (Loss) from Controllable factors shared with Consumers	Net Entitlement (Including Transfer to Reserves) after Impact of Gains / (Loss) from Controllable factors
I	Revenue				697.85
	- Power Supply				696.82
	- Non-Tariff Income		1.04		1.04
II	Expenditure				
1	Fuel Related Expenses		486.92	9.50	477.42
2	Aux. Benefit		11.34	3.78	7.56
3	Operation & Maintenance Expenses		29.92	(2.24)	32.16
4	Depreciation		32.17		32.17
4	Interest on Long-term Loan Capital		60.02		60.02
5	Interest on Working Capital		13.36		13.36
6	Other Finance Charges		0.01		0.01
7	Income tax		20.27		20.27
8	Return on Equity		35.50		35.50
9	Total Expenditure		689.51	11.04	678.47
11	PLF Incentive		1.95		1.95
12	Total Incl. Incentive		691.46		680.42
III	(Gap)/Surplus				17.44
IV	Add: Expenditure towards shared capacity of Unit 4 to 7				10.00
V	(Net Gap)/Surplus				7.44

1.12 ARR & Average Cost of Generation

Based on the above entitlement for FY 2011-12 and the projections for FY 2012-13 to FY 2015-16, the ARR and average cost of generation is worked out as given in the table below:

Table 1-18: ARR & Average Cost of Generation

		FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
Fixed Charges						
Fixed Charges (Unit 4 to 7 and Hydro) net of NTI and allocation outside	Rs Cr	914.68	1027.70	1108.81	1235.55	1280.81
Fixed Charges (Unit 8) net of NTI and allocation outside	Rs Cr	210.01	270.33	274.36	278.55	277.41
Total Fixed Charges	Rs Cr	1124.69	1298.03	1383.17	1514.10	1558.22
Energy Charges						
Unit 4 to 7 and Hydro	Rs Cr	3421.88	3997.54	4435.61	4501.27	3369.96
Unit 8	Rs Cr	477.42	660.78	716.31	687.56	715.81
Total Energy Charges	Rs Cr	3899.31	4658.32	5151.92	5188.83	4085.77
Incentive						
Unit 4 to 7	Rs Cr	8.05	14.42	0.76	15.16	8.18
Unit 8	Rs Cr	1.95	-	1.51	-	1.36
Hydro G	Rs Cr	22.37	28.57	18.14	30.31	28.56
Total Incentive	Rs Cr	32.37	42.99	20.41	45.48	38.10
ARR = Fixed Charges + Energy Charges + Incentives						
Unit 4 to 7 and Hydro	Rs Cr	4366.99	5068.23	5563.32	5782.30	4687.51
Unit 8	Rs Cr	689.38	931.11	992.18	966.11	994.58
Total ARR	Rs Cr	5056.37	5999.34	6555.50	6748.41	5682.08
Quantum of Net Generation	Mus	10056.54	10099.38	10181.79	10654.92	11399.36
Avg Cost of Net Generation	Rs/Kwh	5.03	5.94	6.44	6.33	4.98

1.13 Past Recoveries from the Distribution Licensees

Tata Power –G has in this Petition has discussed the various amounts due from the various distribution licensees in the year FY 2011-12. The same is presented for ease of reference. The recoveries pertain to the following:

- Impact of the ATE Judgement dated 15th February 2011
- (Gap)/Surplus of FY 2009-10
- (Gap)/Surplus of FY 2010-11
- (Gap)/Surplus of FY 2011-12
- Impact of ATE judgement dated 31st August 2012

The summary of the amounts is presented in the table below

Table 1-19: Summary of Amounts Recoverable from Distribution Licensees

Summary of amounts recoverable from distribution licensees in FY 2012-13				
Particulars	Distribution Licensees			Total
	BEST	Rinfra	Tata Power - D	
Amount due to the impact of Hon'ble ATE Judgment (Appeal No. 173 of 2009 dated 15th February, 2011)	63.68	50.37	37.04	151.09
Recovery for FY 2008-09 pertaining to the additional capitalization permitted in Order in Case No. 71 of 2010	0.05	0.03	0.03	0.11
Recovery for FY 2008-09 pertaining reinstatement of amount de-capitalised in FY 2008-09	1.50	0.94	0.89	3.33
Gap/Surplus of FY 2009-10 and FY 2010-11 and impact of De-capitalisation (Replacement Scheme)	55.00	33.17	35.69	
Total Amount Recoverable	120.23	84.51	73.65	278.39
Carrying Cost for FY 2011-12 14.39%	17.31	12.16	10.60	40.07
Carrying Cost for FY 2012-13 14.73%	17.72	12.45	10.85	41.02
Total Amount Recoverable (Including carrying cost) (A)	155.25	109.13	95.10	359.48
Gap/Surplus of Unit 4 to 7 & Hydro for FY 2011-12	110.09		105.07	215.16
Gap/Surplus of Unit 8 for FY 2011-12	-4.15		-4.39	-8.53
Total Amount Recoverable	105.94		100.69	206.63
Carrying Cost for FY 2012-13 14.73%	15.61		14.84	30.45
Total Amount Recoverable (Including carrying cost) (B)	121.55		115.52	237.07
Amount due to impact of ATE Judgment (Appeal no. 18 of 2011 dated 31st August, 2012 including carrying cost till FY 2012-13 (C))	118.24	78.97	70.23	267.45
Total Amount Recoverable for Tata Power-G (A+B+C)	395.04	188.10	280.86	864.00

1.14 Proposed Recovery

In the past the Hon'ble Commission has allowed such under recovery from the distribution utilities. The extract of the Order in Case No 96 of 2009 dated 8th September 2010 is given below:

This amount of Rs 15.31 Crore should be recovered by TPC-G from the three distribution licensees, i.e., RInfra-D, BEST and TPC-D in weighted average proportion to energy supplied by TPC to RInfra, BEST and TPC's retail consumers during FY 2007-08 and FY 2008-09. TPC-G should raise a separate bill to the three distribution licensees for recovering this amount in 7 equal instalments starting from September 2010. The summary of the amount recoverable from each Distribution Licensee as approved by the Commission is shown in the Table below:

Further, Tata Power-G had earlier filed a petition for recovery of past dues approved by the Hon'ble Commission in the Truing up Order dated 15th February 2012 for FY 2010 and FY 2011 in Case of 105 of 2011. However, the Honble Commission in their Order dated 16th October 2012 in Case 55 of 2012 had directed to recover the same through the MYT Tariff petition. The relevant extract of the Order is reproduced below:

The Commission considers it appropriate to address the issue regarding past under recovery of TPC-G from BEST and R-Infra-D at the time of issuance of the Order for

MYT Tariff determination of TPC-G. The Commission directs TPC-G to incorporate this issue, while submitting the Petition for revised Multi Year Tariff for second control period from FY 2012-13 to FY 2015-16, as a separate section including prayers mentioned above, and to make BEST and Rlnfra necessary parties.

It is submitted that out of the above amount of **Rs 864.00Crores** that is due to Tata Power – G from the various distribution licensees, an amount of **Rs 278.39 Crores** pertains to the FY 2010-11 and prior period and has been approved by the Hon'ble Commission in its order dated 15th February 2012. We therefore request the Hon'ble Commission to kindly permit the recovery of this amount at the earliest as this amount is long overdue to Tata Power –G.

We therefore propose the recovery of the amount of **Rs 278.39 Crores** within one month of the order while for the rest of the amount i.e **Rs 585.61 Crores** we propose to recover the same in 9 equal monthly instalments from the distribution utilities from the date of the order.

