

1. EXECUTIVE SUMMARY

1.1 Filings under Present Petition i.e under Fifth Control Period

1. As per the Regulation 5.1 of the MYT Regulations 2024, the present petition has been filed by Tata Power-G for (i) Truing-up for FY 2022-23, Truing up for FY 2023-24 and Provisional Truing-up for FY 2024-25 under the MYT Regulations, 2019 and (iv) Aggregate Revenue Requirement (ARR) and Tariff Proposal for each year of the period from FY 2025-26 to FY 2029-30 under MYT Regulations 2024.ING UP FOR FY 2022-23

✓ Truing Up of FY 2022-23

1.2 Performance of Unit 5, 7 and Hydro Generating Stations

2. The Operational as well as Financial performance of Unit 5, 7 and the Hydro Generating Stations of Tata Power - G for FY 2022-23 is presented in the sections below.

Operational Performance - FY 2022-23

3. The Operational performance of Tata Power - G for FY 2022-23 is as given in the Table below:

Table 1:1: Gross Generation of Unit 5, 7 & Hydro Stations for FY 2022-23

			MUs
Generating Station	MTR Order	FY 2022-23 (As per	Difference
	(Approved)	Schedule)	
Khopoli	287.73	297.21	9.48
Bhivpuri	288.97	335.72	46.75
Bhira	1023.52	934.79	(88.73)
Total Hydro	1600.21	1567.71	(32.50)
Unit 5	2670.12	2753.43	83.32
Unit 7	773.64	646.36	(127.28)
Total Thermal	3443.76	3399.80	(43.96)
Total	5043.97	4967.51	(76.46)



Table 1:2: Availability for FY 2022-23

%

Station	FY 2022-23		
	Normative	Actual	
Thermal			
Unit 5	85%	89%	
Unit 7	85%	97%	
Hydro			
Khopoli	90%	97%	
Bhivpuri	90%	100%	
Bhira	90%	98%	

Table 1:3: Auxiliary Consumption - FY 2022-23

%

Generating Unit	Approved	FY 2022-23 (Actuals)	Difference
Bhira*	1.00%	0.96%	-0.04%
Bhivpuri*	1.20%	1.27%	0.07%
Khopoli*	1.20%	1.37%	0.17%
Unit 5^	6.09%	6.11%	0.02%
Unit 7 [#]	3.00%	4.46%	1.46%

[^] Revised APC for Unit 5 including FGD consumption

Table 1:4: Heat Rate of Thermal Generating Stations - FY 2022-23

(kcal/kWh)

Generating Unit	As per MTR Order	FY 2022-23 (Actuals)	Difference
Unit 5	2549.00	2564.16	15.16
Unit 7*	2063.04	2229.01	165.96

^{*} Revised Heat Rate for Unit 7 including open cycle mode of operation

1.2.1 Fuel Cost

4. The actual fuel cost for FY 2022-23 is as given below:

[#] Revised APC for Unit 7 including open cycle mode of operation & CWP consumption

^{*} APC for Hydros is excluding Headworks, Nallah diversion & Colony consumption



Table 1:5: Actual Fuel Cost for FY 2022-23

Particulars	MTR Order	FY 2022-23 (Actuals)
Consumption (MT)		
Gas - APM		149331.45
Biomass		453.91
Gas - RLNG		462.63
Coal		1407517.94
Oil (combined)		1528.10
GCV (kcal/kg)		
Gas - APM		13095.77
Biomass		3198.69
Gas - RLNG		13180.75
Coal		4445.26
Oil (combined)		10386.67
Price (Rs./MT)		
Gas - APM		35552.97
Biomass		10401.88
Gas - RLNG		124645.74
Coal		15591.17
Oil (combined)		60219.92
Total Fuel Cost (Rs. Crores)		2740.84

5. Tata Power-G would like to submit that post implementation of DSM, fuel cost related to the Scheduled Generation of the beneficiaries has to be considered. The total fuel cost for Unit 5 & 7 considering the Scheduled Generation of the beneficiaries for FY 2022-23 works out to **Rs 2828.54 Crores** as given in the table below:

Table 1:6: Actual Fuel Cost for FY 2022-23

(Rs. Crores)

Unit	Actual Fuel Cost	Actual Net	Rate	Scheduled	Fuel Cost for SG
		Generation		Generation	
	Rs. Crores	Mus	Rs./kWh	Mus	Rs. Crores
Unit 5	2358.30	2507.45	9.405	2585.21	2431.43
Unit 7	382.55	594.91	6.430	617.54	397.10
Total	2740.84	3102.35	8.835	3202.75	2828.54

6. Tata Power-G has considered this fuel cost for the purpose of computation of efficiency gains / (loss) on account of variation in Heat rate of FY 2022-23. In addition to the above, Tata Power-G in line with the directions of the Hon'ble Commission has made following adjustment in the total fuel cost as follows. The details of the same have been presented in the main petition.



Table 1:7: Share to be paid for Unit 5

						Rs. Crores	
		BEST			TPC-D		
Month	Amount to be billed with	Amount to be billed with Amount billed by Differential to be		Amount to be billed with	Amount billed by	Differential to be	
	ECR as per MERC method	TPC-G	billed by TPC-G	ECR as per MERC method	TPC-G	billed by TPC-G	
Dec-22	117.17	113.77	3.40	94.73	91.98	2.75	
Jan-23	57.55	54.99	2.56	54.12	51.71	2.41	
Feb-23	65.76	64.09	1.68	57.98	56.50	1.48	
Mar-23	88.66	86.76	1.90	79.24	77.54	1.70	
Total	329.14	319.60	9.54	286.06	277.73	8.34	

7. The total difference for Unit 5 accordingly works out to 17.87 Crores. Accordingly, Tata Power-G requests the Hon'ble Commission to approve the above difference in the Fuel Cost of Trombay as for Unit 5 to be recovered in FY 2022-23 over and above the fuel cost of Rs 2828.54 Crores.

1.2.2 Capital Expenditure & Capitalisation

- 8. Tata Power-G wish to submit that out of the total Non DPR schemes certain schemes are of R & M nature. Hence, these schemes have been removed from Non DPR and added to O & M expenses on the basis of the treatment provided by the Hon'ble Commission in the past orders.
- 9. Considering the above Tata Power-G has executed the capital expenditure schemes resulting into a total capitalisation of Rs. 24.67 Crores in FY 2022-23 for its Unit 5, 7 and Hydro Generating Stations. The break-up of the actual capitalisation is provided below:

Table 1:8: Capitalisation for Unit 5, 7 & Hydro Generating Stations - FY 2022-23

		Rs. Crores
Particulars	MTR Order	FY 2022-23
		(Actuals)
DPR Capitalisation	_	15.81
Non-DPR Capitalisation		8.86
Total Capitalisation	49.68	24.67
Ratio of Non-DPR to DPR		56.03%
Capitalisation		



1.2.3 Net Entitlement and Resultant Gap/ (Surplus) for Unit 5, 7 and Hydro Stations

10. The net entitlement and the gap for the FY 2022-23 on the basis of the discussions above is shown in the Table below:

Table 1:9: ARR Unit 5, 7 & Hydro Stations FY 2022-23 (Rs Cr)

Sr. No.	Particulars	MTR Tariff Order	Entitlement as per the Regulations
A	Expenditure		
1	Fuel Related Expenses	2660.71	2799.24
2	Fuel Cost compensation based on MERC methodology in FAC Orders		17.87
3	Aux. Consumption Benefit		(4.16)
4	Operation & Maintenance Expenses with uncontrollable expenditure	437.43	468.44
5	Depreciation	127.17	106.48
6	Interest on Long-term Loan Capital	2.72	2.89
7	Other Charges	0.00	2.00
8	Interest on Working Capital net-off DPC	44.97	30.49
9	Water Charges	3.13	4.87
10	Income tax		0.00
11	Return on Equity	193.49	212.91
12	Total Expenditure	3469.61	3641.04
13	Incentive (PLF, Hydro Incentive.)		70.57
	Total Expenditure Including Incentive	3469.61	3711.61
В	Less:		
1	Allocation for U 8 for Shared Capacity	11.02	10.43
2	Revenue Power Supply	3498.33	3653.74
3	Non-Tariff Income	12.87	16.67
D	Total Gap / (Surplus) for FY 2022-23	(52.60)	30.77
E	Net Gap/(Surplus) approved in MTR T O		(52.60)
F	Incremental Net Gap/(Surplus) FY 2022-23		83.37

1.3 Performance of Unit 8

11. This section discusses and presents the actual performance of 250 MW Unit - 8 for FY 2021-23. The actual performance of the Generating units has been compared with the normative values of approved parameters by the Hon'ble Commission in the MTR Order dated 31st March 2023 issued in Case No. 221 of 2022.

Operational Performance - FY 2022-23

12. The various operational parameters pertaining to the actual operational performance of Unit 8 for FY 2022-23 are as given in the Table below:



Table 1:10: Operational Performance of Unit 8 (250 MW) for FY 2022-23

Particulars	UoM	MTR Order	FY 2022-23	Difference
Gross Generation as per Schedule	MUs	1451.35	1511.05	59.70
Auxiliary Consumption*	%	8.67%	7.10%	-1.57%
Scheduled Generation	MUs	1325.55	1403.84	78.29
Heat Rate	kCal/kWh	2430.00	2346.42	(83.58)
Availability	%	90.45%	98.94%	8.49%
PLF	%	65.17%	67.44%	2.27%

^{*} Revised APC including FGD consumption

1.3.1 Fuel Cost

13. The Actual Fuel Costs incurred is as follows for Unit No 8 for FY 2023-24

Table 1:11: Fuel Cost for Unit 8 - FY 2022-23

Particulars	MTR Order	FY 2022-23 (Actuals)
Fuel Consumption (MT)		
Coal		783635
Biomass		45
Oil (combined)		154
GCV (kCal/kg)		
Coal		4420
Biomass		3106
Oil (combined)		10449
Fuel Price (Rs/MT)		
Coal		15725
Biomass	·	11575
Oil (combined)		70080
Total Fuel Cost (Rs. Crores)		1233.37

14. After the implementation of DSM, only the fuel cost required for the Scheduled generation of the beneficiaries has to be considered. The Fuel Cost for Unit-8 considering the Scheduled Generation of the beneficiaries for FY 2022-23 was Rs. 1261.88 Crores. Tata Power-G has considered this fuel cost for the purpose of computation of efficiency gains / (loss) on account of variation in Heat rate of FY 2022-



23. The computation of Fuel Cost for Scheduled Generation is as given in the table below:

Table 1:12: Fuel Cost for Scheduled Generation -Unit 8 - FY 2022-23

(Rs. Crores)

Unit	Actual Fuel Cost	Actual Net Generation	Rate	Scheduled Generation	Fuel Cost for SG
	Rs. Crores	Mus	Rs./kWh	Mus	Rs. Crores
Unit 8	1233.37	1372.11	8.989	1403.84	1261.88

15. In addition, as explained for Unit 5, Fuel Cost Adjustment due to change in methodology of computing Wt Average for the month of December 2022 to March 2023 has been worked out in the tables below:

Table 1:13: Adjustment due to change in methodology for Unit 8 for - FY 2022-23

Rs. Crores

		BEST		TPC-D		
Month	Amount to be billed with ECR as per MERC method	Amount billed by TPC-G	Differential to be billed by TPC-G	Amount to be billed with ECR as per MERC method	Amount billed by TPC-G	Differential to be billed by TPC-G
Dec-22	46.16	44.75	1.41	57.29	55.54	1.75
Jan-23	38.88	37.09	1.78	54.91	52.39	2.52
Feb-23	43.38	42.12	1.26	57.47	55.81	1.67
Mar-23	34.11	33.30	0.81	48.28	47.13	1.15
Total	162.53	157.27	5.26	217.95	210.86	7.08

1.3.2 Net Entitlement and Resultant Gap/ (Surplus)

16. The net entitlement and the Gap / (Surplus) for FY 2022-23 for Unit 8 is shown in the Table below:



Table 1:14: Net Entitlement and Resultant Gap/ (Surplus)- Unit 8 - FY 2022-23

Sr. No.	Particulars	MTR Order	Entitlement as per Regulations
Α	Expenditure		
1	Fuel Related Expenses	1206.97	1277.11
2	Fuel Cost compensation based on MERC		12.35
	methodology in FAC Orders		12.55
3	Auxiliary Consumption Benefit		7.50
4	Operation & Maintenance Expenses	74.83	60.89
5	Depreciation	59.36	59.83
6	Interest on Long-term Loan Capital	9.74	10.40
8	Other Finance Charges		0.59
7	Interest on Working Capital net-off DPC	17.74	12.50
9	Income tax		0.00
10	Return on Equity	50.23	55.56
11	Total Expenditure	1418.87	1496.73
12	PLF Incentive		0.00
13	Expenditure towards shared capacity of Unit 5, 7	11.02	10.43
	Total Including Incentive	1429.90	1507.16
Less	Revenue		
14	- Revenue Power Supply	1438.68	1534.97
15	- Non-Tariff Income	3.42	0.56
В	Net Gap/(Surplus)	(12.21)	(28.37)
С	Net Gap/(Surplus) approved in MTR T O		(12.21)
D	Incremental Net Gap/(Surplus) FY 2022-23		(16.16)

√ Truing Up of FY 2023-24

1.4 Performance of Unit 5, 7 and Hydro Generating Stations

17. The Operational as well as Financial performance of Unit 5, 7 and the Hydro Generating Stations of Tata Power - G for FY 2023-24 is presented in the sections below.

Operational Performance

18. The Operational Performance of Tata Power - G for FY 2023-24 is as given in the Table below:



Table 1:15: Gross Generation of Unit 5, 7 & Hydro Stations for FY 2023-24

MUs

Generating Station	MTR Order (Approved)	FY 2023-24 (As per Schedule)	Difference
Khopoli	282.00	277.71	(4.29)
Bhivpuri	292.00	319.28	27.28
Bhira	896.00	954.87	58.87
Total Hydro	1470.00	1551.86	81.86
Unit 5	3325.00	2921.50	(403.50)
Unit 7	1279.00	1004.19	(274.81)
Total Thermal	4604.00	3925.69	(678.31)
Total	6074.00	5477.55	(596.45)

Table 1:16: Availability for FY 2023-24

Station	FY 2023-24		
	Normative	Actual	
Thermal			
Unit 5	85.00%	95.17%	
Unit 7	85.00%	96.05%	
Hydro			
Khopoli	90.00%	97.08%	
Bhivpuri	90.00%	98.27%	
Bhira	90.00%	99.65%	

Table 1:17: Auxiliary Consumption - FY 2023-24

Generating Unit	Approved	FY 2023-24 (Actuals)	Difference
Bhira*	1.00%	0.98%	-0.02%
Bhivpuri*	1.20%	1.51%	0.31%
Khopoli*	1.20%	1.32%	0.12%
Unit 5^	6.35%	6.61%	0.26%
Unit 7 [#]	3.00%	3.65%	0.65%

[^] Revised APC for Unit 5 including FGD consumption

[#] Revised APC for Unit 7 including open cycle mode of operation & CWP consumption

^{*} APC for Hydros is excluding Headworks, Nallah diversion & Colony consumption



Table 1:18: Heat Rate of Thermal Generating Stations - FY 2023-24

(kcal/kWh)

Generating Unit	As per MYT Regulations	FY 2023-24 (Actuals)	Difference
Unit 5	2549	2587	38
Unit 7 **	2040	2135	96

^{**} Revised Heat Rate for Unit 7 including open cycle mode of operation

1.4.1 Fuel Cost

19. The actual fuel cost for FY 2023-24 is as given in the table below:

Table 1:19: Fuel Prices and GCV for Thermal Stations - FY 2023-24

Particulars	MTR Order	FY 2023-24 (Actuals)
Consumption (MT)		
Gas - APM		1,88,642
Biomass		-
Gas - RLNG		359
Coal		17,38,162
Oil (combined)		378
GCV (kcal/kg)		
Gas - APM		13,064
Biomass		-
Gas - RLNG		13,082
Coal		3,956
Oil (combined)		10,409
Price (Rs./MT)		
Gas - APM		31,441
Biomass		-
Gas - RLNG		67,307
Coal		8,869
Oil (combined)		65,640
Total Fuel Cost (Rs. Crores)		2,139.57

20. Tata Power-G would like to submit that post implementation of DSM, fuel cost related to the Scheduled Generation of the beneficiaries has to be considered. The total fuel cost for Unit 5 & 7 considering the Scheduled Generation of the beneficiaries for FY 2023-24 works out to **Rs. 2219.52 Crores**.



Table 1:20: Fuel Prices and GCV for Thermal Stations - FY 2023-24

Unit	Actual Fuel Cost	Actual Net	Rate	Scheduled	Fuel Cost for SG
		Generation		Generation	
	Rs. Crores	Mus	Rs./kWh	Mus	Rs. Crores
Unit 5	1,634.16	2619.04	6.240	2728.38	1702.38
Unit 7	505.41	945.56	5.345	967.49	517.13
Total	2139.57	3564.60	6.002	3695.87	2219.52

- 21. Accordingly, Tata Power-G requests the Hon'ble Commission to approve the Fuel Cost for Unit 5 and Unit 7 for FY 2023-24 as Rs. 2219.52 Crore and consider the same for computation of sharing of gain/loss as per the MYT Regulations, 2019.
- 22. In addition to the above as explained in the Section for truing up of FY 2022-23, Tata Power-G has given a credit adjustment of **Rs 23.48 Crores** (Rs 12.33 Crores to BEST and Rs 11.15 Crores to Tata Power-D) for change in methodology of computation of Wt Average fuel Cost on the basis of the direction of the Hon'ble Commission in the FAC approval of Tata Power -D. The credit given is as given below:

Table 1:21: Adjustment in Fuel Cost due to change in methodology- FY 2023-24

Rs. Crores **BEST** TPC-D Amount to be billed with Amount billed Differential to be billed Amount to be billed with Amount billed Differential to be billed Month ECR as per MERC method by TPC-G ECR as per MERC method by TPC-G by TPC-G by TPC-G 68.29 67.18 1.11 Apr-23 77.32 76.06 1.26 88.39 84.95 3.45 71.60 68.80 2.79 May-23 Jun-23 84.51 83.37 1.14 66.05 65.16 0.89 52.94 1.20 46.96 1.09 Jul-23 51.74 48.05 Aug-23 78.17 83.40 (5.23)72.33 77.17 (4.84)Sep-23 72.77 79.25 (6.49)63.69 69.37 (5.68)Oct-23 78.78 83.50 (4.72)67.74 71.80 (4.06)Nov-23 65.23 67.73 (2.49)54.50 56.58 (2.08)Dec-23 74.16 74.09 0.07 61.21 61.16 0.05 Jan-24 76.63 76.90 (0.27)65.91 66.14 (0.23)Feb-24 69.41 69.53 (0.12)57.47 57.58 (0.10)Mar-24 73.12 73.24 (0.12)56.45 56.55 (0.10)Total 891.44 903.77 (12.33)753.31 764.45 (11.15)



1.4.2 Capital Expenditure & Capitalisation

23. Tata Power-G has capitalised schemes to the extent of Rs. 25.61 Crores in FY 2023-24 for its Unit 5, 7 and Hydro Generating Stations. The break-up of the capitalisation is provided below:

Table 1:22: Capitalisation for Unit 5, 7 & Hydro Generating Stations - FY 2023-24

Rs. Crores

		715. 616165
Particulars	MTR Order	FY 2023-24
		(Actuals)
DPR Capitalisation		10.66
Non-DPR Capitalisation		14.95
Total Capitalisation	66.31	25.61
Ratio of Non-DPR to DPR Capitalisation		140.30%

1.4.3 Net Entitlement and Resultant Gap/ (Surplus) for Unit 5, 7 and Hydro Stations

24. The net entitlement and the gap for the FY 2023-24 on the basis of the discussions above is shown in the Table below:



Table 1:23: Aggregate Revenue Requirement - Unit 5, 7 & Hydro Stations FY 2023-24

Sr. No. **Particulars** MTR Tariff Entitlement as per the Order Regulations Α **Expenditure** 3475.66 1 Fuel Related Expenses 2187.57 2 Fuel Cost compensation based on MERC (23.48)methodology in FAC Orders 3 Aux. Consumption Benefit (5.58)4 Operation & Maintenance Expenses with 454.65 469.35 uncontrollable expenditure 5 Depreciation 129.06 98.52 6 Interest on Long-term Loan Capital 0.00 0.00 7 Other Charges 1.69 Interest on Working Capital 53.12 8 38.28 9 Water Charges 5.59 3.13 10 Income tax 0.00 11 Return on Equity 195.93 212.98 12 **Total Expenditure** 4311.54 2984.91 Incentive (PLF, Hydro Incentive.) 13 68.30 Total Expenditure Including Incentive 4311.54 3053.21 В 15 Allocation for U 8 for Shared Capacity 10.69 9.76 - Revenue Power Supply 3043.70 16 17 - Non-Tariff Income 12.87 25.27 D Total Gap / (Surplus) for FY 2023-24 (25.52)

1.5 Performance of Unit 8

Operational Performance - FY 2023-24

1.5.1 Generation

25. The various operational parameters pertaining to the actual operational performance of Unit 8 for FY 2023-24 are as given in the Table below:



Table 1:24: Operational Performance of Unit 8 (250 MW) for FY 2023-24

Gross Generation, Heat rate and Aux consumption

Particulars	UoM	MTR Order	FY 2023-24	Difference
Gross Generation as per Schedule	MUs	1,720.00	1,405.43	(314.57)
Auxiliary Consumption*	%	8.69%	7.27%	-1.42%
Scheduled Generation	MUs	1,573.80	1,303.21	(270.59)
Heat Rate	kCal/kWh	2,430	2,384	(46)
Availability	%	90.89%	91.60%	1%
PLF	%	78.32%	62.60%	-16%

^{*} Revised APC including FGD consumption

1.5.2 Fuel Cost

26. After the implementation of DSM, fuel cost applicable for the Scheduled Generation of the beneficiaries has to be considered. The Fuel Cost for Unit-8 considering the scheduled generation of the beneficiaries for FY 2022-23 was Rs. 777.13 Crores. Tata Power-G has considered this fuel cost for the purpose of computation of efficiency gains / (loss) on account of variation in Heat rate of FY 2023-24. The details of price and GCV of the fuel is as given below:

Table 1:25: Fuel Price details for Unit 8 - FY 2023-24

Particulars	MTR Order	FY 2023-24 (Actuals)
Fuel Consumption (MT)		_
Coal		8,24,521
Biomass		NA
Oil (combined)		488
GCV (kCal/kg)		
Coal		3,969
Biomass		NA
Oil (combined)		10,406
Fuel Price (Rs/MT)		
Coal		9,181
Biomass		-
Oil (combined)		63,511
Total Fuel Cost (Rs. Crores)		760.13

27. Based on the above, the cost of fuel for Scheduled Generation is as given below:



Table 1:26: Fuel Cost Working for Scheduled Generation - FY 2023-24

(Rs. Crores) Unit **Actual Fuel Cost Actual Net** Rate Scheduled **Fuel Cost for SG** Generation Generation Rs. Crores Rs./kWh Mus Mus Rs. Crores Unit 8 1274.69 1303.21 777.13 760.13 5.963

28. In addition to the above Tata power-G has passed on credit adjustment of **Rs 11.33 Crores** in year FY 2023-24 as per the direction of the Hon'ble Commission in the FAC order. It is further submitted the above adjustment has not been considered in the actual fuel cost presented in the table above

Table 1:27: Fuel Cost adjustment due to change in methodology - FY 23-24

Rs. Crores

		BEST			TPC-D		
Month	Amount to be billed with ECR	Amount billed by TPC-G	Differential to be billed	Amount to be billed with ECR	Amount billed by TPC-	Differential to be billed	Total
	as per MERC method		by TPC-G	as per MERC method	G	by TPC-G	
Apr-23	31.53	31.02	0.51	43.44	42.74	0.71	1.22
May-23	36.62	35.20	1.42	45.35	43.59	1.76	3.19
Jun-23	31.99	31.53	0.45	39.53	38.97	0.56	1.02
Jul-23	32.27	31.14	1.13	42.27	40.80	1.47	2.60
Aug-23	30.89	33.48	(2.59)	44.52	48.25	(3.73)	(6.32)
Sep-23	29.06	31.64	(2.58)	39.41	42.90	(3.50)	(6.07)
Oct-23	30.62	32.44	(1.83)	40.61	43.03	(2.43)	(4.26)
Nov-23	25.36	26.36	(1.00)	32.77	34.06	(1.29)	(2.29)
Dec-23	27.91	27.89	0.03	35.69	35.66	0.03	0.06
Jan-24	21.03	21.06	(0.04)	28.39	28.44	(0.05)	(0.09)
Feb-24	10.75	10.77	(0.02)	13.44	13.46	(0.02)	(0.04)
Mar-24	29.66	29.82	(0.16)	34.52	34.71	(0.18)	(0.34)
Total	337.69	342.36	(4.67)	439.93	446.59	(6.66)	(11.33)

1.5.3 Capital Expenditure and Capitalisation

29. It is relevant to submit that Tata Power-G has very minimal capitalization for Unit 8 and all the capitalisation is towards Non-DPR Schemes. The amount capitalised under Non DPR Scheme during the FY 2023-24 is **Rs. 3.29 Crores**.



Table 1:28: Capitalisation for Unit 8 in FY 2023-24

Rs. Crores

Particulars	FY 2023-24
	(Actuals)
DPR Capitalisation	-
Non-DPR Capitalisation	3.29
Total Capitalisation	3.29
Ratio of Non-DPR to DPR Capitalistion	

1.5.4 Net Entitlement and Resultant Gap/ (Surplus)

30. The net entitlement and the Gap / (Surplus) for FY 2023-24 for Unit 8 is shown in the Table below:

Table 1:29: Net Entitlement and Resultant Gap/ (Surplus)- Unit 8 – FY 2023-24

Sr. No.	Particulars	MTR Order	Entitlement as per Regulations
Α	Expenditure		
1	Fuel Related Expenses	1246.92	782.10
2	Fuel Cost compensation based on MERC methodology in FAC Orders		(11.33)
3	Auxiliary Consumption Benefit	0.00	4.10
4	Operation & Maintenance Expenses	77.53	72.63
5	Depreciation	59.36	24.84
6	Interest on Long-term Loan Capital	5.33	8.18
7	Interest on Working Capital net-off DPC	18.25	12.75
8	Other Finance Charges		0.21
9	Income tax		0.00
10	Return on Equity	50.23	55.53
11	Total Expenditure	1457.62	949.00
12	PLF Incentive		0.00
13	Expenditure towards shared capacity of Unit 5, 7	10.69	9.76
В	Total Including Incentive	1468.31	958.76
Less	Revenue		
14	- Revenue Power Supply		1010.93
15	- Non-Tariff Income	3.42	(2.34)
c=b- 14-15	Net Gap/(Surplus)	1464.89	(49.83)



✓ Provisional Truing up of FY 2024-25

31. The existing PPA has been extended further, till 31st March, 2029 based on the directions of the Hon'ble Commission in Case No 39 of 2023 dated 17th February, 2023. It is submitted that the total capacity of 1377 MW has been tied up with Tata Power-D and BEST.

1.6 Performance of Unit 5, 7 and Hydro Generating Stations

1.6.1 Estimated Generation and Availability

Bhira

90%

Table 1:30: Gross Generation of Unit 5, 7 & Hydro Stations for FY 2024-25

MUs Generating MTR Order FY 2024-25 H1 FY 2024-25 H2 FY 2024-25 Difference Unit (Actual) (Provisional) (Estimated) (Approved) **Hydro Stations** Khopoli 282.00 183.13 125.00 308.13 26.13 Bhivpuri 292.00 173.92 180.00 353.92 61.92 Bhira 910.00 589.77 309.00 898.77 (11.23)**Total Hydro** 1484.00 946.81 614.00 1560.81 76.81 Thermal Unit 5 3359.00 1385.94 619.04 2004.98 (1,354.02) Unit 7 1198.00 754.41 692.50 1446,91 248.91 **Total Thermal** 4557.00 2140.36 1311.54 3451.89 (1,105.11) Total 6041.00 3087.17 1925.54 5012.71 (1,028.29)

Table 1:31: Availability for FY 2024-25

Station FY 2024-25 Annual Considered **Estimate** for FY 24-25 **Normative** H1 (Actual) H2 (Projection) Thermal Unit 5 85% 90% 53% 69% 69% Unit 7 85% 99% 99% 99% 85% Hydro Khopoli 90% 100% 100% 100% 90% Bhivpuri 90% 93% 100% 100% 90%

67%

83%

90%

100%



Table 1:32: Auxiliary Consumption - FY 2024-25

Generating Unit Approved FY 2024-25 H2 FY 2024-25 FY 2024-25 H1 **Considered for FY** (Actual) (Provisional) (Estimated) 2024-25 Khopoli 1.20% 2.24% 1.88% 2.10% 1.20% Bhira 1.00% 1.24% 1.26% 1.25% 1.00% Bhivpuri 1.20% 1.48% 1.28% 1.38% 1.20% Unit 5 6.00% 6.61% 7.40% 6.86% 6.00% Unit 7 2.75% 2.75% 2.39% 2.61% 2.50%

Table 1:33: Heat Rate of Thermal Generating Stations - FY 2024-25

(kcal/kWh)

Generating Unit	As per MYT Regulations 2019	FY 2024-25 H1 (Actual)	FY 2024-25 H2 (Provisional)	FY 2024-25 (Estimated)	Considered for FY 2024-25
Unit 5	2549	2590	2645	2607	2549
Unit 7	2035	1967	1991	1978	2035

1.6.2 Fuel Cost

32. Tata Power-G has estimated the fuel cost based on the actual fuel cost with schedule generation for FY 2024-25 H1 and estimated fuel cost for FY 2024-25 H2 considering the estimated generation and the Energy Charge Rate computed based on the Wt Average rate of July 2024 to September 2024. The total estimated fuel cost for FY 2024-25 is as given below:

17



Table 1:34: Unit wise Fuel Cost for Unit 5 & 7 - FY 2024-25

Particulars	MTR Order	FY 2024-25 H1 (Actual)	FY 2024-25 H2 (Provisional)	FY 2024-25 (Estimated)
Consumption (MT)				
Gas - APM		118945	107821	226766
Gas - NAPM/Biomass		0	0	0
Gas - RLNG		212	0	212
Coal		856719	388698	1245417
Oil (combined)		521	0	521
GCV (kcal/kg)				
Gas - APM	NA	13084	13088	13086
Gas - NAPM/Biomass	NA	0	0	0
Gas - RLNG	NA	13086	0	13086
Coal	4556	3949	3999	3965
Oil (combined)	NA	10389	0	10326
Price (Rs./MT)				
Gas - APM	NA	31663	31798	31727
Gas - NAPM/Biomass	NA	0	0	0
Gas - RLNG	NA	70662	0	70662
Coal	12500	8384	8368	8379
Oil (combined)	NA	61356	0	59802
Total Fuel Cost (Rs. Crore	es)	1099.55	668.11	1767.66

33. Accordingly, the estimated Fuel Cost for Unit 5 and Unit 7 for FY 2024-25 is Rs. 1767.66 Crore. In addition to the above as explained in the Section for truing up of FY 2022-23 & FY 2023-24, Tata Power-G has been directed by the Hon'ble Commission in its FAC Orders for April-June 2024 to pass an adjustment of Rs (0.87) Crores (Rs (0.49) Crores to BEST and Rs (0.38) Crores to Tata Power-D) for change in methodology of computation of Wt Average fuel Cost on the basis of the direction of the Hon'ble Commission in the FAC approval of Tata Power -D. The credit given is as given below:

Table 1:35: Adjustment in Fuel Cost due to change in methodology- FY 2024-25

	BEST			TPC-D		
Month	Amount to be billed with	Amount billed	Differential to be	Amount to be billed with ECR	Amount billed	Differential to be
	ECR as per MERC method	by TPC-G	billed by TPC-G	as per MERC method	by TPC-G	billed by TPC-G
Apr-24	78.71	78.85	(0.14)	60.44	60.55	(0.11)
May-24	76.32	76.41	(80.0)	59.72	59.79	(0.07)
Jun-24	79.43	79.70	(0.27)	60.72	60.93	(0.21)
Total	234.46	234.96	(0.49)	180.88	181.26	(0.38)



1.6.3 Capital Expenditure & Capitalisation

34. Tata Power-G for the estimation of Capital expenditure has considered the estimated capitalization of DPR schemes on the basis of the approved DPR. In addition, a capitalisation of **Rs 12.04 Crores** under Non DPR schemes has been considered. The estimated Capitalisation for FY 2024-25 is as given below:

Table 1:36: Capitalisation for Unit 5, 7 & Hydro Generating Stations - FY 2024-25

Rs. CroresParticularsCapitalisationDPR35.26Non DPR12.04Total Capitalisation47.30Ratio of Non-DPR to DPR Capitalistion34%

35. Tata Power-G requests the Hon'ble Commission to approve the total estimated capitalisation of Rs. 47.30 Crores for FY 2024-25.

1.6.4 Reduction in the Fixed cost due to Unit 5 Force Majeure Outage

- 36. Unit 5 was taken out on 22nd September, 2024 at around 16:14 hrs due to fire in Control room area. The fire which was occurred in Unit 5 was uncontrollable and in our humble submission it is a Force Majeure condition as per MYT Regulations, 2019 Regulations 2(40).
- 37. The detailed analysis of the occurrence as attached as **Annexure 11** to this petition. We request the Hon'ble Commission to consider the same as Force Majeure condition. The detailed reduction in the Fixed cost is as given below:



Table 1:37: Reduction in the Fixed cost of Unit 5 for - FY 2024-25

Particulars	Unit		AFC U5
Total AFC for Unit 5	Rs Crores	а	298.14
AFC related to Employee Expenses,	Rs Crores	b	222.79
Depreciation, and Interest on long term			
loan Capital			
AFC (revised) without related to Employee	Rs Crores	c=a-b	75.35
Expenses, Depreciation, and Interest on			
long term loan Capital			
Normative Availability	%	d	85%
Estimated Availability	%	e	69%
AFC (revised) at actual Availability	Rs Crores	f=e*d/c	61.02
Reduction in AFC	Rs Crores	g=c-f	14.33
AFC for Unit 5	Rs Crores	h=b+f	283.81

1.6.5 Resultant Gap/ (Surplus) for Unit 5, 7 and Hydro Stations for FY 2024-25

38. The Gap/(Surplus) for the FY 2024-25 on the basis of the discussions above is shown in the Table below:

Table 1:38: Gap/(Surplus)- Unit 5, 7 & Hydro Stations FY 2024-25

Sr. No.	Particulars	MTR Tariff Order	Entitlement as per the Regulations
Α	Expenditure		
1	Fuel Related Expenses	3466.17	1794.67
2	Fuel Cost compensation based on		(0.87)
	MERC methodology in FAC Orders		
3	Operation & Maintenance Expenses	472.55	490.06
	with uncontrollable expenditure		
4	Depreciation	130.86	99.24
5	Interest on Long-term Loan Capital	0.00	0.00
6	Other Charges	0.00	0.00
7	Interest on Working Capital	53.46	34.80
8	Water Charges	3.13	5.59
9	Return on Equity	198.26	193.56
10	Reduction in FC for Unit 5		(14.33)
	Total Expenditure Including Incentive	4324.42	2602.72
В	Less:		
11	Allocation for U 8 for Shared Capacity	10.36	9.76
12	- Revenue Power Supply		2603.30
13	- Non-Tariff Income	12.87	25.27
С	Total Gap / (Surplus) for FY 2024-25		(35.62)



1.7 Performance of Unit 8

Operational Performance - FY 2024-25

1.7.1 Generation

39. The various operational parameters pertaining to the actual operational performance of Unit 8 for FY 2024-25 H1 and estimation for FY 2024-25 H2 given in the Table below:

Table 1:39: Operational Performance of Unit 8 (250 MW) for FY 2024-25

Particulars	UoM	As per MYT	FY 2024-25 H1 (Actual)	FY 2024-25 H2 (Projected)	FY 2024-25 (Estimate)	FY 2024-25 considered for Projections
Gross Generation as per Schedule	MUs	1906	757	782	1539	
Auxiliary Consumption	%	6.40%	7.02%	7.12%	7.07%	8.50%
Net Generation	MUs	1784.03	703.86	726.15	1430.02	
Heat Rate	kcal/kWh	2316.00	2375.37	2370.03	2372.66	2430
Gross Availability	%	96.58%	98.02%	98.00%	98.01%	85.00%
PLF	%	87.03%	69.18%	71.64%	70.38%	

1.7.2 Fuel Cost

40. Fuel Cost has been computed based on the Schedule Generation for H1 of FY 2024-25 and for H2 of FY 2024-25, fuel cost is estimated on the basis of weighted average fuel cost from July 2024 to September 2024 and considering the estimated generation which in turn has been worked on the basis of the Schedule provided by Tata Power -D and BEST. The projected Fuel Costs are as under.

In addition to the above as explained in the Section for truing up of FY 2022-23 & FY 2023-24, Tata Power-G has been directed by the Hon'ble Commission in its FAC Orders for April-June 2024 to pass an adjustment of Rs (0.47) Crores (Rs (0.21) Crores to BEST and Rs (0.26) Crores to Tata Power-D) for change in methodology of computation of Wt Average fuel Cost on the basis of the direction of the Hon'ble Commission in the FAC approval of Tata Power -D. The credit given is as given below



Table 1:40: Fuel Costs for Unit 8 (250 MW) for FY 2024-25

Particulars	MTR Order	FY 2024-25 H1 (Actual)	FY 2024-25 H2 (Provisional)	FY 2024-25 (Estimated)
Fuel Consumption (MT)				
Coal		441502	481302	922804
Oil (combined)		326	358	684
GCV (Kcal/kg)				
Coal	4888	4079	3999	4037
Oil (combined)	10459	10326	10364	10346
Fuel Price (Rs/MT)				
Coal	5003	8381	8368	8374
Oil (combined)	51605	55463	58853	57291
Total Fuel Cost (Cr.)		371.92	404.85	776.80

		BEST			TPC-D	
Month	Amount to be billed with ECR as per MERC method	Amount billed by TPC-G	Differential to be billed by TPC-G	Amount to be billed with ECR as per MERC method	Amount billed by TPC-G	Differential to be billed by TPC-G
Apr-24	30.95	31.00	(0.06)	37.73	37.80	(0.07)
May-24	27.55	27.60	(0.05)	34.45	34.52	(0.06)
Jun-24	31.01	31.12	(0.11)	36.86	36.99	(0.13)
Total	89.51	89.73	(0.21)	109.04	109.30	(0.26)

1.7.3 Capital Expenditure and Capitalisation

41. It is pertinent to submit that Tata Power-G has minimum capitalization for Unit 8 and hence, all the capitalisation is towards Non-DPR Schemes only. The amount capitalised under Non DPR Scheme during the FY 2024-25 is estimated to be Rs. 5.00 Crores. The total Capitalisation would be therefore work out to as follows for FY 2024-25

Table 1:41: Capitalisation in FY 2024-25

Rs. Crores

	1101 010100
Particulars	Capitalisation
DPR	0.00
Non DPR	5.00
Total Capitalisation	5.00

1.7.4 Net Entitlement and Resultant Gap/ (Surplus)

42. The net entitlement and the Gap / (Surplus) for FY 2024-25 for Unit 8 is shown in the Table below:



Table 1:42: Resultant Gap/ (Surplus)- Unit 8 - FY 2024-25

Sr. No.	Particulars	Approved in the MTR Order	Net Entitlement after Impact of Gains / (Loss) from Controllable factors
	Expenditure		
1	Fuel Related Expenses	1243.51	775.51
2	Fuel Cost compensation based on MERC		(0.47)
	methodology in FAC Orders		
3	Operation & Maintenance Expenses	80.33	80.33
4	Depreciation	59.52	24.90
5	Interest on Long-term Loan Capital	1.56	6.20
6	Interest on Working Capital	18.23	13.88
7	Return on Equity	50.37	50.29
	Total Expenditure	1453.51	950.63
В	Add:		
11	Expenditure towards shared capacity of	10.36	9.76
	Unit 4 to 7		
С	Less:		
12	Revenue		997.23
13	Non-Tariff Income	3.42	(2.34)
С	Net Gap/(Surplus)		(34.49)

1.7.5 Issue related to Past Period

- 43. This section presents the issues related to past period which need to be addressed.
 - a. Issue related to Ramp Rate
 - To approve additional ROE of 1.5% for Gas Based Units and Hydro Generating Units as specified in MYT Tariff Regulations, 2019
 - ii. To set a procedure for assessment of Ramp Rate for Coal based Units; for getting additional norms of 0.5% for thermal generating stations,
 - b. Issue of Compensation on account of degradation of parameters applicable as per
 MERC Grid Code 2020



Table 1:43: Summary -Compensation as per MEGC for FY 2020-21 to FY 2023-24

1100"	Calculation period	Total compensation amount		BEST's share as per un-			TPC-D's share as per un-			
year	Calculation period	Unit-5	Unit-7	Unit-8	Unit-5	Unit-7	Unit-8	Unit-5	Unit-7	Unit-8
	16 October 2020 to 15 March 2021	4.74	-	-	2.42	-	-	2.31	-	-
	16 March 2021 to 15 March 2022	4.65	6.33	-	2.40	3.24	-	2.25	3.09	-
	16 March 2022 to 15 March 2023	14.63	38.84	-	6.96	19.87	-	7.68	18.97	-
	16 March 2023 to 15 March 2024	34.47	31.62	-	14.44	16.21	-	20.03	15.42	-
	Total	58.49	76.79	-	26.22	39.32	-	32.27	37.48	-
		135.28			65.54			69.75		

44. A detailed computation of compensation workings for FY 2020-21 to FY 2023-24 is attached as **Annexure 13**. For FY 2020-21, compensation has been calculated from 16 October 2020 as the MEGC compensation mechanism was made applicable from 16 October 2020. The notification from the Hon'ble Commission regarding applicability of the mechanism is attached as **Annexure 14**.

1.8 Cumulative Gap /(Surplus) along with carrying cost:

45. Based on the working of Gap/(Surplus) for various years and the Compensation amount as per MEGC 2020 worked out for various years, the Cumulative Gap /(Surplus) along with carrying cost amount to be recovered in FY 2025-26 is as given in the table below:



Table 1:44: Cumulative Gap / (Surplus) of till FY 2024-25

Rs. Crores

Sr. No	Particulars	Year	Interest Rate		Gap / (Surplus)	KS. Crores
	ARR Gap / (Surplus) for Tata Power-G	_		BEST	Tata Power-D	Total
1	Incremental Gap / (Surplus) Unit 5, 7 and Hydro	FY 2022-23		43.08	40.30	83.37
	Carrying/Holding Cost	FY 2022-23	9.30%	2.00	1.87	3.88
	Carrying/Holding Cost	FY 2023-24	10.07%	4.34	4.06	8.39
	Carrying/Holding Cost	FY 2024-25	10.07%	4.34	4.06	8.39
2	Incremental Gap / (Surplus) Unit 8	FY 2022-23		(6.69)	(9.48)	(16.16)
	Carrying/Holding Cost	FY 2022-23	9.30%	(0.31)	(0.44)	(0.75)
	Carrying/Holding Cost	FY 2023-24	10.07%	(0.67)	(0.95)	(1.63)
	Carrying/Holding Cost	FY 2024-25	10.07%	(0.67)	(0.95)	(1.63)
3	Gap / (Surplus) Unit Unit 5, 7 and Hydro	FY 2023-24		(13.12)	(12.40)	(25.52)
	Carrying/Holding Cost	FY 2023-24	10.07%	(0.66)	(0.62)	(1.28)
	Carrying/Holding Cost	FY 2024-25	10.07%	(1.32)	(1.25)	(2.57)
4	Gap / (Surplus) Unit 8	FY 2023-24		(21.63)	(28.20)	(49.83)
	Carrying/Holding Cost	FY 2023-24	10.07%	(1.09)	(1.42)	(2.51)
	Carrying/Holding Cost	FY 2024-25	10.07%	(2.18)	(2.84)	(5.02)
5	Gap / (Surplus) Unit 5, 7 and Hydro	FY 2024-25		(18.65)	(16.97)	(35.62)
6	Gap / (Surplus) Unit 8	FY 2024-25		(15.74)	(18.76)	(34.49)
- 1	Total ARR Gap / (Surplus)			(28.98)	(44.00)	(72.98)
7	Compensation as per Grid Code	FY 2020-21		2.42	2.31	4.74
	Carrying/Holding Cost	FY 2020-21	8.57%	0.10	0.10	0.20
	Carrying/Holding Cost	FY 2021-22	8.50%	0.21	0.20	0.40
	Carrying/Holding Cost	FY 2022-23	9.30%	0.23	0.22	0.44
	Carrying/Holding Cost	FY 2023-24	10.07%	0.24	0.23	0.48
	Carrying/Holding Cost	FY 2024-25	10.07%	0.24	0.23	0.48
8	Compensation as per Grid Code	FY 2021-22		5.64	5.34	10.98
	Carrying/Holding Cost	FY 2021-22	8.50%	0.24	0.23	0.47
	Carrying/Holding Cost	FY 2022-23	9.30%	0.52	0.50	1.02
	Carrying/Holding Cost	FY 2023-24	10.07%	0.57	0.54	1.10
	Carrying/Holding Cost	FY 2024-25	10.07%	0.57	0.54	1.10
9	Compensation as per Grid Code	FY 2022-23		26.83	26.65	53.48
	Carrying/Holding Cost	FY 2022-23	9.30%	1.25	1.24	2.49
	Carrying/Holding Cost	FY 2023-24	10.07%	2.70	2.68	5.38
	Carrying/Holding Cost	FY 2024-25	10.07%	2.70	2.68	5.38
10	Compensation as per Grid Code	FY 2023-24		30.65	35.44	66.09
	Carrying/Holding Cost	FY 2023-24	10.07%	1.54	1.78	3.33
	Carrying/Holding Cost	FY 2024-25	10.07%	3.08	3.57	6.65
Ш	Total Impact of compensation as per Grid code			79.73	84.47	164.21
= +	Total Gap / (Surplus)			50.75	40.47	91.23

✓ MYT Projections FY 2025-26 to FY 2029-30

46. This section discusses and presents the ARR projections of Tata Power-G from FY 2025-26 to FY 2029-30. Further, the Hon'ble Commission has issued MYT Regulations, 2024 on 19th August, 2024. Tata power-G has projected the ARR and tariff based on these Regulations.



1.9 Generation Capacity and Power Sale Arrangement of Tata Power-G

47. Since, the 5th Control Period is for five years from FY 2025-26 to FY 2029-30, Tata Power-G has also projected the tariff for FY 2029-30. As stated earlier, the Hon'ble Commission in Case No 39 of 2023 has directed Tata Power – D and BEST to tie up with Tata Power-G for five years from FY 2024-25 to FY 2028-29. Accordingly, Tata Power-D and BEST has entered into the PPA with Tata Power-G with a term upto FY 2028-29. The capacity tied up with BEST and Tata Power-D is as given below:

Table 1:45: Generation Capacity and Tie up upto FY 2028-29

Generation Unit	Type of Fuel	Generation Capacity (MW)	N)		Tie up wi Powe		
			%	MW	%	MW	
Unit 5	Coal, Oil and Gas	500	51.17%	256	48.83%	244	
Unit 7	Gas	180	51.17%	92	48.83%	88	
Unit 8	Coal & Oil	250	40%	100	60%	150	
Total Thermal Capacity		930		448		482	
Bhira	Hydro	300	51.17%	154	48.83%	146	
Bhivpuri	Hydro	75	51.17%	38	48.83%	37	
Khopoli	Hydro	72	51.17%	37	48.83%	35	
Total Hydro Capacity		447		229		218	
Total Generation Capacity		1377		677		700	

1.10 Aggregate Revenue Requirement as per MYT Regulations, 2024

Operational Norms

Table 1:46: Availability of Generating Units for FY 2023-24 to FY 2024-25

Generating	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
Unit					
Unit 5	85.00%	85.00%	85.00%	85.00%	85.00%
Unit 7	85.00%	85.00%	85.00%	85.00%	85.00%
Unit 8	85.00%	85.00%	85.00%	85.00%	85.00%
Hydro					
Bhira	90.00%	90.00%	90.00%	90.00%	90.00%
Bhivpuri	90.00%	90.00%	90.00%	90.00%	90.00%
Khopoli	90.00%	90.00%	90.00%	90.00%	90.00%



1.10.1 Gross Generation and PLF

48. In the previous Control Period, Tata Power-G has experienced that Unit 5, and Unit 8 runs mainly on the technical minimum whereas Unit 7 based on its APM Gas availability runs on a lower PLF. Based on the above and lower requisition from Distribution Licensee, Tata Power-G has projected the Gross generation, Auxiliary Consumption, Net Generation and PLF as follows.

Table 1:47: Gross generation for FY 2024-25 to FY 2029-30

Generating Units	Gross Generation details							
	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30			
Bhira	914	929	935	938	938			
Bhivpuri	286	296	298	298	298			
Khopoli	289	289	288	288	288			
Hydro	1487.92	1513.47	1521.18	1523.76	1523.76			
Unit 5	3082	2343	2417	2353	2417			
Unit 7	1120	1175	1178	1175	1166			
Unit 8	1534	1299	1267	1337	1524			
Thermal	5737	4817	4861	4865	5107			
Thermal + Hydro	7225	6330	6383	6389	6631			

49. The projections of Auxiliary Consumption for the period FY 2025-26 to FY 2029-30 is as follows:

Table 1:48: Auxiliary Consumption for FY 2024-25 to FY 2029-30

Generating Units		% Aux	iliary Consun	liary Consumption				
	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30			
Bhira	1.00%	1.00%	1.00%	1.00%	1.00%			
Bhivpuri	1.20%	1.20%	1.20%	1.20%	1.20%			
Khopoli	1.20%	1.20%	1.20%	1.20%	1.20%			
Unit 5	6.00%	6.00%	6.00%	6.00%	6.00%			
Unit 7 combined cycle	3.00%	3.00%	3.00%	3.00%	3.00%			
Unit 7 Open cycle	1.00%	1.00%	1.00%	1.00%	1.00%			
Unit 8	8.50%	8.50%	8.50%	8.50%	8.50%			

50. Based on the Gross Generation and Auxiliary Consumption, the Net Generation from Tata Power -G would be as follows:



Table 1:49: Net generation for FY 2024-25 to FY 2029-30

Generating Units		1	Tata Power-D		
-	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
Bhira	440	440	440	440	440
Bhivpuri	141	141	141	141	141
Khopoli	136	136	136	136	136
Hydro	717	717	717	717	717
Unit 5	1106	1106	1106	1106	1106
Unit 7	516	516	517	516	516
Unit 8	661	661	661	661	661
Thermal	2283	2283	2284	2283	2283
Thermal + Hydro	3000	3000	3001	3000	3000
Generating Units			BEST		
	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
Bhira	465	480	486	488	488
Bhivpuri	141	151	154	154	154
Khopoli	149	149	148	148	148
Hydro	755	780	788	791	791
Unit 5	1792	1097	1166	1106	1166
Unit 7	571	623	625	623	615
Unit 8	742	528	498	562	733
Thermal	3105	2248	2289	2292	2514
Thermal + Hydro	3860	3028	3077	3083	3305
Generating Units			Total		
	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
Bhira	904	920	926	928	928
Bhivpuri	282	292	295	295	295
Khopoli	285	285	284	284	284
Hydro	1471.89	1497.17	1504.79	1507.35	1507.35
Unit 5	2897	2203	2272	2212	2272
Unit 7	1087	1139	1142	1139	1131
Unit 8	1404	1189	1159	1224	1395
Thermal	5388	4531	4573	4575	4797
Thermal + Hydro	6860	6028	6078	6082	6305

1.10.2 Performance Parameters - Heat Rate for Thermal Generating Station

51. The MYT Regulations, 2024 has specified the normative Heat Rate for the existing Generating Units and New Generating Units of Tata Power-G. Tata Power-G has considered normative heat rates for the future Control Period as given in the table below:



Table 1:50: Heat Rate Norms for FY 2025-26 to FY 2029-30

HR Projections	(Kcal/Kwh)				
Units	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
Thermal Units					
Unit 5	2549	2549	2549	2549	2549
Unit 7 Combined Cycle	2035	2035	2035	2035	2035
Unit 7 Open Cycle	2900	2900	2900	2900	2900
Unit 8	2415	2415	2415	2415	2415

1.11 Special Allowance FY 2025-26 to FY 2029-30

- 52. The projections for the financial parameters for all the Generating Units for the period between FY 2025-26 and FY 2029-30 are presented below:
- 53. All the Units of Tata Power -G excluding BPSU and Unit No 8 have completed their useful life. Accordingly, the Special Allowance for the fifth Control Period works out as given in the table below:

Table 1:51:Special Allowance— FY 2025-26 to FY 2029-30

Rs. Crore

Unit			FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
	MW	Rs Lakh/MW					
Unit 5	500	10.75	53.75	53.75	53.75	53.75	53.75
Unit 7	180	10.75	19.35	19.35	19.35	19.35	19.35
Bhira	150	10.75	16.125	16.125	16.125	16.125	16.125
Bhivpuri	75	10.75	8.06	8.06	8.06	8.06	8.06
Khopoli	72	10.75	7.74	7.74	7.74	7.74	7.74
Total	680		105.03	105.03	105.03	105.03	105.03

54. Tata Power-G in the subsequent chapter has given a detailed submission on the impact of claiming Special Allowance and has made certain requests to the Hon'ble Commission. We request the Hon'ble Commission to consider the same.

1.12 Fixed Charges for FY 2025-26 to FY 2029-30

55. Based on the above, Fixed Charges for Unit 5,7 and Hydro and Unit 8 is as given in the table below:



Table 1:52: Fixed Charges for Unit 5,7 and Hydro from 2025-26 to FY 2029-30

Rs. Crores

5	FV 2025 26	EV 2026 27	EV 2027 20	EV 2020 20	FV 2020 20
Particulars	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
RoE	215.40	215.40	215.40	215.40	215.40
Depreciation	99.84	99.84	99.84	99.84	99.84
0&M	527.53	555.27	584.49	615.26	647.66
Special Allowance	105.03	105.03	105.03	105.03	105.03
Interest on LT Loans	0.00	0.00	0.00	0.00	0.00
Interest on Working Capital	39.79	35.95	37.49	38.21	39.82
Less					
Non Tariff Income	25.27	25.27	25.27	25.27	25.27
Share of Unit 8 from	9.76	9.76	9.76	9.76	9.76
Shared Service					
Total Annual Fixed Charges	952.56	976.46	1007.21	1038.70	1072.72
Fuel Cost	2263.94	1941.94	2044.93	2066.26	2162.46
Total ARR including Fuel	3216.50	2918.40	3052.15	3104.96	3235.19
Cost					

Table 1:53: Fixed Charges for Unit 8 from 2025-26 to FY 2029-30

Rs. Crores

Particulars	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
RoE	55.91	56.14	56.38	56.61	56.84
Depreciation	25.01	25.11	25.21	25.32	25.42
O&M	103.33	107.80	112.48	117.35	122.43
Interest on LT Loans	4.26	2.32	0.67	0.00	0.00
Interest on Working Capital	16.73	15.14	15.26	16.34	18.59
Share of Unit 8 from	9.76	9.76	9.76	9.76	9.76
Shared Service					
<u>Less</u>					
Non Tariff Income	(2.34)	(2.34)	(2.34)	(2.34)	(2.34)
Total Annual Fixed Charges	217.34	218.62	222.11	227.72	235.38
Fuel Cost	875.48	763.81	767.01	834.03	979.19
Total ARR including Fuel	1092.82	982.44	989.11	1061.75	1214.57
Cost					

56. Based on the above tariff for the fifth Control Period is as given below.

1.13 Projected Tariff FY 2025-26 to FY 2029-30

57. Based on the discussions in the earlier chapter, the Tariffs for the period FY 2025-26 to FY 2029-30 is projected in the subsequent paragraphs.



1.13.1 Annual Fixed Charges

58. The Unit wise Fixed Cost for FY 2025-26 to FY 2029-30 is provided in the Table below:

Table 1:54: Component wise Fixed Cost for Tata Power-G for FY 2025-26

2025-26										
S.No	Particulars	Unit 5, 7 & Hydro	The	ermal excl.	U8	Hydro				11-40
3.110	Particulars	Onit 5, 7 & Hydro	Total U 5&7	Unit 5	Unit 7	Total Hydro	Bhira	Bhivpuri	Khopoli	Unit 8
1	O&M Charges	527.53	319.07	201.98	117.09	208.46	78.11	46.43	83.92	103.33
2	Other Finance Charges	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	Interest on Normative Debt	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.26
4	Interest on Working Capital	39.79	33.96	26.59	7.37	5.83	2.29	1.31	2.23	16.73
5	Depreciation & Related Debits	99.84	60.38	33.17	27.21	39.46	15.90	8.64	14.92	25.01
6	Return on Equity	215.40	132.04	73.82	58.23	83.35	34.94	20.52	27.90	55.91
7	Incentives	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	Special Allowance	105.03	73.10	53.75	19.35	31.93	16.13	8.06	7.74	0.00
9	Allocation of shared services	-9.76	-9.76	-5.35	-4.41	0.00	0.00	0.00	0.00	9.76
10	Gross Fixed Charges	977.83	608.79	383.95	224.84	369.04	147.37	84.96	136.71	215.00
11	Less: Non Tariff Income	25.27	15.28	8.40	6.89	9.99	4.03	2.19	3.78	-2.34
12	Net Fixed Charges	952.56	593.51	375.56	217.95	359.05	143.34	82.77	132.93	217.34

Table 1:55: Component wise Fixed Cost for Tata Power-G for FY 2026-27

2026-27										
S.No	Particulars	Unit 5, 7 & Hydro	Thermal excl. U8			Hydro				Unit 8
5.110	Particulars	Unit 5, 7 & riyaro	Total U 5&7	Unit 5	Unit 7	Total Hydro	Bhira	Bhivpuri	Khopoli	Unit 8
1	O&M Charges	555.27	335.85	212.60	123.25	219.42	82.22	48.87	88.33	107.80
2	Other Finance Charges									
3	Interest on Normative Debt									2.32
4	Interest on Working Capital	35.95	29.94	22.17	7.77	6.00	2.35	1.35	2.30	15.14
5	Depreciation & Related Debits	99.84	60.38	33.17	27.21	39.46	15.90	8.64	14.92	25.11
6	Return on Equity	215.40	132.04	73.82	58.23	83.35	34.94	20.52	27.90	56.14
7	Incentives									
9	Special Allowance	105.03	73.10	53.75	19.35	31.93	16.13	8.06	7.74	0.00
10	Allocation of shared services	-9.76	-9.76	-5.35	-4.41	0.00	0.00	0.00	0.00	9.76
11	Gross Fixed Charges	1001.73	621.56	390.16	231.40	380.17	151.54	87.44	141.19	216.28
12	Less: Non Tariff Income	25.27	15.28	8.40	6.89	9.99	4.03	2.19	3.78	-2.34
13	Net Fixed Charges	976.45	606.27	381.76	224.51	370.18	147.51	85.25	137.42	218.62

Table 1:56: Component wise Fixed Cost for Tata Power-G for FY 2027-28

FY 2027-28										
S.No	Particulars	Unit 5, 7 & Hydro	The	rmal excl. I	U8	Hydro				Unit 8
3.110	Particulars	Unit 5, 7 & Hydro	Total U 5&7	Unit 5	Unit 7	Total Hydro	Bhira	Bhivpuri	Khopoli	Unit 8
1	O&M Charges	584.49	353.52	223.79	129.73	230.97	86.55	51.44	92.98	112.48
2	Other Finance Charges	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	Interest on Normative Debt	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.67
4	Interest on Working Capital	37.49	31.31	23.32	7.99	6.17	2.42	1.39	2.37	15.26
5	Depreciation & Related Debits	99.84	60.38	33.17	27.21	39.46	15.90	8.64	14.92	25.21
6	Return on Equity	215.40	132.04	73.82	58.23	83.35	34.94	20.52	27.90	56.38
7	Incentives	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	Special Allowance	105.03	73.10	53.75	19.35	31.93	16.13	8.06	7.74	0.00
9	Allocation of shared services	-9.76	-9.76	-5.35	-4.41	0.00	0.00	0.00	0.00	9.76
10	Gross Fixed Charges	1032.48	640.60	402.50	238.10	391.89	155.93	90.05	145.91	219.76
11	Less: Non Tariff Income	25.27	15.28	8.40	6.89	9.99	4.03	2.19	3.78	-2.34
12	Net Fixed Charges	1007.21	625.31	394.10	231.21	381.90	151.90	87.86	142.13	222.11



Table 1:57: Component wise Fixed Cost for Tata Power-G for FY 2028-29

FY 2028-29										
S.No	Particulars	Unit 5, 7 & Hydro	Thermal excl. U8			Hydro				Unit 8
3.110	Farticulars	Offic 5, 7 & Hydro	Total U 5&7	Unit 5	Unit 7	Total Hydro	Bhira	Bhivpuri	Khopoli	Onits
1	O&M Charges	615.26	372.13	235.57	136.56	243.12	91.10	54.15	97.87	117.35
2	Other Finance Charges									
3	Interest on Normative Debt	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	Interest on Working Capital	38.21	31.84	23.61	8.23	6.37	2.49	1.43	2.45	16.34
5	Depreciation & Related Debits	99.84	60.38	33.17	27.21	39.46	15.90	8.64	14.92	25.32
6	Return on Equity	215.40	132.04	73.82	58.23	83.35	34.94	20.52	27.90	56.61
7	Incentives									
8	Special Allowance	105.03	73.10	53.75	19.35	31.93	16.13	8.06	7.74	0.00
9	Allocation of shared services	-9.76	-9.76	-5.35	-4.41	0.00	0.00	0.00	0.00	9.76
10	Gross Fixed Charges	1063.97	659.73	414.56	245.17	404.24	160.56	92.80	150.88	225.38
11	Less: Non Tariff Income	25.27	15.28	8.40	6.89	9.99	4.03	2.19	3.78	-2.34
12	Net Fixed Charges	1038.70	644.45	406.17	238.28	394.25	156.53	90.61	147.10	227.72

Table 1:58: Component wise Fixed Cost for Tata Power-G for FY 2029-30

FY 2029-30										
S.No	Particulars	Unit 5, 7 & Hydro	The	rmal excl. l	J8	Hydro				Unit 8
5.140	Particulars	Unit 5, 7 & Hydro	Total U 5&7	Unit 5	Unit 7	Total Hydro	Bhira	Bhivpuri	Khopoli	Unit 8
1	O&M Charges	647.66	391.73	247.97	143.76	255.93	95.90	57.00	103.03	122.43
2	Other Finance Charges	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	Interest on Normative Debt	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	Interest on Working Capital	39.82	33.25	24.82	8.43	6.57	2.57	1.48	2.53	18.59
5	Depreciation & Related Debits	99.84	60.38	33.17	27.21	39.46	15.90	8.64	14.92	25.42
6	Return on Equity	215.40	132.04	73.82	58.23	83.35	34.94	20.52	27.90	56.84
7	Incentives	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	Special Allowance	105.03	73.10	53.75	19.35	31.93	16.13	8.06	7.74	0.00
9	Allocation of shared services	-9.76	-9.76	-5.35	-4.41	0.00	0.00	0.00	0.00	9.76
10	Gross Fixed Charges	1097.99	680.75	428.18	252.57	417.24	165.43	95.70	156.12	233.04
11	Less: Non Tariff Income	25.27	15.28	8.40	6.89	9.99	4.03	2.19	3.78	-2.34
12	Net Fixed Charges	1072.72	665.46	419.79	245.68	407.25	161.41	93.51	152.34	235.38

1.13.2 Capacity Charge and Energy Charge for Hydro Station

59. The Capacity Charge and the Energy Charge for the Hydro Generating Stations is computed for FY 2025-26 to FY 2029-30 in accordance with the Regulation 52.3 and 52.6 of the MYT Regulations 2024. The relevant extracts from the MYT Regulations 2024 are as given below.



Table 1:59: Capacity & Energy Charge for Hydro Generating Stations for FY 2025-26 to FY 2029-30

Particulars			FY 2025-26			FY 202	26-27		
		Unit	Bhira	Bhivpuri	Khopoli	Bhira	Bhivpuri	Khopoli	Total
Fixed Cost for Hydro	a	Rs Cr	143.34	82.77	132.93	147.51	85.25	137.42	
NAPAF	b	%	90%	90%	90%	90%	90%	90%	90%
Projected Availability	С	%	90%	90%	90%	90%	90%	90%	90%
Capacity Charges	d=0.5*a*c/b	Crs.	71.67	41.39	66.47	73.76	42.63	68.71	0.00
Design Energy	e	MUs	744.12	193.23	174.68	744.12	193.23	174.68	1112.03
Auxiliary Consumption	f	%	1.00%	1.20%	1.20%	1.00%	1.20%	1.20%	
Net Design Energy	g =e*(1-f)	MUs	736.68	190.91	172.58	736.68	190.91	172.58	1100.17
Energy Charge Rate	h = 0.5*a/g	Rs/kWh	0.973	2.168	3.851	1.001	2.233	3.981	0.00

Particulars			FY 2027-28			FY 2028-29			
		Unit	Bhira	Bhivpuri	Khopoli	Bhira	Bhivpuri	Khopoli	Total
Fixed Cost for Hydro	а	Rs Cr	151.90	87.86	142.13	156.53	90.61	147.10	394.25
NAPAF	b	%	90%	90%	90%	90%	90%	90%	90%
Projected Availability	С	%	90%	90%	90%	90%	90%	90%	90%
Capacity Charges	d=0.5*a*c/b	Crs.	75.95	43.93	71.07	78.27	45.31	73.55	197.13
Design Energy	е	MUs	744.12	193.23	174.68	744.12	193.23	174.68	1112.03
Auxiliary Consumption	f	%	1.00%	1.20%	1.20%	1.00%	1.20%	1.20%	1.20%
Net Design Energy	g =e*(1-f)	MUs	736.68	190.91	172.58	736.68	190.91	172.58	1100.17
Energy Charge Rate	h = 0.5*a/g	Rs/kWh	1.031	2.301	4.118	1.062	2.373	4.262	1.79

Particulars		FY 2029-30					
		Unit	Bhira	Bhivpuri	Khopoli		
Fixed Cost for Hydro	a	Rs Cr	161.41	93.51	152.34		
NAPAF	b	%	90%	90%	90%		
Projected Availability	С	%	90%	90%	90%		
Capacity Charges	d=0.5*a*c/b	Crs.	80.70	46.75	76.17		
Design Energy	e	MUs	744.12	193.23	174.68		
Auxiliary Consumption	f	%	1.00%	1.20%	1.20%		
Net Design Energy	g =e*(1-f)	MUs	736.68	190.91	172.58		
Energy Charge Rate	h = 0.5*a/g	Rs/kWh	1.095	2.449	4.413		

1.13.3 Energy Charge for Thermal

- 60. The Energy Charges have been computed by considering the estimated fuel parameters and normative performance of the individual Generating Units for FY 2025-26 to FY 2029-30:
- 61. As a first step, as required by the MYT Regulations 2024, Tata Power –G has worked out the actual weighted average Fuel Price for various fuels for the period July 2024 to September 2024 i.e 3 months prior to submission of this petition. The weighted average Fuel Costs for the last 3 months is as follows:



Table 1:60: Fuel Prices for the previous three months i.e July 24 to Sep 24.

Coal	Consumption (MT)	Rs / MT	Rs / Mkcal	GCV
Jul-24	210755	8472	2173	3.900
Aug-24	188472	8230	2010	4.094
Sep-24	177572	8391	2089	4.016
Weighted Average		8368	2094	3.999

APM	Consumption (MT)	Rs / MT	Rs / Mkcal	GCV
Jul-24	19170	31736	2426	13.080
Aug-24	22479	31804	2428	13.098
Sep-24	18817	31853	2434	13.085
Weighted Average		31798	2429	13.088

RLNG	Consumption (MT)	Rs / MT	Rs / Mkcal	GCV
Jul-24	0	0	0	0.000
Aug-24	211	70652	5399	13.086
Sep-24	0	0	0	0.000
Weighted Average		70652	5399	13.086

Oil	Consumption (MT)	Rs / MT	Rs / Mkcal	GCV
Jul-24	459	56758	5489	10.340
Aug-24	38	92947	8654	10.740
Sep-24	142	56594	5473	10.340
Weighted Average		58853	5672	10.364

62. The Unit wise Energy Charges on the basis of above assumptions are as given below. Further, Tata Power-G has considered the escalation rate of 3% in order to avoid the risk of fuel variation in the future period.

Table 1:61: Energy Charge for Thermal Generating Units – FY 2025-26 to FY 2029-30

Rs./kWh

Unit	Fuel	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
		Projection	Projection	Projection	Projection	Projection
Unit 5	APM	6.786	6.989	7.199	7.415	7.637
Unit 5	Oil	15.861	16.337	16.827	17.332	17.852
Unit 5	Coal	5.844	6.020	6.200	6.386	6.578
Unit 5	RLNG	15.080	15.532	15.998	16.478	16.972
Unit 7	APM	5.250	5.407	5.569	5.737	5.909
Unit 7	RLNG	11.667	12.017	12.377	12.748	13.131
Unit 8	Coal+Oil	5.708	5.879	6.055	6.237	6.424



PRAYERS TO THE HON'BLE COMMISSION

- 63. In view of the above, the Petitioner respectfully prays that the Hon'ble Commission may:
 - a) Accept the Truing Up of FY 2022-23 and FY 2023-24 as worked out in this Petition in accordance with the guidelines & principles outlined in MYT Regulations, 2019
 - b) Accept the Provisional Truing-up of FY 2024-25 as worked out in this Petition in accordance with the guidelines & principles outlined in MYT Regulations, 2019;
 - c) Allow recovery of Fuel Costs on account of direction of the Hon'ble Commission for the period December 2022 to March 2023 as submitted in 2.1.4 Fuel Cost under Paragraph 97 and Paragraph 180 of this petition
 - d) Allow the compensation submitted in Section 5 Issues related to past period
 - e) Allow the performance based ROE for Ramp Rate for Unit 5 and Unit 8 based on submission in in Section 5 Issues related to past period
 - f) Allow the additional ROE of 1.5% for Hydro Generating Station and 0.5% for Unit 7 based on submission in in Section 5 Issues related to past period
 - g) Allow our request made under Section 9 Special items to be considered Special items to be considered
 - h) Allow Tata Power-G to approach the Hon'ble Commission separately for revision of O&M norms, if any, when BPSU pumping gets operationalised.
 - Determine the tariff of Thermal and Hydro Generating Stations for FY 2025-26 to FY 2029-30 as worked out in this Petition in accordance with the guidelines & principles outlined in MYT Regulations, 2024;
 - j) Condone any inadvertent omissions / errors / rounding off differences / shortcomings and permit Tata Power- G to add / change / modify / alter this filing and make further submissions as may be required at a future date;