Before the

MAHARASHTRA ELECTRICITY REGULATORY COMMISSION

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CASE NO. 189 of 2024

In the matter of

Case of The Tata Power Company Limited (Generation) for approval of Final True-up of Annual Revenue Requirement (ARR) for FY 2022-23 and FY 2023-24, Provisional True-up of ARR for FY 2024-25, and ARR and Tariff for FY 2025-26 to FY 2029-30

Coram

Sanjay Kumar, Chairperson
Anand M. Limaye, Member
Surendra J. Biyani, Member

ORDER

Dated: 28 March, 2025

The Tata Power Company Limited-Generation (**TPC-G**) filed a Petition on 31 October, 2024 for approval of Final True-up of ARR for FY 2022-23 and FY 2023-24, Provisional True-up of ARR for FY 2024-25, and ARR and Tariff for FY 2025-26 to FY 2029-30. Subsequently, TPC-G submitted the revised consolidated Petition on 5 December, 2024.

The Petition has been filed in accordance with Regulation 5.1 of MERC (Multi Year Tariff) Regulations, 2024 (**MYT Regulations, 2024**) for Final True-up of FY 2022-23 and FY 2023-24 and Provisional True-up of FY 2024-25 as per MERC (Multi Year Tariff) Regulations, 2019 **("MYT Regulations, 2019")**, and ARR and Tariff for FY 2025-26 to FY 2029-30 as per MYT Regulations, 2024.

The Commission, in exercise of the powers vested in it under Sections 61 and 62 of the Electricity Act (**EA**), 2003 and all other powers enabling it in this behalf, and after taking into consideration the submissions made by TPC-G, upon Public consultation process, and upon considering all other relevant material, has approved the True-up of ARR for FY 2022-23 and FY 2023-24, Provisional True-up of ARR for FY 2024-25, and ARR and Tariff for FY 2025-26 to FY 2029-30.

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AEC	Auxiliary Energy Consumption
AEML	Adani Electricity Mumbai Limited
AFC	Annual Fixed Charges
APM	Administered Prince Mechanism
ARR	Aggregate Revenue Requirement
ATE	Appellate Tribunal for Electricity
BEST	The Brihanmumbai Electric Supply & Transport Undertaking
CERC	Central Electricity Regulatory Commission
CCGT	Combined Cycle Gas Turbine
DPR	Detailed Project Report
DSM	Deviation Settlement Mechanism
EA	Electricity Act
GFA	Gross Fixed Assets
GSHR	Gross Station Heat Rate
GT	Generator Transformer
H1	Half year period from April to September
H1	Half year period from April to September
H2	Half year period from October to March
H2	Half year period from October to March
HBA	Harga Batubara Acuan
HOSS	Head Office & Support Services
ICI	Indonesian Coal Index
IoWC	Interest on Working Capital
kcal	kilo calories
kL	kilo litre
kWh	kilo Watt hour
MAT	Minimum Alternate Tax
MSLDC	Maharashtra State Load Despatch Centre
MSPGCL	Maharashtra State Power Generation Company Limited
MT	Metric Tonne
MTR	Mid Term Review
MU	Milliion Units
MW	Mega Watt
MYT	Multi Year Tariff
NTI	Non-Tariff Income
O&M	Operation & Maintenance
PLF	Plant Load Factor
PPA	Power Purchase Agreement/Arrangement
RLNG	Regasified Liquified Natural Gas
RoE	Return on Equity
TPC	The Tata Power Company Limited
TPC-D	The Tata Power Company Limited-Distribution
TPC-G	The Tata Power Company Limited-Generation
TPC-T	The Tata Power Company Limited-Transmission
USD	United States Dollar

1 BACKGROUND AND BRIEF HISTORY

1.1 INTRODUCTION

1.1.1 The Tata Power Company Limited (**TPC**) is an integrated Utility engaged in Generation, Transmission and Distribution of electricity. TPC-G's installed generation capacity is 1,377 MW as on 1 April, 2022, comprising 447 MW of Hydro Generation and 930 MW of Coal/Gas/Oil-fired Thermal Generation, which supplies power to BEST and TPC's own Distribution Business. The supply of power from TPC's 1377 MW is governed under Power Purchase Agreement/Arrangement (**PPA**) approved by the Commission up to FY 2028-29.

1.2 MYT REGULATIONS

1.2.1 The Commission notified the MYT Regulations, 2019 on 1 August, 2019, which are applicable for the 4th Control Period from FY 2020-21 to FY 2024-25. Subsequently, the Commission notified first and second amendment to MYT Regulations, 2019 on 10 February, 2023 and 8 June, 2023 respectively.

1.2.2 Subsequently, the Commission notified the MYT Regulations, 2024 on 19 August, 2024, which are applicable for the 5th Control Period from FY 2025-26 to FY 2029-30.

1.3 MYT ORDER FOR 4TH CONTROL PERIOD

1.3.1 Vide its Order dated 30 March, 2020 in Case No. 300 of 2019 (**MYT Order**), the Commission approved the Tariff for the 4th MYT Control Period from FY 2020-21 to FY 2024-25. In the said Order, the Commission had also approved the final True-up for FY 2017-18, FY 2018-19 and Provisional True-up for FY 2019-20.

1.4 MID TERM REVIEW ORDER FOR 4TH CONTROL PERIOD

1.4.1 Vide its Order dated 31 March, 2023 in Case No. 221 of 2022 (**MTR Order)**, the Commission approved the revised Tariff for FY 2023-24 and FY 2024-25. In the said Order, the Commission had also approved the final True-up for FY 2019-20, FY 2020-21, FY 2021-22 and Provisional True-up for FY 2022-23.

1.5 MULTI YEAR TARFF FOR 5TH CONTROL PERIOD

1.5.1 In accordance with Regulation 5.1(a) of the MYT Regulations, 2024, the Multi Year Tariff (MYT) Petition for 5th MYT Control Period was to be filed by 1 November, 2024 comprising:

(i) Final True-up for FY 2022-23 and FY 2023-24 to be carried out in accordance with the MYT Regulations, 2019;

(ii) Provisional True-up for FY 2024-25 to be carried out in accordance with the MYT Regulations, 2019;

(iii) ARR and Tariff for FY 2025-26 to FY 2029-30.

1.5.2 TPC-G filed its MYT Petition for the 5th MYT Control Period on 31 October, 2024.

1.5.3 The Office of the Commission issued the data gaps to the Petitioner on 11 November, 2024. TPC-G submitted the replies to first set of data gaps on 22 November, 2024, 23 November, 2024 and 30 November, 2024. The Technical Validation Session (TVS) was held on 28 November, 2024. The list of persons who attended the TVS is at **Appendix-I**.

1.5.4 During the TVS, TPC-G was directed to provide additional information and clarifications on the issues raised, and to submit a revised Petition after incorporating all the necessary data and changes. TPC-G submitted its replies to the data gaps and filed its revised Petition on 5 December, 2024 with the following prayers:

"

(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

(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.

(i) 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) ……"

1.6 ADMISSION OF PETITION AND PUBLIC CONSULTATION PROCESS

1.6.1 The Commission admitted the revised MYT Petition on 9 December, 2024. In accordance with Section 64 of the EA, 2003., the Commission directed TPC-G to publish its Petition in the prescribed abridged form and manner to ensure adequate public participation, and to reply expeditiously to the suggestions and objections received.

1.6.2 TPC-G issued a Public Notice inviting suggestions and objections from the public. The Public Notice was published in the daily newspapers The Indian Express (English), Financial Express (English), Loksatta (Marathi) and Samana (Marathi) on 11 December, 2024. The copies of the Petition and its summary were made available for inspection/purchase at TPC-G's offices and on its website (ww.tatapower.com). The Public Notice and Executive Summary of the Petition were also made available on the website of the Commission (www.merc.gov.in) in downloadable format. The Public Notice specified that the suggestions and objections, in English or Marathi, shall be filed with proof of service on TPC-G.

1.6.3 The e-Public Hearing was held on 8 January, 2025 at 10.30 hrs through video conferencing. The list of persons who attended the e-Public Hearing is at **Appendix-II**. During the Public Hearing, TPC-G was given liberty to file additional submission, if any, within fifteen (15) days.

1.6.4 The Commission has ensured that the due process contemplated under law to ensure transparency and public participation was followed at every stage and adequate opportunity was given to all concerned to express their views.

1.6.5 In response to the notice published by TPC-G, no suggestions and objections are received in writing /through online filing on the Commission's website as well as during the e-Public Hearing on TPC-G's MYT Petition.

1.7 ORGANISATION OF THE ORDER

1.7.1 This Order is organised in the following nine (9) chapters:

- **Chapter 1** provides a brief history of the regulatory process undertaken by the Commission.
- **Chapter 2** deals with the approval of final True-up of FY 2022-23 and FY 2023-24.
- **Chapter 3** deals with the Provisional True-up of FY 2024-25.
- **Chapter 4** deals with the Cumulative Revenue Gap till FY 2024-25.
- **Chapter 5** deals with the approval of ARR and Tariff for FY 2025-26 to FY

2029-30

- **Chapter 6** deals with summary of approved Tariff for 5th Control Period viz. FY 2025-26 to FY 2029-30
- **Chapter 7** summarises the Commission's directives.
- **Chapter 8** covers the Applicability of the Order.

2 FINAL TRUE-UP FOR FY 2022-23 AND FY 2023-24

2.1 BACKGROUND

2.1.1 The Commission, vide the Multi Year Tariff (**MYT**) Order dated 30 March, 2020 in Case No. 300 of 2019 for 4th Control Period has approved the Tariff for FY 2020-21 to FY 2024-25. Further, the Commission vide its Mid Term Order (**MTR**) Order dated 31 March, 2023 in Case No. 221 of 2022 has approved the True-up for FY 2019-20, FY 2020-21 and FY 2021-22, Provisional True-up for FY 2022-23 and revised Tariff for FY 2023-24 and FY 2024-25.

2.1.2 TPC-G, in the present Petition, has sought the final True-up for FY 2022-23 and FY 2023-24 based on the actual expenditure and revenue as per the Audited Accounts for the respective years under the MYT Regulations, 2019. TPC-G also submitted the Auditor's report on the reconciliation between the total expenses, revenue, assets and liabilities of the company and the expenses, revenue, assets and liabilities separately for TPC-G for FY 2022-23 and FY 2023-24 in compliance to Regulation 2.1(1)(viii) of the MYT Regulations, 2019.

2.1.3 The analysis of the True-up undertaken by the Commission is provided below.

2.2 GENERATION CAPACITY

2.2.1 TPC-G has the installed capacity of 1,377 MW comprising of thermal capacity of 930 MW and hydel capacity of 447 MW, fully contracted with BEST and TPC-D.

Table 2.1: Generation capacity

Unit/Station	Type of fuel	Installed capacity	BEST Share		TPC-D Share	
		MW	MW	%	MW	%
Unit 5	Coal, Oil and Gas	500	256	51.17%	244	48.83%
Unit 7	Gas	180	92	51.17%	88	48.83%
Unit 8	Coal	250	100	40.00%	150	60.00%
Total Thermal (A)		**930**	**448**		**482**	
Bhira	-	300	154	51.17%	146	48.83%
Bhivpuri	-	75	38	51.17%	37	49.83%
Khopoli	-	,72	37	51.17%	35	48.83%
Total Hydro (B)		**447**	**229**		**218**	
Grand Total (A+B)		**1377**	**677**		**700**	

2.2.2 In line with the approach adopted in the earlier Orders, the Commission has carried out the detailed analysis of the True-up of Units 5,7 & Hydro and Unit 8 separately as discussed in the following paragraphs.

2.3 PERFORMANCE OF UNITS 5, 7 & HYDRO

2.3.1 The Commission has approved the norms of operation for FY 2022-23 and FY 2023-24 based on the norms specified in the MYT Regulations, 2019 and considering other aspects as detailed out in the MYT Order. TPC-G has submitted the actual performance in FY 2022-23 and FY 2023-24, which is in variation of the norms approved by the Commission. TPC-G's submissions on the actual performance in FY 2022-23 and FY 2023-24 and the Commission's analysis is detailed hereunder.

2.4 AVAILABILITY & PLANT LOAD FACTOR (PLF) (UNITS 5,7 & HYDRO)

TPC-G's submission

2.4.1 The Availability and PLF for FY 2022-23 and FY 2023-24 is as shown in the Table below:

Table 2.2: Availability for Units 5,7 & Hydro for FY 2022-23 and FY 2023-24

Unit/Station	Target Availability	Actual Availability (%)		PLF (%)	
		FY 2022-23	FY 2023-24	FY 2022-23	FY 2023-24
Thermal					
Unit 5	85.00%	88.60%	95.17%	60.97%	63.85%
Unit 7	85.00%	97.31%	96.05%	39.49%	62.07%
Hydro					
Bhira	90.00%	98.49%	99.65%	-	-
Bhivpuri	90.00%	100.00%	98.27%	-	-
Khopoli	90.00%	96.62%	97.08%	-	-

2.4.2 TPC-G submitted the MSLDC certificate for the actual Availability and PLF.

Commission's Analysis and Ruling

2.4.3 As per the MYT Regulations, 2019, recovery of full Annual Fixed Charges (**AFC**) is allowable at target Availability. Regulation 50.1 of the MYT Regulations, 2019 specifies the mechanism of recovery of fixed charges for thermal generating station during high demand season and low demand season.

2.4.4 The actual Availability during high demand season and low demand season as certified by MSLDC is higher than the target Availability for Unit 5 and Unit 7. The actual Availability of hydro stations as certified by MSLDC is also higher than the target Availability for the respective stations. Therefore, the Commission has approved the recovery of full AFC for FY 2022-23 and FY 2023-24.

2.4.5 As regards PLF, the Commission has verified the actual gross generation from MSLDC certificate and approves the actual PLF as submitted by TPC-G in above Table.

2.5 GROSS GENERATION (UNITS 5, 7 & HYDRO)

TPC-G's submission

2.5.1 The gross generation for FY 2022-23 and FY 2023-24 is as shown in the Table below:

Table 2.3: Gross generation for Units 5,7 & Hydro for FY 2022-23 and FY 2023-24 as claimed by TPC-G (MU)

Unit/Station	FY 2022-23		FY 2023-24	
	Approved in MTR	Actual	Approved in MTR	Actual
Thermal				
Unit 5	2670.12	2753.43	3325.00	2921.50
Unit 7	773.64	646.36	1279.00	1004.19
Total Thermal	**3443.76**	**3399.80**	**4604.00**	**3925.69**
Hydro				
Bhira	1023.52	934.79	896.00	954.87
Bhivpuri	288.97	335.72	292.00	319.28
Khopoli	287.73	297.21	282.00	277.71
Total Hydro	**1600.21**	**1567.71**	**1470.00**	**1551.86**
Total	**5043.97**	**4967.51**	**6074.00**	**5477.55**

Commission's Analysis and Ruling

2.5.2 The Commission sought details of actual and scheduled generation from TPC-G for FY 2022-23 and FY 2023-24 duly certified by MSLDC. Further, the Commission also sought details of Virtual State Entity (**VSE**) generation scheduled by MSLDC under the MERC (Deviation Settlement Mechanism and Related Matters) Regulations, 2019 for these years. In reply to a query, TPC-G submitted details as sought for by the Commission duly certified by MSLDC. Further, TPC-G submitted that the actual generation claimed for True-up is excluding VSE generation scheduled by MSLDC.

2.5.3 The Commission notes that TPC-G has submitted the scheduled gross generation, which is derived from scheduled ex-bus generation and actual auxiliary energy consumption as certified by MSLDC. Accordingly, the Commission approves the gross scheduled generation as submitted by TPC-G for Truing-up of FY 2022-23 and FY 2023-24.

Table 2.4: Gross generation for Units 5,7 & Hydro for FY 2022-23 and FY 2023-24 approved by the Commission (MU)

Unit/Station	FY 2022-23			FY 2023-24		
	Approved in MTR	Scheduled Energy	Approved	Approved in MTR	Scheduled Energy	Approved
Thermal						
Unit 5	2670.12	2753.43	2753.43	3325.00	2921.50	2921.50
Unit 7	773.64	646.36	646.36	1279.00	1004.19	1004.19
Total Thermal	**3443.76**	**3399.80**	**3399.80**	**4604.00**	**3925.69**	**3925.69**
Hydro						
Bhira	1023.52	934.79	934.79	896.00	954.87	954.87
Bhivpuri	288.97	335.72	335.72	292.00	319.28	319.28
Khopoli	287.73	297.21	297.21	282.00	277.71	277.71
Total Hydro	**1600.21**	**1567.71**	**1567.71**	**1470.00**	**1551.86**	**1551.86**
Total	**5043.97**	**4967.51**	**4967.51**	**6074.00**	**5477.55**	**5477.55**

2.5.4 The Commission approves the gross generation for Units 5,7 & Hydro as per the table above for FY 2022-23 and FY 2023-24.

2.6 AUXILIARY ENERGY CONSUMPTION (AEC) (UNITS 5,7 & HYDRO)

TPC-G's submission

2.6.1 The AEC for FY 2022-23 and FY 2023-24 is as shown in the Table below:

Table 2.5: AEC for Units 5,7 & Hydro for FY 2022-23 and FY 2023-24 as claimed by TPC-G (MU)

Unit/Station	Approved in MTR	Actual for FY 2022-23	Actual for FY 2023-24
Thermal			
Unit 5	6.00%	6.11%	6.61%
Unit 7	2.75%	4.46%	3.65%
Hydro			
Bhira	1.00%	0.96%	0.98%
Bhivpuri	1.20%	1.27%	1.51%
Khopoli	1.20%	1.37%	1.32%

2.6.2 The actual AEC for Unit 5 & Unit 7 for FY 2022-23 and FY 2023-24 is higher than the norm.

2.6.3 For Unit 5, TPC-G submitted that, actual AEC is marginally higher than normative AEC of 6.09% for FY 2022-23 and 6.35% for FY 2023-24 including actual FGD consumption.

2.6.4 For Unit 7, TPC-G submitted that, during FY 2022-23, Unit was taken out under reserve shut down for 37 times due to low Daily Nominated Quantity (DNQ) of APM gas. Although, the unit was available on RLNG, there was no requirement of power from this Unit on RLNG by the Distribution Licensee, as the cost of generation on RLNG is substantially higher. During reserve shutdown period Unit 7 has consumed 3.19 MU of auxiliary power which caused the increase in AEC by 0.5%.

2.6.5 For hydel stations, the break-up of the actual AEC is as shown in the Table below:

Table 2.6: Actual AEC for hydro stations for FY 2022-23 and FY 2023-24 as claimed by TPC-G

Particulars	FY 2022-23			FY 2023-24		
	Bhira	Bhivpuri	Khopoli	Bhira	Bhivpuri	Khopoli
Auxiliary consumption including static excitation	0.44%	0.67%	0.51%	0.54%	0.65%	0.56%
Condenser Mode operation	0.00%	0.00%	0.00%	0.01%	0.00%	0.00%
GT losses	0.51%	0.60%	0.87%	0.44%	0.86%	0.76%
Total losses	**0.96%**	**1.27%**	**1.37%**	**0.98%**	**1.51%**	**1.32%**

2.6.6 In addition to the above, TPC-G claimed the following auxiliary consumption towards headworks and nallah diversion as under:

Table 2.7: Actual Consumption for headworks and nallah diversion for FY 2022-23 and FY 2023-24 as claimed by TPC-G

Particulars	FY 2022-23		FY 2023-24	
	Approved in MTR	Actual	Approved in MTR	Actual
Headworks Consumption	0.18%	0.18%	0.18%	0.18%
Energy for Nallah diversion	0.34%	0.31%	0.34%	0.31%

2.6.7 TPC-G requested the Commission to approve the additional AEC for Nallah diversion and head works in addition to the normative AEC approved by the Commission. TPC-G submitted that such additional AEC has not been considered for calculation of gain/loss due to variation in AEC.

Commission's Analysis and Ruling

2.6.8 As regards the AEC of Unit 5, the Commission, in the MYT Order ruled as under:

> *"7.7.10* ***In view of the above, the Commission decides to approve the normative Auxiliary Consumption of 6.00% for Unit 5 and 8.50% for Unit 8 as per MYT Regulations, 2019 without consumption for FGD. The actual auxiliary consumption of FGD shall be considered at time of truing up based on actuals subject to ceiling of additional auxiliary consumption***

***norm towards FGD as specified in MYT Regulations, 2019. Further, the Commission directs that all necessary metering arrangements shall be undertaken by TPC-G for measurement of Auxiliary consumption for FGDs of Unit 5 and Unit 8**.”*

2.6.9 In compliance to the above directive, TPC-G submitted that it has installed energy meters for measurement of auxiliary consumption of FGD installed at Unit 5. TPC-G submitted that the FGD is available and is taken in service based on requirement to comply with environmental norms. Based on the response submitted to query in respect of FGD consumption and number of hours of operation, the Commission observed that FGD was run for 3138 hours during FY 2022-23 (FGD 1 for 277 hours and FGD 2 for 2861 hours) and 12,466 hours during FY 2023-24 (FGD 1 for 4947 hours and FGD 2 for 7520 hours). Further, actual FGD consumption for Unit 5 during FY 2022-23 and FY 2023-24 was 2.41 MU and 9.74 MU respectively, which translates to 0.09% and 0.35% for FY 2022-23 and FY 2023-24 respectively as against the normative consumption of 1% as specified in MYT Regulations, 2019. The Commission accepts the FGD consumption for Unit 5 and approves normative AEC of 6.09% for FY 2022-23 and 6.35% for FY 2023-24 including FGD consumption.

2.6.10 As regards AEC of Unit 7, Regulation 46.16 of the MYT Regulations, 2019 specifies the normative AEC of 2.75% and 1.00% for closed cycle and open cycle respectively. Accordingly, the Commission has worked out normative AEC of 2.69% for FY 2022-23 and 2.74% for FY 2023-24, based on the actual generation in closed cycle and open cycle, for Truing-up.

2.6.11 Further, the Commission in MYT Order ruled as under:

“7.7.13 The Commission notes the submission of TPC-G. It is also noted that additional capitalisation has been allowed to TPC-G from time to time for improvement of performance of Generating units. The CERC (Terms and Conditions of Tariff) Regulations, 2019 also provide the identical norms for Gas based /CCGT Generating stations. ***Hence, the Commission is not inclined to relax the norms towards Auxiliary consumption of Unit 7 and approves Auxiliary consumption of 2.75% for Unit 7 for 4th Control Period. However, considering the historical actual auxiliary consumption of Unit 7 and considering the dispensation mentioned in the Statement of Reasons for the CERC (Terms and Conditions of Tariff) Regulations, 2019 for coastal plants as pointed out by TPC-G, the Commission may consider to allow the actual auxiliary consumption, if it is higher than normative value of 2.75%, at the time of truing up, subject to ceiling of auxiliary consumption of 3%, if TPC-G proves the impact of sea water cooling system on the Unit 7 Auxiliary***

consumption with necessary details at the time of truing up.”

2.6.12 The actual AEC of Unit 7 is higher than the normative AEC. TPC-G has submitted that the higher AEC is due to higher consumption of Cooling Water Pump (CWP) for sea water cooling system. TPC-G has also submitted month-wise consumption of Cooling Water Pump (CWP) in auxiliary consumption of Unit-7 for FY 2022-23 and FY 2023-24. After detailed scrutiny of the data submitted by TPC-G, the Commission observed that, actual consumption for CWP during FY 2022-23 and FY 2023-24 was 7.59 MU and 9.06 MU respectively. After excluding this consumption, the actual AEC works out as 3.24% and 2.73% for FY 2022-23 and FY 2023-24 respectively. The increase in actual AEC on account of CWP consumption is 1.22% and 0.92% for FY 2022-23 and FY 2023-24. In view of the above, the Commission finds it is justified that, being coastal plant, the actual consumption is higher because of sea water cooling system. Accordingly, the Commission approves normative AEC of 3.00% for FY 2022-23 and FY 2023-24.

2.6.13 As regards AEC of hydro stations, the Commission, in the MYT Order ruled as under:

“7.7.14 Regarding the Hydro Generating Stations, the Commission notes that norms for Auxiliary consumption are specified in Regulation 48.3 of MYT Regulations, 2019. ***Accordingly, the Commission approves the normative Auxiliary Consumption of 1.20% for Khopoli & Bhivpuri Hydro Generating Stations and 1% for Bhira Hydro Generating Station****.*

7.7.15 … the Commission deems ***it appropriate to consider the auxiliary consumption towards Headworks Consumption and Pumped Energy for Nallah diversion Schemes based on actuals at the time of truing up subject to ceiling of 0.18% for headworks consumption and 0.34% towards Pumped Energy for Nallah diversion****…”*

2.6.14 As regards Nallah diversion schemes, in response to Commission’s query, TPC-G submitted the benefits derived from Nallah diversion schemes as under:

Table 2.8: Benefits derived from Nallah diversion schemes, for FY 2022-23 and FY 2023-24 as submitted by TPC-G

Particulars		FY 2022-23				FY 2023-24			
	Units	**Bhira**	**Bhivpuri**	**Khopoli**	**Total**	**Bhira**	**Bhivpuri**	**Khopoli**	**Total**
Nallah diversion	MCM	37.60	11.53	5.94	**55.07**	37.96	6.02	5.38	**49.36**
Pumping energy for Nallah diversion	MU	1.98	-	2.94	**4.92**	2.18	-	2.72	**4.90**
Generation from diverted water	MU	43.72	14.35	7.01	**65.07**	44.19	7.52	6.36	**58.07**

2.6.15 From the above Table, it is observed that, additional energy has been generated from the pumped water due to Nallah diversion during FY 2022-23 and FY 2023-24.

2.6.16 In line with the MYT Order, the Commission has approved the normative AEC of 1.20% for Khopoli & Bhivpuri Hydro Generating Stations and 1% for Bhira Hydro Generating Station. In addition, the Commission has approved the AEC towards Headworks Consumption and Pumped Energy for Nallah diversion Schemes subject to ceiling of 0.18% and 0.34% respectively for all Hydro stations.

Table 2.9: AEC for hydro stations for FY 2022-23 approved by the Commission

Particulars	Bhira		Bhivpuri		Khopoli	
	Claimed	Normative	Claimed	Normative	Claimed	Normative
Auxiliary consumption including static excitation	0.44%	1.00%	0.67%	1.20%	0.51%	1.20%
Condenser mode operation	0.00%	-	0.00%	-	0.00%	-
GT losses	0.51%	-	0.60%	-	0.87%	-
Total losses	**0.96%**	**1.00%**	**1.27%**	**1.20%**	**1.37%**	**1.20%**
Head works consumption	0.11%	0.11%	0.07%	0.07%	0.53%	0.18%
Energy for Nallah Diversion	0.21%	0.21%	0.00%	0.00%	0.98%	0.34%
Total Auxiliary consumption	**1.27%**	**1.32%**	**1.34%**	**1.27%**	**2.89%**	**1.72%**

Table 2.10: AEC for hydro stations for FY 2023-24 approved by the Commission

Particulars	Bhira		Bhivpuri		Khopoli	
	Claimed	Normative	Claimed	Normative	Claimed	Normative
Auxiliary consumption including static excitation	0.54%	1.00%	0.65%	1.20%	0.56%	1.20%
Condenser mode operation	0.01%	-	0.00%	-	0.00%	-
GT losses	0.44%	-	0.86%	-	0.76%	-
Total losses	**0.98%**	**1.00%**	**1.51%**	**1.20%**	**1.32%**	**1.20%**
Head works consumption	0.18%	0.18%	0.06%	0.06%	0.34%	0.18%
Energy for Nallah Diversion	0.23%	0.23%	0.00%	0.00%	0.97%	0.34%
Total Auxiliary consumption	**1.39%**	**1.41%**	**1.57%**	**1.26%**	**2.63%**	**1.72%**

2.6.17 Based on the above, the AEC approved by the Commission is as shown in the Table below:

Table 2.11: AEC for Units 5,7 & Hydro for FY 2022-23 and FY 2023-24 approved by the Commission

Unit/Station	Approved in MTR	FY 2022-23		FY 2023-24	
		Actual	Normative Approved	Actual	Normative Approved
Thermal					
Unit 5	6.00%	6.11%	6.09%	6.61%	6.35%
Unit 7	2.75%	4.46%	3.00%	3.65%	3.00%
Hydro					
Bhira	1.00%	1.27%	1.32%	1.39%	1.41%
Bhivpuri	1.20%	1.34%	1.27%	1.57%	1.26%
Khopoli	1.20%	2.89%	1.72%	2.63%	1.75%

2.6.18 The Commission approves the AEC for Units 5,7 & Hydro as per Table 2.11 for FY 2022-23 and FY 2023-24.

2.6.19 The Commission has considered the Auxiliary Consumption as a controllable parameter in accordance with the MYT Regulations, 2019. Hence, the difference between the actual Auxiliary Consumption as submitted by TPC-G and normative Auxiliary Consumption as approved by the Commission in this Order has been considered for computing the sharing of efficiency gains/losses as per principles laid out in the MYT Regulations, 2019.

2.7 GROSS STATION HEAT RATE (GSHR) (UNITS 5,7)

TPC-G's submission

2.7.1 The GSHR for FY 2022-23 and FY 2023-24 is as shown in the Table below:

Table 2.12: GSHR for Units 5,7 for FY 2022-23 and FY 2023-24 as claimed by TPC-G (kcal/kWh)

Unit/Station	Actual for FY 2022-23	Actual for FY 2023-24
Unit 5	2564.16	2586.64
Unit 7	2229.01	2135.20

2.7.2 The actual GSHR for Unit 5 is higher than the norm. TPC-G submitted that Unit 5 had maintained its availability more than 85%, However the Plant Load Factor was lower on account of lower requisition from purchasing utilities. The same has resulted in an adverse impact on the Heat Rate of Unit-5. TPC-G further submitted that the decreasing trend of Plant Load Factor of thermal power plant has a direct impact on the Heat rate of the Plant and this trend is on account of increasing share of cheaper RE power which is not under the control of TPC-G.

2.7.3 For Unit 7, the Commission has approved normative GSHR of 2035 kcal/kWh for closed cycle operation and 2900 kcal/kWh for open cycle operation. Accordingly, for FY 2022-23, based on the actual generation during closed cycle and open cycle modes of operation of 602.48 MU and 20.19 MU respectively, the revised normative GSHR for FY 2022-23 works out to 2063.04 kcal/kWh. Further, for FY 2023-24, based on the actual generation during closed cycle and open cycle modes of operation of 976.22 MU and 5.21 MU respectively, the revised normative GSHR for FY 2023-24 works out to 2039.59 kcal/kWh. The actual GSHR for Unit 7 for FY 2022-23 and FY 2023-24 is higher than the norm. Due to the increasing prices of RLNG and restricted availability of APM gas, the PLF of Unit 7 has got substantially affected, which has a direct impact on the GSHR. TPC-G requested the Commission to consider the actual GSHR for Unit 7 as normative GSHR while calculating the efficiency gains/losses.

Commission's Analysis and Ruling

2.7.4 The actual GSHR of Unit 5 for FY 2022-23 and FY 2023-24 is marginally higher than the norm. For Unit 7, the Commission had approved the normative GSHR of 2035 kcal/kWh and 2900 kcal/kWh for closed cycle and open cycle modes of operation respectively as per the MYT Regulations, 2019. The Commission has perused the normative GSHR for Unit 7, based on the actual generation in closed cycle and open cycle, as claimed by TPC-G and finds the same in order. The Commission notes that TPC-G has sought higher GSHR due to lower PLF in view of restricted availability of APM Gas and higher pricing of RLNG. The Commission is of the view that gas based generating stations are designed for handing variation in generation and are flexible in ramp up/down as compared to thermal stations. The Commission while deciding norms takes into consideration all such factors. Further, GSHR is a performance parameter and reflects the efficiency of the operation of the Generating Unit. If while allowing the gains and losses, the actual GSHR is considered as normative GSHR, the purpose of stipulating of the performance norms for GSHR vide the MYT Regulations would be defeated. Hence, the Commission is not inclined to allow the request made by TPC-G and has approved normative GSHR of 2063.04 kcal/kWh and 2039.59 kcal/kWh as per MYT Regulations, 2019.

2.7.5 The Commission has considered the GSHR as a controllable parameter in accordance with the MYT Regulations, 2019. Hence, the difference between the actual GSHR as submitted by TPC-G and normative GSHR as approved by the Commission in this Order has been considered for computing the sharing of efficiency gains/losses as per principles laid out in MYT Regulations, 2019.

Table 2.13: Normative GSHR for Units 5,7 for FY 2022-23 and FY 2023-24 approved by the Commission (kcal/kWh)

Unit/Station	Approved in MTR	FY 2022-23		FY 2023-24	
		Actual	Normative Approved	Actual	Normative Approved
Unit 5	2549.00	2564.16	2549.00	2586.64	2549.00
Unit 7	2035.00	2229.01	2063.04	2135.20	2039.59

2.7.6 The Commission approves the GSHR for Units 5,7 as per Table 2.13 for FY 2022-23 and FY 2023-24.

2.8 FUEL COST (UNITS 5 & 7)

TPC-G's submission

2.8.1 TPC-G has claimed the actual fuel cost of Rs. 2828.54 Crore and Rs. 2219.52 Crore for FY 2022-23 and FY 2023-24 respectively. The details of fuel related parameters for FY 2022-23 and FY 2023-24 are as shown in the Table below:

Table 2.14: Fuel consumption and cost for Units 5,7 for FY 2022-23 and FY 2023-24 as claimed by TPC-G

Particulars	Units	FY 2022-23	FY 2023-24
Fuel consumption			
Gas - APM	SCM	149,331.45	188,642.40
Biomass	MT	453.91	-
Gas - RLNG	SCM	462.63	358.75
Coal	MT	1,407,517.94	1,738,162.34
Oil *(combined)*	KL	1,528.10	378.07
GCV (As fired)			
Gas - APM	kCal/Kg	13,095.77	13,064.17
Biomass	kCal/Kg	3,198.69	-
Gas - RLNG	kCal/Kg	13,180.75	13,082.27
Coal	kCal/Kg	4,445.26	3,956.18
Oil *(combined)*	Kcal/Litre	10,386.67	10,409.36
Price			
Gas - APM	Rs/MT	35,552.97	31,441.45
Biomass	Rs/MT	10,401.88	-
Gas - RLNG	Rs/MT	124,645.74	67,306.89
Coal	Rs/MT	15,591.17	8,868.90
Oil *(combined)*	Rs/KL	60,219.92	65,640.44
Total cost	**Rs. Crore**	**2,740.84**	**2,139.57**
Total cost @scheduled generation	**Rs. Crore**	**2,828.54**	**2,219.52**

2.8.2 In addition to the above, TPC-G submitted that the Commission in its FAC Orders of BEST and TPC-D for the months of December, 2022 to March, 2023 had directed TPC-G to calculate Energy Charge Rate (**ECR**) from April, 2023 onwards to compute fuel cost and energy charge based on Weighted Average Method instead of usage-based methodology which was being followed by TPC-G. However, the ECR for the period December, 2022 to March, 2023 was not revised. This has caused under-recovery to the tune of Rs. 14.80 Crore from BEST and Rs. 15.42 Crore from TPC-D. The total under recovery is Rs. 30.22 Crore (Rs. 17.87 Crore for Unit 5 and Rs. 12.35 Crore for Unit 8) and the same amount is claimed in FY 2022-23.

2.8.3 Further, the Commission in the FAC Order of BEST for April, 2023 dated 16th January, 2024 has reworked the Energy Charge Rate (**ECR**) for Unit-5 and Unit-8 and directed to settle the differential amount with the beneficiaries. Accordingly, TPC-G has raised supplementary bills from April, 2023 onwards and settled the differential amount with BEST and TPC-D. TPC-G has given a credit adjustment of Rs 23.48 Crore (Rs 12.33 Crore to BEST and Rs. 11.15 Crore to TPC-D) for Unit 5 and Rs 11.33 Crore (Rs. 4.67 Crore to BEST and Rs. 6.66 Crore to TPC-D) for Unit 8 due to change in methodology of computation of Weighted Average fuel Cost. The same has been considered in Fuel cost in FY 2023-24.

Commission's Analysis and Ruling

2.8.4 The Commission sought the monthly fuel bills and monthly Unit wise fuel receipts, calorific value and price of fuel for FY 2022-23 and FY 2023-24. The Commission has gone through the details of monthly fuel receipts, calorific value and price. The variation in fuel price and calorific value has been considered as part of FAC and has already been passed on monthly basis by TPC-G.

2.8.5 In reply to a Commission's query, TPC-G submitted the reconciliation of fuel cost claimed for True-up with the actual fuel cost. The Commission has gone through the reconciliation of claimed fuel cost.

2.8.6 The Commission observed that fuel prices were high in FY 2022-23. Further, as regards specific query of the Commission regarding whether the fuel supply agreements have been entered into after competitive bidding under open tendering, TPC-G submitted that to meet the primary objective of fuel securitization with specific ultra-low Sulphur and very low ash coal, TPC-G had entered into a long-term Coal Supply Agreement HBA/HPB based pricing mechanism for Thermal Power Plant at Trombay. Accordingly, to bring down cost of generation at competitive levels, it was prudent to consider the coal sourcing under Indonesian Coal Index (**ICI**) based pricing mechanism which was relatively competitive than HBA-based pricing and provided a significant cost advantage. With this strategy, contracts were signed with other miners / coal suppliers under the ICI indices mechanism and shipments were procured under these contracts. The rate of this coal was lower than the long-term contracts which has benefitted the beneficiaries. Further, TPC-G submitted that the selection of coal supplier is made through competitive bidding conducted under open tendering. The tender is advertised through newspaper giving coal specifications, quantity, commercial terms like loading rate, payment terms, bid validity, technical & financial pre-qualification requirements. The Commission has gone through the copies of fuel supply agreements and agreements for local transport of Coal. Also, the Commission has gone through the details regarding the competitive bidding process followed by TPC-G for entering into contracts.

2.8.7 Also, in response to query of the Commission, TPC-G submitted that for FY 2022-23, an abnormal surge in HBA index occurred due to several factors including COVID-19 pandemic, surge in energy demand, various geo-political situations, etc., leading to high coal prices, which had impacted the plant's power generation cost. During this period, the higher HBA index was making coal procurement unviable. To optimize the cost of generation, the following efforts were taken:

a) To blend Low Calorific Value (**LCV**) coal linked to ICI-4 index with existing long-term Mid CV coal (contracted on HBA/HPB Price mechanism), through spot purchase from April, 2022 to August, 2022.

b) During the period September-December, 2022, there was a large difference observed between ICI3 and HBA indices. It was considered prudent to source coal under ICI3 pricing mechanism at this point of time. As Trombay needs ultra-low Sulphur and very low Ash coal, which was available with existing long term coal supplier, it was decided to take up supply of coal under ICI pricing mechanism with the existing long term coal supplier in place of HBA/HPB for a short duration of 4 months. A separate short-term contract was signed with the existing long term coal supplier for supply of coal on ICI3 index pricing mechanism.

c) Post December, 2023, HBA Index in Q3 FY 2022-23 continued to be at its all-time high level and was expected to remain at elevated levels in upcoming months also. In view of generation cost optimization, TPC-G procured spot Low CV shipments during January-March 2023 on ICI4 index, through limited tendering (with around 19 participants). Limited tendering was resorted to for providing immediate relief in the prices as open tender would have been a longdrawn process and the opportunity to procure cheaper coal would have been missed in Q4 of FY 2022-23. The open tendering process spans over 50-60 days while limited tendering process cycle time is about 20-22 days.

2.8.8 As regards month wise calculation of GCV, in response to specific query, TPC-G submitted that GCV 'As fired' is not a calculated value but a measured value at the input of Coal firing point to the boiler. Total GCV 'As fired' is compared with the GCV 'As received' during monthly billing and only if the difference between the two (i.e. Stacking loss) exceeds 120 kCal/kg, then GCV 'As fired' is required to be calculated to limit the Stacking loss at 120 kCal/kg. The Commission has validated the monthly GCV calculations as submitted by TPC-G. The Commission notes that GCV considered by TPC-G for the purpose of billing and computation of fuel cost is correct.

2.8.9 As regards the query raised regarding the difference in quantity in purchased quantity and quantity received at the plant, TPC-G, stated that as per the current fuel supply agreements with miners located in Indonesia, the coal is being transported from Indonesian ports to Mumbai and unloaded directly at Coal jetty situated near Trombay generating station. All the coal transportation is being done as per international practices related to sea transportation, which involves third party survey and sealing of cargo hatches at load port. At the discharge port, prior to unloading commencement, the initial draft survey is conducted to ensure the Bill of Lading (B/L) Quantity of cargo is loaded in the vessel. At Trombay end, screw unloader system has been installed which is suitable for spillage-free operations. Due to this, till date, TPC-G has not observed measurable losses/wastage in the quantity of the coal dispatched and received. On the basis of the same, TPC-G has been considering zero transit loss till date for all accounting purpose.

2.8.10 Further, the Commission notes that there has been exchange loss of Rs. 455.43/MT in FY 2022-23 and Rs. 15.29/MT in FY 2023-24 for coal procurement. In reply to this, TPC-G submitted that the profit/loss is on the basis of the dollar rate difference at the time of placing the purchase order and the actual payment to the vendor. The Commission has gone through details of the same and observed that it has incurred the exchange loss of Rs. 99.79 Crore in FY 2022-23 and Rs. 3.92 Crore in FY 2023-24. The Commission notes that these expenses incurred are as per fuel supply contract for procurement of imported coal.

2.8.11 In response to the query raised regarding fuel cost on account of VSE operations, TPC-G stated that the fuel cost corresponding to VSE operations has not been considered in its True-up claim. In view of the above, the Commission has approved the actual fuel cost as claimed by TPC-G for FY 2022-23 and FY 2023-24 based on scheduled generation.

2.8.12 The Commission has gone through the computation of adjustment in fuel cost claimed by TPC-G based on directions of this Commission in FAC Orders. The Commission has gone through the details of the computation of said adjustment wherein TPC-G has considered the differential cost based on methodology considered by TPC-G and weighted average cost approved by the Commission. The Commission finds that the adjustment claimed by TPC-G as Rs. 17.87 Crore for FY 2022-23 and credit adjustment of Rs. 23.48 Crore for FY 2023-24 is correct and the same is approved. However, the Commission notes that said adjustments are treated over and above actual fuel cost by TPC-G. The Commission is of view that, the adjustment done by TPC-G is based on weighted average cost of coal and billed under FAC which is nothing but actual fuel cost incurred by TPC-G and thus, the same ought to be part of fuel cost. Moreover, TPC-G has already raised supplementary bills for the same. Hence, the Commission has considered the adjustments as part of actual fuel cost as well as recomputed normative fuel cost. The sharing of efficiency gains has been considered after taking into account of the said amount in actual fuel cost for FY 2022-23 and FY 2023-24.

2.8.13 The fuel cost approved by the Commission for FY 2022-23 and FY 2023-24 is as shown in the Table below:

Table 2.15: Fuel cost for FY 2022-23 and FY 2023-24 approved by the Commission (Rs. Crore)

Unit	FY 2022-23	FY 2023-24
Normative fuel cost	**2,802.91**	**2,147.49**
Actual fuel cost (at actual generation)	**2,740.84**	**2,139.57**
Add: Adjustment in fuel cost as per FAC Orders	17.87	(23.48)
Net actual fuel cost approved (at actual generation)	**2,758.72**	**2,116.09**
Net actual fuel cost approved (at scheduled generation)	**2,846.96**	**2,195.06**

2.8.14 For sharing of efficiency gains and losses, the Commission has considered the actual fuel cost computed corresponding to the scheduled generation.

2.9 ADDITIONAL CAPITALISATION (UNITS 5,7 & HYDRO)

TPC-G's submission

2.9.1 TPC-G has claimed the actual capitalisation of Rs. 24.67 Crore and Rs. 25.61 Crore as against the approved capitalisation of Rs. 49.68 Crore and Rs. 66.31 Crore for FY 2022-23 and FY 2023-24 respectively.

Table 2.16: Additional capitalisation for Units 5,7 & Hydro for FY 2022-23 and FY 2023-24 as claimed by TPC-G (Rs. Crore)

Particulars	FY 2022-23		FY 2023-24	
	Approved in MTR	Actual	Approved in MTR	Actual
DPR capitalisation	46.96	15.81	62.51	10.66
Non-DPR capitalisation	2.72	8.86	3.80	14.95
Total	**49.68**	**24.67**	**66.31**	**25.61**
Non-DPR capitalisation as % of DPR capitalisation	*5.79%*	*56.04%*	*6.08%*	*140.24%*

2.9.2 The capitalisation towards non-DPR schemes is higher as it involves capital expenditures of smaller value of essential nature and are necessarily required to be undertaken for the sustenance of the plants. These small schemes which cannot be clubbed to form a merged DPR. Further, the DPR capitalisation of Trombay Units has significantly reduced as the Units are completing their useful life and hence, only minimum required capex of non-DPR nature is being executed to ensure safe and reliable operation of the power plant.

2.9.3 TPC-G further stated that during the proceedings of Case No 39 of 2023 for extension of PPA of TPC-G, it had informed that there is a need for incurrence of a capital expenditure for about Rs. 900 Crore for a period of 10 years. TPC-G further stated that the DPR Capitalisation may happen in the future i.e., beyond FY 2022-23. In view of this, TPC-G stated that, if non-DPR capitalisation is disallowed on account of being higher than 20% of the DPR capitalisation for that year, the same disallowed amount should be allowed to be carried forward in future years when the DPR amount is expected to be high.

2.9.4 TPC-G requested the Commission to exercise the Power to Relax as provided in Regulation 105 of MYT Regulations, 2019 and under the second proviso to the Regulation 24.7 of the MYT Regulations, 2019 to approve the non-DPR capitalisation beyond 20%.

2.9.5 TPC-G requested the Commission to approve the actual capitalisation of Rs. 24.67 Crore and Rs. 25.61 Crore for FY 2022-23 and FY 2023-24 respectively.

Commission's Analysis and Ruling

2.9.6 The Commission notes that non-DPR capitalisation claimed by TPC-G is higher than 20% of DPR capitalisation. In reply to a query raised in this regard, TPC-G stated that since the capitalisation of DPR schemes is very low, the ratio of non-DPR to DPR capitalisation is higher than the ceiling limit of 20%. Further, the total capitalisation is very low as compared to GFA. Hence, TPC-G has requested the Commission to exercise its power to relax as provided in Regulation 105 of MYT Regulations, 2019 and to approve the non-DPR capitalisation beyond the ceiling limit.

2.9.7 Regarding the DPR capitalisation, the Commission has gone through details of capitalisation undertaken by TPC-G towards each DPR scheme. The Commission also directed TPC-G to submit the cost benefit analysis for each scheme along with the documentary evidence for all the assets put to use during FY 2022-23 and FY 2023-24. In reply, TPC-G submitted the project completion reports along with cost benefit analysis.

2.9.8 Further, the Commission verified on least cost approach adopted by TPC-G while undertaking the DPR schemes. In reply to a query in this regard, TPC-G stated as under:

i. The company follows a very detailed, systematic procurement process that ensures transparency and competition resulting in procurement of material and services at competitive prices. All the activities related to procurement of materials as well as services right from budget availability till preparation of purchase order has been configured through workflow in SAP ERP.

ii. For major procurement of material and services, sealed bids are invited from various registered vendors in SAP and the same has been evaluated by applicable technical and financial expertise. The vendors are finalised based on the best technical and commercial offer.

iii. Further the company ensures that adequate vendor base is available for equipment and for registering a new vendor in SAP, a systematic process has been institutionalised.

2.9.9 The claimed DPR capitalization during FY 2022-23 and FY 2023-24 is mainly towards various Hydro DPR schemes such as civil works for life enhancement, replacement of transformers, installation of control gates, Nive pumping scheme, etc. Based on the project competition reports, the DPR capitalization has been considered for approval.

2.9.10 As regards the capitalization claimed for DPR schemes for FY 2022-23 and FY 2023-24, the Commission has observed as under:

(a) For Installation of Control Gates for BTRP (Operationalisation of Bhira Pumped Storage Unit in Pumping mode), TPC-G has claimed the part capitalisation of Rs. 1.58 Crore in FY 2022-23 and estimated capitalisation of Rs. 54.74 Crore in FY 2024-25. The Commission notes that the scheme is estimated to be completed in FY 2024-25. The Commission denies the part capitalisation of the scheme as asset is yet to be put for use. However, the Commission has considered total capitalisation of Rs. 56.32 Crore in FY 2024-25 as against the claim of Rs. 54.74 Crore in FY 2024-25.

(b) For Nive Pumping Scheme Phase II, TPC-G has claimed the capitalisation of Rs. 2.43 Crore in FY 2023-24. After scrutiny of the details submitted by TPC-G, it is observed that, though the scheme has been dropped, the capitalisation of Rs. 2.43 Crore is claimed towards land. Since, the scheme is not completed and dropped by TPC-G, the Commission has not considered to allow any part capitalisation towards land. Hence, the capitalisation of Rs. 2.43 Crore is disallowed for FY 2023-24.

2.9.11 Further, the Commission has gone through the capitalisation towards DPR schemes submitted by TPC-G. Scheme-wise observations of the Commission are as under:

(a) **Civil works for life enhancement of Shirwata (Strengthening of Shirawta Dam at Khopoli Hydro Generating Station)** – TPC-G has claimed total capitalisation of Rs. 22.26 Crore towards this ongoing scheme approved on 23 July, 2020. This includes the capitalisation of Rs. 14.03 Crore in FY 2022-23 and Rs. 8.23 Crore in FY 2023-24. Under this Scheme, TPC-G has undertaken life enhancement civil works for Shirwata dam including upstream & downstream pointing work, chemical pointing work, additional drilling and grouting, etc. The scheme has benefitted in terms of:

(i) Improving the safety of the dam thereby avoiding the loss of life and property

(ii) Increased availability of water for generation at khopoli by arresting of leakages of water from Shirawta Dam.

(iii) Maintaining healthiness of the dam structure due to reduction in the wear and tear of the dam body due to progressive ingress of the water and enhance the life of the existing structure.

(iv) Compliance to the observations and inspections by the statutory authority.

The Commission has gone through the project completion report submitted by TPC-G along with details of benefits. Further, the Commission notes that total actual capitalisation incurred towards scheme is Rs. 49.53 Crore as against approved cost of Rs. 50.78 Crore. Hence, there is no cost overrun in the said DPR scheme.

(b) **Transformer Replacement at Bhira (Replacement of various transformers in Hydro Generating Stations)** – TPC-G has claimed capitalisation of Rs. 0.11 Crore in FY 2022-23 towards this ongoing DPR scheme approved on 8 April,

2020. Under this scheme, TPC-G has replaced the old transformer at Bhira Hydro stations. The Commission has gone through the project completion report submitted by TPC-G along with details of benefits and actual site photographs. Further, the Commission notes that the actual capitalisation incurred towards Scheme is Rs. 9.63 Crore as against approved cost of Rs. 9.64 Crore. Hence, there is no cost overrun in the said DPR scheme.

(c) **Replacement of Transformers at Bhivpuri (Replacement of various transformers in Hydro Generating Stations)** - TPC-G has claimed capitalisation of Rs. 0.09 Crore in FY 2022-23 towards this ongoing DPR scheme approved on 08 April, 2020. Under this scheme, TPC-G has replaced the old aged transformer at Bhivpuri Hydro stations. The Commission has gone through the project completion report submitted by TPC-G along with details of benefits and actual site photographs. Further, the Commission notes that the actual capitalisation incurred towards Scheme is Rs. 4.96 Crore as against approved cost of Rs. 5.20 Crore. Hence, there is no cost overrun in the said DPR scheme.

2.9.12 In view of the above, capitalisation approved by the Commission towards DPR Schemes is shown in the following Table:

Non-DPR scheme	**Capitalisation (in Rs. Crore)**	
	FY 2022-23	**FY 2023-24**
Civil works for life enhancement of Shir (Strengthening of Shirawta Dam at Khopoli Hydro Generating Station)	14.03	8.23
Transformer Replacement at Bhira (Replacement of various transformers in Hydro Generating Stations)	0.11	-
Replacement of Transformers at Bhivpuri (Replacement of various transformers in Hydro Generating Stations)	0.09	-
Total	**14.23**	**8.23**

2.9.13 Further, while scrutinising the Non-DPR schemes submitted by TPC-G, it is observed that few schemes are of R&M nature which are tabulated below:

Non-DPR scheme	**Capitalisation (in Rs. Crore)**	
	FY 2022-23	**FY 2023-24**
Replacement of Unit 7, 8 & 9 S5 Programmable	1.27	-

Non-DPR scheme	**Capitalisation (in Rs. Crore)**	
	FY 2022-23	**FY 2023-24**
Logic Controller		
Replacement of Lonavala and Walwhan Sluice gate	0.09	1.19
Replacement of Air Conditioners	0.15	-
IT Infra replacement at Hydro	0.03	-
HOSS Allocation	-	0.08
Total	**1.54**	**1.27**

2.9.14 The Commission notes that the non-DPR capitalisation amounting to Rs. 2.81 Crore towards the aforesaid schemes are of the nature of repair and maintenance expenses. Therefore, the Commission does not find it prudent to approve such expenses under the Non-DPR capitalization. Accordingly, the Commission has excluded the same from capitalisation and considered in addition to the actual O&M expense claimed by TPC-G.

2.9.15 Further, it is noted that, the actual capitalisation claimed towards non-DPR schemes is higher than the ceiling limit of 20%. As regards the non-DPR schemes, Hon'ble ATE in its Judgment in Appeal No. 160 of 2012 ruled as under:

> *"110. **We do not find infirmity in the State Commission restricting the capital expenditure on non-DPR schemes to 20% of the capitalisation approved for DPR Scheme**. However, we feel that the DPR schemes which had not approved and were awaiting approval of the State Commission should be considered by the State Commission and allowed after prudence check…."*

2.9.16 Further, Regulation 24.7 of MYT Regulations, 2019 specifies that the cumulative amount of capitalisation against Non-DPR schemes for any Year shall not exceed 20% or such other limit as may be stipulated by the Commission through an Order, of the cumulative amount of capitalisation approved against DPR schemes for that Year. However, the Commission may allow capitalisation against non-DPR schemes for any year in excess of 20% on a request made by the generating company. In present case, number of approved DPRs (for the current ongoing schemes) for TPC-G is low and hence the approved DPR capitalization for the present control period is low. This has resulted in a higher non-DPR ratio for TPC-G. Considering these peculiarities, the Commission deems it to allow to the capitalisation towards Non-DPR schemes in such way that cumulative Non-DPR capitalisation for 4th Control period shall be 20% of the DPR capitalisation as shown in the following Table:

Table 2.17: Non-DPR capitalisation as approved by the Commission (Rs. Crore)

Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
DPR	27.31	36.84	14.23	8.23	56.32
Non-DPR	5.46	6.28	8.11	8.74	-
Total	**32.77**	**43.12**	**22.34**	**16.97**	**56.32**
Cumulative Non-DPR as % of DPR	*20%*	*18%*	***25%***	***33%***	***20%***

2.9.17 Based on the above, the additional capitalisation approved by the Commission is as shown in the Table below:

Table 2.18: Additional capitalisation for Units 5,7 & Hydro for FY 2022-23 and FY 2023-24 approved by the Commission (Rs. Crore)

Particulars	FY 2022-23			FY 2023-24		
	Approved in MTR	Actual	Approved	Approved in MTR	Actual	Approved
DPR capitalisation	46.96	15.81	14.23	62.51	10.66	8.23
Non-DPR capitalisation	2.72	8.86	8.11	3.80	14.95	8.74
Total	**49.68**	**24.67**	**22.34**	**66.31**	**25.61**	**16.97**

2.9.18 The Commission approves the additional capitalisation for Units 5,7 & Hydro as per Table 2.18 for FY 2022-23 and FY 2023-24.

2.10 MEANS OF FINANCE OF ADDITIONAL CAPITALISATION (UNITS 5,7 & HYDRO)

TPC-G's submission

2.10.1 The means of finance for the claimed additional capitalisation has been considered in the debt-equity ratio of 70:30.

Commission's Analysis and Ruling

2.10.2 In line with the True-up of previous years, the Commission has considered the means of finance of the approved additional capitalisation in the debt: equity ratio of 70:30.

2.11 ANNUAL FIXED CHARGES (AFC) (UNITS 5,7 & HYDRO)

2.11.1 Regulation 42 of the MYT Regulations, 2019 specifies the components of AFC as follows:

(a) Operation and Maintenance (O&M) expenses

(b) Depreciation
(c) Interest on Loan
(d) Interest on Working Capital (IoWC)
(e) Return on Equity (RoE)
(f) Income Tax
Less:
(g) Non-Tariff Income (NTI)

2.12 OPERATION AND MAINTENANCE (O&M) EXPENSES (UNITS 5,7 & HYDRO)

TPC-G's submission

2.12.1 Regulation 47.1 of the MYT Regulations, 2019 specifies the methodology for computation of normative O&M expenses. In line with the same, the normative O&M expenses for FY 2022-23 and FY 2023-24 have been claimed. TPC-G has claimed the normative O&M expenses of Rs. 445.62 Crore and Rs. 469.54 Crore for FY 2022-23 and FY 2023-24 respectively. As against the same, the actual O&M expenses are Rs. 487.05 Crore and Rs. 461.40 Crore for FY 2022-23 and FY 2023-24 respectively. In addition to the above, TPC-G has claimed the actual water charges of Rs. 4.87 Crore and Rs. 5.59 Crore for FY 2022-23 and FY 2023-24 respectively.

2.12.2 TPC-G has also claimed the capitalisation towards Non-DPR schemes which are R&M in nature but booked under capitalisation, of Rs. 1.54 Crore for FY 2022-23 and Rs. 1.21 Crore for FY 2023-24. Further, expenditure of Rs. 11.20 Crore for FY 2022-23 and Rs. 12.14 Crore for FY 2023-24 towards works which are R&M in the nature and booked under O&M Expenses has been excluded from working out of efficiency gains/ losses.

Commission's Analysis and Ruling

2.12.3 The last proviso to Regulation 47.1(b) of the MYT Regulations, 2019 specifies as under:

> *"Provided also that at the time of true-up for each Year of this Control Period, the Operation and Maintenance expenses, excluding water charges and including insurance, shall be derived on the basis of the Final Trued-up Operation and Maintenance expenses after adding/deducting the sharing of efficiency gains/losses, for the base year ending March 31, 2020, excluding abnormal expenses, if any, subject to prudence check by the Commission, and shall be considered as the Base Year Operation and Maintenance expenses."*

2.12.4 The Commission, in MTR Order, has approved Normative O&M expenses for FY

2021-22 as Rs. 426.03 Crore. Moreover, at time of Provisional Truing-up for FY 2022-23 in MTR Order, the Commission has reduced these expenses to Rs. 420.86 Crore after adjusting the assets transferred from Generation to Transmission. The relevant extract of Order is as under:

> *"6.12.3 The Commission has perused the computations of O&M expenses submitted by TPC-G. The Commission finds that for projecting the normative O&M expenses for Units 5,7 & Hydro, TPC-G has not deducted the impact of assets transferred from Generation to Transmission in proportion of the assets transferred to the total assets.* ***The Commission has considered the impact of assets transferred from Generation to Transmission in proportion of the assets transferred to the total GFA and deducted the same from the base O&M expenses for FY 2022-23" (emphasis added)***

2.12.5 Based on the above, for computation of normative O&M Expenses for FY 2022-23, the Commission has considered the base O&M Expenses of Rs. 420.86 Crore as approved in MTR Order.

2.12.6 Further, the Commission notes that 2nd and 3rd proviso to Regulation 47.1(c) of the MYT Regulations, 2019 specifies as under:

> *"Provided that, in the Truing-up of the O&M expenses for any particular year of the Control Period, an inflation factor with 50% weightage to the average yearly inflation derived based on the monthly Wholesale Price Index of the respective past five financial years (including the year of Truing-up) and 50% weightage to the average yearly inflation derived based on the monthly Consumer Price Index for Industrial Workers (all-India) of the respective past five financial years (including the year of Truing-up), as reduced by an efficiency factor of 1% or as may be stipulated by the Commission from time to time, shall be applied to arrive at the permissible Operation and Maintenance Expenses for that year:*
>
> *Provided further that the efficiency factor shall be considered as zero, in case the Availability Factor of all Generating Units/Stations of the Generating Company is higher than NAPAF, or there is an improvement in the Availability Factor of all Generating Units/Stations of the Generating Company of at least 2 percent annually over the last 3 years, in case the Availability Factor of all Generating Units/Stations of the Generating Company is lower than NAPAF."*

2.12.7 In accordance with the above, the Commission has computed the escalation factor of 5.88% and 5.37% for FY 2022-23 and FY 2023-24 respectively. The Commission has considered the efficiency factor as zero as the Availability of all the Generating

Units/Stations of TPC-G is higher than NAPAF.

2.12.8 TPC-G has claimed the actual water charges of Rs. 4.87 Crore and Rs. 5.59 Crore for FY 2022-23 and FY 2023-24 respectively. In reply to a query in this regard, TPC-G submitted the details of invoices. Accordingly, the Commission approves the actual water charges as incurred by TPC-G.

2.12.9 The revised normative O&M expenses for FY 2022-23 have been arrived at by escalating the Base Year expenses by the escalation factor of 5.88%. The revised normative O&M expenses for FY 2023-24 have been arrived at by escalating the normative O&M expenses for FY 2022-23 by the escalation factor of 5.37%. In addition to the normative O&M expenses, the Commission has considered the actual water charges.

Table 2.19: O&M expenses for Units 5,7 & Hydro for FY 2022-23 and FY 2023-24 (Rs. Crore)

Particulars	FY 2022-23			FY 2023-24		
	Approved in MTR	Claimed	Approved	Approved in MTR	Claimed	Approved
Normative O&M expenses for previous year	420.86	420.86	420.86	437.43	445.62	445.62
Escalation factor	3.94%	5.88%	5.88%	3.94%	5.37%	5.37%
Normative O&M expenses (A)	**437.43**	**445.62**	**445.62**	**454.65**	**469.54**	**469.54**
Water charges (B)	3.13	4.87	4.87	3.13	5.59	5.59
Total (A+B)	**440.56**	**450.49**	**450.49**	**457.78**	**475.13**	**475.13**

2.12.10 The Commission approves the normative O&M expenses for Units 5,7 & Hydro as per Table 2.19 for FY 2022-23 and FY 2023-24.

2.12.11 TPC-G has claimed the actual O&M expenses are Rs. 487.05 Crore and Rs. 461.40 Crore for FY 2022-23 and FY 2023-24 respectively, excluding water charges.

2.12.12 TPC-G submitted the details of cost centres of Licensed Area (**LA**) Services and HOSS. The Commission sought the justification for allocation of the expenses of the HO Services. In reply, TPC-G submitted the justification for the allocation of expenses of the above HO services and submitted the allocation of the expenses under the above heads to TPC-G as under:

(a) Business collaboration: TPC-G submitted that this function undertakes projects to enable Tata Power to Design, Develop and Deliver unique products/processes/services across Generation, Transmission and Distribution by way of technological interventions for delivery innovating, sustainable, scalable and cost-effective solutions for the consumers. Some of the key projects undertaken for TPC-G are Design and development of high rise structure painting robot for painting of tall structures like tall buildings and chimney, Vertical generator air gap inspection bot for inspection during short outages for preventive maintenance, etc.

(b) Regulations-Delhi: The activities related to dealing with legal matters for representing TPC-G in various forums like Hon'ble ATE, Hon'ble Supreme Court, CEA, Ministry of Power, MNRE are dealt through the Regulations-Delhi office

(c) Corporate Sustainability: Tata Power has been reporting its sustainability performance including Mumbai operations under Business Responsibility and Sustainability Reporting (BRSR) based on the National Guidelines for Responsible Business Conduct (NGRBC). Accordingly, this function provides services for mapping GHG emissions at Mumbai location and Sustainability reporting related study, Sustainability communications, Sustainability Awareness Programs e.g., to shift to clean energy solutions with energy supply to Mumbai consumers.

(d) Financial Concurrence Group (FCG): This department carries out activities pertaining to the procurement process to ensure adherence to bidding / contract policy, evaluation and optimization of tenders, bids, review of Order placement memos for all three businesses of Mumbai License Area and hence the cost of this department has been allocated to TPC-G, T, D.

(e) Corporate Social Responsibility (**CSR**): Expenses of CSR cost center which are allocated to regulated business are of administrative nature. Corporate Social responsibility expenses incurred by Tata Power as per section 135 of Companies Act are not allocated to regulated business. Hence no separate deduction towards CSR is required from the O&M expenses of Regulated business.

2.12.13 The details of allocated expenses are shown in the following Table:

Table 2.20: Allocation of expenses of shared services as submitted by TPC-G (Rs. Crore)

Cost centre	Allocation to TPC-G for FY 2022-23	Allocation to TPC-G for FY 2023-24
Business Collaboration	0.57	1.54
BE Group	1.08	1.66
Regulations – Delhi	0.03	0.02
Corp Sustainability	0.63	1.11
Financial Concurrence Group	0.27	0.31
Corporate CSR	0.62	1.02
Total	**3.20**	**5.66**

2.12.14 As regards the actual O&M Expenses, TPC-G submitted the revised O&M Expenses for FY 2023-24. TPC-G submitted the Audited Statement in which the HoSS cost has been allocated as per the directions of the Commission in its MTR Order in Case No 221 of 2022. The Auditor, while computing the amounts on the basis guidelines provided by the Commission, has included certain expenditure under the heads of A&G, R&M and Employee expenditure which are marginally different from that given in the Petition. The allocation of HOSS expenditure has been accordingly revised when compared with the amount presented in the Petition. Since, there is a change in allocated cost for Employees, A & G and R & M expenses in comparison with the cost submitted by TPC-G, TPC-T and TPC -D in their respective Petitions at the time of MYT filing, the actual O&M cost is revised for all three business of Tata Power in line with the Audited Statement. TPC-G further adjusted and restated Employee Expenditure due to allocation of Senior Management Cost to Mundra', where TPC-G has proposed the reduction of Rs. 0.59 Crore in the actual Employee Expenses. Accordingly, the actual O&M Expenses for TPC-G for FY 2023-24 is revised to Rs. 467.14 Crore as against. Rs. 461.40 Crore submitted in the Petition. The Commission has considered the revised O&M Expenses for the purpose of Truingup.

2.12.15 Further, the Commission has gone through head-wise details of the actual Employee expenses, A&G expenses and R&M expenses. The Commission notes that actual O&M Expenses are higher for FY 2022-23 and lower for FY 2023-24 as compared to normative O&M Expenses. However, the Commission has considered the actual O&M Expenses for the purpose of sharing of efficiency gains and losses.

2.12.16 Further, as discussed in the preceding section, the Commission has deducted the amount of Rs. 2.81 Crore from the additional capitalisation treating the same as Repairs and Maintenance expenses. Accordingly, the actual O&M expenses for FY 2022-23 and FY 2023-24 works out to Rs. 493.46 Crore and Rs. 474.00 Crore (including water charges) as shown in the following Table:

Table 2.21: Actual O&M Expenses approved by the Commission (Rs. Crore)

Particulars	FY 2022-23	FY 2023-24
Employee Costs	201.60	184.88
R&M Expenses	172.95	153.92
A&G Expenses	120.19	128.34
Less: Expenses Capitalised	(7.68)	-
Total	**487.05**	**467.14**
Add: Expenses from Non-DPR capitalised to O&M	1.54	1.27
Add: Water Charges	4.87	5.59
Grand Total	**493.46**	**474.00**

2.12.17 The Commission has considered the O&M expenses as controllable expenses in accordance with the MYT Regulations, 2019. Hence, the difference between the actual O&M expenses and normative O&M expenses as approved by the Commission in this Order has been considered for computing the sharing of efficiency gains/losses as per principles laid out in the MYT Regulations, 2019.

2.13 DEPRECIATION (UNITS 5,7 & HYDRO)

TPC-G's submission

2.13.1 TPC-G has computed the depreciation by applying the rates as specified in the depreciation schedule in Annexure 1 of the MYT Regulations, 2019 and Regulation 28 of the MYT Regulations, 2019. Based on the same, TPC-G requested the Commission to approve the depreciation of Rs. 106.48 Crore and Rs. 98.52 Crore for FY 2022-23 and FY 2023-24 respectively.

Commission's Analysis and Ruling

2.13.2 In the final True-up of FY 2021-22, the Commission had approved the closing GFA for FY 2021-22 as Rs. 3,880.30 Crore. The Commission has considered the same as the opening GFA for FY 2022-23. The approved additional capitalisation for FY 2022-23 and FY 2023-24 has been considered as the GFA addition during the respective years. The deduction from GFA during FY 2022-23 and FY 2023-24 has been considered the same as claimed by TPC-G and the same are also verified from Audited Accounts. The depreciation rates for FY 2022-23 and FY 2023-24 have been considered the same as claimed by TPC-G.

2.13.3 The depreciation approved by the Commission for FY 2022-23 and FY 2023-24 is as shown in the Table below:

Table 2.22: Depreciation for Units 5,7 & Hydro for FY 2022-23 and FY 2023-24 (Rs. Crore)

Particulars	FY 2022-23			FY 2023-24		
	Approved in MTR	Claimed	Approved	Approved in MTR	Claimed	Approved
Opening GFA	3,880.30	3,880.30	3,880.30	3929.98	3,873.70	3,871.38
Addition	49.68	24.67	22.34	66.31	25.61	16.97
Retirement	0.00	(31.27)	(31.27)	0.00	(16.14)	(16.14)
Closing GFA	3929.98	3,873.70	3,871.38	3996.29	3,883.17	3,872.20
Depreciation rate	3.26%	2.75%	2.75%	3.26%	2.54%	2.54%
Depreciation	**127.17**	**106.48**	**106.45**	**129.06**	**98.52**	**98.35**

2.13.4 The Commission approves the depreciation for Units 5,7 & Hydro as per the table above for FY 2022-23 and FY 2023-24.

2.14 INTEREST ON LOAN (UNITS 5,7 & HYDRO)

TPC-G's submission

2.14.1 TPC-G has taken various long-term loans to finance the capital expenditure in line with the Debt: Equity ratio of 70:30. TPC sources long term loans at a company level for its Generation, Transmission and Distribution businesses together to have negotiation advantage to avail better terms and conditions of loans.

2.14.2 In accordance with Regulation 30.5 of the MYT Regulations, 2019, based on the actual loan drawls, interest rates and the interest paid, the weighted average interest rate for FY 2022-23 and FY 2023-24 works out to 7.91% and 9.02% respectively. TPC-G has submitted the statements received from Banks certifying the Opening Balance, Closing Balance, Interest paid, and the applicable rate of interest.

2.14.3 TPC-G has claimed the interest charges of Rs. 2.89 Crore for FY 2022-23. Further, no interest charges are claimed for FY 2023-24. Further, TPC-G has claimed the other finance charges of Rs. 2.00 Crore and Rs. 1.69 Crore for FY 2022-23 and FY 2023-24 respectively.

Commission's Analysis and Ruling

2.14.4 In the final True-up of FY 2021-22, the Commission had approved the closing loan balance for FY 2021-22 as Rs. 73.14 Crore. The Commission has considered the same as the opening loan balance for FY 2022-23, which is the same as considered by TPC-G. The debt portion of the approved additional capitalisation for FY 2022-23 has been considered as the loan addition during the year. The approved depreciation for FY 2022-23 has been considered as the repayment for the year. The closing loan balance for FY 2022-23 has been considered as the opening loan balance for FY 2023-24. The debt portion of the approved additional capitalisation for FY 2023-24 has been considered as the loan addition during the year. The approved depreciation for FY 2023-24 has been considered as the repayment for the year. The actual weighted average rates of interest for FY 2022-23 and FY 2023-24 have been applied to the average loan for the respective year for computing the interest expenses.

2.14.5 Based on the above, the interest on loan approved by the Commission is shown in the Table below:

Table 2.23: Interest on loan for Units 5,7 & Hydro for FY 2022-23 and FY 2023-24 (Rs. Crore)

Particulars	FY 2022-23			FY 2023-24		
	Approved in MTR	Claimed	Approved	Approved in MTR	Claimed	Approved
Opening loan	73.14	73.14	73.14	0.00	0.00	0.00
Addition	34.78	17.27	15.64	46.42	17.93	11.88
Repayment	107.91	106.48	106.45	46.42	98.52	98.35
Closing loan	0.00	0.00	0.00	0.00	0.00	0.00
Rate of interest on loan	7.43%	7.91%	7.91%	7.43%	9.02%	9.02%
Interest on loan	**2.72**	**2.89**	**2.89**	**-**	**-**	**-**

2.14.6 The Commission approves the interest on loan for Units 5,7 & Hydro as per the table above for FY 2022-23 and FY 2023-24.

2.14.7 The Commission sought details of finance charges claimed by TPC-G. Based on the response to the query, the Commission observes that finance charges are towards bank charges, Letter of Credit charges, and other finance costs. The Commission notes that, though TPC-G has claimed Rs 1.69 Crore for FY 2023-24 and submitted the details for the said claim, the said amount is Rs. 0.74 Crore in the Allocation Statement submitted by TPC-G. Accordingly, the Commission approves the finance charges of Rs. 2.00 Crore for FY 2022-23 and Rs. 0.74 Crore for FY 2023-24 as per Allocation Statement submitted by TPC-G.

2.15 INTEREST ON WORKING CAPITAL (UNITS 5,7 & HYDRO)

TPC-G's submission

2.15.1 Interest on Working Capital (**IoWC**) has been computed based on Regulation 32.1 of the MYT Regulations, 2019. For the purpose of computing IoWC, interest rates of 9.30% and 10.07% for FY 2022-23 and FY 2023-24 respectively have been considered. TPC-G has claimed the IoWC of Rs. 46.17 Crore and Rs. 40.60 Crore for FY 2022-23 and FY 2023-24 respectively.

Commission's Analysis and Ruling

2.15.2 The Commission has computed IoWC in accordance with the MYT Regulations, 2019. In accordance with Regulation 32.1, the working capital comprising of the following components has been considered:

(a) Cost of coal towards stock, for thirty days, for Unit 5, for generation corresponding to lower of storage capacity or target Availability;

(b) Cost of coal, for thirty days, for Unit 5, for generation corresponding to lower of scheduled generation or target Availability;

(c) Cost of APM gas, for thirty days, for Unit 7, for generation corresponding to lower of scheduled generation or target Availability;

(d) Approved normative O&M expenses of Units 5,7 & Hydro for one month;

(e) Maintenance spares at one percent of approved opening GFA for Units 5,7 & Hydro;

(f) Receivables for sale of electricity to BEST equivalent to 45 days of the actual revenue from sale of electricity;

(g) minus: payables for fuels to the extent of thirty days of the cost of coal for Unit 5 and APM gas for Unit 7 at lower of actual generation and target Availability.

2.15.3 The Commission has considered the working capital based on the actual scheduled generation for Unit 5 & Unit 7 as the same is lower than generation corresponding to target Availability.

2.15.4 The rate of IoWC has been considered as 9.30% and 10.07% for FY 2022-23 and FY 2023-24 respectively in accordance with the MYT Regulations, 2019.

Table 2.24: Interest on working capital for Units 5,7 & Hydro for FY 2022-23 and FY 2023-24 (Rs. Crore)

Particulars	FY 2022-23			FY 2023-24		
	Approved in MTR	Claimed	Approved	Approved in MTR	Claimed	Approved
Working capital	475.83	496.52	490.77	562.10	403.38	398.02
Rate of interest	9.45%	9.30%	9.30%	9.45%	10.07%	10.07%
IoWC	**44.97**	**46.17**	**45.64**	**53.12**	**40.60**	**40.06**

2.15.5 The Commission approves the normative IoWC for Units 5,7 & Hydro as per the table above for FY 2022-23 and FY 2023-24.

2.15.6 TPC-G has claimed the actual IoWC of Rs. 22.65 Crore and Rs. 37.12 Crore for FY 2022-23 and FY 2023-24 respectively. The actual interest paid towards commercial paper at TPC-G level has been bifurcated between Unit 5, 7 & hydro and Unit 8. The Commission has verified the details of actual interest on working capital based on CA certificate submitted by TPC-G. The increase in actual interest on working capital during FY 2023-24 is on account of increase in working capital requirement as well as increase in rate of interest compared to FY 2022-23. In accordance with the proviso to Regulation 32.6 of the MYT Regulations, 2019, delayed payment surcharge and interest on delayed payment surcharge shall have to be deducted from the actual interest on working capital before sharing of the efficiency gains or losses, as the case may be. In reply to a query, TPC-G confirmed that there is no delayed payment surcharge for FY 2022-23 and FY 2023-24.

2.15.7 The Commission has considered IoWC as a controllable parameter in accordance with the MYT Regulations, 2019. Hence, the difference between the actual IoWC and normative IoWC as approved by the Commission in this Order has been considered for computing the sharing of efficiency gains as per principles laid out in MYT Regulations, 2019.

2.16 RETURN ON EQUITY & INCOME TAX (UNITS 5,7 & HYDRO)

TPC-G's submission

2.16.1 Return on Equity (**RoE**) has been claimed in accordance with Regulation 29 of the MYT Regulations, 2019. TPC-G has considered the Base Rate of RoE of 14%, additional rate of 0.50% for incremental ramp rate and additional rate of 1% for performance related to Mean Time Between Failure (**MTBF**). Accordingly, the total rate of RoE has been claimed as 15.50% for Units 5 & 7. TPC-G submitted the certificate related performance of MTBF along with the Petition. For hydro stations, TPC-G has considered the rate of RoE of 15.50%.

2.16.2 As regards Unit 5 & 7, TPC-G submitted that, the additional ROE of 0.50% is based on Ramp Rate. However, while the Commission has allowed enhanced RoE, there is no defined procedure for measurement of such performance-based norms. However, such provisions were already given by CERC in its Tariff Regulations, 2019. Moreover, CERC had directed National Load Dispatch Centre (**NLDC**) to issue a detailed guidelines for assessment of such norms by 30 June, 2019. NLDC, after due public consultation, had issued procedure for assessment of Ramping Capability of Inter-State Thermal Generating Stations on 28 February, 2020 which was subsequently amended on 30 December, 2020 considering the practical constraints in achieving the assessment threshold specified in the Guidelines. Further, the above procedure is not applicable to the Combined Cycle gas power station. In view of the above, TPC-G requested the Commission to allow an additional ROE of 0.50% for ramp rate performance for Unit 5 & 7.

2.16.3 With respect to the applicable rate of income tax, TPC-G submitted that Section 115BAA was introduced by Taxation Laws (Amendment) Act 2019 w.e.f. 1 April, 2020. As per this newly inserted provision, a choice was given to a domestic company to shift to new simplified tax regime with effect from FY 2021-22. Under the new tax regime benefits of MAT credit and other exemption are not allowed. It has been observed that it would be beneficial to shift to new tax regime where the business is not eligible for deduction under Section 80IA and MAT credit is not available.

Accordingly, in the interest of consumers, TPC-G, for Units 5,7 & Hydro, has opted for the new regime of tax as MAT credit is not available, as this will result in lower tax outgo for the business and ultimately beneficial for the consumers. Further, as per the MYT Regulations 2019, it is required that generating company would calculate the effective tax rate without considering the impact of the actual tax paid on income from any other regulated or unregulated business or other business of the entity. Hence, it is necessary to compute the effective tax rate for TPC-G strictly on a standalone basis considering TPC-G and other businesses of Tata Power as an independent legal entity.

2.16.4 Further, TPC-G submitted that in MTR Order, the Commission has considered tax rate as Nil for FY 2020-21 and FY 2021-22 considering that Tata power Company as a whole had not paid any tax. This issue has been challenged by TPC-G in Appeal No 481 of 2023 before the Hon'ble ATE. As the appeal is pending and the Order on the same is yet to be issued, for FY 2022-23 and FY 2023-24, TPC-G has considered Tax Rate for grossing up of ROE as "Nil". Based on the Order of the Hon'ble ATE, it would approach the Commission for grossing up by the Tax rate at an appropriate time

2.16.5 TPC-G has claimed RoE of Rs. 212.91 Crore and Rs. 212.98 Crore for FY 2022-23 and FY 2023-24 respectively.

Commission's Analysis and Ruling

2.16.6 In the final True-up of FY 2021-22, the Commission had approved the closing equity for FY 2021-22 as Rs. 1374.63 Crore. The Commission has considered the same as the opening equity for FY 2022-23, which is the same as considered by TPC-G. The equity portion of the approved additional capitalisation for FY 2022-23 has been considered as the equity addition during the year. The closing equity for FY 2022-23 has been considered as the opening equity for FY 2023-24. The equity portion of the approved additional capitalisation for FY 2023-24 has been considered as the equity addition during the year.

2.16.7 Regulation 29.2 of the MYT Regulations, 2019 specifies the Base Rate of RoE of 14%. In accordance with Regulation 29.6(a) of the MYT Regulations, 2019, the additional rate of RoE, subject to the ceiling of 0.5%, shall be allowable for incremental ramp rate. Further, in accordance with Regulation 29.6(b) of the MYT Regulations, 2019, the additional rate of RoE, subject to maximum of 1% shall be allowable for achievement of MTBF as specified in the Regulation.

2.16.8 The Base Rate of RoE has been considered as 14% in accordance with Regulation 29.2 of the MYT Regulations, 2019. The Commission notes that TPC-G has submitted certificate related to the performance with respect to the ramping rate for FY 2022-23 and FY 2023-24 in response to specific query sought by the Commission. Based on the MSLDC certificate, it is noted that Unit 5 and 8 are not eligible for additional incentive of 0.5% for ramp rate for FY 2022-23 as well as FY 2023-24. Further, regarding Unit 7, the additional ROE of ramp rate is not allowed in absence of MSLDC's ramp rate certification. Accordingly, the Commission has not considered the additional RoE towards incremental ramp rate as specified in Regulation 29.6(a) of MYT Regulations 2019.

2.16.9 Further, TPC-G has submitted the MSLDC certificate for actual MTBF for Unit 5 and Unit 7 for FY 2022-23 and FY 2023-24 along with Petition. The actual MTBF for Unit 5 and Unit 7 is 180.30 days and 365.00 days respectively for FY 2022-23. The actual MTBF for Unit 5 and Unit 7 is 177.70 days and 182.60 days respectively for FY 2023-24. Accordingly, the Commission has considered the additional rate of 1% for achievement of MTBF of above 120 days for Unit 5 and Unit 7 for FY 2022-23 and FY 2023-24. Accordingly, the Commission has considered the rate of RoE of 15.00% for Unit 5 and Unit 7 for FY 2022-23 and FY 2023-24.

2.16.10 It is noted that TPC-G has considered the rate of RoE of 15.5% for hydro stations, which is not in accordance with the Regulation. The additional rate of RoE is allowable only for thermal Units and therefore, the Commission has considered the rate of RoE of 14% for hydro stations for FY 2022-23 and FY 2023-24.

2.16.11 Based on the above, the Commission has computed the weighted average rate of RoE of 14.62% and 14.61% for FY 2022-23 and FY 2023-24 as per the proportion of RoE approved in the MYT Order for the respective thermal and hydro generating stations.

2.16.12 The Commission notes that, since actual tax payable by TPC (company as a whole) is zero, the effective rate as per the provisions of Regulations works out to Nil. Therefore, the Commission deems it prudent to consider effective tax rate of zero percent (0%) for FY 2022-23 and FY 2023-24. The Commission notes that TPC-G has filed an Appeal before Hon'ble ATE on the issue of the income tax allowed for FY 2020-21 and FY 2021-22 in the MTR Order and the matter is pending.

2.16.13 Accordingly, the RoE approved by the Commission for FY 2022-23 and FY 2023-24 is given in Table below:

Table 2.25: RoE for Units 5,7 & Hydro for FY 2022-23 and FY 2023-24 (Rs. Crore)

Particulars	FY 2022-23			FY 2023-24		
	Approved in MTR	Claimed	Approved	Approved in MTR	Claimed	Approved
Opening equity	1374.63	1,374.63	1,374.63	1389.54	1,372.65	1,371.96
Addition	14.90	7.40	6.70	19.89	7.68	5.09
Reduction of equity towards de-capitalised assets	-	(9.38)	(9.38)	-	(4.84)	(4.84)

Particulars	FY 2022-23			FY 2023-24		
	Approved in MTR	Claimed	Approved	Approved in MTR	Claimed	Approved
Closing equity	1389.54	1,372.65	1,371.96	1409.43	1,375.49	1,372.20
Rate of Return	14.00%	15.50%	14.62%	14.00%	15.50%	14.61%
RoE	**193.49**	**212.91**	**200.77**	**195.93**	**212.98**	**200.46**

2.16.14 The Commission approves RoE for Units 5,7 & Hydro as per the table above for FY 2022-23 and FY 2023-24.

2.17 NON-TARIFF INCOME (NTI) (UNITS 5,7 & HYDRO)

TPC-G's submission

2.17.1 TPC-G has claimed NTI of Rs. 16.67 Crore for FY 2022-23 and Rs. 25.27 Crore for FY 2023-24.

Commission's Analysis and Ruling

2.17.2 The Commission notes that TPC-G has received the NTI of Rs. 16.67 Crore for FY 2022-23 and Rs. 25.27 Crore for FY 2023-24 on account of various heads which includes rent, sale of scrap & stores, sale of fly ash, income from supply of power to housing colony, etc.

2.17.3 The Commission has considered NTI of Rs. 16.67 Crore for FY 2022-23 and Rs. 25.27 Crore for FY 2023-24 as claimed by TPC-G.

2.18 ANNUAL FIXED CHARGES (AFC) (UNITS 5,7 & HYDRO)

Commission's Analysis and Ruling

2.18.1 Based on the above, the AFC approved by the Commission in the final True-up, that is fully recoverable at Target Availability is as shown in the Table below:

Table 2.26: AFC for Units 5,7 & Hydro for FY 2022-23 and FY 2023-24 (Rs. Crore)

Particulars	FY 2022-23			FY 2023-24		
	Approved in MTR	Claimed	Approved	Approved in MTR	Claimed	Approved
O&M expenses	440.56	463.23	463.23	457.78	488.46	488.54
Depreciation	127.17	106.48	106.45	129.06	98.52	98.35
Interest on loan and finance charges	2.72	4.89	4.89	-	1.69	0.74
Interest on working capital	44.97	46.17	45.64	53.12	40.60	40.06

Particulars	FY 2022-23			FY 2023-24		
	Approved in MTR	Claimed	Approved	Approved in MTR	Claimed	Approved
Return on Equity	193.49	212.91	200.77	195.93	212.98	200.46
Less: Allocation of Unit 8 for shared capacity	11.02	10.43	10.43	10.69	9.76	9.76
Less: Non-tariff income	12.87	16.67	16.67	12.87	25.27	25.27
Annual Fixed Charges	**785.02**	**806.58**	**793.88**	**812.33**	**807.22**	**793.13**

2.18.2 The Commission approves the AFC for Units 5,7 & Hydro as per the table above for FY 2022-23 and FY 2023-24.

2.19 INCENTIVE ON PLF AND CAPACITY INDEX (UNITS 5,7 & HYDRO)

TPC-G's submission

2.19.1 TPC-G submitted that, as per the Regulation 50.8 of the MYT Regulations, 2019, thermal generation in excess of ex-Bus energy corresponding to target PLF during peak hours and off-peak hours is eligible for PLF Incentive at a flat rate of 50 paise/kWh and 25 paise/kWh respectively on cumulative basis within each season (High Demand or Low Demand, as the case may be) as specified in Regulation 46.3 of the MYT Regulations, 2019. TPC-G has not claimed any PLF incentive as Unit 5 & 7 are not eligible for PLF Incentive for FY 2022-23 and FY 2023-24.

2.19.2 TPC-G has claimed Rs. 70.57 Crore and Rs. 68.30 Crore for FY 2022-23 and FY 2023-24 respectively towards the incentive for Hydro Generation in excess of the Design Energy and availability more than normative Availability in line with the provisions of Regulation 51 of MYT Regulations, 2019.

Commission's Analysis and Ruling

2.19.3 As Unit 5 & 7 are not eligible for PLF Incentive for FY 2022-23 and FY 2023-24, the Commission has not approved the same.

2.19.4 Further, as regards the incentive for Hydro, the Commission notes that, TPC-G for computation of incentive, has considered the Annual fixed charges which is inclusive of incentive. This will lead to double accounting. Accordingly, the Commission has considered the AFC as approved in this Order without sharing of efficiency gains/(losses) and incentive. The Commission has computed the incentive for hydro generating stations as shown in the Table below:

Table 2.27: Incentive for hydro stations for FY 2022-23 approved by the Commission

Particulars	Units	Bhira	Bhivpuri	Khopoli	Total
Fixed Cost for Hydro	Rs. Crore	115.04	69.77	111.61	296.41
Normative Availability	%	90.00%	90.00%	90.00%	90.00%
Actual Availability	%	98.49%	100.00%	96.62%	
Normative Capacity Charge	Rs. Crore	62.95	38.76	59.91	161.62
Design Energy	MU	744.12	193.23	174.68	1112.03
Auxiliary Consumption	%	1.00%	1.20%	1.20%	
Net Design Energy	MU	736.68	190.91	172.58	1100.17
Energy Charge Rate	Rs./kWh	0.781	1.827	3.233	1.347
Scheduled Generation	MU	922.85	331.20	288.65	1542.70
Energy Charge	Rs. Crore	72.06	51.72	69.73	193.51
Total incentive	**Rs. Crore**	**19.96**	**20.71**	**18.03**	**58.71**

Table 2.28: Incentive for hydro stations for FY 2023-24 approved by the Commission

Particulars	Units	Bhira	Bhivpuri	Khopoli	Total
Fixed Cost for Hydro	Rs. Crore	117.67	69.15	115.00	301.82
Normative Availability	%	90.00%	90.00%	90.00%	0.90
Actual Availability	%	99.65%	98.27%	97.08%	
Normative Capacity Charge	Rs. Crore	65.15	37.75	62.02	164.92
Design Energy	MU	744.12	193.23	174.68	1112.03
Auxiliary Consumption	%	1.00%	1.20%	1.20%	
Net Design Energy	MU	736.68	190.91	172.58	1100.17
Energy Charge Rate	Rs./kWh	0.799	1.811	3.332	1.372
Scheduled Generation	MU	941.62	314.28	270.40	1526.30
Energy Charge	Rs. Crore	75.21	49.38	69.24	193.84
Total incentive	**Rs. Crore**	**22.68**	**17.98**	**16.26**	**56.93**

2.19.5 The Commission approves the incentive for hydro stations as per Table 2.27 and Table 2.28 for FY 2022-23 and FY 2023-24 respectively.

2.20 SHARING OF GAINS AND LOSSES (UNITS 5,7 & HYDRO)

2.20.1 The Commission in its MYT Regulations, 2019 has provided the following methodology for treatment of sharing and gains and sharing of losses:

> *"**11. Mechanism for sharing of gains or losses on account of controllable factors***
> *11.1 The approved aggregate gain to the Generating Company or Licensee or MSLDC on account of controllable factors shall be dealt with in the following*

manner:

(a) Two-third of the amount of such gain shall be passed on as a rebate in Tariff over such period as may be stipulated in the Order of the Commission under Regulation 8.4;

(b) The balance amount of such gain shall be retained by the Generating Company or Licensee or MSLDC.

11.2 The approved aggregate loss to the Generating Company or Licensee or MSLDC on account of controllable factors shall be dealt with in the following manner: —

(a) One-third of the amount of such loss may be passed on as an additional charge in Tariff over such period as may be stipulated in the Order of the Commission under Regulation 8.4;

(b) The balance amount of such loss shall be absorbed by the Generating Company or Licensee or MSLDC."

2.20.2 TPC-G has submitted the actual expenditure under various heads. The gains and loss on account of controllable factors has been computed and the sharing between the beneficiaries and TPC-G has been worked out as under:

2.21 GAIN/(LOSS) ON ACCOUNT OF FUEL COST FOR UNITS 5 & 7

TPC-G's submission

2.21.1 As per the MYT Regulations 2019, the changes in fuel cost due to operational parameters of the generation units would be considered as controllable. Accordingly, gains/losses on account of fuel costs are worked out as below:

Table 2.29: Gain/(Loss) due to variation in GSHR for Units 5,7 for FY 2022-23 and FY 2023-24 as submitted by TPC-G

Particulars	FY 2022-23			FY 2023-24		
	Unit 5	Unit 7	Total Fuel Cost	Unit 5	Unit 7	Total Fuel Cost
Fuel Cost (Rs. Crore) as per Scheduled generation	2,431.43	397.10	2,828.54	1,702.38	517.13	2,219.52
Actual GSHR	2,564	2,229		2,587	2,135	
Normative GSHR	2,549	2,063		2,549	2,040	
Fuel Cost applying Normative Heat Rate (Rs. Crore)	2,417.05	367.54	2,784.59	1,677.61	493.98	2,171.59
Net Gains/ (Loss)	(14.38)	(29.57)	(43.94)	(24.77)	(23.16)	(47.93)
Passed on to the distribution licensees	(4.79)	(9.86)	(14.65)	(8.26)	(7.72)	(15.98)

Commission's Analysis and Ruling

2.21.2 The Commission has computed the sharing efficiency gain or losses on account of variation in GSHR for FY 2022-23 and FY 2023-24 as shown in the following Table:

Table 2.30: Gain/(Loss) due to variation in GSHR for Units 5,7 for FY 2022-23 and FY 2023-24 approved by the Commission

Particulars	FY 2022-23			FY 2023-24		
	Unit 5	Unit 7	Total Fuel Cost	Unit 5	Unit 7	Total Fuel Cost
Fuel Cost (Rs. Crore) as per Scheduled generation	2,449.86	397.10	2,846.96	1,677.92	517.14	2,195.06
Actual GSHR	2,564	2,229		2,586.64	2,135.20	
Normative GSHR	2,549	2,063		2,549	2,039.59	
Fuel Cost applying Normative Heat Rate (Rs. Crore)	2,435.37	367.54	2,802.91	1,653.51	493.98	2,147.49
Net Gain/ (Loss)	**(14.49)**	**(29.57)**	**(44.05)**	**(24.41)**	**(23.16)**	**(47.57)**
Passed on to the distribution licensees	**(4.83)**	**(9.86)**	**(14.68)**	**(8.14)**	**(7.72)**	**(15.86)**

2.21.3 The Commission approves the gain/(loss) due to variation in GSHR for Units 5,7 as per Table 2.30 for FY 2022-23 and FY 2023-24.

2.22 GAIN/(LOSS) ON ACCOUNT OF AEC FOR UNITS 5, 7 & HYDRO

TPC-G's submission

2.22.1 TPC-G submitted the efficiency loss due to variation in AEC as Rs. 2.08 Crore for FY 2022-23 and Rs. 2.79 Crore for FY 2023-24.

Commission's Analysis and Ruling

2.22.2 The Commission has computed sharing of efficiency gain or losses on account of variation in AEC for FY 2022-23 and FY 2023-24 as shown in the Table below:

Table 2.31: Gain/(Loss) due to variation in AEC for Units 5,7 & Hydro for FY 2022-23 approved by the Commission

Particulars	Unit 5	Unit 7	Bhira	Bhivpuri	Khopoli	Total
Gross Generation as per Scheduled generation (MU)	2,753.43	646.36	934.79	335.72	297.21	4,967.51
Actual AEC (%)	6.11%	4.46%	0.96%	1.27%	1.37%	
Revised Normative AEC (%)	6.09%	3.00%	1.00%	1.20%	1.20%	

Particulars	Unit 5	Unit 7	Bhira	Bhivpuri	Khopoli	Total
Difference in Net Generation (MU)	(0.53)	(9.43)	0.39	(0.23)	(0.51)	(10.31)
Energy Charge Rate (Rs./kWh)	9.348	5.862	1.023	2.509	3.963	
Gain / (loss) (Rs. Crore)	**(0.50)**	**(5.53)**	**0.04**	**(0.06)**	**(0.20)**	**(6.24)**
To be retained by TPC-G	**(0.33)**	**(3.69)**	**0.01**	**(0.04)**	**(0.13)**	**(4.16)**
Passed on to the distribution licensees (Rs. Crore)	**(0.17)**	**(1.84)**	**0.03**	**(0.02)**	**(0.07)**	**(2.08)**

Table 2.32: Gain/(Loss) due to variation in AEC for Units 5,7 & Hydro for FY 2023-24 approved by the Commission

Particulars	Unit 5	Unit 7	Bhira	Bhivpuri	Khopoli	Total
Gross Generation as per Scheduled generation (MU)	2,921.50	1,004.19	954.87	319.28	277.71	5,477.55
Actual AEC (%)	6.61%	3.65%	0.98%	1.51%	1.32%	
Revised Normative AEC (%)	6.35%	3.00%	1.00%	1.20%	1.20%	
Difference in Net Generation (MU)	(7.68)	(6.57)	0.15	(0.98)	(0.33)	(15.42)
Energy Charge Rate (Rs./kWh)	6.131	5.071	1.014	2.289	3.775	
Gain / (Loss) (Rs. Crore)	**(4.71)**	**(3.33)**	**0.02**	**(0.22)**	**(0.13)**	**(8.38)**
To be retained by TPC-G	**(3.14)**	**(2.22)**	**0.01**	**(0.15)**	**(0.09)**	**(5.58)**
Passed on to the distribution licensees (Rs. Crore)	**(1.57)**	**(1.11)**	**0.01**	**(0.07)**	**(0.04)**	**(2.79)**

2.22.3 The Commission approves the gain/(loss) due to variation in AEC for Units 5,7 & Hydro as per Table 2.31 and Table 2.32 for FY 2022-23 and FY 2023-24 respectively.

2.23 GAIN/(LOSS) ON ACCOUNT OF O&M EXPENSES FOR UNITS 5,7 & HYDRO

TPC-G's submission

2.23.1 TPC-G submitted the computation of efficiency loss on account of O&M expenses as Rs. 30.23 Crore and gain of Rs. 20.28 Crore for FY 2022-23 and FY 2023-24 respectively. Accordingly, net loss of Rs. 10.08 Crore and net gain of Rs. 13.52 Crore is to be passed on to distribution licensees.

Commission's Analysis and Ruling

2.23.2 The Commission has computed the sharing of efficiency gain on account of variation in O&M expenses as shown in the Table below:

Table 2.33: Gain/(Loss) due to variation in O&M expenses for Units 5,7 & Hydro for FY 2022-23 and FY 2023-24 (Rs. Crore)

Particulars	FY 2022-23		FY 2023-24	
	Claimed	Approved	Claimed	Approved
Normative O&M (excluding water charges) (A)	445.62	445.62	469.54	469.54
Actual O&M (excluding water charges)	487.05	487.05	461.40	467.14
Less: Uncontrollable expenses	11.20	11.20	12.14	12.14
Net Actual O&M Expenses (B)	475.85	475.85	449.26	455.00
Gain/(loss) (C=A-B)	(30.23)	(30.23)	20.28	14.55
Passed on to distribution licensees (D)	(10.08)	(10.08)	13.52	9.70
Add: Actual Water Charges (E)	4.87	4.87	5.59	5.59
Add: Additional O&M Expenses due to shifting of Non-DPR schemes to O&M (F)	1.54	1.54	1.19	1.27
Add: Additional O&M Expenses for Non-DPR schemes booked in O&M (G)	11.20	11.20	12.14	12.14
Entitlement of TPC-G (A-D+E+F+G)	**473.31**	**473.31**	**474.94**	**478.85**

2.23.3 The Commission approves the gain/(loss) due to variation in O&M expenses for Units 5,7 & Hydro as per Table 2.33 for FY 2022-23 and FY 2023-24.

2.24 GAIN/(LOSS) ON ACCOUNT OF IOWC FOR UNITS 5,7 & HYDRO

TPC-G's submission

2.24.1 TPC-G submitted the computation of efficiency gains on account of IoWC as Rs. 23.52 Crore and Rs. 3.48 Crore for FY 2022-23 and FY 2023-24 respectively. Accordingly, net gain of Rs. 15.68 Crore and Rs. 2.32 Crore is to be passed on to distribution licensees.

Commission's Analysis and Ruling

2.24.2 The Commission has computed the sharing of efficiency gain on account of variation in IoWC as shown in the Table below:

Table 2.34: Gain/(Loss) due to variation in IoWC for Units 5,7 & Hydro for FY 2022-23 and FY 2023-24 (Rs. Crore)

Particulars	FY 2022-23		FY 2023-24	
	Claimed	Allowable	Claimed	Allowable
Normative IoWC (A)	46.17	45.64	40.60	40.06
Actual IoWC (B)	22.65	22.65	37.12	37.12
DPS received (C)	-	-	-	-
Net actual IoWC (D=maximum of (B-C), 0)	22.65	22.65	37.12	37.12
Gain/(Loss) (E=A-D)	**23.52**	**22.99**	**3.48**	**2.94**
Passed on to distribution licensee (F)	**15.68**	**15.32**	**2.32**	**1.96**
Entitlement of TPC-G (A-F)	**30.49**	**30.31**	**38.28**	**38.10**

2.24.3 The Commission approves the gain/(loss) due to variation in IoWC for Units 5,7 & Hydro as per Table 2.34 for FY 2022-23 and FY 2023-24.

2.25 REVENUE FROM SALE OF POWER (UNITS 5,7 & HYDRO)

TPC-G's submission

2.25.1 TPC-G has claimed the actual revenue from sale of power of Rs. 3653.74 Crore for FY 2022-23 comprising of revenue from fixed charges, incentive and energy charges of Rs. 684.92 Crore, Rs. 14.94 Crore and Rs. 2953.88 Crore respectively.

2.25.2 Further, TPC-G has claimed the actual revenue from sale of power of Rs. 3036.92 Crore for FY 2023-24 comprising of revenue from fixed charges, incentive and energy charges of Rs. 640.08 Crore, Rs. 16.94 Crore and Rs. 2379.91 Crore respectively. In addition to this, revenue of Rs. 6.77 Crore has been considered based on bills raised as per FAC Order, claiming total revenue of Rs. 3043.70 Crore

Commission's Analysis and Ruling

2.25.3 The Commission has considered the actual revenue from sale of power of Rs. 3653.74 Crore and Rs. 3043.70 Crore for FY 2022-23 and FY 2023-24 respectively as claimed by TPC-G.

2.26 SUMMARY OF TRUE-UP (UNITS 5,7 & HYDRO)

Commission's Analysis and Ruling

2.26.1 Based on the above analysis, the summary of True-up of Units 5,7 & Hydro for FY 2022-23 and FY 2023-24 is as shown in the Table below:

Table 2.35: Summary of True-up for FY 2022-23 and FY 2023-24 (Rs. Crore)

Particulars	FY 2022-23			FY 2023-24		
	Approved in MTR	Claimed	Approved	Approved in MTR	Claimed	Approved
Fixed Cost						
O&M expenses	440.56	463.23	463.23	457.78	488.46	488.54
Depreciation	127.17	106.48	106.45	129.06	98.52	98.35
Interest on loan and finance charges	2.72	4.89	4.89	-	1.69	0.74
Interest on working capital	44.97	46.17	45.64	53.12	40.60	40.06
Return on Equity	193.49	212.91	200.77	195.93	212.98	200.46
Income tax	-	-	-	-	-	-
Hydro incentive	-	70.57	58.71	-	68.30	56.92
Sharing of efficiency (gains) and losses-O&M		10.08	10.08	-	(13.52)	(9.70)
Sharing of efficiency (gains) and losses-IoWC		(15.68)	(15.32)	-	(2.32)	(1.96)
Less: Allocation of Unit 8 for shared capacity	11.02	10.43	10.43	10.69	9.76	9.76
Less: Non-tariff income	12.87	16.67	16.67	12.87	25.27	25.27
Sub-total	**785.01**	**871.56**	**847.33**	**812.33**	**859.67**	**838.39**
Fuel Cost						
Fuel Cost (Normative)	2,660.71	2,802.47	2,802.91	3,475.66	2,148.11	2,147.49
PLF incentive		-	-		-	-
Sharing of efficiency (gains) and losses towards fuel cost		14.65	14.68		15.98	15.86
Auxiliary consumption benefit		(4.16)	(4.16)		(5.58)	(5.58)
Sub-total	**2,660.71**	**2,812.95**	**2,813.43**	**3,475.66**	**2,158.50**	**2,157.76**
ARR	**3,445.73**	**3,684.51**	**3,660.76**	**4,287.99**	**3,018.17**	**2,996.15**
Revenue from sale of power	3,498.33	3,653.74	3,653.74	4,287.99	3,043.70	3,043.70
Revenue gap / (surplus)	**(52.60)**	**30.77**	**7.02**	**-**	**(25.52)**	**(47.54)**
Revenue gap / (surplus) approved in MTR Order		**(52.60)**	**(52.60)**		**-**	**-**
Net Revenue gap / (surplus)		**83.37**	**59.63**		**(25.52)**	**(47.54)**

2.26.2 The Commission approves the summary of True-up for Units 5,7 & Hydro as per

Table 2.35 for FY 2022-23 and FY 2023-24.

2.27 PERFORMANCE OF UNIT 8

2.27.1 Unit 8 of TPC-G is coal fired unit and has an installed capacity of 250 MW. It was commissioned on 29 March, 2009. The actual performance of Unit 8 has been compared with the approved parameters by the Commission in MTR Order. The Truing-up of performance of Unit 8 for FY 2022-23 and FY 2023-24 is discussed in subsequent paragraphs of this Chapter.

2.28 NORMS OF OPERATION (UNIT 8)

TPC-G's submission

2.28.1 TPC-G submitted the norms of operation for Unit 8 as shown in the Table below:

Table 2.36: Performance parameters for Unit 8 for FY 2022-23 and FY 2023-24 as submitted by TPC-G

Particulars	Units	FY 2022-23		FY 2023-24	
		Approved in MTR	Actual	Approved in MTR	Actual
Availability	%	90.45%	98.94%	90.89%	91.60%
PLF	%	65.17%	67.44%	78.32%	62.60%
Gross Scheduled Generation	MU	1451.35	1511.05	1720.00	1405.43
AEC	%	8.67%	7.10%	8.69%	7.27%
GSHR	kcal/kWh	2430	2346	2430	2384

2.28.2 The actual Availability is 98.94% and 91.60% for FY 2022-23 and FY 2023-24 respectively as against the norm of 85%. In accordance with Regulation 46 of the MYT Regulations, 2019, Unit 8 is entitled for recovery of full AFC for FY 2022-23 and FY 2023-24.

2.28.3 The actual GSHR is 2346 kcal/kWh and 2384 kcal/kWh for FY 2022-23 and FY 2023-24 respectively as against the norm of 2430 kcal/kWh. The actual AEC is 7.10% and 7.27% for FY 2022-23 and FY 2023-24 respectively as against the norm of 8.50%. TPC-G has considered the normative AEC of 8.67% for FY 2022-23 and 8.69% for FY 2023-24 for Unit-8 including the AEC for FGD subject to ceiling of additional auxiliary consumption norm towards FGD as specified in the MYT Regulations, 2019

Commission's Analysis and Ruling

2.28.4 The Commission notes that the actual Availability of Unit 8 as certified by MSLDC is higher than the norm of 85% as specified in Regulation 46 of the MYT Regulations, 2019. Accordingly, Unit 8 is entitled for recovery of full AFC for FY 2022-23 and FY 2023-24.

2.28.5 The Commission verified the scheduled generation from the MSLDC certificate and noted that the same is derived from net scheduled generation and actual auxiliary consumption. The Commission has considered it accordingly.

2.28.6 The actual GSHR and AEC are lower than the norms. The Commission hereby approves the normative parameters for the purpose of Truing-up and sharing of efficiency gains and losses on account of such achievement is considered in subsequent section of this Chapter.

Table 2.37: Performance parameters for Unit 8 for FY 2022-23 and FY 2023-24 approved by the Commission

Particulars	Units	FY 2022-23			FY 2023-24		
		Approved in MTR	Actual	Normative Approved	Approved in MTR	Actual	Normative Approved
Availability	%	90.45%	98.94%	85%	90.89%	91.60%	85%
PLF	%	65.17%	67.44%	67.44%	78.32%	62.60%	62.60%
Gross Generation	MU	1451.35	1511.05	1511.05	1720.00	1405.43	1405.43
AEC	%	8.67%	7.10%	8.67%*	8.69%	7.27%	8.69%*
GSHR	kcal/kWh	2430	2346	2430	2430	2384	2430

**Normative Auxiliary Consumption approved including FGD consumption*

2.28.7 The Commission approves the performance parameters for Unit 8 as per Table 2.37 for FY 2022-23 and FY 2023-24.

2.29 FUEL COST (UNIT 8)

TPC-G's submission

2.29.1 TPC-G submitted the details of fuel consumption, GCV of fuels and fuel prices as shown in the Table below:

Table 2.38: Fuel cost for Unit 8 for FY 2022-23 and FY 2023-24 as submitted by TPC-G

Particulars	Units	FY 2022-23	FY 2023-24
Fuel consumption			
Coal	MT	783635	824521
Biomass	MT	45	-
Oil (combined)	KL	154	488
GCV (As fired)			

Particulars	Units	FY 2022-23	FY 2023-24
Coal	kCal/Kg	4420	3969
Biomass	kCal/Kg	3106	-
Oil (combined)	Kcal/Litre	10449	10406
Price			
Coal	Rs/MT	15725	9181
Biomass	Rs/MT	11575	-
Oil (combined)	Rs/KL	70080	63511
Total Fuel Cost at actual generation	**Rs. Crore**	**1233.37**	**760.13**
Total Fuel Cost at scheduled generation	**Rs. Crore**	**1261.88**	**777.13**

2.29.2 Fuel Cost Adjustment due to change in methodology of computing Weighted Average fuel price has been worked out as Rs.12.35 Crore for the month of December, 2022 to March, 2023 and credit adjustment of Rs. 11.33 Crore for FY 2023-24. TPC-G has claimed this cost as part of fuel cost for FY 2022-23 and FY 2023-24.

Commission's Analysis and Ruling

2.29.3 The Commission sought the monthly fuel bills and monthly fuel receipts, calorific value and price of fuel for FY 2022-23 and FY 2023-24. The Commission has gone through such details of monthly fuel receipts, calorific value and price. The variation in fuel price and calorific value has been considered as part of FAC and has already been passed through on monthly basis.

2.29.4 While approving the normative fuel cost, the Commission has considered the actual fuel cost at scheduled generation and then arrived at normative fuel cost considering normative performance parameters. As discussed in earlier section of this Order, the Commission has considered the adjustment in fuel cost as per FAC Order as part of actual fuel cost and normative fuel cost and the same has been considered for sharing of efficiency gains and losses.

Table 2.39: Fuel cost for Unit 8 for FY 2022-23 and FY 2023-24 approved by the Commission (Rs. Crore)

Particulars	FY 2022-23	FY 2023-24
Normative fuel cost	1319.93	780.24
Actual Fuel Cost (A)	1233.37	760.13
FAC Cost adjustment (B)	12.35	(11.33)
Actual fuel cost after adjusting FAC related cost (A+B)	1245.71	748.79

Particulars	FY 2022-23	FY 2023-24
Actual fuel cost corresponding to Scheduled generation	1274.53	765.55

2.29.5 The Commission approves the fuel cost for Unit 8 as per the table above for FY 2022-23 and FY 2023-24. As discussed above, the actual fuel cost does not include the VSE fuel cost and fuel cost allowed is towards scheduled generation.

2.30 ADDITIONAL CAPITALISATION (UNIT 8)

TPC-G's submission

2.30.1 TPC-G has claimed the actual capitalisation of Rs. 1.48 Crore and Rs. 3.29 Crore as against the zero capitalisation approved in MTR Order. The claimed capitalisation is entirely towards non-DPR schemes.

Table 2.40: Additional capitalisation for Unit 8 for FY 2022-23 and FY 2023-24 as claimed by TPC-G (Rs. Crore)

Unit/Station	FY 2022-23		FY 2023-24	
	Approved in MTR	Actual	Approved in MTR	Actual
DPR schemes	0.00	0.00	0.00	0.00
Non-DPR schemes	0.00	1.48	0.00	3.29
Total	**0.00**	**1.48**	**0.00**	**3.29**

2.30.2 TPC-G requested the Commission to approve the claimed actual capitalisation in accordance with the proviso to Regulation 24.7 and Regulation 105 of the MYT Regulations, 2019.

Commission's Analysis and Ruling

2.30.3 The Commission notes that TPC-G has not claimed any DPR capitalisation. The Commission also directed TPC-G to submit the cost benefit analysis for each scheme along with the documentary evidence for all the assets put to use during FY 2022-23 and FY 2023-24. In reply, TPC-G submitted the project completion reports.

2.30.4 The Commission notes that TPC-G submitted the details of Non-DPR capitalisation for HOSS. For 2023-24, the Commission observes that the capitalisation of Rs. 0.02 Crore ought to be considered as part of R&M expenditure and hence, the same has been excluded while approving the capitalisation.

2.30.5 The Commission has gone through the submissions of TPC-G. The claimed actual capitalisation is entirely towards Non-DPR schemes. As regards the Non-DPR schemes, Hon'ble ATE in its Judgment in Appeal No. 160 of 2012 ruled as under:

> *"110. **We do not find infirmity in the State Commission restricting the capital expenditure on non-DPR schemes to 20% of the capitalisation approved for DPR Scheme**. However, we feel that the DPR schemes which had not approved and were awaiting approval of the State Commission should be considered by the State Commission and allowed after prudence check...."*

2.30.6 Regulation 24.6 of MYT Regulations, 2019 provides that the amount of capitalisation against Non-DPR schemes for any year shall not exceed 20% of the amount of capitalisation approved against DPR schemes for that year. However, the Commission may allow capitalisation against non-DPR schemes for any Year in excess of 20% on a request made by the generating company. Considering the fact that the DPR capitalization for Unit 8 for FY 2022-23 and FY 2023-24 is nil, the Commission deems it appropriate to invoke the discretionary power under proviso to Regulation 24.6 of MYT Regulations, 2019 and allow the actual Non-DPR capitalisation as claimed by TPC-G.

2.30.7 Based on the above, the additional capitalisation approved by the Commission is as shown in the Table below:

Table 2.41: Additional capitalisation for Unit 8 for FY 2022-23 and FY 2023-24 approved by the Commission (Rs. Crore)

Unit/Station	FY 2022-23			FY 2023-24		
	Approved in MTR	Actual	Approved	Approved in MTR	Actual	Approved
DPR schemes	0.00	0.00	0.00	0.00	0.00	0.00
Non-DPR schemes	0.00	1.48	1.48	0.00	3.29	3.27
Total	**0.00**	**1.48**	**1.48**	**0.00**	**3.29**	**3.27**

2.30.8 The Commission approves the additional capitalisation for Unit 8 as per the table above for FY 2022-23 and FY 2023-24.

2.31 MEANS OF FINANCE OF ADDITIONAL CAPITALISATION (UNIT 8)

TPC-G's submission

2.31.1 The means of finance for the claimed additional capitalisation has been considered in the debt-equity ratio of 70:30.

Commission's Analysis and Ruling

2.31.2 In line with the True-up of previous years, the Commission has considered the means of finance of the approved additional capitalisation in the debt: equity ratio of 70:30.

2.32 ANNUAL FIXED CHARGES (AFC) (UNIT 8)

2.32.1 Regulation 42 of the MYT Regulations, 2019 specifies the components of AFC as follows:

a. Operation and Maintenance (O&M) expenses
b. Depreciation
c. Interest on Loan
d. Interest on Working Capital (IoWC)
e. Return on Equity (RoE)
f. Income Tax

Less:

g. Non-Tariff Income (NTI)

2.33 OPERATION AND MAINTENANCE (O&M) EXPENSES (UNIT 8)

TPC-G's submission

2.33.1 TPC-G has claimed the normative O&M expenses of Rs. 74.83 Crore and Rs. 77.53 Crore for FY 2022-23 and FY 2023-24 respectively. As against the same, the actual O&M expenses for FY 2022-23 and FY 2023-24 are Rs. 53.93 Crore and Rs. 70.18 Crore respectively. The actual O&M expenses for FY 2022-23 and FY 2023-24 are lower than the normative expenses. TPC-G has not considered the amount of Rs. 1.60 Crore and Rs. 1.25 Crore towards Brand Equity for FY 2022-23 and FY 2023-24 respectively.

Commission's Analysis and Ruling

2.33.2 Regulation 47.2 of the MYT Regulations, 2019 specify the normative O&M expenses of Rs. 29.93 Lakh/MW and Rs. 31.01 Lakh/MW for FY 2022-23 and FY 2023-24 respectively for unit size of 250 MW. Accordingly, the normative O&M expenses work out to Rs. 74.83 Crore for FY 2022-23 and Rs. 77.53 Crore for FY 2023-24.

2.33.3 Further, the Commission has considered the Non-DPR related expenditure of Rs. 0.02 Crore under R&M expenses of HOSS over and above Normative O&M Expenses.

2.33.4 TPC-G has claimed the actual O&M expenses (excluding Brand Equity) of Rs. 53.93 Crore and Rs. 70.18 Crore for FY 2022-23 and FY 2023-24 respectively. The Commission has gone through the head wise details of actual expenses. The increase in actual O&M Expenses in FY 2023-24 w.r.t. previous year is on account of R&M Expenses for Unit 8.

2.33.5 As regards the actual O&M Expenses, TPC-G submitted the revised O&M Expenses for FY 2023-24. TPC-G submitted the Audited Statement in which the HoSS cost has been allocated as per the directions of the Commission in its MTR Order in Case No 221 of 2022. The Auditor, while computing the amounts on the basis guidelines provided by the Commission, has included certain expenditure under the heads of A&G, R&M and Employee expenditure which are marginally different from that presented in the Petition. The allocation of HOSS expenditure has been accordingly revised when compared with the amount presented in the Petition. Since, there is a change in allocated cost for Employees, A & G and R & M expenses in comparison with the cost submitted by TPC-G, TPC-T and TPC -D in their respective Petitions at the time of MYT filing, the O&M cost is revised for all three business of Tata Power in line with the Audited Statement. TPC-G has further adjusted and restated Employee Expenditure due to allocation of Senior Management Cost to Mundra', where TPC-G has proposed the reduction of Rs. 0.05 Crore in the actual Employee Expenses. Accordingly, the actual O&M Expenses for TPC-G for FY 2023-24 for Unit 8 are revised to Rs. 75.60 Crore w.r.t. Rs. 70.18 Crore submitted in the Petition. The Commission has considered the revised O&M Expenses for the purpose of Truing-up.

2.33.6 The Commission finds it prudent to approve the actual expenses as submitted by TPC-G as shown in the following Table:

Table 2.42: Actual and Normative O&M Expenses for Unit 8 for FY 2022-23 and FY 2023-24 approved by the Commission (Rs. Crore)

Particulars	FY 2022-23	FY 2023-24
Employee Expenses	20.18	19.89
R&M Expenses	25.90	47.21
A&G Expenses	7.85	8.50
Grand Total	**53.93**	**75.60**
Normative O&M Expenses	**74.83**	**77.53**

2.33.7 For FY 2022-23 and FY 2023-24, the actual expenses are lower than normative O&M expenses thereby, there is efficiency gain in O&M expenses. The Commission has considered the O&M expenses as controllable in accordance with the MYT Regulations, 2019. Hence, the difference between the actual O&M expenses and normative O&M expenses as approved by the Commission in this Order has been considered for computing the sharing of efficiency gain as per principles laid out in the MYT Regulations, 2019.

2.34 DEPRECIATION (UNIT 8)

TPC-G's submission

2.34.1 TPC-G has computed the depreciation by applying the rates as specified in the depreciation schedule in Annexure 1 of the MYT Regulations, 2019 and Regulation 28 of the MYT Regulations, 2019. Based on the same, TPC-G requested the Commission to approve the depreciation of Rs. 59.83 Crore and Rs. 24.84 Crore for FY 2022-23 and FY 2023-24 respectively.

Commission's Analysis and Ruling

2.34.2 In the final True-up of FY 2021-22, the Commission had approved the closing GFA for FY 2021-22 as Rs. 1,196.01 Crore. The Commission has considered the same as the opening GFA for FY 2022-23. The approved additional capitalisation has been considered as the GFA addition during the year. The deduction from GFA during the year has been considered the same as that claimed by TPC-G. The closing GFA for FY 2022-23 has been considered as the opening GFA for FY 2023-24. The approved additional capitalisation for FY 2023-24 has been considered as the GFA addition during the year FY 2023-24. The deduction from GFA during the year has been considered the same as claimed by TPC-G. The depreciation rates have been considered the same as claimed by TPC-G.

2.34.3 The depreciation approved by the Commission for FY 2022-23 and FY 2023-24 is as shown in the Table below:

Table 2.43: Depreciation for Unit 8 for FY 2022-23 and FY 2023-24 (Rs. Crore)

Particulars	FY 2022-23			FY 2023-24		
	Approved in MTR	Claimed	Approved	Approved in MTR	Claimed	Approved
Opening GFA	1196.01	1,196.01	1,196.01	1196.01	1,193.53	1,193.53
Addition	0.00	1.48	1.48	0.00	3.29	3.27
Retirement	0.00	(3.96)	(3.96)	0.00	(1.92)	(1.92)
Closing GFA	1196.01	1,193.53	1,193.53	1196.01	1,194.89	1,194.88
Depreciation rate	4.96%	5.01%	5.01%	4.96%	2.08%	2.08%
Depreciation	59.36	59.83	59.83	59.36	24.84	24.83

2.34.4 The Commission approves depreciation for Unit 8 as per the table above for FY 2022-23 and FY 2023-24.

2.35 INTEREST ON LOAN (UNIT 8)

TPC-G's submission

2.35.1 TPC-G has taken various long-term loans to finance the capital expenditure in line with the Debt: Equity ratio of 70:30. TPC-G sources long term loans at a company level for its Generation, Transmission and Distribution businesses together to have negotiation advantage to avail better terms and conditions of loans.

2.35.2 In accordance with Regulation 30.5 of the MYT Regulations, 2019, based on the actual loan drawls, interest rates and the interest paid, the weighted average interest rate for FY 2022-23 and FY 2023-24 works out to 7.91% and 9.02% respectively. TPC-G has submitted the statements received from Banks certifying the Opening Balance, Closing Balance, Interest paid, and the applicable rate of interest.

2.35.3 TPC-G has claimed the interest expenses of Rs. 10.40 Crore and Rs. 8.18 Crore for FY 2022-23 and FY 2023-24 respectively.

2.35.4 In addition to the above, TPC-G claimed finance charges of Rs. 0.59 Crore for FY 2022-23 and Rs. 0.21 Crore for FY 2023-24.

Commission's Analysis and Ruling

2.35.5 In the final True-up of FY 2021-22, the Commission had approved the closing loan balance for FY 2021-22 as Rs. 160.78 Crore. The Commission has considered the same as the opening loan balance for FY 2022-23. The debt portion of the approved additional capitalisation FY 2022-23 has been considered as the loan addition during the year. The approved depreciation for FY 2022-23 has been considered as the repayment for the year. The closing loan balance for FY 2022-23 has been considered as the opening loan balance for FY 2023-24. The debt portion of the approved additional capitalisation FY 2022-23 has been considered as the loan addition during the year. The approved depreciation for FY 2022-23 has been considered as the repayment for the year. The actual weighted average rates of interest for FY 2022-23 and FY 2023-24 have been applied to the average loan for the relevant year for computing the interest expenses for corresponding year.

2.35.6 Based on the above, the interest on loan approved by the Commission is shown in the Table below:

Table 2.44: Interest on loan for Unit 8 for FY 2022-23 and FY 2023-24 (Rs. Crore)

Particulars	FY 2022-23			FY 2023-24		
	Approved in MTR	Claimed	Approved	Approved in MTR	Claimed	Approved
Opening loan	160.78	160.78	160.78	101.42	101.98	101.98
Addition	-	1.03	1.03	-	2.30	2.29
Repayment	59.36	59.83	59.83	59.36	24.84	24.83
Closing loan	101.42	101.98	101.98	42.06	79.44	79.43
Rate of interest on loan	7.43%	7.91%	7.91%	7.43	9.02%	9.02%
Interest on loan	**9.74**	**10.40**	**10.40**	**5.33**	**8.18**	**8.18**
Finance charges	-	0.59	0.59	-	0.21	0.21

2.35.7 The finance charges as claimed by TPC-G are verified from Allocation Statement and are approved as submitted by TPC-G.

2.35.8 The Commission approves the interest on loan & finance charges for Unit 8 as per the table above for FY 2022-23 and FY 2023-24.

2.36 INTEREST ON WORKING CAPITAL (UNIT 8)

TPC-G's submission

2.36.1 Interest on Working Capital (**IoWC**) has been computed based on Regulation 32 of the MYT Regulations, 2019. For the purpose of computing the IoWC, interest rate of 9.30% and 10.07% has been considered for FY 2022-23 and FY 2023-24 respectively. TPC-G has claimed IoWC of Rs. 18.93 Crore and Rs. 13.52 Crore for FY 2022-23 and FY 2023-24 respectively.

Commission's Analysis and Ruling

2.36.2 The Commission has computed IoWC in accordance with the MYT Regulations, 2019. In accordance with Regulation 32.1 of the MYT Regulations, 2019, the working capital comprising of the following components has been considered:

(a) Cost of coal towards stock, for thirty days, for generation corresponding to lower of storage capacity or target Availability;

(b) Cost of coal, for thirty days, for generation corresponding to lower of scheduled generation or target Availability;

(c) Cost of secondary fuel oil, for two months, for generation corresponding to lower of scheduled generation or target Availability;

(d) Approved normative O&M expenses for one month;

(e) Maintenance spares at one percent of approved opening GFA;

(f) Receivables for sale of electricity to BEST equivalent to 45 days of the actual revenue from sale of electricity;

(g) minus: payables for fuels to the extent of thirty days at lower of actual generation and target Availability.

2.36.3 The Commission has considered the cost of coal and secondary fuel oil based on scheduled generation as the same is lower than target availability.

2.36.4 The rate of IoWC has been considered as 9.30% and 10.07% for FY 2022-23 and FY 2023-24 respectively in accordance with the MYT Regulations, 2019.

Table 2.45: Interest on Working Capital for Unit 8 for FY 2022-23 and FY 2023-24 (Rs. Crore)

Particulars	FY 2022-23			FY 2023-24		
	Approved in MTR	Claimed	Approved	Approved in MTR	Claimed	Approved
Working capital	187.75	203.54	201.00	193.15	134.35	132.45
Rate of interest	9.45%	9.30%	9.30%	9.45%	10.07%	10.07%
IoWC	17.74	18.93	18.69	18.25	13.52	13.33

2.36.5 The Commission approves the normative IoWC for Unit 8 as per the table above for FY 2022-23 and FY 2023-24.

2.36.6 TPC-G has claimed the actual IoWC of Rs. 9.28 Crore and Rs. 12.36 Crore for FY 2022-23 and FY 2023-24 respectively. The actual interest paid towards commercial paper at TPC-G level has been bifurcated between Unit 5, 7 & hydro and Unit 8. The Commission has verified the details of actual interest on working capital based on CA certificate submitted by TPC-G. The increase in actual interest on working capital during FY 2023-24 is on account of increase in working capital requirement as well as increase in rate of interest compared to FY 2022-23. In reply to a query, TPC-G submitted that there is no delayed payment surcharge for FY 2022-23 and FY 2023-24.

2.36.7 The Commission has considered IoWC as a controllable parameter in accordance with the MYT Regulations, 2019. Accordingly, the difference between the actual IoWC less the delayed payment surcharge and normative IoWC as approved by the Commission in this Order has been considered for computing the sharing of efficiency gains as per principles laid out in MYT Regulations, 2019.

2.37 RETURN ON EQUITY & INCOME TAX (UNIT 8)

TPC-G's submission

2.37.1 RoE has been claimed in accordance with Regulation 29 of the MYT Regulations, 2019. TPC-G has considered the Base Rate of RoE of 14%, additional rate of 0.50% for incremental ramp rate and additional rate of 1% for performance related to Mean Time Between Failure (**MTBF**). Accordingly, the total rate of RoE has been claimed as 15.50% for Unit 8. TPC-G submitted the certificate related performance of MTBF along with the Petition. For hydro stations, TPC-G has considered the rate of RoE of 15.50%.

2.37.2 TPC-G submitted that, while the Commission has allowed enhanced RoE, there is no defined procedure for measurement of such performance-based norms. However, such provisions were already given by CERC in its Tariff Regulations, 2019. NLDC, after due public consultation, had issued procedure for assessment of Ramping Capability of Thermal Inter State Generating Stations on 28 February, 2020 which was subsequently amended on 30 December, 2020 considering the practical constraints in achieving the assessment threshold specified in the Guidelines. In view of the above, TPC-G requested the Commission to allow an additional ROE of 0.50% for ramp rate performance for Unit 8.

2.37.3 With respect to the applicable rate of income tax, TPC-G submitted that Section 115BAA was introduced by Taxation Laws (Amendment) Act 2019 w.e.f. 1 April, 2020. As per this newly inserted provision, a choice was given to a domestic company to shift to new simplified tax regime with effect from FY 2021-22. Under the new tax regime benefits of MAT credit and other exemption are not allowed. It has been observed that it would be beneficial to shift to new tax regime where the business is not eligible for deduction under Section 80IA and MAT credit is not available. Accordingly, in the interest of consumers, TPC-G, for Units 5,7 & Hydro, has opted for the new regime of tax as MAT credit is not available, as this will result in lower tax outgo for the business and ultimately beneficial for the consumers. Further, as per the MYT Regulations 2019, it is required that generating company would calculate the effective tax rate without considering the impact of the actual tax paid on income from any other regulated or unregulated business or other business of the entity. Hence, it is necessary to compute the effective tax rate for TPC-G strictly on a standalone basis considering TPC-G and other businesses of Tata Power as an independent legal entity.

2.37.4 TPC-G further stated that in MTR Order, the Commission has considered tax rate as Nil for FY 2020-21 and FY 2021-22 considering that Tata power Company as a whole had not paid any tax. This issue has been challenged by TPC-G in Appeal No 481 of 2023 before the Hon'ble ATE. As the Appeal is pending and the Order on the same is yet to be issued, for FY 2022-23 and FY 2023-24, TPC-G has considered Tax Rate for grossing up of ROE as "Nil". Based on the Order of the Hon'ble ATE, it would approach the Commission for grossing up by the Tax rate at an appropriate time

2.37.5 TPC-G has claimed RoE of Rs. 55.56 Crore and Rs. 55.53 Crore for FY 2022-23 and FY 2023-24 respectively.

Commission's Analysis and Ruling

2.37.6 In the final True-up of FY 2021-22, the Commission had approved the closing equity for FY 2021-22 as Rs. 358.81 Crore. The Commission has considered the same as the opening equity for FY 2022-23, which is the same as considered by TPC-G. The equity portion of the approved additional capitalisation for FY 2022-23 has been considered as the equity addition during the year. The closing equity for FY 2022-23 has been considered as the opening equity for FY 2023-24. The equity portion of the approved additional capitalisation for FY 2023-24 has been considered as the equity addition during the year.

2.37.7 Regulation 29.2 of the MYT Regulations, 2019 specifies the Base Rate of RoE of 14%. In accordance with Regulation 29.6(a) of the MYT Regulations, 2019, the additional rate of RoE, subject to the ceiling of 0.5%, shall be allowable for incremental ramp rate. Further, in accordance with Regulation 29.6(b) of the MYT Regulations, 2019, the additional rate of RoE, subject to maximum of 1% shall be allowable for achievement of MTBF as specified in the Regulation.

2.37.8 The Base Rate of RoE has been considered as 14% in accordance with Regulation 29.2 of the MYT Regulations, 2019. The Commission notes that TPC-G has submitted certificate related to the performance with respect to the ramping rate for FY 2022-23 and FY 2023-24 in response to specific query raised by the Commission. Based on the MSLDC certificate, it is noted that Unit 8 is not eligible for additional incentive of 0.5% for ramp rate for FY 2022-23 as well as FY 2023-24. Accordingly, the Commission has not considered the additional RoE towards incremental ramp rate as specified in Regulation 29.6(a) of the MYT Regulations, 2019.

2.37.9 Further, TPC-G has submitted the MSLDC certificate for actual MTBF for FY 2022-23 and FY 2023-24 along with Petition. The actual MTBF for Unit 8 is 362.50 days and 182.10 days respectively for FY 2022-23 and FY 2023-24. Accordingly, the Commission has considered the additional rate of 1% for achievement of MTBF of above 120 days for FY 2022-23 and FY 2023-24. Accordingly, the Commission has considered the rate of RoE of 15.00% for Unit 8 for FY 2022-23 and FY 2023-24.

2.37.10 The Commission notes that actual tax payable by TPC (company as a whole) is zero. Hence, the effective rate as per the provisions of Regulations works out to Nil. Therefore, the Commission deems it prudent to consider effective tax rate of 0% for FY 2022-23 and FY 2023-24. The Commission notes that TPC-G has filed an Appeal before Hon'ble ATE on the issue of the income tax allowed for FY 2020-21 and FY 2021-22 vide the MTR Order and the matter is pending before the Hon'ble ATE.

2.37.11 Accordingly, the RoE approved by the Commission for Unit 8 for FY 2022-23 and FY 2023-24 is given in Table below:

Table 2.46: RoE for Unit 8 for FY 2022-23 and FY 2023-24 as approved by the Commission (Rs. Crore)

Particulars	FY 2022-23			FY 2023-24		
	Approved in MTR	Claimed	Approved	Approved in MTR	Claimed	Approved
Opening equity	358.81	358.81	358.81	358.81	358.06	358.06
Addition	-	0.44	0.44	-	0.99	0.98
Reduction of equity towards de-capitalised assets	-	(1.19)	(1.19)	-	(0.58)	(0.58)
Closing equity	358.81	358.06	358.06	358.81	358.47	358.47
Rate of Return	14.00%	15.50%	15.00%	14.00%	15.50%	15.00%
RoE	**50.53**	**55.56**	**53.77**	**50.53**	**55.53**	**53.74**

2.37.12 The Commission approves RoE for Unit 8 as per the table above for FY 2022-23 and FY 2023-24.

2.38 NON-TARIFF INCOME (NTI) (UNIT 8)

TPC-G's submission

2.38.1 TPC-G has claimed NTI of Rs. 0.56 Crore and debit of Rs. 2.34 Crore for FY 2022-23 and FY 2023-24 respectively.

Commission's Analysis and Ruling

2.38.2 The Commission notes that the debit income of Rs. 2.34 Crore for FY 2023-24 is on account of debit balance of Rs. 2.75 Crore for sale of fly ash wherein the expenses incurred are more than income from sale of fly ash. The Commission notes that, TPC-G has been considering the net income from sale of fly ash under NTI. The Commission accepts the NTI as claimed by TPC-G. Accordingly, the Commission approves NTI of Rs. 0.56 Crore and debit of Rs. 2.34 Crore for FY 2022-23 and FY 2023-24 respectively.

2.39 ANNUAL FIXED CHARGES (AFC) (UNIT 8)

Commission's Analysis and Ruling

2.39.1 Based on the above, the AFC approved by the Commission in the final true-up, that is fully recoverable at Target Availability is as shown in the Table below:

Table 2.47: AFC for Unit 8 for FY 2022-23 and FY 2023-24 (Rs. Crore)

Particulars	FY 2022-23			FY 2023-24		
	Approved in MTR	Claimed	Approved	Approved in MTR	Claimed	Approved
O&M expenses	74.83	74.83	74.83	77.53	77.53	77.55
Depreciation	59.36	59.83	59.83	59.36	24.84	24.83
Interest on loan and finance charges	9.74	10.99	10.99	5.33	8.39	8.39
Interest on working capital	17.74	18.93	18.69	18.25	13.52	13.33
Return on Equity	50.23	55.56	53.77	50.23	55.53	53.74
Add: Allocation from shared capacity	11.02	10.43	10.43	10.69	9.76	9.76
Less: Non-tariff income	3.42	0.56	0.56	3.42	(2.34)	(2.34)
Annual Fixed Charges	**219.50**	**230.00**	**227.98**	**217.97**	**191.91**	**189.95**

2.39.2 The Commission approves AFC for Unit 8 as per the table above for FY 2022-23 and FY 2023-24.

2.40 SHARING OF GAINS AND LOSSES (UNIT 8)

2.40.1 The Commission in its MYT Tariff Regulations, 2019 has provided the following methodology for treatment of sharing and gains and sharing of losses:

"11. Mechanism for sharing of gains or losses on account of controllable factors—

11.1 The approved aggregate gain to the Generating Company or Licensee or MSLDC on account of controllable factors shall be dealt with in the following manner: —

(a) Two-third of the amount of such gain shall be passed on as a rebate in Tariff over such period as may be stipulated in the Order of the Commission under Regulation 8.4;

(b) The balance amount of such gain shall be retained by the Generating Company or Licensee or MSLDC.

11.2 The approved aggregate loss to the Generating Company or Licensee or MSLDC on account of controllable factors shall be dealt with in the following manner: —

(a) One-third of the amount of such loss may be passed on as an additional charge in Tariff over such period as may be stipulated in the Order of the Commission under Regulation 8.4;

(b) The balance amount of such loss shall be absorbed by the Generating Company or Licensee or MSLDC."

2.40.2 TPC-G has submitted the actual expenditure under various heads. The gains and loss on account of controllable factors has been computed and the sharing between the beneficiaries and TPC-G has been worked out as under:

2.41 GAIN/(LOSS) ON ACCOUNT OF FUEL COST FOR UNIT 8

TPC-G's submission

2.41.1 As per the MYT Regulations 2019, the changes in fuel cost due to operational parameters of the generation units would be considered as controllable. Accordingly, Gains/Losses on account of fuel costs are worked out as below:

Table 2.48: Gain/(loss) due to variation in GSHR for Unit 8 for FY 2022-23 and FY 2023-24 as submitted by TPC-G

Particulars	FY 2022-23	FY 2023-24
Fuel Cost (Rs. Crore)	1261.88	777.13
Cost of generation (normative) (Rs/kWh)	8.653	5.635
Gross generation (MU)	1511.05	1,405.43
Fuel Cost applying Normative Heat Rate (Rs. Crore)	1307.55	792.03
Net Gains/ (Loss) (Rs. Crore)	45.67	14.90
Passed on to the distribution licensees (Rs. Crore)	30.45	9.93

Commission's Analysis and Ruling

2.41.2 The Commission has computed the sharing efficiency gain or losses on account of variation in GSHR for FY 2022-23 and FY 2023-24 as shown in the following Table:

Table 2.49: Gain/(Loss) due to variation in GSHR for Unit 8 for FY 2022-23 and FY 2023-24 approved by the Commission

Particulars	FY 2022-23	FY 2023-24
Fuel Cost (Rs. Crore) corresponding to scheduled generation (A)	1274.53	765.55
Fuel Cost applying Normative Heat Rate (Rs. Crore) (B)	1319.93	780.24
Net Gains/ (Loss) (C=B-A) (Rs. Crore)	45.40	14.69
Passed on to the distribution licensees (D=C*2/3) (Rs. Crore)	**30.27**	**9.79**
Entitlement of TPC-G (B-D) (Rs. Crore)	**1,289.66**	**770.45**

2.41.3 The Commission approves the gain due to variation in GSHR for Unit 8 as per the table above for FY 2022-23 and FY 2023-24.

2.42 GAIN/(LOSS) ON ACCOUNT OF AEC FOR UNIT 8

TPC-G's submission

2.42.1 TPC-G submitted the efficiency gains/(loss) due to variation in AEC for FY 2022-23 and FY 2023-24 as shown in the Table below:

Table 2.50: Gain/(loss) due to variation in AEC for Unit 8 for FY 2022-23 and FY 2023-24 as claimed by TPC-G

Particulars	FY 2022-23	FY 2023-24
Gross Generation (MU)	1511.05	1405.43
Normative AEC (%)	8.67%	8.69%
Actual AEC (%)	7.10%	7.27%
Difference in Net Generation (MU)	23.76	19.91
Energy Charge Rate (Rs./kWh)	9.474	6.172
Gain / (Loss) (Rs. Crore)	22.51	12.29
Passed on to the distribution licensees (Rs. Crore)	15.01	8.19
Share by TPC-G (Rs. Crore)	7.50	4.10

Commission's Analysis and Ruling

2.42.2 The Commission has computed sharing of efficiency gain or losses on account of variation in AEC for FY 2022-23 and FY 2023-24 as shown in the Table below:

Table 2.51: Gain/(loss) due to variation in AEC for Unit 8 for FY 2022-23 approved by the Commission

Particulars	FY 2022-23	FY 2023-24
Gross Generation (MU)	1511.05	1405.43
Normative AEC (%)	8.67%	8.69%
Actual AEC (%)	7.10%	7.27%
Difference in Net Generation (MU)	23.76	19.91
Energy Charge Rate (Rs./kWh)	9.564	6.080
Gain / (Loss) (Rs. Crore)	22.72	12.11
Passed on to the distribution licensees (Rs. Crore)	15.15	8.07
Entitlement of TPC-G (Rs. Crore)	**7.57**	**4.04**

2.42.3 The Commission approves gain due to variation in AEC for Unit 8 as per the table above for FY 2022-23 and FY 2023-24.

2.43 GAIN/(LOSS) ON ACCOUNT OF O&M EXPENSES FOR UNIT 8

TPC-G's submission

2.43.1 TPC-G submitted the computation of efficiency gains on account of O&M expenses as Rs. 20.90 Crore and Rs. 7.34 Crore for FY 2022-23 and FY 2023-24 respectively. Accordingly, net gain/(loss) of Rs. 13.93 Crore and Rs. 4.90 Crore is to be passed on to distribution licensees.

Commission's Analysis and Ruling

2.43.2 The Commission has computed the sharing of efficiency gain on account of variation in O&M expenses as shown in the Table below:

Table 2.52: Gain/(loss) due to variation in O&M expenses for Unit 8 for FY 2022-23 and FY 2023-24 (Rs. Crore)

Particulars	FY 2022-23		FY 2023-24	
	Claimed	Allowable	Claimed	Allowable
Normative O&M (excluding water charges) (A)	74.83	74.83	77.53	77.53
Actual O&M (excluding water charges) (B)	53.93	53.93	70.18	75.60
Gain/(loss) (C=A-B)	20.90	20.90	7.34	1.93
Passed on to distribution licensee (D)	13.93	13.93	4.90	1.28
Add: Non-DPR capitalisation considered under R&M (E)	-	-	-	0.02
Entitlement of TPC-G (A-D+E)	60.89	60.89	72.63	76.27

2.43.3 The Commission approves the gain due to variation in O&M expenses for Unit 8 as per Table 2.52 for FY 2022-23 and FY 2023-24.

2.44 GAIN/(LOSS) ON ACCOUNT OF IOWC FOR UNIT 8

TPC-G's submission

2.44.1 TPC-G submitted the computation of efficiency gains/(loss) on account of IoWC as Rs. 9.64 Crore and Rs. 1.16 Crore for FY 2022-23 and FY 2023-24 respectively. Accordingly, net gain of Rs. 6.43 Crore and Rs. 0.77 Crore is to be passed on to distribution licensees.

Commission's Analysis and Ruling

2.44.2 The Commission has computed the sharing of efficiency gain on account of variation in IoWC as shown in the Table below:

Table 2.53: Gain/(loss) due to variation in IoWC for Unit 8 for FY 2022-23 and FY 2023-24 (Rs. Crore)

Particulars	FY 2022-23		FY 2023-24	
	Claimed	Approved	Claimed	Approved
Normative IoWC (A)	18.93	18.69	13.52	13.33
Actual IoWC (B)	9.28	9.28	12.36	12.36
DPS received (C)	-	-	-	-
Net actual IoWC (D=maximum of (B-C), 0)	9.28	9.28	12.36	12.36
Gain/(loss) (E=A-D)	9.64	9.41	1.16	0.97
Passed on to distribution licensee (F)	6.43	6.27	0.77	0.65
Entitlement of TPC-G (A-F)	12.50	12.42	12.75	12.69

2.44.3 The Commission approves the gain due to variation in IoWC for Unit 8 as per the table above for FY 2022-23 and FY 2023-24.

2.45 REVENUE FROM SALE OF POWER (UNIT 8)

TPC-G's submission

2.45.1 For FY 2022-23, TPC-G has claimed the actual revenue from sale of power of Rs. 1534.97 Crore as per Audited Accounts comprising of revenue from fixed charges, and energy charges of Rs. 231.71 Crore and Rs. 1303.26 Crore respectively.

2.45.2 For FY 2023-24, TPC-G has claimed the actual revenue from sale of power of Rs. 1010.93 Crore as per Audited Accounts comprising of revenue from fixed charges, and energy charges of Rs. 217.97 Crore and Rs. 792.96 Crore respectively.

Commission's Analysis and Ruling

2.45.3 The Commission has considered the actual revenue from sale of power of Rs. 1534.97 Crore and Rs. 1010.93 Crore for FY 2022-23 and FY 2023-24 respectively as claimed by TPC-G and verified as per Audited Accounts.

2.46 SUMMARY OF TRUE-UP (UNIT 8)

Commission's Analysis and Ruling

2.46.1 Based on the above analysis, the summary of final True-up of Unit 8 for FY 2022-23 and FY 2023-24 is as shown in the Table below:

Table 2.54: Summary of final True-up of Unit 8 for FY 2022-23 and FY 2023-24 approved by the Commission (Rs. Crore)

Particulars	FY 2022-23			FY 2023-24		
	Approved in MTR	Claimed	Approved	Approved in MTR	Claimed	Approved
Fixed Cost						
O&M expenses	74.83	74.83	74.83	77.53	77.53	77.55
Depreciation	59.36	59.83	59.83	59.36	24.84	24.83
Interest on loan and finance charges	9.74	10.99	10.99	5.33	8.39	8.39
Interest on working capital	17.74	18.93	18.69	18.25	13.52	13.33
Return on Equity	50.23	55.56	53.77	50.23	55.53	53.74
Income tax	-	-	-			
Sharing of efficiency (gains) and losses-O&M	-	(13.93)	(13.93)	-	(4.90)	(1.28)
Sharing of efficiency (gains) and losses-IoWC	-	(6.43)	(6.27)	-	(0.77)	(0.65)
Add: Allocation from shared capacity	11.02	10.43	10.43	10.69	9.76	9.76
Less: Non-tariff income	3.42	0.56	0.56	3.42	(2.34)	(2.34)
Sub-total	**219.50**	**209.65**	**207.78**	**217.97**	**186.24**	**188.02**
Fuel Cost						
Fuel Cost (Normative)	1,206.97	1,319.90	1,319.93	1,246.92	780.70	780.24
PLF incentive	-	-	-	-	-	-
Sharing of efficiency (gains) and losses towards fuel cost	-	(30.45)	(30.27)	-	(9.93)	(9.79)
Auxiliary consumption benefit	-	7.50	7.57	-	4.10	4.04
Sub-total	**1,206.97**	**1,296.96**	**1,297.24**	**1,246.92**	**774.86**	**774.48**
ARR	**1,426.48**	**1,506.60**	**1,505.01**	**1,464.89**	**961.10**	**962.50**
Revenue from sale of power	1,438.68	1,534.97	1,534.97	1,464.89	1,010.93	1,010.93
Revenue gap/(surplus)	**(12.21)**	**(28.37)**	**(29.96)**	**-**	**(49.83)**	**(48.43)**
Revenue gap/(surplus) approved in MTR Order		(12.21)	(12.21)	-	-	-
Net Revenue gap/(surplus)		**(16.16)**	**(17.76)**	**-**	**(49.83)**	**(48.43)**

2.46.2 The Commission approves the final True-up of Unit 8 as per the table above for FY 2022-23 and FY 2023-24.

2.46.3 The Commission has considered the revenue gap/(surplus) on account of final True-up of FY 2022-23 and FY 2023-24 in computing the cumulative revenue gap/(surplus) up to FY 2024-25 in Chapter 5 of the Order.

3 PROVISIONAL TRUE-UP FOR FY 2024-25

3.1 BACKGROUND

3.1.1 The Commission, vide the MTR Order dated 31 March, 2023 in Case No. 221 of 2022, approved the revised Tariff for FY 2024-25. TPC-G, in the present Petition has sought the Provisional True-up for FY 2024-25 based on the actual performance for H1 of FY 2024-25 and estimated performance for H2 of FY 2024-25. The analysis of the True-up undertaken by the Commission is provided below.

3.1.2 TPC-G further submitted that the earlier PPA dated 28 March, 2019 was having a term upto 31st March, 2024 with TPC-D and BEST. The existing PPA has been extended further, till 31 March, 2029 based on the directions of the Commission in its Order dated 17 February, 2023 in Case No 39 of 2023.

3.2 GENERATION CAPACITY

3.2.1 TPC-G has the installed capacity of 1377 MW comprising of thermal capacity of 930 MW and hydel capacity of 447 MW, fully contracted with BEST and TPC-D.

Table 3.1: Generation capacity

Unit/Station	Type of fuel	Installed capacity	BEST Share		TPC-D Share	
		MW	MW	%	MW	%
Unit 5	Coal, Oil and Gas	500	256	51.17%	244	48.83%
Unit 7	Gas	180	92	51.17%	88	48.83%
Unit 8	Coal	250	100	40.00%	150	60.00%
Total Thermal (A)		**930**	**448**		**482**	
Bhira	-	300	154	51.17%	146	48.83%
Bhivpuri	-	75	38	51.17%	37	49.83%
Khopoli	-	72	37	51.17%	35	48.83%
Total Hydro (B)		**447**	**229**		**218**	
Grand Total (A+B)		**1377**	**677**		**700**	

3.3 NORMS OF OPERATION

3.3.1 The Commission has approved the norms of operation for FY 2024-25 based on the norms specified in the MYT Regulations, 2019 and considering other aspects as detailed out in the MTR Order. TPC-G has submitted the actual performance for H1 of FY 2024-25 and estimates for H2 of FY 2024-25. TPC-G's submissions on the performance for FY 2024-25 and the Commission's analysis is detailed hereunder.

3.4 AVAILABILITY

TPC-G's submission

3.4.1 The Availability for FY 2024-25 is as shown in the Table below:

Table 3.2: Availability for FY 2024-25 as submitted by TPC-G

Unit/Station	Target Availability	Actual for H1	Estimate for H2	Total Estimate	Claimed for Provisional True-up
Thermal					
Unit 5	85.00%	89.83%	52.52%	68.83%	68.83%
Unit 7	85.00%	99.27%	99.00%	99.00%	85.00%
Unit 8	85.00%	98.02%	98.00%	98.01%	85.00%
Hydro					
Bhira	90.00%	100.00%	99.71%	99.85%	90.00%
Bhivpuri	90.00%	93.08%	99.87%	99.87%	90.00%
Khopoli	90.00%	99.96%	66.67%	83.32%	90.00%

3.4.2 TPC-G submitted that the availability of Unit 5 is considered lower on account emergency shutdown on 22 September, 2024. At present, it is estimated that Unit 5 will be out for three months and hence, availability is computed considering this outage period. For Unit 7 the estimated availability is 99%, however, 85% availability has been considered for Provisional Truing-up purpose. Further, in case of Hydro, outage of BPSU from the month of November, 2024 to February, 2025 for BPSU overhaul for SS, SV Replacement Guide vane seal replacement, Rotor Pole Inspection and Stress Reliving has been planned. However, considering the Unit 5 outage, MSLDC has not approved the planned outage of BPSU till filing of the Petition. Hence, for Provisional Truing-up, Availability has been considered as 90% for FY 2024-25 for Bhira, Bhivpuri and Khopoli.

Commission's Analysis and Ruling

3.4.3 The Commission notes that the estimated Availability of all thermal generating Units and hydro generating stations are greater than the normative Availability as specified in the MYT Regulations, 2019, except for Unit 5 and Khopoli. For the purpose of Provisional True-up, the Commission has considered the Availability as submitted by TPC-G.

3.4.4 Since the Commission has considered Availability higher than the target Availability, TPC-G will be entitled to recover the full fixed charges at target Availability of 85%

and 90% for Thermal and Hydro Generating Units, respectively, as stipulated in the MYT Regulations, 2019, except Unit 5. As regards Unit 5, the Commission has considered the reduction in AFC on account of lower estimated Availability, which has been detailed in subsequent section of this Chapter.

3.5 GROSS GENERATION

TPC-G's submission

3.5.1 The schedule gross generation for FY 2024-25 is as shown in the Table below:

Table 3.3: Gross generation for FY 2024-25 as claimed by TPC-G (MU)

Unit/Station	Approved in MTR	Actual for H1	Estimate for H2	Total Estimate
Thermal				
Unit 5	3,359.00	1,385.94	619.04	2,004.98
Unit 7	1,198.00	754.41	692.50	1,446.91
Unit 8	1,906.00	757.03	781.83	1,538.86
Total Thermal	**6,463.00**	**2,897.38**	**2,093.37**	**4,990.75**
Hydro				
Bhira	910.00	589.77	309.00	898.77
Bhivpuri	292.00	173.92	180.00	353.92
Khopoli	282.00	183.13	125.00	308.13
Total Hydro	**1,484.00**	**946.82**	**614.00**	**1,560.82**
Total	7,947.00	3,844.20	2,707.37	6,551.57

3.5.2 TPC-G submitted that the primary reason for lower generation of Unit 5 is that the Unit was taken out on emergency on 22 September, 2024 at around 16:14 hrs. The same was due to fire that got initiated in the Cable vault under the Control Room Area, and it travelled to Control Room panels which necessitated the Emergency Safe Shut Down of the unit. In order to quench the fire, the Fire fighters from Mumbai Fire brigade arrived at site and helped in firefighting. In all, firefighters from Tata Power Trombay, BPCL, RCF, Aegis, and HPCL and Mumbai Fire brigade worked together to douse the fire on 23 September, 2024. at around 05.30 hrs the fire was doused i.e., after a period of about 13 hours and 16 minutes.

3.5.3 The estimated generation for Unit 8 is lower compared to generation approved in MTR Order because of lower demand from distribution licensees.

Commission's Analysis and Ruling

3.5.4 The Commission sought the justification for the estimated generation as against the approved generation for the respective Units. In reply, TPC-G submitted that the generation has been considered as per the estimated demand provided by the distribution licensees. The Commission deems it appropriate to consider the estimated gross generation as submitted by TPC-G for the purpose of Provisional Truing-up.

3.6 AUXILIARY ENERGY CONSUMPTION

TPC-G's submission

3.6.1 In line with the approach adopted by the Commission in MTR Order for approval of Provisional Truing-up, TPC-G has considered the auxiliary consumption equal to the normative Auxiliary consumption (AEC) for the purpose of Provisional Truing-up of FY 2024-25. The AEC for FY 2024-25 is as shown in the Table below:

Table 3.4: AEC for FY 2024-25 as claimed by TPC-G

Unit/Station	Approved in MTR	Actual for H1	Estimate for H2	Total Estimate	Claimed for Provisional Truing-up
Thermal					
Unit 5	6.00%	6.61%	7.40%	6.86%	6.00%
Unit 7	2.75%	2.39%	2.61%	2.50%	2.75%
Unit 8	8.50%	7.02%	7.12%	7.07%	8.50%
Hydro					
Bhira	1.00%	1.24%	1.26%	1.25%	1.00%
Bhivpuri	1.20%	1.48%	1.28%	1.38%	1.20%
Khopoli	1.20%	2.24%	1.88%	2.10%	1.20%

Commission's Analysis and Ruling

3.6.2 As regards the AEC of Unit 5, the Commission, in the MYT Order ruled as under:

> *"7.7.10* ***In view of the above, the Commission decides to approve the normative Auxiliary Consumption of 6.00% for Unit 5 and 8.50% for Unit 8 as per MYT Regulations, 2019 without consumption for FGD. The actual auxiliary consumption of FGD shall be considered at time of truing up based on actuals subject to ceiling of additional auxiliary consumption norm towards FGD as specified in MYT Regulations, 2019. Further, the Commission directs that all necessary metering arrangements shall be undertaken by TPC-G for measurement of Auxiliary consumption for FGDs of Unit 5 and Unit 8****."*

3.6.3 As regards AEC of Unit 7, the Commission, in the MYT Order, ruled as under:

> *"7.7.13 The Commission notes the submission of TPC-G. It is also noted that additional capitalisation has been allowed to TPC-G from time to time for improvement of performance of Generating units. The CERC (Terms and*

Conditions of Tariff) Regulations, 2019 also provide the identical norms for Gas based /CCGT Generating stations. Hence, the Commission is not inclined to relax the norms towards Auxiliary consumption of Unit 7 and approves Auxiliary consumption of 2.75% for Unit 7 for 4th Control Period. However, considering the historical actual auxiliary consumption of Unit 7 and considering the dispensation mentioned in the Statement of Reasons for the CERC (Terms and Conditions of Tariff) Regulations, 2019 for coastal plants as pointed out by TPC-G, the Commission may consider to allow the actual auxiliary consumption, if it is higher than normative value of 2.75%, at the time of truing up, subject to ceiling of auxiliary consumption of 3%, if TPC-G proves the impact of sea water cooling system on the Unit 7 Auxiliary consumption with necessary details at the time of truing up."

3.6.4 As regards AEC of hydro stations, the Commission, in the MYT Order ruled as under:

"7.7.14 Regarding the Hydro Generating Stations, the Commission notes that norms for Auxiliary consumption are specified in Regulation 48.3 of MYT Regulations, 2019. ***Accordingly, the Commission approves the normative Auxiliary Consumption of 1.20% for Khopoli & Bhivpuri Hydro Generating Stations and 1% for Bhira Hydro Generating Station****.*

7.7.15 … the Commission deems it appropriate to consider the auxiliary consumption towards Headworks Consumption and Pumped Energy for Nallah diversion Schemes based on actuals at the time of truing up subject to ceiling of 0.18% for headworks consumption and 0.34% towards Pumped Energy for Nallah diversion…"

3.6.5 For the purpose of Provisional True-up, the Commission has considered the normative AEC as approved in the MYT Order. However, as mentioned in the MYT Order, if the actual AEC is higher than the normative AEC, the Commission shall take a view on the allowable AEC at the time of final True-up.

Table 3.5: AEC for FY 2024-25 approved by the Commission

Unit/Station	Approved in MTR	FY 2024-25	
		Estimates	Normative Approved
Thermal			
Unit 5	6.00%	6.86%	6.00%
Unit 7	2.75%	2.50%	2.75%
Unit 8	8.50%	7.07%	8.50%
Hydro			
Bhira	1.00%	1.25%	1.00%
Bhivpuri	1.20%	1.38%	1.20%
Khopoli	1.20%	2.10%	1.20%

3.6.6 The Commission approves AEC as per Table 3.5 for FY 2024-25.

3.7 GROSS STATION HEAT RATE (GSHR)

TPC-G's submission

3.7.1 For the purpose of Provisional Truing-up, TPC-G has claimed Heat rate as per norms specified in MYT Regulations, 2019. The GSHR for FY 2024-25 is as shown in the Table below:

Table 3.6: GSHR for FY 2024-25 as claimed by TPC-G (kcal/kWh)

Unit/Station	Approved in MYT	Actual for H1	Estimate for H2	Total Estimate	Claimed for Provisional Truing-up
Unit 5	2,549.00	2,589.76	2,645.00	2,607.18	2,549.00
Unit 7	2,035.00	1,966.67	1,990.84	1,978.30	2,035.00
Unit 8	2,430.00	2,375.37	2,370.03	2,372.66	2,430.00

Commission's Analysis and Ruling

3.7.2 For the purpose of provisional true-up, the Commission has considered the normative GSHR as approved in the MYT Order as per norms specified in MYT Regulations, 2019 as shown in the following Table:

Table 3.7: GSHR for FY 2024-25 approved by the Commission (kcal/kWh)

Unit/Station	Approved in MTR	FY 2024-25	
		Estimate	Normative Approved
Unit 5	2549.00	2,607.18	2549.00
Unit 7	2035.00	1,978.30	2035.00
Unit 8	2430.00	2,372.66	2430.00

3.7.3 The Commission approves GSHR as per Table 3.7 for FY 2024-25.

3.8 FUEL COST

TPC-G's submission

3.8.1 TPC-G has estimated the fuel cost based on the actual fuel cost with scheduled generation for H1 of FY 2024-25 and estimated fuel cost for H2 of FY 2024-25 considering the estimated generation and the Energy Charge Rate computed based on the Weighted Average rate of July, 2024 to September, 2024. The estimated Unit wise fuel cost for FY 2024-25 as shown in the Table below:

Table 3.8: Fuel cost for FY 2024-25 as claimed by TPC-G (Rs. Crore)

Unit/Station	Actual for H1	Estimate for H2	Total Estimate
Unit 5	744.45	325.26	1,069.71
Unit 7	355.10	342.85	697.95
Unit 8	371.92	404.85	776.80
Total	**1471.47**	**1072.96**	**2544.46**

3.8.2 In addition to the above, as explained in the Section for Truing up of FY 2022-23 and FY 2023-24, TPC-G has been directed by the Commission in its FAC Orders for April-June 2024 to pass a credit adjustment of Rs 0.87 Crore for change in methodology of computation of Weighted Average fuel Cost on the basis for Unit 5 and Unit 7 and Rs. 0.47 Crore for Unit 8.

Commission's Analysis and Ruling

3.8.3 The Commission notes that TPC-G submitted the actual fuel cost for H1 of FY 2024-25 and estimated fuel cost for H2 of FY 2024-25. The Commission sought the latest fuel price from TPC-G for the period from October, 2024 to December, 2024. The Commission observed that there is marginal difference in fuel prices for the period from October, 2024 to December, 2024 and fuel prices considered by TPC-G.

3.8.4 The Commission has considered the credit adjustment of Rs. 0.87 Crore for Unit 5 and Rs. 0.47 crore for Unit 8 because of change in methodology as per FAC Orders.

3.8.5 In view of the above, the Commission approves the fuel cost as submitted by TPC-G for the purpose of Provisional Truing-up as shown in Table below.

Table 3.9: Fuel cost for FY 2024-25 approved by the Commission (Rs. Crore)

Unit/Station	Claimed	Approved	Claimed corresponding to Scheduled Generation	Approved corresponding to Scheduled Generation
Unit 5	1,069.71	1,069.71	1,091.84	1,091.84
Unit 7	697.95	697.95	701.96	701.96
Unit 8	776.80	776.80	775.03	775.03
Total	**2544.46**	**2544.46**	**2,568.83**	**2,568.83**

3.8.6 The Commission approves the fuel cost as per the table above for FY 2024-25.

3.9 ADDITIONAL CAPITALISATION

TPC-G's submission

3.9.1 TPC-G has claimed the capitalisation of Rs. 47.30 Crore for Units 5,7 & Hydro as against the approved capitalisation of Rs. 44.55 Crore. TPC-G has claimed Non-DPR capitalisation of Rs. 5 Crore for Unit 8 for FY 2024-25.

Table 3.10: Additional capitalisation for FY 2024-25 as claimed by TPC-G (Rs. Crore)

Particulars	Units 5,7 & Hydro		Unit 8	
	Approved in MTR	Claimed	Approved in MTR	Claimed
DPR capitalisation	44.05	35.26	0.00	0.00
Non-DPR capitalisation	0.50	12.04	6.33	5.00
Total	**44.55**	**47.30**	**6.33**	**5.00**

Commission's Analysis and Ruling

3.9.2 The Commission has analysed the detail scheme wise estimated capitalisation provided by TPC-G. The DPR schemes which have been in principle approved by the Commission have been considered for approval.

3.9.3 The Commission notes that TPC-G, initially, had estimated capitalisation of Rs. 35.26 Crore towards DPR for Installation of Control Gates for BTRP (Operationalisation of Bhira Pumped Storage Unit in Pumping mode). Thereafter, TPC-G revised the estimated capitalisation towards this scheme and claimed capitalization of Rs. 45.74 Crore in FY 2024-25 and Rs. 9.00 Crore in FY 2025-26 vide its additional submission 14 January, 2025. TPC-G has claimed the part capitalisation of Rs. 1.58 Crore in FY 2022-23 and estimated capitalisation of Rs. 54.74 Crore in FY 2024-25 and FY 2025-26. The Commission, while approving the capitalisation of FY 2022-23 has not approved the part capitalisation of Rs. 1.58 Cr. in FY 2022-23 as asset is yet to be put for use. The Commission notes that the scheme is estimated to be completed in FY 2025-26. The Commission notes that, TPC-G has claimed the Special Allowance from FY 2025-26 onwards. Hence, the Commission has provisionally considered the remaining capitalisation towards this scheme in FY 2024-25 itself and will consider actual capitalisation at the time of final Truing-up of FY 2024-25. Further, majority of the capitalization of this scheme (i.e. Rs. 45.74 Cr out of Rs. 56.32 Cr.) has been claimed by TPC-G in FY 2024-25. Accordingly, the Commission has considered total capitalisation of Rs. 56.32 Crore in FY 2024-25, which is total capital expenditure of the said scheme. Post completion of the scheme, actual capitalization may be claimed by TPC-G at the time of Truing up of respective years.

3.9.4 Further, Regulation 24.7 of the MYT Regulations, 2019 specifies that the cumulative amount of capitalisation against non-DPR schemes for any Year shall not exceed 20% or such other limit as may be stipulated by the Commission through an Order, of the cumulative amount of capitalisation approved against DPR schemes for that Year.

However, the Commission may allow capitalisation against non-DPR schemes for any Year in excess of 20% on a request made by the generating company. In line with the approach adopted by the Commission in earlier part of this Order for truing up for FY 2022-23 and FY 2023-24, the Commission allows the capitalisation towards Non-DPR schemes in such way that cumulative Non-DPR capitalisation for 4th Control period shall be 20% of the DPR capitalisation. Accordingly, the Commission has approved capitalisation towards Non-DPR schemes Unit 5, 7 & hydro for FY 2024-25 so that cumulative capitalisation towards Non-DPR schemes for 4th Control Period shall be at 20% of DPR capitalisation as shown in the following Table:

Table 3.11: Non-DPR capitalisation as approved by the Commission (Rs. Crore)

Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
DPR	27.31	36.84	14.23	8.23	56.32
Non-DPR	5.46	6.28	8.11	8.74	-
Total	**32.77**	**43.12**	**22.34**	**16.97**	**56.32**
Cumulative Non-DPR as % of DPR	*20%*	*18%*	***25%***	***33%***	***20%***

3.9.5 As regards Unit 8, TPC-G has claimed the Non-DPR capitalisation of Rs. 5 Crore. For approving the Non-DPR capitalisation for Unit 8, the Commission has considered the average capitalisation approved for past years viz. FY 2021-22 to FY 2023-24. Accordingly, the capitalisation of Rs. 1.90 Crore is provisionally approved for FY 2024-25 for Unit 8 towards Non-DPR capitalisation.

3.9.6 Based on the above, the additional capitalisation approved by the Commission is as shown in the Table below:

Table 3.12: Additional capitalisation for FY 2024-25 approved by the Commission (Rs. Crore)

Particulars	Units 5,7 & Hydro			Unit 8		
	Approved in MTR	Claimed	Approved	Approved in MTR	Claimed	Approved
DPR capitalisation	44.05	35.26	56.32	0.00	0.00	0.00
Non-DPR capitalisation	0.50	12.04	0.00	6.33	5.00	1.90
Total	**44.55**	**47.30**	**56.32**	**6.33**	**5.00**	**1.90**

3.10 MEANS OF FINANCE OF ADDITIONAL CAPITALISATION

TPC-G's submission

3.10.1 The means of finance for the claimed additional capitalisation has been considered in the debt-equity ratio of 70:30.

Commission's Analysis and Ruling

3.10.2 In line with the True-up of previous years, the Commission has considered the means of finance of the approved additional capitalisation in the debt: equity ratio of 70:30.

3.11 ANNUAL FIXED CHARGES (AFC)

3.11.1 Regulation 42 of the MYT Regulations, 2019 specifies the components of AFC as follows:

a. Operation and Maintenance (O&M) expenses
b. Depreciation
c. Interest on Loan
d. Interest on Working Capital (IoWC)
e. Return on Equity (RoE)
f. Income Tax

Less:

g. Non-Tariff Income (NTI)

3.12 OPERATION AND MAINTENANCE (O&M) EXPENSES

TPC-G's submission

3.12.1 The O&M expenses for Units 5,7 & Hydro have been claimed on normative basis in accordance with Regulation 47 of the MYT Regulations, 2019. TPC-G has claimed normative O&M Expenses of Rs. 495.64 Crore including water charges of Rs. 5.59 Crore.

3.12.2 As regards Unit 8, the O&M expenses have been claimed considering the normative O&M expenses of Rs. 32.13 Lakh/MW. The normative O&M Expenses for Unit 8 has been claimed as Rs. 80.33 Crore for FY 2024-25.

Commission's Analysis and Ruling

3.12.3 For the purpose of Truing-up, the Commission approves the normative O&M Expenses for TPC-G for FY 2024-25. For Units 5,7 & Hydro for FY 2024-25, the revised normative O&M expenses have been arrived at by escalating the normative O&M expenses for FY 2023-24, by the escalation factor of 4.37%. The Commission notes that, while considering the escalation factor, the efficiency factor of 1% has been considered by the Commission and the same shall be revisited at time of Truing-up based on actual Availability of TPC-G for FY 2024-25. In addition to the normative O&M expenses, the Commission has considered the water charges, the same as actual for FY 2023-24. Accordingly, the O&M expenses approved for FY 2024-25 is shown in the following Table:

Table 3.13: O&M expenses for Units 5,7 & Hydro for FY 2024-25 (Rs. Crore)

Particulars	Approved in MTR	Claimed	Approved
Normative O&M expenses for previous year	454.65	469.54	469.54
Escalation factor	3.94%	4.37%	4.37%
Normative O&M expenses (A)	472.55	490.06	490.06
Water charges (B)	3.13	5.59	5.59
Total (A+B)	**475.68**	**495.64**	**495.65**

3.12.4 The normative O&M expenses for Unit 8 have been approved as Rs. 80.33 Crore, the same as approved in the MYT Order.

3.13 DEPRECIATION

TPC-G's submission

3.13.1 TPC-G has computed the depreciation by considering the depreciation rate worked out as per the MYT Regulations, 2019 and the average of opening and closing GFA. TPC-G has claimed the depreciation of Rs. 99.24 Crore and Rs. 24.90 Crore for Units 5,7 & Hydro and Unit 8 respectively.

Commission's Analysis and Ruling

3.13.2 In the final True-up of FY 2023-24, the Commission had approved the closing GFA for FY 2023-24 as Rs. 3872.13 Crore and Rs. 1194.89 Crore for Units 5,7 & Hydro and Unit 8 respectively. The Commission has considered the same as the opening GFA for FY 2024-25. The approved additional capitalisation for FY 2024-25 has been considered as the GFA addition during the year. The actual weighted average depreciation rates for FY 2023-24 have been considered for the purpose of Provisional True-up.

3.13.3 The depreciation approved by the Commission for FY 2024-25 is as shown in the Table below:

Table 3.14: Depreciation for FY 2024-25 (Rs. Crore)

Particulars	Units 5,7 & Hydro			Unit 8		
	Approved in MTR	Claimed	Approved	Approved in MTR	Claimed	Approved
Opening GFA	3996.29	3,883.17	3,872.20	1196.01	1,194.89	1,194.88
Addition	44.55	47.30	56.32	6.33	5.00	1.90
Retirement	0.00	0.00	0.00	0.00	0.00	0.00
Closing GFA	4040.84	3,930.47	3,928.52	1202.34	1,199.89	1,196.77
Depreciation rate	3.26%	2.54%	2.54%	4.96%	2.08%	2.08%
Depreciation	**130.86**	**99.24**	**99.08**	**59.52**	**24.90**	**24.87**

3.13.4 The Commission approves the depreciation as per the table above for FY 2024-25.

3.14 INTEREST ON LOAN

TPC-G's submission

3.14.1 The interest on loan has been claimed considering the closing loan balances for FY 2023-24, claimed additional capitalisation for FY 2024-25, loan repayment equal to depreciation and actual interest rate for FY 2023-24. TPC-G has claimed the interest expenses of Nil for Units 5,7 & Hydro and Rs. 6.20 Crore for Unit 8 respectively. Further, TPC-G has not claimed any finance charges.

Commission's Analysis and Ruling

3.14.2 The Commission has considered the closing loan balance as approved for FY 2023-24 after True-up as the opening loan balances for FY 2024-25. The debt portion of the approved additional capitalisation has been considered as the loan addition during the year. The approved depreciation has been considered as the repayment for the year. The actual weighted average rate of interest for FY 2023-24 have been applied to the average loan for FY 2024-25 for computing the interest expenses.

3.14.3 Based on the above, the interest on loan and finance charges approved by the Commission is shown in the Table below:

Table 3.15: Interest on loan for FY 2024-25 (Rs. Crore)

Particulars	Units 5,7 & Hydro			Unit 8		
	Approved in MTR	Claimed	Approved	Approved in MTR	Claimed	Approved
Opening loan	0.00	0.00	0.00	42.06	79.44	79.43
Addition	31.19	47.30	39.42	4.43	3.50	1.33
Repayment	31.19	99.24	99.08	46.49	24.90	24.87
Closing loan	0.00	0.00	0.00	0.00	58.04	55.89

Particulars	Units 5,7 & Hydro			Unit 8		
	Approved in MTR	Claimed	Approved	Approved in MTR	Claimed	Approved
Rate of interest on loan	7.43%	9.02%	9.02%	7.43%	9.02%	9.02%
Interest on loan	**0.00**	**0.00**	**0.00**	**1.56**	**6.20**	**6.10**
Finance charges	0.00	0.00	0.00	0.00	0.00	0.00
Interest on loan & finance charges	**0.00**	**0.00**	**0.00**	**1.56**	**6.20**	**6.10**

3.14.4 The Commission approves the interest on loan & finance charges as per the table above for FY 2024-25.

3.15 INTEREST ON WORKING CAPITAL

TPC-G's submission

3.15.1 Interest on Working Capital (IoWC) has been computed based on Regulation 32.1 of the MYT Regulations, 2019. For the purpose of computing the IoWC, interest rate of 10.50% is considered. TPC-G has claimed the IoWC of Rs. 34.80 Crore and Rs. 13.88 Crore for Units 5,7 & Hydro and Unit 8 respectively.

Commission's Analysis and Ruling

3.15.2 The Commission has computed IoWC in accordance with the MYT Regulations, 2019. In accordance with Regulation 32.1, the working capital comprising of the following components has been considered:

(a) Cost of coal towards stock, for thirty days, for Unit 5 and Unit 8, for generation corresponding to target availability, or the maximum coal/lignite stock storage capacity, whichever is lower;

(b) Cost of coal, for thirty days, for Unit 5 and Unit 8, for generation corresponding to target Availability;

(c) Cost of APM gas, for thirty days, for Unit 7, for generation corresponding to lower of estimated generation or target Availability;

(d) Cost of secondary fuel oil, for two months, for Unit 8, for generation corresponding to lower of estimated generation or target Availability;

(e) Approved normative O&M expenses of Units 5,7 & Hydro and Unit 8 for one month;

(f) Maintenance spares at one percent of approved opening GFA for Units 5,7 & Hydro and Unit 8;

(g) Receivables for sale of electricity to BEST equivalent to 45 days of the sum of the Provisionally Trued-up AFC for Units 5,7 & Hydro and Unit

8 and energy charges for Units 5&7 and Unit 8 computed at lower of estimated generation and target Availability;

(h) minus: payables for fuels to the extent of thirty days of the cost of coal for Unit 5, coal and secondary fuel oil for Unit 8 and APM gas for Unit 7 at lower of projected generation and target Availability.

3.15.3 The rate of IoWC has been considered as 10.45% in accordance with the MYT Regulations, 2019, considering the base rate as on date of filing of present Petition.

Table 3.16: Interest on Working Capital for FY 2024-25 (Rs. Crore)

Particulars	Units 5,7 & Hydro			Unit 8		
	Approved in MTR	Claimed	Approved	Approved in MTR	Claimed	Approved
Working Capital	565.67	331.47	327.82	192.88	132.18	130.62
Rate of interest	9.45%	10.50%	10.45%	9.45%	10.50%	10.45%
IoWC	53.46	34.80	34.26	18.23	13.88	13.65

3.15.4 The Commission approves normative IoWC as per the table above for FY 2024-25.

3.16 RETURN ON EQUITY & INCOME TAX

TPC-G's submission

3.16.1 RoE has been claimed in accordance with Regulation 29 of the MYT Regulations, 2019. TPC-G has considered the Base Rate of RoE of 14%. The income tax has been considered as Nil as per approach adopted for FY 2022-23 and FY 2023-24 as the issue is sub-judice before ATE.

3.16.2 TPC-G has claimed RoE of Rs. 193.56 Crore and Rs. 50.29 Crore for Units 5,7 & Hydro and Unit 8 respectively.

Commission's Analysis and Ruling

3.16.3 The Commission has considered the closing balance of equity for FY 2023-24 as approved after final Truing-up as the opening equity for FY 2024-25. The equity portion of the approved additional capitalisation for FY 2024-25 has been considered as the equity addition during the year.

3.16.4 Regulation 29.2 of the MYT Regulations, 2019 specifies the Base Rate of RoE of 14%. In accordance with Regulation 29.6(a), the additional rate of RoE, subject to the ceiling of 0.5%, shall be allowable for incremental ramp rate. Further, in accordance with Regulation 29.6(b), the additional rate of RoE, subject to maximum of 1% shall be allowable for achievement of MTBF as specified in the Regulation. The additional RoE shall be admissible at the time of Final True-up and hence, has not been considered in Provisional True-up of FY 2024-25.

3.16.5 The Base Rate of RoE has been considered as 14% in accordance with Regulation 29.2. Regulation 34.2 of the MYT Regulations, 2019 specify that the rate of RoE including additional rate of RoE shall be grossed up with the effective tax rate of respective financial year. The Commission has considered the effective tax rate Nil for Units 5,7 & Hydro and Unit 8, as per approach adopted for FY 2022-23 and FY 2023-24. Accordingly, the RoE approved for FY 2024-25 is shown in the following

Table 3.17: RoE for FY 2024-25 (Rs. Crore)

Particulars	Units 5,7 & Hydro			Unit 8		
	Approved in MTR	Claimed	Approved	Approved in MTR	Claimed	Approved
Opening equity	1409.43	1,375.49	1,372.20	358.81	358.47	358.47
Addition	13.37	14.19	16.90	3.21	1.50	0.57
Reduction of equity towards de-capitalised assets	0.00	0.00	0.00	0.00	0.00	0.00
Closing equity	1422.80	1,389.68	1,389.10	362.02	359.97	359.04
Rate of Return	14.00%	14.00%	14.00%	14.00%	14.00%	14.00%
Return on Equity	**198.26**	**193.56**	**193.29**	**50.37**	**50.29**	**50.23**

3.16.6 The Commission approves RoE as per the Table above for FY 2024-25.

3.17 NON-TARIFF INCOME (NTI)

TPC-G's submission

3.17.1 TPC-G has claimed NTI of Rs. 25.27 Crore and Rs. (2.34) Crore for Units 5,7 & Hydro and Unit 8. TPC-G has estimated the debit balance for Unit-8 as it has booked the net income towards sale of fly ash under NTI.

Commission's Analysis and Ruling

3.17.2 The Commission notes that, for the purpose of Provisional True-up, TPC-G has considered the NTI at same level as claimed for FY 2023-24 for Truing-up purpose. The Commission has considered NTI as claimed by TPC-G.

3.18 REDUCTION IN AFC FOR UNIT 5

TPC-G's submission

3.18.1 TPC-G submitted that Unit 5 was taken out on 22 September, 2024 at around 16:14 hrs due to fire in Control room area. The fire which occurred in Unit 5 was uncontrollable and it is a Force Majeure condition as per Regulations 2(40) of MYT Regulations, 2019. The occurrence at Unit 5 was not controllable.

3.18.2 TPC-G requested the Commission to consider the same as Force Majeure condition. In the past the Commission in case of Unit 8 in Case No 6 of 2015 has approved the methodology of recovery of the fixed charges in case of Force Majeure condition. In the said Order, the Commission had approved the charges for Employee Expenditure, Interest and Depreciation without considering the reduction due to Availability.

3.18.3 TPC-G, relying on the said Order of the Commission, has requested the Commission to approve the same methodology of recovery of fixed cost for Unit 5 for FY 2024-25.

3.18.4 Based on the above, TPC-G has claimed reduction in Annual Fixed Charges of Rs. 14.33 Crore considering estimated availability of 68.83%.

Commission's Analysis and Ruling

3.18.5 The Commission notes that Unit 5 was taken out on 22 September, 2024 at around 1614 hrs due to fire in Control room area. The same was due to fire that got initiated in the Cable vault under the Control Room Area, and it travelled to Control Room panels which necessitated the Emergency Safe Shut Down of the unit. On 23 September, 2024 at around 0530 hrs the fire was doused i.e after a period of about 13 hours and 16 minutes. On account of this, Unit 5 will remain under shut down for period of 3 months leading to reduction of estimated availability for FY 2024-25 to 68.83%.

3.18.6 The Commission notes that the estimated availability of Unit 5 for FY 2024-25 is lower than normative availability of 85% and the same is on account of forced shut down of Unit 5.

3.18.7 For reduction of AFC, TPC-G has relied on the methodology approved by the Commission for Unit 8 outage in Case No. 6 of 2015. The Commission, in its Order dated 26 June, 2015 in Case No. 6 of 2015, adopted a methodology for reduction of AFC on provisional basis as a special case. Such relief provided as special case cannot be considered as precedent for allowing the same methodology in the present case. The pleadings of TPC-G for consideration of incidence at Unit 5 as a force majeure event has to be looked afresh and cannot be based on the methodology adopted by the Commission as a special case.

3.18.8 The Commission notes that after incident, TPC-G intimated BEST and TPC-D about the incidence vide their intimation letter dated 24 September, 2024. The Commission observed that the said intimation was given by TPC-G under Article 17.2 of PPA within the stipulated time. The Article 17.2 of PPA stipulates as under:

> *"17.2* ***The Affected party shall give notice to other party of any event of force major as soon as reasonably practicable, but not later than seven (7) days after the date of which such party knew or should reasonably have known of the commencement of the event of force majeure.*** *… … …"*

3.18.9 As regards the incidence, the Commission sought details of first incidence report from TPC-G. The key findings of the report stated that Fire is electrical in nature and appears to have originated from one of the cables (24 V DC, 110 V AC, 220 V DC) of Cable Vault. The relevant extract is as under:

> *"**Key Findings:***
> *Team visited site multiple times. By interacting persons, looking at physical evident damage, prima facie area could be identified where fire might have initiated. Details as follows.*
> - *ASLD 46 – Acoustic steam leak detection panel*
> - *CFA 01, 02, 03,04 – Analog signal conditioning*
> - *FSSS 01- Furnace safeguard & supervisory system*
> - *FSSS 02- Furnace safeguard & supervisory system*
> - *CFA 7, 8, 9, 10, 11- Analog conditioning – monitoring parameters. Honeywell C300*
> - *CVA 02- Analog conditioning*
>
> *Basis our investigation at this stage, we are of the opinion that Fire is electrical in nature and appears to have originated from one of the cables (24VDC, 110 V AC, 220 V DC) of Cable Vault. We have carefully scanned the area under the above panels which comprise of only electrical cables and no other source of shorting is possible. The fire in the section has lasted for over 13 Hours and there is all probability that the origin of fire has destroyed itself."*

3.18.10 In reply to query of the Commission, TPC-G submitted the justification of claim under Force majeure that the cause of fire has been identified as electrical short circuit and is accidental in nature. It conducts periodic checks for the installed fire systems, which ensured that all the fire systems get activated timely during the Unit 5 incident and control the damage due to fire. Further, immediately after the incident the operating personnel managed to expel out the Hydrogen from the Generator which prevented a major mishap. The third party (Protocol Insurance Surveyors & Loss Assessors) appointed by Insurer had visited the site of Unit-5 and prepared an investigation report for the consideration of the insurer. The investigation team also included experts who were earlier associated with BHEL. The report stated that such fire was only accidental.

3.18.11 Further, the Commission notes that the estimated expenditure for restoration of Unit 5 is Rs. 220.82 Crore based on PO details submitted by TPC-G. Further, an advance payment of Rs. 50 Crore has been received against the insurance claim made by TPC-G. The preliminary loss estimate made by TPC-G is Rs. 221 Crore.

3.18.12 The Commission has gone through details of mega risk insurance policy taken for Unit 5 by TPC-G and observed that the policy covers all risks for property damage and machinery breakdown and FLOP (Fire loss of Profit and machinery loss of profit). Further, it is noted that, the insurance claim is yet to be finalised between TPC-G and insurer.

3.18.13 Further, the Commission observed that the detailed investigation for the incident is yet to be carried by OEM and TPC-G has not submitted the sufficient details for justifying the claim under Force majeure event.

3.18.14 In the above background, the Commission notes that, since an exception has been pleaded for, TPC-G should submit all details in its support of claim of Force majeure. Since, Unit 5 is yet to be restored and in the absence of complete details and supporting evidence, many issues are yet to attain finality, and the Commission is not in a position to take a final view on this matter and the same shall require to be taken at time of final Truing-up. Hence, the Commission directs TPC-G to furnish all necessary details along with actual availability and supporting evidence required to determine whether the circumstances leading to the occurrence were uncontrollable or otherwise at time of final Truing-up.

3.18.15 As regards the computation of estimated availability, the Commission notes that, TPC-G has estimated the availability of 68.83%. For reduction of AFC, the Commission has considered estimated availability of 68.83% for FY 2024-25 as submitted by TPC-G.

3.18.16 In view of the above, the Commission has reduced the Annual Fixed Charges for Unit on pro-rata basis as per provisions of the MYT Regulations, 2019 as shown in the following Table:

Table 3.18: Reduction of AFC for Unit 5 for FY 2024-25 as approved by the Commission (Rs. Crore)

Particulars	Unit	Claimed by TPC-G	Approved in this Order
Total AFC for Unit 5	Rs. Crore	298.14	297.64
AFC related to Employee Expenses, Depreciation, and Interest on long term loan Capital	Rs. Crore	222.79	-
AFC (revised) without related to Employee Expenses, Depreciation, and Interest on long term loan Capital	Rs. Crore	75.35	-

Particulars	Unit	Claimed by TPC-G	Approved in this Order
Normative Availability	%	85.00%	85.00%
Estimated Availability	%	68.83%	68.83%
AFC (revised) at Estimated Availability	Rs. Crore	61.02	241.02
Reduction in AFC	**Rs. Crore**	**14.33**	**56.62**

3.19 ANNUAL FIXED CHARGES (AFC)

Commission's Analysis and Ruling

3.19.1 Based on the above, the AFC approved by the Commission in the provisional True-up, that is fully recoverable at Target Availability is as shown in the Table below:

Table 3.19: AFC for Units 5,7 & Hydro for FY 2024-25 (Rs. Crore)

Particulars	Approved in MTR	Claimed	Approved
O&M expenses	475.68	495.64	495.65
Depreciation	130.86	99.24	99.08
Interest on loan and finance charges	-	-	-
Interest on working capital	53.46	34.80	34.26
Return on Equity	198.26	193.56	193.29
Income tax	-	-	-
Less: Allocation of Unit 8 for shared capacity	10.36	9.76	9.76
Less: Reduction of AFC for Unit 5	-	14.33	56.62
Less: Non-tariff income	12.87	25.27	25.27
Annual Fixed Charges	**835.03**	**773.89**	**730.62**

3.19.2 The Commission approves the AFC for Units 5,7 & Hydro as per Table 3.19 for FY 2024-25.

Table 3.20: AFC for Unit 8 for FY 2024-25 (Rs. Crore)

Particulars	Approved in MTR	Claimed	Approved
O&M expenses	80.33	80.33	80.33
Depreciation	59.52	24.90	24.87
Interest on loan and finance charges	1.56	6.20	6.10
Interest on working capital	18.23	13.88	13.65
Return on Equity	50.37	50.29	50.23
Income tax	-	-	-
Add: Allocation from shared capacity	10.36	9.76	9.76
Less: Non-tariff income	3.42	(2.34)	(2.34)
Annual Fixed Charges	**216.94**	**187.70**	**187.27**

3.19.3 The Commission approves AFC for Unit 8 as per the table above for FY 2024-25.

3.20 REVENUE FROM SALE OF POWER

TPC-G's submission

3.20.1 TPC-G has claimed the estimated revenue from sale of power of Rs. 2603.30 Crore for Units 5,7 & Hydro comprising of revenue from fixed charges, incentive and energy charges of Rs. 575.59 Crore, Rs. 9.35 Crore and Rs. 2047.68 Crore respectively. It also includes the credit adjustment of Rs. 29.31 Crore raised as per FAC order.

3.20.2 TPC-G has claimed the estimated revenue from sale of power of Rs. 997.23 Crore for Unit 8 comprising of revenue from fixed charge and energy charges of Rs. 216.94 Crore and Rs. 795.19 Crore respectively. It also includes the credit adjustment of Rs. 14.90 Crore raised as per FAC order.

Commission's Analysis and Ruling

3.20.3 The Commission has considered the estimated revenue from sale of power of Rs. 2603.30 Crore and Rs. 997.23 Crore for Units 5,7 & Hydro and Unit 8 respectively based on the AFC approved in the MYT Order and revised fuel cost approved in this Order.

3.21 SUMMARY OF PROVISIONAL TRUE-UP

Commission's Analysis and Ruling

3.21.1 Based on the above analysis, the summary of Provisional True-up for FY 2024-25 is as shown in the Tables below:

Table 3.21: Summary of Provisional True-up for FY 2024-25 for Unit 5 to 7 and Hydro (Rs. Crore)

Particulars	Approved in MTR	Claimed	Approved
Fixed Cost			
O&M expenses	475.68	495.64	495.65
Depreciation	130.86	99.24	99.08
Interest on loan and finance charges	-	-	-
Interest on working capital	53.46	34.80	34.26
Return on Equity	198.26	193.56	193.29
Less: Allocation of Unit 8 for shared capacity	10.36	9.76	9.76
Less: Reduction in AFC	-	14.33	56.62
Less: Non-tariff income	12.87	25.27	25.27
Sub-total	**835.03**	**773.89**	**730.62**
Fuel Cost			
Fuel Cost (Normative)	3,466.17	1,793.80	1,793.80

Particulars	Approved in MTR	Claimed	Approved
Sub-total	3,466.17	1,793.80	1,793.80
ARR	**4,301.19**	**2,567.68**	**2,524.42**
Revenue from sale of power	4,301.19	2,603.30	2,603.30
Revenue gap/(surplus)	**-**	**(35.62)**	**(78.89)**

3.21.2 The Commission approves the Provisional True-up for Units 5,7 & Hydro as per Table 3.21 for FY 2024-25.

Table 3.22: Summary of Provisional True-up for FY 2024-25 for Unit 8 (Rs. Crore)

Particulars	Approved in MTR	Claimed	Approved
Fixed Cost			
O&M expenses	80.33	80.33	80.33
Depreciation	59.52	24.90	24.87
Interest on loan and finance charges	1.56	6.20	6.10
Interest on working capital	18.23	13.88	13.65
Return on Equity	50.37	50.29	50.23
Add: Allocation from shared capacity	10.36	9.76	9.76
Less: Non-tariff income	3.42	(2.34)	(2.34)
Sub-total	**216.94**	**187.70**	**187.27**
Fuel Cost			
Fuel Cost (Normative)	1,243.51	775.03	775.03
Sub-total	**1,243.51**	**775.03**	**775.03**
ARR	**1,460.45**	**962.73**	**962.31**
Revenue from sale of power	1,460.45	997.23	997.23
Revenue gap/(surplus)	**-**	**(34.49)**	**(34.92)**

3.21.3 The Commission approves the Provisional True-up for Unit 8 as per the table above for FY 2024-25.

3.21.4 The Commission has considered the revenue gap/(surplus) approved on Provisional True-up for FY 2024-25 in the computation of cumulative revenue gap/(surplus) upto FY 2024-25 in Chapter 5 of the Order.

4 CUMULATIVE REVENUE GAP/(SURPLUS) UPTO FY 2024-25

4.1 COMPENSATION FOR DEGRADATION OF OPERATIONAL PARAMETERS

TPC-G's submission

4.1.1 The Commission in the MYT Regulations, 2019 has defined various norms for controllable and un-controllable factors. In case of controllable factors, the gain and loss has been shared with the beneficiaries. However, in case of un-controllable factors, the entire loss/difference is allowed to be recovered from Distribution Licensees. Such factors as per the MERC (State Grid Code) Regulations, 2024 (**State Grid Code**) are Heat Rate and Auxiliary Consumption on account of lower requisition from beneficiaries/Distribution Licensees.

4.1.2 The Commission, in its State Grid Code, has defined the methodology of recovery of such loss due to Higher Heat Rate and Higher Auxiliary consumption which is beyond the control of the Generator. Further, Regulation 34.2 of the State Grid Code provides as under:

> *"34.2 InSGS may be directed by SLDC to operate its unit(s) at or above the technical minimum but below the normative plant availability factor on account of grid security or due to the fewer schedules given by the buyer.*
>
> *Provided that, for computation of compensation for generator supplying power to multiple buyers, the compensation shall be calculated as per the same mechanism specified in these Regulations and its Annexures-4, and the total charges computed shall be allocated among the buyers of the generator in proportion to their implemented schedule for that period.*
>
> *Provided further that, the generators shall maintain separate account for the claims submitted to buyers for operation of Unit below 85% as per the instructions of SLDC. Such information and details shall be also submitted to the Commission while submitting the FAC claims to the Commission for approval and during tariff filing process."*

4.1.3 Hence, as per the regulatory provisions of the State Grid Code, Heat rate and AEC degradation due to part load operation is attributable to the beneficiaries and as mentioned above, operation of the plant below normative plant availability factor due to fewer schedules by the buyers is beyond the control of the generator. Such operations below the normative PLF of 85% need to be therefore compensated as per the State Grid Code.

4.1.4 TPC-G has received verified data used for compensation calculation from 16 October, 2020 to 31 December, 2023 from MSLDC. TPC-G submitted the verification certificate from MSLDC. In the said certificate, MSLDC has verified the data till December, 2023. It was advised by MSLDC in the certificate that such verification should be carried out amongst the Generating company and the Distribution Licensee for further period. Further, Annexure-4 of the State Grid Code prescribes the procedure regarding monthly billing of the compensation amount to the beneficiaries.

4.1.5 Further, TPC-G submitted that as per the discussion during the meeting dated 20 March, 2024 held at BEST office, from FY 2024-25 onwards, TPC-G has commenced raising monthly bills to the beneficiaries for the compensation amount. Regulation 34.2 of the State Grid Code stipulates that the information and details of the claims for such compensation shall be also submitted to Commission while submitting the FAC claims for approval and during tariff filing process. The compensation claimed by TPC-G has also been considered by the Commission in respective FAC Order for TPC-D and BEST.

4.1.6 In line with the above, TPC-G claimed the compensation from FY 2020-21 (from 16 October, 2020 to 15 March, 2021) to FY 2023-24. TPC-G claimed the total compensation of Rs. 135.28 Crore as shown in the following Table:

Table 4.1: Compensation for partial load operation as claimed by TPC-G (Rs. Crore)

Compensation Period	Compensation amount		
	Unit 5	Unit 7	Total
16 October, 2020 to 15 March, 2021	4.74	-	4.74
16 March, 2021 to 15 March, 2022	4.65	6.33	10.98
16 March, 2022 to 15 March, 2023	14.63	38.84	53.48
16 March, 2023 to 15 March, 2024	34.47	31.62	66.09
Total	**58.49**	**76.79**	**135.28**

Commission's Analysis and Ruling

4.1.7 The Commission notes that TPC-G has claimed the compensation on account of partial loading operation for the period from 16 October, 2020 to 15 March, 2024.

4.1.8 The Commission sought details of copies of invoices raised to distribution licensee and details of compensation in FAC and claim by TPC-G from beneficiaries on monthly basis and reasons for not claiming the compensation on monthly basis. In reply to this, TPC-G submitted that as under:

(a) Compensation mechanism specified under the State Grid Code was made applicable by the Commission from 16 October, 2020. Considering the COVID situation and lockdown across the country and impact of RE and unavailability of APM gas causing a lower PLF for TPC-G units, TPC-G had not raised bills as per the State Grid Code for compensation of degradation of parameters

(b) TPC-G had instead requested the Commission, in the MTR Petition in Case No. 221 of 2022, to exercise its 'Power to Relax' as provided in Regulation 105 of MYT Regulations, 2019 and to compensate the degradation suitably in line with Regulation 46.10 of MYT Regulation 2019 and Regulation 34 of State Grid Code. The Commission, in MTR Order, had mentioned that the mechanism for compensation for low unit loading provided in the Grid Code is separate from the Truing-up process.

(c) Thereafter, TPC-G approached the beneficiaries, along with sample calculation as per the State Grid Code. TPC-D, vide its letter dated 12 September, 2023 requested TPC-G to get the relevant data verified from MSLDC as mentioned in the Regulation 34.3 of the State Grid Code Regulations. Further, BEST vide its letter 4 October, 2023 mentioned that since in the MTR Order, the Commission has not fully approved the compensation citing that GSHR and AEC are controllable factors, lower loading led to higher GSHR does not hold good and further, the Commission in MTR Order has considered the difference between Actual and Normative GSHR and AEC for computing the sharing of efficiency gains. Hence, TPC-G cannot claim for compensation under Regulation 34 of the State Grid Code on account of lower loading (below 85%) of thermal units. Thereafter, MSLDC issued certificate for compensation on 28 March, 2024.

(d) TPC-G and BEST mutually decided that FY 2024-25 onwards, monthly bill shall be raised by TPC-G for compensation as per the State Grid Code. Regarding the compensation for the period FY 2020-21 (16 October, 2020 onwards) to FY 2023-24, TPC-G suggested that a separate bill, without carrying costs, shall be raised to both the beneficiaries while BEST insisted that the matter should be taken up by TPC-G in the upcoming MYT Tariff Filing in November, 2024.

4.1.9 The Commission, in MTR Order, has already held that the mechanism for compensation for low unit loading provided in the Grid Code is separate from the Truing-up carried out in accordance with the MYT Regulations. The relevant extract of Order is as under:

> *"5.7.8 Regulation 34.3 of the State Electricity Grid Code provides compensation for degradation of GSHR for unit loading below 75% upto 55%.* ***The mechanism for compensation for low unit loading provided in the Grid Code is separate from the truing-up carried out in accordance with the MYT Regulations. Therefore, the Commission does not find merit in the reliance placed by TPC-G on Regulation 34 of the State Electricity Grid Code****."* ***(emphasis added)***

4.1.10 The Commission has already held that the compensation on account of low loading operation shall be dealt separately as per the provisions of the State Grid Code Regulations.

4.1.11 Further, Regulation 34.2 along with Annexure-4 of the State Grid Code Regulations clearly specify the mechanism for compensation for Degradation of Heat Rate, Auxiliary Consumption and Secondary Fuel Oil Consumption due to Part Load Operation and Multiple Start/Stop of Units of Intra-State Generators connected to InSTS in Maharashtra State under Regulation 34.3(f) and 34.6 of the State Grid Code Regulations. The said mechanism itself provides the detailed methodology for computation of compensation and manner of recovery of such compensation from beneficiary. Clause 7 of Annexure-4 specifies as under:

> *"**7. Calculation of Compensation, Billing and Submission of Data by the Generator***
>
> *a) Generating station shall calculate the compensation as specified in these procedures and **<u>bill the same to beneficiaries along with its monthly bill which shall be subject to the adjustment based on the implemented schedule issued by SLDC.</u>***
>
> *b) Generating station shall submit the requisite data **<u>along with compensation calculation to beneficiaries as prescribed in Schedule-1 for a month by 30th day of the month for the previous calculation month</u>** (16th to 15th) and so on. Payment terms to be decided by the buyer and seller.*
>
> *c) SLDC shall provide necessary implemented schedule for the period of calculation by 22nd day of the month to Generating company as well as to concerned Distribution Licensee."* ***<u>(emphasis added)</u>***

4.1.12 In accordance with the above mechanism, TPC-G was required to raise the bills towards compensation on monthly basis on the Distribution Licensees along with the requisite data to the Distribution Licensees for verification purpose. MSLDC is also required to provide the details about implemented schedule. Further, these monthly compensation bills are required to reconcile at the end of the year. As per Regulation 34.2 of the State Grid Code Regulations, TPC-G was required to maintain separate account for the claims submitted to buyers for operation of Unit below 85% as per the instructions of MSLDC. Further, such information and details were also to be submitted to the Commission while submitting the FAC claims to the Commission for approval and during tariff filing process. However, the Commission notes that for the period from FY 2020-21 (16 October, 2020 onwards) to FY 2023-24, TPC-G has not raised any monthly bill on the distribution licensees. TPC-G has started for raising bills for compensation for partial load operation from April, 2024 onwards.

4.1.13 The Commission notes that reasons provided by TPC-G for not raising the monthly invoice are not justified. The Commission is of view that there has been lapses by TPC-G for adhering to the mechanism specified in State Grid Code Regulations for claiming compensation on account of partial load operation. Hence, the Commission does not find it prudent to allow such claim for compensation and burden the consumers.

4.1.14 In view of the above, the Commission disallows the amount of Rs. 135.28 Crore claimed by TPC-G towards the compensation on account of partial loading operation.

4.2 CUMULATIVE REVENUE GAP/(SURPLUS) UPTO FY 2024-25

TPC-G's submission

4.2.1 TPC-G has proposed the cumulative Revenue gap of Rs. 91.23 Crore to be recovered from Distribution Licensee. The amount recoverable from Distribution Licensees are as Rs. 50.75 Crore from BEST and Rs. 40.47 Crore from TPC-D.

Commission's Analysis and Ruling

4.2.2 The Commission has computed the cumulative revenue gap/(surplus) upto FY 2024-25. The computed revenue gap/(surplus) has been allocated to beneficiaries viz. BEST and TPC-D in ratio of the energy supplied by TPC-G to each beneficiary. The details are as shown in the Table below:

Table 4.2: Cumulative revenue gap/(surplus) for Units 5,7 & Hydro and Unit 8 approved by the Commission (Rs. Crore)

Sr. No	Particulars	Year	Interest Rate (%)	Claimed by TPC-G			Approved in this Order		
				BEST	TPC-D	Total	BEST	TPC-D	Total
1	**Incremental Gap / (Surplus) Unit 5, 7 and Hydro**	**FY 2022-23**		**43.08**	**40.30**	**83.37**	**30.81**	**28.82**	**59.63**
	Carrying/Holding Cost	*FY 2022-23*	*9.30%*	*2.00*	*1.87*	*3.88*	*1.43*	*1.34*	*2.77*
	Carrying/Holding Cost	*FY 2023-24*	*10.07%*	*4.34*	*4.06*	*8.39*	*3.10*	*2.90*	*6.00*
	Carrying/Holding Cost	*FY 2024-25*	*10.07%*	*4.34*	*4.06*	*8.39*	*3.18*	*2.97*	*6.15*
2	**Incremental Gap / (Surplus) Unit 8**	**FY 2022-23**		**(6.69)**	**(9.48)**	**(16.16)**	**(7.35)**	**(10.41)**	**(17.76)**
	Carrying/Holding Cost	*FY 2022-23*	*9.30%*	*(0.31)*	*(0.44)*	*(0.75)*	*(0.34)*	*(0.48)*	*(0.83)*
	Carrying/Holding Cost	*FY 2023-24*	*10.07%*	*(0.67)*	*(0.95)*	*(1.63)*	*(0.74)*	*(1.05)*	*(1.79)*
	Carrying/Holding Cost	*FY 2024-25*	*10.07%*	*(0.67)*	*(0.95)*	*(1.63)*	*(0.76)*	*(1.07)*	*(1.83)*
3	**Gap / (Surplus) Unit Unit 5, 7 and Hydro**	**FY 2023-24**		**(13.12)**	**(12.40)**	**(25.52)**	**(24.44)**	**(23.10)**	**(47.54)**
	Carrying/Holding Cost	*FY 2023-24*	*10.07%*	*(0.66)*	*(0.62)*	*(1.28)*	*(1.23)*	*(1.16)*	*(2.39)*
	Carrying/Holding Cost	*FY 2024-25*	*10.07%*	*(1.32)*	*(1.25)*	*(2.57)*	*(2.52)*	*(2.38)*	*(4.90)*
4	**Gap / (Surplus) Unit 8**	**FY 2023-24**		**(21.63)**	**(28.20)**	**(49.83)**	**(21.02)**	**(27.41)**	**(48.43)**
	Carrying/Holding Cost	*FY 2023-24*	*10.07%*	*(1.09)*	*(1.42)*	*(2.51)*	*(1.06)*	*(1.38)*	*(2.44)*
	Carrying/Holding Cost	*FY 2024-25*	*10.07%*	*(2.18)*	*(2.84)*	*(5.02)*	*(2.17)*	*(2.83)*	*(4.99)*
5	**Gap / (Surplus) Unit 5, 7 and Hydro**	**FY 2024-25**		**(18.65)**	**(16.97)**	**(35.62)**	**(41.31)**	**(37.58)**	**(78.89)**
6	**Gap / (Surplus) Unit 8**	**FY 2024-25**		**(15.74)**	**(18.76)**	**(34.49)**	**(15.93)**	**(18.99)**	**(34.92)**
	Total ARR Gap / (Surplus) (A) (1 to 6)			**(28.98)**	**(44.00)**	**(72.98)**	**(80.34)**	**(91.81)**	**(172.16)**
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*	-	-	-

Sr. No	Particulars	Year	Interest Rate (%)	Claimed by TPC-G			Approved in this Order		
				BEST	TPC-D	Total	BEST	TPC-D	Total
	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*	-	-	-
11	**Total Impact of compensation as per Grid code (B) (7 to 10)**			**79.73**	**84.47**	**164.21**	**-**	**-**	**-**
12	**Total Gap / (Surplus) (A+B)**			**50.75**	**40.47**	**91.23**	**(80.34)**	**(91.81)**	**(172.16)**

4.2.3 The Commission approves the cumulative revenue surplus for Units 5,7 & Hydro and Unit 8 as per the table above.

4.2.4 The Commission has considered the said amounts in the tariff determination of BEST and TPC-D as discussed in the respective MYT Orders in Case No. 207 of 2024 and Case No. 210 of 2024 respectively.

5 ARR PROJECTIONS FOR FY 2025-26 TO FY 2029-30

5.1 BACKGROUND

5.1.1 TPC-G has sought the ARR and Multi Year Tariff determination for the 5th (fifth) Control Period from FY 2025-26 to 2029-30 (**Control Period**) as per the provisions of the MYT Regulations, 2024. The analysis undertaken by the Commission is set out below.

5.2 POWER SALE ARRANGEMENTS FOR TPC-G

5.2.1 TPC-G has in place the existing approved Power Purchase Agreements (**PPA**) with BEST Undertaking and TPC-D broadly in the ratio of 51.17%: 48.83% of its generating capacity comprising of Unit 5, 7 & Hydro Stations. Further, there is a PPA with 250 MW Unit 8 with BEST and TPC-D in the ratio 40:60. The power purchase tie up approved by the Commission from TPC-G is as shown in the Table below:

Table 5.1: Generation capacity

Unit/Station	Type of fuel	Installed capacity	BEST Share		TPC-D Share	
		MW	MW	%	MW	%
Unit 5	Coal, Oil and Gas	500	256	51.17%	244	48.83%
Unit 7	Gas	180	92	51.17%	88	48.83%
Unit 8	Coal	250	100	40.00%	150	60.00%
Total Thermal (A)		**930**	**448**		**482**	
Bhira	-	300	154	51.17%	146	48.83%
Bhivpuri	-	75	38	51.17%	37	49.83%
Khopoli	-	72	37	51.17%	35	48.83%
Total Hydro (B)		**447**	**229**		**218**	
Grand Total (A+B)		**1377**	**677**		**700**	

5.2.2 The Commission in Case No 39 of 2023 has directed TPC-D and BEST to tie up with TPC-G for five years from FY 2024-25 to FY 2028-29. These PPAs are valid till 31 March, 2029. In the said Order, the Commission has stated that future tie-up post expiry of this PPA would be based on the Transmission Constrains at that time. Therefore, with respect to the Control Period, TPC-G has valid PPAs for the four years of the Control Period i.e. up to March, 2029.

5.2.3 The Commission has determined the Tariff for FY 2029-30 in this Order based on the Petition filed by TPC-G. However, mere determination of Tariff for FY 2029-30 shall not be construed as approval of PPA's executed by TPC-G with BEST and TPC-D. The Distribution Licensees are required to take prior approval for any PPA to be executed with TPC-G for FY 2029-30 and beyond. Hence, Tariff approved in this Order for FY 2029-30 will actually apply only if the PPAs are extended with the prior approval of the Commission.

5.3 NORMS OF OPERATION

5.3.1 The Regulation 47 of MYT Regulations, 2024 specifies the Operational Norms for Thermal Generating Stations viz. Availability, Plant Load Factor, Heat Rate, Auxiliary Consumption and Transit Losses. Also, Regulation 49 of MYT Regulations, 2024 specifies Operational Norms for Hydro Generating Stations as Availability and Auxiliary Consumption. TPC-G is having Thermal Generating Units as well as Hydro Generating Stations. The operational norms for these Units/Stations have been approved as discussed in subsequent paragraphs.

5.4 AVAILABILITY

TPC-G's submission

5.4.1 TPC-G has projected Availability of Generating Units based on the outage plan during 5th Control Period. After considering the outages, the Availability of the various Units for FY 2025-26 to FY 2029-30 is estimated to be above the Normative Availability as provided in the MYT Regulations, 2024. However, TPC-G proposed Normative Availability for Control Period as shown in the following Table:

Table 5.2: Availability for FY 2025-26 to FY 2029-30 as submitted by TPC-G

Generation Unit	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
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%
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%

Commission's Analysis and Ruling

5.4.2 The Commission notes that TPC-G has projected Normative Availability of 85% as per Regulation 47.1 of MYT Regulations, 2024 for all the Thermal Generating Units and 90% for the Hydro Generating Stations as per Regulation 49.1 of MYT Regulations, 2024. Hence, the Commission approves the Availability as projected by TPC-G for Control Period. Accordingly, TPC-G shall be entitled for recovery of full Annual Fixed Charges approved in this Order for respective years.

5.5 GROSS GENERATION

TPC-G's submission

5.5.1 TPC-G submitted 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 Licensees, TPC-G has projected the Gross generation as shown in the following Table:

Table 5.3: Gross Generation (MU) for FY 2025-26 to FY 2029-30 as submitted by TPC-G

Generation Unit	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
Thermal					
Unit 5	3,082.43	2,343.21	2,416.95	2,353.29	2,416.95
Unit 7	1,120.43	1,174.52	1,177.77	1,174.52	1,165.54
Unit 8	1,533.90	1,299.28	1,266.71	1,337.27	1,524.30
Total Thermal	**5,736.76**	**4,817.01**	**4,861.43**	**4,865.08**	**5,106.80**
Hydro					
Bhira	913.62	928.97	935.02	937.60	937.60
Bhivpuri	285.59	295.79	298.35	298.35	298.35
Khopoli	288.71	288.71	287.81	287.81	287.81
Total Hydro	**1,487.92**	**1,513.47**	**1,521.18**	**1,523.76**	**1,523.76**
Grand Total	**7,224.68**	**6,330.48**	**6,382.60**	**6,388.85**	**6,630.56**

Commission's Analysis and Ruling

5.5.2 The Commission notes that TPC-G has projected the Gross generation for 5th Control Period which is decreasing in nature. In reply to specific query as regards basis for projection of Gross generation, TPC-G submitted that it has projected the Gross generation based on the input energy requirement received from BEST and TPC-D. In this Order, the Commission has approved the Gross generation as projected by TPC-G. However, the actual generation will be in accordance with the Merit Order Dispatch (MOD) principles. The Gross Generation approved by the Commission for Control period is shown in the following Table:

Table 5.4: Gross Generation (MU) for FY 2025-26 to FY 2029-30 as approved by the Commission

Generation Unit	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
Thermal					
Unit 5	3,082.43	2,343.21	2,416.95	2,353.29	2,416.95
Unit 7	1,120.43	1,174.52	1,177.77	1,174.52	1,165.54

Generation Unit	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
Unit 8	1,533.90	1,299.28	1,266.71	1,337.27	1,524.30
Total Thermal	**5,736.76**	**4,817.01**	**4,861.43**	**4,865.08**	**5,106.80**
Hydro					
Bhira	913.62	928.97	935.02	937.60	937.60
Bhivpuri	285.59	295.79	298.35	298.35	298.35
Khopoli	288.71	288.71	287.81	287.81	287.81
Total Hydro	**1,487.92**	**1,513.47**	**1,521.18**	**1,523.76**	**1,523.76**
Grand Total	**7,224.68**	**6,330.48**	**6,382.60**	**6,388.85**	**6,630.56**

5.6 AUXILIARY ENERGY CONSUMPTION

TPC-G's submission

5.6.1 TPC-G has claimed the Auxiliary Energy Consumption for Control period as per the norms specified in the MYT Regulations, 2024 as shown in the Table below:

Table 5.5: AEC (%) for FY 2025-26 to FY 2029-30 as claimed by TPC-G

Generation Unit	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
Unit 5	6.00%	6.00%	6.00%	6.00%	6.00%
Unit 7 Open Cycle	1.00%	1.00%	1.00%	1.00%	1.00%
Unit 7 Combined Cycle	3.00%	3.00%	3.00%	3.00%	3.00%
Unit 8	8.50%	8.50%	8.50%	8.50%	8.50%
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%

Commission's Analysis and Ruling

5.6.2 As per Regulation 47.15 of the MYT Regulations, 2024, the Commission approves the Auxiliary Consumption for Unit 5 as 6.00% and for Unit 8 as 8.50% on normative basis. Further, the Commission approves the Auxiliary Consumption for Unit 7 as per norm specified in Regulation 47.16 of MYT Regulations, 2024 as 2.75% for Combined cycle operation and 1.00% for Open Cycle operation.

5.6.3 Regarding the Hydro Generating Stations, the Commission notes that norms for Auxiliary consumption are specified in Regulation 49.2 of MYT Regulations, 2024. Accordingly, the Commission approves the normative Auxiliary Consumption of 1.20% for Khopoli and Bhivpuri Hydro Generating Stations and 1.00% for Bhira Hydro Generating Station.

5.7 GROSS STATION HEAT RATE (GSHR)

TPC-G's submission

5.7.1 TPC-G has claimed Heat Rate for Control Period as per the norms specified in MYT Regulations, 2024 as shown in the Table below:

Table 5.6: Heat Rate (kcal/kWh) for FY 2025-26 to FY 2029-30 as claimed by TPC-G

Generation Unit	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
Unit 5	2549	2549	2549	2549	2549
Unit 7 Open Cycle	2900	2900	2900	2900	2900
Unit 7 Combined Cycle	2035	2035	2035	2035	2035
Unit 8	2415	2415	2415	2415	2415

Commission's Analysis and Ruling

5.7.2 For Control Period, the Commission approves heat rate for Unit 5 as 2549 kcal/kWh as per Regulation 47.6 of MYT Regulations, 2024 and for Unit 8 as 2415 kcal/kWh as per Regulation 47.4 of MYT Regulations, 2024.

5.7.3 Further, the Commission approves heat rate and for Unit 7 as 2035 kCal/kWh for Combined cycle operation and 2900 kcal/kWh for Open cycle operation as per norm specified in Regulation 47.7 of MYT Regulations, 2024 for the Control Period.

5.8 SPECIAL ALLOWANCE

TPC-G's submission

5.8.1 TPC-G submitted that the Commission, in Regulation 44 of the MYT Regulations, 2024, has permitted usage of "Special Allowance" for the period FY 2025-26 to FY 2029-30. All the Units except Unit 8 have completed their useful life. Accordingly, TPC-G has claimed the Special allowance at Rs. 10.75 Lakh/MW for Control Period.

5.8.2 The special allowance claimed by TPC-G for Control Period is shown in the following Table:

Table 5.7: Special allowance for FY 2025-26 to FY 2029-30 as claimed by TPC-G

Unit	MW	Rs. Lakh/MW	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
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**

5.8.3 Further, TPC-G submitted that under the Regulation 44.1 of MYT Regulations, 2024, "Special Allowance" is restricted to meet the expense on Capital Expenditure schemes. Accordingly, TPC-G is proposing to include the following schemes under Capital Expenditure for the Control Period:

Table 5.8: Schemes proposed by TPC-G for FY 2025-26 to FY 2029-30

Scheme name	Scheme value (Rs. Cr.)	Capitalization (Rs. Cr.)				
		FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
Hydro Runner Replacement	27.00			13.50	13.50	
Rehabilitation of Intake Structures at Hydro	32.50			13.00	19.50	
Khopoli Ductline Rehabilitation	40.00		12.00	14.00	14.00	
Replacement of 25 MW Set #1 at Bhira	95.00					95.00
Rehabilitation of Intake Structures at Bhira	40.00				20.00	20.00
Upgradation of Electro-Mechanical Systems at Headworks	30.00					15.00
Unit 5- Reliability and Sustainance for 5 Year PPA	30.43	30.43				
Unit 7- Gas Turbine Life Extension Measures	111.00	111.00				
Total-DPR	**405.93**	**141.43**	**12.00**	**40.50**	**67.00**	**130.00**
Non DPR-	117.28	42.43	3.60	12.15	20.10	39.00
Total Capital Expenditure	**508.21**	**183.86**	**15.60**	**52.65**	**87.10**	**169.00**

5.8.4 As regards O&M Expenses after claim of Special allowance, TPC-G submitted that the nature of Capital Expenditure Schemes proposed are for life extensions of the Units and such schemes would not increase any operational efficiency as such. Hence, the impact on the operational efficiency due to such schemes would be negligible and consequently there would be very little or no reduction in the O&M Expenditure or Heat Rate on account of the same. Further, O&M Expenses are increasing and it is more than the normative expenditure in FY 2022-23. Further, as per MYT Regulation, 2024, Special Allowance cannot be treated for meeting O&M Expenses. Further, MYT Regulations, 2024 specify that the normative O&M Expenses for Unit 5 & 7 would be based on norms (in Rs. Lakh/MW) which are applicable for those units commissioned after 1 April, 2005. This will have an adverse impact on TPC-G. TPC-G has worked out the reduction in O&M expenses for Unit 5 as Rs. 304.42 Crore and for Unit 7 as 224.43 Crore.

5.8.5 Further, as regards Heat Rate, Regulation 44.2 of MYT Regulations, 2024 specifies for reduction in Heat Rate for Unit 5 on account of special allowance. TPC-G submitted that Capital Expenditure proposed is only for Life extension and not for improvement in the Heat Rate for Unit 5. Further, Regulation 47.7 of MYT Regulations, 2024 does not specify any reduction in heat rate for Unit 7.

5.8.6 In view of this, TPC-G requested the Commission to invoke power under Regulation 149 ("Power to Relax") and Regulation 151 ("Power to Amend") of MTR Regulations, 2024 and not to reduce the norm for O&M Expenses and also requested that Heat Rate be maintained same as approved in the MYT Regulations, 2024.

Commission's Analysis and Ruling

5.8.7 As regards Special allowance, Regulation 44 of MYT Regulations, 2024 specifies as under:

"44 Special Allowance for Coal-based/Lignite fired Thermal and Hydro Generating Station

44.1 In the case of coal-based/lignite fired thermal, Gas based power plants, and Hydro generating stations who have completed the useful life as specified in these Regulations may opt to avail of a 'special allowance' in accordance with the norms specified in this Regulation, as compensation for meeting the requirement of expenses towards additional capital expenditure as per MERC (Approval of Capital Investment Schemes) Regulations, 2022, including capital expenditure arising out of change in law, award of arbitration or for compliance of the directions or order of any statutory authority, or order or decree of any court of law, and force majeure.

44.2 In case, if the generation plant opts for Special allowance, such Special Allowance shall be included in the annual fixed cost, however, any upward revision of the capital cost or relaxation in the applicable operational norms if any allowed by the Commission shall not be allowed.

Provided that such option shall not be available for a generating station or unit thereof for which Renovation and Modernization has been undertaken and the expenditure has been admitted by the Commission before the commencement of these Regulations;

Provided further that, if the generating plant or unit opted for the Special Allowance for the Control Period and subsequently plans for Renovation and Modernisation during the Control Period, such Plant or Unit shall not be entitled for Specifical Allowance for the remaining Control Period from the date of approval of R&M proposal of the Plant or Unit by the Commission.

44.3 The Generating Company shall submit the details of all work to be undertaken through special allowance, with the MYT petition, for the approval of the Commission, which shall be granted after prudence check of reasonableness of the cost estimates, cost-benefit analysis, and such other factors as may be considered relevant by the Commission:

Provided that, the Special Allowance admissible to a generating station shall be maximum upto INR 10.75 lakh per MW per year for the control period:

Provided also that, the Generating Company opting for special allowance shall not be allowed to capitalise the assets created through special allowance and shall not be eligible for Depreciation, Return of Equity, Interest on Loan on such assets created through special allowance:

Provided also that no additional capitalization shall be admissible under MERC Capex Regulations, 2022 once the special allowance is claimed and utilised by the Generating Company subject to prudence check by the Commission.

44.4 In the event of a generating station availing of Special Allowance, the expenditure incurred upon or utilized from special allowance shall be maintained separately in the separate fund by the generating station and the expenditure incurred or utilized from the special allowance shall be made available to the Commission as and when directed.

Provided that special allowance allowed in the MYT Order shall be trued up at the end of Control Period on cumulative basis and unutilized special allowance shall be adjusted in the ARR with the holding cost, if any."

5.8.8 From the above, it is noted that the Special Allowance mechanism specified in Regulations is summarised as under:

i. The option for Special allowance is available for Thermal generating stations and Hydro generating stations who have completed their useful life.

ii. Special Allowance shall be included in the annual fixed cost, however, any upward revision of the capital cost or relaxation in the applicable operational norms if any allowed by the Commission shall not be allowed.

iii. All details of works to be undertaken through special allowance to be submitted along with MYT Petition and shall be approved by the Commission after prudence check.

iv. Special Allowance admissible to a generating station shall be maximum upto Rs. 10.75 lakh per MW per year for the Control Period

v. Generating Company opting for Special Allowance shall not be allowed to capitalise the assets created through special allowance and shall not be eligible for Depreciation, Return of Equity, Interest on Loan on such assets created through Special Allowance.

vi. No additional capitalization shall be admissible under MERC Capex Regulations, 2022 once the special allowance is claimed and utilised by the Generating Company subject to prudence check by the Commission.

vii. Unutilised Special Allowance to be adjusted in ARR with holding cost.

5.8.9 The Commission notes that TPC-G has claimed Special Allowance for all units except for Unit 8 and Bhira Pump Storage Unit. The Commission has also noted the pleadings made by TPC-G for no reduction in O&M Expenses and Heat Rate on account of Special Allowance.

5.8.10 As regards O&M Expenses, Regulation 48.1(j) of MYT Regulations, 2024 specifies as under:

> *"i) If the Generating Station or Unit opts for Special Allowance as per the provisions of the Regulation 44 of these Regulations, the applicable O&M norms for such Generating Station/Unit shall be as per the provisions of the Regulation 48.2 below of these Regulations for the respective category and type of the Generator."*

5.8.11 In view of the above, if Special Allowance is considered, the O&M expenses for Thermal generating stations viz. Unit 5 and Unit 7 shall be allowed as per Regulation 48.2 of MYT Regulations, 2024. The Commission notes that, if O&M Expenses are allowed to Unit 5 and Unit 7 as per O&M Norms specified in Regulation 48.2 of MYT Regulations, 2024, there would be substantial reduction in O&M Expenses which would be lower than the existing O&M Expenses approved by the Commission in its past Orders. Special Allowance is not the mandatory option provided under MYT Regulations, 2024 and TPC-G has chosen to exercise the option of Special Allowance for Control Period and at the same time, it has also sought relaxation in O&M expense. If the special allowance is allowed and at the same time, the O&M norms are not reduced as required under the MYT Regulations, 2024, there would be double impact on the beneficiaries and objective of the special allowance would be defeated. It is important to note that the special allowance has been introduced in the MYT Regulations, 2024 in lieu of Renovation and Modernization of the Generating Units and therefore it is expected that there shall be improvement in the performance of the Generating Units and also a reasonable reduction in the O&M Expenses. Hence, the Commission is not inclined to invoke power under Regulations 149 and 151 of MYT Regulations, 2024 and allow Special Allowance as well as relaxed O&M Expenses for Unit 5 and Unit 7 especially when claiming Special Allowance is optional.

5.8.12 The Commission notes that TPC-G has also expressed that reduction in norms for

O&M expenses will have an adverse impact on TPC-G. Accordingly, the Commission has decided not to consider the Special Allowance for Unit 5 and Unit 7. However, the Special Allowance is approved for Hydro Generating stations.

5.8.13 For Unit 5 and Unit 7, the Schemes as proposed by TPC-G are approved as part of capitalization and the depreciation, interest on loan capital and return on equity are being allowed on such capitalization.

5.8.14 The Commission notes that TPC-G has claimed the Special Allowance at 10.75 lakh/MW, which is ceiling specified in Regulation 44.3 of MYT Regulations, 2024. Further, Regulation 44.3 of MYT Regulations, 2024 specifies that details of works to be undertaken through Special Allowance should be submitted along with MYT Petition and shall be approved by the Commission after prudence check. The Commission has gone through the details of works proposed by TPC-G under Special Allowance.

5.8.15 The Commission sought the station-wise allocation of schemes proposed for Hydro generating stations. In response, TPC-G submitted details of station-wise works. It is observed that TPC-G has not provided allocation of one of the schemes i.e. scheme for Rehabilitation of Intake Structures at Hydro. amounting to Rs. 32.50 Crore. The Commission has considered the allocation of works of this scheme towards all hydro stations in proportion of their capacity for the amount claimed under Special Allowance.

5.8.16 The Commission notes that in case of Bhivpuri, the cost of schemes (Rs. 20.41 Crore) submitted are lower than the Special Allowance of Rs. 40.31 Crore claimed for Control Period whereas in case of Bhira and Khopoli, the cost of schemes proposed is more than Special Allowance claimed for Control Period.

5.8.17 The Commission has considered the Special Allowance up to the amount of DPR schemes proposed to be undertaken during Control Period as submitted by TPC-G subject to the ceiling of Rs 10.75 Lakh/MW/year as specified in the MYT Regulations, 2024.

5.8.18 In view of the above, the Commission approves the Special Allowance for Hydro generating stations as shown in the following Table:

Table 5.9: Special Allowance for FY 2025-26 to FY 2029-30 as approved by the Commission

Unit	MW	Rs. Lakh/MW	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
Bhira	150	10.75	16.13	16.13	16.13	16.13	16.13
Bhivpuri	75	5.44	4.08	4.08	4.08	4.08	4.08
Khopoli	72	10.75	7.74	7.74	7.74	7.74	7.74
Total	**297**		**27.95**	**27.95**	**27.95**	**27.95**	**27.95**

5.8.19 As per Regulation 44.4 of MYT Regulations, 2024, the unutilized special allowance shall be adjusted at time of Truing-up. TPC-G is directed to submit the details of works undertaken through Special Allowance along with necessary documentary evidences in accordance with the MYT Regulations, 2024 at time of Truing- up.

5.9 ADDITIONAL CAPITALISATION

TPC-G's submission

5.9.1 TPC-G has not claimed any capitalisation for Unit 5,7 and Hydro for Control period as special allowance has been claimed by it. Further, for Unit 8, TPC-G has claimed the Non-DPR capitalisation of Rs. 5.00 Crore for Control period.

Commission's Analysis and Ruling

5.9.2 As discussed above, the Commission has not allowed Special allowance for Unit 5 and Unit 7. Hence, the schemes proposed by TPC-G for Unit 5 and Unit 7 under Special Allowance are being allowed under additional capitalisation for Control Period. However, the Commission directs TPC-G to submit the DPR for the proposed schemes within one month of the date of this Order for in-principle approval. The schemes being considered under capitalization in FY 2025-26 are as given below:

Scheme Name	Amount (in Rs. Crore)
Unit 5- Reliability and Sustainance for 5 Year PPA	34.80*
Unit 7- Gas Turbine Life Extension Measures	111.00
Total	**145.80**

**Note- Based on revised submission made by TPC-G on 14 January, 2025*

5.9.3 Further, as regards the Non-DPR schemes for Unit 5 & 7, the Commission notes that no specific scheme have been submitted by TPC-G, instead Non-DPR capitalisation is claimed on ad-hoc basis (as 30% of capitalisation of DPR schemes). Hence, at this stage, the Commission has not approved any capitalisation towards Non-DPR schemes and the same shall be considered at time of Truing-up, subject to prudence check.

5.9.4 As regards Unit 8, TPC-G has claimed the Non-DPR capitalisation of Rs. 5 Crore for each year. For approving the Non-DPR capitalisation for Unit 8, the Commission has considered the average capitalisation approved for past three years viz. FY 2021-22 to FY 2023-24. Accordingly, the capitalisation of Rs. 1.90 Crore is approved for Control period for Unit 8 towards Non-DPR capitalisation.

5.9.5 Accordingly, the additional capitalisation approved by the Commission for Control

Period is as shown in the Table below:

Table 5.10: Additional capitalisation for FY 2025-26 to FY 2029-30 approved by the Commission (Rs. Crore)

Unit	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
Unit 5, 7 & hydro	145.80	0.00	0.00	0.00	0.00
Unit 8	1.90	1.90	1.90	1.90	1.90

5.9.6 The Commission approves the additional capitalisation as per the table above for Control Period.

5.10 MEANS OF FINANCE OF ADDITIONAL CAPITALISATION

TPC-G's submission

5.10.1 The means of finance for the claimed additional capitalisation has been considered in the debt-equity ratio of 70:30.

Commission's Analysis and Ruling

5.10.2 In line with the True-up of previous years, the Commission has considered the means of finance of the approved additional capitalisation in the debt: equity ratio of 70:30.

5.11 OPERATION AND MAINTENANCE (O&M) EXPENSES

TPC-G's submission

5.11.1 The O&M expenses for Units 5,7 & Hydro have been claimed in accordance with Regulation 48.1 of MYT Regulations, 2024. The base year expenses (for FY 2024-25) are computed as under:

Table 5.11: Base O&M Expenses for Unit 5, 7 & Hydro for FY 2025-26 to FY 2029-30 as claimed by TPC-G (Rs. Crore)

Particulars	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
Trued Up O & M Expenses	391.45	382.49	416.37	468.44	469.35
Avg. O & M Expenses	425.62				
O & M FY 2021-22	425.62				
Escalation Rate					
FY 2022-23	5.88%				
FY 2023-24	5.37%				
FY 2024-25	4.37%				
Base Year FY 2024-25	**495.60**				

5.11.2 The Water Charges have been estimated as Rs. 5.59 Crore based on the water charges for FY 2023-24 without applying for Escalation. The O&M Expenses claimed for Units 5,7 & Hydro for Control Period is shown in the following Table:

Table 5.12: O&M Expenses for Unit 5, 7 & Hydro for FY 2025-26 to FY 2029-30 as claimed by TPC-G (Rs. Crore)

Particulars	**FY 2025-26**	**FY 2026-27**	**FY 2027-28**	**FY 2028-29**	**FY 2029-30**
Base O&M Expenses	495.60	521.94	549.68	578.90	609.67
Escalation Rate	5.32%	5.32%	5.32%	5.32%	5.32%
Normative O&M Expenses	**521.94**	**549.68**	**578.90**	**609.67**	**642.07**
Water Charges	5.59	5.59	5.59	5.59	5.59
Total O&M expenses including Water Charges	**527.53**	**555.27**	**584.49**	**615.26**	**647.66**

5.11.3 The O&M expenses for Units 8 have been claimed in accordance with Regulation 48.3 of MYT Regulations, 2024 based on norms specified in terms of Rs. Lakh/MW as shown in Table below:

Table 5.13: O&M Expenses for Unit 8 for FY 2025-26 to FY 2029-30 as claimed by TPC-G (Rs. Crore)

Particulars	**FY 2025-26**	**FY 2026-27**	**FY 2027-28**	**FY 2028-29**	**FY 2029-30**
O&M Norms (Rs. Lakh/MW)	41.33	43.12	44.99	46.94	48.97
Capacity (MW)	250	250	250	250	250
Normative O&M Expenses	**103.33**	**107.80**	**112.48**	**117.35**	**122.43**

Commission's Analysis and Ruling

5.11.4 Regulation 48.1 of MYT Regulations, 2024 specifies the methodology for determination of Normative O&M Expenses for Generating Stations/Units that achieved COD before 26 August, 2005. The relevant extract of these Regulations is as under:

"48.1 Generating Stations/Units that achieved COD before August 26, 2005

a) The Operation and Maintenance expenses for Generating Stations which achieved COD before the date of coming into effect of the MERC (Terms and Conditions of Tariff) Regulations, 2005, shall be computed in accordance with this Regulation.

b) The Operation and Maintenance expenses excluding water charges and including insurance shall be derived on the basis of the average of the Trued-up Operation and Maintenance expenses after adding/deducting the share of efficiency gains/losses, for the five Years ending March 31, 2024, excluding abnormal Operation and Maintenance expenses, if any, subject to prudence *check by the Commission:*

Provided that, the impact of the wage revision if any during the Trued-up year shall be included in the O&M expenses while determining the norms for the O&M expenses for the future year.

Provided that the average of such Operation and Maintenance expenses shall be considered as Operation and Maintenance expenses for the Year ended March 31, 2022, and shall be escalated at the respective escalation rate for FY 2022- 23, FY 2023-24 and FY 2024-25, to arrive at the Operation and Maintenance expenses for the base year ending March 31, 2025:

Provided further that the escalation rate for FY 2022-23, FY 2023-24 and FY 2024-25 shall be computed by considering 50% weightage to the average yearly inflation derived based on the monthly Wholesale Price Index of the respective past five financial years as per the Office of Economic Advisor of Government of India and 50% weightage to the average yearly inflation derived based on the monthly Consumer Price Index for Industrial Workers (all-India) of the respective past five financial years as per the Labour Bureau, Government of India:

… …. ..

c) The Operation and Maintenance expenses for each subsequent year shall be determined by escalating these Base Year expenses of FY 2024-25 by an inflation factor with 50% weightage to the average yearly inflation derived based on the monthly Wholesale Price Index of the respective past five financial years as per the Office of Economic Advisor of Government of India and 50% weightage to the average yearly inflation derived based on the monthly Consumer Price Index for Industrial Workers (all-India) of the past five financial years as per the Labour Bureau, Government of India, as reduced by an efficiency factor of 1% of Average escalation factor or as may be stipulated by the Commission from time to time, to arrive at the permissible Operation and Maintenance expenses for each year of the Control Period:

… … …

d) Water Charges shall be allowed separately as per actuals, based on water consumption depending upon type of plant, type of cooling water system etc., subject to prudence check and considering the norms of specific water consumption notified by the Ministry of Environment, Forest and Climate Change:

Provided that in the MYT Order, the Commission shall provisionally approve the Water Charges for each year of the Control Period based on the actual Water Charges as per latest Audited Accounts available for the Generating Company, subject to prudence check.

. … … ”

5.11.5 As discussed in earlier Section of this Chapter, Special Allowance is not allowed for Unit 5 and Unit 7. Accordingly, the Commission has computed the Normative O&M Expenses for Control period for Unit 5 and Unit 7 and Hydro Generating Stations as per the above said Regulations.

5.11.6 The Commission has considered the average of the Trued-up O&M expenses (excluding water charges, and including insurance) after adding/deducting the share of Efficiency Gains/Losses for the five years ending 31 March, 2024.

5.11.7 The Commission has computed the escalation factor considering the inflation indices. The escalation factor has been computed as 5.37%, considering the five years average of CPI and WPI index in the ratio of 50:50. Further, the Commission has reduced the efficiency factor of 1% for Control Period, thereby considering the escalation factor of 4.37%.

5.11.8 Accordingly, the Commission has escalated the average of O&M expense of FY 2019-20 to FY 2023-24 considered as the O&M Expense for the year ended 31 March, 2022, at 5.88% and 5.37% to arrive at the O&M expenses for the base year commencing 1 April, 2024. Thereafter, the Commission escalated the same by 4.37% to arrive at O&M Expense for FY 2024-25.

5.11.9 As regards escalation factor for Control Period, TPC-G has claimed the escalation factor of 5.32% by considering the efficiency factor as 1% of 5.37% (i.e., 99% x 5.37%). The Commission in its Statement of Reasons for MYT Regulations, 2024 has clarified the methodology for consideration of efficiency factor as 1%, which would be reduced from escalation factor derived from CPI-WPI index. This is in line with the same approach as adopted for 4th Control Period as per MYT Regulations, 2019. Accordingly, the Commission has considered the escalation factor for Control Period as 4.37%.

5.11.10 The base year expenses for FY 2024-25 are computed as under:

Table 5.14: Base O&M Expenses for Unit 5, 7 & Hydro for FY 2025-26 to FY 2029-30 as approved by the Commission (Rs. Crore)

Particulars	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
Trued Up O & M Expenses with efficiency gains/(losses)	391.45	382.49	416.37	468.44	473.26
Avg. O & M Expenses			426.40		
Escalation Rate					
FY 2022-23			5.88%		

Particulars	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
FY 2023-24			5.37%		
FY 2024-25			4.37%		
Base Year FY 2024-25			**496.51**		

5.11.11 Further, the Commission has computed normative O&M Expenses for Unit 5 and Unit 7 & Hydro Stations as per the following Table. The Water charges have been approved as Rs. 5.59 Crore for each year of the Control Period, in addition to normative O&M Expenses. The Water Charges shall be considered on actuals at time of Truing-up for respective years.

Table 5.15: O&M Expenses for Unit 5, 7 & Hydro for FY 2025-26 to FY 2029-30 as approved by the Commission (Rs. Crore)

Particulars	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
Base O&M Expenses	496.51	518.20	540.84	564.47	589.13
Escalation Rate	4.37%	4.37%	4.37%	4.37%	4.37%
Normative O&M Expenses	**518.20**	**540.84**	**564.47**	**589.13**	**614.87**
Water Charges	5.59	5.59	5.59	5.59	5.59
Total O&M expenses including Water Charges	**523.79**	**546.43**	**570.06**	**594.72**	**620.45**

5.11.12 The O&M expenses for Unit 8 have been computed in accordance with Regulation 48.3 of MYT Regulations, 2024 based on norms specified in terms of Rs. Lakh/MW as shown in Table below:

Table 5.16: O&M Expenses for Unit 8 for FY 2025-26 to FY 2029-30 as approved by the Commission (Rs. Crore)

Particulars	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
O&M Norms (Rs. Lakh/MW)	41.33	43.12	44.99	46.94	48.97
Capacity (MW)	250	250	250	250	250
Normative O&M Expenses	**103.33**	**107.80**	**112.48**	**117.35**	**122.43**

5.12 DEPRECIATION

TPC-G's submission

5.12.1 TPC-G has computed the depreciation as per Regulation 28 of MYT Regulations, 2024. Based on rates specified in Annexure I of the MYT Regulations, 2024, the average rate of depreciation for FY 2023-24 works out to 2.54% and same has been considered for computation of depreciation.

5.12.2 Further, TPC-G stated that vide its letter dated 19 September, 2024, it had sought certain clarifications on the applicable depreciation rate. TPC-G requested the Commission to provide the necessary clarification to enable it to make the necessary changes in its system.

5.12.3 The depreciation claimed by TPC-G for Control Period is shown in the following Table:

Table 5.17: Depreciation for FY 2025-26 to FY 2029-30 as claimed by TPC-G (Rs. Crore)

Particulars	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
Unit 5 to 7 & Hydro Stations					
Opening GFA	3,930.47	3,930.47	3,930.47	3,930.47	3,930.47
Addition of GFA	-	-	-	-	-
Closing GFA	3,930.47	3,930.47	3,930.47	3,930.47	3,930.47
Rate of Depreciation	2.54%	2.54%	2.54%	2.54%	2.54%
Depreciation	99.84	99.84	99.84	99.84	99.84
Unit 8					
Opening GFA	1,199.89	1,204.89	1,209.89	1,214.89	1,219.89
Addition of GFA	5.00	5.00	5.00	5.00	5.00
Closing GFA	1,204.89	1,209.89	1,214.89	1,219.89	1,224.89
Rate of Depreciation	2.08%	2.08%	2.08%	2.08%	2.08%
Depreciation	25.01	25.01	25.01	25.01	25.01

Commission's Analysis and Ruling

5.12.4 In the Provisional True-up of FY 2024-25, the Commission had approved the closing GFA for FY 2024-25. The Commission has considered the same as the opening GFAs for FY 2025-26. The approved additional capitalisation for Control Period has been considered as the GFA addition during the respective year.

5.12.5 As regards the rates of depreciation, Regulation 28(1)(b) and 28(1)(c) of MYT Regulations, 2024 specify separate deprecation rates for existing assets and new capital schemes or assets to be created during Control Period. The Commission has computed the deprecation accordingly.

5.12.6 Further, Regulation 28(c) of MYT Regulations, 2024 specifies that the generating company shall ensure that once the individual asset is depreciated to the extent of seventy percent, remaining depreciable value as on 31st March of the year closing after the period of fifteen years from the Commercial Operation Date or the date of assets capitalised shall be spread over the balance Useful Life of the asset including the Extended Life, as provided in this Regulation. With regard to this proviso, the Commission understands that there is ambiguity in interpretation of this Regulation as rate of depreciation of 4.22% considered for 15 years translates into 63.3% and not 70%. In this regard, the Commission notes that, Annexure II specifies the deprecation rates for different class of assets. The depreciation rates for some of assets are higher than 4.22%, which can achieve the cumulative deprecation up to 70% before 15 years. Hence, in this regard, the Commission clarifies that the above said provision shall be interpreted as under:

> *"The generating company shall ensure that once the individual asset is depreciated to the extent of seventy percent or upto 15 years, whichever comes earlier, remaining depreciable value as on 31st March of the year closing after such period from the Commercial Operation Date or the date of assets capitalised shall be spread over the balance Useful Life of the asset including the Extended Life."*

5.12.7 The depreciation approved by the Commission for Control Period is as shown in the Table below:

Table 5.18: Depreciation for FY 2025-26 to FY 2029-30 as approved by the Commission (Rs. Crore)

Particulars	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
Unit 5 to 7 & Hydro Stations					
Opening GFA	3,928.52	4,074.32	4,074.32	4,074.32	4,074.32
Addition of GFA	145.80	-	-	-	-
Closing GFA	4,074.32	4,074.32	4,074.32	4,074.32	4,074.32
Rate of Depreciation	2.57%	2.60%	2.60%	2.60%	2.60%
Depreciation	**102.83**	**105.86**	**105.86**	**105.86**	**105.86**
Unit 8					
Opening GFA	1,196.77	1,198.67	1,200.56	1,202.46	1,204.36
Addition of GFA	1.90	1.90	1.90	1.90	1.90
Closing GFA	1,198.67	1,200.56	1,202.46	1,204.36	1,206.25
Rate of Depreciation	2.08%	2.08%	2.09%	2.09%	2.09%
Depreciation	**24.93**	**25.01**	**25.09**	**25.16**	**25.24**

5.13 INTEREST ON LOAN

TPC-G's submission

5.13.1 Based on the closing balance of long term loans for FY 2024-25 and the additional capitalisation during Control Period with repayments equal to the estimated depreciation, the interest on loan has been worked out for Control period. Interest Rate of 9.02% for FY 2023-24 has been considered for the Control Period. The interest on loan claimed for control period is as under:

Table 5.19: Interest on Loan for FY 2025-26 to FY 2029-30 as claimed by TPC-G (Rs. Crore)

Particulars	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
Unit 5 to 7 & Hydro Stations					
Opening Balance	0.00	0.00	0.00	0.00	0.00
Addition	0.00	0.00	0.00	0.00	0.00
Repayment	99.84	99.84	99.84	99.84	99.84
Closing balance	0.00	0.00	0.00	0.00	0.00
Interest Rate (%)	9.02%	9.02%	9.02%	9.02%	9.02%
Interest on Loan Capital	0.00	0.00	0.00	0.00	0.00
Unit 8					
Opening Balance	58.04	36.54	14.93	0.00	0.00
Addition	3.50	3.50	3.50	3.50	3.50
Repayment	25.01	25.11	25.21	25.32	25.42
Closing balance	36.54	14.93	0.00	0.00	0.00
Interest Rate (%)	9.02%	9.02%	9.02%	9.02%	9.02%
Interest on Loan	4.26	2.32	0.67	0.00	0.00

Commission's Analysis and Ruling

5.13.2 The Commission has approved interest on loan capital as per Regulation 30 of MYT Regulations, 2024. The closing loan for FY 2024-25 as approved in the Provisional Truing-up, in earlier Section of this Order has been considered as the opening loan for FY 2025-26.

5.13.3 The Commission has considered the debt amount for each year of the Control Period equal to 70% of the capitalisation approved. The loan repayments have been considered equal to the depreciation approved for the respective years, as approved in this Order. The interest rate has been considered equal to the rate of interest considered for FY 2023-24 and the interest on long-term loan has been computed on the normative average loan for each year of the Control Period.

5.13.4 Based on the above, the interest on loan approved by the Commission is shown in the Table below:

Table 5.20: Interest on Loan for FY 2025-26 to FY 2029-30 as approved by the Commission (Rs. Crore)

Particulars	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
Unit 5 to 7 & Hydro Stations					
Opening Balance	0.00	0.00	0.00	0.00	0.00
Addition	102.06	0.00	0.00	0.00	0.00
Repayment	102.83	105.86	105.86	105.86	105.86
Closing balance	0.00	0.00	0.00	0.00	0.00
Interest Rate (%)	9.02%	9.02%	9.02%	9.02%	9.02%
Interest on Loan Capital	0.00	0.00	0.00	0.00	0.00
Unit 8					
Opening Balance	55.89	32.29	8.61	0.00	0.00
Addition	1.33	1.33	1.33	1.33	1.33
Repayment	24.93	25.01	25.09	25.16	25.24
Closing balance	32.29	8.61	0.00	0.00	0.00
Interest Rate (%)	9.02%	9.02%	9.02%	9.02%	9.02%
Interest on Loan	3.98	1.84	0.39	0.00	0.00

5.13.5 The Commission approves the interest on loan as per above Table for the Control Period.

5.14 INTEREST ON WORKING CAPITAL

TPC-G's submission

5.14.1 Interest on Working Capital (IoWC) has been computed based on Regulation 32 of MYT Regulations, 2024. The applicable quantum of Working Capital has been estimated on the basis of Regulation 32.1 of MYT Regulations, 2024. Further, the applicable interest has been considered as per Regulation 32.1 (f) of MYT Regulations, 2024 as equal to Base Rate on date of filing of this Petition plus 150 Basis Points. Accordingly, the rate works out to 10.50% for projections and IoWC would work out as follows:

Table 5.21: IoWC for FY 2025-26 to FY 2029-30 as claimed by TPC-G (Rs. Crore)

Particulars	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
Unit 5 to 7 & Hydro Stations					
Working Capital Requirement	378.97	342.34	357.01	363.86	379.26
Interest Rate (%)	10.50%	10.50%	10.50%	10.50%	10.50%
IoWC	39.79	35.95	37.49	38.21	39.82
Unit 8					
Working Capital	159.34	144.22	145.36	155.62	177.00
Interest Rate (%)	10.50%	10.50%	10.50%	10.50%	10.50%
IoWC	16.73	15.14	15.26	16.34	18.59

Commission's Analysis and Ruling

5.14.2 The Commission has computed IoWC in accordance with the MYT Regulations, 2024. In accordance with Regulation 32.1 of MYT Regulations, 2024, the working capital comprising of the following components has been considered:

(a) Cost of coal towards stock, for twenty days, for Unit 5 and Unit 8, for generation corresponding to target Availability;

(b) Cost of coal, for thirty days, for Unit 5 and Unit 8, for generation corresponding to target Availability;

(c) Cost of APM gas, for thirty days, for Unit 7, for generation corresponding to target Availability;

(d) Cost of secondary fuel oil, for two months, for Unit 8, for generation corresponding to target Availability;

(e) Normative O&M expenses of Units 5,7 & Hydro and Unit 8 for one month;

(f) Maintenance spares at one percent of approved opening GFA for Units 5,7 & Hydro and Unit 8;

(g) Receivables for sale of electricity to BEST equivalent to 45 days of the sum of the approved AFC for Units 5,7 & Hydro and Unit 8 and energy charges for Units 5&7 and Unit 8 computed at target Availability;

(h) minus: payables for fuels to the extent of thirty days of the cost of coal for Unit 5, coal and secondary fuel oil for Unit 8 and APM gas for Unit 7 at target Availability.

5.14.3 The Commission has computed working capital requirement on normative basis in line with above said provisions of Regulations. The Commission notes that TPC-G has considered the lower payables for Fuel for Unit 5, 7 & 8, however, the Commission has considered the same as per MYT Regulations, 2024. The rate of IoWC has been considered as 10.45% as per Regulation 32.1(f) of MYT Regulations,

2024. IoWC approved for Control Period is as under:

Table 5.22: IoWC for FY 2025-26 to FY 2029-30 as approved by the Commission (Rs. Crore)

Particulars	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
Unit 5 to 7 & Hydro Stations					
Working Capital Requirement	337.58	302.56	315.72	321.95	335.95
Interest Rate (%)	10.45%	10.45%	10.45%	10.45%	10.45%
IoWC	35.28	31.62	32.99	33.64	35.11
Unit 8					
Working Capital Requirement	135.92	123.69	124.62	133.19	150.68
Interest Rate (%)	10.45%	10.45%	10.45%	10.45%	10.45%
IoWC	14.20	12.93	13.02	13.92	15.75

5.14.4 The Commission approves IoWC as per above Table for the Control period.

5.15 RETURN ON EQUITY & INCOME TAX

TPC-G's submission

5.15.1 RoE has been claimed in accordance with Regulation 29 of MYT Regulations, 2024. TPC-G has considered the Rate of RoE of 15.50%. No Income Tax has been claimed by TPC-G as discussed in earlier Chapter of this Order. Accordingly, TPC-G submitted the Return on Equity for Control period as shown in the following Table:

Table 5.23: Return on Equity for FY 2025-26 to FY 2029-30 as claimed by TPC-G (Rs. Crore)

Particulars	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
Unit 5 to 7 & Hydro Stations					
Opening Balance	1,389.68	1,389.68	1,389.68	1,389.68	1,389.68
Addition	0.00	0.00	0.00	0.00	0.00
Reduction	0.00	0.00	0.00	0.00	0.00
Closing balance	1,389.68	1,389.68	1,389.68	1,389.68	1,389.68
Rate of Return (%)	15.50%	15.50%	15.50%	15.50%	15.50%
Return on Equity	215.40	215.40	215.40	215.40	215.40
Unit 8					
Opening Balance	359.97	361.47	362.97	364.47	365.97
Addition	1.50	1.50	1.50	1.50	1.50
Reduction	0.00	0.00	0.00	0.00	0.00
Closing balance	361.47	362.97	364.47	365.97	367.47

Particulars	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
Rate of Return (%)	15.50%	15.50%	15.50%	15.50%	15.50%
Return on Equity	55.91	56.14	56.38	56.61	56.84

Commission's Analysis and Ruling

5.15.2 The Commission has computed the RoE for the Control Period in accordance with Regulation 29 of MYT Regulations, 2024. The closing equity for FY 2024-25 has been considered as opening equity for FY 2025-26 and so on. Addition to equity is considered equal to 30% of the capitalization approved in this Order for respective year of the Control Period as specified in the MYT Regulations, 2024

5.15.3 Further, Rate of Return on equity has been considered as 15.50% as per Regulation 29.2 of MYT Regulations, 2024. As regards the Income Tax, the Commission notes that TPC-G has not paid any income tax in past years (i.e., FY 2022-23 and FY 2023-24) as approved in this Order. Further, the TPC-G has not considered any effective tax rate for computation of ROE as the matter is sub-judice before Hon'ble ATE. Hence, the Commission has considered the effective tax rate as Nil.

5.15.4 The RoE approved by the Commission for the Control Period is shown in the Table below:

Table 5.24: Return on Equity for FY 2025-26 to FY 2029-30 as approved by the Commission (Rs. Crore)

Particulars	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
Unit 5 to 7 & Hydro Stations					
Opening Balance	1,389.10	1,432.84	1,432.84	1,432.84	1,432.84
Addition	43.74	0.00	0.00	0.00	0.00
Reduction	0.00	0.00	0.00	0.00	0.00
Closing balance	1,432.84	1,432.84	1,432.84	1,432.84	1,432.84
Rate of Return (%)	15.50%	15.50%	15.50%	15.50%	15.50%
Return on Equity	**218.70**	**222.09**	**222.09**	**222.09**	**222.09**
Unit 8					
Opening Balance	359.04	359.60	360.17	360.74	361.31
Addition	0.57	0.57	0.57	0.57	0.57
Reduction	0.00	0.00	0.00	0.00	0.00
Closing balance	359.60	360.17	360.74	361.31	361.88
Rate of Return (%)	15.50%	15.50%	15.50%	15.50%	15.50%
Return on Equity	**55.69**	**55.78**	**55.87**	**55.96**	**56.05**

5.15.5 The Commission approves RoE as per above Table for Control period.

5.16 NON-TARIFF INCOME (NTI)

TPC-G's submission

5.16.1 TPC-G has claimed NTI of Rs. 25.27 Crore and Rs. (2.34) Crore for Units 5,7 & Hydro and Unit 8 respectively.

Commission's Analysis and Ruling

5.16.2 For Unit 5, 7 & Hydro, the Commission has considered NTI as Rs. 25.27 Crore as approved by the Commission for FY 2023-24 for Truing-up purpose.

5.16.3 For Unit 8, TPC-G has claimed negative NTI based on actual NTI claimed for FY 2023-24. The Commission notes that negative NTI is on account of consideration of net income for sale of fly ash and during FY 2023-24, expenses for sale of fly ash were higher than income. However, the condition may not remain same for Control Period and thus the same is not considered for projection of NTI for Control Period. Hence, for Control Period, the Commission has considered NTI as Rs. 0.40 Crore based on approved NTI for FY 2023-24 excluding expenses incurred for sale of fly ash.

5.17 ANNUAL FIXED CHARGES (AFC)

5.17.1 Regulation 42 of the MYT Regulations, 2024 specifies the components of AFC as follows:

a. Operation and Maintenance (O&M) expenses
b. Depreciation
c. Interest on Loan
d. Interest on Working Capital (IoWC)
e. Return on Equity (RoE)
f. Income Tax

Less:

g. Non-Tariff Income (NTI)

5.17.2 After approving each component of Annual Fixed Charges, the Commission approves the Annual Fixed Charges for Control Period as shown in the following Tables:

Table 5.25: AFC for Units 5,7 & Hydro for 5th Control Period from FY 2025-26 to FY 2029-30 (Rs. Crore)

Particulars	FY 2025-26		FY 2026-27		FY 2027-28		FY 2028-29		FY 2029-30	
	Claimed	Approved	Claimed	Approved	Claimed	Approved	Claimed	Approved	Claimed	Approved
O&M expenses	527.53	523.79	555.27	546.43	584.49	570.06	615.26	594.72	647.66	620.45
Depreciation	99.84	102.83	99.84	105.86	99.84	105.86	99.84	105.86	99.84	105.86
Interest on loan and finance charges	-	-	-	-	-	-	-	-	-	-
Interest on working capital	39.79	35.28	35.95	31.62	37.49	32.99	38.21	33.64	39.82	35.11
Special Allowance	105.03	27.95	105.03	27.95	105.03	27.95	105.03	27.95	105.03	27.95
Return on Equity	215.40	218.70	215.40	222.09	215.40	222.09	215.40	222.09	215.40	222.09
Less: Allocation of Unit 8 for shared capacity	9.76	(9.76)	9.76	(9.76)	9.76	(9.76)	9.76	(9.76)	9.76	(9.76)
Less: Non-tariff income	25.27	25.27	25.27	25.27	25.27	25.27	25.27	25.27	25.27	25.27
Annual Fixed Charges	**952.56**	**873.51**	**976.46**	**898.91**	**1,007.21**	**923.92**	**1,038.70**	**949.23**	**1,072.72**	**976.43**

Table 5.26: AFC for Unit 8 for 5th Control Period from FY 2025-26 to FY 2029-30 (Rs. Crore)

Particulars	FY 2025-26		FY 2026-27		FY 2027-28		FY 2028-29		FY 2029-30	
	Claimed	Approved	Claimed	Approved	Claimed	Approved	Claimed	Approved	Claimed	Approved
O&M expenses	103.33	103.33	107.80	107.80	112.48	112.48	117.35	117.35	122.43	122.43
Depreciation	25.01	24.93	25.11	25.01	25.21	25.09	25.32	25.16	25.42	25.24
Interest on loan and finance charges	4.26	3.98	2.32	1.84	0.67	0.39	-	-	-	-
Interest on working capital	16.73	14.20	15.14	12.93	15.26	13.02	16.34	13.92	18.59	15.75
Return on Equity	55.91	55.69	56.14	55.78	56.38	55.87	56.61	55.96	56.84	56.05
Add: Allocation of Unit 8 for shared capacity	9.76	9.76	9.76	9.76	9.76	9.76	9.76	9.76	9.76	9.76
Less: Non-tariff income	(2.34)	0.40	(2.34)	0.40	(2.34)	0.40	(2.34)	0.40	(2.34)	0.40
Annual Fixed Charges	**217.34**	**211.49**	**218.62**	**212.72**	**222.11**	**216.20**	**227.72**	**221.75**	**235.38**	**228.82**

5.18 UNIT/STATION WISE AFC

Commission's Analysis and Ruling

5.18.1 Based on the methodology adopted by the Commission for fixed cost allocation in MTR Order, the Commission has allocated the AFC to thermal Units and hydro stations as shown in the Table below:

Table 5.27: Unit/Station wise AFC for 5th Control Period from FY 2025-26 to FY 2029-30 (Rs. Crore)

Particulars	FY 2025-26		FY 2026-27		FY 2027-28		FY 2028-29		FY 2029-30	
	Claimed	Approved	Claimed	Approved	Claimed	Approved	Claimed	Approved	Claimed	Approved
Thermal										
Unit 5	375.56	319.48	381.76	326.25	394.10	336.32	406.17	346.03	419.79	356.97
Unit 7	217.95	198.64	224.51	205.71	231.21	211.15	238.28	216.84	245.68	222.74
Unit 8	217.34	211.49	218.62	212.72	222.11	216.20	227.72	221.75	235.38	228.82
Total Thermal	**810.85**	**729.61**	**824.89**	**744.68**	**847.42**	**763.67**	**872.17**	**784.61**	**900.84**	**808.53**
Hydro										
Bhira	143.34	143.54	147.51	147.97	151.90	151.52	156.53	155.24	161.41	159.12
Bhivpuri	82.77	78.89	85.25	81.49	87.86	83.60	90.61	85.81	93.51	88.12
Khopoli	132.93	132.96	137.42	137.50	142.13	141.32	147.10	145.31	152.34	149.48
Total Hydro	**359.05**	**355.39**	**370.18**	**366.95**	**381.90**	**376.44**	**394.25**	**386.36**	**407.25**	**396.71**
Grand Total	**1,169.90**	**1,085.00**	**1,195.08**	**1,111.63**	**1,229.32**	**1,140.12**	**1,266.42**	**1,170.98**	**1,308.10**	**1,205.25**

5.18.2 The Commission approves Unit/Station wise AFC as per above Table for Control Period.

5.19 CAPACITY CHARGE AND ENERGY CHARGE FOR HYDRO STATIONS

TPC-G's submission

5.19.1 TPC-G submitted that the Capacity Charge and Energy Charge for hydro stations have been claimed in accordance with Regulation 52.3 and 52.6 of MYT Regulations, 2024.

5.19.2 The Capacity Charges and Energy Charges as claimed by TPC-G as in Table below:

Table 5.28: Capacity Charges and Energy Charges for Hydro Station for 5th Control Period from FY 2025-26 to FY 2029-30 as claimed by TPC-G (Rs. Crore)

Particulars	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
Bhira					
Total Fixed Cost (Rs. Crore)	143.34	147.51	151.90	156.53	161.41
NAPAF (%)	90%	90%	90%	90%	90%
Projected Availability (%)	90%	90%	90%	90%	90%
Capacity Charges (Rs. Crore)	71.67	73.76	75.95	78.27	80.70
Design Energy (MU)	744.12	744.12	744.12	744.12	744.12
Auxiliary Consumption (%)	1.00%	1.00%	1.00%	1.00%	1.00%
Net Design Energy (MU)	736.68	736.68	736.68	736.68	736.68
Energy Charge (Rs./kWh)	0.973	1.001	1.031	1.062	1.095
Bhivpuri					
Total Fixed Cost (Rs. Crore)	82.77	85.25	87.86	90.61	93.51
NAPAF (%)	90%	90%	90%	90%	90%
Projected Availability (%)	90%	90%	90%	90%	90%
Capacity Charges (Rs. Crore)	41.39	42.63	43.93	45.31	46.75
Design Energy (MU)	193.23	193.23	193.23	193.23	193.23
Auxiliary Consumption (%)	1.20%	1.20%	1.20%	1.20%	1.20%
Net Design Energy (MU)	190.91	190.91	190.91	190.91	190.91
Energy Charge (Rs./kWh)	2.168	2.233	2.301	2.373	2.449
Khopoli					
Total Fixed Cost (Rs. Crore)	132.93	137.42	142.13	147.10	152.34
NAPAF (%)	90%	90%	90%	90%	90%
Projected Availability (%)	90%	90%	90%	90%	90%
Capacity Charges (Rs. Crore)	66.47	68.71	71.07	73.55	76.17
Design Energy (MU)	174.68	174.68	174.68	174.68	174.68
Auxiliary Consumption (%)	1.20%	1.20%	1.20%	1.20%	1.20%
Net Design Energy (MU)	172.58	172.58	172.58	172.58	172.58
Energy Charge (Rs./kWh)	3.851	3.981	4.118	4.262	4.413

Commission's Analysis and Ruling

5.19.3 The Commission has computed the Capacity Charge and Energy Charge for Hydro Stations as per provisions of Regulation 52 of MYT Regulations, 2024.

5.19.4 For computation of Energy Charges, the Commission has considered the Design Energy for each Station as shown in the following Table:

Table 5.29: Design Energy of Hydro Station (MU)

Particulars	Bhira	Bhivpuri	Khopoli
Gross Design Energy (MU)	744.12	193.23	174.68
Auxiliary Consumption (%)	1.00%	1.20%	1.20%
Net Design Energy (MU)	736.68	190.91	172.58

5.19.5 The Commission notes that Regulation 52.3 of MYT Regulations, 2024 specifies that Capacity Charge (inclusive of incentive) shall be payable to Hydro Stations for calendar month based on Plant Availability Factor achieved in that month.

5.19.6 The Capacity Charges and Energy Charges approved by the Commission for Control Period is shown in the following Table:

Table 5.30: Capacity Charges and Energy Charges for Hydro Station for 5th Control Period from FY 2025-26 to FY 2029-30 as approved by the Commission (Rs. Crore)

Particulars	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
Bhira					
Total Fixed Cost (Rs. Crore)	143.54	147.97	151.52	155.24	159.12
NAPAF (%)	90%	90%	90%	90%	90%
Projected Availability (%)	90%	90%	90%	90%	90%
Capacity Charges (Rs. Crore)	71.77	73.98	75.76	77.62	79.56
Design Energy (MU)	744.12	744.12	744.12	744.12	744.12
Auxiliary Consumption (%)	1.00%	1.00%	1.00%	1.00%	1.00%
Net Design Energy (MU)	736.68	736.68	736.68	736.68	736.68
Energy Charge (Rs./kWh)	0.974	1.004	1.028	1.054	1.080
Bhivpuri					
Total Fixed Cost (Rs. Crore)	78.89	81.49	83.60	85.81	88.12
NAPAF (%)	90%	90%	90%	90%	90%
Projected Availability (%)	90%	90%	90%	90%	90%
Capacity Charges (Rs. Crore)	39.44	40.74	41.80	42.91	44.06
Design Energy (MU)	193.23	193.23	193.23	193.23	193.23
Auxiliary Consumption (%)	1.20%	1.20%	1.20%	1.20%	1.20%
Net Design Energy (MU)	190.91	190.91	190.91	190.91	190.91
Energy Charge (Rs./kWh)	2.066	2.134	2.190	2.247	2.308
Khopoli					
Total Fixed Cost (Rs. Crore)	132.96	137.50	141.32	145.31	149.48
NAPAF (%)	90%	90%	90%	90%	90%
Projected Availability (%)	90%	90%	90%	90%	90%
Capacity Charges (Rs. Crore)	66.48	68.75	70.66	72.66	74.74
Design Energy (MU)	174.68	174.68	174.68	174.68	174.68
Auxiliary Consumption (%)	1.20%	1.20%	1.20%	1.20%	1.20%
Net Design Energy (MU)	172.58	172.58	172.58	172.58	172.58
Energy Charge (Rs./kWh)	3.852	3.984	4.094	4.210	4.331

5.19.7 The Commission approves Capacity and Energy Charge for hydro stations as per above Table for Control Period.

5.20 ENERGY CHARGES

TPC-G's submission

5.20.1 TPC-G submitted that 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 as per Regulation 51.6 of MYT Regulations, 2024.

5.20.2 TPC-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 as shown in the following Table:

Table 5.31: Fuel Prices for July 24 to Sep 24 as considered by TPC-G (Rs. Crore)

Fuel	Rs / MT	Rs / Mkcal	GCV (Mkcal/MT)
Coal	8368	2094	3.999
APM Gas	31798	2429	13.088
RLNG	70652	5399	13.086
Oil	58853	5672	10.364

5.20.3 TPC-G, in order to incorporate the risk of fuel price variation in the future period, has considered an annual escalation of 3% in the fuel prices for the Control Period.

5.20.4 In view of the above, the Unit wise Energy Charges on the basis of above assumptions as considered by TPC-G are shown in the Table below:

Table 5.32: Energy Charge Rate for Control Period as claimed by TPC-G (Rs. Crore)

Unit	Fuel	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
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
Bhira	EC	0.973	1.001	1.031	1.062	1.095
Bhivpuri	EC	2.168	2.233	2.301	2.373	2.449
Khopoli	EC	3.851	3.981	4.118	4.262	4.413

Commission's Analysis and Ruling

5.20.5 The Commission notes that Regulation 40 of MYT Regulations, 2024 specifies the provisions related to Fuel Utilisation Plan, wherein Generation Companies are required to forecast the fuel requirement, provide the contracted sources, alternate arrangement of Fuel, etc. The relevant extract of Regulation is as under:

*"**40 Fuel Utilisation Plan***

40.1 The Generating Company shall prepare and submit Fuel Utilisation Plan for the Control Period commencing on April 1, 2025, along with the Petition for determination of Tariff for the Control Period from April 1, 2025 to March 31, 2030, in accordance with Part A of these Regulations, to the Commission for approval.

40.2 The Fuel Utilisation Plan should ensure that fuel quantum is allocated to different generating Stations/Units in accordance with the merit order of different generation Stations/Units in terms of variable cost:

Provided that the fuel allocation should be such that, subject to system and other constraints, the least cost generating Stations/Units are operated at maximum availability and other generating Stations/Units are operated at maximum availability thereafter in the ascending order of variable cost.

40.3 The Fuel Utilisation Plan shall comprise the following:

(a) Forecast of fuel requirement for each unit/station;

(b) Details of contracted source, annual contracted quantity, estimated availability from contracted sources and resultant shortage of fuel, if any, for each unit/station;

(c) Use of optimum mix of fuel;

(d) Alternate arrangement for meeting shortage of fuel along with impact on variable cost of unit/station;

(e) Plan for swapping of fuel source for optimising the cost, if any, along with detailed justification and cost savings;

(f) Net cost savings in variable cost of each unit, if any, after optimum utilisation of Fuel:

Provided that the forecast or estimates for the Control Period from FY 2025-26 to FY 2029-30 shall be prepared for each month over the Control Period:

Provided further that Fuel Utilisation Plan shall be prepared based on past data and reasonable assumptions for future.

40.4 The beneficiary/ies shall file comments/suggestions on such Plan during proceedings of Tariff Petition as per Regulation 13.

40.5 The Commission shall approve the Fuel Utilisation Plan and rationalise the variable cost of generation for Generating Unit/Station based on such Plan and suggestions and comments received from the beneficiary/ies for the Control Period as part of its Order on the MYT Petition.

40.6 A Generating Company shall maintain data of actual performance of Unit/Station wise Fuel Utilisation vis-à-vis Fuel Utilisation plan approved by the Commission, along with justification for variation between approved and actual fuel utilisation plan and, shall put up such data within fifteen days from the end of each month, on the internet website of the Generating Company.

40.7 At time of truing up of respective year, the Commission shall scrutinise the implementation of actual Fuel Utilisation Plan vis-à-vis approved plan, deviations, if any, and justification submitted by a Generating Company *thereon and may disallow the variable cost of generation on account of operational inefficiencies in utilisation of fuel."*

5.20.6 The Commission notes that TPC-G submitted the Fuel Utilisation Plan for Coal, Oil and Gas. The Coal is utilised in Unit 5 and Unit 8, Gas is utilised in Unit 7 and Oil is utilised in Unit 5 and Unit 8.

5.20.7 In response to the Commission's query regarding the existing arrangement of contracts and fuel procurement plan for coal and gas, TPC-G stated that:

i. As regards Coal, TPC-G Trombay plant requires Ultra-low sulphur and low ash quality Coal which is primarily available in Indonesia. TPC has entered into a long-term coal supply contract with M/s Adaro International under HBA/HPB Pricing mechanism (discovered through 5 global open tendering process). Currently, the supplies under the contract are on hold due to legal issues between the parties. Since, International coal market being volatile, TPC is monitoring the Coal Indices on regular basis. Based on favourable trends, TPC shall execute short term/ quarterly coal sourcing contracts to optimize on cost of generation.

ii. As regards Gas, TPC has entered into long term Domestics Gas (APM) supplies Agreement with GAIL (valid till Jul 2026). Domestic Gas prices are declared by Govt. of India from time to time. Domestic Gas being cheaper than RLNG, effort shall be made to renew the Domestic Gas Supplies contract. TPC has also entered into long term contract for Supplies of RLNG with GAIL (valid till December, 2025). This Gas shall be sourced/ utilized whenever there is shortfall in APM Gas. Contract shall be renewed in due course of time. Further effort shall be made to explore other sources of Gas depending on requirement.

5.20.8 The Commission notes that existing PPAs are valid till 31 March, 2029, whereas TPC-G is exploring the options to tie up Coal on annual basis or on short-term basis, to get competitive prices for the required quantity in the best interest of consumers. The Commission is of the view that the reliance on short term contract may lead to price variation for coal as market is volatile.

5.20.9 As regards Gas Contract, the Commission notes that existing APM gas Contract with GAIL is valid upto December, 2025 for RLNG. Since, price for RLNG is higher, TPC-G should attempt to receive maximum supply and use APM gas for Unit 7.

5.20.10 It is the primary responsibility of Generating Companies to ensure supply of fuel for operation of the plant However, the Commission, in the present Order, has reviewed the fuel arrangement to ensure the availability of plant. Further, TPC-G has tied up its capacity with BEST and TPC-D till 31 March, 2029, which are supplying power to consumers in Mumbai city. The Commission notes that TPC-G has relied to enter into Fuel Supply arrangement for shorter period for coal to take advantage of lower fuel prices. The Commission directs TPC-G to enter into fuel supply contracts or arrangement so as to ensure the supply of fuel till the validity of PPA, i.e., upto 31 March, 2029 through transparent process of Competitive Bidding. Further, TPC-G is directed to submit its status report, on arrangement of Fuel Supply till31 March, 2029, to the Commission within three (3) months from the date of this Order.

5.20.11 As regards the determination of Energy Charges, Regulation 51.6 of MYT Regulations, 2024 specifies as under:

> *"Provided that the landed cost of primary fuel and secondary fuel for tariff determination shall be based on actual weighted average cost of primary fuel and secondary fuel of the three preceding months, and in the absence of landed costs for the three preceding months, latest procurement price of primary fuel and secondary fuel for the generating Station, preceding the first month for which the Tariff is to be determined for existing stations, and immediately preceding three months in case of new generating stations shall be taken into account:"*

5.20.12 In view of the above, the Commission sought the details of latest prices of fuel from TPC-G. Accordingly, the Commission has considered the fuel prices based on actual fuel prices for the period October, 2024 to December, 2024 as shown in the following Table:

Table 5.33: Fuel Parameters as considered by the Commission for the Control Period

Fuel	Rs / MT	GCV (MkCal/MT)
Coal	8,056.67	3.989
APM Gas	31,939.69	13.088
RLNG	70,652.16	13.086
Oil	58,853.39	10.364

5.20.13 Further, GCV of fuel has been considered same for each year of the Control Period as submitted by TPC-G. The Commission has considered the escalation of 3% per annum in landed prices of fuel from FY 2025-26 onwards for approving the Tariff for Control Period based on past trends of variations in fuel prices and principle adopted in the MYT Order to avoid any tariff shock to consumers. Accordingly, the landed price of fuel considered for projection of Energy Charges is shown in the following Table:

Table 5.34: Landed Price of Fuel (Rs./MT) as considered by the Commission for Control Period

Fuel	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
Coal	8,298.37	8,547.32	8,803.74	9,067.85	9,339.89
APM Gas	32,897.88	33,884.81	34,901.36	35,948.40	37,026.85
RLNG	72,771.72	74,954.87	77,203.52	79,519.62	81,905.21
Oil	60,618.99	62,437.56	64,310.69	66,240.01	68,227.21

5.20.14 After considering the above said Fuel parameters, the Energy Charges for Control Period as approved by the Commission for Thermal Units are shown in the following Table:

Table 5.35: Energy Charge Rate (Rs./kWh) as approved by the Commission for Control Period

Unit	Fuel	FY 2025-26				
		Normative Heat Rate (kcal/kWh)	Average Fuel Price (Rs./MT)	GCV (MCal/MT)	Normative Auxiliary Consumption (%)	Energy Charge Rate (Rs./kWh)
Unit 5	Coal	2549	8,298.37	3.989	6.00%	5.641
	APM	2549	32,897.88	13.088	6.00%	6.816
	RLNG	2549	72,771.72	13.086	6.00%	15.080
	Oil	2549	60,618.99	10.364	6.00%	15.861
Unit 7	APM	2035	32,897.88	13.088	2.75%	5.260
	RLNG	2035	72,771.72	13.086	2.75%	11.637
Unit 8	Coal	2415	8,298.37	3.989	8.50%	5.510

Unit	Fuel	FY 2026-27				
		Normative Heat Rate (kcal/kWh)	Average Fuel Price (Rs./MT)	GCV (MCal/MT)	Normative Auxiliary Consumption (%)	Energy Charge Rate (Rs./kWh)
Unit 5	Coal	2549	8,547.32	3.989	6.00%	5.810
	APM	2549	33,884.81	13.088	6.00%	7.021
	RLNG	2549	74,954.87	13.086	6.00%	15.532
	Oil	2549	62,437.56	10.364	6.00%	16.337
Unit 7	APM	2035	33,884.81	13.088	2.75%	5.418
	RLNG	2035	74,954.87	13.086	2.75%	11.986
Unit 8	Coal	2415	8,547.32	3.989	8.50%	5.675

Unit	Fuel	FY 2027-28				
		Normative Heat Rate (kcal/kWh)	Average Fuel Price (Rs./MT)	GCV (MCal/MT)	Normative Auxiliary Consumption (%)	Energy Charge Rate (Rs./kWh)
Unit 5	Coal	2549	8,803.74	3.989	6.00%	5.984
	APM	2549	34,901.36	13.088	6.00%	7.231
	RLNG	2549	77,203.52	13.086	6.00%	15.998

Unit	Fuel	FY 2027-28				
		Normative Heat Rate (kcal/kWh)	Average Fuel Price (Rs./MT)	GCV (MCal/MT)	Normative Auxiliary Consumption (%)	Energy Charge Rate (Rs./kWh)
	Oil	2549	64,310.69	10.364	6.00%	16.827
Unit 7	APM	2035	34,901.36	13.088	2.75%	5.580
	RLNG	2035	77,203.52	13.086	2.75%	12.345
Unit 8	Coal	2415	8,803.74	3.989	8.50%	5.845

Unit	Fuel	FY 2028-29				
		Normative Heat Rate (kcal/kWh)	Average Fuel Price (Rs./MT)	GCV (MCal/MT)	Normative Auxiliary Consumption (%)	Energy Charge Rate (Rs./kWh)
Unit 5	Coal	2549	9,067.85	3.989	6.00%	6.164
	APM	2549	35,948.40	13.088	6.00%	7.448
	RLNG	2549	79,519.62	13.086	6.00%	16.478
	Oil	2549	66,240.01	10.364	6.00%	17.332
Unit 7	APM	2035	35,948.40	13.088	2.75%	5.748
	RLNG	2035	79,519.62	13.086	2.75%	12.716
Unit 8	Coal	2415	9,067.85	3.989	8.50%	6.021

Unit	Fuel	FY 2029-30				
		Normative Heat Rate (kcal/kWh)	Average Fuel Price (Rs./MT)	GCV (MCal/MT)	Normative Auxiliary Consumption (%)	Energy Charge Rate (Rs./kWh)
Unit 5	Coal	2549	9,339.89	3.989	6.00%	6.349
	APM	2549	37,026.85	13.088	6.00%	7.672
	RLNG	2549	81,905.21	13.086	6.00%	16.972
	Oil	2549	68,227.21	10.364	6.00%	17.852
Unit 7	APM	2035	37,026.85	13.088	2.75%	5.920
	RLNG	2035	81,905.21	13.086	2.75%	13.097
Unit 8	Coal	2415	9,339.89	3.989	8.50%	6.201

5.20.15 The Commission notes that it has determined the price of various fuels against each Station to ensure the billing of Energy Charges based on utilised fuel.

5.20.16 The Commission notes that Unit 5 is multi fired unit. It is desired that Unit 5 shall run on primary fuel i.e., Coal. The use of RLNG and Oil shall be made minimal. Similarly, Energy Charges for Unit 7 for APM are much lower than that for RLNG. Hence, use of RLNG shall also be made minimal in Unit 7.

5.20.17 In view of the above, the Commission is of the view that the use of RLNG shall be done after duly considering the economic despatch. Hence, the use of RLNG in Unit 5 and Unit 7 shall be done only in consultation with MSLDC.

6 GENERATION TARIFF FOR FY 2025-26 TO FY 2029-30

The Commission has approved the following Generation Tariff for 5th MYT Control Period from FY 2025-26 to FY 2029-30.

6.1 TARIFF FOR THERMAL GENERATING UNITS

6.1.1 The approved Tariff for thermal generating units of TPC-G for FY 2025-26 to FY 2029-30 is as shown in the Table below:

Annual Fixed Charges

6.1.2 The Unit-wise Annual Fixed Charges approved for the Control period is shown in the following Table:

Table 6.1: Annual Fixed Charges as approved by the Commission for Control Period (Rs. Crore)

Unit	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
Unit 5	319.48	326.25	336.32	346.03	356.97
Unit 7	198.64	205.71	211.15	216.84	222.74
Unit 8	211.49	212.72	216.20	221.75	228.82

6.1.3 The MYT Regulations, 2024 stipulates that the target Availability for full recovery of Annual Fixed Charges shall be 85% (normative Availability). The Availability approved by the Commission for TPC-G's Thermal Station Units is 85%. Hence, the Commission approves the full recovery of Fixed Charges for all the Units of the Thermal Station.

6.1.4 Further, as regards the recovery of Annual Fixed Cost, Regulation 51 (A) of MYT Regulations, 2024, stipulates as follows:

> *"The fixed cost of a thermal generating station shall be computed on annual basis based on the norms specified under these Regulations and recovered on monthly basis under Capacity Charge. The total Capacity Charge payable for a generating station shall be shared by its beneficiaries as per their respective percentage share or allocation in the capacity of the generating station. The Capacity Charge shall be recovered under two segments of the year, i.e., High Demand Season (period of three months) and Low Demand Season (period of remaining nine months), and within each season in two parts, viz., Capacity Charge for Peak Hours of the month and Capacity Charge for Off-Peak Hours of the month"*

6.1.5 As regards declaration of High Demand Season and Low Demand Season and Peak Hours and Off-Peak Hours of the month, Regulation 51.3 stipulates as follows:

> *"51.3 Normative Plant Availability Factor for "Peak" and "Off-Peak" Hours in a month shall be equivalent to the NAPAF specified in Regulations 47.1 and*

47.2 of these Regulations. The number of hours of "Peak" and "Off-Peak" periods during a day shall be four and twenty respectively. Hours of Peak and Off-Peak periods during a day shall be declared by MSLDC at least a week in advance. High Demand Season (period of three months, consecutive or otherwise) and Low Demand Season (period of remaining nine months, consecutive or otherwise) in the State shall be declared by MSLDC, at least six months in advance:

Provided that the MSLDC, after duly considering the comments of the concerned stakeholders, shall declare Peak Hours and High Demand Season in such a way as to coincide with the Peak Hours and High Demand Season of the State.

6.1.6 MSLDC in consultation with the concerned stakeholder has to declare the High and Low Demand Season. Further, as per provisions of MYT Regulations, 2024, MSLDC shall declare the hours of Peak and Off-Peak periods during a day for each month at least a week in advance after consultation with concerned stakeholders.

6.1.7 Accordingly, the billing of Capacity Charges for thermal stations shall be done as per Regulation 51 (A) of MYT Regulations, 2024, wherein Capacity Charges shall be recovered under two segments of year viz. High Demand Deason and Low Demand Season as declared by MSLDC, and within each season in two parts i.e., Capacity Charges for Peak hours of the month and Off-peak hours of the month as per the Peak and Off-Peak hours declared by MSLDC.

Energy Charge Rate (ECR)

6.1.8 Energy Charge Rate (ex-bus) has been approved based on the methodology detailed earlier in this Order. Any variations in fuel prices and calorific value would be dealt with through the FAC mechanism in accordance with Regulation 51.10 of MYT Regulations, 2024. The following Table details the Unit-wise approved Energy Charge Rate for TPC-G's Thermal Generating Station:

Table 6.2: Energy Charge Rate (Rs./kWh) as approved by the Commission for Control Period

Unit	Fuel	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
Unit 5	Coal	5.641	5.810	5.984	6.164	6.349
	APM	6.816	7.021	7.231	7.448	7.672
	RLNG	15.080	15.532	15.998	16.478	16.972
	Oil	15.861	16.337	16.827	17.332	17.852
Unit 7	APM	5.260	5.418	5.580	5.748	5.920
	RLNG	11.637	11.986	12.345	12.716	13.097
Unit 8	Coal	5.510	5.675	5.845	6.021	6.201

6.1.9 The Commission views that use of RLNG shall be done after due considering the economic despatch and only in consultation with MSLDC.

Incentive for Thermal Generating Station

6.1.10 As per Regulation 51.11 of the MYT Regulations, 2024, TPC-G shall be eligible for Incentive at a flat rate of 75.00 paise/kWh for actual energy generation in excess of ex-bus energy corresponding to target Plant Load Factor during peak hours and at a flat rate of 55.00 paise/kWh for actual energy generation in excess of ex-bus energy corresponding to target Plant Load Factor during off-peak hours, on a cumulative basis within each Season (High Demand Season or Low Demand Season, as the case may be).

6.1.11 The Commission directs TPC-G that Billing shall be done for each Thermal Generating Unit separately, clearly indicating the capacity charges, energy charges, type of fuel, Fuel Cost Adjustment, etc.

6.2 TARIFF FOR HYDRO STATIONS

6.2.1 The Commission has detailed the computation of Capacity Charges and Energy Charge Rate for Hydro Generating Stations earlier in this Order. The Capacity Charges approved by the Commission for Hydro Generating Stations are at normative Annual Plant Availability Factor. The Tariff approved for Hydro generating Stations for Control Period is shown in the following Table:

Table 6.3: Approved Tariff for Hydro Stations for Control Period from FY 2025-26 to FY 2029-30

Particulars	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
Bhira					
Capacity Charges (Rs. Crore)	**71.77**	**73.98**	**75.76**	**77.62**	**79.56**
Net Design Energy (MU)	736.68	736.68	736.68	736.68	736.68
Energy Charge (Rs./kWh)	**0.974**	**1.004**	**1.028**	**1.054**	**1.080**
Bhivpuri					
Capacity Charges (Rs. Crore)	**39.44**	**40.74**	**41.80**	**42.91**	**44.06**
Net Design Energy (MU)	190.91	190.91	190.91	190.91	190.91
Energy Charge (Rs./kWh)	**2.066**	**2.134**	**2.190**	**2.247**	**2.308**
Khopoli					
Capacity Charges (Rs. Crore)	**66.48**	**68.75**	**70.66**	**72.66**	**74.74**
Net Design Energy (MU)	172.58	172.58	172.58	172.58	172.58
Energy Charge (Rs./kWh)	**3.852**	**3.984**	**4.094**	**4.210**	**4.331**

6.2.2 Any variation in Actual generation vis-à-vis Net Design Energy shall be incentivised/disincentivised as per Regulation 52 of MYT Regulations, 2024.

6.2.3 The Commission directs TPC-G that billing shall be done for each hydro stations separately, clearly indicating the capacity charges, energy charges and incentive, if any.

6.3 PAST RECOVERIES/(REFUND) FROM DISTRIBUTION LICENSEE

6.3.1 In earlier Sections, the Commission has computed the past Revenue Surplus on account of Truing up of FY 2022-23 & 2023-24 and provisional Truing up for FY 2024-25. As discussed earlier, the amounts to be refunded to the Distribution Licensees, as approved by the Commission, is shown in the Table below:

Table 6.4: Refund of Cumulative Revenue Surplus to Distribution Licensee as approved by the Commission (Rs. Crore)

Sr. No	Particulars	Surplus as approved by the Commission		
		BEST	TPC-D	Total
1	Incremental Gap / (Surplus) Unit 5, 7 and Hydro for Truing up of FY 2022-23	30.81	28.82	59.63
2	Incremental Gap / (Surplus) Unit 8 for Truing up of FY 2023-24	(7.35)	(10.41)	(17.76)
3	Gap / (Surplus) Unit 5, 7 and Hydro for Truing up of FY 2023-24	(24.44)	(23.10)	(47.54)
4	Gap / (Surplus) Unit 8 for Truing up of FY 2023-24	(21.02)	(27.41)	(48.43)
5	Gap / (Surplus) Unit 5, 7 and Hydro for Provisional Truing up of FY 2024-25	(41.31)	(37.58)	(78.89)
6	Gap / (Surplus) Unit 8 for Provisional Truing up of FY 2024-25	(15.93)	(18.99)	(34.92)
7	Carrying /(holding) cost on the above Gap/(Surplus)	(1.10)	(3.14)	(4.25)
8	**Grand Total Revenue Gap/(Surplus)**	**(80.34)**	**(91.81)**	**(172.16)**

6.3.2 The Commission allows TPC-G to refund this approved amount, on account of past years, to the concerned Distribution Licensees, viz, BEST, and TPC-D separately. The Commission has considered the said amounts in the tariff determination of BEST and TPC-D for FY 2025-26 as discussed in the respective Orders for the 5th Control Period.

7 DIRECTIVES

The Commission's directives, the compliance thereof submitted by TPC-G in the present Petition and Commission's rulings on the same are discussed as under:

7.1 BIFURCATION OF FIXED COSTS FOR EACH UNIT/STATION OF TPC-G

Directive

7.1.1 The Commission had directed TPC-G in its Order dated 30 March, 2023 in Case No. 221 of 2022 to submit the bifurcated fixed cost for each Unit/Station for the period from FY 2023-24 onwards along with the True-up for the respective year.

TPC-G's Response

7.1.2 TPC-G has submitted fixed cost for each Unit/Station as per directions of the Commission in 30 March, 2023 in Case No 221 of 2022. However, TPC-G has not submitted the Auditors Certificate based on the bifurcation of cost as per principles given in the said Order.

Commission's View

7.1.3 The Commission notes the submission of TPC-G in respect of unit wise bifurcated fixed cost as submitted by TPC-G and has considered the same for Truing-up of FY 2023-24. Further, the Commission has also approved unit wise fixed cost for the Control Period as per the principle of allocation of fixed cost laid down in MTR Order.

7.2 DIRECTIVES ISSUED IN THIS ORDER

7.2.1 As regards Availability of Unit 5 for FY 2024-25, the Commission directs TPC-G to furnish all necessary details along with actual availability and supporting evidence required to determine whether the circumstances claimed as force majeure leading to the occurrence were uncontrollable or otherwise at time of final Truing-up.

7.2.2 TPC-G is directed submit the DPR for the proposed schemes of Unit 5 and Unit 7, if not submitted for the Control Period within One Month of the date of this Order for in-principle approval.

7.2.3 The Commission directs TPC-G to enter into fuel supply contracts or arrangement so as to ensure the supply of fuel till the validity of PPA, i.e., upto 31 March, 2029 through transparent process of Competitive Bidding. Further, TPC-G is directed to submit its Status report, on arrangement of Fuel Supply till 31 March, 2029, to the Commission within three (3) months from the date of this Order.

8 APPLICABILITY OF ORDER

This Order shall come into effect from 1 April, 2025.

The Petition of Tata Power Company Limited-Generation in Case No. 189 of 2024 stands disposed of accordingly.

Sd/-	Sd/-	Sd/-
(Surendra J. Biyani)	**(Anand M. Limaye)**	**(Sanjay Kumar)**
Member	**Member**	**Chairperson**

(Dr. Rajendra G. Ambekar)
Secretary

Appendix – I

List of persons who attended the TVS on 28 November, 2024

Sr. No.	Name of the Participant	Organization
1	Shri Vidyadhar Wagle	TPC-G
2	Shri Deepak Mall	TPC-G
3	Shri Hemant Karadkar	TPC-G
4	Shri Aashish Shrivastav	TPC-G
5	Shri Sayani Chatterjee	TPC-G
6	Smt Subhangi Banka	TPC-G
7	Shri B.B. Khan	TPC-G
8	Shri Ghansham Thakkar	Energyoptimaa
9	Shri Jitendra Bhanushali	Energyoptimaa

Appendix – II

List of persons who attended the E-Public Hearing on 8 January, 2025

Sr. No.	Name of the Participant	Organization
1	Shri Vidyadhar Wagle	TPC-G
2	Shri Deepak Mall	TPC-G