Before the

MAHARASHTRA ELECTRICITY REGULATORY COMMISSION

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CASE NO. 187 OF 2024

In the matter of

Petition of Maharashtra State Power Generation Company Limited for approval of True-up for FY 2022-23 and FY 2023-24, Provisional True-up for FY 2024-25, and Aggregate Revenue Requirement and Multi-Year Tariff (MYT) for the Control Period from 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 Maharashtra State Power Generation Company Limited (MSPGCL) filed a Petition on 28 October, 2024 for approval of True-up for FY 2022-23 and FY 2023-24, Provisional True-up for FY 2024-25, and Aggregate Revenue Requirement (ARR) and Multi-Year Tariff (MYT) for the fifth Control Period from FY 2025-26 to FY 2029-30. The Technical Validation Session (TVS) was held on 28 November, 2024. Subsequently, MSPGCL submitted the revised Petition on 6 December, 2024.

The Petition has been filed in accordance with the MERC (Multi Year Tariff) Regulations, 2019 ("MYT Regulations, 2019") for true-up of FY 2022-23 and FY 2023-24, and provisional true-up of FY 2024-25, and in accordance with the MERC (Multi Year Tariff) Regulations, 2024 ("MYT Regulations, 2024") for the Control Period from FY 2025-26 to FY 2029-30.

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 MSPGCL, suggestions/objections received from public upon public consultation process, and upon considering all other relevant material, has approved the True-up for FY 2022-23, FY 2023-24 and provisional True-up for FY 2024- 25, and ARR and Multi-Year Tariff (MYT) for the fifth Control Period from FY 2025-26 to FY 2029-30.

List of Abbreviations

A&G	Administrative & General
ACQ	Annual Contracted Quantum
ADB	Air Dried Basis
AEC	Auxiliary Energy Consumption
AFC	Annual Fixed Charges
AMR	Automatic Meter Reading
APM	Administered Price Mechanism
APTEL	Appellate Tribunal of Electricity
ARB	As Received Basis
ARR	Aggregate Revenue Requirement
ATIL	Adani Transmission India Limited
AVF	Availability Factor
BHEL	Bharath Heavy Electrical Limited
BoP	Balance of Plant
BPTA	Bulk Power Transmission Agreement
BTG	Boiler Turbine Generator
CAG	Comptroller Auditor General
CAGR	Compounded Annual Growth Rate
CAPEX	Capital Expenditure
CAT	Coal Assurance Team
CBA	Cost Benefit Analysis
CEA	Central Electricity Authority
CERC	Central Electricity Regulatory Commission
CHP	Coal Handling Plant
CIFMR	Central Institute of Mining and Fuel Research
CIL	Coal India Limited
COD	Commercial Operation Date
CPI	Consumer Price Index
CPRI	Central Power Research Institute
CSIR	Council of Scientific & Industrial Research
CT	Current Transformer
DAM	Day Ahead Market
DISCOM	Distribution Company
DNQ	Daily Nominated Quantity
DPC/DPS	Delayed Payment Charge/Surcharge

DPR	Detailed Project Report
DSM	Deviation Settlement Mechanism
EA	Electricity Act
EC	Environmental Clearance
ECR	Energy Charge Rate
ECS	Emission Control System
EER&M	Efficiency Enhancement Renovation and Modernization
FAC	Fuel Adjustment Cost
FC	Forest Clearance
FGD	Flue Gas Desulfuriser
FO	Fuel Oil
FSA	Fuel Supply Agreement
FTLE	Final Time Limit Extension
FUP	Fuel Utilisation Plan
FY	Financial Year
GCV	Gross Calorific Value
GENCO	Generation Company
GFA	Gross Fixed Asset
GoCG	Government of Chhattisgarh
GoI	Government of India
GoM	Government of Maharashtra
GP II	Gare Palma II
GSHR	Gross Station Heat Rate
GT	Gas Turbine
GTPS	Gas Thermal Power Station
HBA	Harga Batubara Acuan
HO	Head Office
HPS	Hydro Power Station
IEX	Indian Energy Exchange
IoWC	Interest on Working Capital
IT	Information Technology
kcal	kilo Calorie
kg	kilo gram
kL	kilo Litre
KTPS	Koradi Thermal Power Station
kWh	kilo Watt hour

LD	Liquidated Damages
LDO	Light Diesel Oil
LMT	Lakh Metric Ton
LOA	Letter of Award
LPS	Late Payment Surcharge
LROT	Lease, Renovate, Operate and Transfer
MCL	Mahanadi Coalfields Limited
MCR	Maximum Continuous Rating
MDO	Mine Developer and Operator
MEGC	Maharashtra Electricity Grid Code
MERC/ Commission	Maharashtra Electricity Regulatory Commission
MMSCMD	Million Metric Standard Cubic Metre per Day
MMT	Million Metric Ton
MMT	Million Metric Ton Per Annum
MoC	Ministry of Coal
MoD	Merit Order Despatch
MoEFCC	Ministry of Environment, Forest and Climate Change
MoP	Ministry of Power
MoU	Memorandum of Understanding
MPD	Maintenance Planning Division
MSEBHCL	MSEB Holding Company Limited
MSEDCL	Maharashtra State Electricity Development Company Limited
MSETCL	Maharashtra State Electricity Transmission Company Limited
MSLDC	Maharashtra State Load Despatch Centre
MSMC	Maharashtra State Mining Corporation
MSPGCL	Maharashtra State Power Generation Company Limited
MSRDC	Maharashtra State Road Development Corporation Limited
MSS	Mine Specific Supply
MT	Metric Ton
MTBF	Mean Time Between Failures
MTR	Mid Term Review
MU	Million Units
MW	Mega Watt
MYT	Multi Year Tariff
NAPAF	Normative Annual Plant Availability Factor
NCLT	National Company Law Tribunal

NHAI	National Highway Authority of India
NLDC	National Load Despatch Centre
NOAR	National Open Access Registry
NTI	Non Tariff Income
NTPC	NTPC Limited
O&M	Operation & Maintenance
OEM	Original Equipment Manufacturer
PAF	Plant Availability Factor
PCE	Pollution Control Equipment
PEG	Prayas Energy Group
PFCCL	PFC Consulting Limited
PLF	Plant Load Factor
PPA	Power Purchase Agreement
PPP	Public Private Partnership
PRC	Peak Rate Capacity
PSA	Power Sale Agreement
PSM	Payment Security Mechanism
PSS	Pooling Substation
R&M	Renovation & Modernization
RCMC	Raw Coal Mining Charge
REA	Regional Energy Account
RLDC	Regional Load Despatch Centre
RLNG	Regasified Liquefied Natural Gas
RMU&LE	Renovation, Modernisation, Uprating and Life Extension
RoE	Return on Equity
RPC	Regional Power Committee
RSD	Reserve Shutdown
RSR	Rail Sea Rail
RTM	Real Time Market
SCCL	Singareni Collieries Company Limited
SCM	Standard Cubic Metre
SCR	Selective Catalytic Reduction
SECL	South Eastern Coalfields Limited
SFOC	Secondary Fuel Oil Consumption
SHR	Station Heat Rate
SMC	Supervision Monitoring and Coordination

SOR	Statement of Reasons
STP	Sewage Treatment Plant
STU	State Transmission Utility
TPC-G	Tata Power Company- Generation
TPD	Ton Per Day
TPL	Tata Projects Limited
TPS	Thermal Power Station
TPSA	Third-Party Sampling Agencies
TSU	Transmission System User
TTRO	Tertiary Treatment Reverse Osmosis
TVS	Technical Validation Session
UDL	Undischarged Liabilities
URS	Unrequisitioned Surplus
VC	Variable Charge/ Video Conference
VSE	Virtual State Entity
VT	Voltage Transformer
WAROI	Weighted Average Rate of Interest
WCL	Western Coalfields Limited
WHR	Waste Heat Recovery
WPI	Wholesale Price Index
WRD	Water Resource Department

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1 BACKGROUND AND BRIEF HISTORY

1.1 INTRODUCTION

1.1.1 MSPGCL is a Company formed under Government of Maharashtra (GoM) Resolution No. ELA- 003/P.K.8588/Bhag-2/Urja-5 dated 24 January, 2005 with effect from 6 June, 2005, in accordance with the provisions of Part XIII of the EA, 2003. MSPGCL is a Company registered under the Companies Act, 1956.

1.1.2 MSPGCL owns and operates seven coal-based thermal power generating stations and one gas-based thermal power generating station with total current installed capacity of 10,212 MW, situated in different parts of Maharashtra. MSPGCL also operates hydel power generating stations owned by the Water Resources Department, GoM on lease basis, with total current installed capacity of 2579 MW. The total current operating capacity of MSPGCL is 12791 MW, which is regulated capacity and the tariff is determined by the Commission under Section 62 of the EA, 2003.

1.2 MYT REGULATIONS

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

1.3 MYT ORDER FOR 4TH CONTROL PERIOD

1.3.1 Vide its MYT Order dated 30 March, 2020 in Case No. 296 of 2019, the Commission approved the Tariff for the 4th MYT Control Period from FY 2020-21 to FY 2024-25. In the said MYT 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 REVIEW ORDER ON MYT ORDER FOR 4TH CONTROL PERIOD

1.4.1 MSPGCL had filed a Petition on 2 September, 2020 seeking review of the Commission's MYT Order in Case No. 296 of 2019 on certain issues. Vide its Order dated 1 March, 2021 in Case No. 180 of 2020, the Commission disposed of the Review Petition partly allowing review on some of the issues and with certain directions to MSPGCL.

1.4.2 MSPGCL filed another Petition on 17 September, 2021 seeking review of the Commission's MYT Order in Case No. 296 of 2019 regarding separation of tariff for Koradi Unit No.6 and 7 for the balance Control Period from FY 2021-22 to FY 2024-25. Vide its Order dated 8 March, 2022 in Case No. 133 of 2021, the Commission disposed of the Review Petition partly allowing review with the separation of tariff for Koradi Unit No. 6 with effect from 1 April, 2022 and with certain directions to

MSPGCL.

1.5 MTR ORDER FOR 4TH CONTROL PERIOD

1.5.1 Vide its MTR Order dated 31 March, 2023 in Case No. 227 of 2022, the Commission approved the True-up for FY 2019-20 to FY 2021-22, Provisional True-up for FY 2022-23 and Revised Tariff for FY 2023-24 and FY 2024-25.

1.6 REVIEW ORDER ON MTR ORDER FOR 4TH CONTROL PERIOD

1.6.1 MSPGCL had filed a Petition on 12 May, 2023 seeking review of the Commission's MTR Order in Case No. 227 of 2022 on certain issues. Vide its Order dated 1 February, 2024 in Case No. 132 of 2023, the Commission disposed of the Review Petition partly allowing review on some of the issues and with certain directions to MSPGCL.

1.7 MYT REGULATIONS 2024

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

1.8 MYT PETITION FOR 5TH CONTROL PERIOD

1.8.1 In accordance with Regulation 5.1(a) of the MYT Regulations, 2024, the 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 in accordance with the MYT Regulations, 2024.

1.8.2 MSPGCL filed its MYT Petition for the 5th MYT Control Period on 28 October, 2024. MSPGCL also sought the approval of provisional tariff for its upcoming Bhusawal Unit No. 6 in its MYT Petition.

1.8.3 The office of the Commission issued the data gaps to MSPGCL on 11 November, 2024. MSPGCL submitted the replies to first set of data gaps on 18 November, 2024, 19 November, 20 November, 21 November, and 26 November, 2024. The Technical Validation Session (TVS) was held on 28 November, 2024 in the office of the Commission. The list of persons who attended the TVS is at **Appendix-1**.

1.8.4 During the TVS, MSPGCL 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. MSPGCL submitted its replies to the data gaps and filed its revised Petition on 6 December, 2024 with the following prayers:

"

i. *Admit this Petition;*
ii. *Allow Petitioner to submit additional information as may be required by the Hon'ble Commission;*
iii. *Grant an expeditious hearing of this Petition;*
iv. *Hon'ble Commission in Order in case no 227 of 2022 & case no 132 of 2023, has allowed the issue in-principle and considering the marginal impact of these issues, allowed to claim the amount in the MYT Petition. Hence the Petitioner request to approve the impact on AFC along with carrying cost on such amount.*
v. *Consider the submission made in context of FY 2022-23 and approve the Annual Revenue Requirement and final truing up for the year, along with the relaxations in following key specific issues by exercising the powers available with the Hon'ble Commission under MYT Regulations 2019 for "Power to Relax"*
   f) *Relaxation in target availability factor for Uran GTPS on account of Gas supply shortages,*
   g) *Relaxation in Target availability for Khaperkheda Units # 1 to 4 on the basis of CPRI report,*
   h) *Relaxation in Auxiliary consumption norm for Khaperkheda Units # 1 to 4, Chandrapur Units # 3 to 7, Paras Units # 3,4 & Parli Units # 6,7,8 on the basis of CPRI reports. With reference to the SHR of Koradi 6, the normative SHR may kindly be considered as 2456Kcal/Kwh (Guaranteed SHR x allowance of 4.5% from the design SHR)*
   i) *Relax GCV As Received deviation as "GCV Billed less 750 kCal/kWh"*
   j) *In view of CEA study submitted in respect of Koradi TPS (3x660 MW) allow actual O&M cost as claimed*
vi. *Consider the submission made in context of FY 2023-24 and approve the Annual Revenue Requirement and final truing up for the year, along with the relaxations in following key specific issues by exercising the powers available with the Hon'ble Commission for under MYT Regulations 2019 "Removal of Difficulties" & "Power to Relax"*
   a) *Relaxation in target availability factor for Uran GTPS on account of Gas supply shortages,*
   b) *Relaxation in Target availability for Khaperkheda Units # 1 to 4 on the basis of CPRI report,*
   c) *Relaxation in Auxiliary consumption norm for Khaperkheda Units # 1 to 4, Chandrapur Units # 3 to 7, Paras Units # 3,4 & Parli Units # 6,7,8 on the basis of CPRI reports. With reference to the SHR of Koradi 6, the normative SHR may kindly be considered as 2456Kcal/Kwh (Guaranteed SHR x allowance of 4.5% from the design SHR)*

d) Relax GCV As Received deviation as "GCV Billed less 750 kCal/kWh".

e) In order to resolve Bill due date issue aroused after 2nd amendment to MYT 2019 dtd 08.06.2023, request Hon Commission to exercise power to relax and allow receivable period 75days for normative working capital calculation w.e.f 08.06.2023.

f) In view of CEA study submitted in respect of Koradi TPS (3x660 MW) allow actual O&M cost as claimed

vii. Consider the submission made in context of FY 2024-25 and approve the revised Annual Revenue Requirement and provisional final truing up for the year, along with the relaxations in following key specific issues by exercising the powers available with the Hon'ble Commission under MYT Regulations 2019 for "Power to Relax"

g) Relaxation in target availability factor for Uran GTPS on account of Gas supply shortages,

h) Relaxation in Target availability for Khaperkheda Units # 1 to 4 on the basis of CPRI report,

i) Relaxation in Auxiliary consumption norm for Khaperkheda Units # 1 to 4, Chandrapur Units # 3 to 7, Paras Units # 3,4 & Parli Units # 6,7,8 on the basis of CPRI reports, Relaxation with reference to the SHR of Koradi 6, the normative SHR may kindly be considered as 2456Kcal/Kwh (Guaranteed SHR x allowance of 4.5% from the design SHR).

j) Relax GCV As Received deviation as "GCV Billed less 750 kCal/kWh",

k) In view of CEA study submitted in respect of Koradi TPS (3x660 MW) allow actual O&M cost as claimed.

l) In order to resolve Bill due date issue aroused after 2nd amendment to MYT 2019 dtd 08.06.2023, request Hon Commission to exercise power to relax and allow receivable period 75days for normative working capital calculation.

viii. Consider the submissions made in the context of procurement of alternate power during FY 2024-25 in compliance to the directions from Government of Maharashtra under Section 11 of Electricity Act, 20023 and allow pass-through of the additional burden due to procurement of such alternate power as extraordinary expenses and revenue in ARR calculations;

ix. Consider the submissions made in the context of approval of expenses for FY 2022-23 & FY 2023-24 towards Hydro Colony related expenses as per Regulation 49.1 (c) of the MYT Regulations, 2019 and accordingly approve the expenses over-and-above the normative O & M costs;

x. Not to consider deduction of LPS and interest on LPS amount from actual interest on working capital;

xi. *Consider and allow loss of interest incurred due to implementation of Electricity (Late Payment of Surcharge and related matters) rule 2022, provisions for liquidation of outstanding dues and allow normative IoWC by adding loss of interest claims for True-up period FY 22-23, 23-24 Provisional true up FY 24-25 and MYT projection period FY 25-26 to 29-30.*

xii. *Consider the submissions made in the context of approval of expenses for FY 2022- 23 & FY 2023-24 towards IT related Opex costs as per Regulations 47.1 (g) & 49.1 (f) of the MYT Regulations, 2019 and accordingly approve the expenses over-and-above the normative O & M costs;*

xiii. *Consider the submissions regarding Fuel Utilisation in FY 2022-23 and FY 2023-24 and approve the Fuel Utilisation Plan for FY 2025-26 to FY 2029-30 submitted in the petition,*

xiv. *Consider the submissions made by MSPGCL in reference to normative parameters approved namely for Target AVF for Nashik, Bhusawal Unit # 3 and Khaperkheda Units # 1 to 4 , Auxiliary Consumption for Khaperkheda Units # 1 to 4, Chandrapur Units # 3 to 7, Paras , Parli units # 6,7,8 considering the CPRI reports and historical data and provide necessary relaxations sought in the performance parameters , by exercising the powers available with the Hon'ble Commission under MYT regulations 2024 for "Removal of Difficulties" & "Power to Relax" for the period FY 2025-26 to FY 2029-30;*

xv. *Consider the difficulties raised by MSPGCL in reference to provisions in Regulation 50.6 of MYT Regulations, 2019 regarding consideration of "As billed GCV" for Energy Charge computation and provide necessary clarifications towards consideration of total moisture for GCV (As Received Basis) calculation consideration and remove the difficulty in working out GCV of coal for calculation of energy charge , by exercising the powers available with the Hon'ble Commission under MYT regulations 2024 for "Removal of Difficulties" for the period FY 2022-23 to FY 2024-25;*

xvi. *Consider the submissions made in context of projections for Annual Revenue Requirements and projected tariff for the years under 5th Control Period i.e. FY 2025-26 to FY 2029-30 and approve the same;*

xvii. *Consider the specific submissions made in the context of projections for*

   g) *Claim for expenses towards Hydro Colony related expenses as per Regulation 50.1 (c) of the MYT Regulations, 2024*

   h) *Claim for expenses towards IT related Opex costs as per Regulations 48.1 (g) & 50.1 (f) of the MYT Regulations, 2024*

   i) *Claims for expenses towards "Ash Transportation costs as per directions from MoEF, CC and MoP*

   j) *Approve the expenses prepared for preparation of Flexibilisation of units* *as claimed at para 14.4.1 & Para 14.4.10 and accordingly approve the expenses over-and-above the normative O & M costs;*

k) *Approve the special allowance for Uran GTPS & Hydro power stations based on operational norms as specified under the MYT Regulations.*

l) *Grant the special allowance for eligible Thermal power plants by adopting an approach of providing relaxed performance norms and applying the prevailing O&M cost methodology as per the submission and with the permission to surrender of the special O&M allowance prior to the MSEDCL MTR,*

xviii. *Consider the submissions made in the context of the issue related to non-installation of "Class 0.2S" Current Transformers , as provided under the Section 78.1.11 of the State Grid Code,2020 Part-H Metering Code , for measurement of energy at Generation- Transmission (G-T) interface point and its adverse impact on measurement of energy sent out at <G> to <T> interface & thus on Auxiliary Power Consumption as well as Availability Factor computations for MSPGCLs' power stations on the basis of specific observations for Koradi Units # 8 to 10 and issue necessary directions to State Transmission Utility (STU) to expedite actions for installation of "Class 0.2 S" CTs at all interface points and also to provide access to metered data for the AMR meters installed for better monitoring & control of generation output in reference to the Scheduled generation;*

xix. *Consider the submissions made in the context of erroneous measurement of energy at Koradi Units # 8 to 10 on account of non-installation of "Class 0.2S" CTs at <G> to <T> interface points and allow the claim towards loss of opportunity due to lower measurement of net sent out generation & resultant higher % Auxiliary Consumption and lower Plant Availability Factor;*

xx. *Consider the submissions made in the context of recovery of expenses incurred by MSPGCL for FY 2022-23 & FY 2023-24 on the Solar power plants under Chief Minister Agricultural Feeder Scheme and approve the same;*

xxi. *Consider the submissions made regarding finalisation of liquidated damages for Bhusawal Units # 4,5; Koradi Units # 8 to 10; Parli Unit # 8 project works and approve the differential capital cost & corresponding recoveries of differential fixed charges for the period since COD for the respective units along with the carrying cost. Also allow extension for cut-off date upto 31.03.2025 considering difficulties submitted.*

xxii. *Allow MSPGCL to submit relevant data post reconciliation of issues related to LPS along with any reworking of previous year True-up amount;*

xxiii. *Allow normative O&M expenses based on past actual O&M expenses rather than True-up amounts;*

xxiv. *Allow the incremental O&M expenses for Koradi Unit 8-10 for FY 2020-21 and FY 2021-22 considering CERC norms;*

xxv. *Consider CAPEX rolling plan for FY 2025-26 to FY 2029-30 submitted as annexure also condone the delay in submission of CAPEX plan;*

xxvi. *Consider the submissions made regarding directives to be given to MSEDCL regarding resolution of pending billing reconciliation and previous period LPS issues and issue appropriate directives;*

xxvii. *Consider the submissions made in the context of under-recovery of part of approved fixed costs and lease rent for Ghatghar PSS for FY 2017-18 & FY 2018-19 due to non-payment of the same from MSEDCL despite of clarifications given by MSPGCL and thus requests to direct MSEDCL for payment of the same along with permission to MSEDCL for recovery of the same in their ARR;*

xxviii. *Consider the submissions made in the context of compensation claims from TPC-G as per the MERC order dated 03.11. 2022 in case No. 29 of 2022;*

xxix. *Consider the submissions made in the context of recovery of "RLDC Legacy charges" claimed by MSLDC for Oct'2023 to Sept'2024 and allow the same as pass-through expense for FY 2024-25 & accordingly consider the same in the provisional true-up for FY 2024-25;*

xxx. *Condone any shortcomings/ deficiencies in the petition and allow MSPGCL to submit additional information/ data at a later stage as may be required;*

xxxi. *Provide the workable excel model used by the Hon'ble Commission for approval of True up amount and tariff of the Petitioner."*

1.9 ADMISSION OF PETITION AND PUBLIC CONSULTATION PROCESS

1.9.1 The Commission admitted the revised MYT Petition on 10 December, 2024. In accordance with Section 64(2) of the Act., the Commission directed MSPGCL 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. MSPGCL issued a Public Notice inviting suggestions and objections from the public. The Public Notice was published in English in the daily newspapers Times of India, and Indian Express, and in Marathi in Lokmat, PunyaNagari, and Loksatta on 12 December, 2024. The copies of the Petition and its summary were made available for inspection/purchase at MSPGCL's offices and on its website (www.mahagenco.in). The Public Notice and Executive Summary of the Petition were also made available on the websites of the Commission (www.merc.gov.in) in downloadable format. The Public Notice specified that the suggestions and objections, in English or Marathi, be filed in writing by uploading it through 'E-Public Consultation' Tab on MERC Website (www.merc.gov.in/e-public-consultation) till 3 January, 2025.

1.9.2 The e-Public Hearing was held on 08 January, 2025 at 10.30 hrs through video conference. The list of persons who attended the e-Public Hearing is at **Appendix-2**.

1.9.3 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.

1.9.4 The suggestions and objections made in writing as well as during the e-Public Hearing, along with MSPGCL's responses and the Commission's rulings have been summarised in Chapter 2 of this Order.

1.9.5 The Commission during the public hearing directed MSPGCL to reassess the status of FGD installations at various units and revise the numbers accordingly. MSPGCL on 04 February, 2025 submitted the revised figures and the same has been considered in the Order.

1.10 ORGANISATION OF THE ORDER

1.10.1 This Order is organised in the following twelve (12) chapters:

- **Chapter 1** provides a brief history of the regulatory process undertaken by the Commission.
- **Chapter 2** sets out the suggestions and objections received in writing as well as during the e-Public Hearing. These have been summarised issue-wise, followed by the response of MSPGCL, and the rulings of the Commission.
- **Chapter 3** deals with the impact of other Orders.
- **Chapter 4** deals with the approval of final true-up of FY 2022-23 and 2023-24.
- **Chapter 5** deals with the provisional true-up of FY 2024-25.
- **Chapter 6** deals with the cumulative Revenue Gap till FY 2024-25.
- **Chapter 7** deals with the approval of Fuel Utilisation Plan for FY 2025-26 to FY 2029-30.
- **Chapter 8** deals with the approval of ARR and MYT for 5th Control Period from FY 2025-26 to FY 2029-30.
- **Chapter 9** deals with the provisional Tariff for Bhusawal Unit 6.
- **Chapter 10** summarises the Tariff Approved for the 5th Control Period
- **Chapter 11** summarises the Commission's directives.
- **Chapter 12** covers the applicability of the Order.

2 SUGGESTIONS/OBJECTIONS RECEIVED, RESPONSE OF MSPGCL AND COMMISSION'S VIEWS

2.1 COAL QUALITY AND WASHED COAL

Suggestions/Objections

2.1.1 Prayas Energy Group (PEG) submitted that MSPGCL in its Petition has requested to pass through the entire variation in coal Gross Calorific Value (GCV) between loading and unloading points. This request has been made in previous Petitions, including the MYT Petition (Case No. 296 of 2019) and MTR Petition (Case No. 227 of 2022).

2.1.2 PEG added that in its Order in Case No. 296 of 2019, the Commission did not allow the entirety of the slippages due to concerns that allowing full GCV loss would diminish MSPGCL's incentive to control such losses. The Commission allowed relaxations in subsequent Orders.

2.1.3 PEG further submitted that MSPGCL has been directed to minimize grade slippages, however, it recorded an annual average of 760-900 kcal/kg slippages from FY 2020-21 to FY 2024-25, with some cases reaching 1200 kcal/kg. MSPGCL's request for relaxation and pass-through of costs due to GCV degradation is untenable. If MSPGCL is allowed slippages beyond the already generous allowances, it undermines the generator's accountability and places the burden on consumers. Hence, the Commission is requested to disallow any slippages between GCV 'As Billed' and GCV 'As Received', over and above that already stipulated in the applicable Regulations. PEG requested the Commission to direct MSPGCL to undertake a techno-economic study or pilot study by installing tamper-proof and automated sampling equipment at the mine end and make available the findings of such study/pilot in the public domain and mandate that MSPGCL provide reports and documents with regard to steps taken by them to reduce grade slippage on their website in an accessible manner.

2.1.4 PEG further submitted that MSPGCL has envisaged a plan for coal beneficiation to the extent of 11.3 MMT in its Petition to improve the quality of coal. In its Petition, MSPGCL has submitted that "Increase in GCV of coal" is first on its list of tangible benefits of using washed coal.

2.1.5 PEG stated that MSPGCL had submitted the results of the Cost Benefit Analysis (CBA) for coal beneficiation with its Petition. The submitted CBA is subject to conditions such as "GCV DATA PERTAINS TO 3X660 MW KTPS only" and "RAW ROAD LANDED COST DOES NOT INCLUDE TRANSPORTATION COST". As per the data submitted, the Rs./kcal price of washed coal is higher than the Rs./kcal price of raw coal in nearly all instances, where both values have been reported while GCV of washed coal is lower than that of raw coal sent to the washery in some instances (for Koradi in FY 2022-23 and FY 2023-24, and Chandrapur in FY 2023-24). In the absence of any analysis to support these claims, the Commission directed MSPGCL to *"carry out the proper cost-benefit analysis of coal beneficiation after receiving the tenders and before going ahead with placing the contracts for coal beneficiation. MSPGCL should try to ensure that the effective landed price of washed coal at the thermal station in terms of Rs./Kcal is lower than the landed price of normal mined coal at the thermal station in terms of Rs./Kcal."* MSPGCL has not carried out a detailed CBA for coal beneficiation to justify the prudence of undertaking coal washing even at the end of the Control Period. The tangible and intangible benefits of coal washing mentioned in the Petition by MSPGCL do not provide robust and quantitative justification for even the tangible benefits of washed coal at a plant level.

2.1.6 The significant additional costs incurred as a result of coal washing will be passed through to the consumer. It is crucial that such costs be allowed only if there are proportionate and demonstrable advantages to incurring these costs. This is especially concerning given that, unlike notified coal prices, the price of coal washing is neither discovered in a competitive market nor governed by any regulatory agency. MSPGCL has submitted plans for the significant use of washed coal for several of its generating stations in the forthcoming Control Period as well. To safeguard consumer interests, such costs must be allowed only after a thorough scrutiny of plant-wise justification for benefits and cost impacts.

2.1.7 Therefore, MSPGCL may be directed to submit the plant-wise details on the impact of coal washing in the next Control Period, disallow the associated coal washing costs until such details are submitted and scrutinised, subject to a public process, and it is confirmed that the landed cost of washed coal in Rs/kcal is lower than that of raw coal.

2.1.8 In addition, PEG has identified discrepancies in coal washing data reported in the Tariff Formats. The GCV of washed coal is reported 'As Billed' and 'As Received', with the GCV 'As Billed' for raw coal often being better than that of washed coal across the true-up and projected periods. Furthermore, it is noted that the GCV of washed coal 'As Billed' is lower than the GCV of washed coal 'As Received' in several instances, suggesting an impossible improvement in quality during transit. Given the impact on consumer tariffs, PEG submitted that coal washing costs should only be approved after clarification of these discrepancies.

2.1.9 MSEDCL submitted that the Commission has already allowed 650 kcal/kWh deviation between 'As Billed' GCV and 'As Received' GCV for FY 2023-24 and FY 2024-25. MSPGCL is asking to implement provisions of the MYT Regulations, 2024 retrospectively, under the garb of 'Removal of Difficulties' and 'Power to Relax'. It is a settled law that Rules and Regulations framed will not be applicable retrospectively, unless specifically mentioned. Hence, the prayer of MSPGCL should not be allowed.

2.1.10 Further, no relaxation in fuel cost should be given on account of requested GCV relaxation. Only approved norms should be considered for calculating fuel expenses and accordingly calculations of gain or loss in fuel expenses should be done.

MSPGCL's replies

2.1.11 MSPGCL submitted that there should be no disallowance of any slippage between GCV 'As Billed' and 'As Received', over and above that already specified in the applicable Regulations. Although it is assumed that the variation between loading end (Eq) and unloading end (ARB) GCV is the risk of MSPGCL, the ground realities are much different. MSPGCL has been repeatedly submitting its difficulties and concerns related to the lack of control on the GCV variation between loading and unloading end through various Petitions and even at the consultation stage of framing the MYT Regulations. MSPGCL has noted that this is a PAN INDIA issue faced by almost all generators using domestic coal. The monopolistic nature of the domestic coal market is one of the main reasons behind such issues. While there is almost complete dependence on the Coal India Limited (CIL) subsidiaries for coal supply, the issues regarding sampling methodologies and their impact on deviations in GCV measured at loading end and GCV measured at unloading end is a chronic problem for all generators.

2.1.12 Additionally, MSPGCL highlighted that historically, even the Central Generating Stations operated by National Thermal Power Corporation (NTPC) have faced similar GCV loss issues. MSPGCL referred to the Comptroller and Auditor General of India (CAG) report in 2017, which flags such losses to an even larger extent than the deviations observed and submitted for some stations of MSPGCL. In the MYT Petition filed for FY 2019-24 before the Hon'ble Central Electricity Regulatory Commission (CERC) in Case No. 439/GT/2020, NTPC has raised similar issues faced by it for its Dadri Thermal Power Station Stage-I. Some of the relevant extracts from the Daily Order and Final Order in the matter are as follows:

2.1.13 In the Daily Order dated 06 December, 2023, it has been stated:

"3. The Petitioner is directed to file the following additional information on or before 2.2.2024 after serving copy to the Respondents:

(a) The reasons for claiming loss in GCV, between GCV billed and GCV received, around 10001700 kCal/kg and actions taken thereof along with supporting documents to address the same i.e. no. of samples challenged, success rate, correspondence made with CIL, Third party, Railways etc;"

2.1.14 In the CERC Order dated 14.04.2024 (page 24 Para 49), it has been mentioned:

"The Petitioner has stated that the generating station of the Petitioner is a non-pithead station, and the loss of VM during the transportation is one of the reasons for the gap in GCV. The Petitioner has submitted that presently, the supply and transportation of

coal is through entities which are essentially monopolistic; however, the generating company has made all possible efforts to reduce the grade slippage, such as carrying out third party sampling as per GOI guidelines. The Petitioner has submitted that the grade slippage during transit is beyond the reasonable control of the Petitioner and the commercial settlement for the procurement of coal is based on the declared grade of mines (i.e., GCV of declared grade), as per the terms and conditions of the FSA. The Petitioner has further submitted that the issue of a significant gap in GCV of coal between the loading and unloading end has been raised by the Petitioner with the sampling agency, i.e., CSIR-Central Institute of Mining and Fuel Research, which is a constituent laboratory of CSIR, an autonomous government body."

2.1.15 From the above, it is evident that MSPGCL is not the only Petitioner facing issues of higher GCV loss between loading and unloading end; this is a common problem.

2.1.16 Furthermore, MSPGCL emphasized the absence of any monitoring and controlling framework for the coal supply business in the form of a "Coal Regulator." However, on the other hand, the tariff framework for electricity insists on fixing the responsibility to arrange fuel supply solely on the generator. This is unnecessarily creating a perception among stakeholders (mainly Distribution Companies and Consumers) that the generator can easily manage coal supply as per requirements and that any deviations in coal quality ('As billed' to 'As Received' GCV gap) are the generator's fault.

2.1.17 MSPGCL has stated that the generator has no alternate options for arranging coal, except for being completely dependent on domestic coal companies (CIL subsidiaries), and is not in a position to negotiate on quality and quantity issues at an optimum price. This is also resulting in adverse impacts of such ambiguities in coal transactions on generating companies, which the generators alone are forced to address. Therefore, MSPGCL has suggested the constitution of a Coal Regulator to mitigate these issues.

2.1.18 MSPGCL has submitted that it has entered into Contract Agreements with M/s MSMC (State Government Agency), appointing M/s MSMC as the Nodal agency for lifting raw coal from WCL, MCL, and SECL mine areas and supplying beneficiated coal to various power stations of MSPGCL. MSPGCL has highlighted that MSMC is the nodal agency, which has discovered the rates through a competitive bidding process.

2.1.19 Furthermore, it has been specified that raw coal be lifted from coal companies and converted to washed coal as per the normative yield, which is 85% in WCL, 80% in SECL, and 72% in MCL, of raw coal in the respective coal companies.

2.1.20 After signing the contracts for washed coal with MSPGCL, M/s MSMC has availed the services of certain washery operators through the bidding process to fulfil its obligation to supply washed coal to MSPGCL's Thermal Power Stations (TPS) as per the terms and conditions laid out therein. The details of the washery operators' appointment reported by M/s MSMC are specified as follows: for 80% of the raw coal quantity M/s Hind LLP and M/s ACB Ltd.; for 20% of the raw coal quantity M/s Rukhmai Infrastructure Pvt. Ltd. and Mahavir Coal Washery Pvt. Ltd. MSPGCL has provided a tabulation of TPS-wise improvement in Gross Calorific Value (GCV) of coal with washed coal for Koradi TPS, Chandrapur TPS, Khaperkheda TPS, and Bhusawal TPS. MSPGCL provided the details of washed coal prices in Rs/kcal as compared to raw coal prices.

2.1.21 The 'As-received' GCV of washed coal has been enhanced after washing, compared to the GCV of raw coal. MSPGCL submitted that the effective coal price (Rs./kcal) of washed coal has been reduced compared to the effective price of raw coal for certain stations, especially Chandrapur, Khaperkheda, and Bhusawal during FY 2022-23.

2.1.22 FY 2023-24 onwards, despite improvements in GCV, MSPGCL indicated that the charges of transportation of coal from the mine to the washery and subsequent transport from the washery to the stations result in an apparent increase in Rs./kcal for washed coal compared to Rs/kcal for raw coal.

2.1.23 Additionally, it is submitted that the washery Agreement provides for the levy of penalties for non-performance of washery operators. A few such penalties have not been finalized due to disputes raised by the suppliers. Such penalties are not included in the aforementioned computation. The finalization of these penalties will lead to further reduction in Rs./kcal for washed coal. For FY 2024-25, the comparison of Rs/kcal does not consider the effect of penalties on the washery operators, as these penalties are still pending finalization. Furthermore, for FY 2023-24, penalties related to MCL coal sent for washing have not been included, thus, affecting the apparent benefits of washing in the case of coal from MCL.

Commission's View

2.1.24 The Commission has taken note of the stakeholders' submissions and MSPGCL's replies thereof. As regards the coal quality issues and loss in GCV, the Commission directs MSPGCL to take note of the suggestions and take appropriate measures to improve the quality of coal. As discussed in Chapters 4, 5, and 7 of the Order, the Commission has not allowed the entire GCV loss from 'As Billed' basis to 'As Received' basis and limited the GCV loss for FY 2022-23, FY 2023-24 and FY 2024-25 to the target approved in the MYT Order/MTR Orders including their Review Orders and MYT Regulations for the next Control Period.

2.1.25 As regards the cost benefit analysis of washed coal for FY 2022-23 and FY 2023-24, the Commission has carried out the detailed analysis as discussed in Chapter 4 of the Order and issued appropriate directions to MSPGCL. For the next Control Period, the

Commission has directed MSPGCL to ensure that the effective landed price of washed coal in Rs./kcal shall be lower than that of raw coal. In case at the time of truing up if it is observed that the landed cost of washed coal in Rs./kcal is higher than the landed price of normal mined coal in terms of Rs./kcal, the Commission will limit the landed price of washed coal in Rs/kcal equivalent to landed price of normal mined coal. Any loss on this account will have to be borne by MSPGCL itself and shall not be passed on to the beneficiaries.

2.2 USAGE OF GP II COAL

Suggestions/Objections

2.2.1 PEG submitted that the techno-economic viability study concerning coal utilization from Gare Palma-II (GP-II) at various MSPGCL plants reveals that MSPGCL's Board concluded that coal from GP-II is not viable for the Chandrapur and Parli Units. Despite this conclusion, in the Control Period from FY 2025-26 to FY 2029-30, coal from GP-II has been planned for use in Chandrapur Units 8 & 9 and Parli Unit 8 in spite of the increased energy charges associated with the use of GP-II coal in comparison to linkage coal.

2.2.2 PEG submitted that the indicative prices of GP-II coal ranges from Rs. 2,840/MT in FY 2025-26 to Rs. 6,115/MT in FY 2027-28, excluding transportation costs. The considerable distance from the mine to the MSPGCL plants implies high transportation expenses: Rs. 1,289/MT for Koradi 8, 9, 10, Rs. 1,666/MT for Chandrapur 8 & 9, and Rs. 2,289/MT for Parli 8. Additionally, the GCV for GP-II, accounted for in calculating energy charges, stands at 3265 kcal/kg, correlating to grade G-14. The projected cost of the integrated mine at GP-II is substantially greater than the equivalent CIL notified price by Rs. 758/MT in 2022-23. When factoring in WCL-specific charges along with Maharashtra-specific taxes, the cost of G-14 coal from CIL linkages, exclusive of transportation, amounts to approximately Rs. 1,812.3/MT, which makes coal procurement from GP-II 1.57 to 3.37 times more expensive than sourcing from CIL.

2.2.3 As regards the quality of coal from GP-II, MSPGCL has submitted that because of the variation in the GCV due to the initial seams, MSPGCL may take the appropriate call on utilisation of the GP II coal during that time. The issue of coal quality has led to considerations about the viability of GP-II procurement, as seen in the Order in Petition No. 231 of 2019 where MSPGCL stated, "With inferior coal grades, the development of Gare Palma II may be economically unviable and, therefore, MSPGCL is considering the future course of action."

2.2.4 In conclusion, PEG submitted that procurement of coal from GP-II is hindered by high costs and inferior quality, as well as its distance from MSPGCL plants. Therefore, such procurement is not likely to benefit consumers or MSPGCL. Increased variable costs for thermal power plants due to GP-II coal could result in these plants moving lower down in the Merit Order Dispatch (MoD) or even lead to their non-scheduling. Instead, MSPGCL should explore options such as swapping linkages to reduce reliance on GP-II.

2.2.5 In light of the above, PEG put forth specific requests to the Commission to:

1. Direct MSPGCL to perform a detailed study to verify the prudence and optimality of procuring coal from GP-II, which should be subjected to public review.
2. Ensure that any utilization of GP-II coal relies on a thorough analysis for justification, and is approved only after public review and consultation.
3. Instruct MSPGCL to consider alternative strategies, such as swapping GP-II coal with CIL linkages, to lower costs.
4. Cap the input price of coal from the integrated mine GP-II at the CIL notified price for the corresponding grade, in compliance with Regulation 56.1 of the MYT Regulations 2024.
5. Disallow the use of washed coal from GP-II without comprehensive cost-benefit analysis to justify its use, similar to the earlier point concerning washed coal.

MSPGCL's replies

2.2.6 MSPGCL submitted that the Ministry of Coal (MoC) has allocated the Gare Palma Sector II coal block in Chhattisgarh for MSPGCL for end-use projects including Koradi Units 8, 9 & 10, Chandrapur Units 8 & 9, and Parli Unit 8, with a formal Allotment Agreement in place. MSPGCL highlighted that the MoEFCC notification dated 02 January, 2014 required coal-based power plants located 500 km or more from the coal mine to utilize coal with an ash content not exceeding 34%. To comply with this requirement, a Techno-Economic Viability study was conducted by M/s PFCCL, which resulted in plans to wash coal seams from the GP II mine during actual mining operations. MSPGCL pointed out that the assessment from M/s PFCCL established that the landed cost of coal and resultant energy charges are favourable only for Koradi Units. Therefore, the MSPGCL Board resolved to utilize coal from GP-II for the existing 660 MW Units at Koradi, along with the upcoming two additional Units at Koradi TPS, rather than for Chandrapur and Parli.

2.2.7 Moreover, MSPGCL noted that the MoEFCC notification dated 21 May, 2020 revised the ash content requirements now allowing the use of coal regardless of ash content, provided the plants ensure proper disposal of coal ash and comply with emission standards. This revision has made the use of raw GP II coal feasible for all end-use plants. Consequently, MSPGCL has calculated the tentative landed cost of GP II coal at end-use plants and compared this with the energy charge rate of plants utilizing existing coal. MSPGCL has concluded that GP II coal is feasible for use at all end-use plants, including Koradi Units 8-10, Chandrapur Units 8-9, and Parli Unit 8, for the next MYT Control Period from FY 2025-26 to FY 2029-30. MSPGCL has also submitted a fuel utilization plan in line with the MYT Regulations, 2024.

2.2.8 Additionally, MSPGCL asserted that the current supply from WCL is not at the notified rates, with no rakes received at the notified pricing from April 2024 to September 2024. MSPGCL indicated that WCL has transitioned from notified rates to Mine Specific Supply (MSS) coal, detailing the breakdown of their coal supply for FY 2025-26. MSPGCL highlighted that procuring cost plus coal is more expensive and requested not to cap the input price of coal from the GP-II mine at the CIL notified price. Further, MSPGCL indicated that the projected input price of GP-II coal is based on expected capital costs aligned with the anticipated CoD in FY 2027-28, emphasizing that these prices are tentative and subject to change. MSPGCL has calculated the projected prices and compared the energy charge rates at the time of achieving the Peak Rate Capacity (PRC) of GP-II with existing coal, demonstrating that the ECR using GP-II coal would be lower. MSPGCL concluded that, despite the higher initial landed price due to lower production, the price will be optimized by the PRC year.

Commission's View

2.2.9 The Commission has taken note of the stakeholders' submissions and MSPGCL's replies thereof. The Commission observed that the input cost as claimed from the GP-II mines are on the higher side. The Commission has capped the cost of coal from GP-II at the notified prices by CIL for the same grade of coal, in line with the MYT Regulations, 2024 . However, as discussed in detail in Chapter 8 while dealing with the Fuel Utilisation Plan, the Commission shall consider the impact of coal production from GP-II mines at the time of determination of the input cost from GP-II mine.

2.3 USAGE OF IMPORTED COAL

Suggestions/Objections

2.3.1 PEG submitted that the coal is being imported by MSPGCL in accordance with the blending directives of the Ministry of Power (MoP). It is noted that the most recent advisory from the MoP was applicable only until 15 October, 2024 and is no longer in effect. MSPGCL has indicated that contracts for the supply of 2.08 MMT of imported coal are being established, extending until May 2025, with an additional requirement identified as needed to address the shortfall of coal.

2.3.2 PEG further highlighted that MSPGCL has acknowledged that sourcing imported coal incurs significantly higher costs and recognised that alternative methods of coal procurement, such as e-auctions, may offer better options. Given the resultant impact on consumer tariffs, procurement of imported coal should be regarded as a measure of last resort.

2.3.3 Moreover, MSPGCL has claimed that it has been mandated to procure costly imported coal for blending purposes on an urgent basis, despite the general practice of not using imported coal during the monsoon months. The MoP letters concerning coal blending, including the latest advisory dated 27 June 2024 are merely advisory in nature and do not constitute mandates. For instance, the stated advisory of 27 June, 2024 addresses all GENCOs, including Independent Power Producers (IPPs), regarding the timely import of coal for blending purposes and to maximize production in captive coal mines. Additionally, it notably requires GENCOs to continuously assess their domestic coal stock positions and engage in blending as per requirements to ensure adequate coal stocks at thermal power plants.

2.3.4 No current mandates or advisories regarding blending are deemed applicable to MSPGCL and it is asserted that more prudent options for fuel supply are available to the generator for the Control Period from FY 2025-26 to FY 2029-30. Despite this clarity, it has been observed that MSPGCL continues to strategise for the procurement of imported coal for its facilities in Bhusawal, Chandrapur, Khaperkheda, Koradi, and Nashik.

2.3.5 In light of these submissions, PEG submitted that the Commission should ensure that the choice of the most prudent avenue for coal procurement is adhered to and disallow cost implications arising from unreasonable and imprudent fuel procurement decisions. Additionally, PEG requested that consideration of imported coal be scrutinized to confirm that MoP advisories are not misinterpreted as mandates.

MSPGCL's replies

2.3.6 MSPGCL submitted that as regards the use of imported coal for blending at generating stations, to address the shortfall in domestic coal availability, the Central Electricity Authority (CEA), Ministry of Power (MoP), Government of India (GoI), conducts an indicative assessment of the imported coal requirements for power generating companies across India. This assessment is based on projected power generation and anticipated coal production from the Ministry of Coal (MoC), GoI. Consequently, the MoP assigns tentative annual import targets to various generating companies.

2.3.7 These assigned targets aim to mitigate coal supply shortfalls at the national level. However, the CEA and MoP advise that State Generating Companies and power generators must independently assess their requirements and plan accordingly to ensure there is no coal shortage at power stations and prevent generation losses due to fuel constraints. It is noted that maintaining fuel security is a prime responsibility of Generating Companies.

2.3.8 MSPGCL further submitted that, in cases where additional coal is required beyond the targets assigned by the MoP, MSPGCL or any other Generating Company can determine the quantity of coal to be imported based on the specific needs of their power stations, anticipated availability of domestic coal, and feasible blending ratios at their plants. Furthermore, MSPGCL referenced the MoP advisory dated 27 June, 2024, which revised the blending requirement for MSPGCL from 6% to 4% (by weight) until 15 October, 2024. The advisory directs all GENCOs to continuously monitor coal stock levels at their domestic coal-based plants and adjust blending practices as needed to ensure adequate coal stocks are maintained at thermal power plants.

2.3.9 MSPGCL submitted that the MoP through its earlier notifications mandated the use of imported coal in power stations stating that due to a shortage in domestic coal supplies, State Governments and State Commissions must ensure that all generating companies under their jurisdiction take immediate action to import coal for blending according to MoP directives. This is necessary to ensure resource adequacy and provide uninterrupted 24x7 power supply to consumers.

2.3.10 Generating companies must be prepared to make provisions for procuring a certain quantity of imported coal as an alternate arrangement in the event of domestic coal shortfalls. This proactive approach helps prevent disallowances in fixed charges, and decisions regarding the procurement of imported coal must be made based on prevailing circumstances.

2.3.11 The total coal requirement for MSPGCL's stations, based on normative Station Heat Rate (SHR) and availability factors, is approximately 55 MMT, assuming a Gross Calorific Value (GCV) (as-fired) of ~3300 kcal/kg. For FY 2025-26, MSPGCL has Fuel Supply Agreements with WCL, MCL, SECL, and SCCL for 48.75 MMT, which includes a Bridge Linkage of 12.51 MMT. MSPGCL noted that the average coal materialization from coal companies was 84% and 86% in FY 2022-23 and FY 2023-24, respectively. To address the coal shortfall issue, MSPGCL has signed Memorandums of Understanding (MoUs) with WCL and SCCL for the supply of an additional 6 MMT of coal.

2.3.12 On the basis of ongoing coal consumption patterns, MSPGCL has assessed the projected shortfall in domestic coal and considered the usage of imported coal in its power stations in the ensuing years. In order to increase generation, MSPGCL has relied on alternative sources mainly imported coal to mitigate shortfalls in domestic coal, maximize generation, and ensure fuel security for MSPGCL. This approach provides an additional cushion in case of a reduction in coal supply from Coal India Limited (CIL) and ensures the availability of high GCV coal for efficient station operation. However, MSPGCL is exploring alternative domestic sources to reduce dependence on imported coal considering the higher costs associated with it.

2.3.13 MSPGCL submitted that it will comply with the directives of the MoP regarding the utilization of imported coal and is unlikely to exceed the specified mix percentage set by MoP. MSPGCL further indicated that in the absence of a shortfall in domestic coal supply or improvement in domestic coal supply, there will likely be no usage or lower usage of imported coal than projected, resulting in a reduction in normative Energy Charge rates and a negative Fuel Adjustment Charge at that time.

Commission's View

2.3.14 The Commission has taken note of the stakeholders' submissions and MSPGCL's replies thereof. The Commission's analysis of the Fuel Utilisation Plan is elaborated in Chapter 8 of this Order, wherein the issue of imported coal has been dealt with in detail. The Commission directs MPSGCL to utilise the imported coal only after exploring all other options of domestic coal sources and to comply with the directives of MoP.

2.4 RELAXATION OF PERFORMANCE PARAMETERS

2.4.1 MSEDCL submitted that the Gross SHR for Koradi Unit 6 has been specified as 2622 kcal/kWh under Regulation 47.5 of the MYT Regulations, 2024, which is the same as specified in the MYT Regulations, 2019. This SHR was applicable for the combined Units 6 and 7; however, with the retirement of Unit 7, MSEDCL contended that the SHR for Koradi Unit 6 needs to be revised. Furthermore, MSPGCL has requested an additional allowance of 4.5% in design SHR for Koradi Unit 6, proposing an adjustment from 2350 kcal/kWh to 2456 kcal/kWh to accommodate local operating conditions, deviations in overall coal quality, and associated parameters. MSEDCL submitted that this additional allowance of 4.5% is typically reserved for new Units that have achieved Commercial Operation Date (COD) post 01 April, 2009. Therefore, the Commission should take an appropriate decision regarding the SHR for Koradi Unit 6.

2.4.2 In relation to other stations, MSEDCL highlighted that MSPGCL has acknowledged that the SHR for all stations has exceeded the norms due to frequent start-ups, shut downs, and partial loadability.

2.4.3 The Commission, in its Statement of Reasons (SOR) for the MYT Regulations, 2024, has mentioned that the proposed SHR norms for existing Generating Stations are approved on the actual performance over the past period. The Commission has also made it clear that additional capital expenditures for each project are approved after careful consideration of various factors including vintage, size, historical performance, maintenance practices, and plant conditions. Moreover, the current MYT framework permits the sharing of losses incurred due to operational norms, which is not the case under CERC Regulations. Hence, it would not be appropriate to further relax the operational norms as requested by MSPGCL.

2.4.4 MSEDCL submitted that the current MYT framework allows MSPGCL to claim compensation bills, which already accounts for frequent start-ups, shut-downs, and partial loadability. Therefore, no relaxation in SHR should be granted, as any such relaxation would impose an additional financial burden on MSEDCL and ultimately affect the end consumers.

2.4.5 MSEDCL has submitted that the relaxation in auxiliary consumption norms proposed for various Units including Chandrapur Units 3-7, Paras Units 3-4, Parli Units 6, 7 & 8, and Khaperkheda Units 1 to 4, should not be granted. MSPGCL has requested the Commission to consider CPRI Energy Audit Reports and sought relaxation; however, the Commission has previously rejected such requests as outlined in the SOR for the MYT Regulations, 2024.

2.4.6 The Commission has acknowledged in the SOR that MSPGCL submitted CPRI data for the mentioned Units, with recommendations for higher auxiliary consumption norms for generating stations like Parli (Units 6, 7, and 8) and Paras (Units 3 and 4), which have not yet completed their Useful Life. The Commission has emphasized that generators are expected to perform within the technical parameters outlined during project planning, while also stating that MSPGCL is required to urgently implement CPRI's recommended technical measures to improve auxiliary consumption.

2.4.7 MSEDCL requested that no relaxation in auxiliary consumption be granted as requested by MSPGCL, emphasizing that such relaxations would impose an additional burden on MSEDCL, ultimately affecting the end consumers adversely.

2.4.8 MSEDCL submitted that MSPGCL has requested to consider target availability for Nashik, Bhusawal Unit 3, and Khaperkheda Units 1 to 4 as per CPRI Energy Audit Reports. The same request was raised while framing the MYT Regulations 2024. However, the Commission has rejected the same based on the well-explained reasons in the SOR for MYT Regulations 2024. MSEDCL requested that MSPGCL’s request to consider target availability for Nashik, Bhusawal Unit 3, and Khaperkheda Units 1 to 4 as per CPRI Energy Audit Reports should be rejected. The normative availability for Koradi 6, which has undergone Renovation & Modernisation, should be increased from 75% to 80%.

2.4.9 MSEDCL also noted that the MSPGCL has requested a relaxation in the target Availability Factor for Uran GTPS due to gas shortages. However, MSEDCL submitted that the shortage of gas is not the sole reason for the lower availability of Uran GTPS; frequent prolonged outages are also contributing to this situation. If the Commission deems it appropriate to grant a relaxation, it should not extend to the non-availability of Uran Units due to technical outages.

2.4.10 MSEDCL submitted that if MSPGCL is allowed to procure RLNG/Spot gas, the ECR will be approximately Rs. 11/kWh. Such costly power will not be scheduled, leading to MSEDCL incurring higher capacity charges, ultimately burdening end consumers. Therefore, MSEDCL submitted that the use of RLNG/Spot gas should not be permitted.

2.4.11 MSEDCL submitted that it has been observed that secondary fuel oil consumption (SFOC) for most of the stations in FY 2022-23 is higher than the approved norms. MSEDCL further stated that the higher oil consumption was on account of frequent backing down, shut down, start-ups, and partial loading due to coal shortages. The Commission, in its SOR for the MYT Regulations 2024, has already stated that the Commission has approved SFOC norms for existing Generating Stations based on actual performance for the past period, as detailed in the Explanatory Memorandum. For the new Stations, the SFOC norms have been retained at 0.5 ml/kWh, as specified in the MYT Regulations, 2019. The norms specified for MSPGCL's Generating Stations are already relaxed norms, and any further relaxation is not justifiable. Hence, the Commission has retained the norms proposed in the MYT Regulations, 2024.

2.4.12 In light of the above, MSEDCL submitted that SFOC should be allowed strictly as per the approved norms.

MSPGCL's replies

2.4.13 MSPGCL submitted that although Regulation 47.5 of the MYT Regulations, 2024 specifies an SHR of 2622 kcal/kWh for Koradi Unit 6, excluding Units 8, 9, and 10 (i.e., Unit 6), MSPGCL has not considered the normative SHR of 2622 kcal/kWh. Instead, MSPGCL has taken into account an SHR of 2456 kcal/kWh, which corresponds to the guaranteed SHR of 2350 kcal/kWh multiplied by a factor of 1.045. MSPGCL clarified that for new generating stations, it is standard practice to allow a deviation of 4.5% from the design SHR to account for local operating conditions and variations in coal quality. Consequently, MSPGCL has requested this additional 4.5% on the guaranteed SHR, leading to the claimed normative SHR of 2456 kcal/kWh.

2.4.14 Furthermore, MSPGCL noted that the guaranteed SHR for the Unit, which was submitted in 2009 as part of the Detailed Project Report (DPR) for the in-principle approval from the Commission, stands at 2350 kcal/kWh. This value reflects the expected performance under 100% Maximum Continuous Rating (MCR) operation following the completion of the Efficiency Enhancement Renovation and

Modernization (EE R & M) programme. The levelized heat rate projected at that time was 2544 kcal/kWh, derived from the design heat rate, with a variation of 50 kcal/kWh for operational corrections and a 6% allowance according to the CERC norms in place at that time.

2.4.15 In the in-principle approval issued by the Commission, it was stated that while the levelized gross heat rate of the unit would be assumed as 6% higher than the design heat rate, all necessary efforts would be made by MSPGCL to enhance performance and align it with the normative heat rate outlined in the MERC (Terms and Conditions of Tariff) Regulations, 2024. MSPGCL asserted that the proposed normative SHR of 2456 kcal/kWh is actually lower than the heat rate previously approved in the in-principle clearance, thus making a valid case for the Commission's approval.

2.4.16 Regarding the SHR of other stations, MSPGCL clarified that the current Petition does not seek any such relaxation for the normative SHR for Units other than Koradi Unit 6. Thus, MSPGCL submitted that MSEDCL's concerns regarding SHR relaxation are unfounded.

2.4.17 MSPGCL hence, requested the Commission to approve the normative SHR of 2456 kcal/kWh for Koradi Unit 6, which is aimed at improving and not relaxing the heat rate, thereby lessening the financial burden on MSEDCL and, in turn, on the end consumers.

2.4.18 MSPGCL submitted that the Commission has considered the submissions made by MSPGCL regarding the auxiliary energy consumption norms for the Chandrapur Units 3-7. MSPGCL has submitted that CPRI has recommended different auxiliary energy consumption percentages for each Unit based on the measurement of input and output variables of various equipment and auxiliary loads in the plant, conducted through performance tests. Consequently, the actual level of auxiliary energy consumption for each Unit is determined by the current operational conditions of its equipment, independent of the age of the respective Units.

2.4.19 MSPGCL emphasized that the auxiliary energy consumption recommended by CPRI is based on actual performance data. The normative auxiliary energy consumption approved for FY 2022-23 to FY 2024-25 is lower than the actual consumption levels. MSPGCL argued that if these norms are not revised for the true-up period in the current Petition, it would lead to financial losses due to higher auxiliary energy consumption for the Chandrapur Units 3-7. In accordance with Section 61 (d) of the Electricity Act 2003, MSPGCL requested the Commission approve the proposed auxiliary energy consumption norms from FY 2022-23 to FY 2024-25, as well as for the upcoming MYT Control Period.

2.4.20 In light of the differences in vintage, technology, capacity, and commissioning period of each Unit, MSPGCL submitted that it would not be appropriate to apply the lowest auxiliary energy consumption rate among the Units of Chandrapur. Therefore, MSPGCL requested the Commission to approve auxiliary energy consumption rate of 9.34%, as recommended by CPRI, based on performance data collected during the audit.

2.4.21 Regarding the adjustment for auxiliary consumption during the complete shutdown of MSPGCL stations, MSPGCL submitted that when all Units within a tariff group are shut down, no generation occurs; however, essential auxiliaries still require some energy drawal. During this period, no Fuel Adjustment Cost (FAC) is calculated as no fuel is consumed. Therefore, when determining the negative billing for auxiliary consumption, the approved energy charge is utilized. MSPGCL maintained that this practice has been employed for many years and is considered more logical. Accordingly, MSPGCL sought permission to continue this methodology for netting-off billing during outages when all Units within a tariff group are non-operational.

2.4.22 MSPGCL submitted that the target availability for Khaperkheda Units 1 to 4 has been a matter of contention. The Commission has rejected the request to relax or revise target availability, despite CPRI recommending an availability of 73.75% for Units 1 and 2, and 79.75% for Units 3 and 4. This recommendation was based on the assumption that the actual availability for FY 2022-23 and FY 2023-24 (H1) was more than 92%. However, MSPGCL clarified that the certified availability figures for these FYs are 63.63% and 65.54.

2.4.23 On the issue of Uran GTPS, MSPGCL indicated that the GTPS Uran block A0 Turbine has suffered blade failure due to its outdated design. The repair work requires considerable re-engineering and refurbishment efforts. MSPGCL confirmed that Work Order has been placed with M/s BHEL, and the last batch of materials has been received on 25 December, 2024. Restoration work is currently ongoing and is estimated to take approximately 30 days for completion, considering balancing, box-up, and trials.

2.4.24 In light of the facts presented, MSPGCL requested the Commission to approve the normative availability as sought in the present MYT Petition for Nashik, Bhusawal Unit 3, and Khaperkheda Units 1 to 4.

2.4.25 MSPGCL has provided actual data of SFOC and claimed fuel cost at normative level only. Further, MSPGCL had merely provided an explanation for the higher SFOC and had not requested any relaxation from the prescribed norms. Therefore, MSEDCL's objection in this regard is unfounded.

Commission's View

2.4.26 The Commission has taken note of the stakeholders' submissions and MSPGCL's replies thereof. The Commission, as discussed in in detail in the true-up and MYT

Chapters of this Order, has approved the costs based on normative performance parameters without any relaxation.

2.5 FUEL UTILISATION PLAN (FUP)

Suggestions/Objections

2.5.1 MSEDCL submitted that the MYT Regulations, 2024 require the Fuel Utilisation Plan to allocate fuel quantum to various generating Stations/Units based on merit order in terms of variable cost. Fuel allocation should enable maximum availability of the least cost generating Stations/Units and should operate other generating Stations/Units thereafter in ascending order of variable cost. It is observed from the Petition that the cost of washed coal is lower than that of raw coal for Bhusawal Units 4&5, and is marginally lower for Chandrapur Units 3 to 7. Given the benefits of washed coal, it proposed that raw coal for these stations may be minimized. The usage of imported coal should be limited and should not exceed the thresholds specified by the Ministry of Power (MoP). Moreover, an escalation factor for fuel prices should be applied after conducting a prudence check.

2.5.2 PEG submitted that the projections for FY2025-26 to FY 2029-30 presented by MSPGCL indicate a high proportion of thermal generation until FY 2029-30, and the coal-based generation projections for the second half of FY 2024-25 as well as the Control Period from FY2025-26 to FY2029-30 are unreasonably high. The actual performance of several plants indicates that most of MSPGCL's plants will need to operate at PLFs exceeding 100% during the Jan-Mar period to align with the estimates submitted in their Petition, which appears to be highly unrealistic.

2.5.3 PEG submitted that these generation projections significantly impact system operations, fuel procurement planning and ultimately, electricity supply and consumer tariffs. The Commission should disallow these unrealistic projections from MSPGCL to ensure optimal operations and prudent fuel procurement. The high variable costs projected for MSPGCL's plants, which reach up to Rs. 7.77/unit, potentially reduce the likelihood of these plants being scheduled. PEG referred to MSEDCL's Resource Adequacy Plans, which expects the coal capacity PLF to remain within the 53%-68% range until 2032. Despite none of MSPGCL's thermal power plants having operated at normative PLF during the last Control Period, normative PLF has still been assumed for FY 2025-26 to FY 2029-30 generation projections. The projected net annual generation from MSPGCL's coal fleet equates to approximately 33% of MSEDCL's energy demand for FY 2025-26 to FY 2029-30. Incorporating generation from Bhusawal Unit 6, expected to commence operations on 31 January, 2025, raises this average to 35.4%, which is unrealistic.

MSPGCL's replies

2.5.4 MSPGCL submitted that MSEDCL has only compared the price of coal without taking into account the corresponding GCV of coal. A proper comparison must include the effective price of coal (Rs./kcal = Price of coal / GCV of coal). The allocation of WCL cost-plus coal is higher due to proximity to such cost-plus sources, however it is more expensive, resulting in slightly higher raw coal prices. Therefore, MSEDCL's suggestion to minimize the use of raw coal in favour of washed coal for Chandrapur Units 3-7 is not valid.

2.5.5 For Bhusawal Units 4-5, MSPGCL indicated that the cost of raw coal is higher than that of washed coal due to the inclusion of cost-plus coal from WCL and raw coal from SECL and MCL transported via the Railways, both of which are relatively costly. Consequently, the overall cost of raw coal for these Units is marginally higher. MSPGCL stated that it has signed an agreement for coal washing, thus fixing the quantity of washed coal and hence, the allocation will be limited as per the agreed quantum. Additionally, washed coal is allocated to stations that are closer to the washery, considering logistical and cost factors, which means the allocation of washed coal to Bhusawal is already at its optimum level.

2.5.6 Regarding imported coal, the total coal requirement for MSPGCL stations, based on normative SHR and availability factors, is around 55 MMT, assuming a GCV (as-fired) of approximately 3300 kcal/kg. The MoP sets a limit of 6% of the total coal requirement, which amounts to 3.3 MMT. Consequently, the imported coal requirement purchased is within this limit.

2.5.7 Regarding the escalation factor for coal prices, MSPGCL submitted that it has employed the weighted average price of coal received during the period from October 2023 to September 2024 as the basis for projections for FY 2024-25 (H2). For the upcoming MYT period, a year-on-year escalation factor of 5% has been applied to the FY 2024-25 (H2) prices. Furthermore, any variation between actual coal prices and the approved prices will be adjusted through monthly FAC billing.

2.5.8 MSPGCL submitted that for the expense towards flexible operation, it will submit the DPR along with the cost-benefit analysis for approval, based on the appropriate directives. Further, MSPGCL will ensure to seek MSEDCL's consent before incurring any expenditure as per the approved DPR for flexible operation expenses.

2.5.9 MSPGCL submitted that regarding the projection of higher generation during the MYT Control Period, PLF is projected at a normative level based on the Fuel Utilisation Plan submitted as part of the present Petition. In accordance with Regulation 40 of the MYT Regulations, 2024, the generator is required to prepare and submit the Fuel Utilisation Plan in a manner that ensures fuel allocation from various fuel sources, both contracted and alternate to various stations, maximizing availability at the least cost. While the Fuel Utilisation Plan should be based on past data, it must also consider reasonable assumptions for the future. Hence, the preparation of the Fuel Utilisation Plan aimed at achieving maximum availability for each station naturally leads to similar maximum generation for energy charge projection purposes. The observation made by PEG claiming that MSPGCL's coal fleet for FY 2025-26 is projected from an elevated base to further increase by 13% is incorrect. The projections are fundamentally based on the Fuel Utilisation Plan and on the assumption that the thermal stations will meet target availability throughout the next Control Period. It is a fact that the Availability Factor (AVF) for coal stations has improved significantly over the past two years (FY 2022-23: 66.31%, FY 2023-24: 72.68%, FY 2024-25 till January: 75.8%). Therefore, the submission of PEG that "no growth is projected for the remainder of the Control Period" is also incorrect.

2.5.10 As regards the projection of generation at normative levels, despite none of the stations operating at normative levels in the last Control Period, MSPGCL indicated that the PLF and generation have been projected at normative levels according to the coal availability outlined in the Fuel Utilisation Plan. However, actual generation may vary depending on the scheduling of the Units. Consequently, the actual fuel cost will be permitted based on the actual net generation during the MYT Control Period. Thus, it is not the case that higher generation would result in higher recovery of fuel cost. Furthermore, recovery of fixed charges is inherently linked to the monthly cumulative actual availability, taking into account season-wise and peak/off-peak period availability. Therefore, there is no possibility of MSPGCL recovering higher fixed charges due to the higher availability projected in the present Petition. MSPGCL urged the Commission to consider the generation for the MYT Control Period based on the coal availability as appropriately addressed in the Fuel Utilisation Plan.

Commission's View

2.5.11 The Commission has taken note of the stakeholders' submissions and MSPGCL's replies thereof. The Commission has dealt with the issues related to Fuel Utilisation plan in detail in Chapter 7 while approving the Fuel Utilisation Plan. As regards generation projections from MSPGCL's thermal stations, the Commission, in line with its approach adopted in previous Orders, has approved the generation considering the past trends of availability with some improvement as elaborated in Chapter 8 of the Order. As regards Bhusawal Unit 6, the Commission has approved the provisional tariff vide its Order in Case No. 236 of 2023.

2.6 INSTALLATION OF EMISSION CONTROL SYSTEM

2.6.1 PEG submitted that the capital expenditure (CAPEX) related to Pollution Control Equipment (PCE) significantly impact the station's ARR, as outlined in the Tariff Formats submitted by MSPGCL. MSPGCL has detailed the per unit charges arising from reagent costs necessary for PCE operations, which result in increased Energy Charge Rate (ECR). It has been observed that there are substantial spikes in variable costs (VC), ranging from Rs. 0.10 to Rs. 0.72 per kWh, that are applicable to certain Units starting as early as FY 2025-26. Furthermore, MSPGCL has claimed increased auxiliary consumption due to PCE operations from the commencement of the upcoming Control Period.

2.6.2 As of 30 December, 2024, the MoEFCC has further extended the deadlines for SOx compliance by an additional three years. In light of the VC implications associated with running the PCE and noting the absence of a legal requirement for its operation, it is deemed reasonable for MSPGCL to refrain from utilizing their PCE in order to maintain their standing within MoD stack. Therefore, any tariff or operational relaxations related to PCE, including those concerning auxiliary consumption, should only be permitted upon the submission of verifiable proof of PCE utilization by MSPGCL.

MSPGCL's replies

2.6.3 MSPGCL submitted that the additional ECR/impact of reagent costs is projected to be higher, at Rs. 0.72/kWh for dry FGD systems due to the associated costs. The projection of the reagent cost is based on prices discovered through recent competitive bidding, which may result in higher costs. During the Public Hearing, the Commission directed MSPGCL to revisit the capitalisation projected for the MYT Control Period. In response to this direction, MSPGCL has revised its projected capitalisation, which includes revising the CoD dates of the FGD/SCR system for certain stations. Consequently, additional auxiliary energy consumption has also been revised and considered based on the revised CoD of the FGD/SCR system.

2.6.4 Furthermore, PEG submitted that the MoEFCC has further pushed back the deadlines for SOx compliance by three years. Given the VC impact of running the PCE and the lack of a legal mandate to do so, PEG has stated that it is rational for MSPGCL not to utilise their PCE, so as not to affect their position on the MoD stack. In response, MSPGCL submitted that for stations where the LoA has already been issued, the implementation remains necessary. While the MoEFCC has extended the deadline for SOx compliance, it has not cancelled the obligation. MSPGCL submitted that deferring the installation of the FGD/SCR system could lead to increased capital costs.

2.6.5 Therefore, the MoEFCC has merely extended the timeline and has not waived or revoked the compliance requirement. As a result, MSPGCL shall not postpone the installation of the FGD/SCR system solely due to the extended deadline; rather, it will also consider the broader social impact before proceeding with the installation.

Commission's views

2.6.6 The Commission has taken note of the stakeholders' submissions and MSPGCL's replies thereof. The Commission agrees with the view of MSPGCL that deferring FGD installations would only increase the implementation costs. The Commission has considered the implementation of FGD in line with the submissions made by MSPGCL for the Units for which the Orders for FGD have already been placed after obtaining the in-principle approval from the Commission. Though the capital costs of FGD for some of the Units is higher than in-principle approved cost, the Commission at this stage has limited the capital cost to that approved by the Commission while approving the DPRs. The impact of increase in energy charges due to consumption of reagent and auxiliary consumption has been considered in accordance with the MYT Regulations, 2024.

2.7 ADDITIONAL CAPITALISATION

Suggestions/Objections

2.7.1 Shri Narendra B Dhanole submitted that MSPGCL has carried out installation of Pipe Conveyor system at Khaperkheda TPS and Koradi TPS for transportation of coal from near-by WCL mines. However, in the Petition, only brief information is provided regarding capitalisation of Rs. 124.51 Crore carried out in FY 2022-23 for Khaperkheda Unit 5, without mentioning the details of cost impact and benefits.

2.7.2 MSEDCL submitted that MSPGCL has proposed a CAPEX Rolling Plan of Rs. 30,596.65 Crore for the 5th Control Period. The proposed CAPEX seems to be exorbitant. It is observed that for Chandrapur TPS, the total CAPEX proposed is about Rs. 10,000 Crore, while for Koradi 8 to 10, it is about Rs. 5,456 Crore. The CAPEX cost proposed for these two TPS is almost equivalent to the cost of new 3 x 660 MW station. Furthermore, Rs. 2933 Crore has been proposed for Khaparkheda Units 1 to 4, which are of 210 MW each. Khaparkheda Units 1 and 2 have already completed a service period of more than 35 years and are likely to be retired in the near future.

2.7.3 MSEDCL submitted that MSPGCL has considered capitalisation of Rs. 11,117.92 Crore for the Control Period. The detailed list of station-wise and year-wise works considered to arrive at the capitalisation of Rs. 11,117.92 Crore is not found in the Petition, making it difficult to provide comments.

2.7.4 The capitalisation proposed for 210 MW Units needs to be deferred due to several reasons: these Units have been in service for more than their useful life of 25 years; Nashik Units are primarily kept in service due to transmission constraints, which, if resolved by MSETCL, could lead to their retirement; CAPEX towards old Units will result in higher power costs, burdening consumers, as these are expected to retire soon; and with the implementation of the Mukhyamantri Saur Krushi Vahini Yojana, local generation to meet agricultural demand will increase, necessitating the retirement of high-cost generation Units.

2.7.5 MSEDCL further submitted that the exorbitant capitalisation plan will require many years to complete, and even the partial capitalisation proposed by MSPGCL will be difficult to complete in the ensuing Control Period. All the old Units need to be retired in a phased manner rather than allowing additional capitalisation for them. Historical trends indicate that actual capitalisation over the years has always been lower than what was approved, leading to a significant cost burden on the consumers of MSEDCL. Therefore, MSEDCL requested that historical trends, completed service years for the old Units, and likely benefits or losses for end consumers be considered before approving capitalisation for the forthcoming years. Capital expenditure plans should not impose a financial burden on consumers, but instead should be beneficial.

2.7.6 MSEDCL submitted that specific provisions of the MERC (Approval of Capital Investment Schemes) Regulations, 2022 should be considered while approving the capitalisation plan. The indicative categories in which generating companies or businesses may file capital investment schemes for approval include stipulations that the repair and maintenance of existing roads and buildings shall not be claimed as capital expenditure, and asset replacement shall not merely be approved because the asset has completed its useful life as specified in applicable Regulations. MSEDCL also emphasized that replacement of assets should be the last resort and not the first priority. Capitalisation should only be approved after thorough prudence checks, and in line with MYT Regulations 2019 and 2024, capitalisation should not exceed 20% for non-DPR schemes. Additionally, MSEDCL should be consulted for proposed capitalisation, as it directly impacts both MSEDCL and its end consumers.

2.7.7 MSEDCL observed that MSPGCL has proposed a capital expenditure of Rs. 5,970.73 Crore towards the Emission Control System (ECS) for the 5th Control Period. The works for the older 210 MW stations are nearing completion, whereas for the comparatively newer Units, the work is expected to be completed by FY 2027-28. Some of the older 210 MW Units where FGD is being installed may retire in the near future, potentially resulting in a financial burden on end consumers. Additionally, MSEDCL raised concerns regarding the auxiliary energy consumption (AEC) considered by MSPGCL for the ECS while projecting the AEC for FY 2025-26 to FY 2029-30. MSEDCL contended that the AEC due to ECS should only be considered after the commercial operation of the system and not for the entire Control Period. Moreover, MSEDCL pointed out that MSPGCL has accounted for additional ECR/impact of reagent costs as high as Rs. 0.72/kWh, while NTPC is billing additional ECR/impact of reagent costs within the range of Rs. 0.34/kWh to Rs. 0.50/kWh. Hence, MSEDCL requested the Commission for a thorough prudence check before permitting such a high rate.

2.7.8 MSEDCL submitted that MSPGCL has projected Rs. 2838.97 Crore towards ash utilisation expenses. Ash utilisation during FY 2022-23 and FY 2023-24 is good barring Chandrapur TPS. In fact, for a few stations, it is more than 100%. Further, MSPGCL stated that the expense incurred towards ash utilisation for FY 2022-23 and FY 2023-24 is negligible. However, MSPGCL has projected huge expenses of Rs. 2,838.92 Crore for the Control Period towards ash utilisation, which should not be allowed. MoEF/MoP has issued Guidelines for thermal power plants regarding the utilisation of fly ash, but nowhere in these Guidelines is there a mention of incurring capital expenditure for the development of infrastructure to increase ash utilisation. There must be existing infrastructure for ash handling/utilisation in the plants. Any repair/upgradation of the same should be considered in O&M expenses. Furthermore, revenue earned from the sale of Fly Ash should be shared with the DISCOM. MSPGCL has itself pointed out that under point No. 6 of MoP advisory Guidelines dated 22 February, 2022, it is mentioned that the appropriate Commission shall scrutinize any expenses regarding ash utilisation proposed to be passed through in tariff by the Generation Company in accordance with these Guidelines to ensure that the least possible burden is passed on to electricity consumers and full transparency is ensured by the Generating Company as envisaged in these Guidelines. Hence, a prudence check is necessary along with directives to MSPGCL to take all-out efforts to keep such expenses to bare minimum to avoid burden on MSEDCL.

MSPGCL's replies

2.7.9 MSPGCL submitted that the details of capitalisation for the pipe conveyor system have been provided in Form 4.2 of the tariff formats for Khaperkheda Units 1-4, Khaperkheda Unit 5, and Koradi Units 8-10.

2.7.10 MSPGCL further clarified that as of now, the work for installation and commissioning of the pipe conveyor system at Khaperkheda TPS and Koradi TPS is not entirely completed. Major work at Khaperkheda TPS is expected to be completed by March 2025, while the works at Koradi TPS are anticipated to be completed in FY 2026-27. Accordingly, in the present Petition, partial capitalisation for Khaperkheda Unit is shown for FY 2022-23 and FY 2023-24, with complete capitalisation projected for FY 2024-25, and for Koradi Units 8-10, part capitalisation is claimed in FY 2026-27.

2.7.11 In response to the stakeholder's submission regarding the lack of details about the pipe conveyor system, MSPGCL stated that complete details are not submitted as the scheme is partly completed. According to the relevant Regulations, MSPGCL is obligated to apply for the approval of completed cost of the approved DPR schemes before filing any claim for true-up for any financial year, along with technical and financial details. Therefore, MSPGCL submitted that it will provide all details related to the Khaperkheda and Koradi Pipe Conveyor system after the full commissioning of the system.

2.7.12 MSPGCL submitted that it has successfully implemented the Coal Pipe Conveyor System connecting the Bhanegaon and Singori coal mine areas to the Koradi and Khaperkheda Thermal Power Stations. The pipe conveyor from Gondegaon to the IP Bunker is also expected to be completed soon.

2.7.13 Regarding the tariff impact, MSPGCL submitted that while there will be cost implications due to depreciation, financial charges to service the loans, and additional operation and maintenance costs for the pipe conveyor system, there will also be savings in road transportation costs currently being incurred. Additionally, some costs will arise from increased AEC. Prior to the initiation of the Pipe Conveyor System, MSPGCL pointed out that the transportation of coal from nearby coal mines to Khaperkheda TPS and Koradi TPS was primarily done by road transport. MSPGCL submitted that the coal pipe conveyor project is expected to provide monetary benefits through reduced transportation costs, although these savings may not be significant. The principal advantages of the system are qualitative in nature. Such infrastructure projects aim more at ensuring the reliability of the coal transportation system and alleviating the challenges associated with road transportation, rather than purely focusing on economic benefits. Furthermore, the system significantly reduces dust pollution typical of heavy road traffic in mining areas and lowers the risk of vehicle accidents.

2.7.14 MSPGCL submitted that it has projected the CAPEX Rolling Plan considering several key objectives. These include improving the operational efficiency and reliability of existing generating Units, ensuring compliance with environmental and regulatory standards, and upgrading technology in view of the obsolescence of current systems. MSPGCL aims for design and material upgrades alongside technological advancements to achieve life extensions for major assets through selective parts replacement and to enhance capacity via modernization and refurbishment of existing plants. Additionally, the Plan is designed to meet future electricity demand while maintaining cost-effective operations, enhance security systems in alignment with threats and directives from national security agencies, and ensure an inventory of insurance spares, modern tools, and equipment upgrades for flexible operations.

2.7.15 MSPGCL submitted that the installation of FGD systems for the older 210 MW stations has been undertaken in compliance with the directives of the MoEF&CC. Furthermore, these Units are required to remain operational until 2030, as per the instructions of the CEA. In alignment with this guidance, MSPGCL has moved forward with the installation of these systems. Regarding the additional ECR/impact of reagent costs, MSPGCL submitted that the projection is high, at Rs.0.72/kWh for dry FGD systems, given the associated costs. This estimate is based on prices obtained through recent competitive bidding, which may drive higher costs. Additionally, it is noted that while MSEDCL has indicated the ECR/impact claimed by NTPC to be between Rs. 0.34/kWh to Rs. 0.50/kWh, the specific type of FGD system (dry or wet) installed by NTPC is unclear, rendering direct comparison inappropriate. Relevant details have been submitted for consideration as part of the data gap responses.

2.7.16 MSPGCL submitted that it acknowledges MSEDCL's position regarding performance parameters but maintains that it will proceed with the Renovation and Modernization of its old Units only upon obtaining consent from MSEDCL. Additionally, MSPGCL pointed out that it operates these old Units in compliance with the directives of the CEA, which mandate their operation until 2030. Thus, it requested that this operational context be considered when evaluating and deciding on the approval or disallowance of expenditure related to Renovation and Modernization, as well as during the approval or disallowance of normative expenses in the True-up process.

2.7.17 MSPGCL submitted that it has claimed estimated ash utilisation expenses over the Control Period under three heads, namely towards dry fly ash utilisation, towards pond utilisation, and towards infrastructure development to increase ash utilisation. Moreover, the approach for expenses towards ash utilisation has been detailed in the Petition. In accordance with the MoP advisory, ongoing activities are also appraised thereof. To enhance ash utilisation, the estimated expenditure over the Control Period is presented in the current Petition. To facilitate ash offtake from plant premises, various infrastructure development works such as railway track extension, railway platform for loading facilitation, weigh bridge, jumbo bag filling machine, and approach road to offtake ash from ash bund or ash silos shall be essential. Additionally, promotional activities such as conferences with ash off-takers like cement companies, NHAI, MSRDC, and brick manufacturers support stakeholder involvement and focus on utilisation efforts. The above infrastructure mainly consists of extensions to existing infrastructure or new infrastructure just to facilitate ash off-takers. These infrastructure works are not part of regular O&M and need to be carried out only as necessary. Ash offtake shall not only enhance environmental compliance but also minimize the cost-intensive capex of ash bund raising, and in some cases, it may delay the capex.

Commission's views

2.7.18 The Commission has carried out detailed scrutiny of Capitalisation claimed by MSPGCL for FY 2022-23, FY 2023-24 and FY 2024-25 as discussed in Chapter 4 and 5 of the Order. For the next Control Period from FY 2025-26 to FY 2029-30, the Commission has carried out the detailed analysis of capitalisation proposed in Chapter 7 of the Order. The Commission at this stage has not approved any capitalisation towards Renovation & Modernisation of old Units and has directed MSPGCL to submit the DPR for approval of the Commission in accordance with the provisions of MYT Regulations, 2024 and MERC (Approval of Capital Investment Schemes) Regulations, 2022.

2.7.19 MSPGCL vide its letter dated 15 February, 2025 has submitted the Report on Time and Cost Over Run of the Pipe Conveyor schemes. The Commission observed that the project is still in work in progress and not yet completed. The actual cost and time over run can only be quantified after the completion of the scheme. Hence, the Commission at this stage has limited the capitalisation to the DPR approved capital cost and directed the MSPGCL to submit the complete details of actual completed cost once the project is complete along with details of time and cost over run once the project is completed.

2.8 ANNUAL FIXED CHARGES

Suggestions/Objections

2.8.1 MSEDCL submitted that the norms specified by the Commission for new generating stations are on the lower side when compared to the actual O&M expenses of new stations for FY 2022-23. MSEDCL further indicated that the Commission has taken into account an escalation rate of 3.94%, which is based on the actual escalation rate for FY 2021-22. For FY 2022-23, the revised normative O&M expenses have been claimed by MSPGCL considering an actual escalation rate of 4.88% as per the WPI/CPI indices. MSEDCL requested the Commission to conduct a thorough prudence check before approving such a high escalation rate.

2.8.2 The Commission, in its SOR for the MYT Regulations, 2024, has specifically noted that MSPGCL submitted the Report of the Committee constituted by MSPGCL with experts from CEA to evaluate the O&M expenses of Koradi Thermal Power Station (KTPS) (3 x 660 MW). This Report comments on the lower normative O&M approved by the Commission compared to CERC norms during the Control Period (2019-2024) and provides recommendations to MSPGCL for controlling O&M expenses. These include a need to control employee expenses in comparison with other supercritical plants, segregating R&M expenses under Capex and Opex, reducing A&G expenses further though they are currently lower than other plants, and adopting best practices along with third-party technical consultants' recommendations to help reduce O&M expenses at these plants. The Commission expects MSPGCL to implement these recommendations with priority to effectively manage O&M expenses.

2.8.3 The Commission had also reiterated that O&M expenses are controllable expenses that are subject to the sharing of gains and losses. During the formulation of the MYT Regulations, 2024 it was specifically noted that MSPGCL should implement the recommendations of third-party technical consultants to manage O&M expenses effectively. Moreover, the Commission has already increased the normative O&M expenses for the next Control Period.

2.8.4 In the context of Appeal No. 250 of 2016 concerning O&M expenses, the Hon'ble APTEL has ruled that the Commission must adhere to its Regulations in all aspects, including O&M expenses. The allowance of O&M expenses on an actual basis would defeat the purpose of specifying norms after due public consultation.

2.8.5 The Commission, after obtaining stakeholder comments and suggestions (including those from MSEDCL) and conducting an exhaustive study, has formulated the Regulations for O&M expenses for old Units in the MYT Regulations, 2019 and the MYT Regulations, 2024. Furthermore, it is noted that one-third of the O&M losses are permitted to be passed through. Therefore, no relaxation should be granted for O&M expenses, and only normative O&M expenses should be considered for calculating normative expenses for the ensuing years to avoid imposing additional burden on end consumers.

2.8.6 MSEDCL submitted that parameters such as depreciation, interest on long-term loan, interest on working capital, contingency reserves, and return on equity may be approved as per regulatory provisions after a prudence check.

2.8.7 As regards the claim of loss of interest on the amount of Rs.13,801 Crore, MSEDCL submitted that the LPS Rules, 2022 do not provide for the levy of interest on the agreed amount unless MSEDCL defaults on its payment obligations. MSEDCL requested the Commission not to allow the claimed loss of interest over and above the normative IoWC.

MSPGCL's replies

2.8.8 MSPGCL submitted that the escalation rates of 4.88% for FY 2022-23 and 4.36% for FY 2023-24 have been calculated based on the actual WPI and CPI values for the respective years. MSPGCL indicated that it has adhered to the relevant Regulations by using these actual figures, whereas the O&M norms approved by the Commission at that time were based on the WPI and CPI values for FY 2021-22, as the numbers for FY 2022-23 and FY 2023-24 were not available. MSPGCL submitted that the necessary calculations have already been provided in the present MYT Petition for the Commission's consideration.

2.8.9 Regarding the request to allow the actual O&M cost as claimed for Koradi TPS (3x660 MW) as per the CEA study, MSPGCL pointed out that the CEA Report clearly states that the approved norms for the current MYT period (FY 2020-21 to FY 2024-25) for Koradi TPS (3x660 MW) are lower than the normative expenses allowed by CERC for 600/660 MW plants. MSPGCL has consistently raised this concern in its Petition, and it has stated that this issue is further supported by the CEA Report. In light of this, MSPGCL submitted that it is entitled to recover costs in a reasonable manner as per Section 61(d) of the Electricity Act, 2003. Therefore, MSPGCL requested the Commission to approve the O&M norms for FY 2020-21 to FY 2024-25 and, accordingly, approve the true-up for these years.

2.8.10 MSPGCL submitted that other elements of the ARR have been calculated as per normative principles, except in the case of IoWC. MSPGCL has claimed a rate for IoWC considering an additional 75 basis points over and above the normative rate as per Regulations. In this context, MSPGCL's current revenue source consists of a single customer, leading to complete revenue dependence on this customer, which significantly raises the risk of a financial shortfall.

2.8.11 MSPGCL submitted that under Regulation 37 of the MYT Regulations, 2019, MSPGCL is entitled to levy a Delayed Payment charge (DPC) on outstanding bills that remain unpaid beyond its due date. As regards MSEDCL's contention that the LPS Rules, 2022 do not allow for the imposition of interest on the agreed amount unless MSEDCL defaults on its payment obligations, it is clarified that MSPGCL has not levied any DPS or LPS on the outstanding amount of Rs. 13,801 Crore. However, considering that the outstanding dues amount of Rs. 13,801 Crore, which is presently accepted by MSEDCL is significantly huge and is getting recovered in 48 monthly instalments, there is significant cost burden on the Petitioner on account of interest on the already increased working capital borrowing, primarily due to previous delays in receipts from MSEDCL.

2.8.12 MSPGCL has been deprived of interest carrying cost over the period of 48 months of recovery of outstanding dues through Equated Monthly Instalments (EMIs). The concept of 'time value of money' states that money available at present time is worth more than the same amount in the future due to potential earning capacity through investments or inflation. If a person is deprived of the use of money to which they are legitimately entitled, they have a right to be compensated through interest. Considering the provisions of LPS Rules, 2022, MSPGCL has not levied any LPS on outstanding amounts to MSEDCL and instead claimed amount under the heading of normative IoWC over and above the normative IoWC.

2.8.13 MSPGCL submitted that it has highlighted the anomaly in the definition of "Due Date" following the 2nd Amendment to the MYT Regulations, 2019, dated 08 June, 2023, and has provided a rationale for requesting a receivable period of 75 days for normative working capital calculations, effective from 08 June, 2023, as detailed in the present Petition. In light of this, MSPGCL requested that the Commission approve the normative IoWC accordingly, considering the receivable period of 75 days for the period 08 June, 2023 to 31 March, 2025, as already mentioned in the present Petition.

Commission's views

2.8.14 The Commission has dealt with the various issues related to AFC while approving the AFC for relevant years in subsequent Chapters of the Order, which are not elaborated here to avoid repetition.

2.9 GHATGHAR AFC AND LEASE RENT

Suggestions/Objections

2.9.1 MSEDCL submitted that it had agreed to pay the deducted AFC and lease rent charges of Rs.181.48 Crore for FY 2019-20 and FY 2020-21 to MSPGCL, as it has been allowed in the ARR of MSPGCL and it has been passed on by MSEDCL to the end consumers in the true up of respective years. However, similar consideration is not done for the deductions carried out for FY 2017-18 and FY 2018-19 and hence, the Commission should allow MSEDCL to recover the deducted O&M charges (Rs. 21.66 Crore) and lease rent charges (Rs. 167.81 Crore) for FY 2017-18 and 2018-19 from the consumers and pay the same to MSPGCL.

2.9.2 The prolonged outage of Ghatghar is a matter of concern, however, the Commission may take appropriate decision regarding allowing MSEDCL to recover the lease disallowed rent for FY 2017-18 and FY 2018-19, from consumers.

MSPGCL's replies

2.9.3 MSPGCL has already made detailed submission in the present Petition. Regarding non-availability of Ghatghar units during FY 2017-18 and FY 2018-19, MSPGCL had provided detailed reasons to MSEDCL vide communication dated 04 May, 2019, which is also shared in the present Petition. Despite sharing such data in 2019, MSEDCL had continued with unilateral deductions of AFC and lease rent of Ghatghar for FY 2017-18 and FY 2018-19 and the said amount of Rs.189.48 Crore has remained disputed and unpaid till now.

2.9.4 Now MSEDCL has no specific other objections on the issue of payment of previously deducted AFC and lease rent related to Ghatghar provided that the same is allowed to

MSEDCL for recovery from consumers. MSPGCL requested the Commission for appropriate decision.

Commission's views

2.9.5 The Commission has taken note of MSEDCL's submissions and MSPGCL's replies thereof. The Commission directs MSEDCL to pay the amount of Rs. 189.48 Crore (Rs. 21.66 Crore O&M charges and Rs. 167.81 Crore lease rent charges pertaining to FY 2017-18 and FY 2018-19) to MSPGCL within 3 months from the date of this Order. The Commission allows MSEDCL to recover this amount from the consumers through its Tariff. The Commission has considered the same as part of previous years true-up in MSEDCL MYT Order for recovering the same form its consumers through tariff for FY 2025-26.

2.10 OUTSTANDING DUES AND LATE PAYMENT SURCHARGE

Suggestions/Objections

2.10.1 PEG submitted that in accordance with MoP's Electricity (Late Payment Surcharge and Related Matters) (Amendment) Rules, 2024, generators are required to offer un-requisitioned surplus (URS) power in the Power Exchange. Specifically, Rule 9 of the Amendment states that a Distribution Licensee shall intimate its schedule for requisitioning power for each day from each Generating Company with which it has an agreement for purchase of power at least two hours before the end of the time for placing proposals or bids in the day-ahead market for that day. Failure to do so would enable the Generating Company to offer the un-requisitioned surplus power, including the power available against the declared capacity of the Unit under shut down, in the Power Exchange, subject to ramping and start-up capabilities as specified by the Appropriate Commission.

2.10.2 Furthermore, PEG pointed out that if the power offered by the Generating Company is not cleared in the Day-Ahead Market, it shall be offered in other market segments, including the Real-Time Market, also in the Power Exchange. The price for such offers will not exceed 120 percent of its energy charge, as determined or adopted by the Appropriate Commission or calculated under directions issued by the Central Government under Section 11 of the Act, if applicable, plus applicable transmission charges. Additionally, any failure to offer un-requisitioned surplus power in the Power Exchange will lead to the un-requisitioned surplus power not being considered available for the payment of fixed charges, up to the declared capacity.

2.10.3 In light of the potential impact on the Generating Company's finances and the need for better resource utilization, PEG requested the Commission to direct MSPGCL to sell

URS power. To facilitate the monitoring of such sales, PEG suggested that the Commission should direct MSPGCL to submit data tracking the treatment of un-requisitioned capacity. To this end, PEG proposed a format for tracking URS from each Unit, detailing the contracted capacity, declared capacity, scheduled capacity, un-requisitioned capacity, and sales information.

2.10.4 PEG further emphasized that this tracking should be reported on MSPGCL's website periodically, preferably monthly, and submitted to the Commission. Additionally, for accountability, MSPGCL should provide certification regarding the capacity offered for sale, bid offered, and capacity sold in the Power Exchange. PEG submitted that the Commission should allow fixed cost recovery only after consideration of the data submitted by MSPGCL, in line with Rule 9 of the LPS Rules.

2.10.5 MSEDCL submitted that the difference in the outstanding dues is primarily due to the methodology adopted by MSPGCL to adjust payments against LPS first and then against principal amount.

2.10.6 In this context, MSPGCL referred to the matter of MSETCL Case No. 162 of 2016, where the Commission has noted the submission of Adani Transmission (India) Ltd at para 5.1(v), which states:

"Regarding recovery of LPS, ATIL stated that the BPTA requires that, upon non-payment of LPS within a billing cycle, the LPS payable be included in the MTC for the next billing cycle. Further, the payment received from TSUs should be appropriated first towards LPS and the balance payment, if any, should be adjusted towards the arrears first and thereafter towards the current monthly bills."

2.10.7 Moreover, MSEDCL highlighted that the submission of STU has been taken on record, which asserts that TSUs are making payments to the STU Pool Account towards MTC as determined by the Commission in the Tariff Order, and these payments cannot be unilaterally adjusted against LPS. Therefore, the recovery of LPS as TSUs have not paid towards LPS separately cannot be applied, and the methodology suggested by ATIL for adjusting the payments received in the STU Pool Account against LPS cannot be implemented.

2.10.8 MSEDCL stated that there are no specific provisions provided in the Electricity Act, PPA, CERC Regulations, or MERC Regulations for the appropriation of payment until the LPS Rules, 2022 came into effect. However, MSEDCL and MSETCL have been appropriating payments towards Principal first and then to LPS, whereas MSPGCL appropriates payments towards LPS first and then to Principal. Furthermore, MSEDCL is also adjusting end consumer payments against principal first and then against DPC.

2.10.9 In light of the above and the submissions made during the proceedings of Case No. 162 of 2016, along with the disallowance of ATIL's request by the Commission, MSEDCL submitted that the methodology of appropriating payments towards Principal first and then to LPS, as adopted by STU, is correct. MSEDCL requested the Commission to direct MSPGCL to consider this.

2.10.10 MSEDCL further submitted that the provisions of LPS Rules, 2022 about adjusting payments against LPS first cannot be made applicable for the prior period.

2.10.11 Additionally, MSPGCL has claimed that it is losing interest/carrying cost on the amount of Rs. 13,801 Crore, which is being considered by MSEDCL for payment in instalments, and has requested the Commission to allow this 'loss of interest' to be claimed in ARR. MSEDCL contended that it is paying the instalments regularly and timely against the mentioned amount. MSEDCL has paid 29 instalments so far, amounting to Rs. 8,338 Crore. The provisions of LPS Rules, 2022 clearly state that no LPS can be levied on the amount of Rs. 13,801 Crore considered by MSEDCL for payment in instalments unless MSEDCL fails to make timely payments.

2.10.12 Given the clear provisions stated above, MSEDCL enquired how MSPGCL can assert such a demand for 'loss of interest.' MSEDCL argued that allowing such a demand would be against the LPS Rules, 2022, and therefore, should not be considered.

2.10.13 Regarding due date interpretation, MSEDCL submitted that, as per the PPA, LPS Rules 2022, and MYT (Second Amendment) Regulations, 2023, the due date has to be 60 days from the billing date. However, if such modification is made on the receivables for Working Capital, the same should not be made pass through.

2.10.14 MSEDCL submitted that following the issuance of the LPS Rules on 3 June, 2022, MSEBHCL, MSPGCL, MSETCL, and MSEDCL approached the Government of Maharashtra regarding the implementation of these Rules. A meeting on 2 August, 2022, led to discussions about the differing methodologies for payment appropriation between subsidiary companies. The Principal Secretary (Energy) GoM directed MSPGCL to adopt MSETCL's methodology for calculating LPS, which prioritizes principal payments.

2.10.15 MSEDCL communicated the provisional outstanding amount as of 3 June, 2022, to MSPGCL, which included a total of Rs. 13,801 Crore, with Rs. 8,881 Crore as principal and Rs. 4,920 Crore as LPS. Payments were to be made in 48 instalments, with 22 instalments paid to date.

2.10.16 On 28 September, 2022 MSPGCL communicated outstanding balances based on MSETCL's methodology, totalling Rs. 17,279.88 Crore. Subsequent communications and reconciliations continued, with MSPGCL later revising its outstanding balances to Rs. 27,163.29 Crore, as detailed in its letter dated 26 May, 2023. On 12 August, 2024, MSEBHCL passed Resolution No. 05/110, reaffirming adherence to the directives from the Principal Secretary (Energy) GoM regarding the freezing of delayed payment charges on arrears prior to the implementation of the LPS Rules, 2022.

2.10.17 According to Ind AS 37, MSPGCL should classify the disputed LPS amount as a Contingent Asset, while MSEDCL has classified it as a contingent liability. MSPGCL has raised LPS bills that have been inflated due to discrepancies in the calculation periods. Therefore, it is requested to the Commission that MSPGCL be directed to adopt the payment apportionment methodology prioritizing principal payments before LPS, with the LPS Rules, 2022 applied prospectively.

MSPGCL's replies

2.10.18 MSPGCL submitted that it is committed to explore the sale of un-requisitioned power for the benefit of end consumers, in accordance with the applicable Regulations and PPA provisions. However, there are certain challenges associated with implementing this approach, as outlined below.

2.10.19 Firstly, MSPGCL indicated an obligation to sell un-requisitioned power while being selectively discriminated against from regular monitoring of the Payment Security Mechanism (PSM). The revised NLDC Procedures issued on 25 November, 2024 for the implementation of the LPS Rules, 2022 and its amendment state that it is obligatory for State-owned Gencos to sell un-requisitioned power but exclude them from the regular monitoring of the PSM. The PSM monitoring system is crucial in ensuring timely payments to generating companies and maintaining payment discipline among Discoms. While it is mandated that Discoms maintain PSM for generating companies generally, State-owned Gencos are exempted without any specified reasons. This selective obligatory approach in the NLDC procedure is encouraging Discoms to evade PSM.

2.10.20 Furthermore, MSPGCL submitted that this exclusion undermines the primary purpose of the LPS Rules, which is to establish payment discipline. MSPGCL has addressed this matter with the CEA during the review meeting held on 18 December, 2024 and made a submission on 24 December, 2024.

2.10.21 Secondly, MSPGCL highlighted difficulties in offering power in the Day Ahead Market due to a mismatch between the deadlines for placing proposals or bids in the Day Ahead Market and the scheduling and dispatch timing under the State mechanism. According to the LPS Amendment Rules, 2024, Rule 9 (1), *"A distribution licensee shall intimate its schedule for requisitioning power for each day from each generating company with which it has an agreement for purchase of power at least two hours before the end of the time for placing proposals or bids in the Day Ahead Market for that day."* Currently, the bid time in the Day Ahead Market segment on power exchanges begins at 10 AM, necessitating that Discoms communicate their day-ahead requisition schedule for the next day to generating companies by 8 AM.

2.10.22 While the Scheduling and Dispatch timelines for Day Ahead Scheduling under CERC are synchronized with this required timeline, in Maharashtra, the Day Ahead Schedule for intra-State generators is finalized at 11 AM. Thus, a mismatch exists between the provisions under Maharashtra and those regulated by CERC. Consequently, by the time the Day Ahead scheduling for intra-State generators is finalized, the Day Ahead Market bidding period has already lapsed, leading to fixed cost recovery issues for State-owned generating stations.

2.10.23 According to the procedures, generating companies must offer un-requisitioned surplus power to the Day Ahead Market first, as this has better chances of consistent power sales. If power sales are not fully cleared or partially cleared for certain blocks in the Day Ahead Market, they have the option to offer it in other market segments, including the Real Time Market. However, Inter-State generating companies lose such backup bidding opportunities due to the aforementioned scheduling mismatch.

2.10.24 Additionally, MSPGCL indicated that a Virtual State Entity has been created for Maharashtra by MSLDC to manage the scheduling process, acting as a counter-party to the schedules provided by the generators. It should be noted that the DSM pool in Maharashtra differs from that of other States, necessitating rationalization or additional provisions.

2.10.25 Lastly, MSPGCL has raised a concern regarding the mechanism for monitoring by RLDC/SLDC of power offered against un-requisitioned quantum and the issuance of timely certifications. Clause 7 (n) of the NLDC procedures, issued on 25 November, 2024, requires that *"RLDCs shall provide the information for monitoring the sale of power by generation stations, as per Format B, to the concerned RPCs by the 6th day of the month for the previous month,"* while Clause 7(o) states, "*Any such un-requisitioned surplus power to the extent not offered in the power exchange(s) up to the declared capacity shall not be considered as available for the payment of fixed charges by the RPCs, and the concerned RPC shall include this in the Regional Energy Account (REA) for the concerned month."*

2.10.26 Given this provision, MSPGCL submitted that there is a need to produce an SLDC certificate for participation in the sale of power on the Power Exchange for claiming fixed charges. If such a certificate is not received in a timely manner, Discoms may dispute the fixed charges, resulting in losses for Generating Companies due to delayed recovery of fixed charges, despite no fault of their own. Hence, there is a need to develop a mechanism for ensuring timeliness in this process.

2.10.27 MSPGCL submitted that the Commission has observed the impact due to payment by MSEDCL as per LPS Rules, 2022. MSEDCL's objections indicate that it has interpreted the ruling as an acceptance of the methodology adopted by STU, as noted in para 5.2 (a) of the Order in Case No. 162 of 2016. MSEDCL has referred to Case No. 162 of 2016, which pertains to a Petition by Adani Transmission (India) Ltd against the State Transmission Utility regarding non-compliance with the Commission's directives to recover outstanding LPS, which has already been approved by the Commission.

2.10.28 MSPGCL submitted that the grounds of the aforementioned Petition are completely distinct and that referencing this Order as case law to establish a general principle for LPS apportionment is unwarranted, as both grounds are entirely different. Furthermore, MSEDCL has provided submissions from various parties to establish a general principle for payment apportionment against LPS. However, as per the submissions, STU has stated that *"TSUs are making payments to the STU Pool Account towards MTC as determined by the Commission in the Tariff Order, which cannot be unilaterally adjusted against LPS. There is no recovery of LPS as TSUs have not paid towards LPS separately. Therefore, the methodology suggested by ATIL for adjusting the payments received in the STU Pool Account against LPS cannot be implemented."* This indicates the purpose of STU in adopting the methodology for adjusting payment against LPS, which does not apply to LPS related to commercial billing and outstanding dues.

2.10.29 MSPGCL submitted that MSEDCL's request for adherence to the same methodology for apportionment of payment is therefore without merit. Additionally, MSEDCL claims that the Commission, in its Order in Case No. 162 of 2016, ruled that the methodology adopted by STU to prioritize payments against the principal before LPS is correct, prompting MSEDCL to seek a direction from the Commission for MSPGCL to consider the same.

2.10.30 The provisions of the applicable MYT Regulations prevail over the provisions of the BPTA. The MYT Regulations, 2011 and 2015 do not mandate inclusion of LPS in the next month's bill. Hence, to that extent, the treatment of LPS by the STU is in line with the applicable MYT Regulations.

2.10.31 MSPGCL submitted that the provisions discussed above merely articulates the non-inclusion of LPS in the next month's bill, as otherwise, it would result in compounding interest on LPS. This cannot be correlated to the methodology for apportioning payments received.

2.10.32 MSPGCL submitted that MSEDCL has deliberately quoted a disconnected segment of the sentence, "*……Hence, to that extent, the treatment of LPS by the STU is in line with the applicable MYT Regulations….*" The Commission's full statement confines its ruling solely to the inclusion of LPS in the next month's bill, thereby supporting the

STU's relevant treatment of LPS in accordance with the prevailing Regulations, which do not mandate the inclusion of LPS in subsequent bills.

2.10.33 MSPGCL submitted that this constitutes a gross misinterpretation of the Commission's ruling by MSEDCL, which attempts to insert its own interpretation into the Commission's ruling that is not articulated in the ruling itself. The Commission has not provided any ruling regarding the general methodology to be adopted for apportioning payment against LPS and the outstanding principal.

2.10.34 Furthermore, in light of the aforementioned ruling, MSPGCL emphasized that the MYT Regulations, 2011 and 2015 stipulate a late/delay payment surcharge of 1.25% per month. Should the ruling prohibit billing of LPS through monthly invoices and subsequently disallow adjustment of LPS payments prior to paying the principal amount, it raises concerns about how the generating company can recover LPS, given that LPS may remain unpaid and accumulate, leading to a lack of payment discipline if the principal is considered first. MSPGCL has been issuing LPS bills separately, adhering to the directives of the Commission by raising LPS on the uncleared principal amount only.

2.10.35 Therefore, MSPGCL submitted that the Commission should take note of this gross misinterpretation of the Commission's Order by MSEDCL and may deem it appropriate to dismiss the irrelevant reference of Case No. 162 of 2016 used by MSEDCL to defend their claim for the adjustment of payments against the principal first methodology.

2.10.36 MSPGCL submitted its reply regarding the LPS issue, which has arisen due to consistent payment defaults by MSEDCL and the subsequent dispute over payment receipt apportionment methodology. MSPGCL has already submitted details on this matter through a Petition and subsequent submissions for the appraisal of the Commission. However, MSPGCL maintains that since the matter is sub-judice at the GoM level, it is not seeking any Order or ruling from the Commission at this stage. Nonetheless, it has become essential for MSPGCL to counter and comply with the points raised by MSEDCL through repeated submissions to protect its interests.

2.10.37 In legal contexts, *"judicial silence"* cannot be considered as consent, especially when it comes to Rules, Procedures, Directives, Regulations, or issuing Orders. Silence alone does not constitute agreement or acceptance; active communication is required for consent in judicial matters. If someone argues that silence constitutes consent, they must provide compelling evidence to support this interpretation.

2.10.38 MSPGCL submitted that the Commission did not opine or order anything regarding payment receipt apportionment methodology in Case No. 162 of 2016. The Commission only directed that LPS for the previous month should not be added to the regular bill for the next month, thereby avoiding the compounding of interest.

2.10.39 Noting MSEDCL's reference to other submissions by ATIL regarding Case No. 162 of 2016, MSPGCL reiterated that the Commission did not deliberate on the apportionment of payments between LPS and the principal amount. The absence of a specific ruling on this issue cannot be construed as a rejection of the prayer. Furthermore, a review of the prayers by the petitioner in Case No. 162 of 2018 indicates that no specific prayer regarding the apportionment of LPS and the principal amount was raised by ATIL. MSPGCL reiterates that MSEDCL's interpretation of the Commission's ruling in Case No. 162 of 2018 is a clear misrepresentation and misinterpretation.

2.10.40 MSPGCL submitted that the waiver of LPS as per Board Resolution No. 450 is misleading. MSEDCL claims that as of 31 July, 2015, the principal charges payable to MSPGCL were frozen and the DPC/LPS recoverable on said principal amount stands waived off, and in compliance with said Resolution No. 450, MSEDCL has paid Rs. 4,000 Crore to MSPGCL. However, MSPGCL highlighted that there are subsequent actions that negate this earlier decision, which MSEDCL has not mentioned.

2.10.41 In response to MSEDCL's submission, MSPGCL noted that post-Board Resolution No. 450, MSEDCL requested MSPGCL for necessary action regarding the waiver of DPS through a letter dated 17 August, 2015. MSPGCL's Board Resolution (BR No. MSPGCL/BM-151/151.12) dated 31 October, 2015 states that since the Commission had already reduced an amount of Rs. 2635 Crore from the true-up amount of MSPGCL, there was no need for a waiver of LPS again, as it would result in a double financial impact on MSPGCL's revenue. MSPGCL further indicated that a decision on the waiver would be taken after the Hon'ble APTEL Judgment.

2.10.42 In 2016, MSPGCL approached MSEB Holding Company Limited regarding overdue payments, including LPS. MSEBHCL, via Board Resolution dated 23 November, 2016, directed MSEDCL to seek budgetary support from the Government of Maharashtra for meeting its obligations towards DPC payable to MSPGCL. This indicates that after MSPGCL's Board deferred the decision on the waiver, there was no insistence from MSEBHCL for the waiver of LPS bills.

2.10.43 It is inferred that MSEBHCL BR No. 450 dated 31 July, 2015 is not conclusive, and subsequent MSPGCL BR, MSPGCL communication, and MSEBHCL BR No. 619 should be jointly referred. While MSEDCL faces challenges in recovering dues, it has delayed Tariff Petitions, affecting timely recovery orders. The Commission has provided additional recovery mechanisms for MSEDCL to recover pending dues, but payments to MSPGCL have not proportionately increased.

2.10.44 If payments to MSPGCL had been increased in a timely manner, outstanding amounts and surcharges could have been managed more effectively. The waiver of surcharge would require reducing the outstanding amount, potentially through a write-off, which cannot be claimed as a pass-through. The Commission has expressed concerns over MSEDCL's delays in payments and emphasized that better cash-flow management could have avoided such expenses.

2.10.45 MSEDCL has asserted that any law, rule, or regulation applies prospectively from its publication in the official Gazette unless explicitly stated otherwise. In response to MSEDCL's argument, MSPGCL submitted that its position on prioritizing the adjustment of LPS over the principal amount from payments received is not solely based on the retrospective application of the LPS Rules. MSPGCL reiterated the rationale provided in its earlier submissions, addressing MSEDCL's objections and justifying the adjustment of LPS first over the principal amount.

2.10.46 Additionally, it is crucial to note that the delayed payment surcharge is compensatory in nature, as acknowledged by the Hon'ble Supreme Court in multiple Judgments.

2.10.47 In light of the above, a person deprived of the use of money to which they are legitimately entitled has the right to be compensated for such deprivation. Hence, if the delayed payment surcharge is not recovered first and is instead adjusted against the principal amount, it would defeat the very purpose of imposing the LPS.

2.10.48 Therefore, it is important to note that MSPGCL has not solely relied on the methodology outlined in the LPS Rules to justify the adjustment of LPS first. Rather, MSPGCL has referenced the approach provided in the LPS Rules only to demonstrate that it validates the methodology MSPGCL has already adopted for LPS bills since 2009, thereby emphasizing the consistency and rationale behind its approach.

2.10.49 Further, MSEDCL has repeatedly claimed that it adjusts the principal amount first for its consumers. However, a key difference lies in the fact that MSEDCL holds a Security Deposit from its consumers, which acts as a cushion against payment delays. It is evident from MSEDCL's various commercial circulars that in cases of prolonged delays in consumer payments, MSEDCL recovers both the delayed payment charges (DPC) and the principal amount with interest, as per the applicable Regulations and provisions under the MERC Electricity Supply Code Regulations. In instances of extended delays, MSEDCL also disconnects the supply and reconnects only after full payment of all dues, including DPC and interest.

2.10.50 As regards MSEDCL's contention that as per Ind AS 37, MSPGCL should have treated the disputed LPS amount as a Contingent Asset since this amount is not recognized by MSEDCL, MSPGCL submitted that as per Section 128 of the Companies Act, 2013, a company is required to prepare its accounts on an accrual basis. Accordingly, expenses and income are accounted for by the company as and when incurred or billed, irrespective of the actual payment or receipt of funds.

2.10.51 MSPGCL submitted that a contingent asset is a possible asset that arises from past events and whose existence depends on the occurrence or non-occurrence of uncertain future events not entirely within the entity's control. Since the LPS is not dependent on the occurrence or non-occurrence of any future event and has been issued in accordance with the terms of the PPA, the LPS bills have been accounted for by MSPGCL on an accrual basis as receivables. Provisions of PPA mention about the mechanism of dispute by one party to another; however, MSEDCL never raised any kind of dispute with MSPGCL on any of the LPS bills raised until the issuance of the LPS Rules, 2022. Consequently, the LPS bills raised by MSPGCL cannot be classified as contingent assets.

2.10.52 Factually, MSEDCL itself has adopted contrary or selective accounting principles while booking the LPS dues in its books of accounts. Until FY 2016-17, MSEDCL did not account for the LPS bills raised by MSPGCL from time to time. Instead, MSEDCL categorized these bills as "Contingent Liabilities," despite the fact that they constitute a legal obligation and should have been accounted for accordingly. In FY 2017-18, MSEDCL accepted all the bills claimed by MSPGCL and accounted for the same.

2.10.53 All the above indicates that there is mere confusion in MSEDCL's accounting policies and understanding of Ind AS (especially Ind AS 37). Thus, the argument by MSEDCL that the LPS revenue should have been considered by MSPGCL as contingent asset is misleading, misrepresentation and wrongful.

2.10.54 MSPGCL submitted that MSEDCL has claimed that the LPS bills raised for FY 2016-17 and FY 2017-18 are inflated because MSPGCL was issuing the bills for the period from April 2016 to March 2018 considering a 'Due Date' of 60 days, while MSPGCL calculated LPS for the same period based on a 'Due Date' of only 30 days. MSEDCL has argued that such a change in "Due Date" after the issuance of bills cannot be considered and is not allowed.

2.10.55 In this regard, MSPGCL submitted that the MYT Regulations, 2015 provided for the levy of LPS for delays in receipt beyond 30 days from the date of billing. The Regulations specify that this is to be carried out "notwithstanding anything to the contrary as may have been stipulated in the Agreement or Arrangement with the Beneficiaries." Since the MYT Regulations, 2015 were in force from 01 April, 2016, MSPGCL raised the LPS bills for FY 2016-17 and FY 2017-18 considering the Due date period of 30 days, despite the Due date mentioned in the PPA being 60 days for regular bills and 45 days for supplementary bills.

2.10.56 Regulatory provisions in force shall overrule PPA clauses; hence, the bill due date as per the MYT Regulations, 2015, effective from 01 April, 2016, is 30 days. The only delay from MSPGCL 's end was the formal request for amendment to the PPA provisions to align them with the regulatory provisions, which was unfortunately not considered by MSEDCL, leading to a subsequent dispute in 2023. Thus, the LPS as claimed for FY 2016-17 and FY 2017-18 is as per the prevailing Regulations and is correct and tenable.

2.10.57 MSPGCL submitted that in the additional submission dated 23 January, 2025, MSEDCL has referenced MSEBHCL BR No. 05/110 dated 12 August, 2024, which states that there are directives from MSEBHCL regarding the instructions from the Principal Secretary (Energy), Government of Maharashtra, circulated via minutes dated 2 August 2022. These instructions pertain to freezing DPC on arrears between MSEDCL and MSPGCL for the period prior to the implementation of LPS Rules, 2022, which both companies initially adhered to in FY 2021-22. MSPGCL has been directed to restore any deviations from these directives taken in FY 2022-23 immediately, with the effects reflected in the accounts for FY 2023-24, if not already closed, or in the current financial year.

2.10.58 MSPGCL noted that the mentioned BR has not attained final validity, as the minutes of the meeting have not yet been affirmed and signed by the Chairman of MSEBHCL and circulated. According to the "SS-1 SECRETARIAL STANDARD ON MEETINGS OF THE BOARD OF DIRECTORS" (issued under Section 118(10) of the Companies Act, 2013), specific procedures must be followed for the finalization of minutes for Board meetings, including circulation of draft minutes within fifteen days, signing and dating of minutes by the Chairman, and subsequent circulation of signed minutes to all Directors.

2.10.59 MSPGCL asserted that the minutes for the MSEBHCL meeting are not yet finalized. Furthermore, a dissent note has been submitted by the CMD of MSPGCL, in his capacity as Director of MSEBHCL, opposing the BR and stating that the issue was not discussed during the Board meeting, along with detailing other measures being undertaken to resolve the LPS issue between the two companies.

2.10.60 In light of these circumstances, MSPGCL submitted that the mention of the BR dated 12 August, 2024 by MSEDCL in the current submission is unwarranted and misleading, as the BR has not yet been communicated to MSPGCL by MSEBHCL; it was merely an enclosure to a request made by the Director (Finance) of MSEDCL to MSPGCL.

Commission's views

2.10.61 The issues raised by the stakeholders about the disputes on outstanding dues is a commercial matter under the purview of the PPA and shall be dealt with if any of the affected party approaches the Commission through appropriate proceedings. MSPGCL has submitted that as the matter is sub-judice at the GoM level, and is not seeking any order or ruling from the Commission at this stage. Hence, the Commission has not dealt with the issue of dispute related to outstanding dues between MSPGCL and MSEDCL in this Order.

2.10.62 For the purpose of this Order, the Commission has considered the treatment of late payment surcharge in accordance with the provisions of the MYT Regulations, 2019 for arriving at the actual IoWC as detailed in the chapter dealing with True-up.

2.10.63 As regards the issue related to offer un-requisitioned surplus (URS) power in the Power Exchange by Generators, the Commission observes that in accordance with MoP's Electricity (Late Payment Surcharge and Related Matters) (Amendment) Rules, 2024, Generators are required to offer Un-Requisitioned Surplus (URS) power in the power exchange. Rule 9 of the abovementioned Amendment states as under:

"(1) A distribution licensee shall intimate its schedule for requisitioning power for each day from each generating company with which it has an agreement for purchase of power at least two hours before the end of the time for placing proposals or bids in the day ahead market for that day, failing which the generating company, shall offer, the un- requisitioned surplus power including the power available against the declared capacity of the unit under shut down, in the power exchange, subject to the limitation of ramping and start up capability as specified by the Appropriate Commission:

Provided that if the power so offered by the generating company is not cleared in Day-Ahead Market, it shall be offered in other market segments, including the Real Time Market, in the power exchange:

Provided further that such offer of power, in the market shall be at a price not exceeding 120 per cent of its energy charge, as determined or adopted by the Appropriate Commission or calculated under the directions, issued by the Central Government, under section 11 of the Act, if applicable, plus applicable transmission charges:

Provided also that if the generating company fails to offer such un-requisitioned surplus power in the power exchange, the un-requisitioned surplus power to the extent not offered in the power exchange up to the declared capacity shall not be considered as available for the payment of fixed charges."

2.10.64MSPGCL stated that the current timeline for bid closure on DAM is 10 a.m. Rule 9(1) of the LPS amendment Rules, 2024 implies that the Distribution Licensee shall intimate its schedule for power requisition by 8 a.m., so that the Generator can offer such URS power on the power exchange, failing which it shall lose its claim for recovery of fixed charges for such un-reoffered capacity. However, under the prevailing Scheduling & Despatch Code as per the Maharashtra Electricity Grid Code (MEGC) 2020, the DAM schedules for intra-State generators are finalized at 11 a.m. Consequently, by the time the Day Ahead scheduling for intra-State generators is finalized, the Day Ahead Market bidding period shall lapse, leading to fixed cost recovery issues for State-owned Generating Stations. Thus, due to the mismatch between the deadlines for placing bids in the Day Ahead Market and the scheduling and dispatch timing under the MEGC, 2020, there is a difficulty in offering power in the Day Ahead Market.

2.10.65 Based on the above submission, the Commission is of the view that there is a need to review the timelines provided in the Scheduling and Dispatch Code to align these timelines with the timelines for offering capacity under DAM as well as RTM segment on power exchange.

2.10.66 NLDC has issued a procedure for implementation of the LPS Rules along with its amendment on 25 November, 2024 and the challenges being faced during mock trial implementation of these Rules are being monitored by the CEA. The mock trial period for operationalization of Section F of the LPS procedure of NLDC has been extended till 31 March, 2025. Further, as per CERC IEGC, the revisions to buyers are allowed after 6th time block and schedules are effective from 7th (odd time block) and 8th time block (even time block). However, as per the MEGC, 2020, revisions to sellers and buyers become effective from 4th time block.

2.10.67 At the regional level, scheduling criteria is requisition based whereas as per MEGC, 2020, scheduling is done based on centralized merit order dispatch. Hence, in real time, since the market schedule is one of the inputs for finalization of schedules of Intra-State generators, the surplus could not be known before the bidding window of RTM.

2.10.68 MSPGCL further submitted that if the intra-state generators offer their surplus power in the market, the up margin would not be available to Discom for Load Generation Balancing (LGB) in case of contingency. In regional level, ancillary service Regulations are in place. However, in Maharashtra, there is no Ancillary service Regulations. Hence, the Distribution Licensees are selling their surplus power in exchanges and paying the intra-State generators at the approved Tariff.

2.10.69 Thus, the Commission has observed that there are issues such as mismatch in timelines, principles of scheduling, unavailability of Ancillary Services etc., that needs to be addressed through amendment/review of existing MEGC, 2020, or introduction of new Regulations for Ancillary Services. The Commission has already constituted a Working Group for review of existing State DSM Regulations, 2019 in line with the CERC DSM Regulations, 2024 and for providing recommendations on introducing the Ancillary Services framework in the State. Hence, the issue of amendment of MEGC. 2020, would be taken up by the Commission in due course of time after undertaking consultation with the concerned stakeholders.

2.11 NEW THERMAL GENERATION AND RETIREMENT OF OLD UNITS

Suggestions/Objections

2.11.1 MSEDCL submitted that MSPGCL has stated that as per present directives of the CEA, all Units are required to operate until 2030. In order to run these plants at a 40% technical minimum, the Units must undergo retrofitting to ensure compliance. Accordingly, MSPGCL has included expenses for flexible operation for such Units that have completed more than 35 years of service. MSPGCL has considered Units for flexibilization that have completed 35 years of service and may require retirement in the near future and hence, such Units should not be included in the initial phase for flexible operations. For expenses related to flexible operation, the Petitioner should submit a DPR along with a cost-benefit analysis for approval.

2.11.2 MSEDCL submitted that MSPGCL operates 13 Units that have surpassed their useful lifespan, which remain functional mainly due to a directive from the CEA. This directive states that all coal-based thermal power plants, including older Units, must remain operational until 2030. However, MSEDCL pointed out that the CEA's advice is not mandatory, and these Units can be retired after following the prescribed process.

2.11.3 In April 2024, the CEA issued revised guidelines for the retirement and uprating of conventional generating units, clarifying that it is not mandatory to keep old Units in service. MSEDCL requested that the Commission should not allow any capital expenditures for the old 210 MW Units, as they will need to be retired soon. Especially since the Nashik Units are operational mainly due to transmission constraints, which, if resolved, would allow for their retirement. MSEDCL emphasized that these Units should be retired rather than incurring additional costs for their maintenance.

2.11.4 PEG also submitted that significant must-run renewable energy capacity will be deployed in the upcoming Control Period along with MSEDCL's recent contract for a composite 5000 MW solar and 1600 MW coal-based project as stated in the Order in Case No. 155 of 2024. Considering the existing operational MSPGCL coal-based capacity, including rehabilitation and maintenance expenses for older Units with deferred retirements as well as under-construction capacities of Bhusawal Unit 6 and Koradi 11 and 12, there is no justification for any new coal-based capacity additions by MSPGCL. Therefore, the Commission should disallow the unrealistic PLF and generation projections by MSPGCL directing them to adopt realistic projections in future submissions, as well as to disallow any further coal-based capacity additions, particularly under Section 62 of the Electricity Act, 2003.

MSPGCL's replies

2.11.5 MSPGCL submitted that the CEA has advised against retiring any thermal Units until 2030 due to the increasing demand for power. Therefore, MSPGCL cannot independently decide to retire its Units, especially since the decision relies on the requirements of MSEDCL. MSPGCL also pointed out an error in MSEDCL's submission where it has incorrectly listed the Chandrapur Units 5, 6, and 7 as 210 MW

Units, when they are actually 500 MW Units. MSPGCL clarified that there are currently no discussions about retiring any of its 500 MW capacity.

2.11.6 MSPGCL emphasized that if it requires to keep the old 210 MW Units operational until 2030 as per CEA directives, additional capital expenditure or EE R&M is necessary to enhance their performance and extend their life.

2.11.7 Additionally, MSPGCL acknowledged that transmission constraints in the Nashik region have led to preferential treatment for Nashik Units # 3 to 5 in the scheduling process. Once these constraints are resolved, scheduling will adhere strictly to MoD ranking. However, any decision regarding the retirement of Nashik Units will still follow the prevailing CEA guidelines at that time. MSPGCL requested consideration for either additional CAPEX until retirement to maintain sustainable operations or Renovation and Modernization for performance improvement and life extension of the Nashik Units.

2.11.8 Under the MYT Regulations 2024, generating companies must file True-Up Petitions for the five-year Control Period by November 2029. Unless a specific decision on the retirement of the old 210 MW Units is made, MSPGCL has proposed necessary additional capitalisation to maintain these Units in service until 2030 as part of the ongoing MYT Petition proceedings. However, if any decision is made regarding the retirement of these old Units, the proposed CAPEX schemes will not be executed.

2.11.9 MSPGCL submitted that the life extension program through Renovation & Modernisation was planned based on CEA directives and its benefits, which has led to a reduction in proposed CAPEX that is essential for extending the operational life of the Units. Therefore, it is crucial to allow CAPEX or EE R&M to keep the old Units operational until 2030 and beyond, or to permit MSPGCL to carry out essential CAPEX for the operation of Units until their retirement.

2.11.10In response to the submission of PEG with regard to new capacity addition, MSPGCL submitted that Bhusawal Unit 6 is recently achieved its full load and the Commission has already issued the Order for the provisional tariff vide Order in Case No. 236 of 2023. Further, the Ministry of Power vide Office Memorandum dated 20 June, 2022 under "Minutes of the meeting held under the chairmanship of Hon'ble Minister of Power, New and Renewable Energy, on 13 May, 2022 regarding 'Thermal capacity addition under construction and of the thermal projects under development" stated that about 62 GW of additional thermal capacity would be required by the year 2030 to meet the demand of the country. Further, the Hon'ble MoP has directed that GENCOs should plan to continue construction of the Plants wherever land has been acquired and clearances obtained or under process. Specifically, regarding MSPGCL, the Hon'ble MoP has stated that CEA will write to MSGPCL to reconsider the projects which were earlier planned but dropped taking into account the required thermal capacity by 2030 to meet generation requirement. The relevant office memorandum dated 20 June, 2022 was also submitted. In view of above, MSPGCL submitted that the installation of Koradi Unit 11&12 is being undertaken in line with directives of the Hon'ble MoP.

Commission's views

2.11.11 The Commission has taken note of the stakeholders' submissions and MSPGCL's replies thereof. The Commission, in this regard in its Order in Case No. 42 of 2017 dated 27 March, 2018 opined as follows:

"…

22. The Commission notes that CEA's 19th EPS has recently been published. However, it is evident from the foregoing that the comprehensive evaluation which was expected from MSPGCL of the upcoming and other proposed Generation Projects considering all the relevant factors and including the assessments of the procurer, MSEDCL, has not yet been undertaken. The replacement plan proposed by MSPGCL and even the considerations on which some upcoming Projects are proposed to be kept on hold for the time being are based on the presumption that MSPGCL would continue to supply MSEDCL from upcoming or newly proposed Units (at the same or other locations) when its existing Units are retired, and would entirely meet MSEDCL's additional future requirements by further additions to MSPGCL's generation capacity.

23. Irrespective of demand-supply projections, that presumption has no basis and is not tenable without considering the optimum mix of alternative sources and types of energy (e.g.. RE power, subject to grid stability considerations) available; the options of procurement modalities (regulated under Section 62, or competitive bidding under Section 63 of the EA, 2003) and tie-up periods in terms of the appropriate combination of long-term and medium-term commitments; and their comparitive cost-effectiveness. MSEDCL has also stated that it needs more time to review the necessity of MSPGCL's upcoming Units listed in the PPA, after taking into consideration its other PPAs, RE additions and MSEDCL's demand projections. Hence, while closing the Case for orders, the Commission had concluded at the last hearing and recorded in its Daily Order dated 19 December, 2017 as follows:

> *"7. The Commission observed that, even if MSPGCL and MSEDCL agree to enter into an agreement under Section 62 of the EA, 2003, MSEDCL needs to show that the electricity proposed to be procured from MSPGCL is competitive as compared to other sources.*
>
> *…*
>
> *9. The Commission observed that MSPGCL's submission does not take into consideration factors such as projected RE generation, future demand-supply scenario in the State, MSEDCL's other PPAs, competitiveness of MSPGCL's*

Units, MSEDCL's RPO obligations, etc. and proceeds on the premise that new Units can be installed in place of old Units retired/being retired and the PPAs can be continued with certain amendments for the proposed new Units as well.

10. After due deliberation with MSEDCL, MSPGCL needs to carry out a realistic assessment considering the issues raised above, and approach the Commission afresh with its proposal and road-map…"

24. MSPGCL shall approach the Commission afresh accordingly. In the meantime, it shall not take any effective steps in pursuance of the Generation Projects approved in the PPA or the other Projects now proposed in these proceedings which are at the planning stage or in respect of which contracts which had not been awarded at the time of the last MYT Order. Any capital expenditure incurred on these Projects shall be at MSPGCL's own risk and cost."

2.11.12 Hence, in line with the earlier stand of the Commission, **MSPGCL is directed to approach the Commission with a comprehensive plan on implementation of new generating stations and retirement of old generating stations through a separate petition for approval of any new generating station or retirement of an old generating station. MSPGCL shall not take any effective steps in pursuance of the new Generation Projects proposed in these proceedings which are at the planning stage or in respect of which contracts which had not been awarded. Any capital expenditure incurred on these Projects shall be at MSPGCL's own risk and cost."**

2.12 OTHERS

Suggestions/Objections

2.12.1 PEG submitted that there are several noted instances of errors and discrepancies in the Petition submitted by MSPGCL. Specifically, there are tariff format errors for Chandrapur Units 3-7, where the estimated availability for FY 2024-25 exceeds 100%. This is due to the calculation method involving the sum of actual availability from April to September and the estimated availability from October to March.

2.12.2 PEG pointed out issues regarding inaccessible files. In its data gaps replies, MSPGCL has uploaded documents to demonstrate compliance with the Commission's directives to minimize grade slippage. However, five out of the six files uploaded are not downloadable. Similar issues exist with files listed in the section related to capital expenses and coal washing, which are also not accessible.

2.12.3 PEG concluded that many of the issues highlighted could have been identified earlier and remedial action could have been taken if a rigorous and diligent TVS involving a broader range of stakeholders had been conducted.

2.12.4 PEG requested the Commission to ensure rigorous TVS involving a wide variety of stakeholders for all important tariff processes and direct MSPGCL to supply the missing data and correct the data discrepancies prior to issuing the Tariff Order.

2.12.5 MSEDCL submitted that it does not agree with MSPGCL's contention regarding measurement errors due to non-installation of 0.2S class CTs/VTs, as CTs have error on both sides, i.e., +ve or -ve. CTs used for analysis may have -ve error, but this does not mean that all CTs will be having a -ve error. There may be some CTs with +ve error, resulting in higher 'energy sent out' recording, further resulting in lower AUX. Hence, no compensation should be allowed on this basis.

2.12.6 MSEDCL submitted that MSPGCL has already filed a Petition (Case No. 84 of 2024) requesting the Commission for quashing or revision of the weekly VSE (Virtual State Entity) bills issued by MSLDC to Koyna HPS. It has been stated that the mismatch between the scheduled and actual generation by Koyna HPS is a result of MSLDC's instructions and not due to any violation on the part of the generator. MSEDCL asserted that Koyna HPS should not be considered in VSE, as consistent with its stance since discussions began. Due to this lack of consideration, MSEDCL has challenged the issue before Hon'ble the APTEL in Appeal No. 42 of 2024, which is yet to be decided.

2.12.7 MSEDCL submitted that that it is making payment under protest towards legacy charges as claimed by MSLDC for the period October 2023 to September 2024. In the CERC (Deviation Settlement Mechanism and Related Matters) Regulations, 2024, there is no provision for retrospective application of the Regulations. However, in the detailed procedure, NLDC has arbitrarily included a section namely "9. Recovery from the drawee DICs for the period deficit in the pool for the period prior to 16.09.24 (Legacy dues)" without any consultation with DICs. Hence, MSPGCL has been made accountable for payment of its share in legacy charges due to its deviation from the schedule energy for which MSEDCL is not responsible. The legacy charges as payable for period prior to 16.09.2024 and thereafter also, if approved by the Commission, should not be allowed to recover from MSEDCL as it will result in financial implications on MSEDCL.

2.12.8 MSEDCL submitted that the total per unit cost for Bhusawal Unit 6, including fixed charges, is projected to be about Rs. 6.78/kWh to Rs. 7.61/kWh for the Control Period, which is considerably high compared to the recent rate of Rs. 5.39/kWh (FC Rs. 3.67/kWh + VC Rs. 1.72/kWh) discovered through competitive bidding by MSEDCL. The DPR was approved in February 2011, while the proposal for the placement of an order with BHEL for the implementation of a 1x660 MW coal-based supercritical unit at Bhusawal was approved by the MSPGCL Board in 2017, followed by the Letter of Award (LOA) issued on 17 January, 2018. The delays incurred by MSPGCL due to its own tardy actions in implementing the project have led to substantial cost overruns, and such cost overruns and their consequences on other parameters due to this delay should not be approved, as the increased tariff resulting from it would unfairly burden MSEDCL and its consumers. Furthermore, MSPGCL has proposed to utilize imported coal from FY 2025-26 onwards, resulting in a rise of projected ECR from Rs. 3.51/kWh for FY 2024-25 to Rs. 4.32/kWh for FY 2025-26 and subsequent escalations during the Control Period. From the Petition, it appears that the cost of washed coal is lower than that of raw coal for Bhusawal 4 & 5 Units. Considering the benefits of washed coal, it is suggested that washed coal should be prioritized over imported coal to minimize ECR.

MSPGCL's replies

2.12.9 MSPGCL submitted that the correction in the revised Formats have been submitted to the Commission. MSPGCL submitted that this error does not result in a claim of higher fixed charges for Chandrapur Unit 3-7 for FY 2024-25, as the calculation of AFC reduction is correctly executed based on the accurate number of estimated availability.

2.12.10 On the issue of the accessibility of documents uploaded on the website, MSPGCL indicated that such an issue has not been previously reported by any stakeholder. Further, PEG had the option to obtain these documents by contacting the relevant officials at MSPGCL.

2.12.11 As regards MSEDCL's contentions in the context of CTs, MSPGCL submitted that CTs error "+ve or -ve" means it may be on both the sides based on the Accuracy Class for the energy meters and associated Current Transformers (CTs) and Voltage Transformers (VTs).

2.12.12 MSPGCL in the present Petition has brought out the issue from Grid Code provisions, effect of accuracy in measurement, factual position of class 0.2S CT installation and observed impact at Koradi 3 x 660 MW due to inaccuracy in measurement with due comparison.

2.12.13 MSPGCL submitted that it has incurred significant reduction in sent out generation due to inaccuracy of CT installed by STU (i.e., power sent by MSPGCL and received by MSEDCL but less measurement due to non-compliance of measurement of CT class).

2.12.14 MSPGCL submitted that in case of Koradi Unit 8-10, CTs had error on '- ve' side, which has resulted in lower measurement of energy sent out. Obviously, if '+ve' error is noticed at any instance, the higher energy measurement correction will come into effect. The critical point is that the subject CTs are not in jurisdiction of MSPGCL, and it is responsibility of STU. Hence, MSEDCL's submission stating *"….no compensation shall be allowed on the ground of this issue"* is travesty of justice.

2.12.15 MSPGCL submitted that MSEDCL has not raised an objection regarding the submission related to VSE charges. Moreover, MSPGCL supports the notion that Koyna HPS should not be included in VSE. Consequently, in Case No. 84 of 2024, MSPGCL has requested a directive for MSLDC to revise the invoices for VSE billing due to schedule discrepancies and actual generation corresponding to specific instructions from MSLDC, or alternatively, that MSPGCL shall be allowed to recover the VSE bill from ARR and to pay it without LPS.

2.12.16 MSPGCL submitted that the Bhira Tail Race Power Station, situated downstream of TPC-G's Bhira Pumped Storage Unit, was impacted by an outage from November 2023 to June 2024. This outage, caused by TPC-G's renovation works, resulted in MSPGCL being unable to generate power and consequently experiencing a loss of revenue. However, the Commission had stipulated that TPC-G must compensate MSPGCL for this loss, in line with the MYT Regulations, 2019, in its Order dated 3 November, 2022 in Case No. 29 of 2022. MSPGCL requested the Commission to allow recovery of the differential bill toward compensation charges based on the final true-up for FY 2023-24, and as per the fixed charges approved under the MTR Order.

2.12.17 MSPGCL submitted that SLDC has apportioned the legacy charges for October 2023 to September 2024 among all State entities in the State Pool Account, following a methodology that allocates charges based on the DSM payable to the DSM pool account by respective State entities during deficits and based on GNA granted to those entities. MSPGCL argued that Legacy Charges should only be levied on entities that have contributed to adverse deviations resulting in payables to the Inter-State DSM Pool. Further, weekly breakup of the legacy charges has not been made available by MSLDC for establishing any correlation. Hence, MSPGCL requested the Commission to allow such expenses in ARR under provisional True up of FY 2024-25, as MSPGCL will be entity participated in GNA in order to provide power to MSEDCL.

2.12.18 MSPGCL submitted that at the time of filing the present Petition, a Petition for the determination of provisional Tariff was already submitted and was under consideration. On 27 December, 2024, the Commission issued an Order approving the provisional tariff for Bhusawal Unit 6 (1 x 660 MW) for FY 2024-25 and directed the filing of a separate Petition for final approval of the actual Capital Cost once the audited Capital Cost of the project is available as on the Commercial Operation Date (COD) of the unit. Accordingly, a detailed explanation for the delay in project implementation will be provided in the Petition for approval of the actual Capital Cost. The decision on the use of imported coal versus washed coal for Bhusawal Unit 6 will be evaluated based on the availability, quantity, and quality of coal at the time of actual execution.

Commission's views

2.12.19 The Commission has taken note of the stakeholders' submissions and MSPGCL's replies thereof.

2.12.20 The Commission has held the TVS and e-public hearing in accordance with the provisions of the MYT Regulations, 2024.

2.12.21 As regards the issues on error in CTs leading to higher auxiliary consumption and VSE bills raised by MSLDC, the Commission is of the view that the same are not issues relevant to the instant Petition and shall be dealt with if required under separate Petitions.

2.12.22 As regards the issue on Legacy Charges, the Commission has dealt with the issue in the provisional true-up for FY 2024-25.

2.12.23 As regards the compensation for loss of revenue against the outage at Bhira HPS, the issue is already dealt by the Commission in Order dated 3 November, 2022 in Case No. 29 of 2022. In the abovementioned Order, the Commission has directed as above:

> *"Maharashtra State Power Generation Company Ltd. can recover the compensation from Tata Power Company-Generation based on principles of MERC (Multi Year Tariff) Regulations, 2019 towards shortfall of its recovery through its Annual Revenue Requirement on account of reduction in availability of 2x40 MW Rawalje power plant."*

2.12.24 Hence, the Commission permits MSPGCL to claim the differential bill towards compensation charges based on the final true-up for FY 2023-24, and as per the fixed charges approved under the MTR Order.

3 IMPACT OF OTHER ORDERS

3.1 ORDER IN CASE NO. 132 OF 2023

Background

3.1.1 MSPGCL had filed the Review Petition in Case No. 132 of 2023 against the Commission's MTR Order dated 31 March, 2023 in Case No. 227 of 2022 seeking review on the following issues:

- **Issue 1:** Disallowance of GCV variation between GCV as billed and GCV as received for the period FY 2020-25,
- **Issue 2:** Incorrect opening balance of Gross Fixed Assets considered of Bhusawal Unit No. 4 & 5 and Khaperkheda Unit No. 5 for FY 2019-20,
- **Issue 3:** Incorrect opening balance of loan considered of Khaperkheda Unit No. 5 and Bhusawal Unit No. 4 & 5 for FY 2019-20,
- **Issue 4:** Incorrect opening balance of Equity considered of Khaperkheda Unit No. 5 for FY 2019-20,
- **Issue 5:** Incorrect Rate of Interest on loan considered for Chandrapur Unit No. 8 & 9 and Hydro Power Plants with respect to Regulation 30 of the MYT Regulations, 2019,
- **Issue 6:** Non consideration of expenses caused by force majeure events leading to disallowance of costs amounting to Rs. 36.64 Crore for FY 2019-20 to FY 2021-22,
- **Issue 7:** Disallowance of additional Return on Equity (RoE) under Regulation 29.6 of the MYT Regulations, 2019,
- **Issue 8:** Non-consideration of request for additional O&M expenses due to labour wage revision,
- **Issue 9:** Non adjudication of MSPGCL's prayer for re-classification of inventory item from category of "Running spares" to "Insurance spares" and request to allow for capitalization of Rs. 22 crores for the same in FY 22-23,
- **Issue 10:** Additional burden on account of deferment of repayment of loan in FY 2020-21 during Covid-19 amounting to Rs. 23 Crore,
- **Issue 11:** Erroneous computation at Table 7.1 of the MTR Order (Cumulative revenue gap/(surplus) up to FY 2022-23),
- **Issue 12:** Expenses not claimed by MSPGCL in the MTR Petition.

3.1.2 The Commission, vide its Review Order dated 1 February, 2024 in Case No. 132 of 2023 partly allowed the review on the some of the issues raised by MSPGCL and ruled as under:

> ***"1. The Case No. 132 of 2023 is partly allowed.***
>
> ***2. The Commission has allowed Review on five issues (Issue 2, Issue 3, Issue***

4, Issue 5, and Issue 11) as detailed out at Para Nos.17.6, 18.6,19.6,20.14 and 26.5 respectively of the Order.

3. The Commission has allowed a partial relaxation on the issue No. 1 under the powers of Commission to relax under Regulation 105 of the MYT Regulations, 2019 as stated at Para No.16.46 of the Order.

4. The Commission has rejected review on six issues (Issue 6, 7, 8, 9, 10, and 12).”

3.1.3 The submissions of MSPGCL on the issues admitted for review and the Commission’s analysis and ruling thereof are detailed below.

3.1.4 The issues allowed in the Review Order pertain to the period from FY 2019-20 onwards. As the present Petition covers the true-up from FY 2022-23 onwards, MSPGCL has worked out the claim and corresponding carrying cost from FY 2019-20 separately. The impact of Review Order from FY 2022-23 onwards has been considered in the true-up of respective year considering the opening balance of financial parameters for FY 2022-23 based on the closing balance of FY 2021-22 as approved in the Review Order.

3.2 INCORRECT OPENING BALANCE OF GFA, ROE AND INTEREST ON LOAN FOR BHUSAWAL UNITS 4&5 AND KHAPERKHEDA UNIT 5 FOR FY 2019-20

MSPGCL’s Submission

3.2.1 The opening Gross Fixed Assets (GFA) for Khaperkheda Unit 5 and Bhusawal Units 4&5 for FY 2019-20 were incorrectly calculated, resulting in values lower than the allowable capital costs. For Khaperkheda Unit 5, the approved GFA was Rs. 3435.13 Crore, but it should have been Rs. 3533.71 Crore, reflecting a difference of Rs. 98.58 Crore. Similarly, for Bhusawal Units 4&5, the approved GFA was Rs. 6522.99 Crore, whereas it should have been Rs. 6553.05 Crore, resulting in a difference of Rs. 30.07 Crore. The Commission acknowledged the error and restated the opening GFA for both Units. However, since the financial impact on MSPGCL’s entitlement was marginal (around Rs. 5 Crore), the Commission ruled that the recovery will be addressed in the next MYT Petition.

3.2.2 The loan component for additional capitalisation was not correctly added to the opening balance for FY 2019-20. For Khaperkheda Unit 5, a loan of Rs. 27.27 Crore was not included, while for Bhusawal Units 4&5, a loan of Rs. 23.10 Crore was incorrectly recorded as Rs. 27.27 Crore. The Commission approved the corrected opening loan balances for both Units. However, due to the marginal financial impact, the recovery was deferred to the next MYT Petition.

3.2.3 The equity component of Rs. 9.08 Crore for additional capitalisation was not considered in the opening equity balance for Khaperkheda Unit 5. The Commission approved the corrected opening equity balance. However, since the impact on MSPGCL's entitlement was minimal, the Commission ruled that the recovery will be addressed in the next MYT Petition.

Commission's Analysis and Ruling

3.2.4 The Commission has considered the submission of MSPGCL while arriving at the impact of variation in figures of opening GFA, Interest on Loan and RoE of Khaperkheda Unit 5 and Bhusawal Units 4&5 for FY 2019-20, as shown in the Table below:

Table 3.1: Impact of Incorrect Opening Balance till FY 2022-23 (Rs. Crore)

Particulars	Additional AFC for Bhusawal Unit 4 & 5	Additional AFC for Khaperkheda 5
FY 2019-20	1.03	4.65
FY 2020-21	0.86	7.93
FY 2021-22	0.70	7.30

3.3 INCORRECT RATE OF INTEREST ON LOAN FOR BHIRA HYDRO STATION

MSPGCL's Submission

3.3.1 The Commission initially considered a 0% interest rate for Bhira Hydro Station, which was incorrect. MSPGCL requested a 10% interest rate, consistent with the rate applied in FY 2020-21. The Commission accepted the correction and restated the interest rate to 10% from FY 2021-22 onwards. Due to the marginal financial impact, the Commission ruled that the recovery will be part of the next MYT Petition.

Commission's Analysis and Ruling

3.3.2 The Commission has considered the submission of MSPGCL while arriving at the impact of incorrect interest rate considered for Bhira Hydro Station from FY 2021-22, as shown in the Table below:

Table 3.2: Impact of Incorrect Interest Rate of Bhira for FY 2021-22 (Rs. Crore)

Particulars	Additional AFC for Bhira HPS
FY 2021-22	0.08

3.4 ERRONEOUS COMPUTATION IN CUMULATIVE REVENUE GAP/(SURPLUS) UP TO FY 2022-23

MSPGCL's Submission

3.4.1 The cumulative Revenue Gap for Chandrapur Units 8 & 9 was incorrectly computed, resulting in a difference of Rs. 2.17 Crore. The Commission accepted the error and allowed the differential amount. However, due to the marginal financial impact, the Commission ruled that the recovery will be addressed in the next MYT Petition.

Commission's Analysis and Ruling

3.4.2 The Commission has considered the submission of MSPGCL while arriving at the impact of error in computation of the cumulative Revenue Gap up to FY 2022-23, as shown in the Table below:

Table 3.3: Impact of Incorrect Revenue Gap computation for FY 2022-23 (Rs. Crore)

Particulars	Impact on Gap
FY 2022-23	2.17

3.5 IMPACT OF LD AMOUNT OF KORADI UNITS 8-10

MSPGCL's Submission

3.5.1 In the matter of the revision of the capital cost for Koradi Units 8-10, MSPGCL submitted that the Units had achieved COD on 17 January, 2017. In its Order dated 14 December, 2017 in Case No. 59 of 2017, the Commission had considered an estimated Liquidated Damages (LD) amount of Rs.1093.02 Crore, comprising Rs.824.99 Crore for the BTG package and Rs.268.53 Crore for the BoP package. However, in the MTR Petition (Case No. 227 of 2022), MSPGCL submitted that the final LD amount for the BTG package was Rs.102.49 Crore, as against the estimated Rs.824.99 Crore, and for the BoP package, the revised LD amount was Rs.0.00, as against the estimated Rs.268.53 Crore. MSPGCL explained that the variation in the LD amount was due to the finalization of the LD amount during contract closure, and at the time of capital cost approval, it had indicated retained payments of Rs.641.28 Crore towards undischarged liabilities, with the LD amount to be finalized later.

3.5.2 MSPGCL further submitted that the BoP contractor is under liquidation, and a claim of Rs.267.87 Crore towards LD has been lodged with the liquidator. However, no amount has been recovered so far, as per communication from the liquidator dated 3 May, 2024, which stated that payments under the liquidation process are to be shared only between secured creditors and the successful acquirer. MSPGCL submitted that it had also filed an application with the NCLT, Hyderabad Bench, on 22 October, 2023, seeking confirmation on the recoverability of the LD amount. Pending this, MSPGCL requested the Commission to consider the final LD amount for the BoP package as NIL and for the BTG package as Rs.102.50 Crore, as approved in the MTR Order, and to approve the revised capital cost for Koradi Units 8-10 accordingly.

3.5.3 MSPGCL also highlighted that the incremental capital cost due to the revision of the

LD amount is Rs.133.93 Crore, effective from the COD date (17 January, 2017). This additional capitalisation impacts the Annual Fixed Cost (AFC) from FY 2016-17 to FY 2021-22. For FY 2022-23, the opening balance of Gross Fixed Assets (GFA), normative loan, and normative equity includes the additional capitalisation of Rs.133.93 Crore. The cumulative capitalisation as of 31 March, 2022 has been revised to account for this additional capitalisation, and the closing balance as of 31 March, 2022 serves as the opening balance for FY 2022-23.

3.5.4 In light of the above, MSPGCL requested the Commission to approve the revised capital cost for Koradi Units 8-10, considering the final LD amounts as submitted.

3.5.5 Furthermore, MSPGCL highlighted that during FY 2016-17 to FY 2021-22, the actual plant availability was significantly lower than the target availability of 85%. The actual availability was recorded at 58.63%, 53.98%, and 46.47% respectively. In light of this, MSPGCL has submitted a claim for recovery of ARR for these years, as detailed in the accompanying tables and supporting documents.

Commission's Analysis and Ruling

3.5.6 The Commission, in its MTR Order (Case No. 227 of 2022), had approved the total LD of Rs. 370.76 Crore, consisting of Rs. 102.50 Crore towards BTG Package and Rs. 287.76 Crore towards BoP Package. However, MSPGCL has claimed the total LD of Rs. 101.93 Crore against the same. Hence, the Commission directed MSPGCL to provide the proper justification for such large variation in the claim and non-consideration of the LD retained for the BoP Package.

3.5.7 In response, MSPGCL has not provided the proper justification for the claim of LD amount of Rs. 101.93 Crore for BTG package against the LD of Rs. 102.50 Crore as approved by the Commission vide its MTR Order (Case No. 227 of 2022). Hence, the Commission has considered the LD amount of Rs 102.50 Crore for BTG package as approved in the MTR Order. As regards the claim of LD as Nil against the BoP Package, the Commission in line with the view taken in MTR Order does not find it prudent to consider the LD against BoP Package as Nil when MSPGCL has lodged a claim of Rs. 267.87 Crore towards LD. The claim has been lodged by MSPGCL after it is convinced about it and it can be fairly expected that they would strongly pursue their claim. The Commission is of the view that revising the LD amount of BoP package to Nil at this stage would not be in the best interest of the stakeholders. Accordingly, the Commission has considered the LD amount of BoP package as Rs. 267.87 Crore. The Commission shall consider the revision of the LD amount of BoP package after finalisation of the matter before the liquidator.

3.6 IMPACT OF UDL OF KORADI UNITS 8-10

MSPGCL's Submission

3.6.1 MSPGCL submitted that in the MTR Order, the Commission approved the discharge of undischarged liabilities (UDL) up to the extended cut-off date of 31 March, 2022. However, for liabilities discharged after this date, i.e., from FY 2022-23 onwards, the Commission stated that a final decision would be taken during the true-up of the respective years, based on a prudence check of MSPGCL's submissions.

3.6.2 In line with this ruling, MSPGCL submitted that UDL of Rs.121.44 Crore was discharged during FY 2022-23. Accordingly, an additional capitalisation of Rs.121.44 Crore has been considered for Koradi Units 8-10 and this has been reflected in the true-up chapter for FY 2022-23.

3.6.3 MSPGCL has also provided the status of UDL for Koradi Units 8-10 as of 31 March, 2023, after accounting for the discharge of liabilities during FY 2022-23.

Commission's Analysis and Ruling

3.6.4 MSPGCL has submitted the documentary evidence for the payment of Rs. 19.51 Crore towards UDL paid to M/s. L&T during FY 2022-23 towards excise duty on transactions between M/s. L&T and its sub-contractors for supply of cement and structural steel.

3.6.5 The Commission observed that though in write-up MSPGCL has mentioned that UDL discharged during FY 2022-23 is Rs 121.44 Crore, however in Table 23 of the Petition while submitting the year-wise status of UDL, MSPGCL has considered the discharge of Rs 19.51 Crore UDL during FY 2022-23 and the same has been considered by MSPGCL in its computations. Accordingly, the Commission has considered an amount of Rs 19.51 Crore as liabilities discharged during FY 2022-23.

3.6.6 As regards the justification for discharge of liabilities post cut-off date, MSPGCL submitted that in Case No. 227 of 2022, MSPGCL had requested the Commission for an extension of the cut-off date to 31 March, 2024. The Commission, in the MTR Order, indicated that it would consider the matter based on submissions made in the true-up petitions for the respective years on a case-by-case basis.

3.6.7 Based on the same, MSPGCL submitted that the delay in discharging the UDL is primarily due to challenges in executing pending additional capitalisation works, caused by the bankruptcy of BoP vendors and subsequent COVID-related disruptions. Additionally, delays in finalizing the Final Time Limit Extension (FTLE) for various contracts, including BTG and BoP, have further contributed to the delay in discharging UDL related to various retentions.

3.6.8 MSPGCL submitted that it has made all-out efforts to complete the pending works and finalizing the FTLE by March 2025. In view of the above, MSPGCL requested the Commission to approve an extension of the cut-off date to 31 March, 2025, and to permit MSPGCL to approach the Commission after the discharge of liabilities. For schemes that are delayed beyond FY 2024-25 or UDL discharges delayed beyond FY 2024-25, MSPGCL sought permission to submit the relevant details in the true-up Petition for the respective year.

3.6.9 Considering the above submissions of MSPGCL and reasons submitted by MSPGCL towards delay in discharging UDL, the Commission has considered the UDL of Rs 19.51 crore discharged during FY 2022-23 as additional capitalisation during FY 2022-23 while carrying out the truing up of FY 2022-23. It is observed that the complete UDL have not been discharged till date and MSPGCL has requested the Commission to approve an extension of the cut-off date to 31 March, 2025, and to permit MSPGCL to approach the Commission after the discharge of liabilities. The Commission is of the view that the Cut-off date cannot be extended multiples and the Commission shall take the final decision on liabilities discharged during the year at the time of true-up of the respective year, based on the prudence check of MSPGCL's submissions.

3.7 IMPACT OF LD OF BHUSAWAL UNIT 4 & 5

MSPGCL's Submission

3.7.1 MSPGCL has submitted details regarding the capital cost and LD for Bhusawal Thermal Power Station Units 4 & 5, which achieved Commercial Operation Date (COD) on 3 January, 2014. MSPGCL stated that the Commission, in its Order dated 20 April, 2015 (Case No. 201 of 2014), approved the capital cost and directed MSPGCL to submit a detailed report on the actual LD levied and recovered from contractors. This directive was reiterated in the Commission's Order dated 30 March, 2020 (Case No. 296 of 2019). In compliance, MSPGCL levied an LD of Rs. 250.25 Crore on the BTG contractor, BHEL, which remains uncontested. However, an LD of Rs. 189 Crore levied on the BoP contractor, TPL, was contested in arbitration, and the Arbitrator's Award dated 30 August 2022 ruled that no LD was leviable on TPL. Consequently, the actual LD recovered stands at Rs. 250.54 Crore, against the estimated Rs. 339.54 Crore considered in the Case No. 201 of 2014.

3.7.2 MSPGCL further submitted that the Commission had initially deducted 50% of the estimated LD (Rs. 169.77 Crore) from the capital cost, which now stands revised to Rs. 125.77 Crore, resulting in an incremental capital cost of Rs. 44.50 Crore as of COD. Additionally, MSPGCL incurred Rs. 23.90 Crore in additional expenses, including costs for additional work, arbitration, prolongation works, bank guarantee maintenance, and interest allowed to TPL, as per the Arbitration Award. MSPGCL also deposited Rs. 46 Crore with the High Court, Mumbai and out of Rs 46 Crore, the amount of Rs 15.19

Crore and Rs 9.92 Crore are paid due to reimbursement of wrongful recovery and release of retention amount of chimney. Hence the total of Rs. 25.11 Crore is considered as discharge of UDL. MSPGCL highlighted that the Commission, in its 2014 Order, had approved funding for UDL upon actual discharge, and accordingly, MSPGCL has claimed funding for Rs. 25.11 Crore at a normative debt-equity ratio of 70:30 from FY 2023-24.

3.7.3 MSPGCL also submitted that the revision in capital cost is entitled from the date of COD, and therefore, the consequential impact on the AFC has to be considered from the date of COD. MSPGCL has calculated the amount to be recovered for the period from FY 2013-14 to FY 2021-22. The impact of the aforementioned capitalization of Rs. 24.05 Crore is considered in the true-up from FY 2022-23 onwards, while the impact of UDL discharge of Rs. 25.11 Crore is considered from FY 2023-24 onwards.

Commission's Analysis and Ruling

3.7.4 The Commission has observed that MSPGCL has claimed additional capitalisation of Rs. 20.76 Crore on account of additional expenditure incurred by MSPGCL due to arbitration submitted by Balance of Plant (BoP) contractor, Tata Projects Limited (TPL) in original Petition. However, considering additional expense of Rs. 3.14 Crore towards interest allowed to M/s TPL as per Arbitration Award, the total claim for incremental capital cost is worked out to Rs. 23.90 Crore as against the earlier claim of Rs. 20.76 Crore. The Commission has also scrutinised the documentary evidence submitted by MSPGCL substantiating the same. The Commission observes that the LD amount recovered pertaining to other miscellaneous packages as Rs. 0.29 Crore was considered in the MTR Order, which is not considered by MSPGCL in the current submission. Hence, the Commission considers the submission of MSPGCL on the impact of Rs. 23.90 Crore only against the claim of Rs. 24.05 Crore (which includes Rs. 0.15 Crore of the LD considered under miscellaneous packages). Accordingly, the Commission has revised the impact in the AFC for the respective years from the COD of the Units, as shown in the Table below:

Table 3.4: Impact of Additional Capitalisation (Rs. Crore)

Financial Impact	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
Days	88	365	366	365	365	365	366	365	365
Interest on Loan	0.56	2.22	2.01	1.61	1.48	1.35	1.23	1.10	0.96
ROE	0.18	0.76	0.76	0.37	0.37	0.76	0.76	0.71	0.68
Depreciation	0.30	1.26	1.27	1.26	1.26	1.26	1.27	1.26	1.26
IOWC	0.03	0.10	0.10	0.06	0.05	0.06	0.05	0.04	0.04
Additional ARR	**1.07**	**4.34**	**4.13**	**3.30**	**3.16**	**3.43**	**3.30**	**3.12**	**2.95**

Financial Impact	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
Actual Availability	55%	82.64%	89.09%	93.49%	80.90%	82.03%	83.72%	92.51%	77.81%
Recovery	**0.74**	**4.22**	**4.13**	**3.30**	**3.01**	**3.31**	**3.25**	**3.12**	**2.70**

3.8 IMPACT OF UDL OF CHANDARPUR UNITS 8-9 AND PARLI UNIT 8

MSPGCL's Submission

3.8.1 MSPGCL has submitted details regarding the UDL for Chandrapur Units 8-9 and the revision in capital cost for Parli Unit 8. For Chandrapur Units 8-9, MSPGCL stated that UDL of Rs. 13.43 Crore and Rs. 2.07 Crore were released during FY 2022-23 and FY 2023-24, respectively. These amounts have been considered as additional capitalization for the respective years in the true-up chapters. The status of UDL for Chandrapur Units 8-9, as of 31 March, 2024, shows a total release of Rs. 15.49 Crore, with a closing SAP balance of Rs. 155.47 Crore.

3.8.2 Regarding Parli Unit 8, MSPGCL referred to the MTR Order (Case No. 227 of 2022), where the Commission approved the discharge of liabilities up to the extended cut-off date of 31 March, 2022. The Commission ruled that liabilities discharged post this date, i.e., from FY 2022-23 onwards, would be decided during the true-up of the respective years based on a prudence check of MSPGCL's submissions. MSPGCL highlighted that there were inadvertent errors in the submission of the discharge of liabilities for FY 2017-18 to FY 2021-22. Based on the corrected details, MSPGCL has calculated the differential or incremental amount of UDL discharge and its impact on AFC for FY 2016-17 to FY 2021-22.

Commission's Analysis and Ruling

3.8.3 The Commission has observed that MSPGCL has claimed additional capitalisation of Rs. 15.49 Crore on account of discharge of UDL (Rs. 13.43 Crore for FY 2022-23 and Rs. 2.07 Crore for FY 2023-24) for Chandrapur Unit 8 & 9. The Commission has also scrutinised the documentary evidence submitted by MSPGCL and has allowed the additional capitalisation of Rs. 15.49 Crore on account of discharge of UDL while carrying out the truing up as claimed by MSPGCL.

3.8.4 The Commission has observed that MSPGCL has claimed additional capitalisation of Rs. 3.24 Crore on account of mismatch of undischarged liabilities for Parli Unit 8 between the actual discharge as claimed from FY 2016-17 to FY 2021-22 from the values approved by the Commission in its MTR Order. The Commission has also scrutinised the documentary evidence submitted by MSPGCL and has allowed the incremental additional capitalisation as claimed by MSPGCL, as shown in the Table below:

Table 3.5: Reconciliation of Undischarged Liabilities for Parli Unit 8 (Rs. Crore)

Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
Discharge of UDL approved in Case No. 227 of 2022		5.17	36.22	1.08	0.26	-
Discharge of UDL - Revised submission	0.66	6.98	36.01	0.62	0.62	1.09
Incremental additional capitalisation claimed	**0.66**	**1.81**	**-0.21**	**-0.46**	**0.36**	**1.09**

Table 3.6: Impact of Mismatch in Undischarged Liabilities (Rs. Crore)

Financial Impact	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
Days	133	365	365	366	365	365
Interest on Loan	0.02	0.11	0.15	0.12	0.11	0.15
ROE	0.01	0.04	0.11	0.09	0.09	0.11
Depreciation	0.01	0.08	0.12	0.11	0.10	0.14
IOWC	0.00	0.00	0.01	0.01	0.00	0.01
Additional AFC	**0.04**	**0.23**	**0.39**	**0.32**	**0.30**	**0.41**
Actual Availability	4.28%	57.59%	82.90%	67.48%	97.06%	80.32%
Recovery	**0.00**	**0.15**	**0.38**	**0.26**	**0.30**	**0.39**

3.9 EXPENSES NOT CLAIMED IN THE MTR PETITION

MSPGCL's Submission

3.9.1 MSPGCL in its MTR Petition inadvertently failed to include expenses amounting to Rs. 27.79 Crore for lubricants, consumables, and commission to agents for FY 2019-20 to FY 2021-22. The Commission in its Review Order denied the claim as it did not qualify for review, given that the expenses were not initially claimed. MSPGCL submitted that it was an inadvertent error to not include these expenses in the MTR Petition. MSPGCL has now included these expenses in the current MYT Petition and requested the approval for the claim and also submitted the supporting documents including the accounting ledger details from SAP.

Commission's Analysis and Ruling

3.9.2 The Commission has considered the submissions made by MSPGCL. The Commission observes that MSPGCL has inadvertently missed out the claim of Rs. 27.79 Crore towards lubricants, consumables, and commission to agents for FY 2019-20 to FY 2021-22. The Commission analysedthe documentary evidence provided and has allowed these expenses as claimed by MSPGCL. However, the Commission has not allowed any carrying cost on the claim since this is an oversight on the part of MSPGCL.

3.10 IMPACT OF CHANGE IN LAW DUE TO COAL TOLLING ARRANGEMENT

3.10.1 The Commission, vide Order dated 3 March, 2025 in Case No. 62 of 2024 has held as below:

> *"1. The Petition in Case No. 62 of 2024 is partly allowed.*
>
> *2. MSPGCL shall file details of actual benefits accrued on account of Coal Tolling arrangement with complete details and impact on tariffs after conclusion of the Agreement in a separate Petition.*
>
> *3. The Commission allows the amount of Rs. 0.82 Crore provisionally as a Change in Law claim to MSPGCL for IEPL for the period of 24 September 2022 to 31 December 2023 under Case IV Phase -III coal tolling arrangement.*
>
> *4. MSPGCL is allowed to claim this amount of Rs. 0.82 Crores in its ongoing MYT Petition."*

3.10.2 Considering the above, the Commission approves the additional amount of Rs. 0.82 Crore due to Change in Law claim to MSPGCL for IEPL for the period of 24 September, 2022 to 31 December, 2023 under Case IV Phase -III coal tolling arrangement.

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

4.1 BACKGROUND

4.1.1 The Commission vide the MYT Order for 4th Control Period from FY 2019-20 to FY 2024-25 dated 30 March, 2020 in Case No. 296 of 2019 approved the Tariff from FY 2020-21 to FY 2024-25. The Commission vide the MTR Order dated 31 March, 2023 approved the final 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.

4.1.2 MSPGCL, in the present Petition has sought the approval of True-up for FY 2022-23 and FY 2023-24 under the MYT Regulations, 2019. The analysis of the true-up undertaken by the Commission is provided below.

4.2 NORMS OF OPERATION

4.2.1 The norms of operation specified under the MYT Regulations, 2019 for thermal generating stations are as follows:

(i) Availability
(ii) Plant Load Factor (PLF)
(iii) Auxiliary Energy Consumption (AEC)
(iv) Gross Station Heat Rate (GSHR)
(v) Secondary fuel oil consumption (SFOC)
(vi) Transit and handling loss

4.2.2 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 respective Orders. MSPGCL has submitted the actual performance in FY 2022-23 and FY 2023-24, which is in variation to the norms approved by the Commission. The performance was better than the norms in some of the cases and inferior in some of the cases. MSPGCL submitted the reasons for the actual performance that is inferior to the norms. MSPGCL's submissions on the actual performance in FY 2022-23 and FY 2023-24 and the Commission's analysis is detailed hereunder.

4.3 AVAILABILITY

MSPGCL's Submission

4.3.1 MSPGCL submitted that the availability of Khaperkheda Unit -5 and Chandrapur Units 8-9 have been more than 80% in FY 2022-23. The availability of Nashik Unit 3-5, Paras Unit 3-4, Parli Unit 6-7, Khaperkheda Unit 5, Bhusawal Unit 4-5 and Chandrapur Unit 8-9 have been more than 80% in FY 2023-24. The actual Availability achieved for FY 2022-23 and FY 2023-24 is shown in the Table below:

Table 4.1: Actual Availability submitted by MSPGCL for FY 2022-23

Station/unit	Normative	Actual	High Demand -Peak	High Demand-Off Peak	Low Demand -Peak	Low Demand-Off Peak
Bhusawal	80.00%	56.79%	61.11%	61.04%	55.11%	55.42%
Chandrapur	80.00%	52.12%	68.16%	68.10%	46.50%	46.88%
Khaperkheda	85.00%	63.63%	69.86%	68.56%	61.45%	62.01%
Koradi	72.00%	71.38%	79.86%	80.43%	67.48%	68.58%
Nashik	80.00%	65.82%	71.65%	72.15%	63.79%	63.74%
Uran	85.00%	26.18%	33.62%	34.50%	23.24%	23.51%
Paras Units 3&4	85.00%	71.68%	82.37%	82.67%	67.98%	68.07%
Parli Units 6&7	85.00%	74.82%	77.35%	78.10%	73.29%	73.87%
Khaperkheda Unit 5	85.00%	84.70%	89.89%	91.41%	82.28%	82.61%
Bhusawal Units 4&5	85.00%	76.36%	81.35%	81.37%	75.53%	74.52%
Koradi Units 8-10	85.00%	63.72%	74.38%	73.63%	60.85%	60.29%
Chandrapur Units 8&9	85.00%	81.97%	88.64%	88.53%	80.56%	79.62%
Parli Unit 8	85.00%	54.91%	52.01%	52.74%	55.76%	55.66%

Table 4.2: Actual Availability submitted by MSPGCL for FY 2023-24

Station/unit	Normative	Actual	High Demand-Peak	High Demand-Off Peak	Low Demand-Peak	Low Demand-Off Peak
Bhusawal	80.00%	62.08%	78.91%	79.52%	56.25%	56.26%
Chandrapur	80.00%	57.27%	75.63%	74.98%	51.03%	51.33%
Khaperkheda	85.00%	65.54%	73.65%	73.70%	63.08%	62.75%
Koradi	72.00%	75.51%	77.28%	76.85%	74.88%	75.08%
Nashik	80.00%	81.20%	83.00%	83.53%	80.66%	80.41%
Uran	85.00%	34.82%	35.09%	36.93%	33.67%	34.32%
Paras Units 3&4	85.00%	83.05%	86.36%	86.48%	82.33%	81.82%
Parli Units 6&7	85.00%	89.43%	86.99%	86.75%	89.96%	90.38%
Khaperkheda Unit 5	85.00%	83.70%	82.24%	83.03%	84.82%	83.81%
Bhusawal Units 4&5	85.00%	81.13%	79.59%	77.73%	82.61%	82.08%
Koradi Units 8-10	85.00%	68.41%	66.44%	65.73%	69.64%	69.20%
Chandrapur Units 8&9	85.00%	86.00%	86.86%	86.36%	86.35%	85.76%
Parli Unit 8	85.00%	74.30%	77.10%	78.32%	72.75%	73.07%

4.3.2 MSPGCL submitted the MSLDC Certificate for actual Availability during FY 2022-23 and FY 2023-24. MSPGCL further submitted that the following factors have adversely affected the Availability of its Stations in FY 2022-23 and FY 2023-24:

4.3.3 **Lower Gas Availability in Uran:** MSPGCL submitted that against an overall requirement of 3.5 MMSCMD, the gas supply in FY 2022-23 and FY 2023-24 was only around 1.16 MMSCMD and 1.31 MMSCMD, respectively. With this limited supply, the Uran gas Unit managed gross generation of 1491.22 MU and 1769.03 MU in FY 2022-23 and FY 2023-24, respectively. The primary reason for the low gas availability was reduced gas supply, which was beyond the control of MSPGCL. Despite this, MSPGCL has made every effort to utilize the available gas optimally.

4.3.4 MSPGCL further submitted that the actual consumption of gas during FY 2022-23 and FY 2023-24 was 96.87% and 89.96% of the total allocated Daily Nominated Quantity (DNQ). The actual generation was 85.8% and 95.2% of the achievable generation using the received gas quantity and at normative SHR for combined cycle operation for FY 2022-23 and FY 2023-24. However, during this period, due to a major accident in Block 1 (GT 5, GT 6 + WHR A0), only one block (GT 7 + GT 8 + WHR B0) was available for combined cycle operation, while GT 5 and GT 6 operated in open cycle. This resulted in a higher overall SHR and lower generation.

4.3.5 **Coal-Related Issues:** MSPGCL submitted that the overall generation loss due to supercritical coal stock and poor coal quality was around 7.3% and 6.62% for FY 2022-23 and FY 2023-24, respectively. Poor coal quality and issues related to wet coal during the monsoon further contributed to a generation loss of approximately 3-5%. These impacts were particularly noticeable during the monsoon months. MSPGCL also stated that the critical coal stock position compelled it to lift whatever coal was available to keep the stations running.

4.3.6 **Nashik Units 3-5:** MSPGCL has submitted that the generation or power scheduling from Case IV, Phase-3 commenced from October 2022 onwards for Nashik Units 3-5. Prior to this, from April 2022 to September 2022, these Units operated using coal received at the station. MSPGCL has further stated that Nashik Units 3-5 are placed in a lower priority range within the MOD stack. Due to critical coal shortage conditions, the best available coal was diverted to the nearest efficient stations, resulting in coal quantity and quality issues for Nashik. Additionally, as Nashik is a vintage Unit, certain O&M challenges are inherent, especially during the monsoon. Consequently, the availability of Nashik Units 3-5 during FY 2022-23 stood at 65.82%.

4.3.7 **Performance of Other Units:** MSPGCL has submitted that Khaperkheda Unit 5 and Chandrapur Units 8-9 successfully maintained peak and off-peak availability during the high-demand season for FY 2022-23. However, Paras Units 3-4 narrowly missed achieving normative availability due to critically low coal stock. For other stations, MSPGCL has stated that low availability was attributed to factors such as critically low coal stock, poor coal quality, wet coal issues, and problems like coal cycle or boiler tube leakages.

4.3.8 MSPGCL submitted that Nashik Units 3 to 5, Chandrapur Units 8-9, Parli Units 6-7, and Koradi Unit 6 have maintained peak and off-peak availability during both high-demand and low-demand periods for FY 2023-24. However, Bhusawal Unit 3 and Khaperkheda Unit 5 narrowly missed achieving normative availability due to lower coal quality. For other stations, the reduced availability was primarily attributed to factors such as inferior coal quality, recurring issues like boiler tube leakages, and problems within the coal handling system.

4.3.9 **Target Availability Adjustment for Khaperkheda Units 1 to 4:** MSPGCL requested the Commission to consider and approve the Target Availability as recommended in the CPRI Energy Audit reports (maximum achievable AVF of 76.75%) for Khaperkheda Units 1 to 4. MSPGCL submitted that the normative availability approved by the Commission for Khaperkheda Units 1 to 4 is higher than the achievable availability, leading to under-recovery of AFC due to the shortfall in availability compared to normative availability.

4.3.10 MSPGCL further stated that the norm of AVF approved by the Commission is higher and not achievable, while the actual availability of the station is comparable with the AVF recommended in the CPRI Report. MSPGCL requested the Commission to consider these recommendations and allow appropriate recovery of AFC under True-up.

4.3.11 **Relaxation of Target Availability for Uran GTPS:** MSPGCL requested the Commission to relax the Target Availability Factor for Uran GTPS to align with the actual performance levels. MSPGCL has submitted that the actual availability factor (26.18%) is significantly lower than the targeted value due to inadequate gas supply. Therefore, MSPGCL requested the Commission to treat the actual availability as equivalent to normative availability and permit the full recovery of the fixed costs for the Uran station.

Commission's Analysis and Ruling

4.3.12 The Commission sought the quantum of generation loss for each station on account of each reason for lower Availability. In reply, MSPGCL submitted the generation loss for each station due to the following reasons:

- Zero schedule/RSD
- Water shortage
- Low coal stock
- Poor coal quality
- Wet coal problem
- System problem
- O&M factors

4.3.13 The Commission observed that major reasons for generation loss are poor coal quality and O&M factors. The Commission finds that significant improvement in generation availability is possible with improvement in O&M practices and levy of penalty on coal provider in line with the FSA to improve the coal quality. The loss of generation due to shortfall in its O&M processes and the coal quality not only impacts MSPGCL, but it also impacts MSEDCL, since they are required to procure this power through alternate sources, which could be costlier than the power from MSPGCL stations. **The Commission directs MSPGCL to submit a plan within three months to ensure the improvement in its O&M practices for reduction in generation loss due to O&M factors**.

4.3.14 As regards grade slippage of coal and coal quality, the Commission sought the details from MSPGCL regarding the outcome of various steps taken by MSPGCL regarding Grade Slippage.

4.3.15 In reply, MSPGCL submitted that the difference in GCV of loading end and unloading end is attributed to various issues of sampling methodologies, viz., topping up of good quality coal in wagons while loading of wagons, only 10 % sampling as per FSA from wagons in a rake against 25% sampling as per IS – 436, and manual mode of sampling from wagons, which collects sample only top portion of coal. Issues in Road mode coal supply wherein randomness is followed only for first lot of 8 trucks, thereafter sample is collected from same number interval for that day. Same is the case with conveyor belt sampling. To overcome these issues, MSPGCL has decided to implement the following steps:

(a) to carry out sampling by deploying Auger machine instead of manual sampling,
(b) collection of sample from 25 % wagons as per BIS to collect the maximum samples to represent the total population,
(c) Collection of road mode sample randomly from each lot of 8 trucks, Collection of belt sample randomly at any time from lot of 45 minutes every time.

4.3.16 Regarding review of sampling methodology, MSPGCL submitted that it has taken up the matter with Ministry of Coal, the Secretary Coal and Secretary CIL, etc., through various meetings / fora at Delhi. The letters have also been written to the Minister of Coal, Govt of India from the Deputy Chief Minister Maharashtra and to Secretary Coal, Ministry of Coal for review of sampling methodology of coal.

4.3.17 In addition to above, MSPGCL submitted that it has adopted various measures for monitoring of coal supplied to MSPGCL at loading end as mentioned below:

(a) For collection of coal samples at loading end, third-party sampling agency M/s CSIR - Central Institute of Mining and Fuel Research (CIMFR) was deployed jointly by Coal India and MSPGCL from 2016 but the difference in GCV of loading End and un-Loading End was above the margin allowed by the Commission. Then, from November 2023 CSIR-CIMFR stopped their work and the sampling analysis work is now allotted to Power Finance Corporation empanelled Third Party sampling agency.

(b) As a result of such efforts, improvement in minimizing the grade results deviations at loading end is observed, whereas the improvement in grade slippage is not much evident. As such, the difference in GCV of Loading End and Un-Loading End is still higher than the gap allowed by the Commission.

4.3.18 As regards the request of MSPGCL to consider the PAF for Khaperkheda Units 1-4 in line with the CPRI Report, the Commission observed that the CPRI study has been done by MSPGCL of its own and the CPRI Report has been submitted in 2024. The Commission is of the view that the norms approved in MYT Regulations cannot be relaxed with retrospective effect based on study carried out the MSPGCL. Hence, the claim of MSPGCL to revise the performance parameters for FY 2022-23 and FY 2023-24 is not allowed.

4.3.19 The other reasons submitted by MSPGCL for not achieving the normative availability for coal-based stations are same as that submitted in previous years and the Commission has not relaxed the target availability for full recovery of AFC in previous years. Accordingly, for coal-based stations, the Commission has not considered any relaxation in availability for recovery of full AFC.

4.3.20 For Uran Gas Station, the Commission sought the supporting documents to substantiate the actual gas receipt in FY 2022-23 and FY 2023-24. In reply, MSPGCL submitted that since gas is supplied through a pipeline, entire quantum of gas supplied during the period was converted into electrical energy. MSPGCL submitted the details of actual gas receipts for FY 2022-23 and FY 2023-24. The Commission had allowed the recovery of full AFC for Uran GTPS in the final true-up for FY 2012-13 to FY 2021-22 considering the shortage of gas as uncontrollable. In line with that approach, the recovery of full AFC, as trued-up in this Order has been allowed for Uran at actual Availability for FY 2022-23 and FY 2023-24.

4.3.21 As the actual availability is lower than the target availability for some of the Stations, the Commission has approved the recovery of trued-up AFC for FY 2022-23 and FY 2023-24 for these Stations (except for Uran) in line with Regulation 50 of the MYT Regulations, 2019, wherein the Capacity Charges are recoverable under two segments viz., High Demand Season (3 months/year) and Low Demand Season (9 months/year), each with 2 parts, viz., peak (4 hours - 20% recovery) and off peak hours (20 hours - 80% recovery).

4.4 PLANT LOAD FACTOR (PLF)

MSPGCL's Submission

4.4.1 MSPGCL submitted the actual PLF for FY 2022-23 as shown in the Table below:

Table 4.3: PLF submitted by MSPGCL for FY 2022-23 and FY 2023-24

Station/Unit	FY 2022-23		FY 2023-24	
	Normative	Actual	Normative	Actual
Bhusawal	85.00%	39.03%	85.00%	54.81%
Chandrapur	85.00%	48.28%	85.00%	52.27%
Khaperkheda	85.00%	58.69%	85.00%	62.74%
Koradi	85.00%	70.89%	85.00%	74.71%
Nashik	85.00%	45.82%	85.00%	46.59%
Uran	85.00%	25.54%	85.00%	30.23%
Paras Units 3&4	85.00%	69.82%	85.00%	81.39%
Parli Units 6&7	85.00%	61.82%	85.00%	62.48%
Khaperkheda Unit 5	85.00%	79.25%	85.00%	81.74%
Bhusawal Units 4&5	85.00%	70.40%	85.00%	74.31%
Koradi Units 8-10	85.00%	62.90%	85.00%	67.02%
Chandrapur Units 8&9	85.00%	76.21%	85.00%	82.27%
Parli Unit 8	85.00%	49.92%	85.00%	56.69%

4.4.2 MSPGCL submitted the MSLDC Certificate for actual PLF during FY 2022-23 and FY 2023-24.

Commission's Analysis and Ruling

4.4.3 The MYT Regulations, 2019 specify the target PLF of 85% for thermal generating stations, to be eligible for the incentive for actual generation in excess of ex-bus energy corresponding to target PLF. The actual PLF of all the stations is lower than the target PLF for incentive and hence, MSPGCL is not entitled for PLF incentive for any of the Plants during FY 2022-23 and FY 2023-24.

4.5 AUXILIARY ENERGY CONSUMPTION (AEC)

MSPGCL's Submission

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

Table 4.4: Actual AEC submitted by MSPGCL for FY 2022-23 and FY 2023-24

Station/Unit	FY 2022-23		FY 2023-24	
	Normative	Actual	Normative	Actual
Bhusawal	10.96%	14.56%	10.96%	13.43%
Chandrapur	9.34%	11.09%	9.34%	10.50%
Khaperkheda	10.21%	11.25%	10.21%	10.99%
Koradi	10.81%	11.28%	10.81%	11.48%
Nashik	10.75%	12.61%	10.75%	12.55%
Uran	1.00%$	2.83%*	1.00%$	2.92%*

Station/Unit	FY 2022-23		FY 2023-24	
	Normative	Actual	Normative	Actual
Paras Unit 3&4	10.25%	10.98%	10.25%	10.48%
Parli Unit 6&7	10.25%	11.58%	10.25%	11.48%
Khaperkheda Unit 5	6.00%	5.85%	6.00%	6.36%
Bhusawal Unit 4&5	6.00%	6.36%	6.00%	6.81%
Koradi Units 8-10	6.00%	7.34%	6.00%	7.28%
Chandrapur Units 8&9	6.00%	5.51%	6.00%	6.02%
Parli Unit 8	9.14%	13.59%	9.14%	12.14%

**** Consolidated AEC, $- AEC for Combined Cycle Operation***

4.5.2 MSPGCL submitted that Khaperkheda Unit 5 and Chandrapur Units 8-9 achieved normative auxiliary consumption for FY 2022-23, while none of the stations achieved normative auxiliary consumption for FY 2023-24. However, MSPGCL has stated that the excess auxiliary consumption beyond the norm was due to several factors, including measuring errors at MSETCL energy meters in the switchyard, partial loading caused by low demand, backing down operations, lower PLF, ageing factors of the Units, and calculation errors while setting norms for Chandrapur. These factors contributed to higher auxiliary consumption than the approved norms.

4.5.3 MSPGCL requested the Commission to consider and approve the auxiliary consumption norms as recommended in the CPRI Energy Audit reports for Chandrapur Units 3-7, Paras Units 3-4, Parli Units 6, 7, and 8, and Khaperkheda Units 1 to 4. MSPGCL has stated that the normative AEC approved by the Commission for these stations is lower than the actual AEC. MSPGCL further submitted that the norm of AEC approved by the Commission are lower and not achievable, while the actual AEC of the stations is comparable with the AEC recommended in the CPRI report. In light of this, MSPGCL requested the Commission to consider these recommendations in its deliberations and allow revenue loss or gain due to higher energy consumption accordingly under True-up.

4.5.4 Regarding Uran GTPS, MSPGCL submitted that from 07 September, 2022 to 20 November, 2022 and 24 May, 2023 to 28 August, 2023, all gas turbine Units at GTPS Uran operated in open cycle mode only. During this period, both steam turbines were shut down, causing the standby consumption of the steam turbines' auxiliaries to be included in the total station auxiliary power consumption. This led to an increase in open cycle auxiliary power consumption. Additionally, MSPGCL has stated that due to limited gas availability, the steam turbines operated in a 1GT-1ST configuration for 6,058 out of a total of 7,536 service hours. MSPGCL has explained that the auxiliary consumption on the steam turbine side remains nearly the same whether operating with one or two gas turbines. However, generation is reduced by 50% in single GT operations, resulting in higher auxiliary power consumption.

4.5.5 In summary, MSPGCL requested the Commission to approve the auxiliary consumption norms as per the CPRI Energy Audit reports for the specified Units, consider the actual auxiliary consumption, and allow appropriate revenue adjustments under True-up. MSPGCL emphasized that the operational challenges at Uran GTPS, including open cycle and combined cycle operations, were beyond their control and have significantly impacted the auxiliary consumption levels.

Commission Analysis and Ruling

4.5.6 As regards the proposal of MSPGCL to consider the increase in AEC in line with the CPRI Report, the Commission observed that CPRI study has been done by MSPGCL of its own and the CPRI Report has been submitted in 2024. The Commission is of the view that the norms approved in MYT Regulations cannot be relaxed from retrospective effect based on study carried out the MSPGCL. Hence, the claim of MSPGCL to revise the performance parameters for FY 2022-23 and FY 2023-24 is not allowed.

4.5.7 The Commission has considered the Auxiliary Consumption as a controllable parameter in accordance with the MYT Regulations, 2019. Hence, the difference between the actual AEC and normative AEC has been considered for computing the sharing of efficiency gains and losses as per principles laid out in MYT Regulations, 2019.

4.6 NET GENERATION

MSPGCL's Submission

4.6.1 The actual net generation during FY 2022-23 and FY 2023-24 is as shown in the Table below:

Table 4.5: Net Generation submitted by MSPGCL for FY 2022-23 and FY 2023-24 (MU)

Station/Unit	FY 2022-23		FY 2023-24	
	Revised Normative	Actual Net Generation	Revised Normative	Actual Net Generation
Bhusawal	637.10	611.32	904.68	879.62
Chandrapur	7627.93	7480.80	8194.87	8089.63
Khaperkheda	3893.84	3848.77	4198.86	4162.33
Koradi	1176.71	1170.49	1238.48	1229.21
Nashik	2256.29	2209.27	2362.79	2315.12
Uran	1476.30	1448.95	1717.33	1717.33
Paras Units 3&4	2755.04	2732.70	3227.39	3219.24
Parli Units 6&7	2508.37	2471.09	2521.28	2486.69
Khaperkheda Unit 5	3232.38	3237.41	3375.64	3362.68
Bhusawal Units 4&5	5752.32	5730.25	6165.64	6112.35

Station/Unit	FY 2022-23		FY 2023-24	
	Revised Normative	Actual Net Generation	Revised Normative	Actual Net Generation
Koradi Units 8-10	10441.17	10292.70	11103.01	10951.93
Chandrapur Units 8&9	6268.43	6300.85	6,806.12	6804.82
Parli Unit 8	1029.56	979.08	1176.63	1137.77
Total	**49055.45**	**48513.67**	**52992.72**	**52468.72**

Commission's Analysis and Ruling

4.6.2 The Commission has considered the actual gross generation as submitted by MSPGCL and the net generation based on normative AEC. Accordingly, the gross generation and net generation approved by the Commission is as shown in the Tables below:

Table 4.6: Gross generation and net generation for FY 2022-23 approved by the Commission (MU)

Station/Unit	Gross generation			Net generation		
	Approved in MTR	Actual	Approved	Approved in MTR	Actual	Approved
Bhusawal	1145.70	715.53	715.53	1020.13	611.32	637.10
Chandrapur	11587.31	8413.77	8413.77	10683.50	7480.80	7757.50
Khaperkheda	5249.54	4336.60	4336.60	4740.34	3848.77	3915.95
Koradi	1368.94	1319.34	1319.34	1220.96	1170.49	1176.71
Nashik	3668.57	2528.06	2528.06	3274.20	2209.27	2256.29
Uran	1564.98	1491.22	1491.22	1516.47	1448.95	1444.99
Paras Units 3&4	3336.67	3069.68	3069.68	3026.36	2732.70	2784.20
Parli Units 6&7	3505.41	2794.85	2794.85	3179.40	2471.09	2534.92
Khaperkheda Unit 5	3506.90	3438.70	3438.70	3296.48	3237.41	3232.38
Bhusawal Units 4&5	6325.21	6119.49	6119.49	5945.70	5730.25	5752.32
Koradi Units 8-10	12127.37	11107.63	11107.63	11399.73	10292.70	10441.17
Chandrapur Units 8&9	6918.77	6668.54	6668.54	6503.65	6300.85	6268.43
Parli Unit 8	1479.23	1133.13	1133.13	1353.49	979.08	1036.81
Total	**61784.60**	**53136.53**	**53136.53**	**57160.40**	**48513.67**	**49238.79**

Table 4.7: Gross generation and net generation for FY 2023-24 approved by the Commission (MU)

Station/Unit	Gross generation			Net generation		
	Approved in MYT	Actual	Approved	Approved in MYT	Actual	Approved
Bhusawal	1471.15	1016.04	1016.04	1309.91	879.62	904.68
Chandrapur	11458.22	9039.12	9039.12	10564.48	8089.63	8334.07
Khaperkheda	5506.78	4676.31	4676.31	4972.63	4162.33	4222.71
Koradi	1328.14	1388.59	1388.59	1184.57	1229.21	1238.48

Station/Unit	Gross generation			Net generation		
	Approved in MYT	Actual	Approved	Approved in MYT	Actual	Approved
Nashik	4427.14	2647.38	2647.38	3951.22	2315.12	2362.79
Uran	2249.45	1769.03	1769.03	2179.71	1717.33	1714.19
Paras Units 3&4	3676.14	3595.98	3595.98	3334.26	3219.24	3261.56
Parli Units 6&7	3733.20	2809.23	2809.23	3386.01	2486.69	2547.97
Khaperkheda Unit 5	3733.20	3591.10	3591.10	3509.21	3362.68	3375.64
Bhusawal Units 4&5	7466.40	6559.20	6559.20	7018.42	6112.35	6165.64
Koradi Units 8-10	12467.56	11811.72	11811.72	11719.50	10951.93	11103.01
Chandrapur Units 8&9	7466.40	7240.55	7240.55	7018.42	6804.82	6806.12
Parli Unit 8	1866.60	1294.99	1294.99	1707.94	1137.77	1184.92
Total	**66850.38**	**57439.23**	**57439.23**	**61856.28**	**52468.72**	**53221.77**

4.7 GROSS STATION HEAT RATE (GSHR)

MSPGCL's Submission

4.7.1 The actual GSHR achieved in FY 2022-23 and FY 2023-24 is shown in the Table below:

Table 4.8: Actual GSHR submitted by MSPGCL for FY 2022-23 and FY 2023-24 (kcal/kWh)

Station/Unit	FY 2022-23		FY 2023-24	
	Normative	Actual	Normative	Actual
Bhusawal	2787.00	3084.95	2787.00	2898.62
Chandrapur	2688.00	2732.51	2688.00	2704.51
Khaperkheda	2630.00	2725.64	2630.00	2787.83
Koradi	2350.00	2602.67	2350.00	2517.95
Nashik	2754.00	2781.35	2754.00	2781.95
Uran	2035.00$	2371.77*	2035.00$	2137.19*
Paras Units 3&4	2430.00	2446.92	2430.00	2417.31
Parli Units 6&7	2430.00	2517.24	2430.00	2452.28
Khaperkheda Unit 5	2375.00	2462.78	2375.00	2450.60
Bhusawal Units 4&5	2375.00	2417.10	2375.00	2464.49
Koradi Units 8-10	2230.00	2480.32	2230.00	2400.17
Chandrapur Units 8&9	2375.00	2386.08	2375.00	2373.03
Parli Unit 8	2430.00	2535.53	2430.00	2441.44

**** Consolidated GSHR as per the Models, $- Combined Cycle SHR***

4.7.2 MSPGCL submitted that the actual GSHR of almost all the Stations is higher than the normative GSHR for FY 2022-23 and FY 2023-24 due to factors such as partial loading and higher oil consumption. In case of Uran, the GSHR is higher than the normative due to open cycle operations, which needs to be considered by the Commission.

4.7.3 MSPGCL further submitted that as regards the SHR of Koradi 6, the guaranteed SHR for the Unit of 2350 kcal/kWh has been approved by the Commission as normative SHR. Even for the new generating stations, an allowance of 4.5% from the design SHR (5% as per the MYT Regulations, 2019) is allowed in order to factor local operating conditions and deviations in overall quality of coal and associated parameters. Accordingly, MSGPCL requested that the normative SHR may kindly be considered as 2350*1.045 = 2456 kcal/kWh.

Commission's Analysis and Ruling

4.7.4 The Commission observes that MSPGCL could not achieve the GSHR norm for most of its Stations. As regards the GSHR for Uran, the MYT Regulations, 2019 specify the separate GSHR for open cycle and combined cycle. MSPGCL operated the Uran Power Station in open cycle during FY 2022-23 and FY 2023-24 due to operational reasons. Hence, the Commission has considered the normative GSHR in the final true-up of FY 2022-23 and FY 2023-24. As GSHR is a controllable performance parameter, the Commission has computed the sharing of gains/losses as per the MYT Regulations, 2015. **The Commission directs MSPGCL to optimally utilise the gas available and operate the Uran Power Station in combined cycle mode to the maximum extent possible. The Commission also directs MSPGCL to submit the complete details and justification in case Uran Power Station is operated in open cycle mode for a certain period of the year at the time of true-up.**

4.7.5 As regards the request of MSPGCL to consider the allowance of 4.5% over the design SHR as per the the MYT Regulations, 2019 for Koradi Unit 6, the Commission agrees that considering the design SHR for approval of GSHR for Koradi 6 (old Unit with Renovation and Modernisation) is not feasible as the margin of 4.5% on Design Heat Rate is allowed even for new Units. Hence, the Commission has approved the normative SHR for Koradi Unit 6 as 2456 kcal/kWh by applying the margin of 4.5% over the design SHR as applicable for new stations in accordance with the provisions of MYT Regulations, 2019.

4.8 SECONDARY FUEL OIL CONSUMPTION (SFOC)

MSPGCL's Submission

4.8.1 The actual SFOC achieved for FY 2022-23 and FY 2023-24 is shown in the Table below:

Table 4.9: Actual SFOC submitted by MSPGCL for FY 2022-23 and FY 2023-24 (ml/kWh)

Station/Unit	FY 2022-23		FY 2023-24	
	Normative	Actual	Normative	Actual
Bhusawal	1.40	5.76	1.40	3.61
Chandrapur	1.00	4.76	1.00	1.98
Khaperkheda	1.20	4.91	1.20	2.53
Koradi	2.81	5.59	2.81	2.80
Nashik	1.00	4.55	1.00	1.72
Paras Units 3&4	0.50	1.74	0.50	0.48
Parli Units 6&7	0.50	3.78	0.50	2.06
Khaperkheda Unit 5	0.50	0.33	0.50	0.35
Bhusawal Units 4&5	0.50	2.03	0.50	0.98
Koradi Units 8-10	0.50	0.64	0.50	0.77
Chandrapur Units 8&9	0.50	0.36	0.50	0.32
Parli Unit 8	0.50	5.15	0.50	1.22

4.8.2 MSPGCL submitted that that actual oil consumption for Khaperkheda Unit -5 and Chandrapur Units 8 & 9 was lower than the norms for FY 2022-23 and SFOC for Koradi Unit 6, Paras Units 3-4, Khaperkheda Unit 5 and Chandrapur Units 8&9 was lower than the norms for FY 2023-24. The higher oil consumption in the balance Units was on account of frequent backing down, shut down, start-ups and partial loading on account of coal shortages.

4.8.3 MSPGCL also submitted that on account of lower PLF of the Units, the oil consumption was on a higher side in order to keep the boiler flame stable to avoid tripping.

Commission's Analysis and Ruling

4.8.4 The Commission sought justification from MSPGCL for the relief sought in accordance with the relevant provisions of the MYT Regulations, 2019. In reply, MSPGCL submitted that during FY 2022-23 and FY 2023-24, the oil consumption increased due to oil support required for flame stability to avoid tripping due to poor coal quality, wet coal problems, forced outages, O&M issues, etc., Under such events, during Unit restart process, there is inevitable need for consumption of secondary oil.

4.8.5 In the true-up of previous years, the Commission had not accepted the coal-related problems, partial loading, and frequent outages as cogent reasons for relaxing the norms of operation. The same approach has been adopted for the final true-up for FY 2022-23 and FY 2023-24. The Commission has considered the normative SFOC in the final true-up of FY 2022-23 and FY 2023-24. As SFOC is a controllable performance parameter, the Commission has computed the sharing of gains/losses as per the MYT Regulations, 2019.

4.9 TRANSIT AND HANDLING LOSS

MSPGCL's Submission

4.9.1 The actual transit and handling loss achieved in FY 2022-23 is as shown in the Table below:

Table 4.10: Actual transit and handling loss submitted by MSPGCL for FY 2022-23 and FY 2023-24

Station/Unit	FY 2022-23		FY 2023-24	
	Normative	Actual	Normative	Actual
Bhusawal	0.80%	0.87%	0.80%	1.09%
Chandrapur	0.80%	0.48%	0.80%	0.41%
Khaperkheda	0.80%	1.86%	0.80%	2.11%
Koradi	0.80%	0.00%	0.80%	0.45%
Nashik	0.80%	0.77%	0.80%	0.75%
Paras Units 3&4	0.80%	0.80%	0.80%	0.79%
Parli Units 6&7	0.80%	0.49%	0.80%	0.75%
Khaperkheda Unit 5	0.80%	1.86%	0.80%	2.11%
Bhusawal Units 4&5	0.80%	0.80%	0.80%	0.99%
Koradi Units 8-10	0.80%	0.31%	0.80%	0.10%
Chandrapur Units 8&9	0.80%	0.48%	0.80%	0.49%
Paril Unit 8	0.80%	0.49%	0.80%	0.11%

Commission's Analysis and Ruling

4.9.2 The MYT Regulations, 2019 specify the normative transit and handling loss of 0.80% for non-pit head generating stations for domestic coal. The Commission has considered the normative transit and handling loss in the final true-up of FY 2022-23 and FY 2023-24. As transit and handling loss is a controllable performance parameter, the Commission has computed the sharing of gains/losses as per the MYT Regulations, 2019.

4.10 GROSS CALORIFIC VALUE (GCV) OF FUELS

MSPGCL's Submission

4.10.1 MSPGCL has sought True-up of expenses for FY 2022-23 and FY 2023-24 as per audited accounts or norms under the MYT Regulations, 2019. It has calculated normative expenses and requested relaxation on GCV losses. MSPGCL highlighted significant variations in GCV between "As Billed" and "As Received" coal, which exceeded the permissible limit of 600 kcal/kg and 650 kcal/kg specified by the Commission for FY 2022-23 and FY 2023-24. The actual GCV loss during FY 2022-23 ranged from 665 kcal/kg to 1216 kcal/kg, with a weighted average of ~897 kcal/kg, primarily due to factors beyond MSPGCL's control, such as grade slippage and moisture loss.

4.10.2 MSPGCL emphasized that it has taken all possible measures to minimize GCV variations but has limited control over coal handling until the unloading point. The Commission, in its Review Order (Case No. 132 of 2023), relaxed the GCV loss limit to 650 kcal/kg for FY 2023-24 and FY 2024-25. However, MSPGCL submitted that this limit is insufficient to cover actual losses. MSPGCL submitted that other Regulatory Commissions including CERC, allow GCV to be considered on an "As Received" basis, ensuring fair fuel cost recovery.

4.10.3 MSPGCL submitted that in the MYT Regulations, 2024, the Commission has acknowledged MSPGCL's challenges and approved a GCV loss of 750 kcal/kg for the MYT Control Period from FY 2025-26 to FY 2029-30. MSPGCL requested that this higher limit be applied retrospectively to FY 2022-23, as the actual average GCV loss was 897 kcal/kg.

4.10.4 MSPGCL also referred to the Hon'ble Supreme Court's Judgment in the matter of MSEDCL vs Adani Power Maharashtra Ltd. [(2023) 7 SCC 401] in which Hon'ble Supreme Court recognised the CEA's view that GCV should be considered on an "As Fired" basis.

4.10.5 MSPGCL also submitted that it has filed an Appeal against the Commission's Order in Case No. 227 of 2022 and Case No. 132 of 2023 before the Hon'ble APTEL on the issue of GCV variation issue between GCV "As Billed" and GCV "As Received". As the matter is sub-judice before Hon'ble APTEL, MSPGCL has calculated its claim for normative fuel costs for FY 2022-23 and FY 2023-24 based on GCV gap of 600 kcal/kg and 650 kcal/kg approved by the Commission in its MTR Order and the Review of MTR Order. MSPGCL requested the Commission to grant relaxations under the "Power to Relax" and "Power to Remove Difficulties" provisions of the MYT Regulations, 2019. MSPGCL further submitted that if the Commission allows a GCV variation of up to 750 kcal/kg, it would withdraw its APTEL Appeal on this matter.

4.10.6 The actual GCV of fuels for FY 2022-23 and FY 2023-24 is as shown in the Tables below:

Table 4.11: Actual GCV of fuels submitted by MSPGCL for FY 2022-23

Station/Unit	Coal as Fired (kcal/kg)	Secondary Fuel Oil (kcal/L)	Gas (kcal/SCM)
Bhusawal	2878.74	9959.68	
Chandrapur	3087.15	9598.08	
Khaperkheda	2995.00	9641.22	
Koradi	2942.86	9394.64	
Nashik	2812.00	9963.73	

Station/Unit	Coal as Fired (kcal/kg)	Secondary Fuel Oil (kcal/L)	Gas (kcal/SCM)
Uran			8575.80
Paras Units 3&4	3139.00	9482.72	
Parli Units 6&7	3249.90	9393.01	
Khaperkheda Unit 5	3091.00	9546.33	
Bhusawal Units 4&5	2980.93	10013.75	
Koradi Units 8-10	3327.00	9426.44	
Chandrapur Units 8&9	3270.74	9561.36	
Parli Unit 8	3227.91	9383.73	

Table 4.12: Actual GCV of fuels submitted by MSPGCL for FY 2023-24

Station/Unit	Coal as Fired (kcal/kg)	Secondary Fuel Oil (kcal/L)	Gas (kcal/SCM)
Bhusawal	3042.40	9754.54	
Chandrapur	3094.98	9459.67	
Khaperkheda	3081.67	9454.68	
Koradi	2966.83	9489.37	
Nashik	2854.00	9480.44	
Uran			8743.43
Paras Units 3&4	3204.18	9519.21	
Parli Units 6&7	3382.00	9506.39	
Khaperkheda Unit 5	3003.00	9377.66	
Bhusawal Units 4&5	3065.78	9812.33	
Koradi Units 8-10	3319.00	9425.30	
Chandrapur Units 8&9	3093.38	9515.23	
Parli Unit 8	3361.00	9425.38	

Commission's Analysis and Ruling

4.10.7 The Commission has considered the actual GCV of secondary fuel oil as submitted by MSPGCL in line with the approach adopted by the Commission in the MTR Order dated 31 March, 2023. The Commission has considered the actual GCV of gas as submitted by MSPGCL.

4.10.8 The MYT Regulations, 2019 specify that the GCV of coal should be considered for tariff "as received" at unloading point less actual stacking loss subject to the maximum stacking loss of 120 kcal/kg. In line with the same, the Commission has considered the lower of actual stacking loss and 120 kcal/kWh and subtracted the same from the actual "as received" GCV of coal as submitted by MSPGCL.

4.10.9 The Commission in its MTR Order dated 31 March, 2023 ruled as under regarding the GCV loss to be considered for FY 2022-23:

"… 6.9.4 Accordingly, the ceiling limit of GCV loss between as billed and as received is 600 kcal/kg for FY 2022-23. Therefore, the Commission has considered the ceiling limit of GCV loss between loading end and receiving end as 600 kcal/kg in the provisional trueup of FY 2022-23."

4.10.10 The Commission observes that MSPGCL has preferred an appeal before Hon'ble APTEL (Appeal No. 501 of 2023) against the Commission's Order in Case No. 227 of 2022 dated 31 March, 2023 on the issue regarding GCV margin norm remaining stringent as compared to actual GCV gap between "As Billed" to "As received" GCV.

4.10.11 Considering the above, the Commission in its Review on MTR Order dated 1 February, 2024 ruled as under regarding the relaxation in GCV loss:

"16.45 The Commission also notes that the Commission in its Order dated 1 March, 2021 on Review Petition filed on MYT Order under provisions of Power to Relax of MYT Regulations, 2019 has relaxed the GCV loss up to 650 kcal/kg (i.e., additional 350 kcal/kg over and above the GCV loss specified in MYT Regulations) for FY 2020-21. Hence, the GCV loss in excess of 650 kcal/kg cannot be allowed as this was the target specified for first year of the Control Period. Accordingly, the Commission relaxes the GCV loss by 350 kcal/kg and allows total GCV loss of up to 650 kcal/kg for FY 2023-24 and FY 2024-25 subject to following conditions:

• MSPGCL shall adhere to the percentage of washed coal to be utilized as per fuel utilization plan submitted as part of MTR Petition.

16.46 Accordingly, the relaxed GCV loss permissible for these 2 years shall be as follows:

• FY 2023-24: Relaxation of 350 kcal/kg in loss of GCV in addition to 300 kCal/kg as per MYT Regulations, 2019.

• FY 2024-25: Relaxation of 350 kcal/kg in loss of GCV in addition to 300 kCal/kg as per MYT Regulations, 2019."

4.10.12 However, the Commission has observed that MSPGCL has claimed for review of GCV Loss relaxation to 750 kcal/kg on a retrospective basis for FY 2022-23 and FY 2023-24, which is not in line with the Regulations and relevant Orders issued by the Commission. Hence, the Commission has considered the GCV loss relaxation of 600 kcal/kg and 650 kcal/kg as approved in the MTR Order dated 31 March, 2023 and Review Order dated 1 February, 2024 for computing the normative fuel cost for FY 2022-23 and FY 2023-24 as the matter of GCV variation between "As Billed" GCV and "As Received" GCV for FY 2022-23 is sub-judice before Hon'ble APTEL.

4.10.13The Commission has observed that though the GCV gap is higher than the allowed margin, the average GCV gap for raw coal for FY 2022-23 was ~897 kcal/kg, which was reduced to ~839 kcal/kg in FY 2022-23 on account of the various measures elaborated above. **Hence, the Commission directs MSPGCL to submit a quarterly report on the quality of coal supplied by the coal supplier, the details of coal grade slippage and the penalty levied as per the FSA.**

4.10.14 Accordingly, the Commission has considered the GCV of fuels as shown in the Tables below:

Table 4.13: GCV of fuels considered by Commission for FY 2022-23

Station/Unit	Coal (kcal/kg)		Secondary Fuel Oil (kcal/L)		Gas (kcal/SCM)	
	Approved in MYT	Approved in final true-up	Approved in MYT	Approved in final true-up	Approved in MYT	Approved in final true-up
Bhusawal	3785.45	3552.43	9549.22	9959.68	-	-
Chandrapur	3462.46	3410.72	9641.82	9598.08	-	-
Khaperkheda	3435.52	3350.59	9644.36	9641.22	-	-
Koradi	3671.90	3392.34	9320.86	9394.64	-	-
Nashik	3471.36	3461.05	9421.71	9963.73	-	-
Uran					8345.00	8575.80
Paras Units 3&4	3602.94	3416.00	9511.01	9482.72	-	-
Parli Units 6&7	3416.19	3249.90	9467.07	9393.01	-	-
Khaperkheda Unit 5	3674.51	3595.69	9690.40	9546.33	-	-
Bhusawal Units 4&5	3845.42	3692.34	9878.94	10013.75	-	-
Koradi Units 8-10	3884.21	3735.44	9282.52	9426.44	-	-
Chandrapur Units 8&9	3636.09	3568.61	9664.17	9561.36	-	-
Parli Unit 8	3411.81	3227.91	9427.79	9383.73	-	-

Table 4.14: GCV of fuels considered by Commission for FY 2023-24

Station/Unit	Coal (kcal/kg)		Secondary Fuel Oil (kcal/L)		Gas (kcal/SCM)	
	Approved in MYT	Approved in final true-up	Approved in MYT	Approved in final true-up	Approved in MYT	Approved in final true-up
Bhusawal	4029.35	3089.15	9836.32	9754.54	-	-
Chandrapur	3277.81	3167.58	9592.42	9459.67	-	-
Khaperkheda	3397.40	3166.80	9490.99	9454.68	-	-
Koradi	3730.89	3024.43	9400.92	9489.37	-	-
Nashik	3554.22	2922.72	9864.55	9480.44	-	-
Uran					8815.17	8743.43
Paras Units 3&4	3370.12	3204.18	9688.48	9519.21	-	-
Parli Units 6&7	3128.01	3382.00	9327.38	9506.39	-	-
Khaperkheda Unit 5	3478.60	3189.82	9488.93	9377.66	-	-
Bhusawal Units 4&5	3888.69	3221.21	9836.32	9812.33	-	-
Koradi Units 8-10	4041.67	3338.75	9557.39	9425.30	-	-
Chandrapur Units 8&9	3564.30	3235.66	9557.39	9515.23	-	-
Parli Unit 8	3044.18	3361.00	9327.38	9425.38	-	-

4.11 LANDED PRICE OF FUELS

MSPGCL's Submission

4.11.1 The actual prices of fuels submitted by MSPGCL is as shown in the Tables below:

Table 4.15: Actual prices of fuels submitted by MSPGCL for FY 2022-23

Station/Unit	Coal (Rs./MT)	Secondary Fuel Oil (Rs./kL)	Gas (Rs./'000 SCM)
Bhusawal	5399.19	64673.71	
Chandrapur	4936.07	60873.98	
Khaperkheda	4260.24	59935.83	
Koradi	3600.99	62154.91	
Nashik	5485.72	58844.84	
Uran			22942.14
Paras Units 3&4	4439.25	61095.87	
Parli Units 6&7	5859.44	56145.96	
Khaperkheda Unit 5	4836.50	61029.67	
Bhusawal Units 4&5	5668.52	58297.13	
Koradi Units 8-10	4908.82	59967.53	
Chandrapur Units 8&9	5274.87	59939.00	
Parli Unit 8	5850.35	56299.54	

Table 4.16: Actual prices of fuels submitted by MSPGCL for FY 2023-24

Station/Unit	Coal (Rs./MT)	Secondary Fuel Oil (Rs./kL)	Gas (Rs./'000 SCM)
Bhusawal	4622.81	59639.71	
Chandrapur	4680.23	59959.58	
Khaperkheda	3836.25	54989.41	
Koradi	3117.03	55428.10	
Nashik	4780.50	59764.04	
Uran			21691.08
Paras Units 3&4	4620.94	56104.97	
Parli Units 6&7	6560.28	69677.38	
Khaperkheda Unit 5	3918.81	59196.88	
Bhusawal Units 4&5	4953.11	54948.71	
Koradi Units 8-10	3790.76	58118.33	
Chandrapur Units 8&9	4292.96	58283.07	
Parli Unit 8	6566.64	70825.33	

Commission's Analysis and Ruling

4.11.2 The actual station-wise landed price of coal as submitted by MSPGCL is after considering the actual transit and handling loss for the respective station. The

Commission has re-computed the station-wise landed price of coal considering the normative transit and handling loss.

4.11.3 The Commission in the MYT Order dated 30 March, 2020, has directed MSPGCL as under:

> *"6.8.3 MSPGCL has submitted that the beneficiation of coal will commence from FY 2020-21. ... The Commission directs MSPGCL to carry out the proper cost benefit analysis of coal beneficiation after receiving the tenders and before going ahead for placing the contracts for coal beneficiation. MSPGCL should try to ensure that the effective landed price of washed coal at thermal station in terms of Rs./Kcal is lower than the landed price of normal mined coal at thermal station in terms of Rs./Kcal."*

4.11.4 The Commission, in the MTR Order dated 31 March, 2023, has directed MSPGCL as under as regards the beneficiation of coal:

> *"8.5.6 The Commission directs MSPGCL to carry out the proper cost benefit analysis of coal beneficiation for each year from FY 2022-23 onwards and submit the same in the trueup of the respective years. MSPGCL should try to ensure that the effective landed price of washed coal at thermal station in terms of Rs./kcal is lower than the landed price of normal mined coal at thermal station in terms of Rs./kcal."*

4.11.5 The Commission asked MSPGCL to provide the details of coal beneficiation for FY 2022-23 and FY 2023-24 for analysis of the effective landed cost. In reply, MSPGCL has submitted the details as shown in the Tables below:

Table 4.17: Details of Coal Beneficiation submitted by MSPGCL for FY 2022-23

FY	Coal Company	RAW Coal received at KTPS			MSMC (Washed Coal)		
		Landed Coal Cost (Rs/MT)	Received GCV	Rs/kcal	Landed Coal Cost (Rs/MT)	Received GCV	Rs/kcal
Koradi TPS	WCL				4457.86	3767	1.183
	WCL-ROAD	2517.5	2423	1.039	3932.05	3648	1.078
	SECL	3094.38	3080	1.005	3790.95	3890	0.975
	MCL	2320.61	2793	0.831	4208.14	3716	1.132
	SCCL	4471.96	2890	1.547	NO SUPPLY	NO SUPPLY	
Chandrapur TPS	WCL	3502.43	3061.09	1.144	3522.35	4152.32	0.848
	SCCL	5424	3129.2	1.733	NO SUPPLY	NO SUPPLY	
	SECL	4011.06	3535.96	1.134	3743.94	4062.74	0.922
	MCL	3489.34	2863.61	1.219	4001.29	3949.59	1.013

FY	Coal Company	RAW Coal received at KTPS			MSMC (Washed Coal)		
		Landed Coal Cost (Rs/MT)	Received GCV	Rs/kcal	Landed Coal Cost (Rs/MT)	Received GCV	Rs/kcal
Khaperkheda TPS	MCL	3403.38	3015	1.129	4120.34	3962	1.040
	SECL	3505.51	3476	1.008	3911.86	4004	0.977
	WCL	3349.7	3118	1.074	4044.87	3860	1.048
Bhusawal TPS	WCL	4018.57	3170.1	1.268	4770.16	4122.63	1.157

Table 4.18: Details of Coal Beneficiation submitted by MSPGCL for FY 2023-24

FY	Coal Company	RAW Coal received at KTPS			MSMC (Washed Coal)		
		Landed Coal Cost (Rs/MT)	Received GCV	Rs/kcal	Landed Coal Cost (Rs/MT)	Received GCV	Rs/kcal
Koradi TPS	WCL	3635.23	3181	1.143	4990.6	3408	1.464
	WCL-ROAD	2554.55	2672	0.956	4374.71	3444	1.270
	SECL	3558.56	2779	1.281	3915.24	3637	1.077
	MCL	3639.19	3298	1.103	4200.31	3604	1.165
	SCCL	6416.77	3226	1.989	NO SUPPLY	NO SUPPLY	
Chandrapur TPS	WCL	3665.03	3186.6	1.150	4191.93	3586.86	1.169
	SCCL	6710.91	3256.56	2.061	NO SUPPLY	NO SUPPLY	
	SECL	3923.05	3440.37	1.140	3591.23	3599.8	0.998
	MCL	3938.3	3091.98	1.274	4900.89	3449.13	1.421
Khaperkheda TPS	MCL	3364.08	3048	1.104	4284.75	3717	1.153
	SECL	3201.7	3212	0.997	4236.46	3850	1.100
	WCL	3205.48	3200	1.002	4754.89	3741	1.271
Bhusawal TPS	WCL	4146.69	3056.03	1.357	4536.85	4007.58	1.132

4.11.6 MSPGCL submitted that 'As received' GCV of washed coal is enhanced after washing of coal as compared to raw coal. The effective coal price of washed in Rs./kcal has been reduced in case of Chandrapur, Khaperkheda and Bhusawal during FY 2022-23.

4.11.7 MSPGCL submitted that from FY 2023-24 onwards, though there is improvement in GCV, considering the charges of transportation of coal from mine to washery and after washing of coal, transportation charges from washery to stations, there is an apparent increase in Rs./kcal for washed coal as compared to Rs./kcal for raw coal.

4.11.8 MSPGCL further submitted that the washery agreement provides for levy of penalty for non-performance of washery operators. Few of such penalties are not finalised yet due to dispute raised by the suppliers. Such penalties are not factored in above computation. Finalisation of these penalties will result in further reduction in Rs./kcal for washed coal. For FY 2023-24, penalties related to MCL coal sent for washing are not included and as result benefits of washing of coal are not reflecting in case of coal from MCL.

4.11.9 MSPGCL submitted that it is the technical requirement to fire design calorific value coal, which made it essential to use washed coal. The objective of selective usage of washed coal is to match fuel requirement as per design parameters of Boiler and to ensure better efficiency, loadability, availability, environmental aspect, ash handling, longevity of the stations, etc., and hence, cost benefit of washed coal has factors beyond comparison of Rs/kcal.

4.11.10 Further, as regards the benefits of beneficiation of coal, MSPGCL has submitted the following:

<u>Tangible benefits:</u>

1 Significant improvement in Generation can be seen, especially in case of Koradi Units No. 8 to 10, as compared to its performance till FY 2020-21 where mainly domestic coal was used.
2 AEC % has decreased.
3 SFOC has decreased.
4 PLF increased considerably.
5 Improvement in coal factor
6 Considerable improvement in loadability observed
7 Saving in freight as less coal needs to be transported for same heat value considering rejects.

In addition to above tangible benefits, the usage of washed coal provides following intangible benefits:

<u>Intangible Benefits of use of washed coal:</u>

1 No instances of receipt of lumpy coal and stones.
2 Reduction in unloading time and demurrages.
3 Less wear and tear of equipment (Conveyer belts, crushing elements, Chutes, etc.)
4 Crushing system is bypassed, hence, reduction in auxiliary consumption
5 Washing of coal reduces the ash content of coal, also improves its heat value and removes small amounts of other substances, such as sulphur and hazardous air pollutants.
6 Reduction in ash disposal expenditure
7 Reduction in wear and tear of boiler and CHP parts
8 Reduction in load fluctuation results in gain in DSM.

4.11.11 MSPGCL submitted that considering the above benefits of washed coal, it has planned to use the washed coal during the MYT Control Period based on existing washery contracts. MSPGCL further submitted it is also taking steps to make necessary corrections/changes in the washed coal contracts for the future period so that the beneficiation effect will be maximised to achieve adequate reduction in Rs/kcal. In view of the above submissions, MSPGCL requested the Commission to approve the cost of washed coal, as claimed in True up for FY 2022-23 and FY 2023-24.

4.11.12 Based on the details submitted by MSPGCL, the Commission has observed that in some cases, the landed price of washed coal in Rs./kcal is higher than the price of raw coal, which is not in accordance with the repeated directions of the Commission. The Commission, while approving the utilisation of washed coal in its MYT Order dated 30 March, 2020 and MTR Order dated 31 March, 2023 has duly considered the technical reasons and other tangible/intangible benefits of utilising washed coal. However, the Commission in its Orders clearly directed MSPGCL to carry out the proper cost benefit analysis of coal beneficiation after receiving the tenders and before going ahead for placing the contracts for coal beneficiation. The Commission in its Orders also emphasised that MSPGCL should try to ensure that the effective landed price of washed coal at thermal station in terms of Rs./kcal is lower than the landed price of normal mined coal at thermal station in terms of Rs./kcal. Further, the Commission in its MTR Order dated 31 March, 2023 has clearly directed MSPGCL to carry out the proper cost benefit analysis of coal beneficiation for each year from FY 2022-23 onwards and submit the same in the true-up of the respective years.

4.11.13 Despite clear directions from the Commission, MSPGCL has failed to submit the proper cost benefit analysis of washed coal for FY 2022-23 and FY 2023-24 in its Petition. Subsequently, as part of replies to data gaps submitted on 10 February, 2025, MSPGCL has provided the detailed comparison of effective landed cost of washed coal and raw coal. In its submissions, MSPGCL submitted that the landed costs of washed coal are not yet finalised as the penalties in some of the coal washing contracts are yet to be finalised. The Commission expresses its displeasure with the MSPGCL's non-compliance with the Commission's clear directions. The Commission fails to understand when FY 2022-23 and FY 2023-24 are already over, why the penalty in coal washing coals are not yet finalised. **Therefore, the Commission directs MSPGCL to finalise the penalty amount in all the coal washing contracts for FY 2022-23 and FY 2023-24 and submit the following information within 6 months from the date of this Order**:

- Complete computations of Penalty amount for each washing contract
- Penalties levied in each washing contract
- Reasons for variation in Penalty levied and penalty computed as per provisions of

the Contract, if any

- Amount of penalty already considered in True up claimed in this Petition and additional Penalty amount to be passed on to consumers
- Comparison of Effective Price of Landed Cost of Washed coal in Rs./kcal with landed cost of raw coal in Rs./kcal.

4.11.14 The Commission at this stage has considered the landed cost of washed coal as submitted by MPSGCL for carrying out the true up for FY 2022-23 and FY 2023-24. **The Commission directs MSPGCL to pass on the penalty levied in coal washing contracts to MSEDCL through monthly Fuel Cost Adjustment.**

4.11.15 The Commission has considered the actual prices of secondary fuel oil and gas as submitted by MSPGCL. The summary of fuel prices considered by the Commission for FY 2022-23 and FY 2023-24 are given in Tables below:

Table 4.19: Fuel prices considered by the Commission for FY 2022-23

Station/Unit	Coal (Rs./MT)		Secondary Fuel Oil (Rs./kL)		Gas (Rs./'000 SCM)	
	Approved in MYT	Approved in final true-up	Approved in MYT	Approved in final true-up	Approved in MYT	Approved in final true-up
Bhusawal	5483.30	5396.82	57356.54	64673.71	-	-
Chandrapur	4779.94	4947.16	59796.29	60873.98	-	-
Khaperkheda	4484.70	4232.37	64212.52	59935.83	-	-
Koradi	4326.18	3608.94	58886.85	62154.91	-	-
Nashik	5527.97	5486.93	61105.28	58844.84	-	-
Uran					23165.40	22942.14
Paras Units 3&4	4210.32	4439.33	63070.59	61095.87	-	-
Parli Units 6&7	5608.17	5877.66	55785.51	56145.96	-	-
Khaperkheda Unit 5	5632.99	4819.44	50240.56	61029.67	-	-
Bhusawal Units 4&5	5834.65	5668.52	53355.50	58297.13	-	-
Koradi Units 8-10	5130.86	4909.38	62624.41	59967.53	-	-
Chandrapur Units 8&9	5321.57	5283.87	56645.23	59939.00	-	-
Parli Unit 8	5526.29	5868.52	53763.33	56299.54	-	-

Table 4.20: Fuel prices considered by the Commission for FY 2023-24

Station/Unit	Coal (Rs./MT)		Secondary Fuel Oil (Rs./kL)		Gas (Rs./'000 SCM)	
	Approved in MYT	Approved in final true-up	Approved in MYT	Approved in final true-up	Approved in MYT	Approved in final true-up
Bhusawal	5574.87	4610.46	62704.26	59639.71	-	-

Station/Unit	Coal (Rs./MT)		Secondary Fuel Oil (Rs./kL)		Gas (Rs./'000 SCM)	
	Approved in MYT	Approved in final true-up	Approved in MYT	Approved in final true-up	Approved in MYT	Approved in final true-up
Chandrapur	4549.79	4695.07	65185.75	59959.58	-	-
Khaperkheda	4812.59	3799.07	67086.84	54989.41	-	-
Koradi	4459.05	3122.41	65031.02	55428.10	-	-
Nashik	5285.48	4782.46	66982.34	59764.04	-	-
Uran					28374.69	21691.08
Paras Units 3&4	4342.09	4621.58	69152.71	56104.97	-	-
Parli Units 6&7	5925.90	6563.57	62694.70	69677.38	-	-
Khaperkheda Unit 5	5486.31	3882.42	56002.84	59196.88	-	-
Bhusawal Units 4&5	5668.28	4945.32	64715.56	54948.71	-	-
Koradi Units 8-10	5205.50	3791.79	65020.46	58118.33	-	-
Chandrapur Units 8&9	4819.19	4302.13	65020.46	58283.07	-	-
Parli Unit 8	5721.43	6612.06	63083.94	70825.33	-	-

4.12 ENERGY CHARGES

MSPGCL's Submission

4.12.1 As against the approved energy charges of Rs. 22108.99 Crore and Rs. 24487.36 Crore, MSPGCL has claimed the actual energy charges of Rs. 22698.40 Crore and Rs. 20856.47 Crore as per the audited accounts for FY 2022-23 and FY 2023-24, respectively. Further, MSPGCL has computed revised normative energy charges of Rs. 19113.91 Crore and Rs. 19329.63 Crore considering the actual gross generation and normative performance parameters for FY 2022-23 and FY 2023-24, respectively, as shown in the Tables below:

Table 4.21: Energy charges for FY 2022-23 as submitted by MSPGCL (Rs. Crore)

Station/Unit	Approved in MTR Order	Revised Normative	Actual
Bhusawal	469.50	307.92	432.94
Chandrapur	4353.68	3319.93	3858.28
Khaperkheda	1834.78	1465.53	1779.76
Koradi	397.45	364.02	457.50
Nashik	1625.81	1114.64	1417.05
Uran	884.07	884.59	945.24
Paras Units 3&4	956.16	965.13	1087.78
Parli Units 6&7	1405.43	1209.72	1309.85
Khaperkheda Unit 5	1283.02	1102.94	1330.56
Bhusawal Units 4&5	2291.47	2244.38	2861.44
Koradi Units 8-10	3602.93	3281.88	4097.44

Station/Unit	Approved in MTR Order	Revised Normative	Actual
Chandrapur Units 8&9	2419.61	2360.29	2576.93
Parli Unit 8	585.07	492.96	543.44
Total	**22108.99**	**19113.91**	**22698.40**

Table 4.22: Energy charges for FY 2023-24 as submitted by MSPGCL (Rs. Crore)

Station/Unit	Approved in MTR Order	Revised Normative	Actual
Bhusawal	577.39	415.52	463.93
Chandrapur	4334.62	3447.65	3689.08
Khaperkheda	2087.02	1462.28	1639.10
Koradi	393.11	340.54	384.25
Nashik	1836.28	1089.59	1219.44
Uran	1473.47	907.31	937.81
Paras Units 3&4	1161.36	1195.48	1260.87
Parli Units 6&7	1727.00	1373.14	1366.00
Khaperkheda Unit 5	1406.03	1021.62	1121.45
Bhusawal Units 4&5	2603.58	2353.21	2580.33
Koradi Units 8-10	3613.72	2883.85	3280.96
Chandrapur Units 8&9	2417.04	2201.72	2287.26
Parli Unit 8	856.74	637.72	625.99
Total	**24487.36**	**19329.63**	**20856.47**

4.12.2 The variance in the approved and actual fuel expenses is on account of variation in gross generation, price, GCV of fuels and performance parameters.

4.12.3 MSPGCL requested the Commission to allow fuel expenses on actual basis. The variation between actual and "to be approved cost" against fuel expenses has to be shared with the consumers in accordance with the MYT Regulations, 2019.

Commission's Analysis and Ruling

4.12.4 The Commission has computed the energy charges for each station considering the approved generation, performance parameters, GCV of fuels and landed price of fuels, as shown in the Tables below:

Table 4.23: Energy charges for FY 2022-23 (Rs. Crore)

Station/Unit	Actual as claimed by MSPGCL	Normative as considered by MSPGCL	Normative approved by the Commission
Bhusawal	432.94	307.92	307.92
Chandrapur	3858.28	3319.93	3319.93
Khaperkheda	1779.76	1465.53	1465.53

Station/Unit	Actual as claimed by MSPGCL	Normative as considered by MSPGCL	Normative approved by the Commission
Koradi	457.50	364.02	364.02
Nashik	1417.05	1114.64	1114.64
Uran	945.24	884.59	884.59
Paras Units 3&4	1087.78	965.13	965.13
Parli Units 6&7	1309.85	1209.72	1209.72
Khaperkheda Unit 5	1330.56	1102.94	1102.94
Bhusawal Units 4&5	2861.44	2244.38	2244.38
Koradi Units 8-10	4097.44	3281.88	3281.88
Chandrapur Units 8&9	2576.93	2360.29	2360.29
Parli Unit 8	543.64	492.96	492.96
Total	**22698.40**	**19113.91**	**19113.91**

Table 4.24: Energy charges for FY 2023-24 (Rs. Crore)

Station/Unit	Actual as claimed by MSPGCL	Normative as considered by MSPGCL	Normative approved by the Commission
Bhusawal	463.93	415.52	415.52
Chandrapur	3689.08	3447.65	3447.65
Khaperkheda	1639.10	1462.28	1462.28
Koradi	384.25	340.54	340.54
Nashik	1219.44	1089.59	1089.59
Uran	937.81	907.31	907.31
Paras Units 3&4	1260.87	1195.48	1195.48
Parli Units 6&7	1366.00	1373.14	1373.14
Khaperkheda Unit 5	1121.45	1021.62	1021.62
Bhusawal Units 4&5	2580.33	2353.21	2353.21
Koradi Units 8-10	3280.96	2883.85	2883.85
Chandrapur Units 8&9	2287.26	2201.72	2201.72
Parli Unit 8	625.99	637.72	637.72
Total	**20856.47**	**19329.63**	**19329.63**

4.12.5 As the normative Energy Charges approved by the Commission at target norms of operation, viz., GSHR, SFOC and transit and handling loss and the norms of operation are controllable factors, the Commission has undertaken the sharing of gains and losses in energy charges on account of variation in norms of operation in accordance with the MYT Regulations, 2019.

4.12.6 The Commission asked MSPGCL to submit the station-wise details of compensation collected (Rs. 117.72 Crore for FY 2022-23 and Rs. 87.75 Crore for FY 2023-24) in line with the MERC (State Grid Code Regulations), 2020 and also to confirm whether the same has been considered as part of overall revenue claimed for true-up of respective years. MSPGCL submitted the station-wise compensation collected in line with the Grid Code Regulations, 2020 and confirmed that the same has not been considered in revenue claimed for FY 2022-23 and FY 2023-24.

4.12.7 The compensation as per Grid Code Regulations is provided to generating stations for degradation of SHR, AEC and SFOC due to part load operation and multiple start/stop of Units**.** The actual fuel costs as submitted by MSPGCL also includes the impact of degradation of SHR, AEC and SFOC due to part load operation and multiple start/stop of units. The Commission is of the view if the variation in entire actual fuel costs and normative fuel costs is considered for sharing of gains and losses, it will have double impact on consumers as MSPGCL has already collected some revenue on account of variation in performance parameters. Accordingly, to avoid such double impact on the consumers, the Commission has reduced the compensation received on account on deterioration of performance parameters from the actual fuel costs for the purpose of sharing of gains and losses on account of fuel costs. Hence, the station-wise actual fuel costs considered by the Commission for FY 2022-23 and FY 2023-24 for sharing purposes after deducting the compensation received is given in the Table below:

Table 4.25: Actual Fuel Cost excluding Compensation for FY 2022-23 and FY 2023-24 (Rs. Crore)

Station/Unit	FY 2022-23		FY 2023-24	
	Actual	Actual Excl. Compensation	Actual	Actual Excl. Compensation
Bhusawal	432.94	426.97	463.93	460.52
Chandrapur	3858.28	3849.80	3689.08	3682.08
Khaperkheda	1779.76	1769.63	1639.10	1636.66
Koradi	457.50	455.45	384.25	382.99
Nashik	1417.05	1411.70	1219.44	1213.45
Uran	945.24	945.24	937.81	937.81
Paras Units 3&4	1087.78	1085.61	1260.87	1260.60
Parli Units 6&7	1309.85	1283.49	1366.00	1344.50
Khaperkheda Unit 5	1330.56	1314.67	1121.45	1118.92
Bhusawal Units 4&5	2861.44	2838.51	2580.33	2553.51
Koradi Units 8-10	4097.44	4092.19	3280.96	3270.16
Chandrapur Units 8&9	2576.93	2567.08	2287.26	2285.42
Parli Unit 8	543.64	540.37	625.99	622.09
Total	**22698.40**	**22580.68**	**20856.47**	**20768.72**

4.13 ADDITIONAL CAPITALISATION

MSPGCL's Submission

4.13.1 MSPGCL submitted that the total additional capitalization for FY 2022-23 and FY 2023-24 amounts to Rs. 854.39 Crore and Rs. 611.09 Crore against the approved capitalization of Rs. 1118.70 Crore and Rs. 1569.16 Crore, respectively. This includes Rs. 19.51 Crore for undischarged liabilities related to Koradi Units 8-10 and Rs. 13.43 Crore for Chandrapur Units 8-9 for FY 2022-23 and Rs. 2.07 Crore for Chandrapur Units 8-9 for FY 2023-24.

4.13.2 MSPGCL has provided the following justification for the variation between the actual capitalization and the capitalization approved for FY 2022-23:

(a) During FY 2022-23, MSPGCL planned Annual/Capital Overhauls for 14 thermal units with a total capacity of 5,370 MW. However, to meet Maharashtra's increasing power demand, overhauls for 5 thermal units (1,630 MW) were deferred at the request of MSEDCL. This deferral, which accounted for 30% of the planned overhauls, delayed the execution and implementation of approved DPR schemes that were scheduled during these overhauls.

(b) Additionally, some capital expenditure (capex) schemes faced procurement delays due to issues such as poor vendor response or single bidding, requiring tenders to be re-floated multiple times.

(c) The delivery period for certain capex items, ranging from 6 to 9 months from the dispatch of purchase orders, also contributed to delays.

(d) Some materials were received towards the end of FY 2022-23, resulting in spillover of capitalization to FY 2023-24. Delays in the production and delivery of critical components further impacted timely procurement.

(e) Moreover, cost savings achieved through favourable procurement terms and efficient project execution led to final capitalization being lower than initially anticipated.

4.13.3 MSPGCL has provided the following justifications for the variation between the actual capitalization and the capitalization approved for FY 2023-24:

(a) During FY 2023-24, MSPGCL planned Annual/Capital Overhauls for 12 thermal units with a total capacity of 4,256 MW. However, to meet Maharashtra's increasing power demand, overhauls for 6 thermal units (2,460 MW) were deferred at the request of MSEDCL. This deferral, which accounted for 58% of the planned overhauls, delayed the execution and implementation of approved DPR schemes that were scheduled during these overhauls.

(b) Some of the anticipated capital expenditures occurred later in the fiscal period, and therefore, the total capitalization for the period is lower than expected. The remaining costs may be recognized in the next reporting period.

4.13.4 MSPGCL has further submitted that the progress of capitalization has been close to the approved limits for Khaperkheda Units 1-4, Paras Units 3-4, and Parli Units 6-7. For Khaperkheda Unit 5, assets related to the pipe conveyor system for coal transportation were capitalized at Rs. 124.51 Crore during FY 2022-23. Overall, the actual capitalization for FY 2022-23 was lower than the amount approved by the Commission. MSPGCL has emphasized that implementing approved capital expenditure requires significant lead time for design preparation, bid process management, negotiations, outage planning, and addressing external factors such as the aftermath of COVID-19. These processes often take longer than anticipated, leading to spillover of schemes into subsequent years. MSPGCL is committed to ensuring that capitalization of schemes adheres to envisaged timelines in the future.

4.13.5 As regards the Additional Capitalisation for FY 2023-24, MSPGCL submitted that during the execution of the capital schemes, there were instances of cost savings due to more favourable procurement terms or more efficient project execution. These savings resulted in the final capitalization being lower than initially anticipated.

4.13.6 In its MTR Petition, MSPGCL had submitted additional capitalization of Rs. 1,169.38 Crore for the provisional true-up of FY 2022-23 and Rs. 2,461.39 Crore for the revised ARR for FY 2023-24. The Commission in its MTR Order approved capitalization for FY 2022-23 and FY 2023-24, adopting the following approach:

- For DPR schemes (above Rs. 10 Crore each), the entire capitalization was approved for schemes where in-principle approval had been granted. In cases of cost overruns without justification, the capital cost was capped at the approved amount. However, for schemes executed through competitive bidding, cost overruns were allowed.
- For non-DPR schemes (below Rs. 10 Crore each), capitalization was limited to 20% of the cost of capitalized DPR schemes.

4.13.7 MSPGCL had provided detailed reasons for cost overruns beyond the in-principle approval for specific schemes. The capitalization for non-DPR schemes has remained within the 20% limit for most stations, except for SHP and Koyna hydro stations. MSPGCL has explained that, as per Regulation 74.2 of the MERC MYT Regulations, 2019, only projects exceeding Rs. 10 Crore qualify as capex schemes. However, for hydro projects, the capex value per scheme typically remains below Rs. 10 Crore, resulting in their classification as non-DPR schemes. This has led to a higher proportion of non-DPR capex for hydro stations compared to the 20% limit stipulated by the Commission for FY 2022-23.

4.13.8 As regards the additional capitalisation for FY 2023-24, MSPGCL has provided detailed reasons for cost overruns beyond the in-principle approval for specific schemes. The capitalization for non-DPR schemes has remained within the 20% limit for most stations, except for Bhusawal Units 4 & 5.

4.13.9 In light of this, MSPGCL has requested the Commission to allow actual capitalization for hydro stations without restricting non-DPR schemes to the 20% ceiling. Additionally, for Chandrapur Units 3-7 and Khaperkheda Units 1-4, where non-DPR capitalization marginally exceeds the 20% limit, MSPGCL has requested the Commission to approve the marginal increase for FY 2022-23.

4.13.10 MSPGCL submitted the station/unit wise details of approved and actual capitalization during the year as shown in the Tables below:

Table 4.26: Additional capitalisation submitted by MSPGCL for FY 2022-23 (Rs. Crore)

Station/Unit	Approved in MTR	Actual claimed
Bhusawal	-	0.26
Chandrapur	199.17	117.32
Khaperkheda	45.77	43.16
Koradi	48.27	41.85
Nashik	6.19	6.92
Uran	34.55	17.40
Paras Units 3&4	82.56	78.58
Parli Units 6&7	37.57	34.32
Khaperkheda Unit 5	22.10	152.08
Bhusawal Units 4&5	18.87	13.92
Koradi Units 8-10	306.92	113.20
Chandrapur Units 8&9	158.42	94.96
Parli Unit 8	103.66	12.81
SHP	12.34	13.16
Bhira	1.91	-
Koyna	37.95	10.50
Tillari	2.45	2.00
Total	**1118.70**	**752.46**

Table 4.27: Additional capitalisation submitted by MSPGCL for FY 2023-24 (Rs. Crore)

Station/Unit	Approved in MTR	Actual claimed
Bhusawal	5.54	0.41
Chandrapur	149.45	110.79
Khaperkheda	421.13	112.08
Koradi	88.81	2.05
Nashik	29.76	5.11
Uran	114.05	21.86
Paras Units 3&4	44.95	26.73
Parli Units 6&7	25.80	7.86

Station/Unit	Approved in MTR	Actual claimed
Khaperkheda Unit 5	269.41	91.41
Bhusawal Units 4&5	7.89	16.58
Koradi Units 8-10	41.59	31.90
Chandrapur Units 8&9	301.75	87.45
Parli Unit 8	7.57	78.83
SHP	61.46	7.50
Bhira		0.18
Koyna		9.53
Tillari		0.81
Total	**1569.16**	**611.09**

Commission's Analysis and Ruling

4.13.11 In accordance with Regulations 22.5 and 23.5 of the MYT Regulations, 2019, MSPGCL was asked to make detailed submission on each of the following points:

- Least cost approach adopted while undertaking the DPR schemes.
- Mechanism put in place for monitoring the physical progress of projects with respect to their original schedule.
- Optimum drawal of loans in accordance with the physical progress of the capital expenditure schemes, and efficient utilisation of such loans.
- Detailed justification for the schemes that have not commenced during FY 2022-23 but approved for the year.

4.13.12 In reply, MSPGCL submitted that the implementation of schemes is undertaken through vendors/contractors/agencies selected through competitive bidding process so as to ensure that the prices are discovered in a transparent and objective manner. Further, for proprietary items, Original Equipment Manufacturers (OEMs) become the preferred choice wherein detailed due-diligence is performed based on the latest order placed on the OEM for supply of such items. The internal approval process for the proposed appointment of the vendors further ensures that detailed prudence is undertaken towards cost competitiveness of the offer price. As per the Capex Regulation Guidelines, MSPGCL carries out studies on the existing system proposed in the schemes through renowned Government/ Private third-party agencies. These third-party agencies elaborate various least cost options and suggest/recommend the best suited least cost option for implementation of the scheme to enhance the system's Reliability, Availability and its service life.

4.13.13 MSPGCL submitted that in order to monitor the physical progress of the projects with respect to their original schedule, following mechanisms are followed:

- Video conferencing (VC) is held between the Chief Engineer Works and the

Deputy Chief Engineer and Head of Maintenance Planning Division (MPD) of individual power stations on monthly basis. In the VC, physical status of the schemes are discussed and constraints, if any, regarding its implementation are resolved.

- Monthly Capex implementation status is sent by every station, which includes the physical and the financial status of each and every scheme of various DPRs.
- For Civil related schemes, C.E. Civil-III is the nodal officer, who is responsible for monitoring the physical and financial status of civil related schemes and sending the consolidated detailed report to C.E Works on monthly basis.
- For the completed schemes, Station sends the work completion and scheme completion with all the capitalization details.

4.13.14 MSPGCL submitted that in order to monitor the financial progress of the projects with respect to their original schedule, following mechanisms are followed:

- Capex Budget is allocated to the respective station/executing authority for effective implementation of the approved scheme in the respective year.
- Monthly Budget Utilisation of various schemes is prepared by the Finance section of MSPGCL, which contains the consolidated expenditure status of various schemes of various power stations.
- In addition to above, VC is held between the Chief Engineer Works and the Deputy Chief Engineer and Head of MPD of individual power stations on monthly basis. In VC, financial status and progress of the schemes are discussed and constraints, if any, regarding its implementation are resolved.
- Monthly Capex implementation status is sent by every station, which includes the physical and the financial status of each and every scheme of various DPRs.
- For the completed schemes, Station sends the work completion and scheme completion with complete capitalization details.

4.13.15 MSPGCL submitted that the capital expenditure incurred by it is classified as DPR and Non-DPR schemes. The capital expenditure incurred under DPR schemes is initiated pursuant to approval of the schemes by the Commission. However, complexities arise during the actual implementation of approved capital expenditure schemes such as lead time required for finalisation of design specifications, tender documents and supply conditions, time extensions for changes requested by the bidders, time required for evaluation of bids and establishment of reasonability of prices quoted by the bidders, retendering in case of lower participation by the bidders or price unreasonability, if any, lead time for supply of items, actual implementation of schemes pursuant to supply of materials. Given the complex nature of the schemes, the implementation may require shutdown or have to be undertaken at the time of annual overhauls. Any delay in supply of equipment may defer the implementation to subsequent event of unit shutdown/forced outage. A combination of aforesaid factors therefore may lead to slippages in implementation of the schemes to the subsequent financial year. MSPGCL further submitted that the entire nation underwent lockdown since March 2020 on account of COVID-19 pandemic and accordingly, the schemes envisaged to be implemented during the years got deferred. MSPGCL submitted that it would be implementing the approved schemes in the ensuing years since the same are required to be implemented for reliable operations of the generating stations. The revised capitalisation proposed by MSPGCL for ensuing years takes into consideration such spill over impact as well.

4.13.16 The Commission sought the station-wise documentary evidence of all the assets put to use during FY 2022-23 and FY 2023-24. In reply, MSPGCL has submitted the work completion reports and final bills of the capitalised works during FY 2022-23 and FY 2023-24.

4.13.17 The Commission has examined the actual additional capitalisation claimed by MSPGCL as against the schemes accorded in-principle approval. The Commission's approach for approving the additional capitalisation in final true-up of FY 2022-23 and FY 2023-24 is as follows:

- <u>DPR schemes (above Rs. 10 Crore each)</u>: Entire capitalisation is approved for all DPR schemes capitalised in the year in respect of which in-principle approval has been accorded. In case of cost over-run without appropriate justification, the capital cost is capped at approved capital cost as per in-principle approval. However, in case of the schemes executed through competitive bidding, the cost overrun with respect to approved cost has been allowed.
- <u>Non-DPR schemes (less than Rs. 10 Crore each)</u>: The capitalisation of the non-DPR schemes has been considered up to 20% of the cost of the capitalised DPR schemes and based on the prudence check of such expenses.

4.13.18 The Commission, while approving the additional capitalisation during the truing up, has observed the following:

- The capital cost of the pipe conveyor system for Koradi, Khaperkheda and Chandrapur has been higher than the value approved by the Commission based on the DPR. MSPGCL vide its letter dated 15 February, 2025 has submitted the Report on Time and Cost Over Run of the scheme. The Commission observed that the project is still in work in progress and not yet completed. The actual cost and time over run can only be quantified after the completion of the scheme. Hence, the Commission at this stage has limited the capitalisation to the DPR approved capital cost. **The Commission directs MSPGCL to submit the complete details of actual cost with cost and time over run along with supporting documents after completion of the Scheme.**

- The FGD capitalisation proposed for most of the generating stations are higher than the value approved by the Commission based on the DPR. It is pertinent to note that most of the projects are still in work in progress and not yet completed. The actual cost and time over run can only be quantified after the completion of the scheme. The Commission at this stage has limited the capitalisation to the DPR approved capital cost. **The Commission directs MSPGCL to submit the complete details of actual cost with cost and time over run along with supporting documents after completion of the Scheme.**
- The capitalisation proposed towards rising of ash bund is observed to be higher than the value approved by the Commission based on the DPR. The Commission at this stage has limited the capitalisation to the DPR approved capital cost. **The Commission directs MSPGCL to submit the complete details of actual cost with cost and time over run along with supporting documents.**
- Accordingly, the additional capitalisation approved by the Commission in the final true-up of FY 2022-23 and FY 2023-24 is as shown in the Tables below:

Table 4.28: Additional capitalisation approved for FY 2022-23 (Rs. Crore)

Station/Unit	Approved in MTR	Actual claimed	Approved
Bhusawal	-	0.26	0.26
Chandrapur	199.17	117.32	117.32
Khaperkheda	45.77	43.16	43.15
Koradi	48.27	41.85	40.92
Nashik	6.19	6.92	3.95
Uran	34.55	17.40	15.54
Paras Units 3&4	82.56	78.58	77.35
Parli Units 6&7	37.57	34.32	34.32
Khaperkheda Unit 5	22.10	152.08	151.84
Bhusawal Units 4&5	18.87	13.92	13.92
Koradi Units 8-10	306.92	113.20	78.28
Chandrapur Units 8&9	158.42	94.96	81.54
Parli Unit 8	103.66	12.81	12.80
Hydro	54.65	25.67	25.82
Total	**1118.70**	**752.46**	**697.01**

Table 4.29: Additional capitalisation approved for FY 2023-24 (Rs. Crore)

Station/Unit	Approved in MYT	Actual claimed	Approved
Bhusawal	5.54	0.41	0.41
Chandrapur	149.45	110.79	110.79

Station/Unit	Approved in MYT	Actual claimed	Approved
Khaperkheda	421.13	112.08	109.60
Koradi	88.81	2.05	2.05
Nashik	29.76	5.11	3.98
Uran	114.05	21.86	21.30
Paras Units 3&4	44.95	26.73	26.73
Parli Units 6&7	25.80	7.86	7.86
Khaperkheda Unit 5	269.41	91.41	91.41
Bhusawal Units 4&5	7.89	16.58	16.43
Koradi Units 8-10	41.59	31.90	31.27
Chandrapur Units 8&9	301.75	87.45	85.39
Parli Unit 8	7.57	78.83	78.83
Hydro	61.46	18.01	18.01
Total	**1569.16**	**611.09**	**604.05**

4.14 MEANS OF FINANCE OF ADDITIONAL CAPITALISATION

MSPGCL's Submission

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

Commission's Analysis and Ruling

4.14.2 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.

4.15 ANNUAL FIXED CHARGES (AFC)

4.15.1 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)

4.16 OPERATIONS AND MAINTENANCE (O&M) EXPENSES

MSPGCL's Submission

4.16.1 MSPGCL submitted that the Commission, in its MTR Order (Case No. 227 of 2022) dated 31 March, 2023, approved O&M expenses for old stations for FY 2022-23 and FY 2023-24 based on historical averages, escalated as per Regulation 47.1 of the MYT Regulations, 2019. For new Units commissioned after 2005, the Commission approved O&M expenses based on the normative levels specified in Regulation 47.2 of the MYT Regulations, 2019. While determining the normative O&M expenses for the provisional true-up of FY 2022-23 and for FY 2023-24, the Commission considered an escalation rate of 3.94%, based on the actual escalation rate for FY 2021-22. MSPGCL has calculated revised normative O&M expenses using the actual escalation rate of 4.88% and 4.36%, derived from WPI/CPI indices for FY 2022-23 and FY 2023-24, respectively.

4.16.2 MSPGCL further submitted that Regulation 49.1(c) of the MYT Regulations, 2019, allows hydro generating stations to claim O&M expenses incurred on housing colonies, medical facilities, and related expenses separately. These expenses are excluded from the normative O&M expenses and are subject to a prudence check. MSPGCL has provided a summary of O&M expenses related to housing colonies and other facilities for hydro stations for FY 2022-23 and FY 2023-24, which are claimed under the head of other expenses. The revised normative O&M expenses, including water charges and other charges, have been compared with the actual expenses for FY 2022-23 and FY 2023-24.

4.16.3 MSPGCL has explained the variation in O&M expenses as follows:

- Revised normative expenses for FY 2022-23 and FY 2023-24 have been calculated using the revised escalation rate as per Regulation 47.1(c) of the MYT Regulations, 2019.
- The escalation factor has been updated based on CPI and WPI indices for FY 2022-23 to 4.88% and for FY 2023-24 to 4.36%.
- The Commission approved normative O&M expenses based on historical averages, escalated as per the MYT Regulations, 2019. The impact of pay revision for FY 2022-23 and FY 2023-24 was approved separately, based on the actual pay revision amount for FY 2021-22, escalated using the WPI/CPI indices for FY 2021-22. MSPGCL has included the impact of pay revision in the actual O&M expenses for FY 2022-23 and FY 2023-24.
- MSPGCL had announced a pay revision for its employees through Circulars no. 546, 548, and 549 dated 09 August, 2024. As per these circulars, the pay revision is effective from 01 April, 2023. Accordingly, a provision for the pay revision has been recorded in the books of accounts for FY 2023-24. In light of this, MSPGCL requested the Commission to approve the pay revision amount of Rs. 289.62 Crore for FY 2023-24 (for old and new stations), without subjecting it to the sharing of gains or losses. The revised salary structure has been implemented from August 2024

for regular monthly payments and the arrears for the period April 2023-July 2024 will be disbursed during FY 2024-25. Therefore, MSPGCL requested the Commission to approve the pay revision impact as per the provisions recorded in the books of accounts and subsequently allow for the adjustment of the differential amount based on actual disbursements.

- For Koradi Unit 6, the Commission approved normative O&M expenses in the MTR Order based on the operation of two Units (Units 6 and 7). However, since Unit 7 has been retired, MSPGCL has considered the normative O&M expenses for Koradi Unit 6 as two-thirds of the amount approved for FY 2021-22, accounting for common auxiliaries that remain operational.

4.16.4 MSPGCL submitted detailed reasons for claiming O&M expenses at two-thirds of the combined O&M expenses for Units 6 and 7. Under Stage III of the Koradi Thermal Power Station, Units 5, 6, and 7 shared a combined Balance of Plant (BoP) auxiliary system. Following the retirement of Units 5 and 7, the common systems had to remain operational to support Unit 6, resulting in O&M costs exceeding half of the expenses incurred when two Units were operational. The common systems include oil handling plants, ash slurry pump houses, clear water pump houses, compressor houses, workshops, and other critical infrastructure. The sanctioned staff strength was reduced from 872 to 572 after the decommissioning of Unit 7, with the current working staff at 476. Despite the reduction, manpower costs remain significant, accounting for 60-70% of total O&M expenses. Repairs and maintenance (R&M) and administrative and general (A&G) expenses also remain substantial due to the continued operation of shared systems. Therefore, MSPGCL has estimated the O&M costs for Koradi Unit 6 at two-thirds of the total O&M costs incurred when both Units were operational.

4.16.5 For new Units, MSPGCL submitted that O&M expenses have been calculated as per the MYT Regulations, 2019 on a Rs. Lakh/MW basis. The impact of pay revision approved for FY 2021-22 has been escalated at 4.88% and 4.36% (based on WPI/CPI indices for FY 2022-23 and FY 2023-24) and included in the O&M expenses for FY 2022-23 and FY 2023-24, respectively. MSPGCL submitted that the normative O&M expenses approved by the Commission for new stations are significantly lower than those allowed under CERC Regulations. This has resulted in substantial disallowances in actual O&M expenses, creating financial challenges for MSPGCL. The lower norms have made it difficult for MSPGCL to allocate sufficient funds for R&M, leading to extended maintenance periods and reduced plant availability. This, in turn, has resulted in under-recovery of fixed costs, adversely affecting MSPGCL's financial position.

4.16.6 MSPGCL submitted that the stringent O&M norms have led to a financial loss of Rs. 479.19 crore for FY 2022-23 and Rs. 575.26 Crore for FY 2023-24. MSPGCL has requested the Commission to relax the O&M norms for new generating stations and align them with CERC norms to ensure reasonable cost recovery as per Section 61 of the Electricity Act, 2003. MSPGCL also highlighted that the O&M norms for Koradi Units 8-10, specified under the MYT Regulations, 2019, are significantly lower than the CERC norms. The CERC norm for 600 MW Units for FY 2022-23 is Rs. 22.47 Lakh/MW, while the actual O&M expenses for Koradi Units 8-10 are in line with this norm. MSPGCL requested the Commission to approve normative O&M expenses for Koradi Units 8-10 in line with the CERC norms and apply these norms retrospectively for FY 2022-23 and FY 2023-24. The incremental O&M expenses for these years, based on CERC norms, have been provided for the Commission's consideration, as shown in the Tables below

Table 4.30: O&M expenses for FY 2022-23 as claimed by MSPGCL (Rs. Crore)

Particulars	Approved in MTR	Actual	Normative claimed
O&M expenses	2918.61	3690.44	3204.21
Pay revision	200.98	-	-
Water charges	288.61	322.72	322.72
Other charges	278.17	295.06	295.06
Total	**3686.38**	**4308.21**	**3821.98**

Table 4.31: O&M expenses for FY 2023-24 as claimed by MSPGCL (Rs. Crore)

Particulars	Approved in MTR	Actual	Normative claimed
O&M expenses	3029.65	4241.25	3333.59
Pay revision	208.90	289.62	289.62
Water charges	288.61	454.03	454.03
Other charges	278.17	292.68	292.68
Total	**3805.33**	**5277.57**	**4369.92**

4.16.7 MSPGCL further submitted that, under Regulation 47.1(g), IT-related expenses may be claimed over and above the normative O&M expenses. MSPGCL has incurred IT expenses of Rs. 21.45 Crore for FY 2022-23 and Rs. 28.89 Crore for FY 2023-24, which are currently recorded under A&G expenses in Head Office (H.O.) expenses and allocated to stations.

Table 4.32:IT Expenses as claimed by MSPGCL (Rs. Crore)

Particulars	FY 2022-23	FY 2023-24
IT expense	21.45	28.89

4.16.8 MSPGCL requested the Commission to allow these IT expenses separately, in addition to the normative O&M expenses, while approving the O&M expenses for FY 2022-23 and FY 2023-24 in the True-Up.

Commission's Analysis and Ruling

4.16.9 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."

4.16.10 The normative O&M expenses computed by MSPGCL for old stations is in line with the above provision.

4.16.11 Regulation 47.2 of the MYT Regulations, 2019 specify the normative O&M expenses for new Units depending on Unit size.

4.16.12 Further, the 2nd and 3rd proviso to Regulation 47.1(c) of the MYT Regulations, 2019 specify 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."

4.16.13 In accordance with the above, the Commission has computed the escalation factor of 4.88% for FY 2022-23 and 4.36% for FY 2023-24.

4.16.14 For old stations, the revised normative O&M expenses for FY 2022-23 and FY 2023-24 have been arrived at by escalating the Base Year expenses including the impact of pay revision as approved by the Commission for FY 2021-22 by the escalation factor of 4.88% for FY 2022-23 and again at 4.36% for FY 2023-24. For new Units, the Commission has considered the normative O&M expenses as approved in the MTR Order plus, the impact of pay revision for the year. As regards the proposal of MSPGCL to consider the O&M norms as per CERC Regulations for FY 2022-23 and FY 2023-24, the Commission is of the view that the normative O&M Expenses have to be allowed in line with the MYT Regulations, 2019 and any retrospective revision of the O&M Expenses cannot be considered while carrying out the true up.

4.16.15 For FY 2023-24, the Commission has approved the impact of pay revision as claimed by MSPGCL after carrying out the prudence check of the same with the audited Accounts for FY 2023-24.

4.16.16 As regards the normative O&M Expenses for Koradi Unit 6, the Commission is of the view that 60% of the O&M Expenses can be considered since some of the common facilities are still to be maintained in spite of the decommissioning of Unit 7.

4.16.17 MSPGCL has claimed the actual water charges of Rs. 322.72 Crore and Rs. 454.03 Crore for FY 2022-23 and FY 2023-24, respectively. In reply to a query in this regard, MSPGCL submitted the copies of invoices and the reconciliation with the Audited Accounts for FY 2022-23 and FY 2023-24. The Commission has considered the actual water charges as claimed by MSPGCL.

4.16.18 The actual other charges claimed by MSPGCL include the expenses towards the coal handling charges. The Commission has considered the actual other charges as claimed by MSPGCL after considering the reconciliation submitted by MSPGCL with its Audited Accounts for FY 2022-23 and FY 2023-24.

4.16.19 The revised normative O&M expenses approved by the Commission for FY 2022-23 and FY 2023-24 are as shown in the Tables below:

Table 4.33: Normative O&M expenses for FY 2022-23 approved by the Commission (Rs. Crore)

Station/Unit	Normative O&M expenses	Water charges	Other charges	Total O&M expenses
Bhusawal	105.25	13.85	5.37	**124.47**
Chandrapur	632.74	16.41	56.68	**705.83**
Khaperkheda	297.61	85.99	28.29	**411.90**
Koradi	114.01	35.58	13.80	**163.38**
Nashik	294.18	29.09	27.74	**351.01**
Uran	98.82	1.07	0.07	**99.96**
Paras Units 3&4	159.88	6.55	16.16	**182.58**
Parli Units 6&7	162.12	15.28	12.39	**189.79**

Station/Unit	Normative O&M expenses	Water charges	Other charges	Total O&M expenses
Khaperkheda Unit 5	105.75	5.60	16.84	**128.19**
Bhusawal Units 4&5	214.70	9.19	35.12	**259.01**
Koradi Units 8-10	340.14	86.95	42.31	**469.40**
Chandrapur Units 8&9	211.06	8.42	24.59	**244.08**
Parli Unit 8	80.10	8.73	14.27	**103.11**
Hydro	244.04	0.00	1.41	**245.45**
Total	**3060.39**	**322.72**	**295.06**	**3678.17**

Table 4.34: Normative O&M expenses for FY 2023-24 approved by the Commission (Rs. Crore)

Station/Unit	Normative O&M expenses	Pay Revision	Water charges	Other charges	Total O&M expenses
Bhusawal	109.83	8.19	16.34	7.41	**141.76**
Chandrapur	660.30	62.57	26.89	44.95	**794.72**
Khaperkheda	310.57	25.88	62.24	30.27	**428.97**
Koradi	118.97	14.14	41.88	15.41	**190.40**
Nashik	306.99	19.97	46.17	29.41	**402.54**
Uran	103.13	8.82	1.46	0.05	**113.46**
Paras Units 3&4	165.72	15.84	12.50	15.39	**209.45**
Parli Units 6&7	168.06	16.57	37.99	17.09	**239.72**
Khaperkheda Unit 5	109.62	8.77	43.12	20.41	**181.93**
Bhusawal Units 4&5	222.59	22.89	20.11	39.81	**305.39**
Koradi Units 8-10	352.56	23.95	99.06	35.19	**510.76**
Chandrapur Units 8&9	218.79	13.10	26.24	21.40	**279.53**
Parli Unit 8	83.03	8.29	20.03	15.16	**126.51**
Hydro	254.67	40.64	0.00	0.71	**296.02**
Total	**3184.85**	**289.62**	**454.03**	**292.68**	**4221.18**

4.16.20 MSPGCL has claimed the actual O&M expenses of Rs. 4308.21 Crore for FY 2022-23 and Rs. 5280.22 Crore for FY 2023-24. In addition, MSPGCL has claimed additional IT Expenses of Rs. 21.45 Crore for FY 2022-23 and Rs. 28.84 Crore for FY 2023-24 apart from the O&M Expenses claimed as per the MYT Regulations, 2019. The relevant provisions as per Regulation 47 (1) (g) of the MYT Regulations, 2019 is as below:

"g) A Generating Company may undertake Opex schemes for system automation, new technology and IT implementation, etc., and, such expenses may be allowed over and above normative O&M Expenses, subject to prudence check by the Commission:

Provided that the Generating Company shall submit detailed justification, cost benefit analysis of such schemes as against capex schemes, and savings in O&M expenses, if *any."*

4.16.21 The Commission directed MSPGCL to submit the details of the IT Expenses proposed as per the above Regulations. MSPGCL in response submitted the details of the IT related expenses incurred for FY 2022-23 and FY 2023-24 along with the life cycle cost analysis.

4.16.22 From the above, it is observed that MSPGCL has not provided any proper justification for incurring such expenses, cost benefit analysis and savings in O&M Expenses after such implementation. Further, the Commission has observed that the actual O&M Expenses are more than the normative O&M Expenses approved by the Commission. Hence, the Commission has not allowed any specific IT Expenses separately under Opex, as claimed by MSPGCL.

4.16.23 The Commission has considered the actual O&M expenses of Rs. 4329.66 Crore (including Rs. 21.45 Crore under IT Expenses) for FY 2022-23 and Rs. 5309.12 Crore (including Rs. 28.84 Crore under IT Expenses) for FY 2023-24 for the purpose of computing of sharing of loss in O&M expenses in accordance with the MYT Regulations, 2019.

4.17 DEPRECIATION

MSPGCL's Submission

4.17.1 MSPGCL has considered the closing GFA for FY 2021-22 as the opening GFA for FY 2022-23 and the closing GFA for FY 2022-23 as the opening GFA for FY 2023-24. Considering the same as the opening GFA and the actual additional capitalisation, the depreciation has been worked out as per the depreciation rates specified in the MYT Regulations, 2019.

4.17.2 MSPGCL further submitted that it has apportioned the actual Head Office (HO) depreciation based on the operating capacity during the year.

Table 4.35: Depreciation for FY 2022-23 and FY 2023-24 as submitted by MSPGCL (Rs. Crore)

Station/Unit	FY 2022-23		FY 2023-24	
	Approved in MTR	Claimed	Approved in MTR	Claimed
Bhusawal	9.21	9.16	19.24	5.33
Chandrapur	89.11	78.28	107.43	91.94
Khaperkheda	25.93	24.33	57.80	32.89
Koradi	28.02	145.05	36.59	12.97
Nashik	20.77	20.22	33.88	7.12
Uran	15.56	4.91	66.86	6.89

Station/Unit	FY 2022-23		FY 2023-24	
	Approved in MTR	Claimed	Approved in MTR	Claimed
Paras Units 3 & 4	88.62	85.44	78.32	75.35
Parli Units 6 & 7	80.42	78.16	78.35	74.63
Khaperkheda Unit 5	178.32	184.22	185.98	190.50
Bhusawal Units 4 & 5	344.63	343.88	345.27	344.77
Koradi Units 8, 9 & 10	697.51	692.83	706.63	696.82
Chandrapur Units 8 & 9	340.45	335.57	352.67	340.34
Parli Unit 8	98.23	95.08	101.15	97.09
Hydro	11.71	10.58	14.73	8.83
Total	**2028.50**	**2107.69**	**2184.90**	**1985.48**

Commission's Analysis and Ruling

4.17.3 The Commission has computed the depreciation for FY 2022-23 and FY 2023-24 in accordance with the MYT Regulations, 2019. The closing GFA and accumulated depreciation approved for FY 2021-22, including the impact due to LD and capital cost revision of certain generating stations have been considered as the opening GFA and accumulated depreciation for FY 2022-23 and the closing GFA and accumulated depreciation approved for FY 2022-23, including the impact due to LD and capital cost revision of certain generating stations, have been considered as the opening GFA and accumulated depreciation for FY 2023-24. If the accumulated depreciation for a particular asset class has reached 70% of the allowable depreciation, the remaining depreciable value has been spread over the remaining useful life of the station, as submitted by MSPGCL. Else, the depreciation on opening GFA and additional capitalisation has been computed at the depreciation rates specified in the Regulations. Further, the Commission observed that MSPGCL has not furnished the dates of commissioning of additional capitalisation for many of the works claimed. The Commission has computed the depreciation on opening GFA for full year and depreciation on additional capitalisation has been computed for half year. The Commission has considered HO depreciation as claimed by MSPGCL. The Depreciation approved by the Commission is shown in the Tables below:

Table 4.36: Depreciation for FY 2022-23 as approved by the Commission (Rs. Crore)

Station/Unit	Approved in MTR	Claimed	Approved
Bhusawal	9.21	9.16	9.00
Chandrapur	89.11	78.28	78.19
Khaperkheda	25.93	24.33	24.33
Koradi	28.02	145.05	26.76

Station/Unit	Approved in MTR	Claimed	Approved
Nashik	20.77	20.22	7.84
Uran	15.56	4.91	3.98
Paras Units 3 & 4	88.62	85.44	85.33
Parli Units 6 & 7	80.42	78.16	78.13
Khaperkheda Unit 5	178.32	184.22	184.21
Bhusawal Units 4 & 5	344.63	343.88	343.88
Koradi Units 8, 9 & 10	697.51	692.83	691.90
Chandrapur Units 8 & 9	340.45	335.57	335.22
Parli Unit 8	98.23	95.08	95.08
Hydro	11.71	10.58	15.29
Total	**2028.50**	**2107.69**	**1979.16**

Table 4.37: Depreciation for FY 2023-24 as approved by the Commission (Rs. Crore)

Station/Unit	Approved in MTR	Claimed	Approved
Bhusawal	19.24	5.33	5.30
Chandrapur	107.43	91.94	91.52
Khaperkheda	57.80	32.89	32.64
Koradi	36.59	12.97	26.81
Nashik	33.88	7.12	8.35
Uran	66.86	6.89	6.56
Paras Units 3 & 4	78.32	75.35	75.24
Parli Units 6 & 7	78.35	74.63	74.60
Khaperkheda Unit 5	185.98	190.50	190.49
Bhusawal Units 4 & 5	345.27	344.77	344.77
Koradi Units 8, 9 & 10	706.63	696.82	694.96
Chandrapur Units 8 & 9	352.67	340.34	339.60
Parli Unit 8	101.15	97.09	97.09
Hydro	14.73	8.83	21.40
Total	**2184.90**	**1985.48**	**2009.32**

4.17.4 The main reason for the variation between the depreciation 'as claimed' and 'as approved' is due to variation in assumption of the residual life of Koradi, Nashik and the Hydro stations as claimed by MSPGCL and as approved by the Commission in line with the approval in its MTR Order dated 31 March, 2023.

4.18 INTEREST ON LONG-TERM LOANS AND OTHER FINANCE CHARGES

MSPGCL's Submission

4.18.1 MSPGCL has considered the closing loan balances approved for FY 2021-22 as the opening loan balances for FY 2022-23 and the closing loan balances for FY 2022-23 as the opening loan balances for FY 2023-24. Further, the additional capitalization has been considered to be funded in the normative debt-equity ratio of 70:30. The allowable depreciation has been considered as the repayment for the year. Apart from the above, the opening loan balances include the incremental loan amount towards settlement of LD/UDL in case of new Units as explained earlier. MSPGCL considered the weighted average interest for FY 2022-23 and FY 2023-24 in accordance with Regulation 30.6 of the MYT Regulations, 2019.

4.18.2 MSPGCL has claimed the Finance Charges comprising of Guarantee Fee payable to GoM, Service Fees, and other bank charges such as bank remittance charges, bank commission, stamp duty towards working capital limit enhancement, etc., on actuals.

4.18.3 In addition to the above, MSPGCL has also claimed Interest on Loan against HO assets of Rs. 0.43 Crore and Rs. 0.48 Crore for FY 2022-23 and FY 2023-24, respectively.

4.18.4 MSPGCL has submitted the summary of interest and finance charges claimed for the year as shown in the Table below:

Table 4.38: Interest and finance charges submitted by MSPGCL for FY 2022-23 (Rs. Crore)

Station/Unit	Approved in MYT			Claimed			
	Interest expenses	Finance charges	Total	Interest expenses	Interest HO*	Finance charges	Total
Bhusawal	0.00	0.29	**0.29**	0.00	0.00	0.46	**0.46**
Chandrapur	59.59	1.31	**60.90**	59.40	0.02	4.24	**63.65**
Khaperkheda	5.30	0.57	**5.87**	5.22	0.00	1.85	**7.07**
Koradi	18.60	0.29	**18.89**	25.01	0.01	0.46	**25.48**
Nashik	3.24	0.99	**4.23**	3.26	0.00	1.63	**4.89**
Uran	9.35	0.99	**10.34**	8.61	0.00	1.48	**10.09**
Paras Units 3&4	29.03	0.78	**29.81**	29.33	0.01	1.20	**30.54**
Parli Units 6&7	12.86	0.63	**13.49**	13.33	0.00	1.10	**14.44**
Khaperkheda Unit 5	62.78	0.75	**63.53**	70.80	0.02	2.00	**72.83**
Bhusawal Units 4&5	197.17	0.78	**197.95**	194.23	0.06	1.96	**196.25**
Koradi Units 8-10	611.07	3.32	**614.38**	551.84	0.18	5.77	**557.79**
Chandrapur Units 8&9	325.19	1.57	**326.76**	289.89	0.09	4.83	**294.81**
Parli Unit 8	104.10	0.43	**104.53**	99.68	0.03	0.64	**100.36**
Hydro	1.80	0.02	**1.81**	0.96	0.00	0.01	**0.97**
Total	**1440.07**	**12.70**	**1452.77**	**1351.55**	**0.43**	**27.67**	**1379.65**

**** Not claimed in the main Petition. However, considered as a part of the True-up***

Table 4.39: Interest and finance charges submitted by MSPGCL for FY 2023-24 (Rs. Crore)

Station/Unit	Approved in MYT			Claimed			
	Interest expenses	Finance charges	Total	Interest expenses	Interest HO*	Finance charges	Total
Bhusawal	0.00	0.29	**0.29**	0.00	0.00	0.41	**0.41**
Chandrapur	62.29	1.31	**63.60**	55.54	0.02	3.78	**59.33**
Khaperkheda	18.08	0.57	**18.65**	7.71	0.00	1.65	**9.36**
Koradi	19.54	0.29	**19.83**	16.94	0.01	0.41	**17.36**
Nashik	1.76	0.99	**2.74**	2.26	0.00	2.54	**4.80**
Uran	10.68	0.99	**11.67**	9.41	0.00	2.06	**11.48**
Paras Units 3&4	25.50	0.78	**26.28**	24.87	0.01	1.21	**26.09**
Parli Units 6&7	7.80	0.63	**8.43**	7.49	0.00	0.98	**8.48**
Khaperkheda Unit 5	56.51	0.75	**57.25**	69.71	0.03	3.37	**73.10**
Bhusawal Units 4&5	162.62	0.78	**163.40**	160.41	0.06	2.98	**163.46**
Koradi Units 8-10	554.07	3.32	**557.39**	504.33	0.20	4.14	**508.66**
Chandrapur Units 8&9	306.77	1.57	**308.34**	271.76	0.11	4.20	**276.07**
Parli Unit 8	97.75	0.43	**98.17**	88.20	0.03	0.55	**88.79**
Hydro	5.35	0.02	**5.37**	1.53	0.00	0.02	**1.55**
Total	**1328.72**	**12.70**	**1341.42**	**1220.16**	**0.48**	**28.31**	**1248.94**

**** Not claimed in the main Petition. However, considered as a part of the True-up***

Commission's Analysis and Ruling

4.18.5 The Commission sought the supporting documents to substantiate the actual rate of interest on long-term loan claimed for each station. MSPGCL has submitted the loan sanction letters including reconciliation statement of interest charges.

4.18.6 The Commission has considered the approved closing loan balance for FY 2021-22 as the opening loan balance for FY 2022-23 and approved closing loan balance for FY 2022-23 as the opening loan balance for FY 2023-24. 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 has been applied to the average loan for the year for computing the interest expenses. In addition to the normative interest expenses, the Commission has considered the actual finance charges and Interest on HO Assets as claimed by MSPGCL in accordance with the provisions of the Regulations. The interest on long-term loan approved by the Commission is shown in the Tables below:

Table 4.40: Interest and finance charges for FY 2022-23 as approved by the Commission (Rs. Crore)

Station/Unit	Claimed				Allowable			
	Interest expenses	HO	Finance charges	Total	Interest expenses	HO	Finance charges	Total
Bhusawal	0.00	0.00	0.46	**0.46**	0.00	0.00	0.46	**0.46**
Chandrapur	59.40	0.02	4.24	**63.65**	59.38	0.02	4.24	**63.64**
Khaperkheda	5.22	0.00	1.85	**7.07**	5.22	0.00	1.85	**7.07**
Koradi	25.01	0.01	0.46	**25.48**	30.58	0.01	0.46	**31.05**
Nashik	3.26	0.00	1.63	**4.89**	3.79	0.00	1.63	**5.43**
Uran	8.61	0.00	1.48	**10.09**	8.59	0.00	1.48	**10.07**
Paras Units 3&4	29.33	0.01	1.20	**30.54**	29.29	0.01	1.20	**30.51**
Parli Units 6&7	13.33	0.00	1.10	**14.44**	13.33	0.00	1.10	**14.44**
Khaperkheda Unit 5	70.80	0.02	2.00	**72.83**	69.58	0.02	2.00	**71.61**
Bhusawal Units 4&5	194.23	0.06	1.96	**196.25**	194.88	0.06	1.96	**196.90**
Koradi Units 8-10	551.84	0.18	5.77	**557.79**	557.42	0.18	5.77	**563.36**
Chandrapur Units 8&9	289.89	0.09	4.83	**294.81**	289.47	0.09	4.83	**294.40**
Parli Unit 8	99.68	0.03	0.64	**100.36**	100.52	0.03	0.64	**101.19**
Hydro	0.96	0.00	0.01	**0.97**	0.67	0.00	0.01	**0.68**
Total	**1351.55**	**0.43**	**27.67**	**1379.65**	**136272**	**0.43**	**27.67**	**1390.82**

Table 4.41: Interest and finance charges for FY 2023-24 as approved by the Commission (Rs. Crore)

Station/Unit	Claimed				Allowable			
	Interest expenses	HO	Finance charges	Total	Interest expenses	HO	Finance charges	Total
Bhusawal	0.00	0.00	0.41	**0.41**	0.00	0.00	0.41	**0.41**
Chandrapur	55.54	0.02	3.78	**59.33**	55.53	0.02	3.78	**59.33**
Khaperkheda	7.71	0.00	1.65	**9.36**	7.63	0.00	1.65	**9.29**
Koradi	16.94	0.01	0.41	**17.36**	26.28	0.01	0.41	**26.70**
Nashik	2.26	0.00	2.54	**4.80**	3.21	0.00	2.54	**5.75**
Uran	9.41	0.00	2.06	**11.48**	9.37	0.00	2.06	**11.43**
Paras Units 3&4	24.87	0.01	1.21	**26.09**	24.81	0.01	1.21	**26.03**
Parli Units 6&7	7.49	0.00	0.98	**8.48**	7.50	0.00	0.98	**8.48**
Khaperkheda Unit 5	69.71	0.03	3.37	**73.10**	68.33	0.03	3.37	**71.73**
Bhusawal Units 4&5	160.41	0.06	2.98	**163.46**	160.15	0.06	2.98	**163.19**
Koradi Units 8-10	504.33	0.20	4.14	**508.66**	509.00	0.20	4.14	**513.34**
Chandrapur Units 8&9	271.76	0.11	4.20	**276.07**	270.88	0.11	4.20	**275.18**
Parli Unit 8	88.20	0.03	0.55	**88.79**	89.00	0.03	0.55	**89.58**
Hydro	1.53	0.00	0.02	**1.55**	0.40	0.00	0.02	**0.42**
Total	**1220.16**	**0.48**	**28.31**	**1248.94**	**1232.08**	**0.48**	**28.31**	**1260.86**

4.18.7 The reason for increased interest on loan approved as compared to the claimed interest is due to the variation between the depreciation claimed and approved by the Commission for Koradi and Nashik. As the depreciation approved by the Commission is lower than the depreciation claimed, which is considered as repayment for computation of interest on loans, the interest on loan as approved by the Commission is higher as compared to claimed figures.

4.19 INTEREST ON WORKING CAPITAL (IOWC)

MSPGCL's Submission

4.19.1 MSPGCL submitted that the Interest on working capital has been computed as per the norms based on normative elements of ARR like O&M expenses, maintenance spares, and fuel expenses.

4.19.2 Regulation 32 of the MYT Regulations, 2019 provides the norms for computation of the working capital for generating companies. The IoWC has been computed as per the norms. Further, as per Regulation 32.1(f) the MYT Regulations, 2019, Base Rate has been specified as SBI one-year marginal cost of funds-based lending rate. Considering the same, the interest rate has been considered as 9.30% for FY 2022-23 and 10.07% for FY 2023-24.

4.19.3 MSPGCL submitted that the actual interest on working capital as per the books of accounts is Rs. 1475.10 Crore and Rs. 1818.53 Crore for FY 2022-23 and FY 2023-24, respectively, and the same have been considered for the purpose of true-up.

4.19.4 MSPGCL submitted that as per Regulation 32.6 of the MYT Regulations, 2019, DPC and Interest on DPC shall be deducted from the actual IoWC. However, as per the provisions under PPA dated 01 April, 2009 between MSPGCL and MSEDCL, and also under the MYT Regulations, 2019, MSPGCL is allowed to raise DPC bills on MSEDCL for the delays in receipt of payment for energy bills raised by MSPGCL. Under the methodology adopted by MSPGCL for computing the DPC bills till FY 2020-21, the payment receipts from MSEDCL are firstly adjusted against the DPC amount due till the payment receipt date, and the balance of the amount received is then adjusted against the principal overdue amount till that day. In FY 2019-20, MSEDCL has raised queries on this methodology. As per MSEDCL, any payment should be initially adjusted against the principal outstanding amount and balance if any to be adjusted against the LPS dues. At present, an exercise is being undertaken by MSPGCL as well as MSEDCL for reconciliation and finalization of the principal and DPC outstanding amount since PPA date, i.e., since FY 2009-10. While the billing reconciliation process between the two Companies is in advanced stages, MSEDCL has commenced payment towards liquidation of outstanding dues, as per LPS Rules, 2022, on the basis of outstanding dues as per MSEDCL's assessment.

4.19.5 MSPGCL further submitted that DPC is being recognised in the Books of Accounts on accrual basis. Hence, it is not the case that DPC recognised in the books of account would result in reduction in working capital requirement of the Petitioner. Further, MSPGCL submitted that the DPC is being levied as penalty due to default in payment and on the other hand reducing the working capital requirement of the Petitioner to the extent of LPS on accrual basis would be unjust for the Petitioner.

4.19.6 In addition to the above, MSPGCL referred several Judgments of Hon'ble Supreme Court and Hon'ble APTEL related to the matter i.e., Irrigation Department, Govt. of Orissa Vs. G.C. Roy – (1992) 1 SCC 508 – paras 43 and 44, South Eastern Coalfields Ltd. Vs. State of M.P. & Ors. – (2003) 8 SCC 648, Consolidated Coffee Ltd. Vs. Agricultural ITO – (2001) 1 SCC 278 [para 9], Judgment dated 30.07.2010 in Appeal No.153/2009 titled NDPL v. DERC, Paras 43, 45-46, 51; Judgment dated 29.05.2019 in Appeal No. 250 of 2016 titled Adani Transmission (India) Limited v. MERC, Paras 6.11-6.17; Judgment dated 24.07.2020 in Appeal No. 260 of 2016 titled Maharashtra Eastern Grid Power Transmission Company Limited v. MERC, Paras 11(c)-(d),

4.19.7 MSPGCL further submitted that the issue of reduction of DPC/LPS from IoWC is sub-judice before Hon'ble Supreme Court in C.A. No. 1356-58 of 2017 and batch.

4.19.8 In light of the above, in the present MYT Petition, MSPGCL requested the Commission not to carry out any adjustment of actual IoWC against the DPC bills raised thus far.

4.19.9 MSPGCL submitted that the MoP has notified Electricity (Late Payment Surcharge) Rules, and Electricity (Late Payment Surcharge and Related matters) Rules, 2022 on 22 February, 2021 and 03 June, 2022 respectively. MSEBHCL initiated efforts to reach a consensus amongst MSEDCL, MSPGCL and MSETCL regarding outstanding dues in compliance to the Rule 5 of the LPS Rules 2022, wherein a distribution licensee is required to communicate, within a period of 30 days from the promulgation of the said Rules (i.e., by 03 July, 2022), the outstanding dues and the number of instalments in which such dues are to be paid. There is a mismatch between the dues as arrived by MSPGCL and MSEDCL as summarised below:

Table 4.42: Outstanding Dues as of 3.6.2022 (Rs. Crore)

Particulars	Total
As per MSEDCL's working	13,801.00
As per MSPGCL's working	27,163.29
Difference	**13,362.29**

4.19.10 MSPGCL submitted that MSEDCL has participated in the liquidation of arrears scheme for total amount of Rs.13801 Crore (Principal amount of Rs.8881 Crore and DPC of Rs.4920 Crore). The current scheme for liquidation of outstanding amount brought out vide LPS Rules, 2022, does not explicitly permit the levy of interest/DPC on the agreed arrears. Hence, MSPGCL has been losing the interest amount on the part of outstanding agreed dues for the scheme. In view of this, MSPGCL has calculated the impact of loss of interest on such amount for the period of 48 months as per LPS scheme at the rate of 10.40%. The interest on outstanding amount of Rs.13801 Crore for FY 2022-23 and FY 2023-24 works out to Rs.1114.08 Crore and Rs 1003.96 Crore, respectively.

4.19.11 MSPGCL, quoting the Hon'ble Supreme Court and the Hon'ble APTEL Judgments, viz., Uttar Haryana Bijli Vitran Nigam Ltd. & Anr. v. Adani Power (Mundra) Ltd. & Anr., 2023 2 SCC 624 [Para 20, 22 and 24], SLS Power Ltd. v. APERC & Ors.,2012 SCC OnLine APTEL 209 - [Para 35.5-35.6] and Torrent Power Ltd. v. GERC & Ors., 2019 SCC On Line APTEL 110 - [Para 9.5], requested that the loss of interest of Rs. 1114.08 Crore for FY 2022-23 and Rs 1003.96 Crore for FY 2023-24 be considered over and above the normative IoWC as per the MYT Regulations, 2019.

Table 4.43: IoWC for FY 2022-23 as submitted by MSPGCL (Rs. Crore)

Station/Unit	Approved in MTR	Normative IoWC	Actual IoWC
Bhusawal	15.88	11.54	24.06
Chandrapur	139.81	111.38	215.60
Khaperkheda	61.96	52.53	106.12
Koradi	17.59	17.00	40.37
Nashik	52.55	38.78	78.75
Uran	28.71	28.45	55.56
Paras Units 3 & 4	35.80	35.85	71.91
Parli Units 6 & 7	47.81	42.29	84.82
Khaperkheda Unit 5	45.46	40.49	87.65
Bhusawal Units 4 & 5	82.57	81.37	174.08
Koradi Units 8, 9 & 10	139.54	133.58	273.43
Chandrapur Units 8 & 9	87.60	84.91	181.43
Parli Unit 8	22.76	20.15	38.64
Hydro	11.64	16.25	42.68
Total	**789.66**	**714.55**	**1475.10**
Add: Loss of Interest		**1114.08**	
Total		**1828.63**	**1475.10**

Table 4.44: IoWC for FY 2023-24 as submitted by MSPGCL (Rs. Crore)

Station/Unit	Approved in MTR	Normative IoWC	Actual IoWC
Bhusawal	19.00	20.06	36.40
Chandrapur	140.19	158.48	272.98

Station/Unit	Approved in MTR	Normative IoWC	Actual IoWC
Khaperkheda	69.80	71.88	128.02
Koradi	17.18	20.97	40.58
Nashik	58.56	53.09	99.07
Uran	45.56	39.49	69.29
Paras Units 3 & 4	41.43	57.94	106.24
Parli Units 6 & 7	56.56	64.50	116.11
Khaperkheda Unit 5	49.00	53.97	101.73
Bhusawal Units 4 & 5	90.79	115.65	214.71
Koradi Units 8, 9 & 10	140.66	169.64	306.38
Chandrapur Units 8 & 9	87.78	111.19	211.43
Parli Unit 8	30.28	33.66	61.02
Hydro	11.87	24.28	54.57
Total	**858.65**	**994.79**	**1818.53**
Add: Loss of Interest		**1114.08**	
Total		**1998.75**	**1818.53**

Commission's Analysis and Ruling

4.19.12 The Commission has computed normative IoWC in accordance with the provisions of Regulation 32.1 of the MYT Regulations, 2019. The rate of IoWC has been considered as 9.30% for FY 2022-23 and 10.07% for FY 2023-24 in accordance with the MYT Regulations, 2019. The IoWC approved by the Commission is shown in the Tables below:

Table 4.45: Approved Normative IoWC for FY 2022-23 (Rs. Crore)

Station/Unit	Approved in MTR	Claimed	Approved
Bhusawal	15.88	24.06	10.87
Chandrapur	139.81	215.60	103.37
Khaperkheda	61.96	106.12	50.92
Koradi	17.59	40.37	14.04
Nashik	52.55	78.75	37.53
Uran	28.71	55.56	27.32
Paras Units 3 & 4	35.80	71.91	34.37
Parli Units 6 & 7	47.81	84.82	40.68
Khaperkheda Unit 5	45.46	87.65	41.24
Bhusawal Units 4 & 5	82.57	174.08	79.45
Koradi Units 8, 9 & 10	139.54	273.43	121.71
Chandrapur Units 8 & 9	87.60	181.43	82.85
Parli Unit 8	22.76	38.64	18.42
Hydro	11.64	42.68	11.83
Total	**789.66**	**1475.10**	**674.60**

Table 4.46: Approved Normative IoWC for FY 2023-24 (Rs. Crore)

Station/Unit	Approved in MTR	Claimed	Approved
Bhusawal	19.00	36.40	15.27
Chandrapur	140.19	272.98	117.37
Khaperkheda	69.80	128.02	55.18
Koradi	17.18	40.58	16.79
Nashik	58.56	99.07	40.52
Uran	45.56	69.29	32.02
Paras Units 3 & 4	41.43	106.24	43.83
Parli Units 6 & 7	56.56	116.11	49.91
Khaperkheda Unit 5	49.00	101.73	41.86
Bhusawal Units 4 & 5	90.79	214.71	88.69
Koradi Units 8, 9 & 10	140.66	306.38	130.52
Chandrapur Units 8 & 9	87.78	211.43	88.09
Parli Unit 8	30.28	61.02	25.08
Hydro	11.87	54.57	12.82
Total	**858.65**	**1818.53**	**757.95**

4.19.13 The Commission observes that the IoWC is normative in nature and additional loss of interest claimed by MSPGCL on outstanding dues being paid by MSEDCL in 48 months without interest as a part of such normative value is not in line with the MYT Regulations, 2019. It may be noted that such claim of loss of interest due to payment of arrears in instalments is also not in accordance with the LPS Rules, 2022. Hence, the Commission has not considered such claims of loss of interest while arriving at the normative IoWC.

4.19.14 The proviso to Regulation 32.6 of the MYT Regulations, 2019 specifies as under:

"Provided that the Delayed Payment Surcharge and Interest on Delayed Payment as per the books of accounts of the Generating Company or Licensee or MSLDC shall be deducted from the actual interest on working capital, before sharing of the efficiency gain or efficiency loss, as the case may be."

4.19.15 As the issue of issue of reduction of DPC/LPS from IoWC is sub-judice before the Hon'ble Supreme Court, the Commission has decided to continue with the methodology adopted for arriving at the IoWC in line with the MYT Regulations, 2019.

4.19.16 The actual DPC as per the audited accounts for FY 2022-23 and FY 2023-24 is Rs. 3949.25 Crore and Rs. 2674.18 Crore, respectively. The same has to be deducted from the actual IoWC as per the audited accounts before sharing of the efficiency gain or efficiency loss. Accordingly, the actual IoWC for sharing purposes has been worked out as Nil for FY 2022-23 and FY 2023-24.

4.19.17 As IoWC is a controllable factor under the MYT Regulations, 2019, the Commission has carried out the sharing of variation in normative IoWC and actual IoWC in accordance with the MYT Regulations, 2019.

4.20 RETURN ON EQUITY (ROE)

MSPGCL's Submission

4.20.1 MSPGCL has considered the closing balance of equity for FY 2021-22 as the opening balance for FY 2022-23 and closing balance of equity for FY 2022-23 as the opening balance for FY 2023-24. The equity addition has been considered equivalent to 30% of capitalization for the year. Rate of Return on Equity has been considered as 14.00% as per MYT Regulations, 2019. The additional RoE on account of ramp rate and achievement of Mean Time Between Failures (MTBF) have been worked out as per Regulation 29.6 of the MYT Regulations, 2019. MSPGCL has not claimed any income tax for FY 2022-23 and FY 2023-24.The RoE claimed by MSPGCL is shown in the Tables below:

Table 4.47: RoE submitted by MSPGCL for FY 2022-23 and FY 2023-24 (Rs Crore)

Station/Unit	FY 2022-23		FY 2023-24	
	Approved in MTR	Claimed*	Approved in MTR	Claimed*
Bhusawal	13.40	13.40	13.52	13.41
Chandrapur	131.76	130.50	139.08	135.95
Khaperkheda	138.62	142.25	148.43	141.75
Koradi	37.23	37.09	40.11	38.01
Nashik	35.09	35.52	35.85	35.36
Uran	42.38	42.49	45.50	43.31
Paras Units 3&4	132.24	132.16	134.92	140.37
Parli Units 6&7	131.30	131.23	132.63	132.12
Khaperkheda Unit 5	103.77	111.48	109.90	112.75
Bhusawal Units 4&5	183.23	183.68	183.80	184.84
Koradi Units 8-10	427.34	428.91	434.66	431.95
Chandrapur Units 8&9	178.27	183.25	187.93	183.99
Parli Unit 8	56.87	55.00	59.21	56.93
Hydro	5.95	5.29	8.39	6.15
Total	**1617.45**	**1632.27**	**1673.90**	**1656.90**

** Includes RoE on HO Assets*

Commission's Analysis and Ruling

4.20.2 The Commission has considered the approved closing equity for FY 2021-22 as the opening equity for FY 2022-23 and approved closing equity for FY 2022-23 as the opening equity for FY 2023-24. The addition to equity has been considered equivalent to the equity portion of the approved additional capitalisation for the year. The Commission has approved the Base Rate of RoE at the rate of 14.00%, on the opening equity as well as on 50% of the addition during the year.

4.20.3 MSPGCL has submitted the SLDC certificate for actual MTBF for FY 2022-23 and FY 2023-24. Regulation 29.6(b) of the MYT Regulations, 2019 specifies as under:

"an additional rate of Return on Equity shall be allowed as per the following schedule:

i. 0.50% for Unit that achieves Mean Time Between Failure (MTBF) of at least 45 days.

ii. 0.75% for Unit that achieves Mean Time Between Failure (MTBF) of at least 90 days.

iii. 1.00% for Unit that achieves Mean Time Between Failure (MTBF) of at least 90 days.

Provided that the Mean Time Between Failure (MTBF) shall be computed as provided in Annexure-III to the Regulations…"

4.20.4 Accordingly, the Commission has considered the additional rate of RoE for achievement of MTBF in accordance with the provisions of the MYT Regulations, 2019, as shown in the Table below:

Table 4.48: Additional Rate of RoE for achievement of MTBF for FY 2022-23 and FY 2023-24

Station/Unit	FY 2022-23		FY 2023-24	
	Claimed*	Allowable	Claimed	Allowable
Bhusawal	0.00%	0.00%	0.00%	0.00%
Chandrapur	0.05%	0.05%	0.13%	0.13%
Khaperkheda	0.38%	0.13%	0.00%	0.00%
Koradi	0.00%	0.00%	0.00%	0.00%
Nashik	0.17%	0.00%	0.00%	0.00%
Uran	0.16%	0.12%	0.16%	0.16%
Paras Units 3&4	0.00%	0.00%	0.63%	0.63%
Parli Units 6&7	0.00%	0.00%	0.00%	0.00%
Khaperkheda Unit 5	0.50%	0.00%	0.00%	0.00%
Bhusawal Units 4&5	0.00%	0.00%	0.00%	0.00%
Koradi Units 8-10	0.00%	0.00%	0.00%	0.00%
Chandrapur Units 8&9	0.50%	0.50%	0.25%	0.25%
Parli Unit 8	0.00%	0.00%	0.00%	0.00%

** Additional RoE claimed as per the formats submitted does not match the submission in the Petition. Additional RoE as claimed in the Petition has been considered.*

4.20.5 From the above table, it can be observed that the Additional Rate of RoE for MTBF achievement claimed in the models is not in line with the actual MTBF for FY 2022-23 submitted in the Petition. Hence, there is some reduction in the RoE approved by the Commission for Khaperkheda, Nashik and Khaperkheda Unit 5.

4.20.6 As MSPGCL has not claimed any additional RoE on ramp rate, the Commission has also not considered the same for approval of Additional RoE. Further, the Commission has also considered the RoE on HO assets as claimed by MSPGCL.

4.20.7 Regulation 34 of the MYT Regulation, 2019 specifies as under:
"34.1 The Income Tax for the Generating Company or Licensee or MSLDC for the regulated business shall be allowed on Return on Equity, including Additional Return on Equity through the Tariff charged to the Beneficiary/ies, subject to the conditions MERC Order on approval of Mid-Term Review for 4th MYT Control Period MERC Order in Case No. 227 of 2022 Page 237 of 259 *stipulated in Regulations 34.2 to 34.6: Provided that no Income Tax shall be considered on the amount of efficiency gains and incentive approved by the Commission, irrespective of whether or not the amount of such efficiency gains and incentive are billed separately: Provided further that no Income Tax shall be considered on the amount of income from Delayed Payment Charges or Interest on Delayed Payment or Income from Other Business, as well as on the income from any source that has not been considered for computing the Aggregate Revenue Requirement: Provided also that the Income Tax shall be computed for the Generating Company as a whole, and not Unit-wise/Station-wise: Provided also that the deferred tax liability only before March 31, 2020 shall be allowed by the Commission, whenever they get materialised, after prudence check. 34.2 The rate of Return on Equity, including additional rate of Return on Equity as allowed by the Commission under Regulation 29 of these Regulations shall be grossed up with the effective tax rate of respective financial year. … 34.4 The effective tax rate shall be considered on the basis of actual tax paid in respect of financial year in line with the provisions of the relevant Finance Acts by the concerned Generating Company or Licensee or MSLDC, as the case may be: Provided that, in case of the Generating Company or Licensee or MSLDC has engaged in any other regulated or unregulated Business or Other Business, the actual tax paid on income from any other regulated or unregulated Business or Other Business shall be excluded for the calculation of effective tax rate: Provided further that effective tax rate shall be estimated for future year based on actual tax paid as per latest available Audited accounts, subject to prudence check… 34.6 Variation between the Income Tax estimated by the Commission for future year during MYT Order and Mid Term Review Order and the Income Tax approved by the Commission for the respective Year after truing up for respective year, shall be allowed for recovery as part of the Aggregate Revenue Requirement at the time of Mid-term Review or Truing-up, subject to prudence check: Income Tax on any income stream from sources other than the Business regulated by the Commission shall not constitute a pass-through component in Tariff, and Income Tax on such other*

income shall be borne by the Generating Company or Licensee or MSLDC, as the case may be."

4.20.8 The Commission has not considered any income tax for FY 2022-23 and FY 2023-24 as the actual income tax is zero.

4.20.9 Accordingly, the RoE approved by the Commission is given in the Tables below:

Table 4.49: Approved RoE for FY 2022-23 (Rs. Crore)

Station/Unit	Approved in MTR	Claimed	Approved
Bhusawal	13.40	13.40	13.41
Chandrapur	131.76	130.50	130.53
Khaperkheda	138.62	142.25	139.80
Koradi	37.23	37.09	37.08
Nashik	35.09	35.52	35.05
Uran	42.38	42.49	42.33
Paras Units 3&4	132.24	132.16	132.16
Parli Units 6&7	131.30	131.23	131.25
Khaperkheda Unit 5	103.77	111.48	107.25
Bhusawal Units 4&5	183.23	183.68	183.55
Koradi Units 8-10	427.34	428.91	428.25
Chandrapur Units 8&9	178.27	183.25	183.00
Parli Unit 8	56.87	55.00	55.01
Hydro	5.95	5.29	5.30
Total	**1617.45**	**1632.27**	**1623.98**

Table 4.50: Approved RoE for FY 2023-24 (Rs. Crore)

Station/Unit	Approved in MTR	Claimed	Approved
Bhusawal	13.52	13.41	13.42
Chandrapur	139.08	135.95	135.98
Khaperkheda	148.43	141.75	141.73
Koradi	40.11	38.01	37.98
Nashik	35.85	35.36	35.22
Uran	45.50	43.31	43.23
Paras Units 3&4	134.92	140.37	140.35
Parli Units 6&7	132.63	132.12	132.14
Khaperkheda Unit 5	109.90	112.75	112.36
Bhusawal Units 4&5	183.80	184.84	184.19
Koradi Units 8-10	434.66	431.95	430.56
Chandrapur Units 8&9	187.93	183.99	183.41
Parli Unit 8	59.21	56.93	56.94
Hydro	8.39	6.15	6.16
Total	**1673.90**	**1656.90**	**1653.67**

4.21 NON-TARIFF INCOME (NTI)

MSPGCL's Submission

4.21.1 MSPGCL submitted that it has considered certain deductions in the actual NTI (on account of implementation of Ind-AS/IFRS) reflected in the books of accounts. MSPGCL claimed the Non-Tariff Income as shown in the Table below:

Table 4.51: Non-Tariff Income submitted by MSPGCL for FY 2022-23 (Rs. Crore)

Station/Unit	FY 2022-23		FY 2023-24	
	Approved in MTR	Claimed	Approved in MTR	Claimed
Bhusawal	3.99	1.50	1.78	0.83
Chandrapur	30.89	10.59	6.38	6.90
Khaperkheda	28.94	(0.69)	13.27	4.36
Koradi	15.09	5.50	63.01	1.38
Nashik	7.94	1.46	4.74	2.42
Uran	0.47	1.62	1.14	0.87
Paras Units 3&4	7.49	8.68	4.10	4.28
Parli Units 6&7	2.12	4.18	3.91	5.68
Khaperkheda Unit 5	17.22	0.59	8.14	2.58
Bhusawal Units 4&5	19.00	6.47	7.78	3.94
Koradi Units 8-10	105.93	8.03	10.92	12.70
Chandrapur Units 8&9	16.09	5.60	2.36	3.38
Parli Unit 8	1.63	4.43	2.14	2.84
Hydro	3.47	3.56	3.39	6.40
Total	**260.27**	**61.53**	**133.07**	**58.55**

Commission's Analysis and Ruling

4.21.2 The Commission asked MSPGCL to provide the detailed reconciliation of the Non-Tariff Income as claimed along with the values as per the Audited Accounts. The complete reconciliation provided by MSPGCL has been considered for approval of actual NTI as claimed by MSPGCL. The details of reconciliation as provided by MSPGCL is shown in the Tables below:

Table 4.52: Reconciliation of Non-Tariff Income for FY 2022-23 (Rs. Crore)

Particulars	As per Accounts	Claimed in True up	Remark
<u>Other operating revenues</u>			
Gain on sale of Fixed assets	-1.36	-1.36	
Gain on sale of Fixed assets of BSL created through Ash Fund	2.90	-	Assets created through Ash fund, excluded from NTI
Late payment surcharge	3,949.25	-	Not considered as per Regulation 37.3 of MYT Regulations, 2019

Particulars	As per Accounts	Claimed in True up	Remark
Sale of Rejected Coal	117.88	-	Adjusted against fuel cost.
IPP Sale of Coal	116.40	-	Related to Case IV; Not claimed
Total (A)	**4,185.07**	**-1.36**	
Other Income			
Sale of scrap	31.44	31.44	
Rental from contractors & staff Quarters	4.11	4.11	
Other Misc. Income	4.97	4.82	Rs. 0.15 Cr is pertaining to Solar Business, not included
Loss on obsolescence of stores	10.12	-	Provision, excluded from NTI claim
Income of LD recovery (Koradi)	-	4.78	
Income of LD recovery adjusted in Wash Coal Cost	93.39	-	Adjusted against fuel cost. Hence not considered
Income of LD recovery adjusted in R&M	12.32	-	Adjusted against R&M cost. Hence not considered
Credit Balances Written Back	86.25	-	Provision, not considered
APTEL	0.12	-	Not pertaining to regulated business
HO	7.48	7.48	
Total (B)	**250.19**	**52.63**	
Energy and demand charges of Supply of electricity to the housing colonies of its operating staff and supply of electricity for construction works at generating Station (**C**)	10.27	10.27	
Grand Total (A+B+C)	**4,445.53**	**61.53**	

Table 4.53: Reconciliation of Non-Tariff Income for FY 2023-24 (Rs. Crore)

Particulars	As per Accounts	Claimed in True up	Remark
Other operating revenues			
IPP Sale of Coal	218.56	-	Related to Case IV; Not claimed
Income from sale of wash Coal reject adjusted in wash coal cost	184.71	-	Adjusted against fuel cost
Total (A)	**403.27**	**0.00**	
Other Income			
Credit Balances Written Back	18.48		Provision, not considered
(Gain / Loss on sale of Fixed Assets)	0.13	0.13	
Late payment surcharge	2674.18		Not considered as per Regulation 37.3 of MYT Regulations, 2019
Other Misc. Income (NTI)	45.68	45.68	

Particulars	As per Accounts	Claimed in True up	Remark
Income of LD recovery (in Form 2.2)	118.41	-	Adjusted against fuel cost. Hence not considered
Income of LD recovery (in Form 3.4)	10.07	-	Adjusted against R&M cost. Hence not considered
Gain on sale of Asset- Old unit of Parli 3-4	144.25	-	Retired unit, hence not considered
Government Grant (Solar) & Other income	0.15	-	Not pertaining to regulated business
Total (B)	**3011.42**	**45.81**	
Energy and demand charges of Supply of electricity to the housing colonies of its operating staff and supply of electricity for construction works at generating Station **(C)**	12.75	12.75	
Grand Total (A+B+C)	**3,427.44**	**58.55**	

4.21.3 The Commission after carrying out the prudence check has considered the Non-Tariff Income as claimed by MSPGCL for FY 2022-23 and FY 2023-24.

4.22 ANNUAL FIXED CHARGES

Commission's Analysis and Ruling

4.22.1 Based on the above analysis, the AFC approved by the Commission in the final true-up of FY 2022-23 and FY 2023-24, that is fully recoverable at target Availability, is as shown in the Tables below:

Table 4.54: AFC claimed by MSPGCL and approved by the Commission recoverable at target Availability for FY 2022-23 (Rs. Crore)

Station/Unit	Return on Equity			Interest on loan			Depreciation			O&M expenses			IoWC			Less:NTI			AFC		
	Approved in MTR	Claimed	Approved	Approved in MTR	Claimed	Approved	Approved in MTR	Claimed	Approved	Approved in MTR	Claimed	Approved	Approved in MTR	Claimed	Approved	Approved in MTR	Claimed	Approved	Approved in MTR	Claimed	Approved
Bhusawal	13.40	13.40	13.41	0.29	0.46	0.46	9.21	9.16	9.00	119.30	124.47	124.47	15.88	24.06	10.87	3.99	1.50	1.50	**154.09**	**170.05**	**156.71**
Chandrapur	131.76	130.50	130.53	60.90	63.65	63.64	89.11	78.28	78.19	684.50	705.83	705.83	139.81	215.60	103.37	30.89	10.59	10.59	**1075.19**	**1183.28**	**1070.98**
Khaperkheda	138.62	142.25	139.80	5.87	7.07	7.07	25.93	24.33	24.33	383.94	411.90	411.90	61.96	106.12	50.92	28.94	-0.69	-0.69	**587.39**	**692.37**	**634.71**
Koradi	37.23	37.09	37.08	18.89	25.48	31.05	28.02	145.05	26.76	240.42	180.11	163.38	17.59	40.37	14.04	15.09	5.50	5.50	**327.06**	**422.60**	**266.81**
Nashik	35.09	35.52	35.05	4.23	4.89	5.43	20.77	20.22	7.84	333.76	351.01	351.01	52.55	78.75	37.53	7.94	1.46	1.46	**438.45**	**488.93**	**435.40**
Uran	42.38	42.49	42.33	10.34	10.09	10.07	15.56	4.91	3.98	99.19	99.96	99.96	28.71	55.56	27.32	0.47	1.62	1.62	**195.71**	**211.39**	**182.05**
Paras Units 3&4	132.24	132.16	132.16	29.81	30.54	30.51	88.62	85.44	85.33	181.59	182.68	182.58	35.80	71.91	34.37	7.49	8.68	8.68	**460.57**	**494.05**	**456.28**
Parli Units 6&7	131.30	131.23	131.25	13.49	14.44	14.44	80.42	78.16	78.13	184.71	189.90	189.79	47.81	84.82	40.68	2.12	4.18	4.18	**455.61**	**494.37**	**450.11**
Khaperkheda Unit 5	103.77	111.48	107.25	63.53	72.83	71.61	178.32	184.22	184.21	150.79	128.25	128.19	45.46	87.65	41.24	17.22	0.59	0.59	**524.65**	**583.84**	**531.91**
Bhusawal Units 4&5	183.23	183.68	183.55	197.95	196.25	196.90	344.63	343.88	343.88	249.30	259.16	259.01	82.57	174.08	79.45	19.00	6.47	6.47	**1038.68**	**1150.58**	**1056.33**
Koradi Units 8-10	427.34	428.91	428.25	614.38	557.79	563.36	697.51	692.83	691.90	451.67	595.92	469.40	139.54	273.43	121.71	105.93	8.03	8.03	**2224.51**	**2540.84**	**2266.59**
Chandrapur Units 8&9	178.27	183.25	183.00	326.76	294.81	294.40	340.45	335.57	335.22	270.61	244.19	244.08	87.60	181.43	82.85	16.09	5.60	5.60	**1187.60**	**1233.66**	**1133.95**
Parli Unit 8	56.87	55.00	55.01	104.53	100.36	101.19	98.23	95.08	95.08	94.45	103.16	103.11	22.76	38.64	18.42	1.63	4.43	4.43	**375.20**	**387.80**	**368.38**
Hydro	5.95	5.29	5.30	1.81	0.97	0.68	11.71	10.58	15.29	242.15	245.45	245.45	11.64	42.68	11.83	3.47	3.57	3.57	**269.79**	**301.41**	**274.98**
Total	**1617.45**	**1632.27**	**1623.98**	**1452.77**	**1379.65**	**1390.82**	**2028.50**	**2107.69**	**1979.16**	**3686.38**	**3821.98**	**3678.17**	**789.66**	**1475.10**	**674.60**	**260.27**	**61.53**	**61.53**	**9314.49**	**10355.17**	**9285.19**

Table 4.55: AFC claimed by MSPGCL and approved by the Commission recoverable at target Availability for FY 2023-24 (Rs. Crore)

Station/Unit	Return on Equity			Interest on loan			Depreciation			O&M expenses			IoWC			Less:NTI			AFC		
	Approved in MTR	Claimed	Approved	Approved in MTR	Claimed	Approved	Approved in MTR	Claimed	Approved	Approved in MTR	Claimed	Approved	Approved in MTR	Claimed	Approved	Approved in MTR	Claimed	Approved	Approved in MTR	Claimed	Approved
Bhusawal	13.52	13.41	13.42	0.29	0.41	0.41	19.24	5.33	5.30	123.40	141.76	141.76	19.00	36.40	15.27	1.78	0.83	0.83	**173.68**	**196.50**	**175.34**
Chandrapur	139.08	135.95	135.98	63.60	59.33	59.33	107.43	91.94	91.52	709.19	794.72	794.72	140.19	272.98	117.37	6.38	6.90	6.90	**1153.11**	**1348.03**	**1192.01**
Khaperkheda	148.43	141.75	141.73	18.65	9.36	9.29	57.80	32.89	32.64	395.55	428.97	428.97	69.80	128.02	55.18	13.27	4.36	4.36	**676.96**	**736.62**	**663.43**
Koradi	40.11	38.01	37.98	19.83	17.36	26.70	36.59	12.97	26.81	247.84	207.87	190.40	17.18	40.58	16.79	63.01	1.38	1.38	**298.53**	**315.41**	**297.31**
Nashik	35.85	35.36	35.22	2.74	4.80	5.75	33.88	7.12	8.35	345.24	402.54	402.54	58.56	99.07	40.52	4.74	2.42	2.42	**471.53**	**546.46**	**489.96**
Uran	45.50	43.31	43.23	11.67	11.48	11.43	66.86	6.89	6.56	103.05	113.46	113.46	45.56	69.29	32.02	1.14	0.87	0.87	**271.50**	**243.57**	**205.84**
Paras Units 3&4	134.92	140.37	140.35	26.28	26.09	26.03	78.32	75.35	75.24	187.40	209.55	209.45	41.43	106.24	43.83	4.10	4.28	4.28	**464.24**	**553.32**	**490.62**
Parli Units 6&7	132.63	132.12	132.14	8.43	8.48	8.48	78.35	74.63	74.60	190.60	239.84	239.72	56.56	116.11	49.91	3.91	5.68	5.68	**462.65**	**565.49**	**499.18**
Khaperkheda Unit 5	109.90	112.75	112.36	57.25	73.10	71.73	185.98	190.50	190.49	154.64	181.99	181.93	49.00	101.73	41.86	8.14	2.58	2.58	**548.63**	**657.50**	**595.79**
Bhusawal Units 4&5	183.80	184.84	184.19	163.40	163.46	163.19	345.27	344.77	344.77	257.11	305.54	305.39	90.79	214.71	88.69	7.78	3.94	3.94	**1032.59**	**1209.38**	**1082.29**
Koradi Units 8-10	434.66	431.95	430.56	557.39	508.66	513.34	706.63	696.82	694.96	464.00	641.45	510.76	140.66	306.38	130.52	10.92	12.70	12.70	**2292.42**	**2572.56**	**2267.43**
Chandrapur Units 8&9	187.93	183.99	183.41	308.34	276.07	275.18	352.67	340.34	339.60	278.29	279.65	279.53	87.78	211.43	88.09	2.36	3.38	3.38	**1212.64**	**1288.09**	**1162.43**
Parli Unit 8	59.21	56.93	56.94	98.17	88.79	89.58	101.15	97.09	97.09	97.35	126.56	126.51	30.28	61.02	25.08	2.14	2.84	2.84	**384.03**	**427.54**	**392.36**
Hydro	8.39	6.15	6.16	5.37	1.55	0.42	14.73	8.83	21.40	251.67	296.02	296.02	11.87	54.57	12.82	3.39	6.40	6.40	**288.63**	**360.73**	**330.43**
Total	**1673.90**	**1656.90**	**1653.67**	**1341.42**	**1248.94**	**1260.86**	**2184.90**	**1985.48**	**2009.32**	**3805.33**	**4369.92**	**4221.18**	**858.65**	**1818.53**	**757.95**	**133.07**	**58.55**	**58.55**	**9731.12**	**11021.21**	**9844.43**

4.23 HYDRO LEASE RENTAL

MSPGCL's Submission

4.23.1 MSPGCL has claimed the lease rent of Rs. 541.20 Crore for FY 2022-23 and Rs. 531.70 Crore for FY 2023-24.

Commission's Analysis and Ruling

4.23.2 The Commission has approved the lease rent of Rs. 541.20 Crore for FY 2022-23 and Rs. 531.70 Crore for FY 2023-24, the same being in line with the approved lease rent.

4.24 REVENUE GAIN/ (LOSS) DUE TO LOWER/ HIGHER AUXILIARY CONSUMPTION

MSPGCL's Submission

4.24.1 MSPGCL submitted that the difference between actual auxiliary consumption and normative auxiliary consumption is the lesser/ additional sales units, due to higher/ lower actual auxiliary consumption, than the normative auxiliary consumption. MSPGCL has computed the station-wise lesser/ additional sales units and used the station-wise energy charge approved by the Commission in the MYT Order to arrive at the revenue loss/ gain due to higher/ lower auxiliary consumption. This revenue loss/ gain is then shared with the consumers as per the provisions of the Regulations.

Table 4.56: Revenue Loss/(Gain) due to higher/lower AEC for FY 2022-23 and FY 2023-24 as submitted by MSPGCL (Rs. Crore)

Station/Unit	FY 2022-23	FY 2023-24
Bhusawal	3.73	3.84
Chandrapur	21.03	14.76
Khaperkheda	5.65	4.24
Koradi	0.64	0.85
Nashik	7.37	6.77
Uran	0.82	(0.73)
Paras Units 3 & 4	2.61	1.01
Parli Units 6 & 7	5.82	5.00
Khaperkheda Unit 5	(1.14)	1.31
Bhusawal Units 4 & 5	2.87	6.78
Koradi Units 8, 9 & 10	15.56	13.08
Chandrapur Units 8 & 9	(8.14)	0.14
Parli Unit 8	7.93	6.39
Total	**64.74**	**63.42**

Commission's Analysis

4.24.2 The Commission has computed the revenue loss/(gain) on account of variation in normative and actual AEC for FY 2022-23 and FY 2023-24, as shown in the Tables below:

Table 4.57: Revenue loss/(gain) on account of variation in AEC approved by the Commission for FY 2022-23

Station/Unit	Actual Gross Generation	Normative AEC	Actual AEC	Lesser/ (Additional) sale	Rate of Energy Charge	Revenue Loss	Sharing of Loss
	MU	%	%	MU	Rs. / kWh	Rs. Crore	Rs. Crore
Bhusawal	715.53	10.96%	14.56%	25.78	4.83	12.46	4.15
Chandrapur	8413.77	7.80%	11.09%	276.70	4.28	118.42	39.47
Khaperkheda	4336.60	9.70%	11.25%	67.19	3.74	25.14	8.38
Koradi	1319.34	10.81%	11.28%	6.22	3.09	1.93	0.64
Nashik	2528.06	10.75%	12.61%	47.02	4.94	23.23	7.74
Uran	1491.22	3.10%	2.83%	-3.96	6.12	-2.42	-0.81
Paras Units 3&4	3069.68	9.30%	10.98%	51.50	3.47	17.85	5.95
Parli Units 6&7	2794.85	9.30%	11.58%	63.84	4.77	30.46	10.15
Khaperkheda Unit 5	3438.70	6.00%	5.85%	-5.03	3.41	-1.71	-0.57
Bhusawal Units 4&5	6119.49	6.00%	6.36%	22.07	3.90	8.61	2.87
Koradi Units 8-10	11107.63	6.00%	7.34%	148.47	3.14	46.67	15.56
Chandrapur Units 8&9	6668.54	6.00%	5.51%	-32.43	3.77	-12.21	-4.07
Parli Unit 8	1133.13	8.50%	13.59%	57.73	4.75	27.45	9.15
Total	**53136.53**			**725.11**		**295.87**	**98.62**

Table 4.58: Revenue loss/(gain) on account of variation in AEC approved by the Commission for FY 2023-24

Station/Unit	Actual Gross Generation	Normative AEC	Actual AEC	Lesser/ (Additional) sale	Rate of Energy Charge	Revenue Loss	Sharing of Loss
	MU	%	%	MU	Rs. / kWh	Rs. Crore	Rs. Crore
Bhusawal	1016.04	10.96%	13.43%	25.06	4.59	11.51	3.84
Chandrapur	9039.12	7.80%	10.50%	244.43	4.14	101.12	33.71
Khaperkheda	4676.31	9.70%	10.99%	60.38	3.46	20.91	6.97
Koradi	1388.59	10.81%	11.48%	9.27	2.75	2.55	0.85
Nashik	2647.38	10.75%	12.55%	47.67	4.61	21.98	7.33
Uran	1769.03	3.10%	2.92%	-3.14	5.29	-1.66	-0.55
Paras Units 3&4	3595.98	9.30%	10.48%	42.32	3.67	15.51	5.17
Parli Units 6&7	2809.23	9.30%	11.48%	61.28	5.39	33.02	11.01
Khaperkheda Unit 5	3591.10	6.00%	6.36%	12.96	3.03	3.92	1.31
Bhusawal Units 4&5	6559.20	6.00%	6.81%	53.29	3.82	20.34	6.78
Koradi Units 8-10	11811.72	6.00%	7.28%	151.08	2.60	39.24	13.08

Station/Unit	Actual Gross Generation	Normative AEC	Actual AEC	Lesser/ (Additional) sale	Rate of Energy Charge	Revenue Loss	Sharing of Loss
	MU	%	%	MU	Rs. / kWh	Rs. Crore	Rs. Crore
Chandrapur Units 8&9	7240.55	6.00%	6.02%	1.30	3.23	0.42	0.14
Parli Unit 8	1294.99	8.50%	12.14%	47.15	5.38	25.37	8.46
Total	**57439.23**			**753.04**		**294.24**	**98.08**

4.25 INCENTIVE FOR EXCESS HYDRO GENERATION

MSPGCL's Submission

4.25.1 MSPGCL submitted that in accordance with the provisions of Regulation 51 of the MYT Regulations, 2019, the availability of the hydro station and the actual generation exceeding the normative availability and design energy qualify for the applicable incentive.

4.25.2 Accordingly, MSPGCL had claimed incentive amounting to Rs. 14.18 Crore for FY 2022-23 and Rs. 0.44 Crore for FY 2023-24, as summarised below:

Table 4.59: Hydro Incentive submitted by MSPGCL for FY 2022-23 (Rs. Crore)

Particulars	Unit	Koyna	Bhira	Tillari	Total
Fixed Cost for Hydro	Rs. Crore	140.53	9.61	17.01	167.16
Normative Availability	%	90%	90%	90%	
Actual Availability	%	92.86%	99.10%	96.67%	
Normative Capacity Charge	Rs. Crore	70.27	4.81	8.51	83.58
Design Energy	MU	3,158.00	70.00	106.06	3,334.06
Auxiliary Consumption	%	1.13%	0.70%	1.20%	
Net Design Energy	MU	3122.31	69.51	104.79	3,296.61
Energy Charge Rate	Rs./kWh	0.23	0.69	0.81	
Actual Net Generation	MU	3450.12	94.15	126.33	3,670.60
Energy Charge billed	Rs. Crore	77.64	6.51	10.26	
AFC incentive	Rs. Crore	2.23	0.49	0.63	3.35
VC Incentive	Rs. Crore	7.38	1.70	1.75	10.83
Total incentive	**Rs. Crore**	**9.61**	**2.19**	**2.38**	**14.18**

Table 4.60: Hydro Incentive submitted by MSPGCL for FY 2023-24 (Rs. Crore)

Particulars	Unit	Koyna	Bhira	Tillari	Total
Fixed Cost for Hydro	Rs. Crore	127.66	7.63	16.93	152.23
Normative Availability	%	90.00%	90.00%	90.00%	
Actual Availability	%	90.16%	63.13%	61.28%	
Normative Capacity Charge	Rs. Crore	63.83	3.82	8.46	76.11
Design Energy	MU	3,158.00	70.00	106.06	3,334.06
Auxiliary Consumption	%	1.13%	0.70%	1.20%	

Particulars	Unit	Koyna	Bhira	Tillari	Total
Net Design Energy	MU	3,122.31	69.51	104.79	3,296.61
Energy Charge Rate	Rs./kWh	0.204	0.549	0.808	
Actual Net Generation	MU	2,929.64	75.41	46.89	3,051.94
Energy Charge billed	Rs. Crore	59.76	4.14	3.79	
AFC incentive	Rs. Crore	0.11	-	-	0.11
VC Incentive	Rs. Crore	-	0.32	-	0.32
Total incentive	**Rs. Crore**	**0.11**	**0.32**	**-**	**0.44**

Commission's Analysis and Ruling

4.25.3 The Commission has arrived at the incentive as per the MYT Regulations, 2019 as detailed in the Tables below:

Table 4.61: Hydro Incentive approved by the Commission for FY 2022-23 (Rs. Crore)

Particulars	Unit	Koyna	Bhira	Tillari	Total
Fixed Cost for Hydro	Rs. Crore	128.11	8.76	15.51	152.38
Normative Availability	%	90%	90%	90%	
Actual Availability	%	92.86%	99.10%	96.67%	
Normative Capacity Charge	Rs. Crore	64.05	4.38	7.75	76.19
Design Energy	MU	3,158.00	70.00	106.06	3,334.06
Auxiliary Consumption	%	1.13%	0.70%	1.20%	
Net Design Energy	MU	3122.31	69.51	104.79	3,296.61
Energy Charge Rate	Rs./kWh	0.23	0.69	0.81	
Actual Net Generation	MU	3450.12	94.15	126.33	3,670.60
Energy Charge billed	Rs. Crore	77.64	6.51	10.26	
AFC incentive	Rs. Crore	2.04	0.44	0.57	3.05
VC Incentive	Rs. Crore	7.38	1.70	1.75	10.83
Total incentive	**Rs. Crore**	**9.41**	**2.15**	**2.32**	**13.88**

Table 4.62: Hydro Incentive approved by the Commission for FY 2023-24 (Rs. Crore)

Particulars	Unit	Koyna	Bhira	Tillari	Total
Fixed Cost for Hydro	Rs. Crore	116.94	6.99	15.51	139.44
Normative Availability	%	90%	90%	90%	
Actual Availability	%	90.16%	63.13%	61.28%	
Normative Capacity Charge	Rs. Crore	58.47	3.50	7.75	69.72
Design Energy	MU	3,158.00	70.00	106.06	3,334.06
Auxiliary Consumption	%	1.13%	0.70%	1.20%	
Net Design Energy	MU	3122.31	69.51	104.79	3,296.61
Energy Charge Rate	Rs./kWh	0.20	0.55	0.81	
Actual Net Generation	MU	2929.64	75.41	46.89	3,051.94
Energy Charge billed	Rs. Crore	59.76	4.14	3.79	
AFC incentive	Rs. Crore	0.10	-	-	0.10

Particulars	Unit	Koyna	Bhira	Tillari	Total
VC Incentive	Rs. Crore	-	0.32	-	0.32
Total incentive	**Rs. Crore**	**0.10**	**0.32**	**-**	**0.43**

4.26 REDUCTION IN AFC DUE TO SHORTFALL AGAINST TARGET AVAILABILITY

MSPGCL's Submission

4.26.1 The reduction in AFC due to shortfall in target Availability is Rs. 1637.89 Crore for FY 2022-23 and Rs. 1096.26 Crore for FY 2023-24.

Commission's Analysis and Ruling

4.26.2 As the actual Availability of some of the stations is lower than the target Availability approved for recovery of full AFC, the Commission has approved the recovery of trued-up AFC for such stations on pro-rata basis, except for Uran. For Uran, the Commission has approved the recovery of full trued-up AFC, at actual Availability.

4.26.3 The computation of AFC disallowance for FY 2022-23 and FY 2023-24 is as shown in the Tables below:

Table 4.63: AFC disallowance for FY 2022-23 approved by the Commission

Station/Unit	Target Availability	Actual Availability	Total AFC	Less: water charges	Total AFC minus water charges	AFC Reduction	Reduced AFC	Reduced AFC plus water charges
	%	%	Rs. Crore	Rs. Crore	Rs. Crore	Rs. Crore	Rs. Crore	Rs. Crore
Bhusawal	80.00%	56.79%	156.71	13.85	142.85	41.46	101.39	115.25
Chandrapur	80.00%	52.12%	1070.98	16.41	1054.57	367.41	687.16	703.57
Khaperkheda	85.00%	63.63%	634.71	85.99	548.72	137.96	410.76	496.75
Koradi	72.00%	71.38%	266.81	35.58	231.24	8.76	222.47	258.05
Nashik	80.00%	65.82%	435.40	29.09	406.31	71.99	334.32	363.41
Uran	85.00%	26.18%	182.05	1.07	180.98	0.00	180.98	182.05
Paras Units 3&4	85.00%	71.68%	456.28	6.55	449.73	70.43	379.30	385.85
Parli Units 6&7	85.00%	74.82%	450.11	15.28	434.83	52.16	382.68	397.96
Khaperkheda Unit 5	85.00%	84.70%	531.91	5.60	526.32	11.41	514.91	520.51
Bhusawal Units 4&5	85.00%	76.36%	1056.33	9.19	1047.14	106.14	941.00	950.19
Koradi Units 8-10	85.00%	63.72%	2266.59	86.95	2179.65	544.93	1634.71	1721.66
Chandrapur Units 8&9	85.00%	81.97%	1133.95	8.42	1125.53	51.54	1073.98	1082.41
Parli Unit 8	85.00%	54.91%	368.38	8.73	359.64	127.34	232.31	241.04
Total			**9010.21**	**322.72**	**8687.49**	**1591.53**	**7095.97**	**7418.69**

Table 4.64: AFC disallowance for FY 2023-24 approved by the Commission

Station/Unit	Target Availability	Actual Availability	Total AFC	Less: water charges	Total AFC minus water charges	AFC Reduction	Reduced AFC	Reduced AFC plus water charges
	%	%	Rs. Crore	Rs. Crore	Rs. Crore	Rs. Crore	Rs. Crore	Rs. Crore
Bhusawal	80.00%	62.08%	175.34	16.34	159.00	35.69	123.31	139.65
Chandrapur	80.00%	57.27%	1192.01	26.89	1165.12	331.60	833.52	860.41
Khaperkheda	85.00%	65.54%	663.43	62.24	601.19	137.71	463.48	525.72
Koradi	72.00%	75.51%	297.31	41.88	255.43	0.00	255.43	297.31
Nashik	80.00%	81.20%	489.96	46.17	443.79	0.00	443.79	489.96
Uran	85.00%	34.82%	205.84	1.46	204.38	0.00	204.38	205.84
Paras Units 3&4	85.00%	83.05%	490.62	12.50	478.12	12.98	465.14	477.64
Parli Units 6&7	85.00%	89.43%	499.18	37.99	461.19	0.00	461.19	499.18
Khaperkheda Unit 5	85.00%	83.70%	595.79	43.12	552.67	8.30	544.37	587.50
Bhusawal Units 4&5	85.00%	81.13%	1082.29	20.11	1062.18	47.93	1014.25	1034.36
Koradi Units 8-10	85.00%	68.41%	2267.43	99.06	2168.38	422.57	1745.81	1844.86
Chandrapur Units 8&9	85.00%	86.00%	1162.43	26.24	1136.20	0.00	1136.20	1162.43
Parli Unit 8	85.00%	74.30%	392.36	20.03	372.33	46.97	325.36	345.39
Total			**9514.00**	**454.03**	**9059.97**	**1043.75**	**8016.22**	**8470.25**

4.26.4 The approved AFC reduction is lower than the AFC reduction claimed by MSPGCL owing to lower AFC approved by the Commission.

4.27 REVENUE FROM SALE OF POWER

MSPGCL's Submission

4.27.1 MSPGCL has considered the revenue from sale of power of Rs. 26,976.20 Crore for FY 2022-23 and Rs. 28,633.69 Crore for FY 2023-24.

Commission's Analysis and Ruling

4.27.2 The Commission has considered the reconciliation of the revenue with respect to the audited accounts for FY 2022-23 and FY 2023-24 and has considered the revenue as claimed for the purpose of true-up.

4.28 SUMMARY OF TRUE UP OF FY 2022-23 AND FY 2023-24

MSPGCL's Submission

4.28.1 The summary of true-up of FY 2022-23 and FY 2023-24 claimed by MSPGCL is as shown in the Tables below:

Table 4.65: Summary of true-up for FY 2022-23 claimed by MSPGCL (Rs. Crore)

Particulars	Revised Normative	Actual	Efficiency (Gain)/Loss	Sharing of efficiency (Gain)/Loss	Net entitlement
	A	B	C=B-A	D=1/3rd of (Gain)/Loss	E=A+D
Expenses side summary					
Return on Equity	1,632.57				1,632.57
Interest on Loan	1,379.65				1,379.65
Depreciation	2,107.69				2,107.69
O&M expenses	3,204.21	3,668.99	464.79	154.93	3,359.14
Water Charges		322.72			322.72
Other Charges		295.06			295.06
Other charges - Hydro colony related		2.70			2.70
Interest on Working Capital	1,828.63	1,475.10	-353.53	-235.69	1,592.94
IT Expenses		21.45			21.45
Less: Non-Tariff Income		61.53			61.53
Annual Fixed Charges					**10,652.39**
Income Tax		-			-
Hydro Incentive		14.18			14.18
Hydro Lease Rent		541.20			541.20
Fuel Cost	19,113.91	22,698.40	3,584.49	1,194.83	20,308.74
Aggregate Revenue Requirement					**31,516.51**
AFC Reduction					1,637.89
Net Revenue Requirement					**29,882.99**
Revenue from sale of power		26,976.20			26,976.20
Revenue loss due to higher auxiliary consumption				64.74	64.74
Revenue for true-up					**27,040.95**
Revenue Gap/(Surplus)					**2,837.68**
Revenue Gap/(Surplus) approved in MTR Order					**-1,031.72**
Net Revenue Gap/(Surplus) to be approved after final true-up					**3,869.40**

Table 4.66: Summary of true-up for FY 2023-24 claimed by MSPGCL (Rs. Crore)

Particulars	Revised Normative	Actual	Efficiency (Gain)/Loss	Sharing of efficiency (Gain)/Loss	Net entitlement
	A	B	C=B-A	D=1/3rd of (Gain)/Loss	E=A+D
Expenses side summary					
Return on Equity	1,657.25				1,657.25
Interest on Loan	1,248.95				1,248.95
Depreciation	1,985.48				1,985.48

Particulars	Revised Normative	Actual	Efficiency (Gain)/Loss	Sharing of efficiency (Gain)/Loss	Net entitlement
	A	B	C=B-A	D=1/3rd of (Gain)/Loss	E=A+D
O&M expenses	3,333.59	4,212.35	878.76	292.92	3,626.51
Pay revision		289.62			289.62
Water Charges		454.03			454.03
Other Charges		292.68			292.68
Other charges - Hydro colony related		2.65			2.65
Interest on Working Capital	1,998.75	1,818.53	-180.22	-120.15	1,878.60
IT Expenses		28.89			28.89
Less: Non-Tariff Income		58.55			58.55
Annual Fixed Charges			**-**		**11,406.10**
Income Tax			-		-
Hydro Incentive		0.44			0.44
Hydro Lease Rent		531.70			531.70
Fuel Cost	19,329.63	20,856.47	1,526.84	508.95	19,838.57
Aggregate Revenue Requirement			-		**31,776.81**
AFC Reduction			-		1,096.26
Net Revenue Requirement			-		**30,680.55**
Revenue from sale of power		28,633.69			28,633.69
Revenue loss due to higher auxiliary consumption				63.42	63.42
Revenue for true-up			-		**28,697.12**
Revenue Gap/(Surplus)			-		**1,983.44**

Commission's Analysis and Ruling

4.28.2 In accordance with the MYT Regulations, 2019, the Commission has allowed the expenses for FY 2022-23 and FY 2023-24 based on the norms of operation approved in this Order, and carried out the sharing of gains and losses under the following heads:

i. Sharing of losses in O&M expenses.
ii. Sharing of losses in fuel expenses.
iii. Sharing of gains towards IoWC.
iv. Sharing of normative revenue loss due to higher AEC.

4.28.3 In accordance with the MYT Regulations, 2019, 2/3rd of efficiency gains and 1/3rd of efficiency loss on account of variation in controllable factors is to be passed on to the beneficiary. The ARR approved by the Commission after truing up for FY 2022-23 and FY 2023-24 is shown in the Tables below:

Table 4.67: Summary of true-up for FY 2022-23 approved by the Commission (Rs. Crore)

Particulars	Approved in MTR	Normative	Actual	Efficiency (Gain)/Loss	Sharing of efficiency (Gain)/Loss	Net entitlement
		A	B	C=B-A	D=2/3rd of (Gain); 1/3rd of Loss	E=A+D
Expenses side summary						
Return on Equity	1617.45	1623.98				1623.98
Interest on Loan	1452.77	1390.82				1390.82
Depreciation	2028.50	1979.16				1979.16
O&M expenses	3686.38	3060.39	3711.89	651.50	217.17	3277.56
Pay Revision			0.00			0.00
Water Charges			322.72			322.72
Other Charges			295.06			295.06
Other Charges- Hydro Colony			2.70			2.70
Interest on Working Capital	789.66	0.00	1475.10	1475.10	491.70	491.70
IT Expenses						
Less: Non-Tariff Income	260.27		61.53			61.53
Annual Fixed Charges	**9314.49**					**9322.16**
Income Tax	0.00	0.00				0.00
Hydro Incentive			13.89			13.89
Hydro Lease Rent	541.19		541.20			541.20
Fuel Cost	22108.99	19113.91	22580.68	3466.77	1155.59	20269.50
Aggregate Revenue Requirement	**31964.67**					**30146.74**
AFC Reduction	993.16	1591.53				1591.53
Net Revenue Requirement	**30971.51**					**28555.21**
Revenue from sale of power	**32003.23**		26976.20			26976.20
Revenue from Compensation as per Grid Code						
Revenue loss due to higher auxiliary consumption				295.87	98.62	98.62
Revenue for true-up	**32003.23**					**27074.83**
Revenue Gap/(Surplus)	**-1031.72**					**1480.38**
Revenue Gap/(Surplus) approved in provisional true-up						**-1031.72**
Net Revenue Gap/(Surplus) approved after final true-up						**2512.11**

Table 4.68: Summary of true-up for FY 2023-24 approved by the Commission (Rs. Crore)

Particulars	Approved in MTR	Normative	Actual	Efficiency (Gain)/Loss	Sharing of efficiency (Gain)/Loss	Net entitlement
		A	B	C=B-A	D=2/3rd of (Gain); 1/3rd of Loss	E=A+D
Expenses side summary						
Return on Equity	1673.90	1653.67				1653.67
Interest on Loan	1341.42	1260.86				1260.86
Depreciation	2184.90	2009.32				2009.32
O&M expenses	3805.33	3184.85	4270.14	1085.29	361.76	3546.61
Pay Revision			289.62			289.62
Water Charges			454.03			454.03
Other Charges			292.68			292.68
Other Charges- Hydro Colony			2.65			2.65
Interest on Working Capital	858.65	0.00	1818.53	1818.53	606.18	606.18
IT Expenses						
Less: Non-Tariff Income	133.07		58.55			58.55
Annual Fixed Charges	**9731.12**					**10057.06**
Income Tax	0.00	0.00				0.00
Hydro Incentive			0.43			0.43
Hydro Lease Rent	533.76		531.70			531.70
Fuel Cost	24487.36	19329.63	20768.72	1439.09	479.70	19809.32
Aggregate Revenue Requirement	**34752.24**					**30398.51**
AFC Reduction		1043.75				1043.75
Net Revenue Requirement	**34752.24**					**29354.76**
Revenue from sale of power			28633.69			28633.69
Revenue from Compensation as per Grid Code						
Revenue loss due to higher auxiliary consumption				294.24	98.08	98.08
Revenue for true-up						**28731.77**
Revenue Gap/(Surplus)						**622.99**

4.29 OTHER ISSUES TO BE TRUED-UP

Expenses for CMAGF projects (MSKVY)

MSPGCL's Submission

4.29.1 MSPGCL submitted that it had filed a Petition (Case No. 172 of 2017) in the matter of removal of difficulties in the implementation of "Mukhya Mantri Solar Agricultural Feeder Scheme", approval of draft Power Purchase Agreement (PPA) and draft Power Sale Agreement (PSA) being executed by MSPGCL with the developer and MSEDCL., respectively, for Agriculture (AG) Feeder Solar Power Projects in Maharashtra. In this matter, MSPGCL had requested the Commission for approval of additional A&G expenses to be recovered in the form of trading margin on a per unit basis.

4.29.2 While disposing of the Petition in Case No. 172 of 2017 vide Order dated 16 October 2018, the Commission had ruled as under regarding recovery of such additional A&G expenses:

"The Commission notes that the Intra-State Trading margin has not yet determined by the Commission. On this issue the Commission in its Order dated 25 September, 2018 in Case NO.104 of 2018 has directed MSPGCL as follows;

"23. MSPGCL shall abide by such trading margin, as and when same is decided by the Commission to fix under Section 86(l)U) of the Electricity Act, 2003 for Intra-State Trading transactions in the State of Maharashtra." (Emphasis added)

The Commission notes that presently upto seven paise per unit is allowed to SECI as a trading margin as an intermediary whereas MSPGCL under the present Case has proposed five paise per unit as an Administrative charge. After considering the Administrative charges of MSPGCL, the power purchase cast of the power from the proposed scheme works out to Rs. 3.20 per unit. Considering the decreasing trend of Solar tariffs, such an additional trading margin of 5 paise per unit over and above the discovered tariff/rate will add more burden on the end consumers.

Moreover, MSEDCL in its submission dated June 2, 2018 on this issue of MSPGCL's Administrative charge, has stated that; the administrative expenses incurred by MSPGCL towards implementation of the scheme as an intermediary procurer may be claimed by MSPGCL in their Aggregate Revenue Requirement (ARR) and no administrative charges be added to the PPA tariff. MSEDCL further stated that the Commission may review and decide the administrative charges proposed by MSPGCL in transparent manner as such charges shall has long term impact. In light of above submissions and circumstances the Commission rejects MSPGCL's prayers regarding approval of the administrative charges (Trading margin) of 5 Poise per unit. Until the trading margin is duly determined, MSPGCL can claim prudent administrative expenses as an intermediary procurer as part of its ARR. ".

4.29.3 In view of the above, MSPGCL submitted that it has been claiming the expenses incurred by it on development of Solar Power project under Chief Minister Agricultural feeder (CMAg) Solar scheme.

4.29.4 MSPGCL further submitted that even though in the GoM GR dated 14 June, 2017 and 17 March, 2018, it is envisaged that the Government land will be made available at nominal lease rent of Rs. 1 per year, during the initial phase of implementation of the scheme, some more expenses were incurred by MSPGCL for land acquisition and land development. The issue of reimbursement of these expenses was raised by MSPGCL before the CMAg Scheme Implementation Committee headed by the Principal Secretary (Energy), GoM. In the meeting dated 05 April, 2019, the Committee had resolved to approach GoM for reimbursement of these expenses. Accordingly, MSPGCL had approached Energy Department, GoM for reimbursement of such expenses to MSPGCL. However, as of now GoM has not made any reimbursement of such land acquisition expenses incurred by MSPGCL. Therefore, MSPGCL requested the Commission to consider these expenses for reimbursement through ARR as directed under Order dated 16 October, 2018 in Case No. 72 of 2017.

4.29.5 MSPGCL submitted that the CMAg scheme related expense for FY 2022-23 is Rs. 5.01 Crore and for FY 2023-24 is Rs. 3.41 Crore.

Commission's Analysis and Ruling

4.29.6 The Commission has observed that expenses incurred under CMAg are already considered under O&M Expenses as per the Audited Accounts. Hence, the Commission has not approved expenses incurred separately.

4.29.7 The Commission has considered the above approved amount in computing the cumulative Revenue Gap/(Surplus) up to FY 2024-25 as detailed in Chapter 6 of the Order.

5 PROVISIONAL TRUE-UP FOR FY 2024-25

5.1 BACKGROUND

5.1.1 MSPGCL, in the present Petition has sought the approval of Provisional True-up for FY 2024-25 under the MYT Regulations, 2019. The analysis of the provisional true-up undertaken by the Commission is detailed below.

5.2 NORMS OF OPERATION

5.2.1 The norms of operation specified under the MYT Regulations, 2019 for thermal generating stations are as follows:

(i) Availability
(ii) Plant Load Factor (PLF)
(iii) Auxiliary Energy Consumption (AEC)
(iv) Gross Station Heat Rate (GSHR)
(v) Secondary fuel oil consumption (SFOC).
(vi) Transit and handling loss

5.2.2 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 in respective Orders. MSPGCL has submitted the actual performance for H1 of FY 2024-25 and estimated performance for H2 of FY 2024-25. MSPGCL's submissions on the estimated performance for FY 2024-25 and the Commission's analysis is detailed hereunder.

5.3 AVAILABILITY

MSPGCL's Submission

5.3.1 MSPGCL submitted that the estimated Availability for FY 2024-25 as shown in the following Table:

Table 5.1: Availability submitted by MSPGCL for FY 2024-25

Station/unit	Normative	Estimated
Bhusawal	80.00%	67.52%
Chandrapur	80.00%	69.33%
Khaperkheda	85.00%	71.95%
Koradi	72.00%	70.31%
Nashik	80.00%	65.05%
Uran	85.00%	41.87%
Paras Units 3&4	85.00%	74.92%
Parli Units 6&7	85.00%	70.22%
Khaperkheda Unit 5	85.00%	83.39%
Bhusawal Units 4&5	85.00%	75.03%

Station/unit	Normative	Estimated
Koradi Units 8-10	85.00%	77.54%
Chandrapur Units 8&9	85.00%	74.31%
Parli Unit 8	85.00%	72.32%

5.3.2 MSPGCL submitted that the actual coal realisation during H1 of FY 2024-25 was lower at pan-India level resulting in lower availability. With the improving situation, the Availability is expected to improve.

5.3.3 MSPGCL requested the Commission to consider and approve the target availability as recommended in the CPRI Energy Audit reports for Khaperkheda Units 1 to 4.

Commission's Analysis and Ruling

5.3.4 As discussed in the final true-up of FY 2022-23 and FY 2023-24, the Commission is not inclined to revise the target availability retrospectively for Khaperkheda Units 1-4 for FY 2024-25 considering the CPRI Report submitted by MSPGCL. Hence, the Commission has considered the normative availability as per the MYT Regulations, 2019 for recovery of Fixed Charges.

5.3.5 The recovery of full AFC is allowable at target Availability. As the estimated Availability is lower than the target Availability for some of the Stations, the Commission has approved the recovery of provisionally trued-up AFC for FY 2024-25 on pro-rata basis, for these Stations (except for Uran) since, the complete details of availability in the high demand and low demand seasons for peak and off-peaks hours are not available presently. For Uran, the Commission has approved the recovery of full AFC for FY 2024-25 at estimated Availability, considering shortage of gas as uncontrollable factor.

5.4 PLANT LOAD FACTOR (PLF)

MSPGCL's Submission

5.4.1 MSPGCL submitted the estimated PLF for FY 2024-25 as shown in the Table below:

Table 5.2: PLF submitted by MSPGCL for FY 2024-25

Station/Unit	Normative	Estimated
Bhusawal	85.00%	67.52%
Chandrapur	85.00%	69.33%
Khaperkheda	85.00%	71.95%
Koradi	85.00%	70.31%
Nashik	85.00%	65.05%
Uran	85.00%	41.87%
Paras Units 3&4	85.00%	74.92%

Station/Unit	Normative	Estimated
Parli Units 6&7	85.00%	70.22%
Khaperkheda Unit 5	85.00%	83.39%
Bhusawal Units 4&5	85.00%	75.03%
Koradi Units 8-10	85.00%	77.54%
Chandrapur Units 8&9	85.00%	74.31%
Parli Unit 8	85.00%	72.32%

Commission's Analysis and Ruling

5.4.2 The Commission has considered the estimated PLF for FY 2024-25 as submitted by MSPGCL.

5.5 AUXILIARY ENERGY CONSUMPTION (AEC)

MSPGCL's Submission

5.5.1 The estimated AEC for FY 2024-25 is as shown in the Table below:

Table 5.3: Estimated AEC submitted by MSPGCL for FY 2024-25

Station/Unit	Normative	Estimated
Bhusawal	10.96%	10.96%
Chandrapur	7.80%	9.34%
Khaperkheda	9.70%	10.21%
Koradi	10.81%	10.81%
Nashik	10.75%	10.75%
Uran	3.10%	2.91%
Paras Unit 3&4	9.30%	10.25%
Parli Unit 6&7	9.30%	10.25%
Khaperkheda Unit 5	6.00%	6.00%
Bhusawal Unit 4&5	6.00%	6.00%
Koradi Units 8-10	6.00%	6.00%
Chandrapur Units 8&9	6.00%	6.00%
Parli Unit 8	8.50%	8.50%

5.5.2 MSPGCL requested the Commission to consider and approve the auxiliary consumption norms as recommended in the CPRI Energy Audit reports for Chandrapur Units 3-7, Paras Units 3-4, Parli Units 6, 7, and 8, and Khaperkheda Units 1 to 4. MSPGCL stated that the normative AEC approved by the Commission for these stations is lower than the actual AEC. MSPGCL further submitted that the norm of AEC approved by the Commission is lower and not achievable, while the actual AEC of the stations is comparable with the AEC recommended in the CPRI report. In light of this, MSPGCL requested the Commission to consider these recommendations in its deliberations and allow revenue loss or gain due to higher energy consumption accordingly under provisional True-up.

Commission Analysis and Ruling

5.5.3 MSPGCL has claimed the relaxation in AEC considering the CPRI Report for Chandrapur, Khaperkheda, Paras Units 3 &4, and Parli Unit 6 & 7. As discussed in the final true-up for FY 2022-23 and FY 2023-24, the Commission is not inclined to relax the norms of operation retrospectively for any of the generating station for FY 2024-25 considering the CPRI Report submitted by MSPGCL. Hence, the Commission has considered the normative AEC as per the MYT Regulations, 2019 for calculation of net generation. The Normative AEC as approved by the Commission is summarised below:

Table 5.4: AEC approved by the Commission for FY 2022-23 and FY 2023-24

Station/Unit	FY 2022-23			FY 2023-24		
	Approved in MTR	Revised Normative	Approved	Approved in MTR	Revised Normative	Approved
Bhusawal	10.96%	10.96%	10.96%	10.96%	10.96%	10.96%
Chandrapur	7.80%	9.34%	7.80%	7.80%	9.34%	7.80%
Khaperkheda	9.70%	10.21%	9.70%	9.70%	10.21%	9.70%
Koradi	10.81%	10.81%	10.81%	10.81%	10.81%	10.81%
Nashik	10.75%	10.75%	10.75%	10.75%	10.75%	10.75%
Uran	3.10%	3.10%	3.10%	3.10%	3.10%	3.10%
Paras Units 3&4	9.30%	10.25%	9.30%	9.30%	10.25%	9.30%
Parli Units 6&7	9.30%	10.25%	9.30%	9.30%	10.25%	9.30%
Khaperkheda Unit 5	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%
Bhusawal Units 4&5	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%
Koradi Units 8-10	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%
Chandrapur Units 8&9	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%
Parli Unit 8	8.50%	9.14%	8.50%	8.50%	9.14%	8.50%

5.6 NET GENERATION

MSPGCL's Submission

5.6.1 The estimated net generation for FY 2024-25 is as shown in the Table below:

Table 5.5: Net Generation submitted by MSPGCL for FY 2024-25 (MU)

Station/Unit	Approved in MTR	Estimated
Bhusawal	1306.34	1091.98
Chandrapur	10535.62	10513.30
Khaperkheda	4959.04	4727.27

Station/Unit	Approved in MTR	Estimated
Koradi	1181.33	1143.38
Nashik	3940.42	3174.68
Uran	2173.76	2392.72
Paras Units 3&4	3325.15	2930.07
Parli Units 6&7	3376.76	2736.36
Khaperkheda Unit 5	3499.62	3418.79
Bhusawal Units 4&5	6999.24	6136.95
Koradi Units 8-10	11687.48	12584.72
Chandrapur Units 8&9	6999.24	6105.59
Parli Unit 8	1703.27	1418.73
Total	**61687.27**	**58374.53**

Commission's Analysis and Ruling

5.6.2 The Commission has considered the estimated gross generation as submitted by MSPGCL and has calculated the net generation based on normative AEC approved in line with the MYT Regulations, 2019. Accordingly, the gross generation and net generation approved by the Commission is as shown in the Table below:

Table 5.6: Gross generation and net generation for FY 2024-25 (MU)

Station/Unit	Gross generation			Net generation		
	Approved in MYT	Estimated	Approved	Approved in MYT	Estimated	Approved
Bhusawal	1467.13	1242.09	1242.09	1306.34	1091.98	1105.95
Chandrapur	11426.92	11661.03	11661.03	10535.62	10513.30	10751.47
Khaperkheda	5491.74	5294.10	5294.10	4959.04	4727.27	4780.57
Koradi	1324.51	1293.45	1293.45	1181.33	1143.38	1153.63
Nashik	4415.04	3589.93	3589.93	3940.42	3174.68	3204.01
Uran	2243.30	2464.54	2464.54	2173.76	2392.72	2388.14
Paras Units 3&4	3666.10	3281.45	3281.45	3325.15	2930.07	2976.27
Parli Units 6&7	3723.00	3075.58	3075.58	3376.76	2736.36	2789.55
Khaperkheda Unit 5	3723.00	3652.64	3652.64	3499.62	3418.79	3433.48
Bhusawal Units 4&5	7446.00	6572.44	6572.44	6999.24	6136.95	6178.09
Koradi Units 8-10	12433.49	13449.01	13449.01	11687.48	12584.72	12642.07
Chandrapur Units 8&9	7446.00	6509.79	6509.79	6999.24	6105.59	6119.20
Parli Unit 8	1861.50	1584.08	1584.08	1703.27	1418.73	1449.43
Total	**66667.73**	**63670.10**	**63670.10**	**61687.27**	**58374.53**	**58971.86**

5.7 GROSS STATION HEAT RATE (GSHR)

MSPGCL's Submission

5.7.1 The estimated GSHR for FY 2024-25 is shown in the Table below:

Table 5.7: Estimated GSHR submitted by MSPGCL for FY 2024-25 (kcal/kWh)

Station/Unit	Normative	Claimed by MSPGCL
Bhusawal	2787.00	2787.00
Chandrapur	2688.00	2688.00
Khaperkheda	2630.00	2630.00
Koradi	2350.00	2455.75
Nashik	2754.00	2754.00
Uran	2035.00	2035.00
Paras Units 3&4	2430.00	2415.00
Parli Units 6&7	2430.00	2415.00
Khaperkheda Unit 5	2375.00	2375.00
Bhusawal Units 4&5	2375.00	2375.00
Koradi Units 8-10	2230.00	2230.00
Chandrapur Units 8&9	2375.00	2375.00
Parli Unit 8	2430.00	2415.00

Commission's Analysis and Ruling

5.7.2 The Commission has considered the normative GSHR in the provisional true-up of FY 2024-25 as it is in line with the MYT Regulations, 2019, except for Koradi Unit 6, the Commission has considered the SHR as approved in the final true-up for FY 2022-23 and FY 2023-24, for FY 2024-25 also.

5.8 SPECIFIC FUEL OIL CONSUMPTION (SFOC)

MSPGCL's Submission

5.8.1 The estimated SFOC for FY 2024-25 is shown in the Table below:

Table 5.8: Estimated SFOC submitted by MSPGCL for FY 2024-25 (ml/kWh)

Station/Unit	Normative	Claimed by MSPGCL
Bhusawal	1.40	1.40
Chandrapur	1.00	1.00
Khaperkheda	1.20	1.20
Koradi	2.81	2.81
Nashik	1.00	1.00
Paras Units 3&4	0.50	0.50
Parli Units 6&7	0.50	0.50

Station/Unit	Normative	Claimed by MSPGCL
Khaperkheda Unit 5	0.50	0.50
Bhusawal Units 4&5	0.50	0.50
Koradi Units 8-10	0.50	0.50
Chandrapur Units 8&9	0.50	0.50
Parli Unit 8	0.50	0.50

Commission's Analysis and Ruling

5.8.2 The Commission has considered the normative SFOC in the provisional true-up of FY 2024-25 as it is in line with the MYT Regulations, 2019.

5.9 GROSS CALORIFIC VALUE (GCV) OF FUELS

MSPGCL's Submission

5.9.1 MSPGCL submitted that the Commission has acknowledged the GCV loss of 750 kcal/kg for MYT period in the MYT Regulations 2024. Therefore, the fact of actual GCV loss as admitted by the Commission for MYT period (FY 2025-26 to FY 2029-30) also remain relevant for period FY 2022-23 to FY 2024-25 for which True Up is being undertaken in this Petition. It is settled law that similar facts must be treated in a similar fashion so as to not be arbitrary/ discriminatory. In view of this, MSPGCL requested the Commission to allow GCV loss of 750 kcal/kg for FY 2024-25.

5.9.2 MSPGCL further submitted that despite MSPGCL's request (in foregoing para) to the Commission to permit a GCV variation of at least 750 kcal/kg between the 'As Billed' and 'As Received' GCV, in view of the fact that the matter is sub-judice before the Hon'ble APTEL, MSPGCL has calculated its claim for normative fuel costs for FY 2024-25 based on a GCV gap of 650 kcal/kg approved by the Commission in MTR review Order. Additionally, MSPGCL respectfully sought appropriate relaxations for FY 2024-25 by invoking the provisions of the MYT Regulations, 2019, under the clauses for "Power to Relax" and "Power to Remove Difficulties."

5.9.3 Based on the above, the details of GCV claimed by MSPGCL is as below:

Table 5.9: GCV of fuels submitted by MSPGCL for FY 2024-25

Station/Unit	Coal as Fired (kcal/kg)	Secondary Fuel Oil (kcal/L)	Gas (kcal/SCM)
Bhusawal	3145.86	9804.63	
Chandrapur	3288.28	9494.74	
Khaperkheda	3138.41	9468.64	
Koradi	3292.16	9555.20	
Nashik	3146.72	9483.87	
Uran			8672.95
Paras Units 3&4	3359.79	9476.52	

Station/Unit	Coal as Fired (kcal/kg)	Secondary Fuel Oil (kcal/L)	Gas (kcal/SCM)
Parli Units 6&7	3182.27	9444.60	
Khaperkheda Unit 5	3138.41	9468.64	
Bhusawal Units 4&5	3180.01	9816.11	
Koradi Units 8-10	3438.49	9450.66	
Chandrapur Units 8&9	3291.95	9475.52	
Parli Unit 8	3173.96	9241.03	

Commission's Analysis and Ruling

5.9.4 The Commission has considered the estimated GCV of secondary fuel oil and gas as submitted by MSPGCL.

5.9.5 As regards the GCV of coal, the Commission, in the review of the MTR Order in Case No. 132 of 2023 ruled as under:

"16.45 The Commission also notes that the Commission in its Order dated dated 1 March, 2021 on Review Petition filed on MYT Order under provisions of Power to Relax of MYT Regulations, 2019 has relaxed the GCV loss up to 650 kcal/kg (i.e., additional 350 kcal/kg over and above the GCV loss specified in MYT Regulations) for FY 2020-21. Hence, the GCV loss in excess of 650 kcal/kg cannot be allowed as this was the target specified for first year of the Control Period. Accordingly, the Commission relaxes the GCV loss by 350 kcal/kg and allows total GCV loss of up to 650 kcal/kg for FY 2023-24 and FY 2024-25 subject to following conditions:

• MSPGCL shall adhere to the percentage of washed coal to be utilized as per fuel utilization plan submitted as part of MTR Petition.

16.46 Accordingly, the relaxed GCV loss permissible for these 2 years shall be as follows:

• FY 2023-24: Relaxation of 350 kcal/kg in loss of GCV in addition to 300 kCal/kg as per MYT Regulations, 2019.

• FY 2024-25: Relaxation of 350 kcal/kg in loss of GCV in addition to 300 kCal/kg as per MYT Regulations, 2019.

16.47 However, the Commission also directs MSPGCL to take all the necessary and adequate steps to minimize the grade slippage and submit the efforts taken by MSPGCL during the MYT Petition for considering the relaxed norms approved in this Order on its merit. …"

5.9.6 However, the Commission has observed that MSPGCL has claimed for review of GCV Loss relaxation to 750 kcal/kg on a retrospective basis for FY 2024-25, which is not in line with the MYT Regulations and relevant Orders issued by the Commission. Hence, the Commission has considered the GCV loss relaxation of 650 kcal/kg as approved in the Review Order dated 1 February, 2024 for working of the normative fuel cost for FY

2024-25.

5.9.7 Accordingly, the Commission has considered the GCV of fuels as shown in the Table below:

Table 5.10: GCV of fuels considered by Commission for FY 2024-25

Station/Unit	Coal (kcal/kg)		Secondary Fuel Oil (kcal/L)		Gas (kcal/SCM)	
	Approved in MYT	Approved in provisional true-up	Approved in MYT	Approved in provisional true-up	Approved in MYT	Approved in provisional true-up
Bhusawal	4031.76	3145.86	9836.32	9804.63	-	-
Chandrapur	3325.57	3288.28	9592.42	9494.74	-	-
Khaperkheda	3423.44	3138.41	9490.99	9468.64	-	-
Koradi	3730.89	3292.16	9400.92	9555.20	-	-
Nashik	3599.99	3146.72	9864.55	9483.87	-	-
Uran					8815.17	8672.95
Paras Units 3&4	3395.12	3359.79	9688.48	9476.52	-	-
Parli Units 6&7	3178.01	3182.27	9327.38	9444.60	-	-
Khaperkheda Unit 5	3503.02	3138.41	9488.93	9468.64	-	-
Bhusawal Units 4&5	3896.65	3180.01	9836.32	9816.11	-	-
Koradi Units 8-10	4041.67	3438.49	9557.39	9450.66	-	-
Chandrapur Units 8&9	3602.60	3291.95	9557.39	9475.52	-	-
Parli Unit 8	3068.22	3173.96	9327.38	9241.03	-	-

5.10 LANDED PRICE OF FUELS

MSPGCL's Submission

5.10.1 MSPGCL has projected the landed price of fuels as summarised below:

Table 5.11: Landed prices of fuels submitted by MSPGCL for FY 2024-25

Station/Unit	Coal (Rs./MT)	Secondary Fuel Oil (Rs./kL)	Gas (Rs./'000 SCM)
Bhusawal	4759.58	59438.68	
Chandrapur	4724.10	61596.14	
Khaperkheda	3879.23	57945.74	
Koradi	3586.94	57981.80	
Nashik	4953.78	58417.35	
Uran			21577.04
Paras Units 3&4	4722.11	59695.66	
Parli Units 6&7	6398.13	60597.21	
Khaperkheda Unit 5	4107.93	60094.40	
Bhusawal Units 4&5	5106.72	57506.34	

Station/Unit	Coal (Rs./MT)	Secondary Fuel Oil (Rs./kL)	Gas (Rs./'000 SCM)
Koradi Units 8-10	4235.42	59777.82	
Chandrapur Units 8&9	4269.73	62059.17	
Parli Unit 8	6404.29	65285.07	

Commission's Analysis and Ruling

5.10.2 The Commission has considered the station-wise estimated landed price of coal as submitted by MSPGCL. The Commission has considered the estimated prices of secondary fuel oil and gas as submitted by MSPGCL. The fuel prices considered by the Commission for FY 2024-25 are shown in the Table below:

Table 5.12: Fuel prices considered by the Commission for FY 2024-25

Station/Unit	Coal (Rs./MT)		Secondary Fuel Oil (Rs./kL)		Gas (Rs./'000 SCM)	
	Approved in MYT	Approved in provisional true-up	Approved in MYT	Approved in provisional true-up	Approved in MYT	Approved in provisional true-up
Bhusawal	5645.48	4759.58	63644.82	59438.68	-	-
Chandrapur	4607.58	4724.10	66163.54	61596.14	-	-
Khaperkheda	4872.12	3879.23	68093.14	57945.74	-	-
Koradi	4525.94	3586.94	66006.49	57981.80	-	-
Nashik	5344.84	4953.78	67987.07	58417.35	-	-
Uran					28374.69	21577.04
Paras Units 3&4	4407.23	4722.11	70190.00	59695.66	-	-
Parli Units 6&7	6014.79	6398.13	63635.12	60597.21	-	-
Khaperkheda Unit 5	5540.80	4017.93	56842.88	60094.40	-	-
Bhusawal Units 4&5	5735.45	5106.72	65686.30	57506.34	-	-
Koradi Units 8-10	5265.66	4235.42	65995.77	59777.82	-	-
Chandrapur Units 8&9	4867.41	4269.73	65995.77	62059.17	-	-
Parli Unit 8	5807.25	6404.29	64030.20	65285.07	-	-

5.11 ENERGY CHARGES

MSPGCL's Submission

5.11.1 MSPGCL submitted that considering the actual generation for H1 (Apr-Sep) and revised projected generation for H2 (Oct-Mar), projection of revised energy charge rate is computed as below:

Table 5.13: Energy charges for FY 2024-25 as submitted by MSPGCL

Station/Unit	Energy Charges (Rs. Crore)	Energy Charges (Rs./kWh)
Bhusawal	531.50	4.806
Chandrapur	4462.11	4.221
Khaperkheda	1705.37	3.588
Koradi	362.79	3.145
Nashik	1540.96	4.809
Uran	1263.84	5.289
Paras Units 3&4	1128.33	3.831
Parli Units 6&7	1509.02	5.467
Khaperkheda Unit 5	1081.99	3.151
Bhusawal Units 4&5	2473.94	4.004
Koradi Units 8-10	3726.52	2.948
Chandrapur Units 8&9	1962.90	3.208
Parli Unit 8	780.39	5.384
Total	**22529.65**	

Commission's Analysis and Ruling

5.11.2 The Commission has computed the energy charges for each station considering the approved generation, performance parameters, GCV of fuels and landed price of fuels, as shown in the Table below:

Table 5.14: Energy Charges for FY 2024-25

Station/Unit	Claimed (in Rs. Crore)	Approved (in Rs. Crore)	Claimed (in Rs. /kWh)	Approved (in Rs. /kWh)
Bhusawal	531.50	531.50	4.806	4.806
Chandrapur	4462.11	4462.11	4.221	4.150
Khaperkheda	1705.37	1705.37	3.588	3.567
Koradi	362.79	362.79	3.145	3.145
Nashik	1540.96	1540.96	4.809	4.809
Uran	1263.84	1263.84	5.289	5.292
Paras Units 3&4	1128.33	1128.33	3.831	3.791
Parli Units 6&7	1509.02	1509.02	5.467	5.410
Khaperkheda Unit 5	1081.99	1081.99	3.151	3.151
Bhusawal Units 4&5	2473.94	2473.94	4.004	4.004
Koradi Units 8-10	3726.52	3726.52	2.948	2.948
Chandrapur Units 8&9	1962.90	1962.90	3.208	3.208
Parli Unit 8	780.39	780.39	5.384	5.384
Total	**22529.65**	**22529.65**		

5.12 OTHER EXPENSES INCURRED DUE TO POWER PURCHASE

MSPGCL's Submission

5.12.1 MSPGCL submitted that in light of the rising demand reaching approximately 23,500 MW since July 2024 and an anticipated supply shortage of 1,000–1,500 MW during morning and evening peak periods, MSEDCL, in August 2024, requested MSPGCL to explore options for sourcing additional power through Power Exchange purchases to meet the increased demand. At that time, MSEDCL also faced certain restrictions on purchasing power from the Power Exchange.

5.12.2 MSPGCL communicated the following to MSEDCL:

- The PPA between MSPGCL and MSEDCL, dated 1 April, 2009, includes no terms or conditions addressing this matter;
- No Regulations currently issued by by the Commission provide support for this type of purchase;
- The State Grid Code 2020 does not contain a provision equivalent to Section 48 of the IEGC, which applies only to central sector generators;
- Consequently, for MSPGCL to procure power through bilateral transactions or market purchases, necessary approvals, directives, or permissions from the Government of Maharashtra and the Commission are required; otherwise, NLDC may not permit MSPGCL to engage in such transactions.

5.12.3 MSPGCL submitted that notably, sourcing power from alternate suppliers could be feasible through market purchases. However, MSPGCL would need to initiate processes such as NOAR registration and membership with IEX to facilitate such procurement. Due to MSEDCL's repeated requests to address power shortages and in anticipation of directives from the Government of Maharashtra (GoM), MSPGCL had taken the following preparatory steps to enable a quick response:

- As MSPGCL's Delegation of Power (DoP) did not include provisions for market power purchases, the matter was presented to the MSPGCL's Board. A Board Resolution was passed, authorizing power procurement from the Power Exchange to supply MSEDCL on a cost-to-cost basis as an alternative supply, pending GoM/MERC approval.
- Registration for Proprietary Membership on the Indian Energy Exchange (IEX) was completed, including necessary formalities such as payment of registration fees and a refundable security deposit.
- Each power station was subsequently registered as a Client on IEX, with individual Client registration fees paid for each.
- MSPGCL initiated the registration process for the National Open Access Registry (NOAR) to enable power exchange transactions for specific units/stations, completing the required formalities with MSLDC/NLDC. However, clearance from MSLDC/NLDC was not issued due to a lack of clarity on the provisions under

which such power procurement would proceed

5.12.4 MSPGCL submitted that on 22 September, 2024, MSEDCL verbally informed MSPGCL that the process of obtaining GoM directives has been initiated and would be finalized shortly. Given an acute shortfall during peak hours that was leading to significant load shedding, MSEDCL continued to request MSPGCL to pursue alternative power procurement for the anticipated evening peak shortfall. In response, MSPGCL asked MSEDCL to assist in securing NOAR clearance, arrange advance payments for the procurement, and provide technical support from the MSEDCL Power Purchase Team for executing transactions on IEX.

5.12.5 After MSEDCL deposited Rs. 10 Crore into MSPGCL's IEX settlement account on 22 September, 2024, for power purchases, and with standing clearance obtained from MSLDC for power procurement on behalf of Chandrapur Unit No. 9 (which was under Capital Overhaul outage), MSPGCL began power procurement from the Real-Time Market (RTM) on IEX. This was initiated at 20:15 hrs for three blocks, in accordance with MSEDCL's requirements, with support from the MSEDCL team.

5.12.6 MSPGCL further submitted that on 23 September, 2024, MSPGCL received directives from the Energy Department of the Government of Maharashtra, as per Letter Ref. No. D.O. No.-2024/C.R. 166/Energy-5 dated 23 September, 2024, instructing MSPGCL to ensure full-capacity operation of all operational power plants to meet State demand. The directive also required MSPGCL to arrange for alternate power sources in cases of technical issues, insufficient coal supply, or forced outages.

5.12.7 The specific directives issued under the notification are as follows:

"...

In the light of the present emergent circumstances, the following directions are issued in the public interest under Section-11 of the Electricity Act:

a) MSPGCL is directed to ensure operation and generation of electricity from all its operational power plants to their full capacity to meet the immediate demand in the state as per requirement of PPA holder. This includes optimizing the operation of thermal, hydro, and renewable energy plants.

b) Utilization of Available Resources: MSPGCL should explore all available resources, including Indigenous fuel procurement and maintenance scheduling, to enhance generation capacity wherever feasible.

c) Power from alternate source: In case of any technical glitches in supply of sufficient coal/ quality of coal or any force outage of plants, MSPGCL shall arrange power in consultation with PPA holder from all available alternate sources for declaration of full availability. It is instructed that MSPGCL to submit reasons for opting to deliver power from alternate source. It may be noted that the pass-through of the actual additional burden due to such alternate power would be allowed by the appropriate:

Commission. The payment shall be made to the MSPGCL on a weekly basis by DISCOMs. Further, for computation of fixed charges, the availability on account of alternate source will not be considered.

d) Reporting: MSPGCL must provide daily updates on generation status, fuel availability, and any operational challenges encountered to the Department of Energy, SLDC and PPA holder.

e) Compliance: All necessary steps should be taken to comply with these directions promptly and effectively. keeping in mind the importance of ensuring a stable power supply for the citizens of Maharashtra.

This order is to be followed with immediate effect and shall remain valid upto 31.12.2024.

This directive is issued in the interest of public safety and welfare, and compliance is to be done with immediate effect."

5.12.8 MSPGCL submitted that on 25 September, 2024, a corrigendum was issued to clarify the directives issued on 23 September, 2024, stating that:

"c) Power from alternate source: Alternate power supply is allowed for all units of MSPGCL which are under forced outage only, as per Indian Electricity Grid Code, 2023 Regulation No. 48 (1)."

5.12.9 By 25 September, 2024, MSPGCL completed Client Registration for all its Thermal Stations.

5.12.10 In compliance with the directives from the GoM, MSPGCL submitted that it carried out power procurement as an alternative supply from 22 September, 2024, to 2 October, 2024, in coordination with MSEDCL and MSLDC. Initially, from 22 September to 25 September, 2024, procurement was conducted for Units under outage or Units with limited load capacity. Following the issuance of the GoM corrigendum, procurement focused on Units experiencing forced outages. For each purchase, MSEDCL communicated the block-wise power requirements and acceptable price range, which guided MSPGCL's bidding on IEX. Power was then scheduled as an alternate supply according to IEX settlements. Additionally, MSPGCL declared and continuously updated the availability of this alternate capacity on the MSLDC Scheduling Portal to ensure scheduling of power to MSEDCL.

5.12.11 Subsequently, as per email from NLDC 01 October, 2024, it is stated that,

"…curtailment of access imposed on Maharashtra State Electricity Distribution Co. Ltd (MSEDCL) as per LPSC Rules stands withdrawn from 00:00 hrs. of 02-10-2024."

5.12.12 Given the withdrawal of MSEDCL's restrictions on power purchases, MSEDCL has not communicated any requirement for power procurement from 3 October, 2024, onward up to the date of filing this Petition. Furthermore, the directives issued on 23

September, 2024, remained in effect until 31 December, 2024.

5.12.13 MSPGCL further provided the details of quantum and cost of power purchased by MSPGCL on IEX between 22 September, 2024, and 2 October, 2024, as an alternate power supply in compliance with the GoM directives dated 23 September, 2024.

5.12.14 MSPGCL submitted that since, this power procurement was undertaken by MSPGCL for the first time due to exigent circumstances, related accounting, finance, and tax compliance formalities are being finalized with necessary adjustments to SAP mapping and accounting policies.

5.12.15 Regarding payment for this power procurement, the GoM directives dated 23 September, 2024, specify that,

"The payment shall be made to the MSPGCL on a weekly basis by DISCOMs.".

5.12.16 Accordingly, MSPGCL had submitted claims to MSEDCL, as the PPA holder, for either adjustment against the advance payment or reimbursement of the power procurement expenses.

5.12.17 Additionally, the directives specify the following regarding the pass-through of the actual additional costs incurred for such alternate power:

"It may be noted that the pass-through of the actual additional burden due to such alternate power would be allowed by the appropriate Commission."

5.12.18 Accordingly, the above details were submitted to the Commission for review, with a request to approve a pass-through of expenses incurred for alternate power in FY 2024-25. These expenses were undertaken in compliance with GoM directives under Section 11 of the Electricity Act, 2003, and were essential to ensure a stable power supply for Maharashtra's citizens. In this Petition, MSPGCL included these expenses up to the present date as part of the ARR submitted for the provisional true-up for FY 2024-25.

5.12.19MSPGCL the Commission to consider this submission and allow a pass-through of the actual additional costs incurred for alternate power.

Commission's Analysis and Ruling

5.12.20The Commission has considered the submission made by MSPGCL. It is observed that MSPGCL has procured power for MSEDCL to meet the demand of Maharashtra as per the GoM directives under Section 11 of the Electricity Act, 2003 between 22 September, 2023 and 2 October, 2024. Hence, the Commission has considered the expenses incurred under such head in the ARR approved for FY 2024-25. However, **the Commission directs MSPGCL to provide the complete details of such power procured along with the relevant documentary evidence and the reconciliation with its audited accounts during the final true-up for FY 2024-25.**

5.13 ADDITIONAL CAPITALISATION

MSPGCL's Submission

5.13.1 MSPGCL has claimed estimated additional capitalisation of Rs. 2333.17 Crore against the approved capitalisation Rs. 3699.06 Crore for FY 2024-25. MSPGCL submitted that the variation in estimated and approved additional capitalisation for some of the stations is on account of subsequent approval of schemes by the Commission and spill-over of prior-period schemes which have already been approved in the previous orders.

Table 5.15: Additional capitalisation submitted by MSPGCL for FY 2024-25 (Rs. Crore)

Station/Unit	Approved in MYT	Estimated
Bhusawal	0.00	5.63
Chandrapur	920.43	439.67
Khaperkheda	101.01	601.56
Koradi	0.00	158.51
Nashik	10.72	9.66
Uran	8.50	92.40
Paras Units 3&4	381.66	74.54
Parli Units 6&7	145.02	66.71
Khaperkheda Unit 5	282.01	298.02
Bhusawal Units 4&5	481.48	24.41
Koradi Units 8-10	997.00	340.89
Chandrapur Units 8&9	220.27	95.82
Parli Unit 8	89.24	17.11
Hydro	61.72	108.24
Total	**3699.06**	**2333.17**

Commission's Analysis and Ruling

5.13.2 The Commission has examined the estimated additional capitalisation claimed by MSPGCL as against the schemes accorded in-principle approval. The Commission's approach for approving the additional capitalisation in provisional true-up of FY 2024-25 is as follows:

- DPR schemes (above Rs. 10 Crore each): Entire capitalisation is approved for all DPR schemes capitalised in the year in respect of which in-principle approval has been accorded. In case of cost over-run without appropriate justification, the capital cost is capped at approved capital cost as per in-principle approval. However, in case of the schemes executed through competitive bidding, the cost overrun with respect to approved cost has been allowed.

- Non-DPR schemes (less than Rs. 10 Crore each): The capitalisation of the non-DPR schemes has been considered up to 20% of the cost of the capitalised DPR schemes.

5.13.3 The Commission, while approving the additional capitalisation during provisional truing up, has observed the following:

- The capital cost of the pipe conveyor system for Koradi, Khaperkheda and Chandrapur has been higher than the value approved by the Commission based on the DPR. MSPGCL vide its letter dated 15 February, 2025 has submitted the Report on Time & Cost Over Run of the scheme. The Commission is of the view that this additional submission made by MSPGCL on 15 February, 2025 cannot be considered at this stage as the same is submitted after the close of public hearings in the matter. . Further, the project is still in work in progress and not yet completed. The actual cost and time over run can only be quantified after the completion of the scheme. Hence, the Commission at this stage has limited the capitalisation to the DPR approved capital cost. **The Commission directs MSPGCL to submit the complete details of actual cost with cost and time over run along with supporting documents after completion of the Scheme.**
- The FGD capitalisation proposed for most of the generating stations are higher than the value approved by the Commission based on the DPR. It is pertinent to note that most of the projects are still in work in progress and not yet completed. The actual cost and time over run can only be quantified after the completion of the scheme. The Commission at this stage has limited the capitalisation to the DPR approved capital cost. **The Commission directs MSPGCL to submit the complete details of actual cost with cost and time over run along with supporting documents after completion of the projects.**
- The capitalisation proposed towards rising of ash bund is observed to the higher than the value approved by the Commission based on the DPR.
- The Commission at this stage has limited the capitalisation to the DPR approved capital cost. **The Commission directs MSPGCL to submit the complete details of actual cost with cost and time over run along with supporting documents after completion of the Scheme.**

5.13.4 **Hence, the Commission directs MSPGCL to submit the complete details of such capitalisation along with proper justification, documentary evidence and detailed analysis of delay in implementation of the project at the time of final truing up for FY 2024-25.**

5.13.5 Accordingly, the additional capitalisation approved by the Commission in the provisional true-up of FY 2024-25 is as shown in the Table below:

Table 5.16: Additional capitalisation approved for FY 2024-25 (Rs. Crore)

Station/Unit	Approved in MYT	Actual claimed	Approved
Bhusawal	0.00	5.63	5.63
Chandrapur	920.43	439.67	541.12
Khaperkheda	101.01	601.56	479.86
Koradi	0.00	158.51	124.36
Nashik	10.72	9.66	9.66
Uran	8.50	92.40	31.24
Paras Units 3&4	381.66	74.54	71.21
Parli Units 6&7	145.02	66.71	65.60
Khaperkheda Unit 5	282.01	298.02	297.59
Bhusawal Units 4&5	481.48	24.41	24.41
Koradi Units 8-10	997.00	340.89	292.75
Chandrapur Units 8&9	220.27	95.82	95.82
Parli Unit 8	89.24	17.11	17.11
Hydro	61.72	108.24	77.41
Total	**3699.06**	**2333.17**	**2133.77**

5.14 MEANS OF FINANCE OF ADDITIONAL CAPITALISATION

MSPGCL's Submission

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

Commission's Analysis and Ruling

5.14.2 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.

5.15 AFC

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

a. O&M expenses
b. Depreciation
c. Interest on Loan
d. IoWC
e. RoE
f. Income Tax

Less:

g. NTI

5.16 O&M EXPENSES

MSPGCL's submission

5.16.1 MSPGCL submitted that the Commission, in its MTR Order (Case No. 227 of 2022) dated 31 March, 2023, approved O&M expenses for old stations for FY 2024-25 based on historical averages, escalated as per Regulation 47.1 of the MYT Regulations, 2019. For new Units commissioned after 2005, the Commission approved O&M expenses based on the normative levels specified in Regulation 47.2 of the MYT Regulations, 2019. While determining the normative O&M expenses for FY 2024-25, the Commission considered an escalation rate of 3.94%, based on the actual escalation rate for FY 2021-22. MSPGCL has considered the actual escalation rate of 4.36% of FY 2023-24 for FY 2024-25.

5.16.2 MSPGCL further submitted that Regulation 49.1(c) of the MYT Regulations, 2019, allows hydro generating stations to claim O&M expenses incurred on housing colonies, medical facilities, and related expenses separately. These expenses are excluded from the normative O&M expenses and are subject to a prudence check. MSPGCL has provided a summary of O&M expenses related to housing colonies and other facilities for hydro stations for FY 2024-25, which are claimed under the head of other expenses.

5.16.3 MSPGCL has explained the variation in O&M expenses as follows:

- Revised escalation rate as per Regulation 47.1(c) of the MYT Regulations, 2019 at 4.88% for FY 2022-23, and 4.36% for FY 2023-24 and FY 2024-25.
- The Commission approved normative O&M expenses based on historical averages, escalated as per the MYT Regulations, 2019. The impact of pay revision for FY 2024-25 was approved separately, based on the actual pay revision amount for FY 2021-22, escalated using the WPI/CPI indices for FY 2021-22. MSPGCL has included the impact of pay revision in the O&M expenses for FY 2024-25.
- MSPGCL had announced a pay revision for its employees through Circulars No. 546, 548, and 549 dated 09 August, 2024. As per these circulars, the pay revision is effective from 01 April, 2023. Accordingly, MSPGCL requested the Commission to approve the pay revision amount of Rs. 302.24 Crore for FY 2024-25 (for old and new stations). The revised salary structure has been implemented from August 2024 for regular monthly payments and the arrears for the period April 2023-July 2024 will be disbursed during FY 2024-25. Therefore, the Commission is requested to approve the pay revision impact as per the provisions recorded in the books of accounts and subsequently allow for the adjustment of the differential amount based on actual disbursements.
- In addition to the above, MSPGCL has also claimed the tentative Impact of Wage Revision of Rs. 78.06 Crore towards wage revision for contractual staff considering the Circular No. 464/10720 and 465/10721 dated 14 October, 2024 which has

announced wage revision w.e.f. 01 April, 2024 for contractual staff.

- For Koradi Unit 6, the Commission approved normative O&M expenses in the MTR Order based on the operation of two Units (Units 6 and 7). However, since Unit 7 has been retired, MSPGCL has considered the normative O&M expenses for Koradi Unit 6 as two-thirds of the amount approved for FY 2021-22, accounting for common auxiliaries that remain operational, based on detailed reasons elaborated in the true-up Chapter.

5.16.4 For new Units, MSPGCL has submitted that O&M expenses have been calculated as per the MYT Regulations, 2019 on a Rs. Lakh/MW basis. The impact of pay revision approved for FY 2021-22 has been escalated at 4.88% and 4.36% (based on WPI/CPI indices for FY 2022-23 and FY 2023-24) and included in the O&M expenses for FY 2024-25. MSPGCL has highlighted that the normative O&M expenses approved by the Commission for new stations are significantly lower than those allowed under CERC Regulations. This has resulted in substantial disallowances in actual O&M expenses, creating financial challenges for MSPGCL. The lower norms have made it difficult for MSPGCL to allocate sufficient funds for R&M, leading to extended maintenance periods and reduced plant availability. This, in turn, has resulted in under-recovery of fixed costs, adversely affecting MSPGCL's financial position.

5.16.5 MSPGCL requested the Commission to relax the O&M norms for new generating stations and align them with CERC norms to ensure reasonable cost recovery as per Section 61 of the Electricity Act, 2003.

5.16.6 In addition to the above, MSPGCL also claimed Additional O&M Expenses of Rs. 1.85 Crore towards FGD installation as per Regulation 47.3 of the MYT Regulations, 2019, amended in 2023.

5.16.7 MSPGCL further submitted that, under Regulation 47.1(g), IT-related expenses may be claimed over and above the normative O&M expenses. MSPGCL has estimated to incur IT expenses of Rs. 29.18 Crore for FY 2024-25, which are currently recorded under A&G expenses in Head Office (H.O.) expenses and allocated to stations.

5.16.8 MSPGCL also requested the expenses towards repair/rewinding of the Generator Transformer at the Bhira TR power station based on the actuals separately, over and above the stipulated normative O&M expenses, and excluding the aforementioned costs from the computation of the sharing of gains and losses.

Table 5.17: O&M expenses for FY 2024-25 as claimed by MSPGCL (Rs. Crore)

Particulars	Approved in MTR	Estimated
O&M expenses	3144.76	4526.99
Pay revision	217.12	302.24
Water charges	288.61	454.03

Particulars	Approved in MTR	Estimated
Other charges	278.17	213.51
Total	**3928.67**	**5496.76**

Commission's Analysis and Ruling

5.16.9 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."

5.16.10 Regulation 47.2 of the MYT Regulations, 2019 specify the normative O&M expenses for new Units depending on Unit size.

5.16.11 Further, the 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."

5.16.12 In accordance with the above, the Commission has considered the escalation factor of 4.36% for FY 2024-25.

5.16.13 For old stations, the revised normative O&M expenses for FY 2024-25 have been arrived at by escalating the expenses approved (including the impact of pay revision) for FY 2023-24 by the escalation factor of 4.36% applicable for FY 2023-24. For new Units, the Commission has considered the normative O&M expenses as approved in the MTR Order plus, the impact of pay revision for the year in line with the approach adopted In MTR Order.. As regards the proposal of MSPGCL to consider the O&M norms as per CERC Regulations for FY 2024-25, the Commission is of the view that the O&M Expenses have to be allowed in line with the MYT Regulations, 2019 and any retrospective revision of the O&M Expenses cannot be considered while carrying out the provisional true up.

5.16.14 Notwithstanding the above, considering the increasing trend of O&M expenses particularly employee expenses and the concerns raised by the Commission during the public hearing process, **the Commission herby directs MSPGCL to provide a justification for increase in employee expenses including the impact of wage revision and compare the same vis-à-vis the pay revisions scale applicable for the State Government Departments. The same shall be considered at the time of MYT proceedings for undertaking prudence check of O&M expenses as part of the truing up process for relevant years.**

5.16.15 Thus, the **Commission directs MSPGCL to submit details of the employee expenses at the time of truing up of projection years. The details shall comprise employee category, number of employees in that category, applicable pay band as per the provision of the 7th Pay Commission approved by the Government of Maharashtra and actual salary of the respective employee category in tabular format.**

5.16.16 As regards the normative O&M Expenses for Koradi Unit 6, the Commission is of the view that 60% of the O&M Expenses can be considered since some of the common facilities are still to be maintained in spite of the decommissioning of Unit 7.

5.16.17 MSPGCL has claimed the water charges of Rs. 403.35 Crore for FY 2024-25. The Commission has considered the water charges for FY 2024-25 in line with the actual water charges as approved for FY 2023-24.

5.16.18 The actual other charges claimed by MSPGCL include the expenses towards the coal handling charges. The Commission has considered the other charges as claimed by MSPGCL for FY 2024-25.

5.16.19 As regards the claim of wage revision, the Commission is of the view that such claim is on tentative basis. **Hence, the Commission directs MSPGCL to submit the details of actual wage revision along with proper justification and required documentary evidence during the final true-up for FY 2024-25.**

5.16.20 As regards the claim of IT Expenses, he relevant provisions as per Regulation 47 (1) (g) is as below:

"g) A Generating Company may undertake Opex schemes for system

automation, new technology and IT implementation, etc., and, such expenses may be allowed over and above normative O&M Expenses, subject to prudence check by the Commission:

Provided that the Generating Company shall submit detailed justification, cost benefit analysis of such schemes as against capex schemes, and savings in O&M expenses, if any."

5.16.21 The Commission directed MSPGCL to submit the details of the IT Expenses proposed as per the above Regulations. MSPGCL in response submitted the details of the IT related expenses estimated to be incurred for FY 2024-25 along with the life cycle cost analysis.

5.16.22 From the above, it is observed that MSPGCL has not provided any proper justification for incurring such expenses, and the cost benefit analysis and savings in O&M Expenses after such implementation. Further, the Commission has observed that the estimated O&M Expenses are more than the normative O&M Expenses approved by the Commission. Hence, the Commission has not allowed any specific IT Expenses as claimed by MSPGCL.

5.16.23 As regards the claim of repair/rewinding of GT for Bhira, the Commission is of the view that such expenses are a part of the O&M Expenses and are to be considered as a part of the normative O&M Expenses. However, MSPGCL may submit the proper justification for such expenses along with requisite documentary evidence at the time of final true-up before the Commission for its consideration.

5.16.24The revised normative O&M expenses approved by the Commission for FY 2024-25 is as shown in the Table below:

Table 5.18: Normative O&M expenses for FY 2024-25 approved by the Commission (Rs. Crore)

Station/Unit	Normative O&M expenses	Pay Revision	Water charges	Other charges	Total O&M expenses
Bhusawal	114.62	8.54	16.34	6.39	**145.89**
Chandrapur	689.07	65.30	26.89	26.93	**808.19**
Khaperkheda	324.11	27.01	62.24	17.46	**430.81**
Koradi	124.16	14.76	41.88	2.54	**183.33**
Nashik	320.37	20.84	46.17	27.48	**414.85**
Uran	107.62	9.21	1.46	0.00	**118.29**
Paras Units 3&4	171.79	16.53	12.50	7.29	**208.11**
Parli Units 6&7	174.23	17.29	37.99	26.91	**256.43**
Khaperkheda Unit 5	113.61	9.16	43.12	8.00	**173.89**
Bhusawal Units 4&5	230.70	23.88	20.11	31.13	**305.83**

Station/Unit	Normative O&M expenses	Pay Revision	Water charges	Other charges	Total O&M expenses
Koradi Units 8-10	365.42	24.99	99.06	25.87	**515.33**
Chandrapur Units 8&9	226.74	13.67	26.24	12.82	**279.47**
Parli Unit 8	86.07	8.65	20.03	20.68	**135.43**
Hydro	265.77	42.41	0.00	0.00	**308.18**
Total	**3314.26**	**302.24**	**454.03**	**213.51**	**4284.04**

5.17 DEPRECIATION

MSPGCL's submission

5.17.1 MSPGCL submitted that the depreciation has been claimed in accordance with Regulation 27 of the MYT Regulations, 2019, as shown in the Table below:

Table 5.19: Depreciation for FY 2024-25 as submitted by MSPGCL (Rs. Crore)

Station/Unit	Approved in MYT	Claimed
Bhusawal	19.24	6.18
Chandrapur	215.49	154.65
Khaperkheda	65.90	138.67
Koradi	36.59	28.48
Nashik	42.99	8.53
Uran	74.51	19.04
Paras Units 3 & 4	166.28	80.58
Parli Units 6 & 7	90.02	79.11
Khaperkheda Unit 5	199.55	198.90
Bhusawal Units 4 & 5	357.34	344.95
Koradi Units 8, 9 & 10	734.05	706.64
Chandrapur Units 8 & 9	366.45	344.47
Parli Unit 8	103.71	99.15
Hydro	19.07	14.00
Total	**2491.19**	**2223.34**

Commission's Analysis and Ruling

5.17.2 The Commission has computed the depreciation for FY 2024-25 in accordance with the MYT Regulations, 2019. The closing GFA and accumulated depreciation approved in final true-up of FY 2023-24 has been considered as the opening GFA and accumulated depreciation for FY 2024-25. If the accumulated depreciation for a particular asset class has reached 70% of the allowable depreciation, the remaining depreciable value has been spread over the remaining Useful Life of the station, as submitted by MSPGCL. Else, the depreciation on opening GFA and additional capitalisation has been computed at the depreciation rates specified in the Regulations. The Commission has computed the depreciation on opening GFA for full year and depreciation on additional capitalisation has been computed for half year. The Commission has considered HO depreciation, the same as claimed by MSPGCL. The Depreciation approved for FY 2024-25 is shown in the Table below:

Table 5.20: Depreciation for FY 2024-25 (Rs. Crore)

Station/Unit	Approved in MYT	Claimed	Approved
Bhusawal	19.24	6.18	6.13
Chandrapur	215.49	154.65	168.46
Khaperkheda	65.90	138.67	72.26
Koradi	36.59	28.48	40.46
Nashik	42.99	8.53	9.74
Uran	74.51	19.04	10.69
Paras Units 3 & 4	166.28	80.58	80.27
Parli Units 6 & 7	90.02	79.11	78.98
Khaperkheda Unit 5	199.55	198.90	198.88
Bhusawal Units 4 & 5	357.34	344.95	344.95
Koradi Units 8, 9 & 10	734.05	706.64	703.49
Chandrapur Units 8 & 9	366.45	344.47	343.68
Parli Unit 8	103.71	99.15	99.15
Hydro	19.07	14.00	16.34
Total	**2491.19**	**2223.34**	**2173.46**

5.18 INTEREST ON LONG-TERM LOANS AND OTHER FINANCE CHARGES

MSPGCL's submission

5.18.1 MSPGCL has considered the closing loan balances approved for FY 2023-24 as the opening loan balances for FY 2024-25. Further, the additional capitalization has been considered to be funded in the normative debt-equity ratio of 70:30. The allowable depreciation has been considered as the repayment for the year. MSPGCL considered the weighted average interest for FY 2024-25 in accordance with Regulation 29.5 of the MYT Regulations, 2019. The actual finance charges for FY 2023-24 have been provisionally considered for FY 2024-25.

5.18.2 MSPGCL has submitted the summary of interest and finance charges claimed for the year as shown in the Table below:

Table 5.21: Interest and finance charges submitted by MSPGCL for FY 2024-25 (Rs.

Crore)

Station/Unit	Approved in MTR			Claimed			
	Interest expenses	Finance charges	Total	Interest expenses	HO	Finance charges	Total
Bhusawal	0.00	0.29	**0.29**	0.00	0.00	0.41	**0.41**
Chandrapur	84.42	1.31	**85.74**	62.58	0.03	3.78	**66.39**
Khaperkheda	30.79	0.57	**31.37**	24.29	0.01	1.65	**25.95**
Koradi	19.28	0.29	**19.56**	19.95	0.01	0.41	**20.37**
Nashik	0.55	0.99	**1.54**	2.00	0.00	2.54	**4.54**
Uran	7.70	0.99	**8.69**	12.24	0.01	2.06	**14.31**
Paras Units 3&4	28.03	0.78	**28.80**	20.96	0.01	1.21	**22.18**
Parli Units 6&7	5.77	0.63	**6.40**	2.60	0.00	0.98	**3.59**
Khaperkheda Unit 5	56.71	0.75	**57.46**	64.21	0.03	3.37	**67.61**
Bhusawal Units 4&5	144.30	0.78	**145.07**	127.50	0.06	2.98	**130.54**
Koradi Units 8-10	519.34	3.32	**522.66**	451.90	0.21	4.14	**456.24**
Chandrapur Units 8&9	289.23	1.57	**290.80**	245.86	0.11	4.20	**250.17**
Parli Unit 8	90.56	0.43	**90.99**	81.78	0.04	0.55	**82.37**
Hydro	9.82	0.02	**9.84**	4.95	0.00	0.02	**4.97**
Total	**1286.50**	**12.70**	**1299.20**	**1120.83**	**0.51**	**28.31**	**1149.64**

Commission's Analysis and Ruling

5.18.3 The Commission has considered the approved closing loan balance for FY 2023-24 as the opening loan balance 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 weighted average rate of interest approved for FY 2023-24 has been applied to the average loan for the year for computing the interest expenses. In addition to the normative interest expenses, the Commission has considered the finance charges and interest on HO assets as claimed by MSPGCL in accordance with the provisions of the Regulations.

Table 5.22: Interest and finance charges for FY 2024-25 (Rs. Crore)

Station/Unit	Claimed				Approved			
	Interest expenses	HO	Finance charges	Total	Interest expenses	HO	Finance charges	Total
Bhusawal	0.00	0.00	0.41	**0.41**	0.00	0.00	0.41	**0.41**
Chandrapur	62.58	0.03	3.78	**66.39**	65.48	0.03	3.78	**69.28**
Khaperkheda	24.29	0.01	1.65	**25.95**	23.19	0.01	1.65	**24.85**
Koradi	19.95	0.01	0.41	**20.37**	27.19	0.01	0.41	**27.61**
Nashik	2.00	0.00	2.54	**4.54**	2.79	0.00	2.54	**5.32**
Uran	12.24	0.01	2.06	**14.31**	10.40	0.01	2.06	**12.47**
Paras Units 3&4	20.96	0.01	1.21	**22.18**	20.81	0.01	1.21	**22.03**

Station/Unit	Claimed				Approved			
	Interest expenses	HO	Finance charges	Total	Interest expenses	HO	Finance charges	Total
Parli Units 6&7	2.60	0.00	0.98	**3.59**	2.58	0.00	0.98	**3.56**
Khaperkheda Unit 5	64.21	0.03	3.37	**67.61**	62.83	0.03	3.37	**66.22**
Bhusawal Units 4&5	127.50	0.06	2.98	**130.54**	126.33	0.06	2.98	**129.37**
Koradi Units 8-10	451.90	0.21	4.14	**456.24**	455.23	0.21	4.14	**459.57**
Chandrapur Units 8&9	245.86	0.11	4.20	**250.17**	244.98	0.11	4.20	**249.29**
Parli Unit 8	81.78	0.04	0.55	**82.37**	82.58	0.04	0.55	**83.17**
Hydro	4.95	0.00	0.02	**4.97**	1.98	0.00	0.02	**2.00**
Total	**1120.83**	**0.51**	**28.31**	**1149.64**	**1126.36**	**0.51**	**28.31**	**1155.17**

5.19 INTEREST ON WORKING CAPITAL (IOWC)

MSPGCL's submission

5.19.1 MSPGCL submitted that the IoWC has been computed as per the norms based on normative elements of ARR like O&M expenses, maintenance spares, and fuel expenses.

5.19.2 Regulation 32 of the MYT Regulations, 2019 provides the norms for computation of the working capital for generating companies. The IoWC has been computed as per the norms. Further, as per Regulation 32.1(f) of the MYT Regulations, 2019, Base Rate has been specified as SBI one-year marginal cost of funds-based lending rate. Considering the same, the interest rate has been considered as 10.45% for FY 2024-25.

5.19.3 MSPGCL submitted that as per Regulation 32.6 of the MYT Regulations, 2019, DPC and Interest on DPC shall be deducted from the actual IoWC. However, as per the provisions under PPA dated 01 April, 2009 between MSPGCL and MSEDCL, and also under the MYT Regulations, 2019, MSPGCL is allowed to raise DPC bills on MSEDCL for the delays in receipt of payment for energy bills raised by MSPGCL. Under the methodology adopted by MSPGCL for computing the DPC bills till FY 2020-21, the payment receipts from MSEDCL are firstly adjusted against the DPC amount due till the payment receipt date, and the balance of the amount received is then adjusted against the principal overdue amount till that day. In FY 2019-20, MSEDCL has raised queries on this methodology. As per MSEDCL, any payment should be initially adjusted against the principal outstanding amount and balance if any to be adjusted against the LPS dues. At present, an exercise is being undertaken by MSPGCL as well as MSEDCL for reconciliation and finalization of the principal and DPC outstanding amount since PPA date, i.e., since FY 2009-10. While the billing reconciliation process between the two Companies is in advanced stages, MSEDCL has commenced payment towards liquidation of outstanding dues, as per LPS Rules, 2022, on the basis of outstanding dues as per MSEDCL's assessment.

5.19.4 MSPGCL further submitted that DPC is being recognised in the Books of Accounts on accrual basis. Hence, it is not the case that DPS recognised in the books of account would result in reduction in working capital requirement of the Petitioner. Further, MSPGCL submitted that the DPC is being levied as penalty due to default in payment and on the other hand reducing the working capital requirement of the Petitioner to the extent of LPS based on accrual basis would be unjust for MSPGCL.

5.19.5 In addition to the above, MSPGCL referred several Judgments of Hon'ble Supreme Court and Hon'ble APTEL related to the matter, as detailed in the truing up Chapter.

5.19.6 MSPGCL further submitted that the issue of reduction of DPC/LPS from IoWC is sub-judice before Hon'ble Supreme Court in C.A. No. 1356-58 of 2017 and batch.

5.19.7 In light of the above, in the present MYT Petition, MSPGCL requested the Commission not to carry out any adjustment of actual IoWC against the DPS bills raised thus far.

5.19.8 MSPGCL submitted that the MoP has notified LPS Rules, 2021 and LPS Rules, 2022 on 22 February, 2021 and 03 June, 2022, respectively. MSEBHCL initiated efforts to reach a consensus amongst MSEDCL, MSPGCL and MSETCL regarding outstanding dues in compliance to the Rule 5 of the LPS Rules 2022, wherein a distribution licensee is required to communicate, within a period of 30 days from the promulgation of the said Rules (i.e., by 03 July, 2022), the outstanding dues and the number of instalments in which such dues are to be paid. There is a mismatch between the dues as arrived by MSPGCL and MSEDCL as summarised below:

Table 5.23: Outstanding Dues as of 3.6.2022 (Rs. Crore)

Particulars	Total
As per MSEDCL's working	13,801.00
As per MSPGCL's working	27,163.29
Difference	**13,362.29**

5.19.9 MSPGCL submitted that MSEDCL has participated in the liquidation of arrears scheme for total amount of Rs.13801 Crore (Principal amount of Rs. 8881 Crore and DPC of Rs.4920 Crore). The current scheme for liquidation of outstanding amount brought out vide LPS Rules, 2022, does not explicitly permit the levy of interest/DPS on the agreed arrears. Hence, MSPGCL has been losing the interest amount on the part of outstanding agreed dues for the scheme. In view of this, MSPGCL has calculated the impact of loss of interest on such amount for the period of 48 months as per LPS scheme at the rate of 10.40%. The interest on outstanding amount of Rs.13801 Crore for FY 2024-25 works out to Rs. 641.93 Crore.

5.19.10 MSPGCL, quoting certain Supreme Court and APTEL Judgments as detailed in the truing up Chapter, requested that the loss of interest of Rs. 641.93 Crore for FY 2024-

25 be considered over and above the normative IoWC as per the MYT Regulations, 2019. The IoWC claimed by MSPGCL is shown in the Table below:

Table 5.24: IoWC for FY 2024-25 as submitted by MSPGCL (Rs. Crore)

Station/Unit	Approved in MYT	Claimed
Bhusawal	19.29	26.33
Chandrapur	142.49	213.21
Khaperkheda	71.11	92.19
Koradi	17.60	24.37
Nashik	58.87	75.37
Uran	45.84	57.14
Paras Units 3 & 4	43.02	59.65
Parli Units 6 & 7	56.83	75.38
Khaperkheda Unit 5	49.77	60.59
Bhusawal Units 4 & 5	91.74	128.66
Koradi Units 8, 9 & 10	142.34	217.11
Chandrapur Units 8 & 9	88.31	109.96
Parli Unit 8	30.50	42.27
Hydro	12.19	25.99
Total	**869.88**	**1208.21**
Add: Loss on Interest		**641.93**
Grand Total		**1850.15**

Commission's Analysis and Ruling

5.19.11 The Commission has computed normative IoWC in accordance with the provisions of Regulation 32.1 of the MYT Regulations, 2019. The rate of IoWC has been considered as 10.45% for FY 2024-25 in accordance with the MYT Regulations, 2019.

5.19.12 The Commission observes that IoWC is normative in nature and additional loss of interest claimed by MSPGCL on outstanding dues being paid by MSEDCL in 48 months without interest as a part of such normative value is not in line with the MYT Regulations, 2019. Hence, the Commission has not considered such claims of loss of interest while arriving at the normative Interest on Working Capital. Further, as the Commission has undertaken the provisional truing up for FY 2024-25 in this Order, the actual IoWC and adjustment with DPC and interest on arrears has not been considered, and the same shall be considered at the time of final tuing up for FY 2024-25. The normative IoWC approved by the Commission is shown in the Table below:

Table 5.25: Approved Normative IoWC for FY 2024-25 (Rs. Crore)

Station/Unit	Approved in MTR	Claimed	Approved
Bhusawal	19.29	26.33	19.64

Station/Unit	Approved in MTR	Claimed	Approved
Chandrapur	142.49	213.21	160.43
Khaperkheda	71.11	92.19	67.81
Koradi	17.60	24.37	17.98
Nashik	58.87	75.37	56.67
Uran	45.84	57.14	46.64
Paras Units 3 & 4	43.02	59.65	45.20
Parli Units 6 & 7	56.83	75.38	55.26
Khaperkheda Unit 5	49.77	60.59	47.35
Bhusawal Units 4 & 5	91.74	128.66	95.81
Koradi Units 8, 9 & 10	142.34	217.11	161.70
Chandrapur Units 8 & 9	88.31	109.96	84.63
Parli Unit 8	30.50	42.27	30.83
Hydro	12.19	25.99	13.72
Total	**869.88**	**1208.21**	**903.66**

5.20 ROE

MSPGCL's submission

5.20.1 MSPGCL has considered the closing balance of equity for FY 2023-24 as the opening balance for FY 2024-25. The equity addition for FY 2024-25 has been considered as equivalent to 30% of capitalization for the year. Rate of Return on Equity has been considered as 14% for FY 2024-25 as per the MYT Regulations, 2019. MSPGCL has not grossed up the RoE rate with Income Tax rate for FY 2024-25, as no Income Tax has been paid for FY 2023-24.

Table 5.26: RoE submitted by MSPGCL for FY 2024-25 (Rs Crore)

Station/Unit	Approved in MYT	Claimed
Bhusawal	13.64	13.54
Chandrapur	161.54	146.25
Khaperkheda	159.39	156.75
Koradi	41.97	41.40
Nashik	36.70	35.68
Uran	48.07	45.23
Paras Units 3&4	143.88	136.53
Parli Units 6&7	136.22	133.71
Khaperkheda Unit 5	121.47	120.96
Bhusawal Units 4&5	194.07	186.27
Koradi Units 8-10	456.47	439.88
Chandrapur Units 8&9	198.90	184.65
Parli Unit 8	61.24	58.96
Hydro	10.97	8.80

Station/Unit	Approved in MYT	Claimed
Total	**1784.53**	**1708.60**

Commission's Analysis and Ruling

5.20.2 The Commission has considered the approved closing equity for FY 2023-24 as the opening equity for FY 2024-25. The addition to equity has been considered as equivalent to the equity portion of the approved additional capitalisation for the year. The Commission has approved the RoE at the rate of 14% for FY 2024-25, on the opening equity as well as on 50% of the addition during the year. The Commission has not grossed up the RoE rate with Income Tax rate for FY 2024-25, as no Income Tax has been paid for FY 2023-24. The RoE approved by the Commission is shown in the Table below:

Table 5.27: Approved RoE for FY 2024-25 (Rs. Crore)

Station/Unit	Approved in MYT	Claimed	Approved
Bhusawal	13.64	13.54	13.54
Chandrapur	161.54	146.25	148.38
Khaperkheda	159.39	156.75	154.09
Koradi	41.97	41.40	40.64
Nashik	36.70	35.68	35.51
Uran	48.07	45.23	43.84
Paras Units 3&4	143.88	136.53	136.41
Parli Units 6&7	136.22	133.71	133.69
Khaperkheda Unit 5	121.47	120.96	120.53
Bhusawal Units 4&5	194.07	186.27	185.05
Koradi Units 8-10	456.47	439.88	437.38
Chandrapur Units 8&9	198.90	184.65	184.00
Parli Unit 8	61.24	58.96	58.96
Hydro	10.97	8.80	8.16
Total	**1784.53**	**1708.60**	**1700.17**

5.21 NON-TARIFF INCOME (NTI)

MSPGCL's submission

5.21.1 MSPGCL has claimed estimated NTI of Rs. 58.55 Crore based on the actuals for FY 2023-24.

Commission's Analysis and Ruling

5.21.2 The Commission has considered the estimated NTI as claimed by MSPGCL.

5.22 AFC

Commission's Analysis and Ruling

5.22.1 Based on the above analysis, the AFC approved by the Commission in the provisional true-up of FY 2024-25, that is fully recoverable at target Availability, is as shown in the Table below:

Table 5.28: AFC claimed by MSPGCL and approved by the Commission for FY 2024-25 (Rs. Crore)

Station/Unit	Return on Equity			Interest on loan			Depreciation			O&M expenses			IoWC			Less:NTI			AFC		
	Approved in MTR	Claimed	Approved	Approved in MTR	Claimed	Approved	Approved in MTR	Claimed	Approved	Approved in MTR	Claimed	Approved	Approved in MTR	Claimed	Approved	Approved in MTR	Claimed	Approved	Approved in MTR	Claimed	Approved
Bhusawal	13.64	13.54	13.54	0.29	0.41	0.41	19.24	6.18	6.13	127.67	145.89	145.89	19.29	26.33	19.64	1.78	0.83	0.83	**178.35**	**191.53**	**184.79**
Chandrapur	161.54	146.25	148.38	85.74	66.39	69.28	215.49	154.65	168.46	734.85	808.19	808.19	142.49	213.21	160.45	6.38	6.90	6.90	**1333.73**	**1381.79**	**1347.86**
Khaperkheda	159.39	156.75	154.09	31.37	25.95	24.85	65.90	138.67	72.26	407.62	430.81	430.81	71.11	92.19	67.99	13.27	4.36	4.36	**722.12**	**840.00**	**745.63**
Koradi	41.97	41.40	40.64	19.56	20.37	27.61	36.59	28.48	40.46	255.54	201.56	183.33	17.60	24.37	17.89	63.01	1.38	1.38	**308.26**	**314.80**	**308.57**
Nashik	36.70	35.68	35.51	1.54	4.54	5.32	42.99	8.53	9.74	357.17	414.85	414.85	58.87	75.37	56.68	4.74	2.42	2.42	**492.51**	**536.54**	**519.68**
Uran	48.07	45.23	43.84	8.69	14.31	12.47	74.51	19.04	10.69	107.06	118.29	118.29	45.84	57.14	46.64	1.14	0.87	0.87	**283.03**	**253.13**	**231.07**
Paras Units 3&4	143.88	136.53	136.41	28.80	22.18	22.03	166.28	80.58	80.27	193.41	208.22	208.11	43.02	59.65	45.20	4.10	4.28	4.28	**571.30**	**502.87**	**487.73**
Parli Units 6&7	136.22	133.71	133.69	6.40	3.59	3.56	90.02	79.11	78.98	196.71	256.55	256.43	56.83	75.38	55.26	3.91	5.68	5.68	**482.26**	**542.66**	**522.24**
Khaperkheda Unit 5	121.47	120.96	120.53	57.46	67.61	66.22	199.55	198.90	198.88	158.60	173.95	173.89	49.77	60.55	47.47	8.14	2.58	2.58	**578.71**	**619.38**	**604.41**
Bhusawal Units 4&5	194.07	186.27	185.05	145.07	130.54	129.37	357.34	344.95	344.95	265.16	305.98	305.83	91.74	128.67	95.81	7.78	3.94	3.94	**1045.60**	**1092.49**	**1057.07**
Koradi Units 8-10	456.47	439.88	437.38	522.66	456.24	459.57	734.05	706.64	703.49	476.76	684.05	515.33	142.34	217.26	161.71	10.92	12.70	12.70	**2321.36**	**2491.37**	**2264.79**
Chandrapur Units 8&9	198.90	184.65	184.00	290.80	250.17	249.29	366.45	344.47	343.68	286.18	279.59	279.47	88.31	109.96	84.66	2.36	3.38	3.38	**1228.27**	**1165.45**	**1137.72**
Parli Unit 8	61.24	58.96	58.96	90.99	82.37	83.17	103.71	99.15	99.15	100.37	135.48	135.43	30.50	42.29	30.83	2.14	2.84	2.84	**384.66**	**415.41**	**404.69**
Hydro	10.97	8.80	8.16	9.84	4.97	2.00	19.07	14.00	16.34	261.57	308.18	308.18	12.19	25.99	13.74	3.39	6.40	6.40	**310.24**	**355.54**	**342.02**
Total	**1784.53**	**1708.60**	**1700.17**	**1299.20**	**1149.64**	**1155.17**	**2491.19**	**2223.34**	**2173.46**	**3928.67**	**4471.58**	**4284.04**	**869.88**	**1208.35**	**903.98**	**133.07**	**58.55**	**58.55**	**10240.40**	**10702.96**	**10158.26**

5.23 HYDRO LEASE RENTAL

MSPGCL's submission

5.23.1 MSPGCL has claimed the lease rent of Rs. 523.53 Crore for FY 2024-25.

Commission's Analysis and Ruling

5.23.2 The Commission has approved the lease rent of Rs. 523.53 Crore for FY 2024-25, the same being in line with the approved lease rent.

5.24 REDUCTION IN AFC DUE TO SHORTFALL AGAINST TARGET AVAILABILITY

MSPGCL's submission

5.24.1 The reduction in AFC due to shortfall in target Availability is Rs. 636.17 Crore for FY 2024-25.

Commission's Analysis and Ruling

5.24.2 As the estimated Availability of some of the stations was lower than the target Availability approved for recovery of full AFC, the Commission has approved the recovery of AFC for such stations on pro-rata basis, except for Uran. For Uran, the Commission has approved the recovery of full trued-up AFC, at actual Availability.

5.24.3 The computation of AFC disallowance for FY 2024-25 is as shown in the Table below:

Table 5.29: AFC disallowance for FY 2024-25 approved by the Commission

Station/Unit	Target Availability	Actual Availability	Total AFC	Less: water charges	Total AFC minus water charges	AFC Reduction	Reduced AFC	Reduced AFC plus water charges
	%	%	Rs. Crore	Rs. Crore	Rs. Crore	Rs. Crore	Rs. Crore	Rs. Crore
Bhusawal	80.00%	67.52%	184.79	16.34	168.46	26.28	142.17	158.51
Chandrapur	80.00%	69.33%	1347.86	26.89	1320.97	176.16	1144.81	1171.70
Khaperkheda	85.00%	71.95%	745.63	62.24	683.39	104.95	578.44	640.68
Koradi	72.00%	70.12%	308.57	41.88	266.69	6.97	259.72	301.60
Nashik	80.00%	65.05%	519.68	46.17	473.51	88.49	385.02	431.19
Uran	85.00%	52.81%	231.07	1.46	229.61	0.00	229.61	231.07
Paras Units 3&4	85.00%	74.92%	487.73	12.50	475.23	56.36	418.87	431.37
Parli Units 6&7	85.00%	70.22%	522.24	37.99	484.24	84.21	400.03	438.03
Khaperkheda Unit 5	85.00%	83.39%	604.41	43.12	561.28	10.61	550.67	593.80
Bhusawal Units 4&5	85.00%	75.03%	1057.07	20.11	1036.96	121.66	915.31	935.42
Koradi Units 8-10	85.00%	77.54%	2264.79	99.06	2165.73	190.10	1975.63	2074.69

Station/Unit	Target Availability	Actual Availability	Total AFC	Less: water charges	Total AFC minus water charges	AFC Reduction	Reduced AFC	Reduced AFC plus water charges
	%	%	Rs. Crore	Rs. Crore	Rs. Crore	Rs. Crore	Rs. Crore	Rs. Crore
Chandrapur Units 8&9	85.00%	74.31%	1137.72	26.24	1111.48	139.75	971.73	997.97
Parli Unit 8	85.00%	72.32%	404.69	20.03	384.66	57.36	327.30	347.33
Total			**9816.24**	**454.03**	**9362.22**	**1062.89**	**8299.32**	**8753.35**

5.25 REVENUE FROM SALE OF POWER

MSPGCL's Submission

5.25.1 MSPGCL has considered the revenue from sale of power of Rs. 33261.66 Crore in the provisional true-up of FY 2024-25.

Commission's Analysis and Ruling

5.25.2 The Commission has considered the revenue from sale of power of Rs. 33261.66 Crore, same as claimed by MSPGCL.

5.26 SUMMARY OF TRUE UP OF FY 2024-25

MSPGCL's Submission

5.26.1 The summary of provisional true-up of FY 2024-25 claimed by MSPGCL is as shown in the Table below:

Table 5.30: Summary of true-up for FY 2024-25 claimed by MSPGCL (Rs. Crore)

Particulars	Revised Normative	Actual	Net entitlement
Expenses side summary			
Return on Equity	1,708.60		1,708.60
Interest on Loan	1,149.64		1,149.64
Depreciation	2,223.34		2,223.34
O&M expenses	3,482.12		3,482.12
O&M expenses - FGD	1.85		1.85
Pay revision		302.24	302.24
Wage Revision		78.06	78.06
Water Charges		454.03	454.03
Other Charges		213.51	213.51
Other charges - Hydro colony related		2.68	2.68
IT Expenses		19.69	19.69
Interest on Working Capital	1,850.14		1,850.14

Particulars	Revised Normative	Actual	Net entitlement
Less: Non-Tariff Income		58.55	58.55
Annual Fixed Charges			**11,427.35**
Income Tax			
Hydro Lease Rent	523.53		523.53
Fuel Cost	22,529.65		22,529.65
Fuel Cost - FGD & SCR	113.94		113.94
SLDC - Legacy charges			23.61
Power Purchase Expenses		14.35	14.35
Aggregate Revenue Requirement			**34,632.43**
AFC Reduction			636.17
Net Revenue Requirement			**33,996.26**
Revenue from sale of power		33,261.66	33,261.66
Revenue loss due to higher auxiliary consumption			
Advance received towards power purchase		10.00	10.00
Revenue for true-up			33,271.66
Revenue Gap/(Surplus)			**724.60**

Commission's Analysis and Ruling

5.26.2 Based on the analysis of the norms of operation and fuel parameters, the Commission has approved the energy charges for FY 2024-25 as detailed in Table 5.14. Based on the analysis of the individual components of AFC, the Commission has approved the AFC that is recoverable at target Availability as detailed in Table 5.28. Further, the Commission has approved the AFC disallowance on account of projected Availability lower than target Availability as detailed in Table 5.29. Accordingly, the Commission has approved the net revenue requirement for FY 2024-25, as shown in the Table below:

Table 5.31: Summary of provisional true-up of FY 2024-25 approved by the Commission (Rs. Crore)

Particulars	Approved in MTR	Provisional true-up
Expenses side summary		
Return on Equity	1784.53	1700.17
Interest on Loan	1299.20	1155.17
Depreciation	2491.19	2173.46
O&M expenses	3144.76	3314.26
O&M expenses FGD		1.76
Pay Revision	217.12	302.24
Wage Revision		0.00

Particulars	Approved in MTR	Provisional true-up
Water Charges	288.61	454.03
Other Charges	278.17	213.51
Other Charges- Hydro Colony		2.68
IT expenses		
Interest on Working Capital	869.88	903.97
Less: Non-Tariff Income	133.07	58.55
Annual Fixed Charges	**10240.40**	**10162.69**
Income Tax		
Hydro Lease Rent	525.55	523.53
Fuel Cost	24517.80	22529.65
Fuel Cost-FGD & SCR		113.94
SLDC - Legacy charges		23.61
Power Purchase Expenses		14.35
Aggregate Revenue Requirement	**35283.74**	**33367.77**
AFC Reduction		1062.89
Net Revenue Requirement		**32304.88**
Revenue from sale of power		**33261.66**
Advance received towards power purchase		10.00
Revenue for true-up		**33271.66**
Revenue Gap/(Surplus)		**(966.78)**

5.26.3 The Commission has considered the above approved amount in computing the cumulative Revenue Gap/(Surplus) up to FY 2024-25 as detailed in Chapter 6 of the Order.

6 CUMULATIVE REVENUE GAP/(SURPLUS)

6.1 CUMULATIVE REVENUE GAP/(SURPLUS) UP TO FY 2024-25

MSPGCL's Submission

6.1.1 MSPGCL has claimed the cumulative Revenue Gap/(Surplus) of Rs. 7856.73 Crore including carrying cost up to FY 2024-25.

Commission's Analysis and Ruling

6.1.2 Based on the above analysis, the Commission has approved the cumulative Revenue Gap/(Surplus) up to FY 2024-25 (including carrying/holding cost allowed till FY 2025-26) as shown in the Table below:

Table 6.1: Cumulative Revenue Gap/(Surplus) up to FY 2024-25 (Rs. Crore)

Particulars	Claimed			Allowable		
	Principal Amount	Carrying Cost	Total	Principal Amount	Carrying Cost	Total
Bhusawal 4-5 (LD capitalisation)	27.94	18.78	46.72	27.77	18.67	46.44
Koradi 8-10 (LD finalisation)	70.05	33.83	103.88	-	-	-
Pali 8 (UDL impact)	1.48	0.68	2.16	1.48	0.68	2.16
Correction in opening balance of GFA, Equity and loan for Bhusawal U# 4-5	2.60	1.05	3.64	2.60	1.05	3.64
Correction in opening balance of GFA, Equity and loan for Khaperkheda U# 5	19.88	7.56	27.43	19.88	7.56	27.43
Correction in interest rate for Bhira Station	0.08	0.02	0.10	0.08	0.02	0.10
Erroneous computation at Table 7.1 of MTR Order (Cumulative revenue gap/(surplus) upto FY 2022-23	2.17	0.76	2.93	2.17	0.76	2.93
CMAg (administrative expense)	8.41	1.39	9.81	-	-	-
Expenses towards the consumption of lubricants and consumables and commission to agents for FY 2019-20 to FY 2021-22	27.79	8.45	36.24	27.79	-	27.79
Change in Law- Coal Tolling Arrangement				0.82	-	0.82
Final True-up of FY 2022-23	3869.40	801.26	4,670.66	2,512.11	520.20	3,032.30
Final True-up of FY 2023-24	1983.44	207.27	2,190.71	622.99	65.10	688.09
Provisional True-up FY 24-25	724.60	37.86	762.46	-966.78	-50.51	-1,017.30
Total	**6,737.83**	**1,118.90**	**7,856.73**	**2,250.08**	**563.52**	**2,814.42**

6.1.3 The Commission has considered the total Revenue Gap of Rs 2,814.42 Crore considering all the past claims including final truing up of FY 2022-23, final truing up for FY 2023-24, and provisional truing up for FY 2024-25. The Commission allows MSPGCL to recover this amount in 12 equal monthly instalments from April 2025.

7 FUEL UTILISATION PLAN FOR FY 2025-26 TO FY 2029-30

7.1 BACKGROUND

7.1.1 MSPGCL submitted that in accordance with the MYT Regulations, 2024, the Generating Company is required to prepare and submit its Fuel Utilisation Plan for the Control Period commencing on 1 April, 2025, along with the Petition for determination of Tariff for the Control Period from 1 April, 2025 to 31 March, 2030, in accordance with Part A of these Regulations, to the Commission for approval. Furthermore, as per Regulation 40, the Fuel Utilisation Plan should ensure that fuel quantum is allocated to different generating stations or Units in accordance with the merit order of different generation stations or Units in terms of variable cost.

7.1.2 The overall coal requirement of MSPGCL stations based on the normative SHR and normative availability factors is around 55.40 MMT (considering GCV (As fired) of ~3300 kcal/kg). The station-wise requirement is provided below:

Table 7.1: Overall Coal Requirement for MSPGCL

Station	Capacity	NAPAF	Gross Gen.	Normative SHR	Heat Content Required	Coal Req, @ GCV 3300 kcal/kg
	MW	%	MU	kcal/kWh	Mkcal	MMT
Bhusawal 3	210	80%	1472	2787	4101572	1.24
Bhusawal 4,5	1000	85%	7446	2375	17684250	5.35
Chandrapur 3-7	1920	80%	13455	2688	36168008	10.92
Chandrapur 8,9	1000	85%	7446	2375	17684250	5.35
Khaperkheda 1-4	840	75%	5519	2630	14514444	4.38
Khaperkheda 5	500	85%	3723	2375	8842125	2.67
Koradi 6	210	75%	1380	2456	3388198	1.02
Koradi 8-10	1980	85%	14743	2230	32877068	9.94
Nashik 3-5	630	80%	4415	2754	12259020	3.67
Parli 6,7	500	85%	3723	2415	8991045	2.72
Parli 8	250	85%	1862	2415	4495523	1.36
Paras 3,4	500	85%	3723	2415	8991045	2.72
Bhusawal 6	660	85%	4914	2139	10512065	3.18

7.1.3 The broad utilisation of coal amongst the power stations based on the submissions made in the MYT Petition is provided below:

7.2 ACTUAL COAL UTILISATION DURING FY 2022-23 AND FY 2023-24

7.2.1 The overall tie-up under Fuel Supply Agreement is provided in the table below:

7.2.2 Total Fuel tie up for the period FY 2022-23 along with the additional MoU's is provided below:

Table 7.2: Total Coal Tie up in FY 2022-23 (MMT)

TPS	WCL	MCL	SECL	SCCL	FSA Qty
Chandrapur#	15.861	-	-	-	**15.861**
Koradi	5.475	0.373	0.627	1.300	**7.774**
Khaperkheda	1.432	3.879	2.001	-	**7.312**
Nasik	2.354	-	0.724	-	**3.078**
Bhusawal	3.213	-	2.312	-	**5.525**
Parli	1.708	-	-	0.865	**2.573**
Paras	2.503	-	-	-	**2.503**
Additional MoU	*1.100	-	-	3.835	**4.935**
Total	**34.956**	**4.252**	**5.664**	**6.000**	**49.561**

 # MSPGCL has signed an agreement with WCL to supply additional 1.87 MMTPA from NM UG to OC Exp. mine over and above FSA ACQ linkage.

**MSPGCL has signed MoU on 17.11.2022 for additional 1.100 MMTPA from Cost Plus Mines for FY. 2022-23.*

7.2.3 Total Fuel tie up for the period FY 2023-24 along with the additional MoU's is provided below:

Table 7.3: Total Coal Tie up in FY 2023-24 (MMT)

TPS	WCL	MCL	SECL	SCCL	FSA Qty
Chandrapur	15.861	-	-	-	15.861
Koradi	5.475	0.373	0.627	1.300	7.774
Khaperkheda	1.432	3.879	2.001	-	7.312
Nasik	2.354	-	0.724	-	3.078
Bhusawal	3.213	-	2.312	-	5.525
Parli	1.708	-	-	0.865	2.573
Paras	2.503	-	-	-	2.503
Additional MoU	*4.000	-	-	3.835	7.835
Total	**36.545**	**4.252**	**5.664**	**6.000**	**52.461**

**MSPGCL has signed MoU for additional 4.00 MMTPA from Cost Plus Mines for FY. 2023-24.*

7.2.4 Out of the total FSA/linkage quantum available with MSPGCL, ~70% of the supply is through WCL. The coal supply agreement with WCL (2009) provides for supply of D/E Grade of coal and the subsequent FSA signed in 2017 provided for supply of G8-G10 grades. FSA with MCL (2009) provides supply of F Grade coal and subsequent FSA provides for supply of G10-G13 grade. Similarly, FSA with SECL provides for supply of G10-G12 grades and SCCL is expected to supply G8 to G13 grade coal.

7.2.5 The overall materialization of coal in FY 2022-23 and FY 2023-24 is summarized below:

Table 7.4: Coal Materialisation in FY 2022-23 and FY 2023-24 (MMT)

Coal Company	FY 2022-23			FY 2023-24		
	ACQ	Receipt	% Mat	ACQ	Receipt	% Mat
WCL	34.96	28.29	81%	36.55	29.85	82%
MCL	4.62	4.69	101%	4.25	5.17	122%
SECL	6.29	6.62	105%	5.66	6.44	114%
SCCL	6.00	4.01	67%	6.00	3.45	58%
Total	**51.87**	**43.60**	**84%**	**52.46**	**44.91**	**86%**

7.2.6 MSPGCL had undertaken the following measures for improvement in coal supply:

- **Usage of washed coal**: MSPGCL had envisaged beneficiation of coal for around 21 MMT of coal from WCL, MCL and SECL. Almost the entire quantum of coal from MCL and SECL was proposed for beneficiation so that the effective materialisation of coal improves significantly from such companies. MSPGCL had appointed and placed LoA on Maharashtra State Mining Corporation (MSMC), as Nodal Agency for supply of washed coal.

  The total washed coal quantum of 10.83 MMT and 10.19 MMT was consumed in FY 2022-23 and FY 2023-24, respectively. The utilisation of washed coal has improved the realization of coal and the GCV of coal on "As received" basis is comparatively better than that of raw coal received at the station. In case of raw coal, the drop in GCV EQ Vs ARB has been in the rage of 700-1100 kcal/kg, wherein case of washed coal, the overall GCV ARB is higher than the GCV EQ basis (which does not include the impact of surface moisture). The envisaged yield of washed coal in WCL, MCL, and SECL is around 85%, 72% and 80% respectively, of raw coal. The improvement of GCV in case of washed coal is based on the input parameters of raw coal (with respect to ash and moisture). The corresponding values in washed coal are monitored at the unloading points in the stations and accordingly, the variations, if any, are settled with the contractors as per provisions of the Agreement. In the last 2 years of washed coal usage, it is observed that even though the GCV of the washed coal is not improving considerably, there are some tangible and intangible benefits of use of washed coal, which are listed below:

  Tangible benefits of use of Washed Coal:

  - Increase in GCV of coal
  - Significant improvement in power generation.
  - Reduction in AEC (%)
  - Lower SFOC
  - Increase in PLF
  - Improvement in Specific coal consumption

- Enhanced Load handling capacity
- Saving in freight, as less coal is required to transport for same heat value, considering reject

Intangible benefits of use of Washed Coal:

- Overall increase in realization of coal as compared to realization of only raw coal (especially from WCL)
- No instances of receipt of lumpy coal and stones.
- Reduction in unloading time and demurrages.
- Less wear and tear of equipment (Conveyer belts, crushing elements, Chutes, etc.)
- Crushing system is bypassed, hence, reduction in auxiliary consumption
- Washing of coal reduces the ash content of coal, also improves its heating value and removes small amounts of other substances, such as Sulphur and hazardous air pollutants.
- Reduction in ash disposal expenditure
- Reduction in wear and tear of boiler and CHP parts
- Load fluctuation decreased result in gain in DSM

- **Usage of imported coal**: In order to mitigate potential shortfall in supply of domestic coal, MSPGCL had considered usage of 3.48 MMT and 1.87 MMT of imported coal in FY 2022-23 and FY 2023-24 respectively in some of its stations. The quantum was envisaged to be used in the months of Apr to June and Oct – March.

  Considering the coal shortage scenario, MOP has issued Advisory dated 07 December, 2021 to all domestic coal-based power plants (State Gencos and IPPs) to import coal to meet the requirement by blending the imported coal to the extent of 4%.

  Further, MoP issued revised Advisory on 28 April, 2022 for importing coal for blending purpose to meet the requirement at 10% of the total requirement by 31 October, 2022 in lieu of the prevailing shortages in supply of Domestic Coal. In the said revised Advisory, State-wise and Generation Company-wise targets were fixed and it was urged to ensure delivery of coal for blending purposes before the onset of monsoon as domestic coal supply gets affected during the rainy season. Accordingly, MoP has computed the imported coal requirement of MSPGCL at 3.46 MMT. As per the revised Advisory, the said imported coal has to be procured in a manner that 50% quantity is received by 30 June, 2022, 40% by 31 August, 2022 and 10% by 31 October, 2022. It was also specified that procurement of imported coal must be done in a transparent manner to obtain competitive rate.

Further, vide notification dated 13 May, 2022, MoP has stated that due to shortage of domestic coal supplies, the State Government and State Commissions are to ensure that all Generating Companies under them need to take immediate action for import of coal for blending as per order of MoP so that resource adequacy is ensured and 24x7 supply to consumers is provided.

Further, MoP vide its notification dated 18 May, 2022 has issued direction under Section 107 of Electricity Act 2003 regarding blending of imported coal with domestic coal to mitigate the domestic coal shortage. As per the notifications, the CERC was directed to immediately allow higher amount of blending of up to 30% with imported coal in compliance with decision of the MoP, subject to technical feasibility, without beneficiaries' consultation for the period up to 31st March 2023, to maintain resource adequacy and 24x7 supply to consumers.

In addition to the above, MoP issued an additional direction to all Gencos including IPPs for timely import of coal for blending purposes. The following directions were issued in the same:

- As per the said direction, it was decided that if the orders for import coal for blending is not placed by Gencos by 31 May, 2022 and is not arrived at power plants by 15 June, 2022, then the defaulter Gencos would have to import coal to the extent of 15% in the remaining period up to 31 October, 2022.
- Also, the power plants, which have not yet started blending of imported coal to ensure that they blend coal @15% up to Oct 2022 and thereafter @10% from November 2022 to March 2023.
- Also, from 01 June, 2022, the domestic coal will be allocated proportionately to all Gencos based on likely availability.
- It is also cautioned in the said letter that if blending of imported coal is not started by 15 June, 2022, then the domestic coal allocation of the concerned defaulter will be further reduced by 5%.
- Also, any additional domestic supply available post June 2022 will be allocated for stock building to those Gencos, which prove commendable level of blending of coal in the month of June 2022. Based on the same, the revised allocation of coal in July 2022 onwards will be conveyed.
- As per the said notification, the total target for imported coal for FY 2022-23 for MSPGCL is 3.464 MT of which 0.289 MT needs to be procured in June 2022.

In continuation with earlier letters, MoP vide its letter dated 01 June, 2022 further stated that Gencos which either do not place indents with CIL by 03 June, 2022or have not initiated tender process for purchase of imported coal, will be allocated only 70% of quantity domestic coal from 07 June, 2022 and allocation will be further reduced to 60% from 15 June, 2022. Domestic coal thus saved shall be allocated to those Gencos who have already commenced blending.

MSPGCL submitted that based on the various directions of MoP for blending of imported coal and risk of lower allocation of domestic coal due to non-adherence of the MoP direction, MSPGCL was mandated to buy the costly imported coal for blending purpose on immediate basis, even though usage of imported coal is generally not undertaken during monsoon months.

Further, MoP had issued an advisory dated 09 January, 2023 and directed to all generating companies including IPPs to take necessary action and immediately plan to import coal through a transparent competitive procurement for blending at the rate of 6% by weight so as to have coal stocks at their power plants for smooth operations till September 2023. Additionally, MoP vide letters dated 01 September, 2023, 25 October, 2023 and 04 March, 2024time to time revised and directed to maintain 6% blending (by weight) till June 2024.

In view of 6% blending directives, MSPGCL processed the international tender with reverse auction and placed orders for procurement of 2.08 Million MTPA imported coal for Khaperkheda, Chandrapur, Bhusawal and Nashik TPS' for two years. The supply commenced in June 2023, but was halted during the rainy season from July to September. From 1 October, 2023, imported coal supply is resumed. MSPGCL issued orders for total schedule of 3.12 Million MTPA for period June 2023 to June 2024 against first year schedule of contract.

- **Acceptance to usage of Mine specific coal**: In 2018, WCL offered MSPGCL mine-specific coal from 13 mines with an add-on charge of Rs. 450/tonne, which MSPGCL initially contested due to additional financial burdens. Despite MSPGCL's requests for detailed pricing and allocation, WCL implemented the mine-specific pricing from November 2019. MSPGCL repeatedly sought clarification on the policy and urged WCL to align coal prices with other subsidiaries like MCL and SECL, but received no favourable response. In August 2020, MSPGCL took a firm stance against paying the add-on charges and appealed to MoC, MoP and CEA for price corrections. However, due to depleting coal stocks, MSPGCL eventually agreed to WCL's mine-specific supply with add-on charge of Rs. 450/tonne from January 2021. WCL subsequently expanded its Mine Specific Sources list to 19 mines, applying the add-on price to these sources as of November 2021.

Since, the agreement of accepting the MSP, the commitment to augment coal supplies to TPSs of MSPGCL has improved marginally. MSPGCL is constantly striving to pursue the matter with WCL to ensure that the desired supplies are made to the stations. At present WCL is not supplying the coal to the MSPGCL power stations at the notified rates. During the period from April 2024 to September 2024, not even a single rake was received from WCL at the notified price. WCL has shifted all the coal from notified to the Mine specific coal.

7.2.7 MSPGCL submitted that due to following major reasons, the actual fuel utilization plan (FUP) has deviated from the approved fuel utilization plan:

(a) Directives for blending of the Imported Coal

The MoP stipulates imported coal blending at the MSPGCL level. Koradi, Paras, and Parli TPS' do not use imported coal and a higher blending was considered at BTPS, NTPS, CSTPS, and KPKD to meet the overall blending targets. Imported coal prices are index-based and fluctuate, leading to significant variations between the prices considered in the Approved and the actual FUP. The price parameter for GCV ARB in contracts is fixed at 4600 kcal/kg, though actual GCV may vary.

(b) Sourcing of coal through Rail Sea Rail (RSR)

MSGPCL is sourcing the coal through RSR mode primarily from the MCL region, to ensure fuel security and coal stock building at Bhusawal and Nashik TPS. This led to the change in the fuel utilization plan.

(c) Shifting of the Washed Coal to Koradi TPS

As proposed in MTR Petition, MSPGCL has initially planned to supply washed coal primarily to Bhusawal, Khaperkheda, Koradi and Chandrapur Units; however, washed coal was primarily used at Koradi TPS 8,9,10 more efficient Units. Based on coal stock levels, smaller quantities are supplied to Chandrapur, Khaperkheda and Bhusawal TPS, resulting in variations between the approved and actual FUP.

(d) Implementation of Flexible Utilization of Coal

The CEA issued a "Methodology for Flexibility in Utilization of Domestic Coal to Reduce the Cost of Power Generation" on 8 June, 2016. This methodology allows State Generating Companies to optimize coal utilization across their own power stations, based on several key factors such as the operational efficiency of the plants, transportation logistics and feasibility depending on plant location, fixed and variable costs including transportation and the relative merit order dispatch of power.

Further, under the Case I methodology, State Generating Companies have the flexibility to use their coal optimally within the limits of overall company-wise aggregated ACQ as per FSAs. The relevant excerpt from the notification is reproduce below:

"Case 1: Flexibility of utilization of coal aggregated with the State in its own State Generating Stations

(i) The States would use their coal optimally in the power stations of the state power utility within the limits of overall coal company wise ACQ aggregated with them for all FSAs.

(ii) The guiding objective, in this process would be to reduce the transportation cost thereby reducing the variable charges of its plants and also ensuring adequate availability of coal to all power plants as per their optimized requirement starting from most efficient to least efficient in terms of total variable charges."

From this methodology, it is clear that Generating Companies have the flexibility to allocate coal within their own plants up to the aggregated ACQ limit.

(e) Other Issues

(i) Coal availability fluctuations.

(ii) Deviation in received coal GCV by 2-3 grades compared to the declared GCV of the mines.

(iii) Re-declaration of coal grades at mines. Unexpected variations in coal supply from coal companies against MSPGCL's order booking.

(iv) Unplanned diversion of rakes to other plants due to railway logistics issues/Railway route congestions and coal stock levels at TPS'.

(v) Cost-plus coal prices from WCL are index-based and change every six months.

(vi) Frequent changes in Government directions with stringent timelines for implementation.

(vii) The commencement of new cost-plus mines, which provides for alternate options.

(viii) Variation in the coal pricing.

(ix) Implementation of alternative coal transportation options

7.3 PROPOSED COAL UTILISATION FOR H2 OF FY 2024-25 TO FY 2029-30

7.3.1 MSPGCL submitted that it has coal supply arrangements from WCL, SECL, SCCL and MCL. The overall tie-up under Fuel Supply Agreement, Bridge Linkages and other MOU route for FY 2024-25 is provided in the table below:

Table 7.5: Total Coal Tie up in FY 2024-25 (MMT)

TPS	WCL	MCL	SECL	SCCL	FSA Qty
Chandrapur	14.479	0.909	0.817	-	**16.205**
Koradi	3.397	1.737	1.853	1.300	**8.287**
Khaperkheda	1.432	3.879	2.001	-	**7.312**
Nasik	2.354	-	0.724	-	**3.078**
Bhusawal#	5.836	-	2.312	-	**8.148**
Parli	1.708	-	-	0.865	**2.573**
Paras	2.503	-	-	-	**2.503**
Addl. MoU	3.000	-	-	3.835	**6.835**
Total	**34.709**	**6.525**	**7.707**	**6.000**	**54.940**

 # MSPGCL has signed FSA with WCL for 2.623 MMT for BTPS Unit 6 & the same is included in above table; Actual coal supplies commences after COD.

7.3.2 MSPGCL submitted that it is contemplating supply of 3 MMT from WCL and 3.835 MMT from SCCL (shown above under additional MoU) from Cost Plus Mines. The aforesaid quantum of 54.940 MMT is inclusive of bridge linkages of 11.862 MMT available from WCL and SCCL as shown in the Table above.

7.3.3 Total fuel tie-up for FY2025-26 without the additional MoU's is provided below:

Table 7.6: Total Coal Tie up in FY 2025-26 (MMT)

TPS	WCL	MCL	SECL	SCCL	FSA Qty
Chandrapur	13.493	1.565	1.406	-	16.464
Koradi	1.920	2.721	2.737	1.300	8.688
Khaperkheda	1.432	3.879	2.001	-	7.312
Nasik	2.350	-	0.724	-	3.074
Bhusawal	5.836	-	2.312	-	8.148
Parli	1.708	-	-	0.865	2.573
Paras	2.503	-	-	-	2.503
Total	**29.242**	**8.165**	**9.180**	**2.165**	**48.751**

7.3.4 WCL quantity of 29.242 MMT consists of 16.804 MMT of the Mine Specific Supply (MSS) coal and 9.520 MMT of the cost-plus coal supply and 2.918 MMT of Bridge linkage coal from WCL.

7.3.5 From FY 2026-27 onwards, total FSA quantity will remain 48.751 MMT, including 29.242 MMT from WCL. However, 0.867 MMT of MSS coal quantity will shift to the cost-plus coal sources, thereby MSS coal will be revised to 15.937 MMT and cost-plus coal supply will be revised to 10.387 MMT. WCL Bridge linkage coal will remain 2.918 MMT.

7.3.6 Given that the realization of coal does not reach 100%, the comparison between

Optimistic (100% realization of coal from all sources) vis-à-vis the Pessimistic scenario (overall realization at ~85%) is shown in the table below:

Table 7.7: Probable PLFs based on coal realisation.

Station/Unit	Optimistic scenario	Pessimistic scenario
Bhusawal	85.07%	72.37%
Chandrapur	80.33%	68.31%
Khaperkheda	84.51%	71.90%
Koradi	74.50%	63.45%
Nashik	84.67%	72.01%
Paras Units 3&4	84.83%	72.13%
Parli Units 6&7	85.20%	72.45%
Khaperkheda Unit 5	85.09%	72.66%
Bhusawal Units 4&5	84.67%	72.01%
Koradi Units 8-10	84.95%	72.20%
Chandrapur Units 8&9	85.33%	72.45%
Parli Unit 8	84.52%	71.87%
Bhusawal Unit 6	84.92%	72.21%
Total Net Generation (MU)	**68791**	**58499**

7.3.7 In order to improve the supply required at normative levels, MSPGCL has been considering the following:

a) Additional Supplies from SCCL:

MSPGCL signed MoUs for the supply of additional coal (Bridge Linkage Quantity is exclusive) from SCCL vide its MoU dated 27 April, 2024 for 3.835 MMTPA at 30% over and above notified basic price of power for all grades of coal. This additional coal quantity of 3.835 MMT will be mainly supplied to CSTPS and Parli TPS due to the close proximity of the SCCL mine from these power stations and feasibility of the railway network.

b) Additional Supplies from WCL:

MSPGCL signed MoUs for the supply of additional coal (Bridge Linkage Quantity is exclusive) from WCL vide its MoU dated 18 July, 2024 for 3.00 MMTPA at Index-linked price for coal is applicable for a period of six months and will be revised after every six months based on the latest index rates. This additional coal quantity of 3.00 MMT will be mainly supplied to CSTPS, Koradi and Khaperkheda TPS due to the close proximity of the WCL mine from these power stations.

c) Extension of Bridge Linkages:

As per Policy guidelines for grant of 'Bridge Linkage' to specified end-use plants of Central and State Public Sector Undertakings which have been allocated coal mines/blocks, the Government of India has provided a provision of allowing "Bridge

Linkage". The said linkage acts like a short-term linkage to bridge the gap between requirement of coal of a specified end use plant of Central and State PSUs and the start of production from the linked allotted coal mine/block.

WCL is supplying the Bridge linkage coal at 40% higher price than declared notified price of coal.

As per the letter No. 216 dated 24 April, 2024, CIL has now revised Bridge Linkage quantity against previous 100% BL quantity of WCL area and distributing among three subsidiaries of the CIL in the proportion of 33 % in WCL, 33% in SECL and 34 % in MCL.

Accordingly, bridge linkage quantity has been reduced in WCL area to 33% from FY 24 to FY 26. The same has been considered for Fuel Utilization Plan and shown in above table.

SCCL bridge linkage of 2.17 MMT is continuous throughout the period from FY 24 to FY 26. The additional MOU from WCL and SCCL is inclusive of supply under the bridge linkage. Accordingly, the fuel arrangement will continue seamlessly till the commencement of production of coal from Gare Palma.

After commencing of the coal production from Gare Palma II coal Block, Bridge linkage quantity shall be reduced in proportion to the coal production from the WCL mine.

d) **Coal Transportation from MCL through Rail-Sea-Rail (RSR) mode:**

The initiative by MSPGCL to implement the Rail-Sea-Rail (RSR) movement of coal, as directed by the Ministry of Power (MoP) and Ministry of Coal (MoC) has been a significant logistical step. MSPGCL initially signed contract agreements with M/s GCMPL for the same and transported 6.38 lakh metric tonnes of raw/washed coal on trial basis from Mahanadi Coalfields Limited (MCL) in Odisha to Nashik TPS and Bhusawal TPS. The process involves rail transport from Talcher (MCL) to Paradip Port (East Coast), sea transport from Paradip to Dharamtar Port (West Coast), and rail transport again from Dharamtar to the respective TPS'.

<u>Key developments in this RSR coal movement include:</u>

a) Improvement in Coal Quality with no observed grade slippage as compared to loading end and better-sized coal enhanced unloading and handling processes at the TPSs.

b) Performance Improvements to manage coal stock position both at BTPS and NTPS, also promoted better coal management, higher PLF, improved loadability, reduction in SFOC and lower AEC. The blending of RSR coal with dry coal further optimized these benefits.

c) Logistical Scaling and Planning: MoP, aiming to relieve logistical pressure on the railways and promote coastal coal transport, also encouraged transporting 10-15% of coal through the RSR route.

d) New Contracts for Extended Coal Transport: MSPGCL expanded the RSR coal transport effort, tendering 9.6 LMT of MCL coal, awarded to contractors M/s GCMPL (5.76 LMT) and M/s MML (3.84 LMT). The contract volumes were later extended by 50%, with additional allocations to Nashik TPS as needed.

Sourcing of 1.92 MTPA of coal from the Talcher area of MCL through the RSR route was considered for the BTPS U4,5 and U6 and NTPS U3-5 stations for the MYT projections for the period till FY2029-30 as it will ensure a steady supply of coal and help in building adequate coal stock for the power plants. This approach is crucial for maintaining reliable operations and avoiding potential fuel shortages.

e) **Washed Coal:**

MSPGCL had envisaged beneficiation of coal for ~19.91 MMT of coal from WCL, MCL and SECL. This is due to the change in the bridge linkage quantities (WCL Bridge linkage divided amongst MCL and SECL). Accordingly, for the period FY 2024-25 (H2) and FY 2025-26 onwards, quantum of coal to be send to the washery is reduced as compared to FY 2022-23 to FY 2024-25. MSPGCL has appointed and placed LoA on MSMC, as Nodal Agency for supply of washed coal. The details of the washery operators and expected performance parameters as per the washery contracts has already been provided above. Ash content expectations (%) in the coal washery contracts were revised from ADB to ARB basis. Additionally, MSPGCL is also planning to procure the washed coal from the MCL IB valley under existing FSA.

This arrangement will help MSPGCL supplement its coal supply with higher-quality, non-coking washed coal, thereby enhancing operational efficiency while maintaining its current fuel supply structure under the FSAs.

Total of 144 rakes of the Non-coking washed coal have been received at MSPGCL power stations during the period from March 2024 to September 2024.

MSPGCL has considered an average of 24 rakes per month, equating to approximately 1.108 MMTPA (24 rakes/month*3,850 MT/rake*12 months) in the fuel projection forecasts up to FY 2029-30.

f) **Flexibility in Imported Coal Procurement:**

MoP vide letter dated 27 June, 2024 revised the coal blending advisory and directed to maintain 4% blending (by weight) for period 01 July, 2024 to 15 October, 2024. Accordingly, MSPGCL issued delivery schedule against second year quantity of ongoing contracts for Khaperkheda, Bhusawal and Nashik TPS'.

Currently, the imported coal procurement contracts are being placed for supply of 2.08 MMT of imported coal for the period till May 2025 (Chandrapur 1 MMT, Bhusawal 0.45 MMT, Nashik 1.50 MMT and Khaperkheda 0.48 MMT).

As per the imported coal procurement contract, there is a provision for 50 % extension in the above quantity. Accordingly, after May 2025, MSPGCL can procure the imported coal of 1.04 MMT in the upcoming months excluding active monsoon period.

Additionally, MSPGCL procures imported coal as per blending directives of MoP. Consequently, the future prediction for procurement of imported coal will depend on MoP directives. However, MSPGCL will require to procure additional ~1 MMT of imported coal in order to meet the shortfall of coal.

MSPGCL is also mindful of the significant increase in cost of Imported Coal considering the present geo-political situation. MSPGCL is currently procuring coal mainly from Indonesia. Harga Batubara Acuan (HBA) is reference price ($/MT) for thermal coal in Indonesia. Considering the HBA indices, the imported coal prices are projected at the same rate for FY 2024-25 (H2) as prevalent in the months of Oct 2023 to Sep 2024. Thereafter, escalation of 5% per year has been considered on the imported coal during the projection period till FY2029-30 for arriving the ECR.

g) Availability of Coal from Gare Palma-II:

The overall production schedule from GP-II as per mining plan is provided in the table below. The envisaged commencement of production from GP-II is envisaged in FY 2025-26 (0.25 MMT in first year).

Table 7.8: Raw Coal production from GPII as per Mining Plan (MMT)

Year 1 FY 2025-26	Year 2 FY 2026-27	Year 3 FY 2027-28	Year 4 FY 2028-29	Year 5 FY 2029-30
0.25	1.55	3.00	6.00	9.50

The current status and key reasons for shifting the timeline as against the MYT submission are provided below:

- **Techno-Economic Viability** study was conducted by M/s PFCCL for the utilization of GP-II coal, particularly focusing on the viability of using washed coal at various MSPGCL plants. The study concluded that the use of GP-II washed coal is viable for the Koradi Units but not for Chandrapur and Parli units. Consequently, the MSPGCL Board decided that coal from GP-II will be utilized for the existing 660 MW Units of Koradi (Units 8, 9 and 10) as well as for the upcoming two 660 MW Units at Koradi TPS (Units 11 and 12), instead of using it at Chandrapur and Parli.

  The P&P section reviewed the matter of appointing a consultant for a feasibility study and DPR for a reject-based power plant utilizing GP-II coal washery rejects. It was discussed that since the washability is only 56%, the reject quantity will be significant. Consequently, the focus has shifted to exploring direct transportation of raw coal to the new 2x660 MW project at Koradi and potentially other power stations. The option to sell any surplus coal is also being considered. Given these discussions, the decision was made to halt the appointment of a consultant for the feasibility study and DPR preparation.

A study for the optimum utilization of coal from GP-II, including the potential for the sale of excess coal, is underway. MSPGCL has engaged M/s Mercados to conduct a cost-benefit analysis, and the report is awaited. Based on this, a strategy for the utilization of raw and/or washed coal from GP-II will be developed.

- **Status Update:**
    - **Environmental Clearance (EC):** While the EC was initially granted on 11 July, 2022, it was subsequently quashed by the National Green Tribunal (NGT) on 15 January, 2024. MSPGCL has since submitted a revised proposal on 15 March, 2024 accordingly, Fresh EC granted by MoEFCC on 13 August, 2024.
    - **Forest Clearance (FC-II):** Although FC-II was granted on 27 January, 2023, the formal issuance of FC-II letter from GoCG and transfer of forest land from the Government of Chhattisgarh (GoCG) to MSPGCL was delayed for more than 19 months. Finally, after rigorous follow-ups from MSPGCL, GoM and Ministry of Coal; GoCG issued FC-II letter on 27 August, 2024. However, transfer of forest land is still pending with GoCG
    - After transfer of forest land to MSPGCL by GoCG, Mining Lease will be executed followed by asset survey, land acquisition and Mine Opening Permission.
    - MSPGCL has requested nominated authority, MoC and SDM, Gharghoda to impose restriction on the construction work.

MSPGCL is proactively pursuing the development activities of the mine and expects an expeditious grant of necessary approvals to ensure the mine's contribution to MSPGCL's fuel supply strategy, beginning in FY 2025-26. The projected coal availability from GP-II, once operational, will significantly enhance the fuel security of MSPGCL's generating stations, particularly at the Koradi Units.

From the perspective of availability of coal, the same will not result in materialization difference as there will be a commensurate reduction in bridge linkages as and when the supply from Gare Palma II mine will commence.

The price of coal from Gare Palma II is determined as per the formula in the Coal Mining Agreement. As per the Coal Mining Agreement, the future cost of coal in any year is to be calculated as per the following formula:

Escalated Raw Coal Mining Charge shall be determined as below;

$RCMCn_{esc}$ = (BRCMC) x $\{1 + (I_n-I_o)/I_o\}$

Whereas;

BRCMC	Base Raw Coal Mining Charge
$RCMCn_{esc}$	Escalated Raw Coal Mining Charge for the nth operating financial year
I_o	Base CERC composite index as prevalent during the month immediately preceding the Bid Date
I_n	CERC composite index prevalent during the month in the beginning of the nth operating FY

In the current case, BRCMC has been fixed at Rs 883.50/tonne and base composite index (I_o) has been 130.64. Therefore, for any subsequent year, MSPGCL needs to consider the composite index notified by CERC in the month of April for that particular Financial Year.

The capital cost for the GP II coal mine, as approved in the MSPGCL's Board Resolution dated 05 November, 2019, has been considered for computing the annual extraction cost. MDO (Mine Developer and Operator) charges for the period from August 2016 to March 2024 have been calculated based on the CERC composite index, with an escalation rate of 6.45%, determined using a 5-year CAGR from FY2018-19 to FY2023-24. For the period from April 2024 onwards, MDO charges have been escalated considering the same 6.45% rate.

Costing of the GP-II coal is considered based on the mining charge escalated as per the CERC composite index till April 2024. The indicative coal prices including taxes and excluding transportation are as follows:

Table 7.9: Indicative Coal Prices from GP-II (Rs./MT)

FY	Coal Price
2025-26	2840
2026-27	2991
2027-28	6115
2028-29	4764
2029-30	4349

- Transportation cost as per the railway freight FOIS is considered as 1,666 Rs/MT for Chandrapur 8,9 Units; 1,289 Rs/MT for Koradi 8,9,10, and 2,289 Rs/MT for Parli 8.

- The COD of the GP II mine is anticipated in FY 2027-28. Hence, considering capex on annual extraction cost, the overall cost of coal will increase from FY 2027-28.
- As fired GCV for the GP II coal is considered as 3265 kcal/kg for computing the energy charges.
- As per Regulation 39.13 of the MYT Regulations, 2024, MSPGCL will separately approach the Commission for the determination of the price of GP II. The excerpt from the Regulations is given below for ready reference:

  "39.13 A Generating Company with integrated mine(s) shall file a Petition for determination of input price of coal or lignite from the integrated mine(s) not later than 60 days from the date of commercial operation of the integrated mine(s):

  Provided that the Generating Company having integrated mine(s) shall file Petition before the Commission for determination of the input price of coal or lignite from the integrated mine(s) containing the details of expenditure incurred and projected to be incurred duly certified by the Auditor, in accordance with the Formats that may be stipulated by the Commission."

As already apprised to this Commission in the Case No. 231 of 2019, the Board of MSPGCL had approved utilization of coal from Gare Palma II in Koradi Units. However, in case required, coal from Gare Palma II can also be blended with existing linkages in other stations based on fitment of such energy charges in the merit order dispatch of the stations. Since, the quantum of coal envisaged in the initial years is miniscule, MSPGCL will submit the details regarding actual production schedule and expected prices based on CPI and WPI movements in the FAC submission.

Further, as mentioned in the MTR Order Para No. 8.3.11, MSPGCL has planned to wash different coal seams during actual mining to ensure consistent quality of washed coal based on the MOEF notification dated 02 January, 2014 that made it mandatory for all coal-based power plants located 500 km or more from the pit-head or coal mine to use raw or blended or beneficiated coal with no more than 34% ash content. However, MoEF notification dated 21 May, 2020 under the Environment (Protection) Act, 1986, permits the use of coal with ash content higher than permitted earlier. Under the new notification, TPP's will be able to use coal irrespective of ash content and will be liable for proper disposal of coal ash and meeting emission standards.

Consequently, for the time being, MSPGCL has factored raw coal from the GP II mines into its FUP. Plan for usage of the beneficiated coal/raw coal can be taken in future depending upon the actual coal receipt from the mines.

As coal production from the GP II coal mine increases, the bridge linkage coal allocated to the End Use Plants (EUPs) will be gradually replaced in proportion to the heat content of the coal produced from the GP II mine. Bridge Linkage coal reduction considered in order of SCCL, MCL, SECL and WCL in order of the increasing effective coal price (Rs/mcal).

Bridge linkage coal will gradually reduce to nil with the increase in the coal production of GP II coal. Because of the variation in the GCV due to the initial seams, MSPGCL may take the appropriate call on utilisation of the GP II coal during that time.

h) Coal from Commercial Mines:

In 2023, MSPGCL explored possibility of procurement of coal from commercial mines; however, it is discovered that coal production from prospective commercial mines is in initial stages and offered rates are on higher side. To date, the Ministry of Coal has auctioned approximately 64 mines under the commercial auction process. However, production from these commercial mines reached only 17.5 MT in FY 2023-24. In the 10th tranche of commercial coal mining auction, the Ministry of Coal has auctioned approximately 67 mines spread across India. Assuming the production starts in next 2/3 years, MSPGCL will keep procurement of coal from Commercial coal mining as alternative in future years.

i) E-auction coal procurement:

MSPGCL may explore the potential to procure coal through e-auctions (Single window mode agonistic e-auction), which could serve as a flexible option for meeting its coal requirements. E-auctions provide an opportunity to source coal directly from a variety of suppliers, including CIL subsidiaries and other commercial miners, allowing MSPGCL to access spot market coal without long-term contracts. This method enables the company to manage shortfalls in coal supply and adapt to fluctuating demand.

The pricing in e-auctions can be volatile and may be higher than linkages or long-term agreements, making cost management a challenge. The reserve price set for e-auction coal is higher than the coal provided under Fuel Supply Agreements (FSA) or linkage agreements offered to MSPGCL. However, e-auction coal could serve as a viable alternative to imported coal, especially for procuring smaller quantities. This coal can be transported via rail, road, or a combination of both, and short-term transportation contracts may be suitable for ensuring efficient logistics. This approach provides MSPGCL with additional flexibility in managing coal supply, particularly when conventional sources are inadequate.

j) Captive Mining:

MSPGCL has the potential to explore coal procurement through captive coal mining as a strategic option to secure a steady and reliable coal supply. By acquiring or partnering in coal blocks allocated for captive mining, MSPGCL could directly control the extraction and supply of coal for its power plants, reducing dependence on external sources like CIL or commercial auctions. This approach could offer long-term cost savings by avoiding fluctuating market prices and transportation challenges associated with other procurement methods. Moreover, captive coal mining provides the advantage of aligning production with MSPGCL's specific requirements, ensuring consistent fuel availability. Additionally, MSPGCL may explore the possibility of bidding and developing mines, similar to its efforts with the Gare Palma-II mine, as part of a strategy to achieve greater self-reliance in the future.

k) Procurement through Coal Exchange:

On 21 October, 2024, the Union Minister for Coal and Mines, has announced that India is set to launch its first-ever coal exchange. The coal exchange aims to create a broader, more competitive market for coal, enabling both buyers and sellers to access the commodity more efficiently. It will also establish a transparent benchmark pricing system, ensuring that coal transactions are conducted in a fair and regulated manner. The introduction of the coal exchange will help in liberalizing the coal market and improving pricing mechanisms in the country. In future, MSPGCL may procure coal from Coal Exchange as at competitive price.

l) Coal Linkage Rationalisation:

Coal Linkage Rationalization is a policy initiative by the Ministry of Coal to reduce the distance between coal mines and consumers like thermal power producers. Rationalisation of the coal linkage has resulted in decrease in transportation cost from the mines to the power plants leading to more efficient coal based power generation. MSPGCL has coal linkages with MCL/SECL and has incurring a considerable coal transportation cost. MSPGCL may explore such possibility in future with new mines coming / increase in coal production with all companies.

7.4 COAL ALLOCATION

7.4.1 For the purpose of the MYT Petition, MSPGCL had relied on the approach formulated by CEA under Case-I i.e. Use of Coal aggregated with the State in its own State Generating Stations. As per CEA, the basic approach under this case is that the States would use their coal optimally in the power stations of the state power utility within the limits of overall Coal Company wise ACQ aggregated with them for all FSAs.

7.4.2 Given the previously mentioned provisions, MSPGCL had initially proposed the least cost generation under the following principles:

a) Flexible Use of WCL coal in stations located nearer to mines
b) Usage of MCL, SECL and SCCL as per linkages since they were relatively costlier landed cost than WCL.

7.4.3 WCL is not supplying the coal to the MSPGCL power stations at the notified rates. During the period from April 2024 to September 2024, not even a single rake was received from WCL at the notified price. WCL has shifted all the coal from notified to the Mine specific coal (16.8 MMT for FY2025-26 and 15.94 for FY2026-27 onwards)

7.4.4 Besides, the constraints in availability of Railway rakes, non-availability of the WCL coal at notified prices, supply of Mine specific coal (~16-17 MMT) and larger realization of cost-plus coal (~10 MMT) under the coal shortage scenario lead to reconsideration of fuel utilisation amongst the power stations. Accordingly, for the 5th control period, the following practical approach that can help in optimization of cost of generation is proposed by MSPGCL:

a) Only mine-specific coal from WCL is considered for all the stations as due to unavailability of the coal at notified prices.
b) WCL mine specific coal which is comparatively cheap as compared to Cost plus coal is allocated primarily to far off stations viz. Bhusawal, Paras, Parli and Nasik.
c) WCL cost plus coal is primarily allocated to Chandrapur and Khaperkheda units due to close proximity from the coal mines.
d) Usage of washed coal from WCL, MCL & SECL is considered for Koradi 8, 9, 10 since it will be prudent to use improved quality coal in efficient supercritical units.
e) Usage of MCL (Notified/ Bridge Linkage / IB Valley Washed Coal) coal is considered for Chandrapur, Khaperkheda and Koradi units being in the proximity of the mines and the overall efficiency of the units.
f) Usage of MCL RSR mode coal is considered for Bhusawal and Nashik units as RSR mode is feasible in those stations
g) Usage of SECL coal is considered in Bhusawal, Chandrapur, Khaparkheda.
h) Usage of SCCL coal is considered for Chandrapur and Parli units because of the Railway logistics issues.
i) Usage of WCL MoU coal is considered for Khaparkheda, Koradi and Chandrapur units because of the close proximity from the mines.
j) GP II coal production is expected from FY 2025-26. It will supply to the EUP. End User Plants for the GP-II coal are Koradi 8,9,10, Chandrapur 8,9 and Parli stations. GP II is allocated to the majorly to the Koradi 8,9,10 and Chandrapur 8,9, considering the Rail Logistic issue for Coal transportation from Mine in Odisha to the Parli station.

k) As coal production from the GP II coal mine increases, the bridge linkage coal allocated to the End Use Plants (EUPs) will be gradually replaced in proportion to the heat content of the coal produced from the GP II mine.

l) Bridge Linkage coal reduction considered in order of SCCL, MCL, SECL and WCL in order of the increasing effective coal price (Rs/mCal).

7.4.5 Proposed Coal Mix proposed for the period FY2025-26 is as follows:

Table 7.10: Proposed Coal Mix for FY 2025-26

Station	Raw coal	Imported Coal	Washed Coal	Total
	%	%	%	%
Bhusawal	100%	0%	0%	100%
Chandrapur	88%	6%	6%	100%
Khaperkheda	76%	5%	19%	100%
Koradi	92%	8%	0%	100%
Nashik	90%	10%	0%	100%
Uran	100%			100%
Paras Units 3&4	100%	0%	0%	100%
Parli Units 6&7	100%	0%	0%	100%
Khaperkheda Unit 5	74%	9%	17%	100%
Bhusawal Units 4&5	72%	8%	19%	99%
Koradi Units 8-10	8%	0%	92%	100%
Chandrapur Units 8&9	86%	9%	5%	100%
Parli Unit 8	100%	0%	0%	100%
Bhusawal Unit 6	85%	15%	0%	100%
Total	**71%**	**5%**	**24%**	**100%**

7.4.6 The coal mix will vary annually based on the increasing production from the GP II coal mine and the corresponding reduction in bridge linkage coal. As a result, units Koradi U8-10, CSTPS U8-9 will see a higher proportion of GP II coal in their fuel mix, leading to a decrease in the use of WCL and MCL bridge linkage coal. Consequently, the proportion of washed coal at these stations will also fluctuate in line with the coal supply composition

7.4.7 WCL is supplying coal to all the stations and therefore it is flexible to shift the coal from WCL to stations having least cost of generation. The stations viz. Chandrapur, Khaperkheda and Koradi fall closer the WCL mines supplying coal to these stations. Accordingly, MSPGCL has considered allocation of cost plus coal to such stations.

7.4.8 Imported coal has been considered in Bhusawal, CSTPS, KPKD, Koradi and NTPS units. The Fuel Utilization Plan is prepared based on the previous period actual GCV and Price of the coal which depend upon the station-wise coal receipts from various mines and collieries. While the Fuel Utilization Plan provides a general framework under ideal conditions, in practice, coal usage may need to be adjusted according to real-time requirements and operational challenges. Therefore, MSPGCL may modify its coal usage strategy in the future to accommodate changing circumstances and ensure optimal power generation. Reasons for the deviation in the Fuel utilization plan for the period FY2022-23 & FY2023-24 and actual fuel utilization is already mentioned above. Actual fuel utilization for the period FY2025-26 to FY2029-30 may differ from the Fuel utilization plan considering the same reasons. The following factors can lead to the variations between the fuel plan submitted and actual fuel utilization at the stations.

- Coal Availability fluctuations
- Frequent changes in Government directions with stringent timelines for implementation.
- Re-declaration of coal grades at mines
- The commencement of new cost-plus mines
- Changes in coal pricing
- Directives for blending imported coal
- Implementation of alternative coal transportation options
- Railway route congestions

7.5 STRATEGY TO MEET SHORTFALL OF COAL IN REAL TIME

7.5.1 The increasing integration of renewable energy into the grid has led to a decline in the Plant Load Factor (PLF) of thermal generating stations, resulting in annual PLFs ranging from 50-60%. Under normal circumstances, MSPGCL’s current coal reserves are expected to meet scheduled requirements. However, unforeseen events, such as those experienced in the first half of 2022-23, may necessitate additional coal procurement. To address such contingencies, MSPGCL plans to supplement its coal supply through MoU-based procurement and requests for additional imported coal. To ensure adaptability, MSPGCL will maintain flexibility in its procurement plan, tying up additional MoU coal as needed to align with MSEDCL's requirements.

7.6 PRICES AND GCV OF FUELS AND ESCALATION FACTOR FOR FUEL COST

7.6.1 For the purpose of working out the Fuel prices and GCV for FY 2024-25 (H2), the actual prices and GCV during the period Oct-23 to Sept-24 have been considered along with certain considerations/improvements based on overall GCV of coal (ARB) for MSPGCL as a whole.

7.6.2 MSPGCL pointed out certain restrictions in the MYT Regulations, 2024 in Regulation 51.10 that prohibits the cash flows required to make purchasing decision considering the proviso:

> *"Provided also that in such case, prior permission from beneficiaries shall not be a precondition, unless otherwise agreed specifically in the power purchase agreement:*
>
> *Provided also that the weighted average price of alternative source of fuel shall not exceed 5% of base price of primary and secondary fuel approved by the Commission:*
>
> *Provided also that where the Energy Charge Rate based on weighted average price of fuel upon use of alternative source of fuel supply exceeds 5% of base Energy Charge Rate as approved by the Commission for that year, prior consultation with beneficiary/ies shall be made at least three days in advance:"*

7.6.3 Duly considering this aspect, MSPGCL has kept an escalation factor of 5% (Y-o-Y) for the landed prices of fuels over the FY2024-25 (H2) prices considered in the Petition. In case the actual fuel prices are lower than the projected prices, the same will automatically get factored in the FAC prices worked out for the month.

7.7 RELAXATION IN GCV VARIATIONS BETWEEN GCV AS BILLED (LOADING) VIS-À-VIS GCV ARB UNLOADING

7.7.1 Submitting the overall variation in GCV –As Billed (loading EQ basis) vis-à-vis the GCV ARB at unloading points in FY 2022-23, FY 2023-24 and FY 2024-25 (H1), MSPGCL submitted that the weighted average deviations between the GCVs have been around 800 kcal/kg with deviations in certain stations as high as 900-1200 kcal/kg.

7.7.2 In this regard, the initiative of MSPGCL to reduce the variations are summarized below:

- MSPGCL has established a Coal Assurance Team (CAT), consisting of regular employees, including engineers, chemists, and technicians. These team members are deployed to various coal sidings of WCL, SECL, MCL, and SCCL to oversee and monitor coal quality, quantity, and the activities of Third-Party Sampling Agencies (TPSA).
- Additionally, retired experienced MSPGCL employees have been assigned to the loading points to supervise and witness coal sampling and preparation, ensuring adherence to quality standards.
- Given that the majority of coal is dispatched from WCL sidings, MSPGCL has also appointed a Supervision Monitoring and Coordination (SMC) agency. This agency is responsible for overseeing the activities of TPSA, monitoring raw coal dispatches to MSPGCL's power stations, and ensuring continuous monitoring of coal quality and quantity at the loading end, around the clock.
- The Commission in its MYT Order, has emphasized the need to minimize discrepancies in GCV between the loading and unloading ends. This directive has

been communicated to TPSA and the SMC agency, and regular reviews are conducted with these agencies to improve coal quality and ensure compliance with the Commission's guidelines.

- Points as above and Following Targets are given to Third party sampling agencies
  - The difference between the loading end Equivalent GCV (Eq. GCV) and unloading end As Received Basis GCV (ARB GCV) must not exceed the limit of allowed by the Commission or specified by the MYT Regulations, 2024.
  - For WCL, the difference between loading end and unloading end Equivalent GCV (Eq. GCV) must be within a limit of 300 kcal/kg.
  - Multiple communications have been sent to coal companies, requesting the dispatch of coal in line with the declared grade and as per the terms of the FSA.
  - Issues related to FSA, coal quality, and sampling have been raised in various meetings and through formal letters to coal companies, CIL, the MoC and MoP.

7.7.3 MSPGCL therefore requested the Commission to allow the entire variation in GCV between loading and unloading points be allowed as a pass through. However, for the purpose of calculations, the GCV variation of 750 kcal/kg has been considered as a cap for working out the energy charges.

7.8 GAS SUPPLY FOR URAN

7.8.1 The annual gas requirement of Uran is 3.5 MMSCMD. Due to less production levels of APM gas, the present allocation of APM gas from M/s GAIL is considerably lower. The supply of natural gas supplied by M/s GAIL is fluctuating based on upstream gas availability from M/s ONGC. The average gas receipt for Uran for last few years is as below:

Table 7.11: Actual gas availability for Uran

Financial Year	Daily Normative Quantity	Average gas receipt (MMSCMD)		
		APM gas	Non - APM gas	Total gas
FY 2014-15	2.31	1.55	0.73	2.28
FY 2015-16	1.96	1.53	0.44	1.97
FY 2016-17	2.24	1.80	0.40	2.20
FY 2017-18	2.21	2.15	0.0021	2.152
FY 2018-19	1.79	1.75	0.0	1.75
FY 2019-20	1.86	1.77	0.0	1.77
FY 2020-21	1.404	1.34	0.0	1.34
FY 2021-22	1.543	1.51	0.0	1.51
FY 2022-23	1.164	1.81	0.0	1.81
FY 2023-24	1.31	1.09	0.0	1.09
FY 2024-25 (Apr-24 to Sep-24)	2.351	1.70	0.0	1.70

7.8.2 Unless there is any improvement in gas supplies, the shortfall of gas is expected to be 1 MMSCMD for 3 GT operation and about 2 MMSCMD for 4 GT operation. In case permitted, MSPGCL can explore possibility of running the machines by procurement of spot gas from open market in case the impact of high spot gas prices is allowed to be recovered in the subsequent months without any capping.

7.9 USE OF BIOMASS PELLETS

7.9.1 MSPGCL has a mandate for usage of biomass pellets in the stations based on the directives from the Government of India. As per GoI, MoP notification F.No.11/86/2017-Th-II (C.NO. 238797) dated 16 June, 2023 on revised policy for Biomass utilization for power Generation through Co-firing in coal based power Plants.

7.9.2 Station-wise status of pellet procurement is as follows:

a) Bhusawal TPS: Tender is refloated on 30 April, 2024 for the procurement of 850 TPD (2,07,258 MT per year) of Non-Torrefied Biomass Pellets for Bhusawal TPS for (3+1) year. Technical Bid is opened on date 09 July, 2024 and evaluation is under process.

b) Koradi TPS: Tender is refloated on date 29 April, 2024 for the procurement of 200TPD (48,800 MT) of Non-Torrefied Biomass Pellets for Koradi Unit-6 for one year. Technical Bid is opened on date 05 July, 2024, and evaluation is under process.

c) Khaperkheda TPS: Tender was floated on date 16 February, 2024 for the procurement of 50TPD (12,200 MT) of Torrefied Biomass Pellets for Khaperkheda Unit-5 for one year. Tender is finalized and LOA dated 07 June, 2024 awarded to M/s Avaneesh Chemicals, supply expected to start from October 2024.

7.9.3 MSPGCL will consider procurement of such pellets for remaining TPS in near future. Given the uncertainty in the availability and consistent supply of biomass pellets, MSPGCL has not currently included biomass pellets in its fuel mix. However, MSPGCL is actively making efforts to procure pellets and utilize them in its power stations in order to comply with the MoP guidelines. In case of usage of pellets in the next MYT period, MSPGCL may be allowed to submit the claims towards such usage as part of the relevant period FAC computations, as and when the pellets are used.

7.10 COMMISSION’S ANALYSIS ON FUEL UTILISATION PLAN FOR FY 2025-26 TO FY 2029-30

7.10.1 The Commission has taken note of the submissions made by MSPGCL for ensuring the availability of coal for its Stations to operate at normative availability of the generating stations in cost effective manner. The Commission noted that MSPGCL has proposed various measures to improve the overall coal supply position during the ensuing years of the Control Period for achieving the normative availability of its various thermal stations.

7.10.2 MSPGCL has proposed the following coal mix by quantum for FY 2025-26:

Table 7.12: Proposed coal mix by MSPGCL for FY 2025-26

Station	Raw coal	Imported Coal	Washed Coal	Total
Bhusawal	100%	0%	0%	100%
Chandrapur	88%	6%	6%	100%
Khaperkheda	76%	5%	19%	100%
Koradi	92%	8%	0%	100%
Nashik	90%	10%	0%	100%
Paras Units 3&4	100%			100%
Parli Units 6&7	100%	0%	0%	100%
Khaperkheda Unit 5	100%	0%	0%	100%
Bhusawal Units 4&5	74%	9%	17%	100%
Koradi Units 8-10	72%	8%	19%	99%
Chandrapur Units 8&9	8%	0%	92%	100%
Parli Unit 8	86%	9%	5%	100%
Bhusawal Unit 6	85%	15%	0%	100%
Total	**71%**	**5%**	**24%**	**100%**

**Decimals not considered*

7.10.3 The Commission observed that MSPGCL has proposed the imported coal consumption of 5% on overall basis.

7.10.4 The Commission observed that MPSGCL has claimed the utilisation of 24% washed coal in the Fuel Mix in FY 2025-26. In addition, MSPGCL has submitted that in the last 2 years of washed coal usage, it was observed that even though the GCV of the washed coal is not improving considerably, there are some tangible & intangible benefits of use of washed coal which are listed below:

<u>Tangible benefits of use of Washed Coal:</u>

- Increase in GCV of coal
- Significant improvement in power generation.
- Reduction in Auxiliary Power Consumption (%)
- Lower Specific Oil Consumption (SOC)
- Increase in Plant Load Factor (PLF)
- Improvement in Specific coal consumption
- Enhanced Load handling capacity
- Saving in freight, as less coal is required to transport for same heat value, considering reject

<u>Intangible benefits of use of Washed Coal:</u>

- Overall increase in realization of coal as compared to realization of only raw coal

(especially from WCL)

- No instances of receipt of lumpy coal and stones.
- Reduction in unloading time and demurrages.
- Less wear & tear of equipment (Conveyer belts, crushing elements, Chutes, etc.)
- Crushing system is bypassed, hence reduction in auxiliary consumption
- Washing of coal reduces the ash content of coal, also improves its heating value and removes small amounts of other substances, such as Sulphur and hazardous air pollutants.
- Reduction in ash disposal expenditure
- Reduction in wear and tear of boiler and CHP parts
- Load fluctuation decreased result in gain in DSM

7.10.5 As discussed in truing up chapters of this Order, it is observed that MSPGCL has been facing shortage of coal in the previous years on account of low coal materialisation from the linkage coal and the lower GCV received against the contracted grade of coal. The Commission has been considering the arrangement of sufficient coal to meet the normative availability as a business risk and not allowing any relaxation in availability norms for recovery of full fixed charges due to shortage of coal. Accordingly, the Commission, in principally approves the various measures proposed by MSPGCL including coal beneficiation and procurement of imported coal in order to meet the requirement of coal for maintaining normative availability.

7.10.6 As regards the washed coal as discussed in Chapter 4 of the Order MSPGCL has submitted that it is also taking steps to make necessary corrections/changes in the washed coal contracts for the future period so that the beneficiation effect will be maximised to achieve adequate reduction in Rs/kcal. **The Commission directs MSPGCL to carry out the proper cost benefit analysis of coal beneficiation for each year from FY 2025-26 onwards and submit the same in the true-up of the respective years. MSPGCL should ensure that the effective landed price of washed coal at thermal station in terms of Rs./kcal is lower than the landed price of normal mined coal at thermal station in terms of Rs./kcal. In case at the time of truing up it is observed that the landed cost of washed coal in Rs./kcal is higher than the landed price of normal mined coal in terms of Rs./kcal, the Commission will limit the landed price of washed coal in Rs/kcal equivalent to landed price of normal mined coal. Any loss on this account will have to be borne by MSPGCL itself and shall not be passed on to beneficiaries.**

7.10.7 As regards imported coal, MSPGCL has submitted that it is also mindful of the significant increase in cost of imported Coal considering the present geo-political situation. MSPGCL is currently procuring coal mainly from Indonesia. HBA is reference price ($/MT) for thermal coal in Indonesia. The Global increase in prices can be understood from the Harga Batubara Acuan (HBA) indices which is a monthly average price based 25% on the Platts Kalimantan (5,900 kcal/kg GAR) assessments, Argus-Indonesia Coal Index (6,500 kcal/kg GAR), Newcastle Export Index (6,322 kcal/kg GAR) and GlobalCOAL Newcastle (6,000 kcal/kg NAR). Increase in HBA indices (HBA indices as per 6,322 kcal/kg GAR coal with 12.26% total moisture content, 7.94% ash as received and 0.66% Sulphur) together with the Dollar Appreciation (83.01 in Sept 2023 to 83.80 in Sept 2024) gives an impression of the Global turmoil in energy prices.

7.10.8 As regards the imported coal, the Commission observes that MSPGCL should procure imported coal judiciously at lower index price considering the impact of same on variable charge of various stations and their likely dispatch in Merit Order. Further, MSPGCL should make efforts and try to enter into the Contracts for imported coal without any take of pay condition. Any take of pay obligations due to non-procurement of imported coal will not be allowed as pass through.

7.10.9 Regarding Gare-Palma II coal block, the Commission asked MSPGCL to submit the current status in detail and to reassess the likely production from coal block. MSPGCL in its reply submitted the current status as follows:

Following approvals/clearances are received till date:

- Mine Plan & Mine Closure Plan Approval (on 12 August, 2016),
- Previous Approval (on 20 February, 2018);
- Forest Clearance Stage –I on 02 June, 2022, & Forest clearance Stage-II (on 27 January, 2023);
- Escrow Account opened on 11 August, 2023 and Escrow account agreement executed on 04 September, 2023;
- Environmental Clearance received on 13 August, 2024;
- Forest Department, Chhattisgarh issued Forest Clearance Letter on 27 August, 2024;
- Grant of Mining Lease on 13 November, 2024;
- SDM - Gharghoda vide letter dated 29 January, 2025 has given tree cutting permission of Revenue Forest (115 Ha);
- Mining Lease Order has been issued by Mining Department to Collector, Raigarh on 31 January, 2025;

7.10.10 In view of above completion of formalities and receipt of clearances, MSPGCL is expecting execution of mining lease shortly. Further, permission for mine opening is expected by the end of February 2025 or in March 2025. Considering @ 6 months period required for the MDO for mobilisation of resources & operationalisation of mining activities, it is expected that extraction of coal will commence from September, 2025.

7.10.11 MSPGCL further submitted that as per above current status, it is expected that production of coal will start in FY 2025-26 (1st year) of 0.25 MMT and production for subsequent years is expected as per mining plan. In light of this, MSPGCL expect production of coal (in Million MT) from GP II for MYT Control period FY 2025-26 to FY 2029-30 as under:

Year 1 FY 2025-26	Year 2 FY 2026-27	Year 3 FY 2027-28	Year 4 FY 2028-29	Year 5 FY 2029-30
0.25	1.55	3.00	6.00	9.50

7.10.12 MSPGCL also submitted the correspondence from Gare Palma II Collieries Pvt. Ltd (GPIICPL) in which GPIICPL mentioned that it endeavors to operationalize this coal block by third quarter of FY 2025-26 on a best effort basis.

7.10.13 Based on the current status submitted by MPSGCL, it is observed that the coal production from Gare Palma II mines may get delayed. However, based on the confirmation from MDO, it the Commission has considered the coal production as proposed by MSPGCL from Gare Palma II mines.

7.10.14 As regards the input price of coal from the GP II mines, MSPGCL submitted that the price of GP II coal is calculated as per Regulation 56, and 57 of the MERC (MYT) Regulations 2024. The relevant extract is as under:

"56.1 Input price of coal or lignite from the integrated mine(s) shall be determined based
on the following components:
(i) Run of Mine (ROM) Cost; and
(ii) Additional charges:
a) crushing charges;
b) transportation charge within the mine up to the washery end or coal handling plant associated with the integrated mine, as the case may be;
c) handling charges at mine end;
d) washing charges; and
e) transportation charges beyond the washery end or coal handling plant, as the case may be, and up to the loading point:
…

57 Run of Mine (ROM) Cost
57.1 Run of Mine Cost of coal in case of integrated mine(s) allocated through auction
route under Coal Mines (Special Provisions) Act, 2015 shall be worked out as under: ROM Cost = (Quoted Price of coal) + (Fixed Reserve Price)

...
57.2 Run of Mine Cost of coal in case of integrated mine allocated through allotment
route under Coal Mines (Special Provisions) Act, 2015 shall be worked out as under: ROM Cost = [(Annual Extraction Cost / ATQ) + Mining Charge] + (Fixed Reserve Price).
...”

7.10.15 In view of the above formula specified in the MYT Regulations, 2024, MSPGCL submitted that the quoted price of coal for the respective year is projected based on the following formula specified in the Coal Mining Agreement:

Escalated Raw Coal Mining Charge shall be determined as below;

RCMCn esc = (BRCMC) x {1 + (In-Io)/Io}

Whereas;

BRCMC	Base Raw Coal Mining Charge
RCMCnesc	Escalated Raw Coal Mining Charge for the nth operating financial year
Io	Base CERC composite index as prevalent during the month immediately preceding the Bid Date
In	CERC composite index prevalent during the month in the beginning of the nth operating FY

7.10.16 MSPGCL submitted that the Base Raw Coal Mining Charge (BRCMC) has been fixed at Rs 883.50/tonne [Quoted mining charges during the period Aug-16] and base composite index (Io) has been 130.64 [During the period Aug-16]. Therefore, for any subsequent year, the composite index notified by CERC in the month of April for that particular Financial Year needs to be considered.

7.10.17 MSPGCL submitted that the capital cost for the GP II coal mine, as approved in the MSPGCL's Board Resolution dated 05 November, 2019, has been considered for computing the annual extraction cost. MDO (Mine Developer and Operator) charges for the period from August 2016 to March 2024 have been calculated based on the CERC composite index, with an escalation rate of 6.45%, determined using a 5-year CAGR from FY2018-19 to FY2023-24. For the period from April 2024 onwards, MDO charges have been escalated considering the same 6.45% rate. The following table shows calculation of escalation rate considered for projection of mining charges for MYT control period (FY 25-26 to FY 29-30).

Quoted Mining Charges	883.5	Sep-16										
	Aug-16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27
Yearly Escalation (CERC Composite Index) (Cumulative Escalation)		42.2%	3.6%	7.8%	14.0%	11.8%	22.0%	43.2%	47.4%	56.9%	67.0%	77.8%
CERC Composite Index	131	186	135	141	149	146	159	187	193	205	218	232
Mining Charges (Esc with base year)	Rs/MT	884	915	952	1007	988	1078	1265	1302	1386	1476	1571
Surface Transport Charge	**46.5**	**Sep-16**										
	Aug-16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27
Transportation Charges		46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5
WPI	111	109	113	117	121	119	132	152	151	158	166	173
WPI factor (all commodities)			0.41	0.42	0.44	0.43	0.47	0.55	0.54	0.57	0.60	0.62
CPI (IW)	278	271	277	288	312	329	346	368	386	405	426	447
CPI Factor			0.30	0.31	0.34	0.36	0.37	0.40	0.42	0.44	0.46	0.48
WPI (HSD)	67	59	82	93	96	76	101	169	172	198	228	262
WPI (HSD) Factor			0.36	0.41	0.43	0.34	0.45	0.76	0.77	0.89	1.02	1.17
Combined Factor			1.07	1.15	1.20	1.12	1.30	1.70	1.73	1.89	2.08	2.28
Indexed Transportation Charge		47	50	53	56	52	60	79	80	88	96	106
Total Charges		**930**	**965**	**1,006**	**1,063**	**1,040**	**1,139**	**1,344**	**1,382**	**1,474**	**1,572**	**1,677**

7.10.18 MSPGCL submitted that considering the definition of commercial operation date of integrated mine(s) specified in the MYT Regulations, 2024, considering that the condition of COD *"the date of two years from the date of commencement of production"* is the earliest of the three conditions specified in the Regulations, the COD of the GP II mine is anticipated in FY 2027-28. Accordingly, the impact of capitalisation in calculation of annual extraction cost has been considered from the year of COD i.e. FY 2027-28.

7.10.19 Based on the above, MSPGCL has arrived at the input cost of coal from GP II mine as summarised below:

Period	Coal Price (Rs/MT)
FY2025-26	2840
FY2026-27	2991
FY2027-28	6115
FY2028-29	4764
FY2029-30	4349

7.10.20 MSPGCL submitted that the impact of cost components towards servicing of MSPGCL capital costs from FY 2027-28 onwards coupled with comparatively lower coal output is resulting in sudden rise in input price of coal in FY 2027-28.

7.10.21 Further, transportation cost for delivering coal at Chandrapur 8,9 units, Koradi 8,9,10 and Parli unit 8 as per the railway freight FOIS is considered as Rs. 1,666/MT, Rs. 1,289/MT and Rs. 2,289 /MT respectively for FY 2025-26. Further, for subsequent years' transportation cost is projected considering 5% Y-o-Y escalation. Accordingly, transportation cost of GP II coal for Chandrapur unit 8-9, Koradi Unit 8-10 and Parli Unit 8 is projected as under:

Particulars	Chandrapur 8,9	Koradi 8,9,10	Parli 8
Transportation (Rs./MT)			
FY2025-26	1,666	1,289	2,289
FY2026-27	1,749	1,353	2,403
FY2027-28	1,837	1,421	2,524
FY2028-29	1,929	1,492	2,650
FY2029-30	2,025	1,567	2,782

7.10.22 Accordingly, landed cost of GP II coal at Chandrapur 8,9 units, Koradi 8,9,10 and Parli unit 8 for MYT Control period worked out as under:

Particulars	Chandrapur 8,9	Koradi 8,9,10	Parli 8
Landed cost of GP II coal (Rs./MT)			
FY2025-26	4,506	4,129	5,129
FY2026-27	4,740	4,345	5,395
FY2027-28	7,952	7,536	8,639
FY2028-29	6,693	6,257	7,414
FY2029-30	6,374	5,916	7,131

7.10.23 MSPGCL further submitted that the input price of GP II coal is projected considering the tentative capital cost in view of expecting CoD in FY 2027-28. Hence, the prices of GP II coal projected are tentative and the same are subject to change based on the actual capitalization as on CoD. MSPGCL requested the Commission not to cap the price of GP II coal with CIL notified price of coal. MSPGCL further submitted that MSPGCL shall submit the Petition before the Commission for determination of final input price of coal within 6 months from the date of CoD of the GP II mine. MSPGCL also submitted that currently, WCL is not supplying the coal to MSPGCL power stations at the notified rates. During the period from April 2024 to September 2024, not even a single rake was received from WCL at the notified price. WCL has shifted all the coal from notified to the Mine specific coal. Out of the total 29.24 MMT of WCL for the period FY 2025-26, 16.804 MMT of the Mine Specific Supply (MSS) coal and 9.520 MMT of the cost-plus coal supply and 2.918 MMT of Bridge linkage coal from WCL. MSPGCL has to procure the Cost plus coal which is expensive as compared to that of the mine specific coal. Hence, it would be inappropriate to cap the input price of coal from integrated mine GP-II at the CIL notified price for the corresponding grade.

7.10.24 The relevant excerpts of the MYT Regulations, 2024, on input price of coal from Gare Palma II are as below:

"24.12 Supply of Coal or Lignite prior to the Date of Commercial Operation of Integrated Mine:

The input price for supply of coal or lignite from the integrated mine(s) prior to their date of commercial operation shall be:

(a) in case of coal, the estimated price available in the investment approval, or the notified price of Coal India Limited for the corresponding grade of coal supplied to the power sector, whichever is lower; *and*

…

39.13 A Generating Company with integrated mine(s) shall ***file a Petition for determination of input price of coal or lignite from the integrated mine(s) not later than 60 days from the date of commercial operation of the integrated mine(s)***

Provided that the Generating Company having integrated mine(s) shall file Petition before the Commission for determination of the input price of coal or lignite from the integrated mine(s) containing the details of expenditure incurred and projected to be incurred duly certified by the Auditor, in accordance with the Formats that may be stipulated by the Commission.

…

51.7 The Generating Company shall, ***after the date of commercial operation of the integrated mine(s) till the input price of coal is determined by the Commission under these Regulations, adopt the notified price of Coal India Limited commensurate with the grade of the coal from the integrated mine(s) or the estimated price available in the investment approval, whichever is lower****, as the input price of coal for the generating station:*

Provided that the difference between the input price of coal determined under these Regulations and the input price of coal so adopted prior to such determination, for the quantity of coal billed, shall be adjusted in accordance with Regulation 51.9.

…

56.1 Input price of coal or lignite from the integrated mine(s) shall be determined based on the following components:

(i) Run of Mine (ROM) Cost; and

(ii) Additional charges:

a) crushing charges;

b) transportation charge within the mine up to the washery end or coal handling plant associated with the integrated mine, as the case may be;

c) handling charges at mine end;

d) washing charges; and

e) transportation charges beyond the washery end or coal handling plant, as the case may be, and up to the loading point:

Provided that one or more components of additional charges may be applicable *in case of the integrated mine(s), based on the scope and nature of the mining activities:*

Provided further that the input price of lignite shall be computed based on Run of Mine (ROM) based on the technology such as bucket excavator-conveyor or belt-spreader or its combination and handling charges, if any.

Provided also that Statutory Charges, as applicable, shall be allowed as pass-through expenses:

Provided also that the Input Price of coal or lignite determined above shall be capped to the delivered price of coal at the upper price band notified by Coal India Limited for the same Grade of coal from time to time:

Provided also that if the coal rejects generated out of the coal washery are used in own/captive generating plant, then the basic cost of coal rejects shall be considered as Nil, and actual transportation charges, subject to prudence check, shall be considered as input cost.

…"

7.10.25**The Commission directs MSPGCL to file a separate Petition for determination of input price as per the provisions of the MYT Regulations, 2024.** In the absence of the approved input price, the Commission at this stage has considered the latest notified price of coal from SECL for the same Grade of coal in accordance with the provisions of the MYT Regulations, 2024 and has arrived at the landed cost of Rs. 1521/MT for FY 2024-25.The Commission has escalated the landed price at 3% per annum as considered for projecting all the Fuel Prices for the Control Period. Further, the Commission has considered the transportation expenses of Rs. 1666/MT for Chandrapur 8 & 9, Rs. 1289/MT for Koradi 8-10 and Rs. 2289/MT for Parli Unit 8 for FY 2025-26 as claimed by MSPGCL and has considered the escalation of 3% on the transportation costs also to arrive at the landed cost of coal from Gare Palma II mines for the specific stations.

7.10.26 The landed cost of coal from Gare Palma II mine as considered by the Commission are as follows:

Table 7.13: Landed Cost of Coal approved by the Commission from Gare Palma II mine (Rs./MT)

Particulars	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
Coal Price	1566.59	1613.58	1661.99	1711.85	1763.21
Transportation Expense					
Chandrapur 8 &9	1666	1715.98	1767.46	1820.48	1875.10
Koradi 8-10	1289	1327.67	1367.50	1408.53	1450.78
Parli 8	2289	2357.67	2428.40	2501.25	2576.29

Particulars	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
Total					
Chandrapur 8 &9	**3232.59**	**3329.56**	**3429.45**	**3532.33**	**3638.30**
Koradi 8-10	**2855.59**	**2941.25**	**3029.49**	**3120.38**	**3213.99**
Parli 8	**3855.59**	**3971.25**	**4090.39**	**4213.10**	**4339.50**

7.10.27 The Commission will approve the input price of coal from GP II mines based on Petition to be filed by MSPGCL.

8 MULTI YEAR TARIFF FOR THE CONTROL PERIOD FY 2025-26 TO FY 2029-30

8.1 BACKGROUND

8.1.1 MSPGCL has sought approval for the ARR and MYT for the 5th Control Period from FY 2025-26 to FY 2029-30. The analysis of the Commission is set out below:

8.2 OPERATING CAPACITY DURING THE CONTROL PERIOD

MSPGCL's submission

8.2.1 MSPGCL submitted that there is no anticipated change in the operating capacity of the existing stations in the control period. The CEA has requested MSPGCL to maintain operation of all currently available thermal capacities until 2030 and beyond. Furthermore, the CEA has suggested that MSPGCL shall consider the Renovation and Modernization of thermal units to extend their operational life and enhance efficiency. This recommendation is made in light of the potential need for power from these Units till the year 2030 and beyond. As per the request, MSPGCL is currently evaluating the continued service of all existing capacities until March 2030.

8.2.2 For thermal stations, the projections are based on the Fuel Utilization Plan, taking into account the availability of fuel and the planned outages to meet target availability and PLF.

8.2.3 For hydro stations, it is anticipated that the units will consistently achieve at least the Design Energy, as no significant constraints are expected. This assumption holds true for the majority of hydro units, allowing them to meet the generation targets effectively.

8.3 NORMS OF OPERATION

8.3.1 The norms of operation specified under the MYT Regulations, 2024 for thermal generating stations are as follows:

(i) Availability
(ii) PLF
(iii) AEC
(iv) GSHR
(v) SFOC
(vi) Transit and handling loss

MSPGCL's submission

8.3.2 MSPGCL has been submitting the Commission that the operational norms (Plant Availability Factor, Auxiliary Power Consumption, Station Heat Rate, etc.) set by the Commission in the MYT Regulations 2015, MYT Regulations 2019 and MYT Regulations 2024 are unachievable for the following thermal units in light of the age of the machines, their individual characteristics, quality of primary fuel, operating conditions etc.

i. Khaperkheda TPS (Units 1 to 4),
ii. Paras TPS (Units 3 and 4),
iii. Parli TPS (Units 6 and 7),
iv. Koradi TPS (Unit 6), and
v. Chandrapur Super Thermal Power Station (CSTPS).

8.3.3 During the proceedings in Case No. 227 of 2022 (Mid Term Review Petition), in the context of the target Availability for Khaperkheda Units No. 1 to 4, in the Mid Term Review Petition (Case No. 227 of 2022 filed under the 4th Control period, MSPGCL requested the Commission to appoint a technical agency (CPRI) to "suggest likely cost benefit analysis of incurring any capital expenditure to improve the performance". By the MTR Order dated 31 March, 2023, the Commission had granted liberty to the MSPGCL to appoint a qualified technical agency to assess on its own and suggest improvements in the performance of its stations. Relevant extracts of the Commission's MTR Order 31 March, 2023 is as follows:

"9.5.3 MSPGCL sought the relaxation in normative AEC of Khaperkheda. The norms of operation have been specified in the MYT Regulations, 2019 after due consultation process and therefore, the Commission does not find it prudent to revise the normative AEC for Khaperkheda as sought by MSPGCL. The Commission does not accept the request of MSPGCL to appoint a technical agency. ***MSPGCL can take recourse to any measures, including appointment of a qualified technical agency on its own, required for improvement in the performance of the station, within the provisions of the applicable Regulations." (Emphasis added)***

8.3.4 In light of the above liberty granted by the Commission, MSPGCL appointed Central Power Research Institute (CPRI), to conduct a detailed study of its power stations.

8.3.5 The key findings of CPRI in pursuant to its detailed study have been categorized and summarized below, based on the respective generating stations,

<table>
<tr><th>S. No.</th><th>Station</th><th>Unit s</th><th>Study conducted on</th><th colspan="2">Study Results</th></tr>
<tr><td rowspan="5">1</td><td rowspan="5">Khaperkheda TPS</td><td>1</td><td rowspan="4">Improvement in Availability Factor</td><td>Maximum achievable AVF at 10.10% AEC - 73.75%</td><td rowspan="4">Maximum achievable AVF for the station - 76.75%</td></tr>
<tr><td>2</td><td>Maximum achievable AVF at 10.10% AEC - 73.75%</td></tr>
<tr><td>3</td><td>Maximum achievable AVF at 9.80% AEC - 79.75%</td></tr>
<tr><td>4</td><td>Maximum achievable AVF at 9.80% AEC - 79.75%</td></tr>
<tr><td>1</td><td>Reduction in Auxiliary</td><td>Achievable AEC at 80 % PLF - 10.02%</td><td>Maximum achievable</td></tr>
</table>

<table>
<tr><th>S. No.</th><th>Station</th><th>Unit s</th><th>Study conducted on</th><th colspan="2">Study Results</th></tr>
<tr><td rowspan="3"></td><td rowspan="3"></td><td>2</td><td rowspan="3">Power Consumption</td><td>Achievable AEC at 80 % PLF - 9.24%</td><td rowspan="3">AEC for the station is 9.95%, at achievable AVF of 76.75% and 10.21% considering CT ratio issue</td></tr>
<tr><td>3</td><td>Achievable AEC at 80 % PLF - 9.91%</td></tr>
<tr><td>4</td><td>Achievable AEC at 80 % PLF - 9.56%</td></tr>
<tr><td rowspan="5">2</td><td rowspan="5">CSTPS</td><td>3</td><td rowspan="5">Reduction in Auxiliary Power Consumption</td><td>Nominal Achievable AEC at 80 % PLF - 9.63%</td><td rowspan="5">Achievable AEC for the station at 80 % PLF - 9.34%</td></tr>
<tr><td>4</td><td>Nominal Achievable AEC at 80 % PLF - 9.42%</td></tr>
<tr><td>5</td><td>Nominal Achievable AEC at 80 % PLF - 8.82%</td></tr>
<tr><td>6</td><td>Nominal Achievable AEC at 80 % PLF - 8.67%</td></tr>
<tr><td>7</td><td>Nominal Achievable AEC at 80 % PLF - 10.51%</td></tr>
<tr><td rowspan="3">3</td><td rowspan="3">Parli TPS</td><td>6</td><td rowspan="3">Reduction in Auxiliary Power Consumption</td><td>Nominal Achievable AEC at 85 % PLF - 10.82%</td><td rowspan="3">Achievable AEC for the station at 85 % PLF - 10.82% for Units # 6,7 & 9.51% for Unit # 8</td></tr>
<tr><td>7</td><td>Nominal Achievable AEC at 85 % PLF - 10.82%</td></tr>
<tr><td>8</td><td>Nominal Achievable AEC at 85 % PLF - 9.51%</td></tr>
<tr><td rowspan="2">4</td><td rowspan="2">Paras TPS</td><td>3</td><td rowspan="2">Reduction in Auxiliary Power Consumption</td><td>Nominal Achievable AEC at 85 % PLF - 10.42%</td><td rowspan="2">Achievable AEC for the station at 85 % PLF - 10.21%</td></tr>
<tr><td>4</td><td>Nominal Achievable AEC at 85 % PLF - 10.00%</td></tr>
</table>

8.3.6 During the stakeholder consultation for the Draft MYT Regulations, 2024, MSPGCL had sought relaxations in plant performance parameters for Nashik (Availability), Bhusawal (Availability), Chandrapur Units 3-7 (Availability and Auxiliary consumption), Khaperkheda Units 1-4 (Availability), Paras Units 3-4 (Auxiliary Consumption) and Parli Units 6-7 (Auxiliary Consumption). In support of its request, MSPGCL had also submitted the aforementioned CPRI Reports. However, the Commission only partially relaxed the Auxiliary Consumption norms for Chandrapur Units 3 to 7, by revising the norm to 8.6% instead of 9.34%.

8.3.7 MSPGCL has also referred the provisions of Tariff Policy and certain Judgments from Hon'ble the APTEL regarding the relaxation in performance parameters in its Petition.

8.3.8 MSPGCL submitted that based on CPRI's report the Auxiliary and Availability norms under the MYT Regulations 2024 are unachievable for MSPGCL's generating stations. Hence these norms need to re-determined to ensure recovery of cost of generation for MSPGCL. Considering the CPRI Reports as well as historical performance data & other operational constraints, MSPGCL requested for consideration of the relaxations in performance parameters as tabulated below,

Plant Performance Parameter	Station / Unit	Relaxed Norm requested	Rationale
Plant Availability Factor	Khaperkheda Units # 1 to 4	75% (for FY 2025-26 onwards)	CPRI Report as well as historical performance & operational constraints
	Nashik	80% (FY 2025-26 onwards)	Historical performance & operational constraints. MoP's coal flexibilisation under Case 4 is temporary arrangement & hence effect may not be considered.
	Bhusawal Unit # 3	80% (FY 2025-26 onwards)	Historical performance & operational constraints
Auxiliary Consumption %	Chandrapur Units # 3 to 7	9.34% (for FY 2022-23 onwards)	CPRI Report as well as historical performance & operational constraints
	Paras	10.25% (for FY 2022-23 onwards)	CPRI Report as well as historical performance & operational constraints
	Parli Units # 6,7	10.25% (for FY 2022-23 onwards)	CPRI Report as well as historical performance & operational constraints
	Parli Unit # 8	9.14% (for FY 2022-23 onwards)	CPRI Report as well as historical performance & operational constraints
	Khaperkheda Units # 1 to 4	10.21% (for FY 2022-23 onwards)	CPRI Report as well as historical performance & operational constraints

8.3.9 MSPGCL requested the Commission to kindly exercise its powers under Regulations 149 (Power to Relax) under the MYT Regulations, 2024 to revise the Auxiliary consumption norms and Availability factor for the future control period, i.e., from FY 2025-26 to FY 2029-30.

Commission's Analysis and Ruling

8.3.10 MSPGCL in its Petition has submitted that it has appointed CPRI , to conduct a detailed study of its power stations in light of the liberty granted by the Commission in its MTR Order. In this regard, it is important to note that the Commission in its MTR Order never mentioned that the Commission will revise the norms of operation based on any study. The Commission opined that MSPGCL can take recourse to any measures, including appointment of a qualified technical agency on its own, required for improvement in the performance of the station, within the provisions of the applicable

Regulations. From the above, it is clear that the Commission has asked MSPGCL to take recourse to any measures including appointment of any agency required for improvement in the performance of the stations, within the provisions of applicable Regulations.

8.3.11 The study reports of CPRI have also been submitted by MSPGCL at the time of framing the MYT Regulations, 2024 and the Commission after duly considering these reports have framed the norms of operation in the MYT Regulations, 2024. The norms of operation have been specified in the MYT Regulations, 2024 after due consultation process. Hence, the Commission does not find it prudent to exercise its powers under Regulations 149 (Power to Relax) under the MYT Regulations, 2024 to revise the norms of operation specified in MYT Regulations, 2024. Hence, the Commission for the next Control Period has considered the norms of operation as specified in MYT Regulations, 2024.

8.4 AVAILABILITY AND PLF

MSPGCL's submission

8.4.1 MSPGCL has projected Availability for the 5th Control Period in line with the MYT Regulations, 2024 except for Khaperkheda Units 1 to 4, where MSPGCL requested the Commission to consider and approve the availability as recommended in the CPRI Energy Audit reports. Additionally, for the Nashik and Bhusawal Units, MSPGCL requested the Commission to approve the target availability based on the historical data. MSPGCL had projected the availability of the Uran station based on average gas availability of 1.77 MMSCMD based on the gas receipts in the last years and six months of FY 2024-25. In anticipation of availability of WHR A0 block from December 2024 onwards, after completion of restoration works currently undertaken, the complete utilisation of available gas is envisaged in combined cycle only.

8.4.2 MSPGCL has claimed the PLF equal to the PAF projected for the 5th Control Period.

Table 8.1: Projected Availability/PLF submitted by MSPGCL for the 5th Control Period

Station/unit	Normative	Projected by MPSGCL
Bhusawal	85.00%	80.00%
Chandrapur	80.00%	80.00%
Khaperkheda	85.00%	75.00%
Koradi	75.00%	75.00%
Nashik	85.00%	80.00%
Uran	85.00%	41.00%
Paras Units 3&4	85.00%	85.00%
Parli Units 6&7	85.00%	85.00%
Khaperkheda Unit 5	85.00%	85.00%

Station/unit	Normative	Projected by MPSGCL
Bhusawal Units 4&5	85.00%	85.00%
Koradi Units 8-10	85.00%	85.00%
Chandrapur Units 8&9	85.00%	85.00%
Parli Unit 8	85.00%	85.00%

Commission's Analysis and Ruling

8.4.3 MSPGCL has sought the relaxation in normative Availability of Khaperkheda. As discussed earlier, the Commission has considered the norms of operation as specified in the MYT Regulations, 2024.

8.4.4 Regulation 47.1 and 47.2 of MYT Regulations, 2024 specify the Target Availability for full recovery of AFC for MSPGCL's Stations and the same has been considered by the Commission.

8.4.5 As discussed in previous MYT Order, MTR Order as well as in previous sections of this Order, the actual availability of most of MSPGCL's Stations has been consistently lower that the normative in the 4th Control Period. The Commission has been disallowing the Fixed Cost for not achieving the Target Availability, in accordance with the Tariff Regulations, in the truing-up for the respective years. As the availability for subsequent years is projected at the normative level, the energy available from MSPGCL's Stations is also projected at normative levels, while MSPGCL has been unable to achieve the normative availability in most of the Stations. With this approach, MSPGCL will recovers the entire Fixed Charges corresponding to normative Availability, and these are proportionately reduced considering the actual Availability during truing-up. It is therefore more appropriate to project the realistic Availability based on past trends in line with the approach adopted by the Commission in its MYT Order dated 30 March, 2020 and MTR Order dated 31 March, 2023.

8.4.6 In view of the above, the availability for computation of reduction of AFC for each year of the 5th Control Period has been projected assuming an increase of 3% over the average of the actual Availability for FY 2022-23, FY 2023-24 and revised estimate of availability for FY 2024-25, considering the improvement in efficiency of operations. For Stations whose average actual Availability for FY 2022-23, FY 2023-24 and revised estimate of availability for FY 2024-25, plus 3%, is more than the availability claimed by MSPGCL, the Commission has considered Availability as proposed by MSPGCL.

8.4.7 Accordingly, the following table shows the PAF/PLF claimed by MSPGCL and that approved by the Commission along with the PAF/PLF considered for AFC adjustment for FY 2025-26 to FY 2029-30:

Table 8.2: Availability/PLF for the 5th Control Period

Station/Unit	Average of FY 23- FY 25	PAF Norms as per Regulations	Claimed for the MYT Period	Approved				
				2025-26	2026-27	2027-28	2028-29	2029-30
Bhusawal	62.13%	85.00%	80.03%	65.13%	68.13%	71.13%	74.13%	77.13%
Chandrapur	59.57%	80.00%	85.00%	62.57%	65.57%	68.57%	71.57%	74.57%
Khaperkheda	67.04%	85.00%	75.04%	70.04%	73.04%	75.04%	75.04%	75.04%
Koradi	72.34%	75.00%	75.00%	75.00%	75.00%	75.00%	75.00%	75.00%
Nashik	70.69%	85.00%	80.02%	73.69%	76.69%	79.69%	80.01%	80.01%
Uran	37.94%	85.00%	40.89%	40.89%	40.89%	41.00%	40.89%	40.89%
Paras Units 3&4	76.55%	85.00%	85.00%	79.55%	82.55%	85.00%	85.00%	85.00%
Parli Units 6&7	78.16%	85.00%	85.00%	81.16%	84.16%	85.00%	85.00%	85.00%
Khaperkheda Unit 5	83.93%	85.00%	85.00%	85.00%	85.00%	85.00%	85.00%	85.00%
Bhusawal Units 4&5	77.50%	85.00%	85.00%	80.50%	83.50%	85.00%	85.00%	85.00%
Koradi Units 8-10	69.89%	85.00%	85.00%	72.89%	75.89%	78.89%	81.89%	84.89%
Chandrapur Units 8&9	80.76%	85.00%	85.00%	83.76%	85.00%	85.00%	85.00%	85.00%
Parli Unit 8	67.18%	85.00%	85.00%	70.18%	73.18%	76.18%	79.18%	82.18%

8.5 AUXILIARY ENERGY CONSUMPTION (AEC)

MSPGCL's submission

8.5.1 The AEC claimed for 5th Control Period is shown in the Table below. MSPGCL has requested to consider and approve the Auxiliary consumption norms as recommended in the CPRI Energy Audit reports for Chandrapur Units 3-7, Paras Units 3-4, Parli Units 6,7 & 8, Khaperkheda Units 1 to 4. MSPGCL further submitted that the auxiliary energy consumption of the Emission Control System (ECS) has been duly incorporated while projecting the auxiliary energy consumption for the period from FY 2025-26 to FY 2029-30.

Table 8.3: AEC claimed by MSPGCL for 5th Control Period

Station/unit	Normative	Claimed
Bhusawal	10.96%	10.96%
Chandrapur	7.80%	7.80%
Khaperkheda	9.70%	9.70%
Koradi	10.81%	9.00%
Nashik	10.75%	10.75%
Uran	3.10%	3.10%
Paras Units 3&4	9.30%	9.30%
Parli Units 6&7	9.30%	9.30%
Khaperkheda Unit 5	6.00%	6.00%

Station/unit	Normative	Claimed
Bhusawal Units 4&5	6.00%	6.00%
Koradi Units 8-10	6.00%	6.00%
Chandrapur Units 8&9	6.00%	6.00%
Parli Unit 8	8.50%	8.50%

Commission's Analysis and Ruling

8.5.2 MSPGCL sought the relaxation in normative AEC of Chandrapur Units 3-7, Paras Units 3-4, Parli Units 6,7 & 8, Khaperkheda Units 1 to 4.

8.5.3 As discussed earlier, the Commission has considered the norms of operation as specified in the MYT Regulations, 2024. Accordingly, the Commission has approved the normative AEC in accordance with the provisions of the MYT Regulations, 2024. In addition, the Commission has also considered the increase in AEC due to FGD installation as claimed by MSPGCL. The base AEC approved by the Commission for the 5th Control Period is as shown in the Table below:

Table 8.4: Base AEC for the 5th Control Period

Station/unit	Normative	Claimed	Approved
Bhusawal	10.96%	10.96%	10.96%
Chandrapur	7.80%	7.80%	7.80%
Khaperkheda	9.70%	9.70%	9.70%
Koradi	10.81%	9.00%	10.81%
Nashik	10.75%	10.75%	10.75%
Uran	3.10%	3.10%	3.10%
Paras Units 3&4	9.30%	9.30%	9.30%
Parli Units 6&7	9.30%	9.30%	9.30%
Khaperkheda Unit 5	6.00%	6.00%	6.00%
Bhusawal Units 4&5	6.00%	6.00%	6.00%
Koradi Units 8-10	6.00%	6.00%	6.00%
Chandrapur Units 8&9	6.00%	6.00%	6.00%
Parli Unit 8	8.50%	8.50%	8.50%

8.6 NET GENERATION

Commission's Analysis and Ruling

8.6.1 The Commission has considered the gross generation for the 5th Control Period considering the approved PLFs. The net generation has been approved considering the approved gross generation and the approved AEC.

Table 8.5: Gross and Net generation for FY 2025-26

Station/Unit	Projected by MSPGCL		Approved by the Commission	
	Gross Gen.	Net Gen.	Gross Gen.	Net Gen.*
Bhusawal	1472.21	1310.85	1198.08	1066.77
Chandrapur	13456.33	12199.51	10524.31	9703.42
Khaperkheda	5521.47	4946.68	5153.59	4643.38
Koradi	1379.63	1227.74	1379.63	1227.74
Nashik	4415.88	3941.18	4066.92	3629.72
Uran	2407.17	2332.55	2407.17	2332.55
Paras Units 3&4	3722.86	3341.26	3484.32	3160.28
Parli Units 6&7	3722.91	3333.86	3554.66	3216.96
Khaperkheda Unit 5	3722.98	3499.60	3722.98	3499.60
Bhusawal Units 4&5	7445.57	6998.84	7052.17	6629.04
Koradi Units 8-10	14742.37	13857.83	12642.81	11884.24
Chandrapur Units 8&9	7446.30	6999.52	7337.37	6897.12
Parli Unit 8	1861.41	1687.56	1536.91	1406.28
Total	**71317.10**	**65676.99**	**64060.92**	**59297.11**

** Net Generation includes the impact of reduction due to FGD*

Table 8.6: Gross and Net generation for FY 2026-27

Station/Unit	Projected by MSPGCL		Approved by the Commission	
	Gross Gen.	Net Gen.	Gross Gen.	Net Gen.*
Bhusawal	1472.15	1310.80	1253.27	1115.91
Chandrapur	13455.67	12163.59	11028.89	10139.69
Khaperkheda	5521.75	4946.94	5374.34	4842.28
Koradi	1379.61	1227.71	1379.61	1227.71
Nashik	4415.88	3941.18	4232.48	3777.49
Uran	2407.17	2332.55	2407.17	2332.55
Paras Units 3&4	3723.17	3296.86	3615.72	3236.07
Parli Units 6&7	3723.04	3333.98	3686.06	3335.88
Khaperkheda Unit 5	3722.85	3499.48	3722.85	3499.48
Bhusawal Units 4&5	7445.72	6998.97	7314.97	6876.08
Koradi Units 8-10	14742.84	13858.27	13163.15	12373.36
Chandrapur Units 8&9	7445.82	6999.07	7445.82	6999.07
Parli Unit 8	1861.41	1687.56	1602.61	1466.39
Total	**71317.09**	**65596.97**	**66226.95**	**61221.96**

** Net Generation includes the impact of reduction due to FGD*

Table 8.7: Gross and Net generation for FY 2027-28

Station/Unit	Projected by MSPGCL		Approved by the Commission	
	Gross Gen.	Net Gen.	Gross Gen.	Net Gen.*
Bhusawal	1472.15	1310.80	1312.05	1168.24
Chandrapur	13455.79	12121.65	11565.06	10596.49

Station/Unit	Projected by MSPGCL		Approved by the Commission	
	Gross Gen.	Net Gen.	Gross Gen.	Net Gen.*
Khaperkheda	5521.75	4946.94	5536.88	4988.73
Koradi	1379.61	1227.71	1383.39	1231.08
Nashik	4416.00	3941.28	4410.09	3936.01
Uran	2413.77	2338.94	2420.38	2345.35
Paras Units 3&4	3722.90	3296.63	3733.10	3341.12
Parli Units 6&7	3723.04	3333.98	3733.24	3378.58
Khaperkheda Unit 5	3722.85	3499.48	3733.05	3509.07
Bhusawal Units 4&5	7445.72	6998.97	7466.12	7018.15
Koradi Units 8-10	14742.71	13858.15	13720.98	12897.72
Chandrapur Units 8&9	7445.96	6999.20	7466.36	7018.37
Parli Unit 8	1861.49	1687.63	1672.88	1530.69
Total	**71323.73**	**65561.36**	**68153.58**	**62959.60**

** Net Generation includes the impact of reduction due to FGD*

Table 8.8: Gross and Net generation for FY 2028-29

Station/Unit	Projected by MSPGCL		Approved by the Commission	
	Gross Gen.	Net Gen.	Gross Gen.	Net Gen.*
Bhusawal	1472.15	1310.80	1363.65	1214.19
Chandrapur	13454.82	12078.73	12038.04	10992.24
Khaperkheda	5521.95	4947.11	5521.95	4975.27
Koradi	1379.61	1227.71	1379.61	1227.71
Nashik	4415.77	3941.08	4415.77	3941.08
Uran	2407.17	2332.55	2407.17	2332.55
Paras Units 3&4	3722.90	3296.63	3722.90	3331.99
Parli Units 6&7	3723.17	3334.10	3723.17	3369.47
Khaperkheda Unit 5	3722.85	3454.80	3722.85	3454.80
Bhusawal Units 4&5	7445.85	6954.42	7445.85	6954.42
Koradi Units 8-10	14743.19	13799.63	14203.84	13266.39
Chandrapur Units 8&9	7445.80	6954.38	7445.80	6954.38
Parli Unit 8	1861.49	1687.63	1734.01	1583.15
Total	**71316.72**	**65319.56**	**69124.60**	**63597.64**

** Net Generation includes the impact of reduction due to FGD*

Table 8.9: Gross and Net generation for FY 2029-30

Station/Unit	Projected by MSPGCL		Approved by the Commission	
	Gross Gen.	Net Gen.	Gross Gen.	Net Gen.*
Bhusawal	1472.15	1310.80	1418.84	1263.33
Chandrapur	13455.50	12079.34	12542.62	11452.98
Khaperkheda	5521.95	4947.11	5521.95	4975.27
Koradi	1379.61	1227.71	1379.61	1227.71
Nashik	4415.66	3940.98	4415.66	3940.98

Station/Unit	Projected by MSPGCL		Approved by the Commission	
	Gross Gen.	Net Gen.	Gross Gen.	Net Gen.*
Uran	2407.17	2332.55	2407.17	2332.55
Paras Units 3&4	3723.03	3296.74	3723.03	3332.11
Parli Units 6&7	3722.91	3333.86	3722.91	3369.23
Khaperkheda Unit 5	3722.85	3454.80	3722.85	3454.80
Bhusawal Units 4&5	7445.85	6954.42	7445.85	6954.42
Koradi Units 8-10	14743.13	13799.57	14724.18	13752.39
Chandrapur Units 8&9	7446.30	6954.84	7446.30	6954.84
Parli Unit 8	1861.49	1687.63	1799.71	1643.14
Total	**71317.60**	**65320.38**	**70270.67**	**64653.76**

** Net Generation includes the impact of reduction due to FGD*

8.7 GROSS STATION HEAT RATE GSHR

MSPGCL's submission

8.7.1 The GSHR claimed for the 5th Control Period as shown in the Table below. MSPGCL submitted that Regulation 47.5 of the MYT Regulations, 2024 prescribes a SHR of 2622 kcal/kWh for Koradi Unit 6. However, the SHR approved under the previous Regulations accounted for both Koradi Units 6 and 7. Given that Koradi Unit 6 continues to operate following the retirement of Unit 7, MSPGCL has not considered the higher SHR of 2622 for the MYT projections.

8.7.2 MSPGCL submitted that the guaranteed SHR for the unit 6 is 2350 kcal/kWh which has been approved by the Commission. Even for the new generating stations, an allowance of 4.5% from the design SHR is allowed in order to factor local operating conditions and deviations in overall quality of coal and associated parameters. Accordingly, MSPGCL requested that the normative SHR may be considered as 2350*1.045 = 2456 kcal/kWh.

Table 8.10: GSHR claimed by MSPGCL for the 5th Control Period (kcal/kWh)

Station/unit	Normative	Projected
Bhusawal	2787.00	2787.00
Chandrapur	2688.00	2688.00
Khaperkheda	2630.00	2630.00
Koradi	2350.00	2455.75
Nashik	2754.00	2754.00
Uran	2035.00	2035.00
Paras Units 3&4	2430.00	2415.00
Parli Units 6&7	2430.00	2415.00
Khaperkheda Unit 5	2375.00	2375.00

Station/unit	Normative	Projected
Bhusawal Units 4&5	2375.00	2375.00
Koradi Units 8-10	2230.00	2230.00
Chandrapur Units 8&9	2375.00	2375.00
Parli Unit 8	2430.00	2415.00

Commission's Analysis and Ruling

8.7.3 As regards the proposal of MSPGCL to consider the allowance of 4.5% over the design SHR as per the MYT Regulation 2019 for Koradi Unit 6, the Commission agrees that considering the design SHR for approval of GSHR for Koradi 6 (old unit with Renovation and Modernisation) is not feasible as the margin of 4.5% on Design Heat Rate is even applied on new units. Hence, the Commission has approved the SHR for Koradi Unit 6 as 2456 kcal/kWh by applying the margin of 4.5% over the design SHR as applicable for new stations.

8.7.4 Regulations 47.4, 47.5 and 47.7 of the MYT Regulations, 2024 specify the normative GSHR for existing MSPGCL stations. The Commission has approved the GSHR for the 5th Control Period in accordance with the MYT Regulations, 2024 except for Koradi Unit 6.

Table 8.11: GSHR for the 5th Control Period (kcal/kWh)

Station/unit	Normative	Projected	Approved
Bhusawal	2787.00	2787.00	2787.00
Chandrapur	2688.00	2688.00	2688.00
Khaperkheda	2630.00	2630.00	2630.00
Koradi	2350.00	2455.75	2455.75
Nashik	2754.00	2754.00	2754.00
Uran	2035.00	2035.00	2035.00
Paras Units 3&4	2430.00	2415.00	2415.00
Parli Units 6&7	2430.00	2415.00	2415.00
Khaperkheda Unit 5	2375.00	2375.00	2375.00
Bhusawal Units 4&5	2375.00	2375.00	2375.00
Koradi Units 8-10	2230.00	2230.00	2230.00
Chandrapur Units 8&9	2375.00	2375.00	2375.00
Parli Unit 8	2430.00	2415.00	2415.00

8.8 SECONDARY FUEL OIL CONSUMPTION (SFOC)

MSPGCL's Submission

8.8.1 The SFOC claimed for the 5th Control Period is shown in the Table below:

Table 8.12: SFOC claimed by MSPGCL for the 5th Control Period (ml/kWh)

Station/unit	Normative	Claimed
Bhusawal	1.40	1.40
Chandrapur	1.00	1.00
Khaperkheda	1.20	1.20
Koradi	2.81	2.81
Nashik	1.00	1.00
Uran	-	-
Paras Units 3&4	0.50	0.50
Parli Units 6&7	0.50	0.50
Khaperkheda Unit 5	0.50	0.50
Bhusawal Units 4&5	0.50	0.50
Koradi Units 8-10	0.50	0.50
Chandrapur Units 8&9	0.50	0.50
Parli Unit 8	0.50	0.50

Commission's Analysis and Ruling

8.8.2 Regulations 47.11 and 47.12 of the MYT Regulations, 2024 specify the normative SFOC for MSPGCL's stations. The Commission has approved SFOC as per the norms specified in the MYT Regulations, 2024.

Table 8.13: SFOC for the 5th Control Period (ml/kWh)

Station/unit	Normative	Claimed	Approved
Bhusawal	1.40	1.40	1.40
Chandrapur	1.00	1.00	1.00
Khaperkheda	1.20	1.20	1.20
Koradi	2.81	2.81	2.81
Nashik	1.00	1.00	1.00
Uran	-	-	-
Paras Units 3&4	0.50	0.50	0.50
Parli Units 6&7	0.50	0.50	0.50
Khaperkheda Unit 5	0.50	0.50	0.50
Bhusawal Units 4&5	0.50	0.50	0.50
Koradi Units 8-10	0.50	0.50	0.50
Chandrapur Units 8&9	0.50	0.50	0.50
Parli Unit 8	0.50	0.50	0.50

8.9 TRANSIT LOSS

MSPGCL's Submission

8.9.1 MSPGCL has proposed Transit loss of 0.80% for the 5th Control Period in line with the norms specified in the MYT Regulations, 2024.

Commission's Analysis and Ruling

8.9.2 Regulation 47.20 of the MYT Regulations, 2024 specifies the normative Transit Loss of 0.80% for domestic coal. Accordingly, the Commission has approved the normative Transit Loss of 0.80% for the 5th Control Period.

8.10 CONSIDERATION OF MOISTURE LOSS FOR GCV

MSPGCL's Submission

8.10.1 MSPGCL submitted that in Case No. 132 of 2023 dated 01 February, 2024 in the matter of MSPGCL seeking review of MTR Order dated 31 March, 2023 in Case No. 227 of 2022 in the matter of final truing-up of ARR of FY 2019-20, FY 2020-21 and FY 2021-22, provisional truing-up of ARR of FY 2022-23 and revised projections of ARR and revised Tariff for FY 2023-24 and FY 2024-25 and provisional Tariff for Bhusawal Unit No. 6, the Commission has ruled as under:

> *"16.45 The Commission also notes that the Commission in its Order dated 1 March, 2021 on Review Petition filed on MYT Order under provisions of Power to Relax of MYT Regulations, 2019 has relaxed the GCV loss up to 650 kCal/kg (i.e., additional 350 kCal/kg over and above the GCV loss specified in MYT Regulations) for FY 2020-21. Hence, the GCV loss in excess of 650 kCal/kg cannot be allowed as this was the target specified for first year of the Control Period. Accordingly, the Commission relaxes the GCV loss by 350 kCal/kg and allows total GCV loss of up to 650 kCal/kg for FY 2023-24 and FY 2024-25 subject to following conditions:*
>
> *MSPGCL shall adhere to the percentage of washed coal to be utilized as per fuel utilization plan submitted as part of MTR Petition.*
>
> *16.46 Accordingly, the relaxed GCV loss permissible for these 2 years shall be as follows:*
>
> *FY 2023-24: Relaxation of 350 kCal/kg in loss of GCV in addition to 300 kCal/kg as per MYT Regulations, 2019.*
>
> *FY 2024-25: Relaxation of 350 kCal/kg in loss of GCV in addition to 300 kCal/kg as per MYT Regulations, 2019."*

8.10.2 In this regard, MSPGCL submitted that the overall variation in GCV –As Billed (loading EQ basis) vis-à-vis the GCV ARB at unloading points in FY 2022-23, FY 2023-24 and FY 2024-25 (H1) as below:

Table 8.14: Variations in GCV over the years (kcal/kg)

Station	FY 2022-23			FY 2023-24			FY 2024-25 H1		
	As Billed Loading	ARB Unloading	Variation	As Billed Loading	ARB Unloading	Variation	As Billed Loading	ARB Unloading	Variation
Bhusawal Unit 3	4,109	3,188	920	3,904	3,144	761	3,918	3,253	665
Chandrapur Units 3 -7	4,001	3,106	894	4,047	3,186	861	4,055	3,260	795
Khaperkheda Units 1-4	3,907	3,126	781	3,907	3,155	752	3,878	3,031	847
Koradi Unit 6	3,787	2,680	1,107	3,948	2,830	1,118	4,025	2,992	1,032
Nashik Units 3-5	4,051	2,835	1,216	3,937	2,958	979	3,886	3,156	730
Paras Units 3-4	4,136	3,217	919	4,160	3,314	846	4,026	3,442	585
Parli Units 6-7	3,947	3,282	665	3,930	3,252	678	3,957	3,326	631
Khaperkheda Unit 5	3,921	3,132	789	3,921	3,157	764	3,875	3,030	845
Bhusawal Units 4-5	4,171	3,214	957	3,950	3,212	738	3,921	3,217	704
Koradi Units 8-10	3,854	2,798	1,057	4,014	3,010	1,004	3,889	3,014	875
Chandrapur Units 8-9	4,044	3,131	913	4,045	3,201	844	4,073	3,299	774
Parli Unit 8	3,947	3,282	665	3,930	3,252	678	3,962	3,314	648
Weighted Average	**4,020**	**3,123**	**897**	**3,992**	**3,175**	**817**	**3,968**	**3,205**	**764**

8.10.3 MSPGCL submitted that from the table above, it may be observed that the weighted average deviations between the GCVs have been around 800 kcal/kg with deviations in certain stations as high as 900-1200 kcal/kg. Further MSPGCL also submitted the initiatives taken to reduce such variations.

8.10.4 MSPGCL submitted that the huge difference in loading and unloading end GCV even on Equilibrated basis is therefore getting burdened on MSPGCL for no fault at its end. While, there would not be any deficiency on part of MSPGCL to pursue such measures which can help reduce this variation, however, loading this entire burden of variations above 750 kcal/kg will mean a tremendous financial impact on the finances of the company.

8.10.5 MSPGCL therefore requested the Commission to allow the entire variation in GCV between loading and unloading points be allowed as a pass through. However, for the purpose of calculations, the GCV variation of 750 kcal/kg has been considered as a cap for working out the energy charges.

Commission's Analysis and Ruling

8.10.6 The Commission has perused the submissions of MSPGCL. The issue of GCV variation between loading and unloading ends had been discussed in detail in the Review Order dated 1 February, 2024 and during the finalisation of the MYT Regulations, 2024.

8.10.7 For most of the stations, the GCV variation is beyond the ceiling limit of 750 kcal/kg as stipulated in the MYT Regulations, 2024. However, for some of the stations, MSPGCL had been able to curtail the GCV variation within the ceiling limit. It would not be prudent to allow the entire GCV variation for such stations.

8.10.8 As discussed in FUP, MSPGCL had envisaged beneficiation of coal for around 21 MMT of coal from WCL, MCL and SECL. The washed coal consumed for FY 2022-23 and FY 2023-24 was 10.83 MMT and 10.19 MMT respectively. The utilisation of washed coal has improved the realization of coal and the GCV of coal on "As received" basis is comparatively better than that of raw coal received at the station. As MSPGCL has started taking steps to improve the utilisation of washed coal, the Commission is of the view that with the increased utilisation of washed coal, the weighted average GCV of coal will improve over a period of time.

8.10.9 The Commission, considering the submission of MSPGCL over the recent years has relaxed the GCV loss from 300 kcal/kg to 750 kcal/kg for the 5th Control Period during the process of finalisation of the MYT Regulations, 2024. Hence, the Commission is of the view that the same needs to be considered for the 5th Control Period. Further, in case the actual GCV loss is lower than the GCV worked out as per the relaxation provided above, the actual GCV loss shall be considered for computation of Energy Charges.

8.11 GCV AND LANDED PRICE OF FUELS

MSPGCL's Submission

8.11.1 MSPGCL submitted that it has considered escalation of 5% for Raw and washed coal on weighted average prices of coal for the period from October 2023 to September 2024. Further, MSPGCL submitted that the weighted average rate of imported coal for the period from October 2023 to September 2024 without escalation have been considered for projection of fuel cost for MYT period.

Table 8.15: GCV and Landed Price of fuels considered by MSPGCL for FY 2025-26

Station	Domestic		Imported		Washed		GP II		FO	LDO
	Price/ MT	GCV kcal/kg	Price/ MT	GCV kcal/kg	Price/ MT	GCV kcal/kg	Price/ MT	GCV kcal/kg	Price Rs./Kl	Price Rs./Kl
Bhusawal Unit 3	5,167	3,139	-	-	-	-	-		56,227	81,997
Chandrapur Units 3 -7	4,500	3,300	11,937	4,681	4,442	3,619	-		54,675	86,181
Khaperkheda Units 1-4	3,471	3,236	13,427	4,686	4,417	3,266	-		72,098	78,388
Koradi Unit 6	3,048	3,285	12,397	4,652	-	-	-		57,030	81,922
Nashik Units 3-5	4,997	3,165	11,702	4,665	-	-	-		59,890	65,175
Uran	22	8,020	-	-	-	-	-		-	-
Paras Units 3-4	4,735	3,338	-	-	-	-	-		55,876	84,742
Parli Units 6-7	6,694	3,203	-	-	-	-	-		57,143	78,122
Khaperkheda Unit 5	3,452	3,238	13,868	4,684	4,499	3,274	-		56,418	79,615
Bhusawal Units 4-5	5,116	3,167	12,302	4,753	4,814	3,547	-		54,675	86,181
Koradi Units 8-10	4,980	3,181	12,386	4,652	5,187	3,623	4,129	3,350	57,704	64,822
Chandrapur Units 8-9	4,417	3,294	12,038	4,682	4,627	3,598	4,506	3,350	56,489	81,385
Parli Unit 8	6,710	3,208	-	-	-	-	5,129	3,350	71,961	78,388

Table 8.16: GCV and Landed Price of fuels considered by MSPGCL for FY 2026-27

Station	Domestic		Imported		Washed		GP II		FO	LDO
	Price/ MT	GCV kcal/kg	Price/ MT	GCV kcal/kg	Price/ MT	GCV kcal/kg	Price/ MT	GCV kcal/kg	Price Rs./Kl	Price Rs./Kl
Bhusawal Unit 3	5,426	3,139	-	-	-	-	-		59,038	86,096
Chandrapur Units 3 -7	4,725	3,300	12,534	4,681	4,665	3,619	-		57,409	90,490
Khaperkheda Units 1-4	3,645	3,236	14,098	4,686	4,637	3,266	-		75,703	82,307
Koradi Unit 6	3,200	3,285	13,017	4,652	-	-	-		59,881	86,018
Nashik Units 3-5	5,247	3,165	2,287	4,665	-	-	-		62,884	68,433
Uran	22	8,020	-	-	-	-	-		-	-
Paras Units 3-4	4,971	3,338	-	-	-	-	-		58,669	88,980
Parli Units 6-7	7,029	3,203	-	-	-	-	-		60,000	2,028
Khaperkheda Unit 5	3,624	3,238	14,561	4,684	4,724	3,274	-		59,239	83,596
Bhusawal Units 4-5	5,372	3,167	12,917	4,753	5,054	3,547	-		57,409	90,490
Koradi Units 8-10	5,320	3,181	13,005	4,652	5,447	3,623	4,345	3,350	60,589	68,063
Chandrapur Units 8-9	4,634	3,294	12,640	4,682	4,858	3,598	4,740	3,350	59,313	85,454
Parli Unit 8	7,045	3,208	-	-	-	-	5,395	3,350	75,559	82,307

Table 8.17: GCV and Landed Price of fuels considered by MSPGCL for FY 2027-28

Station	Domestic		Imported		Washed		GP II		FO	LDO
	Price/ MT	GCV kcal/kg	Price/ MT	GCV kcal/kg	Price/ MT	GCV kcal/kg	Price/ MT	GCV kcal/kg	Price Rs./Kl	Price Rs./Kl
Bhusawal Unit 3	5,697	3,139	-	-	-	-	-		61,990	90,401
Chandrapur Units 3 -7	4,961	3,300	13,161	4,681	4,898	3,619	-		60,279	95,014
Khaperkheda Units 1-4	3,827	3,236	14,803	4,686	4,869	3,266	-		79,488	86,423
Koradi Unit 6	3,360	3,285	13,668	4,652	-	-	-		62,876	90,319
Nashik Units 3-5	5,509	3,165	12,901	4,665	-	-	-		66,029	71,855
Uran	22	8,020	-	-	-	-	-		-	-
Paras Units 3-4	5,220	3,338	-	-	-	-	-		61,603	93,429
Parli Units 6-7	7,381	3,203	-	-	-	-	-		63,000	86,130
Khaperkheda Unit 5	3,806	3,238	15,289	4,684	4,960	3,274	-		62,201	87,776
Bhusawal Units 4-5	5,640	3,167	13,563	4,753	5,307	3,547	-		60,279	95,014
Koradi Units 8-10	5,586	3,181	13,655	4,652	5,735	3,623	7,536	3,350	63,618	71,467
Chandrapur Units 8-9	4,890	3,294	13,272	4,682	5,101	3,598	7,952	3,350	62,279	89,727
Parli Unit 8	7,397	3,208	-	-	-	-	8,639	3,350	79,337	86,423

Table 8.18: GCV and Landed Price of fuels considered by MSPGCL for FY 2028-29

Station	Domestic		Imported		Washed		GP II		FO	LDO
	Price/ MT	GCV kcal/kg	Price/ MT	GCV kcal/kg	Price/ MT	GCV kcal/kg	Price/ MT	GCV kcal/kg	Price Rs./Kl	Price Rs./Kl
Bhusawal Unit 3	5,982	3,139	-	-	-	-	-		65,090	94,921
Chandrapur Units 3 -7	5,190	3,300	13,819	4,681	5,143	3,619	-		63,293	99,765
Khaperkheda Units 1-4	4,018	3,236	15,543	4,686	5,113	3,266	-		83,462	90,744
Koradi Unit 6	3,956	3,285	14,352	4,652	-	-	-		66,019	94,835
Nashik Units 3-5	5,784	3,165	13,546	4,665	-	-	-		69,330	75,448
Uran	22	8,020	-	-	-	-	-		-	-
Paras Units 3-4	5,481	3,338	-	-	-	-	-		64,683	98,100

Station	Domestic		Imported		Washed		GP II		FO	LDO
	Price/ MT	GCV kcal/kg	Price/ MT	GCV kcal/kg	Price/ MT	GCV kcal/kg	Price/ MT	GCV kcal/kg	Price Rs./Kl	Price Rs./Kl
Parli Units 6-7	7,750	3,203	-	-	-	-	-		66,150	90,436
Khaperkheda Unit 5	3,996	3,238	16,054	4,684	5,208	3,274	-		65,311	92,165
Bhusawal Units 4-5	5,922	3,167	14,241	4,753	5,572	3,547	-		63,293	99,765
Koradi Units 8-10	5,979	3,181	14,338	4,652	5,943	3,623	6,257	3,350	66,799	75,040
Chandrapur Units 8-9	4,893	3,294	-	4,682	5,356	3,598	6,693	3,350	65,393	94,213
Parli Unit 8	7,767	3,208	-	-	-	-	7,414	3,350	83,304	90,744

Table 8.19: GCV and Landed Price of fuels considered by MSPGCL for FY 2029-30

Station	Domestic		Imported		Washed		GP II		FO	LDO
	Price/ MT	GCV kcal/kg	Price/ MT	GCV kcal/kg	Price/ MT	GCV kcal/kg	Price/ MT	GCV kcal/kg	Price Rs./Kl	Price Rs./Kl
Bhusawal Unit 3	6,281	3,139	-	-	-	-	-		68,344	99,667
Chandrapur Units 3 -7	5,450	3,300	14,510	4,681	5,400	3,619	-		66,458	104,753
Khaperkheda Units 1-4	4,219	3,236	16,320	4,686	5,368	3,266	-		87,635	95,281
Koradi Unit 6	4,153	3,285	15,069	4,652	-	-	-		69,320	99,576
Nashik Units 3-5	6,074	3,165	14,224	4,665	-	-	-		72,796	79,220
Uran	22	8,020	-	-	-	-	-		-	-
Paras Units 3-4	5,755	3,338	-	-	-	-	-		67,917	103,005
Parli Units 6-7	8,137	3,203	-	-	-	-	-		69,458	94,958
Khaperkheda Unit 5	4,196	3,238	16,857	4,684	5,469	3,274	-		68,577	96,773
Bhusawal Units 4-5	6,219	3,167	14,953	4,753	5,851	3,547	-		66,458	104,753
Koradi Units 8-10	-	3,181	15,055	4,652	6,050	3,623	5,916	3,350	70,139	78,792
Chandrapur Units 8-9	5,241	3,294	-	4,682	5,624	3,598	6,374	3,350	68,663	98,924
Parli Unit 8	8,155	3,208	-	-	-	-	7,131	3,350	87,469	95,281

Commission's Analysis and Ruling

8.11.2 The proviso to Regulation 51.6 of the 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:"

8.11.3 In reply to a query, MSPGCL submitted the actual fuel details for the period from October, 2024-December, 2024. The provisions of the Regulations provide for consideration of the fuel prices for the three preceding months. The actual fuel parameters are available upto the latest month of December, 2024. Therefore, the Commission deems it prudent to consider the actual fuel parameters for the period from October, 2024 to December, 2024 for the purpose of tariff determination for FY 2025-

26 to FY 2029-30 in this Order. For domestic coal, the Commission has considered the loss in calorific value of coal between as billed by supplier and as received at generating station in accordance with the provisions of the MYT Regulations, 2024. Further, the Commission has considered the stacking loss of 85 kcal/kg as per the MYT Regulations, 2024. The Commission has considered the station wise coal mix proposed by MSPGCL for FY 2025-26 to arrive at the weighted average GCV.

8.11.4 The Commission analysed the variation in fuel prices for the last few years. Since, the availability of raw coal has been fluctuating in the past few years, for the purpose of projecting the energy charges, the Commission for domestic, imported as well as washed coal has considered the annual escalation of 3% per annum over the actual fuel prices for the period from October, 2024 to December, 2024 for arriving at the fuel prices for FY 2025-26 to FY 2029-30. The Commission has not considered any escalation in the gas prices due to the reducing trend in prices in the recent past. The Commission has considered the station wise coal mix proposed by MSPGCL for FY 2025-26 to arrive at the weighted average coal price. The Commission has considered the coal production from Gare Palma II mines as per the mining plan submitted by MSPGCL.

8.11.5 The Commission asked MSPGCL to provide the detailed calculation of input price arrived for Gare Palma II for the 5th Control Period. MSPGCL has provided the complete details of the input price calculated. In this regard, the relevant excerpts of the MYT Regulations, 2024, on input price of coal from Gare Palma II are as below:

"24.12 Supply of Coal or Lignite prior to the Date of Commercial Operation of Integrated Mine:

The input price for supply of coal or lignite from the integrated mine(s) prior to their date of commercial operation shall be:

(a) in case of coal, the estimated price available in the investment approval, or the notified price of Coal India Limited for the corresponding grade of coal supplied to the power sector, whichever is lower; *and*

…

39.13 A Generating Company with integrated mine(s) shall ***file a Petition for determination of input price of coal or lignite from the integrated mine(s) not later than 60 days from the date of commercial operation of the integrated mine(s)***

Provided that the Generating Company having integrated mine(s) shall file Petition before the Commission for determination of the input price of coal or lignite from the integrated mine(s) containing the details of expenditure incurred and projected to be incurred duly certified by the Auditor, in accordance with the Formats that may be stipulated by the Commission.

…

B. Energy Charges

51.5 Energy Charges shall cover landed cost of primary fuel and secondary fuel oil and shall be worked out on the basis of total energy scheduled to be supplied to the Beneficiary/ies during the calendar month on ex-power plant basis, at the Energy Charge Rate of the month (with fuel price adjustment) as per the following formula:

Energy Charges (INR) = (Energy Charge Rate in INR/kWh) x [Scheduled Energy (ex-bus) for the month in kWh]

Provided also that in case of supply of coal or lignite from the integrated mine(s), the ***landed cost of primary fuel shall be based on the input price of coal or lignite****, as the case may be, as computed in accordance with these Regulations.*

…

51.7 The Generating Company shall, ***after the date of commercial operation of the integrated mine(s) till the input price of coal is determined by the Commission under these Regulations, adopt the notified price of Coal India Limited commensurate with the grade of the coal from the integrated mine(s) or the estimated price available in the investment approval, whichever is lower****, as the input price of coal for the generating station:*

Provided that the difference between the input price of coal determined under these Regulations and the input price of coal so adopted prior to such determination, for the quantity of coal billed, shall be adjusted in accordance with Regulation 51.9.

…

56.1 Input price of coal or lignite from the integrated mine(s) shall be determined based on the following components:

(i) Run of Mine (ROM) Cost; and

(ii) Additional charges:

a) crushing charges;

b) transportation charge within the mine up to the washery end or coal handling plant associated with the integrated mine, as the case may be;

c) handling charges at mine end;

d) washing charges; and

e) transportation charges beyond the washery end or coal handling plant, as the case may be, and up to the loading point:

Provided that one or more components of additional charges may be applicable in case of the integrated mine(s), based on the scope and nature of the mining activities:

Provided further that the input price of lignite shall be computed based on Run of Mine (ROM) based on the technology such as bucket excavator-conveyor or belt-spreader or its combination and handling charges, if any.

Provided also that Statutory Charges, as applicable, shall be allowed as pass-through expenses:

Provided also that the Input Price of coal or lignite determined above shall be capped to the delivered price of coal at the upper price band notified by Coal India Limited for the same Grade of coal from time to time:

Provided also that if the coal rejects generated out of the coal washery are used in own/captive generating plant, then the basic cost of coal rejects shall be considered as Nil, and actual transportation charges, subject to prudence check, shall be considered as input cost.

…"

8.11.6 Considering the above Regulations, **the Commission directs MSPGCL to file a separate Petition for determination of input price as per the MYT Regulations, 2024.** In absence of the input price, the Commission has considered the latest notified price of coal from SECL and has arrived at the landed cost of Rs. 1521/MT for FY 2024-25 and has escalated the same to Rs. 1557/MT for FY 2025-26 at 3% escalation factor considered for all fuel. Further, the Commission has considered the transportation expenses of Rs. 1666/MT for Chandrapur 8 & 9, Rs. 1289/MT for Koradi 8-10 and Rs. 2289/MT for Parli Unit 8 for FY 2025-26 and has considered the escalation of 3% on the transportation costs also to arrive at the landed cost of coal from Gare Palma II mines for the specific stations.

8.11.7 Accordingly, the Commission has considered the GCV and landed price of fuels as shown in the Table below:

Table 8.20: GCV of coal considered by Commission for the 5th Control Period

Station	Raw coal	Imported Coal	Washed Coal	Total	GCV considered				
					Raw Coal	Imported Coal	Washed Coal	Wtd. Avg.	GCV after Stacking Loss
	%	%	%	%	kcal/kg	kcal/kg	kcal/kg	kcal/kg	kcal/kg
Bhusawal	100%	0%	0%	100%	3195.11	0.00	0.00	3195.11	3110.11
Chandrapur	88%	6%	6%	100%	3262.22	4685.00	3717.69	3374.91	3289.91
Khaperkheda	76%	5%	19%	100%	3239.50	4674.39	3088.83	3282.61	3197.61
Koradi	92%	8%	0%	100%	3118.74	4674.39	0.00	3243.19	3158.19
Nashik	90%	10%	0%	100%	3172.69	4609.35	0.00	3316.36	3231.36
Uran	100%			100%	8670.00	0.00	0.00	8670.00	8670.00
Paras Units 3&4	100%	0%	0%	100%	3267.24	0.00	0.00	3267.24	3182.24

Station	Raw coal	Imported Coal	Washed Coal	Total	GCV considered				
					Raw Coal	Imported Coal	Washed Coal	Wtd. Avg.	GCV after Stacking Loss
	%	%	%	%	kcal/kg	kcal/kg	kcal/kg	kcal/kg	kcal/kg
Parli Units 6&7	100%	0%	0%	100%	3159.31	0.00	0.00	3159.31	3074.31
Khaperkheda Unit 5	74%	9%	17%	100%	3261.08	4667.92	3100.40	3360.38	3275.38
Bhusawal Units 4&5	72%	8%	19%	99%	3149.78	4680.18	3955.64	3393.83	3308.83
Koradi Units 8-10	8%	0%	92%	100%	3455.30	0.00	3474.81	3473.25	3388.25
Chandrapur Units 8&9	86%	9%	5%	100%	3332.19	4680.18	3580.00	3465.90	3380.90
Parli Unit 8	100%	0%	0%	100%	3160.94	0.00	0.00	3160.94	3075.94

Table 8.21: GCV of oil considered by Commission for the 5th Control Period

Station	SFOC			GCV considered		
	FO	LDO	Total	FO	LDO	Wtd. Avg.
	%	%	%	kcal/L	kcal/L	kcal/L
Bhusawal	75%	25%	100%	9856.21	9610.75	9795.64
Chandrapur	74%	26%	100%	9674.72	9179.35	9545.38
Khaperkheda	94%	6%	100%	9608.66	9128.05	9580.87
Koradi	93%	7%	100%	9709.73	9284.91	9680.14
Nashik	76%	24%	100%	9577.93	9127.50	9470.57
Uran				0.00	0.00	0.00
Paras Units 3&4	91%	9%	100%	9470.88	9208.14	9448.22
Parli Units 6&7	81%	19%	100%	9606.17	8889.11	9471.52
Khaperkheda Unit 5	75%	25%	100%	9554.21	9141.60	9452.14
Bhusawal Units 4&5	91%	9%	100%	9856.21	9610.75	9834.30
Koradi Units 8-10	79%	21%	100%	9709.73	9284.91	9618.54
Chandrapur Units 8&9	83%	17%	100%	9659.12	9261.01	9592.47
Parli Unit 8	64%	36%	100%	9606.17	8889.11	9350.93

Table 8.22: Landed Price of coal considered by Commission for the 5th Control Period

Station	Landed Cost considered				FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
	Raw Coal	Imported Coal	Washed Coal	Wtd. Avg.	Wtd. Avg.	Wtd. Avg.	Wtd. Avg.	Wtd. Avg.	Wtd. Avg.
	Rs./MT	Rs./MT	Rs./MT	Rs./MT	Rs./MT	Rs./MT	Rs./MT	Rs./MT	Rs./MT
Bhusawal	4922.12	0.00	0.00	4922.12	5069.78	5221.88	5378.53	5539.89	5706.08
Chandrapur	4451.18	11262.03	4026.58	4834.36	4979.39	5128.77	5282.63	5441.11	5604.34
Khaperkheda	3211.03	12105.04	4466.38	3894.25	4011.08	4131.41	4255.35	4383.01	4514.50
Koradi	3102.81	12105.04	0.00	3822.98	3937.67	4055.80	4177.48	4302.80	4431.89
Nashik	4659.54	10857.08	0.00	5279.30	5437.68	5600.81	5768.83	5941.90	6120.15

Station	Landed Cost considered				FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
	Raw Coal	Imported Coal	Washed Coal	Wtd. Avg.	Wtd. Avg.	Wtd. Avg.	Wtd. Avg.	Wtd. Avg.	Wtd. Avg.
	Rs./MT	Rs./MT	Rs./MT	Rs./MT	Rs./MT	Rs./MT	Rs./MT	Rs./MT	Rs./MT
Uran (Gas in Rs./SCM)	21.60	0.00	0.00	21.60	21.60	21.60	21.60	21.60	21.60
Paras Units 3&4	4641.23	0.00	0.00	4641.23	4780.47	4923.88	5071.60	5223.75	5380.46
Parli Units 6&7	5981.25	0.00	0.00	5981.25	6160.69	6345.51	6535.87	6731.95	6933.91
Khaperkheda Unit 5	3121.16	12066.10	4475.45	4156.43	4281.13	4409.56	4541.85	4678.10	4818.45
Bhusawal Units 4&5	5056.25	11319.35	4523.24	5405.47	5567.63	5734.66	5906.70	6083.90	6266.42
Koradi Units 8-10	4471.40	0.00	4607.56	4596.66	4709.98	4782.72	4831.83	4603.37	4295.99
Chandrapur Units 8&9	4181.49	11194.45	5368.25	4872.00	4805.05	4753.10	4708.33	4085.18	3913.94
Parli Unit 8	5886.97	0.00	0.00	5886.97	6063.58	6245.49	6252.83	6447.47	6647.63

Table 8.23: Landed Price of oil considered by Commission for the 5th Control Period

Station	Price considered			FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
	FO	LDO	Wtd. Avg.	Wtd. Avg.	Wtd. Avg.	Wtd. Avg.	Wtd. Avg.	Wtd. Avg.
	Rs./kL	Rs./kL	Rs./kL	Rs./kL	Rs./kL	Rs./kL	Rs./kL	Rs./kL
Bhusawal	54459.33	76416.23	59877.43	61673.75	63523.96	65429.68	67392.57	69414.35
Chandrapur	58549.71	74109.60	62612.30	64490.67	66425.39	68418.15	70470.69	72584.81
Khaperkheda	59031.64	78824.02	60175.78	61981.06	63840.49	65755.70	67728.38	69760.23
Koradi	59214.96	58094.18	59136.89	60911.00	62738.33	64620.48	66559.09	68555.87
Nashik	55502.03	71864.32	59402.11	61184.17	63019.70	64910.29	66857.60	68863.32
Uran	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paras Units 3&4	58275.71	74421.96	59668.33	61458.38	63302.13	65201.20	67157.23	69171.95
Parli Units 6&7	53925.92	69093.83	56774.16	58477.38	60231.70	62038.65	63899.81	65816.81
Khaperkheda Unit 5	59031.64	58286.44	58847.30	60612.72	62431.10	64304.03	66233.15	68220.15
Bhusawal Units 4&5	57662.95	80018.69	59658.85	61448.61	63292.07	65190.84	67146.56	69160.96
Koradi Units 8-10	57889.12	69968.92	60482.16	62296.62	64165.52	66090.49	68073.20	70115.40
Chandrapur Units 8&9	58235.67	75111.97	61061.04	62892.87	64779.66	66723.05	68724.74	70786.48
Parli Unit 8	53899.88	59718.64	55971.12	57650.25	59379.76	61161.15	62995.98	64885.86

8.12 ENERGY CHARGE RATE

MSPGCL's submission

8.12.1 Based on the submissions made above, the Energy Charge Rate claimed by MSPGCL excluding the impact of FGD is as below:

Table 8.24: ECR claimed by MSPGCL for the 5th Control Period (Excluding FGD) (Rs./kWh)

Station	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
Bhusawal Unit 3	5.37	5.64	5.92	6.22	6.53
Chandrapur Units 3 -7	4.48	4.70	4.93	5.16	5.42

Station	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
Khaperkheda Units 1-4	3.89	4.08	4.29	4.44	4.66
Koradi Unit 6	3.30	3.47	3.64	4.15	4.35
Nashik Units 3-5	5.50	5.78	6.07	6.37	6.69
Uran	5.23	5.23	5.23	5.23	5.23
Paras Units 3-4	3.94	4.14	4.35	4.56	4.79
Parli Units 6-7	5.80	6.09	6.39	6.71	7.05
Khaperkheda Unit 5	3.54	3.72	3.90	4.10	4.30
Bhusawal Units 4-5	4.39	4.61	4.84	5.08	5.33
Koradi Units 8-10	3.53	3.68	4.07	4.20	4.23
Chandrapur Units 8-9	3.86	4.06	5.06	4.64	4.81
Parli Unit 8	5.74	6.03	6.38	6.60	6.89

Commission's Analysis and Ruling

8.12.2 Based on the approved performance parameters, fuel prices and GCV, the Energy Charge Rate approved by the Commission excluding the impact of reagents claimed for FGD for the 5th Control Period is as shown in the Table below:

Table 8.25: Energy Charge Rate for the 5th Control Period (Rs. /kWh)

Station	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
Bhusawal Unit 3	5.174	5.329	5.489	5.654	5.824
Chandrapur Units 3 -7	4.467	4.614	4.769	4.928	5.076
Khaperkheda Units 1-4	3.728	3.840	3.955	4.074	4.196
Koradi Unit 6	3.595	3.703	3.814	3.928	4.046
Nashik Units 3-5	5.243	5.401	5.563	5.729	5.901
Uran	5.232	5.232	5.232	5.232	5.232
Paras Units 3-4	4.026	4.202	4.328	4.458	4.592
Parli Units 6-7	5.369	5.530	5.696	5.867	6.043
Khaperkheda Unit 5	3.328	3.428	3.531	3.684	3.794
Bhusawal Units 4-5	4.275	4.404	4.536	4.702	4.843
Koradi Units 8-10	3.323	3.378	3.420	3.296	3.103
Chandrapur Units 8-9	3.660	3.617	3.580	3.210	3.074
Parli Unit 8	5.236	5.393	5.375	5.543	5.716

8.12.3 In addition to the above, MSPGCL has also claimed the impact of installation of FGD to its Stations. The Commission, during the Public Hearing directed MSPGCL to revise the details of the capitalisation of FGD based on the latest update. In response, MSPGCL has submitted the revised capitalisation schedule of the FGDs as below:

Table 8.26: Revised FGD Commissioning Schedule submitted by MSPGCL

Stations	Likely dt of FGD/SCR installation
Khaperkheda 3-4	Sep-24
Koradi 6	Nov-24
Parli 6 & 7; Parli 8	Jun-25
Chandrapur 3-4	Apr-26
Khaperkheda 1-2	May-25
Paras 3 & 4	Apr-26
Khaperkheda 5	Apr-28
Bhusawal 4	Apr-28
Koradi 8	Apr-28
Koradi 9	Apr-29
Bhusawal 5	Apr-29
Chandrapur 8 & 9	Apr-28
Koradi 10	Apr-29
Chandrapur 5,6 &7	Apr-27

8.12.4 The Commission has considered the date of FGD commissioning as submitted by MSPGCL in its revised submissions.

8.12.5 The impact on the ECR due to the reagent cost incurred on FGD installation as claimed by MSPGCL is summarised below:

Table 8.27: Impact of Reagent Cost on the ECR as claimed by MSPGCL (Rs. /kWh)

Station	FY 2025-26	FY 2026- 27	FY 2027- 28	FY 2028- 29	FY 2029- 30
Bhusawal Unit 3					
Chandrapur Units 3 -7		0.17	0.20	0.24	0.25
Khaperkheda Units 1-4	0.66	0.72	0.72	0.72	0.72
Koradi Unit 6	0.72	0.72	0.72	0.72	0.72
Nashik Units 3-5	-	-	-	-	-
Uran	-	-	-	-	-
Paras Units 3-4	-	0.14	0.14	0.14	0.15
Parli Units 6-7	0.54	0.72	0.72	0.72	0.72
Khaperkheda Unit 5	-	-	-	0.12	0.12
Bhusawal Units 4-5	-	-	-	0.06	0.10
Koradi Units 8-10	-	-	-	0.04	0.04
Chandrapur Units 8-9	-	-	-	0.05	0.05
Parli Unit 8	0.54	0.71	0.71	0.71	0.71

8.12.6 The relevant norms as per the MYT Regulations are reproduced below:

"Provided also that for thermal Generating Stations with Flue Gas De-

Sulphuriser (FGD), additional Auxiliary Energy Consumption shall be allowed as follows:

(a) 200/250 MW series : 1.2%

(b) 300/330/350/500 MW & above : 1.0%

…

47.19 Norms for consumption of reagent:

(1) The normative consumption of specific reagent for various technologies for reduction of emission of sulphur dioxide shall be as under:

(a) For Wet Limestone based Flue Gas De-sulphurisation (FGD) system: The specific limestone consumption (g/kWh) shall be worked out by following formula:

[K x SHR x S/CVPF] x [85/LP]

Where,

S = Sulphur content in percentage;

LP= Limestone Purity in percentage;

SHR= Gross station heat rate, in kcal per kWh;

CVPF = (a) Weighted Average Gross calorific value of coal as received, in kcal per kg for coal based thermal generating stations less 85 kcal/kg on account of variation during storage at generating station;

(b)Weighted Average Gross calorific value of lignite as received, in kcal per kg, as applicable for lignite based thermal generating stations:

Provided that value of K shall be equivalent to (35.2 x Design SO2 Removal Efficiency/96%) for units to comply with SO2 emission norm of 100/200 mg/Nm3 or (26.8 x Design SO2 Removal Efficiency/73%) for units to comply with SO2 emission norm of 600 mg/Nm3;

Provided further that the limestone purity shall not be less than 85%.

(b) For Lime Spray Dryer or Semi-dry Flue Gas Desulphurisation (FGD) system: The specific lime consumption shall be worked out based on minimum purity of lime (LP) as at 90% or more by applying formula [6 x 90 / LP] g/kWh;

(c) For Dry Sorbent Injection System (using sodium bicarbonate): The specific consumption of sodium bicarbonate shall be 12 g per kWh at 100% purity.

(d) For CFBC Technology (furnace injection) based generating station: The specific limestone consumption for CFBC based generating station (furnace injection) shall be computed with the following formula:

[62.9 x S x SHR /CVPF] x [85/ LP]

Where

S = Sulphur content in percentage;

LP = Limestone Purity in percentage;

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SHR = Gross station heat rate, in kcal per kWh;
CVPF = (a) Weighted Average Gross calorific value of coal as received, in kcal per kg for coal based thermal generating stations less 85 kcal/kg on account of variation during storage at generating station;
(b) Weighted Average Gross calorific value of lignite as received, in kCal per kg as applicable for lignite based thermal generating stations;
(e) For Sea Water based Flue Gas Desulphurisation (FGD) system: The reagent used in sea water-based Flue Gas Desulphurisation (FGD) system shall be NIL
(2) The normative consumption of specific reagent for various technologies for reduction of emission of oxide of nitrogen shall be as below:
(a) For Selective Non-Catalytic Reduction (SNCR) System: The specific urea consumption of SNCR system shall be 1.2 g per kWh at 100% purity of urea.
(b) For Selective Catalytic Reduction (SCR) System: The specific ammonia consumption of SCR system shall be 0.6 g per kWh at 100% purity of ammonia."

8.12.7 The Commission provisionally considers the cost of reagent as projected by MSPGCL for the 5th Control Period. MSPGCL shall bill the additional energy charge on account of cost of reagent from the date of commissioning of FGD for respective unit. The additional energy charges on account of reagent will be subject to the subject to true-up in line with the MYT Regulations, 2024, landed cost of the reagent and the actual generation at the time of truing up.

8.13 CAPITALISATION PLAN

MSPGCL's submission

8.13.1 MSPGCL submitted the Rolling Capital Investment Plan from FY 2025-26 to FY 2029-30 in line with the MERC (Approval of Capital Investment Schemes) Regulations, 2022. The area of preparedness for flexible operation is at initial stage and shall require detail assessment as well as Capital investment in the area of C&I, Flexibility Retrofits, Efficiency retrofits, Simulators etc which are left open as technological details, cost estimate plant specific requirements are not available.

8.13.2 Furthermore, the FGD/SCR projects that are either currently being implemented or are planned to be undertaken in the next five years are also indicated in the capital expenditure projections.

8.13.3 MSPGCL submitted that it envisions carrying out Life Extension R&M activities for certain 210 MW units that have completed over 25 years of operation. In accordance with Regulation 43 of the MYT Regulations, 2024, MSPGCL submitted that it shall submit CAPEX before the Commission for approval, supported by a Detailed Project Report (DPR) covering the project scope, justification, cost-benefit analysis, estimated life extension, financial package, expenditure phasing, and completion schedule, along with beneficiary consent (i.e., MSEDCL). However, as the detailed plans for these R&M activities are not yet finalized.

8.13.4 In line with Regulation 44 of the MYT Regulations, 2024, generating companies may opt for a "Special Allowance" to cover expenses related to additional capital expenditure for thermal and hydro Units that have completed their useful life. The Special Allowance provided under these regulations' maximum up to Rs. 10.75 Lakh/MW. As per Regulation 44.3 of the MYT Regulations, 2024, the details of the work to be undertaken under the Special Allowance were submitted for hydro Units.

8.13.5 Based on the above, MSPGCL submitted the rolling capital investment plan as below:

Table 8.28: Capital Investment Plan for the 5th Control Period claimed by MSPGCL excluding FGD (Rs. Crore)

Station	Capex rolling Plan (excl FGD capitalisation)					
	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30	Total
Bhusawal Unit 3	-	398	-	-	-	398
Chandrapur Units 3 -7	1,908	1,628	833	879	236	5,483
Khaperkheda Units 1-4	343	1,119	777	215	181	2,635
Koradi Unit 6	104	74	29	21	78	306
Nashik Units 3-5	711	1,041	89	9	1	1,851
Uran	200	307	267	134	132	1,040
Paras Units 3-4	150	203	202	59	46	660
Parli Units 6-7	437	445	164	534	101	1,680
Khaperkheda Unit 5	136	707	91	216	37	1,186
Bhusawal Units 4-5	197	278	243	257	145	1,120
Koradi Units 8-10	1,377	1,377	821	220	123	3,917
Chandrapur Units 8-9	481	645	338	107	213	1,784
Parli Unit 8	211	203	161	12	65	652
SHP	184	95	96	25	35	436
Bhira						-
Koyna	199	132	78	56	55	519
Tillari						-
Total	**6,636**	**8,652**	**4,189**	**2,744**	**1,447**	**23,667**

Table 8.29: Capital Investment for the 5th Control Period claimed by MSPGCL for FGD (Rs. Crore)

Station	FGD Capitalisation						
	FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29	FY 29-30	Total - 5yrs
Bhusawal U-4 & 5					424.58	424.58	849.16
Chandrapur STPS U-3 to 4			128.16				128.16
Chandrapur STPS U-5 to 7				598.29	299.14	299.14	1,196.57
Chandrapur STPS U-8 to 9					398.86	398.86	797.71
Khaperkheda TPS U-1 to 2		129.13					129.13

Station	FGD Capitalisation						
	FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29	FY 29-30	Total - 5yrs
Khaperkheda TPS U-3 to 4	130.03						-
Khaperkheda TPS U-5					566.11		566.11
Koardi U-6	98.75						-
Koradi TPS U-8 to 10					1,037.44	518.73	1,556.17
Paras TPS U-3 & 4			475.59				475.59
Parli TPS U-6 & 7		163.28					163.28
Parli TPS U- 8		108.86					108.86
Total	**228.78**	**401.27**	**603.75**	**598.29**	**2,726.13**	**1,641.31**	**5,970.74**

8.13.6 MSPGCL has claimed the additional capitalisation based on the capital investment plan for the 5th Control Period as below:

Table 8.30: Additional Capitalisation for the 5th Control Period claimed by MSPGCL (Rs. Crore)

Station	Capitalisation considered for Tariff					
	FY 25-26	FY 26-27	FY 27-28	FY 28-29	FY 29-30	Total
Bhusawal Unit 3	-	159	-	-	-	159
Chandrapur Units 3 -7	274	519	514	473	328	2,108
Khaperkheda Units 1-4	194	86	169	140	146	735
Koradi Unit 6	-	12	25	12	13	63
Nashik Units 3-5	11	161	159	163	0	494
Uran	19	29	50	56	59	212
Paras Units 3-4	31	498	45	50	32	656
Parli Units 6-7	191	36	64	77	88	455
Khaperkheda Unit 5	74	59	42	351	65	590
Bhusawal Units 4-5	130	47	70	248	258	754
Koradi Units 8-10	81	145	170	403	428	1,227
Chandrapur Units 8-9	27	63	85	270	307	751
Parli Unit 8	116	13	50	51	36	265
SHP	7	18	23	14	24	85
Bhira	-	-	-	-	-	-
Koyna	87	47	25	21	26	205
Tillari	-	-	-	-	-	-
Total	**1,241**	**1,890**	**1,489**	**2,330**	**1,809**	**8,760**

8.13.7 The additional capitalisation claimed by MSPGCL is inclusive of capitalisation towards FGD as under:

Table 8.31: Capitalisation towards FGD claimed by MSPGCL (Rs. Crore)

Station	FGD Capitalisation							
	FY 24-25		**FY 25-26**	**FY 26-27**	**FY 27-28**	**FY 28-29**	**FY 29-30**	**Total - 5yrs**
Bhusawal U-4 & 5						212.29	212.29	424.58
Chandrapur STPS U-3 to 4				128.16				128.16
Chandrapur STPS U-5 to 7					398.86	199.43	199.43	797.71
Chandrapur STPS U-8 to 9						199.43	199.43	398.86
Khaperkheda TPS U-1 to 2			129.13					129.13
Khaperkheda TPS U-3 to 4	130.03							-
Khaperkheda TPS U-5						283.06		283.06
Koardi U-6	98.75							-
Koradi TPS U-8 to 10						259.36	259.37	518.73
Paras TPS U-3 & 4				475.59				475.59
Parli TPS U-6 & 7			163.28					163.28
Parli TPS U- 8			108.86					108.86
Total	**228.78**		**401.27**	**603.75**	**398.86**	**1,153.56**	**870.51**	**3,427.95**

8.13.8 In addition to the above, MSPGCL has also claimed capitalisation of Rs. 329 Crore towards flexible operation of coal fired generating units as per CEA Regulations on "Flexible Operation of Coal-Based Thermal Power Generating Units, 2022".

8.13.9 MSPGCL submitted that the Commission had relaxed the cut-off date for Koradi Units 8-10, Chandrapur Units 8&9 and Parli Unit 8 upto 31 March, 2022. MSPGCL submitted that execution of some of the works is taking more time than envisaged. MSPGCL submitted there had been attempts for tenderisation and appointment of the agencies at the envisaged cost, however the response from vendors was poor and the vendors have expressed unwillingness to execute the works at earlier estimated costs. MSPGCL requested the Commission to extend the timeline for incurring this capital expenditure which was within the scope of work till 31 March, 2025 so that it can complete the pending works.

Commission's Analysis and Ruling

8.13.10 MSPGCL initially submitted the capitalisation to the tune of Rs. 11118 Crore for the 5th Control Period. However, the complete break-up of DPR, Non DPR and FGD capitalisation within such claim was not available. Hence, the Commission directed MSPGCL to provide the clear break-up of the same including the impact FGD implementation based on the actual progress and Renovation and Modernisation (R&M) required for the operation of its old Units for the 5th Control Period. Capitalisation claimed as per the original is as under:

Table 8.32: Additional capitalisation (incl. FGD) for the 5th Control Period (Rs. Crore)

Station	Capitalisation proposed for 5th Control Period					
	FY 25-26	FY 26-27	FY 27-28	FY 28-29	FY 29-30	Total
Bhusawal Unit 3	-	100	-	-	-	100
Chandrapur Units 3 -7	736	658	395	586	211	2,586
Khaperkheda Units 1-4	221	276	389	143	181	1,209
Koradi Unit 6	51	22	19	13	64	169
Nashik Units 3-5	245	260	45	6	1	557
Uran	87	84	134	89	132	525
Paras Units 3-4	215	53	105	47	55	475
Parli Units 6-7	190	120	83	342	73	807
Khaperkheda Unit 5	183	177	46	144	37	586
Bhusawal Units 4-5	59	277	122	171	145	774
Koradi Units 8-10	577	505	327	147	123	1,680
Chandrapur Units 8-9	176	300	180	71	213	939
Parli Unit 8	103	51	81	8	65	308
SHP	44	25	47	28	35	179
Bhira	2	-	1	11	-	14
Koyna	33	33	39	37	55	197
Tillari	7	-	-	6	-	13
Total	**2,928**	**2,941**	**2,011**	**1,849**	**1,390**	**11,118**

8.13.11 The Commission has examined the revised projected additional capitalisation claimed by MSPGCL. The Commission has observed that the additional capitalisation claimed by MSPGCL includes four parts, viz., Spillover Schemes, FGD, Renovation & Modernization (R&M) and New Schemes. The Commission has excluded the FGD and R&M schemes proposed and has analysed the capitalisation proposed for the 5th Control Period. The proposed additional capitalisation is observed close to the average of the actual capitalisation over the past three years (~Rs. 640 Crore). Hence, the Commission has considered the same based on the proposal.

8.13.12 The Commission observed that MSPGCL has proposed capital expenditure towards Non DPR schemes. However, the capitalisation claim proposed is miniscule against Non DPR schemes for the 5th Control Period. The Commission also observes that such expenses are claimed for Hydro stations. Hence, no capitalisation against the Non DPR schemes is allowed by the Commission for the 5th Control Period. However, MSPGCL may submit the details of Non DPR schemes implemented at the time of Truing-up along with proper justification and supporting documentary evidence.

8.13.13 The Commission sought the status of implementation of FGDs in its generating stations viz., commission's in-principle approvals, tendering, placement of work orders, physical progress, expected date of completion etc. In reply, MSPGCL submitted the sought details. Based on details submitted by the MSPGCL, the Commission observed that the capitalisation of FGD claimed is substantially higher the in-principle approved cost by the Commission. The Commission at this stage has limited the FGD capitalisation to the capital cost approved by the Commission based on the capitalisation claimed by MSPGCL on pro-rata basis. The Commission will carry out the prudence check of actual cost of FGD for each plant after the commissioning of FGD. **The Commission directs MSPGCL to submit the separate Petition for increase in actual cost with respect to approved cost along with detailed justification for cost and time over-run.**

8.13.14 The Commission, during the Public Hearing asked MSPGCL to revise the schedule for commissioning of the FGDs proposed to be installed considering the latest progress and provide the details of the Renovation and Maintenance (R&M) required for the continuous operation of the old units during the 5th Control Period. Based on the direction of the Commission, MSPGCL submitted the revised schedule of Commissioning of the FGD and revised the additional capitalisation. Based on the details provided by MSPGCL, it is observed that the Orders for all the FGD systems have been placed between 2022 and 2024. Based on the Orders placed and current progress, MSPGCL has proposed the revised capitalisation of FGD for various units. The Commission has considered the revised date of capitalisation of FGD as submitted by MSPGCL in revised submissions.

8.13.15 The Commission observed that there has been a significant increase in the FGD Estimated Cost as against the capital cost approved by the Commission against the DPRs submitted The Commission further observed that there are some mismatch between the capital cost estimated and the implementation schedule between the revised capitalisation document submitted by MSPGCL and the comparison statement submitted by MSPGCL regarding the progress of the FGD systems. The Commission has considered the revised capitalisation document for maintenance of consistency. The Commission has also observed that capitalisation proposed against all the FGD installation are higher than the capital cost approved by the Commission. The Commission has limited the capital cost of the FGD to the capital cost approved by the Commission against the DPR submitted by MSPGCL. Further, the Commission has observed that MSPGCL has proposed partial capitalisation for Bhusawal Unit 4-5, Koradi Unit 8-10 and Chandrapur Unit 8 & 9. **The Commission directs MSPGCL to submit the complete details of the actual cost towards installation of FGD with details of cost and time over run along with supporting documents within 3 months from the date of capitalisation of FGD.**

8.13.16 Further, MSPGCL has claimed capitalisation of Rs. 868.44 Crore towards Renovation and Modernization of old units like Bhusawal Unit 3, Chandrapur Units 3-7 and Nashik

Units 3-5 stating that the same is required for the continuous operation of the units through the Control Period. The relevant provisions of the MYT Regulations, 2024 is reproduced below:

"Renovation & Modernisation

43.1 For undertaking Renovation and Modernisation for the purpose of extension of life beyond the useful life of the Generating Station or a Unit thereof, the Generating Company shall file a Petition for approval with a Detailed Project Report giving complete scope, justification, cost-benefit analysis, estimated life extension from a reference date, financial package, phasing of expenditure, schedule of completion, reference price level, estimated completion cost, record of consultation with Beneficiaries and any other relevant information.

Provided further that, the generating company intending to undertake renovation and modernization (R&M) shall be required to obtain the consent of the beneficiary Licensees, for such R&M and submit the same along with the Petition.

Provided that the generating company opting for Renovation and Modernization (R&M) shall not be eligible for Special Allowance under Regulation 44 of these Regulations;

43.2 Approval of such proposal for Renovation and Modernisation shall be granted after consideration of reasonableness of the cost estimates, schedule of completion, use of efficient technology, cost-benefit analysis, and such other factors as may be considered relevant by the Commission.

43.3 In case of gas/ liquid fuel based open/combined cycle thermal generating Unit, any expenditure, which has become necessary for renovation of gas turbines/steam turbine and any expenditure necessitated due to obsolescence or non-availability of spares for efficient operation of the stations shall be allowed:

Provided that any expenditure included in the Renovation and Modernisation on consumables and cost of components and spares, which is generally covered in the O&M expenses during the major overhaul of gas turbine, shall be suitably deducted after prudence check, from the Renovation and Modernisation expenditure to be allowed.

43.4 The expenditure approved by the Commission after prudence check based on the estimates of Renovation and Modernisation expenditure and life extension, and after deducting the accumulated depreciation already recovered from the original Project cost, shall form the basis for determination of Tariff."

8.13.17 The Commission observed that MSPGCL has not provided any Detailed Project Report giving complete scope, justification, cost-benefit analysis, estimated life extension from a reference date, financial package, phasing of expenditure, schedule of completion, reference price level, estimated completion cost, record of consultation with Beneficiaries and any other relevant information as required for the R&M Expenses. Further, MSPGCL has also not provided the impact of the assets that are proposed to be replaced as per the Regulation 43.4. In the absence of these details, the Commission at this stage has not approved and additional Capitalisation proposed by MSPGCL for the 5th Control Period. **The Commission directs MSPGCL to submit a separate Petition for R&M proposed for the Old units in line with the MYT Regulations, 2024 with the complete details, justification, DPR, cost benefit analysis and the impact of the replacement of existing assets.**

8.13.18 Further, the Commission observed that MSPGCL has claimed addition in capitalisation towards hydro generating station mostly under the heads of upgradation of the old Units. However, MSPGCL has proposed to claim Special Allowance as per Regulation 44 of the MYT Regulations, 2024. The relevant provisions of the Special Allowance is reproduced below:

> *"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 Special 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."

8.13.19 In line with the provisions of the MYT Regulations, 2024, the Commission has not considered any addition to the capitalisation during the 5th Control Period for any hydro station.

8.13.20 As regards, the claim of MSPGCL towards expenses proposed to be incurred towards flexible operation, the Commission observes that the expenses proposed are a mix of capital and operational expenses. Further, the complete details of such expenses are not submitted properly. Hence, the Commission has not considered the capital expenditure forwards flexible operation at this stage and **directs MSPGCL to submit a separate Petition for approval of Expenditure towards flexible operation with complete details.**

8.13.21 Considering the revised capitalisation proposed by MSPGCL in line with the direction of the Commission, the additional capitalisation approved by the Commission for the 5th Control Period is as shown in the Table below:

Table 8.33: Additional capitalisation (excl. FGD) for the 5th Control Period (Rs. Crore)

Station/Unit	FY 2025-26		FY 2026-27		FY 2027-28	
	Claimed	Approved	Claimed	Approved	Claimed	Approved
Bhusawal	0.00	0.00	159.20	0.00	0.00	0.00
Chandrapur	273.61	273.61	391.16	273.96	115.27	115.27
Khaperkheda	64.58	64.58	86.10	86.10	168.60	168.60
Koradi	0.00	0.00	12.25	12.25	25.36	25.36
Nashik	10.50	10.50	161.10	7.50	159.22	0.00
Uran	18.90	18.90	29.00	29.00	50.00	50.00
Paras Units 3&4	31.15	31.15	22.50	22.50	45.00	45.00
Parli Units 6&7	28.00	28.00	36.00	36.00	63.50	63.50
Khaperkheda Unit 5	73.81	73.81	58.50	58.50	41.50	41.50
Bhusawal Units 4&5	129.99	129.99	47.07	47.07	70.47	70.47
Koradi Units 8-10	80.50	80.50	144.75	144.75	170.25	170.25
Chandrapur Units 8&9	27.30	27.30	62.50	62.50	84.50	84.50
Parli Unit 8	7.00	7.00	12.50	12.50	49.50	49.50
Hydro	85.31	0.00	64.00	0.00	47.00	0.00
Total	**830.65**	**745.34**	**1286.63**	**792.63**	**1090.17**	**883.95**

Station/Unit	FY 2028-29		FY 2029-30	
	Claimed	Approved	Claimed	Approved
Bhusawal	0.00	0.00	0.00	0.00
Chandrapur	273.97	153.97	128.27	128.27
Khaperkheda	140.40	140.40	146.25	146.25
Koradi	12.42	12.42	12.50	12.50
Nashik	163.32	4.10	0.25	0.25
Uran	55.80	55.80	58.50	58.50
Paras Units 3&4	50.40	50.40	31.50	31.50
Parli Units 6&7	76.68	76.68	87.98	87.98
Khaperkheda Unit 5	67.50	67.50	65.25	65.25
Bhusawal Units 4&5	36.12	36.12	45.99	45.99
Koradi Units 8-10	144.00	144.00	168.75	168.75
Chandrapur Units 8&9	70.20	70.20	108.00	108.00
Parli Unit 8	51.12	51.12	36.00	36.00
Hydro	34.92	0.00	78.93	0.00
Total	**1176.85**	**862.71**	**968.17**	**889.24**

8.13.22 The above approved additional capitalisation is excluding the capitalisation towards FGD schemes as under:

Table 8.34: FGD capitalisation for the 5th Control Period (Rs. Crore)

Station/Unit	FY 2025-26		FY 2026-27		FY 2027-28	
	Claimed	Approved	Claimed	Approved	Claimed	Approved
Bhusawal	0.00	0.00	0.00	0.00	0.00	0.00
Chandrapur	0.00	0.00	128.16	115.34	398.86	328.13
Khaperkheda	129.13	115.34	0.00	0.00	0.00	0.00
Koradi	0.00	0.00	0.00	0.00	0.00	0.00
Nashik	0.00	0.00	0.00	0.00	0.00	0.00
Uran	0.00	0.00	0.00	0.00	0.00	0.00
Paras Units 3&4	0.00	0.00	475.59	376.06	0.00	0.00
Parli Units 6&7	163.28	145.02	0.00	0.00	0.00	0.00
Khaperkheda Unit 5	0.00	0.00	0.00	0.00	0.00	0.00
Bhusawal Units 4&5	0.00	0.00	0.00	0.00	0.00	0.00
Koradi Units 8-10	0.00	0.00	0.00	0.00	0.00	0.00
Chandrapur Units 8&9	0.00	0.00	0.00	0.00	0.00	0.00
Parli Unit 8	108.86	89.24	0.00	0.00	0.00	0.00
Total	**401.27**	**349.60**	**603.75**	**491.40**	**398.86**	**328.13**

Station/Unit	FY 2028-29		FY 2029-30	
	Claimed	Approved	Claimed	Approved
Bhusawal	0.00	0.00	0.00	0.00
Chandrapur	199.43	164.06	199.43	164.06
Khaperkheda	0.00	0.00	0.00	0.00
Koradi	0.00	0.00	0.00	0.00
Nashik	0.00	0.00	0.00	0.00
Uran	0.00	0.00	0.00	0.00
Paras Units 3&4	0.00	0.00	0.00	0.00
Parli Units 6&7	0.00	0.00	0.00	0.00
Khaperkheda Unit 5	283.06	280.82	0.00	0.00
Bhusawal Units 4&5	212.29	212.29	212.29	212.29
Koradi Units 8-10	259.36	259.36	259.37	259.37
Chandrapur Units 8&9	199.43	199.43	199.43	199.43
Parli Unit 8	0.00	0.00	0.00	0.00
Total	**1153.56**	**1115.96**	**870.51**	**835.15**

8.13.23 MSPGCL has requested for extension of cut-off date upto 31 March, 2025 for completion of balance works within the original scope of work for Koradi Units 8-10, Chandrapur Units 8&9 and Parli Unit 8. The Commission does not find it prudent to grant the relief sought by MSPGCL at this stage. The Commission shall take a view on the same based on the submissions of the MSPGCL in the true-up of the respective years on case to case basis.

8.14 MEANS OF FINANCE OF ADDITIONAL CAPITALISATION

MSPGCL's Submission

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

Commission's Analysis and Ruling

8.14.2 The Commission has considered the means of finance of the approved additional capitalisation in the normative. debt: equity ratio of 70:30.

8.15 ANNUAL FIXED CHARGES (AFC)

8.15.1 Regulation 42 of the MYT Regulations, 2024 specifies the components of AFC as follows:

a. O&M expenses
b. Depreciation
c. Interest on Loan
d. IoWC
e. RoE
f. Income Tax

Less:

g. NTI

8.16 O&M EXPENSES

MSPGCL's submission

8.16.1 MSPGCL submitted that the O&M expenses for the MYT period are projected as per the norms approved in the MERC MYT Regulations, 2024.

8.16.2 The details of normative O&M expenses considered for the 5th MYT Control period are as follows:

O&M Expenses for Old Units:

8.16.3 The O&M expenses for old Units (Units that achieved COD before 26 August, 2005) are projected based on Regulation 48.1 of the MERC (MYT) Regulations, 2024. Regulations 48.1 of the MERC (MYT) Regulations, 2024, prescribes as follows:

> *"48 Operation and maintenance expenses for Thermal Generating Stations 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.

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:"

8.16.4 MSPGCL submitted that on an annual basis, there has been a significant disallowance in the O&M expenses. In case the approved expenses are considered as a base, the same will always lead to a disallowance in the ensuing years. Being a government company, all the expenses incurred are in a transparent manner and is subject to stringent audit checks. Further, such O&M expenses include the expenses towards repair and maintenance of old units which is to be done irrespective of the quantum of O&M expenses approved by the Commission.

8.16.5 The approval of O&M expenses takes into account the inflation indices as per regulations. An average escalation in such indices may/may not be able to map the actual movement of such expenses. For instance, the WPI index showed a dip of -0.7% from FY 2023 to FY 2024 whereas no such reduction in O &M expenses could be seen in actual terms. Therefore, restricting the O&M expenses to historically approved limits will be detrimental to the financial health of MSPGCL. Accordingly, MSPGCL requested the Commission to invoke its Power to Relax as provided in the Regulations and approve the following submissions of MSPGCL:

a) Actual O & M expenses (excluding provisions) may be considered for working out the normative expenses for ensuing years or the same may at least be considered at the time of truing up.

b) Efficiency improvement factor of 1% may be applied at the time of true-up in case actual O & M expenses are lower than the normative expenses

8.16.6 For the projection of O&M expenses for the MYT period, escalation rate of 4.36% arrived based on WPI and CPI indices numbers for FY 2023-24 has been considered for the projection O&M expenses.

O&M Expenses for New Units:

8.16.7 MSPGCL submitted that the O&M expenses for new units have been considered on Rs. Lakhs/MW basis as per Regulation 48.2 of MYT Regulations, 2024.

Expenses related to Housing Colonies:

8.16.8 Regulation 50.1 (c) of the MYT Regulations, 2024 provides that O&M expense incurred by Hydro generating stations on its housing colonies and related expenses, including medical and other facilities and on their operating staff shall be allowed separately. The relevant excerpt of the said regulation is reproduced as below:

> *"50 Operation and Maintenance Expenses for Hydro Generating Stations*
> *50.1 For Existing Stations:*
> *……….*
> *c) The Operation and Maintenance expenses incurred by the Generating Company on its housing colonies and related expenses, including medical and other facilities, and on their operating staff shall be excluded from (a) and (b) above and allowed separately, subject to prudence check."*

8.16.9 In view of aforesaid Regulations, the O&M expenses expected to be incurred by Hydro generating stations on its housing colonies and related expenses for FY 2025-26 to FY 2029-30 are projected.

Water Charges:

8.16.10 MSPGCL submitted that, as per the MYT Regulations, 2024, water charges are allowed at actuals over and above the normative O&M costs. In accordance with this provision, the water charges are projected for the upcoming period based on actual water charges data of the past three years, inputs from power stations regarding projected water usage and applicable water charges, as well as the estimated water costs for proposed water arrangements at Koradi, Paras, Khaperkheda, and Bhusawal TPS for TTRO water supply from STP.

Other Fuel related Charges

8.16.11 MSPGCL submitted that the fixed costs associated with fuel handling within the Plant premises have been duly approved by the Commission as part of the Operation and Maintenance (O&M) costs as per actuals. In line with this approval, MSPGCL has also considered the projections of 'Other Fuel Related (fixed) Charges' for MYT control period as per actuals for FY 2023-24.

Impact of wage revision

8.16.12 MSPGCL vide circular No. 464/10720 and 465/10721 dated 14 October, 2024 has announced wage revision w.e.f. 01 April, 2024 for contractual staff. MSPGCL is in process of assessing the impact of pay revision station wise. Tentative impact of wage revision for FY 2024-25 worked out to ~ Rs.78.06 Crore. Accordingly, MSPGCL has projected the impact of wage revision for MYT control period with y-o-y escalation rate of 4.36% MSPGCL has considered the impact of revised labour wage rate over and above the normative O&M, as part of the O&M expenses.

Impact of Pay revision

8.16.13 As mentioned in the true-up section, the Commission has approved normative O&M expense based on the historical average O&M expenses with escalation as per norms provided in the MYT Regulations, 2019. Further, in MTR Order impact of pay revision has been approved separately for FY 2023-24 based on the actual amount for FY 2021-22 with escalation based on WPI/CPI indices. O&M expenses projected for FY 2024-25 are including the impact of pay revision corresponding to pay revision amount approved by the Commission for FY 2024-25 in MTR order.

8.16.14 MSPGCL has announced a pay revision for its employees through circulars no. 546, 548, and 549 dated 09 August, 2024. As per these circulars, the pay revision is effective from 01 April, 2023. In light of this, impact of this pay revision for MYT control period has worked out considering escalation factor of 4.36% on the pay revision impact provided for FY 2024-25 in foregoing section of this petition. The revised salary payments commenced with the August 2024 payroll, and the arrears will be disbursed during FY 2024-25.

8.16.15 The norm approved in MYT Regulations 2024 for new stations are without considering impact of pay revision announced as per circular dated 09 August, 2024. Further, Regulation 48.1 (e) of MYT Regulations, 2024 provides that wage revision if any during the MYT control period shall be subject to treatment as per sharing of gains and loss. The relevant excerpt of the Regulation is reproduced as under:

"48.1…….

e) Wage revision, if any, during the Control Period, shall be treated as part of employee expense as controllable parameter and compared vis-à-vis normative O&M expense. Hence, the impact of arrears of wage revision, if any, booked as part of employee expense in any particular year, shall be normalised annually over Control Period and shall be subject to treatment as per sharing of gains and loss as per Regulation 11 for the purpose of true-up of O&M expense of respective years, subject to prudence check."

8.16.16 MSPGCL submitted that the aforesaid pay revision was announced during the current (4th) control period. Hence, in case of old stations, MSPGCL has considered O&M expenses for 5th MYT control period considering escalation on the amount of pay revision for FY 2024-25. Further, O&M expenses of new stations are allowed on normative basis, however the pay revision was announced through circular dated 09 August, 2024 hence the same could not be provided to the Commission at the stage of framing of MYT Regulations, 2024. Hence, the norm approved by the Commission for 5th MYT Control Period are without considering impact of this pay revision. Therefore, MSPGCL has considered O&M expense for new stations including impact of aforesaid pay revision. In light of this, MSPGCL requested the Commission to approve the impact of pay revision announced in 4th Control Period and subsequently allow for the adjustment of the differential amount based on actual disbursements.

O&M Costs for FGD/SCR installation:

8.16.17 MSPGCL submitted that the O&M costs associated with the FGD/SCR systems, which are anticipated to be commissioned during the period from FY 2025-26 to FY 2029-30, have been duly considered and requested the Commission to approve the costs.

8.16.18 MSPGCL submitted that it has calculated the O&M expenses for the FGD/SCR systems based on the Regulation 48.3 of the MYT Regulations, 2024. The excerpt of the Regulation is provided below:

"48.3 The operation and maintenance expenses on account of Emission Control System in coal or lignite based thermal generating station shall be 2% of the admitted capital expenditure (excluding interest during construction) as on its date of commercial operation, which shall be escalated annually @4.33% during the Control Period ending on 31st March 2030:"

Costs related to Ash transportation and infrastructure development

8.16.19 MSPGCL submitted that, in compliance with the directions of MoEFCC and MoP, and with the aim to improve the ash utilisation in the 5th Control Period, it has made projections towards such expenses. The expenses include cost related to ash transportation and infrastructure towards ash utilisation for the plants of MSPGCL.

8.16.20 MSPGCL submitted that the estimated expenditure for the utilization of Dry Fly Ash, Pond Ash, and the development of necessary infrastructure to improve ash utilization is projected to be Rs. 3301.62 Crore for the MYT period from FY 2025-26 to FY 2029-30. The summary of the year-wise claim is as below:

Particular	Year wise Financial Burden (Rs Crore)					
	1st Year	2nd Year	3rd Year	4th Year	5th Year	Total
Towards Dry fly Ash utilization	86.00	86.00	86.00	86.00	86.00	430.00
Expenditure towards Pond Ash utilization	377.88	415.6	457.16	502.86	553.12	2306.62*
Expenditure towards infrastructure development to increase Ash utilization	151.00	151.00	121.00	71.00	71.00	565.00
Total	**614.88**	**652.60**	**664.16**	**659.86**	**710.12**	**3301.62***

** Calculation error by MSPGCL*

8.16.21 MSPGCL submitted that the relevant expenditure is of varied nature, revenue as well as capital expenditure. The claims for the expenses at the time of true-up will be made in accordance with the relevant provisions of the applicable Regulations.

8.16.22 As stated in the earlier sections, the normative O&M expenses for Koradi Unit 6, as approved by the Commission in the MTR Order from FY 2022-23 onwards, were based on the operation of both Units 6 and 7. However, with the retirement of Unit 7 and only Unit 6 remaining in operation, MSPGCL has considered the normative O&M expenses for Koradi Unit 6 as two-thirds of the amount approved by the Commission for FY 2021-22 in the MTR Order, along with the applicable escalation up to FY 2023-24. The two-thirds proportion has been considered in view of common auxiliaries that are essential for operation of Unit 6. Accordingly, the revised normative O&M expenses for Koradi Unit 6 for 5th Control Period have been calculated. As assessment of ratio of apportionment can be undertaken at the time of truing-up.

8.16.23 Additionally, as detailed in the earlier sections, CEA in its report regarding the O&M norms for Koradi Units 8-10, noted that the O&M expense norm for FY 2020-21 was significantly reduced compared FY 2019-20 for 600/660 MW units. This reflects a reduction of approximately 7.7% O&M expenses. In view of the above, MSPGCL submitted that the revised normative O&M expenses have been calculated, aligning with the CERC norm for the 5th Control Period and approve the normative O&M expenses in accordance with the CERC O&M norm, as stipulated in the MYT Regulations, 2024.

8.16.24 MSPGCL submitted that, under Regulation 48.1(g), IT-related expenses may be claimed over and above the normative O&M expenses. The relevant excerpt of the regulation is provided below,

> *"g) A Generating Company may undertake Opex schemes for system automation, new technology and IT implementation, etc., and such expenses may be allowed over and above normative O&M Expenses, subject to prudence check by the Commission as per the provisions of the MERC (Approval of Capital Investment Schemes) Regulations, 2022:"*

8.16.25 In view of the above, the Petitioner submitted the IT expenses projected to be incurred for the 5th Control Period.

Commission's Analysis and Ruling

8.16.26 MSPGCL has sought the relaxation in the provisions of the Regulations regarding the normative O&M expenses for old stations and new stations. The Regulations have been notified after due consultation with all the stakeholders. Wherever necessary, the Commission had been giving special dispensations to certain factors. Actual O&M expenses being higher than the normative O&M expenses as determined in accordance with the Regulations cannot be a valid ground for deviation from the Regulations. If the higher actual O&M expenses only deserve to be allowed, it nullifies the entire provisions of the Regulations specifying the normative O&M expenses and mechanism of sharing of gains and losses in O&M expenses. Therefore, the Commission does not find merit in MSPGCL's request to relax the provisions of the Regulations regarding the O&M expenses.

8.16.27 For New Stations, the Commission has approved the O&M Expenses as per the Norms specified in Regulation 48.2 of the MYT Regulations, 2024.

8.16.28 For Old Stations, the Commission has arrived at the O&M Expenses excluding Water and Other expenses based on the average of the Trued-up Operation and Maintenance expenses after adding/deducting the share of efficiency gains/losses, for the five Years ending 31 March, 2024.

8.16.29 The impact of pay revision in the 5th Control Period is allowed considering the escalation arrived as per the MYT Regulations, 2024 in accordance with the provisions of the MYT Regulations, 2024. However, the Commission has not considered any impact of pay revision for New Stations since there are no provisions for passing on such impact as per the MYT Regulations, 2024.

8.16.30 Notwithstanding the above, considering the increasing trend of O&M expenses particularly employee expenses and the concerns raised by the Commission during the public hearing process, **the Commission herby directs MSPGCL to provide a justification for increase in employee expenses including the impact of wage revision and compare the same vis-à-vis the pay revisions scale applicable for the State Government Departments. The same shall be considered at the time of MYT proceedings for undertaking prudence check of O&M expenses as part of the truing up process for relevant years.**

8.16.31 Thus, the **Commission directs MSPGCL to submit details of the employee expenses at the time of truing up of projection years. The details shall comprise employee category, number of employees in that category, applicable pay band as per the provision of the 7th Pay Commission approved by the Government of Maharashtra and actual salary of the respective employee category in tabular format.**

8.16.32 The Commission has observed that MSPGCL has claimed IT Expenses during the 5th Control Period. The relevant Regulations are quoted below:

> *"g) A Generating Company may undertake Opex schemes for system automation, new technology and IT implementation, etc., and such expenses may be allowed over and above normative O&M Expenses, subject to prudence check by the Commission as per the provisions of the MERC (Approval of Capital Investment Schemes) Regulations, 2022:*
>
> *Provided that the Generating Company shall submit detailed justification, cost benefit analysis, and life-cycle cost analysis (in accordance with Format specified at Annexure V) of such schemes as against capex schemes, and savings in O&M expenses, if any as per the provisions of the MERC (Approval of Capital Investment Schemes) Regulations, 2022."*

8.16.33 It is observed that MSPGCL has not provided any proper justification for incurring such expenses, cost benefit analysis and savings in O&M Expenses after such implementation. Hence, in the absence of proper details, the Commission has not allowed any specific IT Expenses as claimed by MSPGCL.

8.16.34 As discussed in the true-up section, the Commission has considered 60% of the O&M Expenses for Koradi Unit 6 considering the common utilities.

8.16.35 The Commission has observed that in the Water Expenses claimed by MSPGCL for the 5th Control Period, expenses of an amount of ~Rs. 2000 Crore for FY 2027-28 to FY 2029-30 towards water arrangements at Koradi, Paras, Khaperkheda, and Bhusawal TPS for TTRO water supply from STP is claimed. The Commission asked MSPGCL to provide proper justification for same since it appeared to be expense of capital expenditure. In response MSPGCL submitted that it is planning to set up TTRO water supply from STP under PPP model. Thus, these are not Capex schemes. The water will be sourced at "Rs./ltr" terms. MSPGCL has submitted OPEX DPR for these stations vide letter no. RCD25/35A/LT0165/00921 dtd. 30 January, 2025. Since the Commission has not yet provided approval for the same, the Commission at this stage has not considered the additional water charges towards setting up TTRO water supply from STP under PPP model. The Commission has approved water charges for each year of the Control Period equivalent to the water charges actually incurred during FY 2023-24.

8.16.36 The Commission has approved the Hydro Colony Expenses separately as a part of AFC.

8.16.37 The Commission has considered Other Charges for thermal stations as claimed by MSPGCL.

8.16.38 O&M Expenses for FGD systems are approved in line with Regulation 48.3 of the MYT Regulations, 2024 as reproduced below:

> *"48.3 The operation and maintenance expenses on account of Emission Control System in coal or lignite based thermal generating station shall be 2% of the admitted capital expenditure (excluding interest during construction) as on its date of commercial operation, which shall be escalated annually @4.33% during the Control Period ending on 31st March 2030:*
> *Provided that income generated from sale of gypsum or other by-products shall be reduced from the operation and maintenance expenses."*

8.16.39 As regards wage revision, MSPGCL in its Petition submitted that it has announced wage revision w.e.f., 01.04.2024 for contractual staff and it is in process of assessing the impact of wage revision station wise. MSPGCL has claimed the wage revision on tentative basis. In the absence of proper estimation of wage revision for contractual staff, the Commission at this stage has not considered it as a part of the O&M Expenses for the 5th Control Period. **The Commission directs MSPGCL to submit the details of actual wage revision during the Control Period FY 2025-26 to FY 2029-30 along with proper justification and required documentary evidence at the time of true-up and the same will be considered by the Commission subject to prudence check.**

8.16.40 As regards the Ash Transportation Expenses, the Commission observed that the details of ash generated and the assumptions made for arriving at the Ash Transportation Expenses are not provided in detail and asked MSPGCL to submit the detailed information with documentary evidence for such claims. MSPGCL has submitted the following as regards the above query:

- No responses were received for the E-auction for fly ash and pond ash carried out several times at Koradi & Khaperkheda TPS. Paper advertisement were also published to invite interested agencies for pond ash.
- For ash to be provided at free of cost,

  - Fly ash and pond ash at Koradi & Khaperkheda TPS is made free of cost on as is where is basis. Many agencies demanded ash to be transported at their site by MSPGCL
  - Pond ash of Chandrapur TPS is made free of cost on as is where is basis. No agency approached yet.
  - Possibility of backfilling of abandoned open cast mines of WCL (as identified by MoP) by pond ash of Chandrapur TPS is being explored. The identified mines are approximately 40km from CSTPS. Several correspondences were made to WC. However, WCL has not yet finalized the modalities for bearing of ash transportation cost.
- Considering the option of TPP bearing the cost of transportation of ash to be provided free to the eligible projects/mine owners:
  - Financial assistance of Rs 100/MT and Rs 120/MT for lifting and transportation of fly ash respectively from Koradi and Chandrapur TPS is being provided through the process of EOI.
  - Through this process, LOA issued to M/s Ambuja Cement for lifting & transportation of fly ash by rail / road mode
  - Additionally, M/s. Ambuja have to lift and transport pond ash of quantity of 10 % of allotted /committed annual dry fly ash quantity without financial assistance.
  - BR is passed for providing financial assistance of Rs 125/MT for pond ash lifting.
  - An agreement has been signed between CSTPS, NHAI & M/s. Govindpur Rajura Infra Project on 11 October, 2024 for use of 42 LMT of pond ash in the NHAI's project with financial assistance of Rs. 125/MT and work started from 17 October, 2024.

8.16.41 MSPGCL in its MTR Petition has also claimed the incidental expenses towards fly utilisation. The Commission in its MTR Order directed MSPGCL to submit the claim of expenses duly submitting the compliance to the notifications of GoI along with justification under the relevant provisions of Regulations in true-up of the respective year for prudence check by the Commission. MSPGCL in current MYT Petition has submitted that the expenses towards ash utilisation for FY 2022-23 and FY 2023-24 are negligible. Further, MSPGCL in its Petition has submitted the expenditure claimed is of varied nature, revenue as well as capital expenditure. MSPGCL further submitted that the claims for expenses at the time of true-up will be made in accordance with the relevant provisions of the applicable Regulations. The Commission is of the view that the revenue and capital expenditure needs to be separated and claimed properly in the Petition. The expenses of capital expenditure cannot be allowed to be recovered as revenue expenditure in one year. Hence, in the absence of proper details the

Commission at this stage has not allowed the entire expenditure as revenue expenditure as claimed by MSPGCL **The Commission directs MSPGCL to submit a separate Petition on this issue along with proper justification and break up of Capital and Revenue expenditure for the approval of the Commission.** The Commission will allow the impact of these expenses at the time of true up subject to prudence check.

8.16.42 Based on above, the total O&M expenses approved by the Commission for the fifth Control Period are summarised below:

Table 8.35: Total O&M expenses for 5th MYT Period (Rs. Crore)

Station/ Unit	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
Bhusawal	167.02	152.50	174.58	157.09	257.66	162.95	267.48	169.06	278.57	175.43
Chandrapur	867.40	845.59	903.99	862.43	942.26	899.74	982.28	941.65	1,024.14	981.75
Khaperkheda	478.95	464.17	499.09	468.65	603.05	485.59	627.11	503.27	649.86	522.73
Koradi	223.24	206.15	232.35	199.71	267.21	206.47	277.75	213.53	288.73	220.90
Nashik	397.14	395.10	417.63	407.08	439.57	421.61	463.10	436.77	488.38	452.59
Uran	121.80	117.34	127.11	122.34	132.64	127.60	138.42	133.10	144.45	138.83
Paras Units 3&4	241.34	251.79	251.38	257.16	387.25	271.38	400.62	282.29	415.75	293.65
Parli Units 6&7	316.12	281.23	325.86	302.36	336.03	312.67	346.64	323.41	357.68	334.59
Khaperkheda Unit 5	205.60	216.09	215.23	211.59	274.72	219.93	286.60	231.49	298.36	243.76
Bhusawal Units 4&5	355.81	370.84	372.54	378.25	748.34	395.19	775.90	415.09	804.59	436.13
Koradi Units 8-10	604.44	639.69	630.47	652.29	895.00	675.25	929.31	701.66	962.92	731.45
Chandrapur Units 8&9	369.42	347.91	386.58	354.95	404.64	371.40	423.58	390.67	443.52	413.64
Parli Unit 8	164.67	148.43	169.54	159.78	174.63	164.95	179.93	170.34	185.45	177.69
Hydro	337.60	310.99	352.28	323.80	367.60	337.91	383.58	352.63	400.26	367.99
Total	**4850.57**	**4747.83**	**5085.62**	**4857.50**	**6230.60**	**5052.63**	**6482.30**	**5264.96**	**6742.65**	**5491.14**

8.17 SPECIAL ALLOWANCE

MSPGCL's submission

8.17.1 MSPGCL submitted that Water Resources Department (WRD), Government of Maharashtra, has recently notified a policy for "Renovation, Modernisation, Uprating and Life Extension (RMU & LE) for Hydroelectric Projects on Lease, Renovate, Operate and Transfer (LROT) Basis", for the hydro projects which are owned by WRD . Through these policies, the life extension is to be carried out for the hydro units which have completed 35 years of life or about to complete 35 years of life in the 5th Control period.

8.17.2 WRD has categorised the hydro power plants into categories,

- Category-I – Purely power project units, like Koyna, Bhira, Tillari, Ghatghar & Vaitarana
- Category-II – Remaining small hydro stations

8.17.3 For Category-I, WRD decided that the RMU & LE activities are to be carried out by the Petitioner. However, for the Category-II the RMU&LE activity is to be carried out through an agency/ vendor which will be selected by WRD through competitive bidding process. The Petitioner can compete in the bidding process and carry out the RMU & LE work if it wins the bid. In case, the Petitioner fails to win the bid, it will have to handover the units to the selected bidder at that time.

8.17.4 Considering that WRD has yet to initiate the process for assessment of RMU & LE works to be carried out for the units which have already completed 35 years' life or the units which will complete 35 years' life in next 5 years, MSPGCL has considered all the hydro capacity under this category for projections for the next control period.

8.17.5 Based on finalization of decisions related to RMU & LE activities, the units will be withdrawn at the time of actual execution by MSPGCL or handing over to the selected vendor, as the case may be.

8.17.6 In stations where MSPGCL will undertake RMU&LE activities for hydro units it will have to pay Annual Lease Rent (at Rs. 4.5 lakh /MW) and Intake-maintenance charge (at Rs. 0.5 /kWh). Since the RMU&LE activity for the units under Category – I are to be undertaken by MSPGCL, such charges will be payable to WRD post RMU & LE activities. Similar charges are to be payable for units under Category-II which will be awarded to MSPGCL for RMU & LE works.

8.17.7 Regulation 44 of the MYT Regulation, 2024, provides the Special allowance for Coal-based/Lignite fired thermal and Hydro generating stations. The regulation is provided below:

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

8.17.8 For Hydro units, Special allowance of Rs. 10.75 lakh per MW shall be utilised every year towards Renovation & Modernisation Capex schemes from 01 April, 2025 till commencement of RMU & LE works. MSPGCL submitted that it will approach the Commission for in-principle approval of such RMU & LE schemes under the MERC (Approval of Capital Investment Schemes) Regulations, 2022.

8.17.9 Since the timelines for implementation of RMU & LE activities are yet to be finalised, MSPGCL has not considered these charges for projection purpose.

8.17.10 As per Regulation 44 of MYT Regulation 2024, the thermal generating stations which have completed the useful life as specified in the regulations, may opt to avail "Special Allowance" for meeting the requirement of expenses towards capital expenditure as per MERC (Approval of Capital Investment Schemes) Regulations, 2022. This cost shall include capital expenditure for change in law, award for arbitration or for compliance of the directions of order of any statutory authority or order or decree of any court of law and force majeure.

8.17.11 This special allowance of maximum Rs. 10.75 lakhs per MW per year for control period, has following major riders:

- Any upward revision of the capital cost or relaxation in the applicable operational norms if any allowed by the Hon'ble Commission shall not be allowed
- The details of all work to be undertaken through special allowance be submitted along with MYT Petition for the approval of Commission which shall be granted after prudence check of reasonableness of the cost estimate, cost benefit analysis and such other factors as may be considered relevant by the Commission.
- Special allowance shall be purely OPEX and all CAPEX treatment like depreciation, RoE, interest on loans will not be allowed.
- Separate record for special allowance as well as true-up at the end of control period

8.17.12 When special allowance itself displaces or stops all capital expenditure and exposes the Petitioner to additional risk such as change in law, force majeure, court awards and statutory directions. Its usefulness for old units (on the extended life) has been limited or negated. Further, opting for special allowance will result in immediate removal of operational norm relaxations for older units, which is detrimental and disincentivizes the utility from opting for the special allowance.

8.17.13 EE R&M costs for old Units is typically in the range of 2 Cr./MW to Rs. 2.5 Cr./MW for restoration of operational parameters. Whereas the special O&M is Rs. 10.75 lakh/MW, which is ~5.3% of the lower band of capital expenditure required. Achieving performance improvements with only 5.3% of the total cost is practically very difficult.

8.17.14 Hence, MSPGCL has refrained from opting for special O&M costs, finding itself compelled to choose either more expensive R&M measures or to continue with the limited capital expenditures permissible under the MERC (Approval of Capital Investment Schemes) Regulations, 2022. A comparison of operational norms and challenges can be submitted to substantiate these constraints. The Commission to consider invoking the Power to Relax operational norms, thereby supporting CEA directives to operate the plants until 2030 and improve availability to support growing power demands. Typically, such units have low fix cost component, as assets are almost depreciated.

8.17.15 MSPGCL has also claimed special allowance against Uran Gas TPS without any revision of the operational norms.

Commission's Analysis and Ruling

8.17.16 The relevant Regulations on Special Allowance is reproduced below:

"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 Special 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."

8.17.17 As per the Regulations, above, the Commission asked MSPGCL to submit the complete details of works proposed to be undertaken along with the cost and justification. In response, MSPGCL has provided the complete list of works proposed to be undertaken using the special allowance for the 5th Control Period.

8.17.18 The Commission has considered the submission of MSPGCL and has allowed the Special Allowance as claimed by MSPGCL for hydro stations.

8.17.19 As regards the claim of Special Allowance by MSPGCL towards Uran GTPS, the Commission is of the view that MSPGCL has claimed such expenses in addition to expenses already claimed under additional capitalisation for upgradation/ renovation. Hence, the Commission has not considered the Special Allowance for Uran GTPS.

8.18 DEPRECIATION

MSPGCL's submission

8.18.1 MSPGCL submitted that depreciation has been computed in accordance with Regulations 28 of the MYT Regulations, 2024. The depreciation has been computed based on straight line method at the rates specified in the Regulations on the opening balance of the GFA as well as on the assets added during each year. Further, Regulation 28.1(b) of the MYT Regulations, 2024 provides that once the individual asset depreciates to the extent of 70% of the value of the asset, remaining depreciable value as of the 31st March of the year closing shall be spread over the balance useful life of the asset. Furthermore, any subsequent asset additions, as outlined in the Capital Expenditure Plan, will be accounted for in the year-on-year depreciation computation for the subsequent years of the Control Period.

Commission's Analysis

8.18.2 The Commission has considered the station wise closing GFA approved for FY 2024-25 as the opening GFA for FY 2025-26. The approved additional capitalisation for the 5th Control Period has been considered as the GFA addition during the year.

8.18.3 The Commission has computed the depreciation in accordance with the MYT Regulations, 2024. If the accumulated depreciation for a particular asset class has reached 70% of the allowable depreciation, the remaining depreciable value has been spread over the remaining useful life of the station. Else, the depreciation on opening GFA and additional capitalisation has been computed at the depreciation rates specified in the Regulations. The Commission has computed the depreciation on opening GFA for full year and depreciation on additional capitalisation has been computed for half year. The Commission has considered HO depreciation, the same as claimed by MSPGCL.

8.18.4 The depreciation approved by the Commission for the 5th Control Period is as shown in the Table below:

Table 8.36: Depreciation for the 5th Control Period (Rs. Crore)

Station/Unit	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
Bhusawal	5.79	5.74	9.15	5.74	12.51	5.74	12.51	5.74	12.51	5.74
Chandrapur	201.16	178.75	287.74	198.71	401.72	219.79	488.28	232.91	488.28	248.31
Khaperkheda	159.49	76.78	91.20	83.38	96.23	89.72	102.69	97.84	102.69	104.53
Koradi	28.87	40.77	28.89	41.54	29.68	43.19	32.68	48.23	32.68	48.67
Nashik	10.44	9.66	13.47	10.12	20.23	10.31	27.04	11.06	27.04	11.82
Uran	24.12	11.76	30.47	12.90	32.34	14.99	34.51	17.78	34.51	21.37
Paras Units 3 & 4	83.23	80.63	171.00	89.94	131.63	101.10	133.40	103.11	133.40	104.80
Parli Units 6 & 7	94.32	79.44	95.08	84.73	99.88	87.07	102.31	89.89	102.31	93.65
Khaperkheda Unit 5	196.63	196.64	200.01	199.85	111.14	107.49	212.20	117.00	212.20	128.26
Bhusawal Units 4 & 5	346.88	347.42	152.11	150.58	153.20	153.38	174.05	161.75	174.05	175.13
Koradi Units 8, 9 & 10	717.80	713.38	723.29	719.32	730.03	727.42	743.51	742.57	743.51	354.47
Chandrapur Units 8 & 9	347.09	346.63	349.46	349.27	352.96	352.96	361.30	361.28	361.30	186.54
Parli Unit 8	102.60	102.12	105.89	104.99	107.20	106.63	109.20	109.20	109.20	58.65

Station/Unit	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
Hydro	18.81	13.46	22.44	13.29	24.75	20.48	27.72	20.95	27.72	20.95
Total	**2337.23**	**2203.18**	**2280.18**	**2064.35**	**2303.51**	**2040.28**	**2561.40**	**2119.32**	**2561.40**	**1562.89**

8.19 INTEREST ON LONG TERM LOANS AND OTHER FINANCE CHARGES

MSPGCL's submission

8.19.1 MSPGCL has arrived at the normative outstanding loan as on 1 April, 2025 in accordance with Regulation 30.2 of the MYT Regulations, 2024. MSPGCL has considered loan addition equal to 70% of claimed additional capitalisation for the respective year. The normative repayment has been considered as depreciation allowed for the year. MSPGCL has computed the interest on long term loans on the normative average of outstanding opening balance of loan and closing balance of loan by applying the weighted average rate of interest.

8.19.2 MSPGCL has considered the finance charges for the 5th Control Period, the same as the actuals for FY 2023-24.

Commission's Analysis and Ruling

8.19.3 The Commission has considered the station wise closing loan balances approved in the provisional true-up of FY 2024-25 as the opening loan balances for FY 2025-26. The debt portion of the approved additional capitalisation for each year of the 5th Control Period has been considered as the loan addition during the year. The approved depreciation for FY 2025-26 has been considered as the repayment for the year. The actual weighted average rates of interest for FY 2023-24 have been applied to the average loan for the respective year for computing the interest expenses. The Commission has considered the finance charges as claimed by MSPGCL.

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

Table 8.37: Interest on loan and finance charges for the 5th Control Period (Rs. Crore)

Station/Unit	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
Bhusawal	0.41	0.41	5.79	0.41	10.52	0.42	9.21	0.41	7.91	0.41
Chandrapur	73.68	80.58	77.09	85.01	78.86	93.35	68.93	97.46	40.65	94.81
Khaperkheda	39.03	40.67	36.31	42.02	35.89	42.33	36.81	43.82	36.35	43.78
Koradi	22.65	27.88	20.59	25.52	19.25	23.81	17.75	21.09	15.72	17.75
Nashik	4.31	5.07	9.26	4.72	19.04	3.96	28.20	3.92	31.13	3.81
Uran	16.14	13.16	15.08	13.65	14.71	15.10	15.12	17.26	15.59	19.41

Station/Unit	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
Paras Units 3 & 4	18.04	17.92	23.50	24.03	27.16	29.64	17.97	23.28	8.18	16.32
Parli Units 6 & 7	3.98	4.03	3.46	3.53	0.98	0.98	0.99	0.99	0.99	0.99
Khaperkheda Unit 5	61.23	59.83	46.83	45.44	35.42	34.21	33.15	36.56	30.50	38.72
Bhusawal Units 4 & 5	100.68	99.48	81.54	80.39	70.20	69.12	64.96	64.51	64.25	65.52
Koradi Units 8, 9 & 10	404.39	406.52	345.45	347.96	288.84	291.65	239.63	242.61	198.07	219.06
Chandrapur Units 8 & 9	221.97	221.15	192.45	191.66	164.53	163.75	142.83	142.05	127.50	135.41
Parli Unit 8	76.97	77.10	71.06	70.58	62.61	62.20	55.35	54.96	47.65	49.65
Hydro	10.65	3.28	14.29	1.89	15.89	0.62	16.16	0.03	16.31	0.03
Total	**1054.14**	**1057.07**	**942.69**	**936.82**	**843.91**	**831.14**	**747.06**	**748.95**	**640.80**	**705.67**

8.20 IOWC

MSPGCL's submission

8.20.1 The normative IoWC has been computed as per the provisions of Regulation 32.1 of the MYT Regulations, 2024. The rate of interest considered for computation of Interest on Working Capital, calculated as per the Regulation 32.1 (f), is 10.45% (SBI MCLR – Base rate as on 15.10.2024 - 8.95% plus 150 basis point).

8.20.2 MSPGCL submitted that its prevailing revenue source consists of a single customer, resulting in complete reliance on this customer for revenue. This dependency significantly increases the risk of a potential adverse impact on MSPGCL's credit rating, potentially leading to increase in the borrowing rate. MSPGCL anticipates adverse impact on its credit rating and therefore requested the Commission to approve additional 75 basis points over and above the rate of IoWC computed as per the MYT Regulations, 2024.

8.20.3 As per Regulation 32.1(a)(vi) of the MYT Regulations, 2024, the normative provision for the receivable's component is equivalent to the sale of electricity for forty-five days of annual fixed charges and energy charges. MSPGCL submitted that the computation of Working Capital has been carried out in accordance with this prescribed norm. However, the Commission to permit the claim of Working Capital based on the actual receivable days at the time of True-up for the Control Period.

8.20.4 MSPGCL further calculated the additional working capital for Emission control system of coal or lignite based thermal generating stations in line with that Regulation 32.1 (aa) of the MYT Regulations, 2024.

8.20.5 In addition to the above, as detailed out in the earlier section, MSEDCL has participated in the liquidation of arrears scheme for total amount of Rs.13801 Crore (Principal amount of Rs.8881 Crore and LPS of Rs.4920 Crore). The current scheme of LPS does not permit the levy of LPS on the agreed arrears. Hence, MSPGCL has been losing the interest amount on the balance outstanding agreed dues. In view of this, MSPGCL has calculated the impact of loss of interest on such amount for the period of 48 months as per LPS scheme at the rate of 10.40%. The loss of interest on outstanding amount of Rs.13801 Crore for 5th Control Period is worked out to Rs. 299.44 Crore. Considering that deferment of recovery of such amount will increase the requirement of working capital, hence MSPGCL requested the Commission to allow additional/incremental amount of Rs. 299.44 Crore (Rs. 284.52 Crore for FY 2025-26 and Rs. 14.91 Crore for FY 2026-27) over and above the normative IoWC amount computed and requested the Commission to work out sharing of gain and losses on IoWC amount accordingly.

Commission's Analysis

8.20.6 The Commission has computed normative IoWC in accordance with the provisions of Regulation 32.1 of the MYT Regulations, 2024.

8.20.7 The Commission observes that the Interest on Working Capital is normative in nature and additional loss of interest claimed by MSPGCL on outstanding dues being paid by MSEDCL in 48 months without interest as a part of such normative value is not in line with the MYT Regulations, 2024. Hence, the Commission has not considered such claims of loss of interest while arriving at the normative Interest on Working Capital.

8.20.8 The rate of IoWC has been considered as 10.45% for the 5th Control Period. Interest on Working Capital towards FGD is considered as claimed by MSPGCL provisionally.

Table 8.38: IoWC for the 5th Control Period (Rs. Crore)

Station/Unit	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
Bhusawal	23.75	20.84	25.04	22.23	28.13	23.74	29.46	25.28	30.81	26.91
Chandrapur	179.93	160.97	195.25	175.43	207.01	189.19	218.69	202.86	230.86	216.67
Khaperkheda	81.12	74.87	84.37	79.64	89.44	83.60	92.65	86.13	96.47	88.71
Koradi	21.37	22.19	22.10	22.44	23.41	23.06	25.46	23.70	26.40	24.28
Nashik	69.86	67.97	73.46	72.41	77.35	77.17	81.82	79.70	86.13	82.15
Uran	39.44	42.57	21.96	42.74	22.14	43.10	22.40	43.22	22.66	43.52
Paras Units 3 & 4	48.41	51.04	53.26	55.09	58.23	58.69	60.64	60.22	63.05	61.83
Parli Units 6 & 7	71.93	67.80	76.72	73.00	79.65	75.61	83.17	77.68	86.67	79.91
Khaperkheda Unit 5	48.19	49.70	50.08	50.63	51.83	50.69	56.55	52.96	58.24	55.03
Bhusawal Units 4 & 5	108.00	109.96	109.99	113.39	122.30	118.31	129.14	122.29	136.27	126.88
Koradi Units 8, 9 & 10	183.26	169.27	188.99	176.04	208.81	182.93	215.77	183.41	218.41	176.40
Chandrapur Units 8 & 9	99.53	101.36	103.35	101.44	122.63	100.66	115.91	93.33	120.30	89.23
Parli Unit 8	38.20	32.28	40.58	34.69	42.18	35.59	43.45	37.57	44.87	38.95
Hydro	15.95	14.25	16.59	14.58	17.07	14.92	17.30	15.00	17.63	15.17
Total	**1028.92**	**985.06**	**1061.74**	**1033.74**	**1150.17**	**1077.26**	**1192.41**	**1103.34**	**1238.78**	**1125.63**

8.21 RETURN ON EQUITY (ROE) & INCOME TAX

MSPGCL's submission

8.21.1 MSPGCL has computed RoE at a rate of 15.5% on the opening balance of the equity portion of the capitalised assets and 50% of the equity portion of the capitalised assets added during each year in accordance with Regulations 29 of the MYT Regulations, 2024. Additional RoE shall be claimed at the time of true-up.

8.21.2 MSPGCL submitted that no income tax liability has been considered for the 5th Control Period. Any tax liability actually paid shall be considered at the time of true-up.

Commission's Analysis

8.21.3 The Commission has considered the station wise closing equity approved in the provisional true-up of FY 2024-25 as the opening equity for FY 2025-26. The equity portion of the approved additional capitalisation for each year of the Control Period has been considered as the equity addition during the year.

8.21.4 The relevant extracts of the MYT Regulations are reproduced below:

> *"29.1 Return on Equity shall be allowed in two parts viz. Base Return on Equity, and Performance Linked Return on Equity linked with actual performance:*
>
> *Provided that, the Return on Equity allowed at the time of MYT Proceedings shall be inclusive of both Base Return on Equity and Performance Linked Return on Equity:*

8.21.5 Regulation 29.2 of the MYT Regulations, 2024 provides for approval of RoE inclusive of both base RoE and performance linked RoE at the time of MYT proceedings. Regulation 29.2 specifies the Base Rate of RoE of 14% and the performance linked RoE of 1.5%.

8.21.6 Regulation 34 of the MYT Regulation, 2024 specifies as under:

> *"34.1 The Income Tax for the Generating Company or ESSD or Licensee or MSLDC or STU for the regulated business shall be allowed on Return on Equity, including Performance Linked Return on Equity at the income tax rate applicable for the respective financial year, through the Tariff charged to the Beneficiary/ies, subject to the conditions stipulated in Regulations 34.2 to 34.5:*
>
> *Provided that, at the time Multi Year Tariff Projections, the Income tax rate shall be allowed as the latest available Income Tax Rate approved by the Commission, whereas, at the time of true-up the Income Tax rate shall be approved based on the actual Income Tax paid by the Generating Company or ESSD or Licensee or MSLDC or STU, subject to prudence check;*
>
> *"*

8.21.7 The Commission has considered Income Tax as Nil, the same as proposed by MSPGCL based on the actual income tax for FY 2023-24.

8.21.8 Accordingly, the RoE approved by the Commission for the 5th Control Period is given in Table below:

Table 8.39: RoE for 5th Control Period (Rs. Crore)

Station/Unit	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
Bhusawal	15.12	15.13	18.82	15.13	22.53	15.13	22.53	15.13	22.53	15.13
Chandrapur	178.47	183.22	196.90	198.64	220.93	218.00	243.89	235.70	262.51	249.90
Khaperkheda	191.99	185.93	198.50	192.12	204.42	198.04	211.60	205.22	218.27	211.89
Koradi	49.51	47.88	49.79	48.75	50.66	50.20	51.54	51.08	52.12	51.66
Nashik	39.96	39.78	43.95	40.20	51.40	40.37	58.90	41.05	62.70	41.73
Uran	52.65	49.70	53.76	50.82	55.60	52.65	58.06	55.11	60.72	57.77
Paras Units 3 & 4	153.58	153.40	165.89	163.39	178.51	173.70	180.73	175.92	182.63	177.82
Parli Units 6 & 7	154.00	153.56	159.29	158.42	161.60	160.73	164.86	163.99	168.69	167.82
Khaperkheda Unit 5	142.53	142.08	145.61	145.16	147.93	147.48	157.05	156.55	166.72	166.16
Bhusawal Units 4 & 5	209.77	208.46	213.89	212.58	216.62	215.31	224.03	222.72	235.81	234.50
Koradi Units 8, 9 & 10	496.70	492.91	501.94	498.14	509.26	505.46	522.60	518.80	541.93	538.13
Chandrapur Units 8 & 9	207.25	206.57	209.33	208.65	212.75	212.07	220.98	220.30	234.40	233.72
Parli Unit 8	68.35	67.91	71.33	70.43	72.78	71.88	75.11	74.22	77.14	76.24
Hydro	14.45	10.83	18.13	10.83	20.71	10.83	22.62	10.83	24.57	10.83
Total	**1974.32**	**1957.35**	**2047.13**	**2013.25**	**2125.70**	**2071.86**	**2214.50**	**2146.63**	**2310.74**	**2233.31**

8.22 NON TARIFF INCOME (NTI)

MSPGCL's submission

8.22.1 MSPGCL has considered the NTI of Rs. 58.55 Crore as per the actual NTI for FY 2023-24.

Commission's Analysis

8.22.2 The Commission has considered the NTI of Rs. 58.55 Crore as claimed by MSPGCL.

8.23 ANNUAL FIXED CHARGES (AFC)

Commission's Analysis and Ruling

8.23.1 Based on the above analysis, the AFC approved by the Commission for the 5th Control Period, that is fully recoverable at target Availability, is as shown in the Table below:

Table 8.40: AFC at target Availability for 5th Control Period (Rs. Crore)

Station/Unit	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
Bhusawal	211.27	193.79	232.57	199.78	330.53	207.15	340.36	214.79	351.50	222.80
Chandrapur	1493.74	1442.21	1654.08	1513.32	1843.88	1613.17	1995.17	1703.68	2039.54	1784.53
Khaperkheda	946.22	838.05	905.10	861.44	1024.66	894.92	1066.51	931.93	1099.28	967.27
Koradi	344.27	343.50	352.34	336.58	388.84	345.37	403.80	356.26	414.27	361.88
Nashik	519.28	515.15	555.34	532.11	605.17	551.00	656.64	570.08	692.96	589.68
Uran	253.28	233.67	247.51	241.57	256.58	252.58	267.64	265.61	277.06	280.03
Paras Units 3 & 4	540.32	550.50	660.74	585.32	778.50	630.23	789.09	640.54	798.74	650.13
Parli Units 6 & 7	634.67	580.38	654.72	616.36	672.46	631.38	692.28	650.28	710.66	671.28
Khaperkheda Unit 5	651.59	661.75	655.16	650.08	618.45	557.21	742.96	591.97	763.44	629.35
Bhusawal Units 4 & 5	1117.21	1132.23	926.12	931.25	1306.72	947.36	1364.16	982.42	1411.05	1034.23
Koradi Units 8, 9 & 10	2393.88	2409.05	2377.43	2381.05	2619.23	2370.02	2638.11	2376.35	2652.14	2006.82
Chandrapur Units 8 & 9	1241.88	1220.23	1237.80	1202.59	1254.13	1197.46	1261.22	1204.25	1283.62	1055.16
Parli Unit 8	447.95	425.00	455.57	437.64	456.55	438.41	460.20	443.45	461.48	398.34
Hydro	388.27	346.42	414.41	357.99	436.59	378.36	457.81	393.04	476.78	408.57
Total	**11183.83**	**10891.93**	**11328.90**	**10847.10**	**12592.29**	**11014.61**	**13135.94**	**11324.65**	**13432.50**	**11060.07**

8.24 AFC REDUCTION

Commission's Analysis and Ruling

8.24.1 As detailed in the preceding section, the Commission has reduced the AFC for the 5th Control Period as shown in the Table below:

Table 8.41: AFC reduction for FY 2025-26

Station/Unit	Target Availability	Projected Availability	Total AFC	Less: water charges	Total AFC minus water charges	AFC Reduction	Reduced AFC	Reduced AFC plus water charges
	%	%	Rs. Crore	Rs. Crore	Rs. Crore	Rs. Crore	Rs. Crore	Rs. Crore
Bhusawal	85.00%	65.13%	193.79	16.34	177.46	41.49	135.97	152.31
Chandrapur	80.00%	62.57%	1442.21	26.89	1415.32	308.31	1107.01	1133.90
Khaperkheda	85.00%	70.04%	838.05	62.24	775.81	136.57	639.24	701.48
Koradi	75.00%	75.00%	343.50	41.88	301.62	0.01	301.61	343.48
Nashik	85.00%	73.69%	515.15	46.17	468.98	62.39	406.59	452.76
Uran	85.00%	40.89%	233.67	1.46	232.21	0.00	232.21	233.67
Paras Units 3&4	85.00%	79.55%	550.50	12.50	538.00	34.49	503.51	516.01
Parli Units 6&7	85.00%	81.16%	580.38	37.99	542.38	24.52	517.86	555.85
Khaperkheda Unit 5	85.00%	85.00%	661.75	43.12	618.63	0.00	618.63	661.75
Bhusawal Units 4&5	85.00%	80.50%	1132.23	20.11	1112.12	58.82	1053.30	1073.41
Koradi Units 8-10	85.00%	72.89%	2409.05	99.06	2310.00	329.08	1980.92	2079.98
Chandrapur Units 8&9	85.00%	83.76%	1220.23	26.24	1194.00	17.42	1176.58	1202.81
Parli Unit 8	85.00%	70.18%	424.09	20.03	404.06	70.46	333.61	353.64

Station/Unit	Target Availability	Projected Availability	Total AFC	Less: water charges	Total AFC minus water charges	AFC Reduction	Reduced AFC	Reduced AFC plus water charges
	%	%	Rs. Crore	Rs. Crore	Rs. Crore	Rs. Crore	Rs. Crore	Rs. Crore
Total			**10545.52**	**454.03**	**10091.49**	**1083.72**	**9007.77**	**9461.80**

Table 8.42: AFC reduction for FY 2026-27

Station/Unit	Target Availability	Projected Availability	Total AFC	Less: water charges	Total AFC minus water charges	AFC Reduction	Reduced AFC	Reduced AFC plus water charges
	%	%	Rs. Crore	Rs. Crore	Rs. Crore	Rs. Crore	Rs. Crore	Rs. Crore
Bhusawal	85.00%	68.13%	199.78	16.34	183.45	36.41	147.03	163.37
Chandrapur	80.00%	65.57%	1513.32	26.89	1486.43	268.06	1218.37	1245.27
Khaperkheda	85.00%	73.04%	861.44	62.24	799.21	112.48	686.72	748.96
Koradi	75.00%	74.99%	336.58	41.88	294.70	0.02	294.68	336.56
Nashik	85.00%	76.69%	532.11	46.17	485.94	47.50	438.44	484.61
Uran	85.00%	40.89%	241.57	1.46	240.11	0.00	240.11	241.57
Paras Units 3&4	85.00%	82.55%	585.32	12.50	572.82	16.51	556.31	568.81
Parli Units 6&7	85.00%	84.16%	616.36	37.99	578.37	5.74	572.63	610.62
Khaperkheda Unit 5	85.00%	85.00%	650.08	43.12	606.96	0.02	606.93	650.06
Bhusawal Units 4&5	85.00%	83.50%	931.25	20.11	911.14	16.03	895.11	915.22
Koradi Units 8-10	85.00%	75.89%	2381.05	99.06	2282.00	244.55	2037.45	2136.50
Chandrapur Units 8&9	85.00%	85.00%	1202.59	26.24	1176.35	0.03	1176.33	1202.56
Parli Unit 8	85.00%	73.18%	437.64	20.03	417.61	58.08	359.53	379.56
Total			**10489.10**	**454.03**	**10035.08**	**805.43**	**9229.65**	**9683.68**

Table 8.43: AFC reduction for FY 2027-28

Station/Unit	Target Availability	Projected Availability	Total AFC	Less: water charges	Total AFC minus water charges	AFC Reduction	Reduced AFC	Reduced AFC plus water charges
	%	%	Rs. Crore	Rs. Crore	Rs. Crore	Rs. Crore	Rs. Crore	Rs. Crore
Bhusawal	85.00%	71.13%	207.15	16.34	190.81	31.14	159.67	176.01
Chandrapur	80.00%	68.57%	1613.17	26.89	1586.28	226.58	1359.70	1386.59
Khaperkheda	85.00%	75.04%	894.92	62.24	832.68	97.57	735.11	797.35
Koradi	75.00%	74.99%	345.37	41.88	303.49	0.02	303.47	345.35
Nashik	85.00%	79.69%	551.00	46.17	504.83	31.52	473.30	519.47
Uran	85.00%	41.00%	252.58	1.46	251.12	0.00	251.12	252.58
Paras Units 3&4	85.00%	85.00%	630.23	12.50	617.73	0.02	617.71	630.21
Parli Units 6&7	85.00%	85.00%	631.38	37.99	593.39	0.00	593.39	631.38
Khaperkheda Unit 5	85.00%	85.00%	557.21	43.12	514.09	0.02	514.06	557.19
Bhusawal Units 4&5	85.00%	85.00%	947.36	20.11	927.25	0.04	927.21	947.33
Koradi Units 8-10	85.00%	78.89%	2370.02	99.06	2270.97	163.21	2107.75	2206.81

Station/Unit	Target Availability	Projected Availability	Total AFC	Less: water charges	Total AFC minus water charges	AFC Reduction	Reduced AFC	Reduced AFC plus water charges
	%	%	Rs. Crore	Rs. Crore	Rs. Crore	Rs. Crore	Rs. Crore	Rs. Crore
Chandrapur Units 8&9	85.00%	85.00%	1197.46	26.24	1171.22	0.01	1171.22	1197.45
Parli Unit 8	85.00%	76.18%	438.41	20.03	418.38	43.42	374.96	394.99
Total			**10636.25**	**454.03**	**10182.22**	**593.55**	**9588.68**	**10042.70**

Table 8.44: AFC reduction for FY 2028-29

Station/Unit	Target Availability	Projected Availability	Total AFC	Less: water charges	Total AFC minus water charges	AFC Reduction	Reduced AFC	Reduced AFC plus water charges
	%	%	Rs. Crore	Rs. Crore	Rs. Crore	Rs. Crore	Rs. Crore	Rs. Crore
Bhusawal	85.00%	74.13%	214.79	16.34	198.45	25.38	173.07	189.41
Chandrapur	80.00%	71.57%	1703.68	26.89	1676.79	176.62	1500.17	1527.06
Khaperkheda	85.00%	75.04%	931.93	62.24	869.69	101.88	767.81	830.05
Koradi	75.00%	74.99%	356.26	41.88	314.38	0.02	314.36	356.24
Nashik	85.00%	80.01%	570.08	46.17	523.91	30.74	493.17	539.34
Uran	85.00%	40.89%	265.61	1.46	264.15	0.00	264.15	265.61
Paras Units 3&4	85.00%	85.00%	640.54	12.50	628.04	0.02	628.02	640.52
Parli Units 6&7	85.00%	85.00%	650.28	37.99	612.28	0.00	612.28	650.28
Khaperkheda Unit 5	85.00%	85.00%	591.97	43.12	548.85	0.02	548.83	591.95
Bhusawal Units 4&5	85.00%	85.00%	982.42	20.11	962.31	0.02	962.29	982.40
Koradi Units 8-10	85.00%	81.89%	2376.35	99.06	2277.29	83.29	2194.00	2293.05
Chandrapur Units 8&9	85.00%	85.00%	1204.25	26.24	1178.02	0.03	1177.98	1204.22
Parli Unit 8	85.00%	79.18%	443.45	20.03	423.43	29.00	394.43	414.46
Total			**10931.61**	**454.03**	**10477.58**	**447.03**	**10030.56**	**10484.58**

Table 8.45: AFC reduction for FY 2029-30

Station/Unit	Target Availability	Projected Availability	Total AFC	Less: water charges	Total AFC minus water charges	AFC Reduction	Reduced AFC	Reduced AFC plus water charges
	%	%	Rs. Crore	Rs. Crore	Rs. Crore	Rs. Crore	Rs. Crore	Rs. Crore
Bhusawal	85.00%	77.13%	222.80	16.34	206.46	19.12	187.34	203.68
Chandrapur	80.00%	74.57%	1784.53	26.89	1757.64	119.23	1638.41	1665.30
Khaperkheda	85.00%	75.04%	967.27	62.24	905.04	106.02	799.02	861.25
Koradi	75.00%	74.99%	361.88	41.88	320.00	0.02	319.98	361.86
Nashik	85.00%	80.01%	589.68	46.17	543.51	31.90	511.61	557.78
Uran	85.00%	40.89%	280.03	1.46	278.57	0.00	278.57	280.03
Paras Units 3&4	85.00%	85.00%	650.13	12.50	637.63	0.00	637.63	650.13
Parli Units 6&7	85.00%	85.00%	671.28	37.99	633.28	0.02	633.27	671.26
Khaperkheda Unit 5	85.00%	85.00%	629.35	43.12	586.23	0.02	586.20	629.33

Station/Unit	Target Availability	Projected Availability	Total AFC	Less: water charges	Total AFC minus water charges	AFC Reduction	Reduced AFC	Reduced AFC plus water charges
	%	%	Rs. Crore	Rs. Crore	Rs. Crore	Rs. Crore	Rs. Crore	Rs. Crore
Bhusawal Units 4&5	85.00%	85.00%	1034.23	20.11	1014.12	0.02	1014.10	1034.21
Koradi Units 8-10	85.00%	84.89%	2006.82	99.06	1907.76	2.45	1905.31	2004.37
Chandrapur Units 8&9	85.00%	85.00%	1055.16	26.24	1028.93	0.00	1028.93	1055.16
Parli Unit 8	85.00%	82.18%	398.34	20.03	378.31	12.56	365.75	385.78
Total			**10651.50**	**454.03**	**10197.48**	**291.35**	**9906.12**	**10360.15**

8.25 MYT FOR THERMAL GENERATING STATIONS

Commission's Analysis and Ruling

8.25.1 The tariff for thermal generating stations for the 5th Control Period is as shown in the Tables below:

Table 8.46: Tariff for thermal generating stations for the 5th Control Period

Station/Unit	FY 2025-26		FY 2026-27		FY 2027-28		FY 2028-29		FY 2029-30	
	AFC	ECR	AFC	ECR	AFC	ECR	AFC	ECR	AFC	ECR
	Rs. Crore	Rs./kWh	Rs. Crore	Rs./kWh	Rs. Crore	Rs./kWh	Rs. Crore	Rs./kWh	Rs. Crore	Rs./kWh
Bhusawal	152.31	5.174	163.37	5.329	176.01	5.489	189.41	5.654	203.68	5.824
Chandrapur	1133.90	4.467	1245.27	4.614	1386.59	4.769	1527.06	4.928	1665.30	5.076
Khaperkheda	701.48	3.728	748.96	3.840	797.35	3.955	830.05	4.074	861.25	4.196
Koradi	343.48	3.595	336.56	3.703	345.35	3.814	356.24	3.928	361.86	4.046
Nashik	452.76	5.243	484.61	5.401	519.47	5.563	539.34	5.729	557.78	5.901
Uran	233.67	5.232	241.57	5.232	252.58	5.232	265.61	5.232	280.03	5.232
Paras Units 3 & 4	516.01	4.026	568.81	4.202	630.21	4.328	640.52	4.458	650.13	4.592
Parli Units 6 & 7	555.85	5.369	610.62	5.530	631.38	5.696	650.28	5.867	671.26	6.043
Khaperkheda Unit 5	661.75	3.328	650.06	3.428	557.19	3.531	591.95	3.684	629.33	3.794
Bhusawal Units 4 & 5	1073.41	4.275	915.22	4.404	947.33	4.536	982.40	4.702	1034.21	4.843
Koradi Units 8, 9 & 10	2079.98	3.323	2136.50	3.378	2206.81	3.420	2293.05	3.296	2004.37	3.103
Chandrapur Units 8 & 9	1202.81	3.660	1202.56	3.617	1197.45	3.580	1204.22	3.210	1055.16	3.074
Parli Unit 8	354.38	5.236	379.56	5.393	394.99	5.375	414.46	5.543	385.78	5.716
Total	**9461.80**		**9683.68**		**10042.70**		**10484.58**		**10360.15**	

8.26 HYDRO LEASE RENTAL

MSPGCL's submission

8.26.1 MSPGCL has claimed the lease rent for hydro Stations of Rs. 515.41 Crore, Rs. 520.70 Crore, Rs. 520.05 Crore, Rs. 499.20 Crore and Rs. 489.62 Crore for FY 2025-26 to FY

2029-30 respectively.

Commission's Analysis and Ruling

8.26.2 The Commission has approved the lease rent for hydro Stations the same as claimed by MSPGCL.

8.27 TARIFF FOR HYDRO STATIONS

Commission's Analysis and Ruling

8.27.1 The Commission, in its MYT Order for the 4th Control Period from FY 2020-21 to FY 2024-25 had approved the recovery mechanism of hydro stations with installed capacity above 25 MW, which are pure power projects (Koyna, Bhira TR and Tillari). In line with that approach adopted for the 4th Control Period, the Commission has now approved the AFC for these hydro Stations considering the proportion of AFC as submitted by MSPGCL for each of those Stations out of the total AFC for all hydro Stations in accordance with the MYT Regulations, 2024.

8.27.2 The performance parameters approved by the Commission for Hydro Stations which are purely power projects are shown in the Table below:

Table 8.47: Norms for hydro stations

Station	Capacity (MW)	NAPAF (%)	Design Energy (MU)	AEC (%)
Koyna	1956	89.65%	3158	1.13%
Bhira TR	80	90.00%	70	0.70%
Tillari	60	90.00%	131	1.20%
SHP	489	-	1077	1.00%

8.27.3 The AFC for hydro approved by the Commission is as shown in the Table below:

Table 8.48: AFC for hydro stations for the 5th Control Period (Rs. Crore)

Particulars	Units	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
AFC Approved*		931.70	949.55	972.51	966.47	972.56
AFC for Hydro Stations with capacity more than 25 MW						
Koyna	Rs. Crore	476.81	479.28	482.94	481.72	481.73
Bhira TR	Rs. Crore	15.02	15.18	15.54	15.99	16.32
Tillari	Rs. Crore	26.27	26.62	27.34	27.94	28.65
SHP	Rs. Crore	413.61	428.47	446.70	440.81	445.86

**Includes AFC, Lease Rental, Special Allowance and Hydro Colony Expenses*

8.27.4 The Commission approves the recovery of AFC of Koyna, Bhira TR and Tillari through

Capacity Charge and ECR as shown in the Table below:

Table 8.49: Capacity Charge and ECR for Koyna, Bhira TR and Tillari for the 5th Control Period

Particulars	Units	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
AFC for Hydro Stations with capacity more than 25 MW						
Koyna	Rs. Crore	476.81	479.28	482.94	481.72	481.73
Bhira TR	Rs. Crore	15.02	15.18	15.54	15.99	16.32
Tillari	Rs. Crore	26.27	26.62	27.34	27.94	28.65
Design Energy						
Koyna	MU	3158	3158	3158	3158	3158
Bhira TR	MU	70	70	70	70	70
Tillari	MU	106	106	106	106	106
Auxiliary Energy Consumption						
Koyna	%	1.13%	1.13%	1.13%	1.13%	1.13%
Bhira TR	%	0.70%	0.70%	0.70%	0.70%	0.70%
Tillari	%	1.20%	1.20%	1.20%	1.20%	1.20%
Capacity Charge						
Koyna	Rs. Crore	238.40	239.64	241.47	240.86	240.86
Bhira TR	Rs. Crore	7.51	7.59	7.77	8.00	8.16
Tillari	Rs. Crore	13.13	13.31	13.67	13.97	14.33
Energy Charge Rate						
Koyna	Rs./kWh	0.76	0.77	0.77	0.77	0.77
Bhira TR	Rs./kWh	1.08	1.09	1.12	1.15	1.17
Tillari	Rs./kWh	1.25	1.27	1.30	1.33	1.37

8.27.5 The AFC for Hydro Stations other than Koyna, Bhira TR and Tillari approved by the Commission for 5th Control Period are as shown in the Table below. The Commission approves the of AFC recovery of other hydro stations approved for the year in twelve equal monthly instalments.

Table 8.50: Tariff for Other Hydro Stations for the 5th Control Period

Particulars	Units	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
AFC for hydro station other than Koyna, Bhira TR and Tillari approved by the Commission	Rs. Crore	413.61	428.47	446.70	440.81	445.86

9 PROVISIONAL TARIFF OF BHUSAWAL UNIT 6

9.1 BACKGROUND

9.1.1 The Commission vide its Order in Case No. 227 of 2022 dated 31 March, 2023 directed the MSPGCL to file a separate Petition for approval of provisional tariff of Bhusawal Unit 6 after incurring at least 75% of the estimated capital cost and in compliance to the regulatory provisions of the MYT Regulations, 2019. MSPGCL filed a Petition (Case No, 236 of 2023) for determination and approval of provisional tariff for Bhusawal Unit 6 (1 x 660 MW) for FY 2023-24 and FY 2024-25 on 08 December, 2023.

9.1.2 The Commission approved the Provisional Tariff for Bhusawal Unit 6 for FY 2024-25 vide its Order dated 27 December, 2024 in Case No. 236 of 2020 as provided below:

Table 9.1: Provisional Tariff approved by the Commission

Particulars	FY 2024-25		
	Original Petition	MSPGCL Revised (for 60 days)	Approved (for 60 days)
Net Generation (MU)	4914.36	751.70	761.39
Annual Fixed Charges (Rs. Crore)	1183.13	182.29	155.49
Energy Charge Rate (Rs./kWh)	3.604	3.503	3.458

9.1.3 The Commission, in the provisional Tariff Order directed MSPGCL as below:

> *"2.5.2 The Commission will carry out the detailed scrutiny of final Capital Cost while approving the Final Capital Cost of the Project after the COD of the Project. The Commission directs MSPGCL to submit the separate Petition for final approval of actual Capital Cost once the audited Capital Cost of the Project is available as on COD of the Unit."*

9.1.4 In line with the above direction, MSPGCL is directed to submit the Petition for Capital Cost and Tariff from COD till FY 2029-30 after the actual COD of the Station.

9.2 PROVISIONAL TARIFF OF BHUSAWAL UNIT 6 FOR 5TH CONTROL PERIOD

Commission's Analysis and Ruling

9.2.1 The Commission has considered the provisional Capital Cost of Rs. 4973.39 Crore approved by the Commission in its Order dated 27 December, 2024 in Case No. 236 of 2023. As per the relevant Regulations of MYT Regulations, 2024, the performance parameters considered by the Commission for the 5th Control Period are as under:

Table 9.2: Operational Parameters approved by the Commission for the 5th Control Period

Particulars	Units	Approved
Target Availability for full recovery of AFC	%	85%
Target PLF for Incentive	%	85%
Auxiliary Consumption	%	5.75%
Gross Station Heat Rate	kcal/kWh	2139.05
Secondary fuel oil consumption	ml/kWh	0.50
Transit Loss	%	0.80%

9.2.2 Based on the above details the provisional Tariff for Bhusawal Unit 6 is computed as below:

9.3 O&M EXPENSES

9.3.1 The O&M Expenses are allowed as per the Regulation 48.2 of the MYT Regulations, 2024 for the 5th Control Period. The O&M Expenses so arrived is summarised below:

Table 9.3: O&M Expenses approved by the Commission for the 5th Control Period

Particulars	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
O&M Expense Norms	21.43	22.36	23.33	24.34	25.3
MW Installed	660	660	660	660	660
O&M Expenses	**141.44**	**147.58**	**153.98**	**160.64**	**166.98**

9.4 DEPRECIATION

9.4.1 The Depreciation computed based on the Regulation 28 of the MYT Regulations, 2024 is for the 5th Control Period is summarised below:

Table 9.4: Depreciation approved by the Commission for the 5th Control Period

Particulars	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
Capital Cost	4973.39	4973.39	4973.39	4973.39	4973.39
WAROD (%)	5.28%	5.28%	5.28%	5.28%	5.28%
Depreciation	**262.60**	**262.60**	**262.60**	**262.60**	**262.60**

9.5 INTEREST ON LOAN

9.5.1 The Commission has considered the opening loan for FY 2025-26 as the closing loan for FY 2024-25 and weighted average rate of interest (WAROI) as approved in the Provisional Tariff Order. The repayment is considered as the depreciation for the year as per Regulation 30 of the MYT Regulations, 2024. Hence, interest on loan approved by the Commission is summarised below:

Table 9.5: Interest on Loan approved by the Commission for the 5th Control Period

Particulars	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
Opening Loan	3935.55	3672.95	3410.36	3147.76	2885.17
Loan Addition	0.00	0.00	0.00	0.00	0.00
Repayment	262.60	262.60	262.60	262.60	262.60
Closing Loan	3672.95	3410.36	3147.76	2885.17	2622.57
Average Loan	3804.25	3541.65	3279.06	3016.46	2753.87
Interest Rate	9.20%	9.20%	9.20%	9.20%	9.20%
Interest on Loan	**350.11**	**325.95**	**301.78**	**277.61**	**253.45**

9.6 RETURN ON EQUITY

9.6.1 The Commission has considered the opening equity for FY 2025-26 as the closing equity for FY 2024-25 as approved in the Provisional Tariff Order. The RoE is approved at 15.50% as per Regulation 29 of the MYT Regulations, 2024. Hence, return on equity approved by the Commission is summarised below:

Table 9.6: Return on Equity approved by the Commission for the 5th Control Period

Particulars	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
Opening Equity	994.68	994.68	994.68	994.68	994.68
Equity Addition	0.00	0.00	0.00	0.00	0.00
Closing Equity	994.68	994.68	994.68	994.68	994.68
Average Equity	994.68	994.68	994.68	994.68	994.68
Rate of RoE	15.50%	15.50%	15.50%	15.50%	15.50%
Return on Equity	**154.18**	**154.18**	**154.18**	**154.18**	**154.18**

9.7 INTEREST ON WORKING CAPITAL

9.7.1 The Commission has calculated the Interest on Working Capital considering the fuel cost and GCV as approved by the Commission in the Provisional Tariff Order. Further, the Commission has considered an escalation of 3% on the fuel cost on year-on-year basis. The interest rate is arrived at 10.45% for the Control period as per the Regulation 32 of the MYT Regulations, 2024. The summary of the Interest on Working Capital approved is summarised below:

Table 9.7: Interest on Working Capital approved by the Commission for the 5th Control Period

Particulars	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
Cost of Coal Stock	817.29	841.81	869.44	893.08	919.87
Cost of Coal Consumed	817.29	841.81	869.44	893.08	919.87
Cost of Fuel Oil	14.91	15.36	15.86	16.29	16.78

Particulars	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
O&M Expenses	70.72	73.79	76.99	80.32	83.49
Maintenance Spares	49.73	49.73	49.73	49.73	49.73
Receivables	2232.01	2262.08	2298.02	2326.94	2361.30
Total Working Capital	**4001.96**	**4084.58**	**4179.48**	**4259.44**	**4351.04**
Interest Rate	10.45%	10.45%	10.45%	10.45%	10.45%
Interest on Working Capital	**418.20**	**426.84**	**436.76**	**445.11**	**454.68**

9.7.2 The Commission has not considered the impact of FGD presently in either the AFC or the Energy Charges as the same shall be dealt with in Tariff to be determined after the COD of the Unit.

9.7.3 Based on the above discussions, the Energy Charges arrived for the 5th Control Period is as summarised below:

Table 9.8: ECR approved by the Commission for the 5th Control Period

Particulars	Units	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
Installed Capacity	MW	660	660	660	660	660
No. of days of operation	Days	365	365	366	365	365
PLF	%	85%	85%	85%	85%	85%
Gross Generation	MU	4914.36	4914.36	4927.82	4914.36	4914.36
Auxiliary Consumption	%	5.75%	5.75%	5.75%	5.75%	5.75%
Net Generation	MU	4631.78	4631.78	4644.47	4631.78	4631.78
Landed Price of Coal	Rs./kg	4.98	5.13	5.28	5.44	5.61
Gross Station Heat Rate	kcal/kWh	2139.05	2139.05	2139.05	2139.05	2139.05
Price of Secondary fuel oil	Rs./ml	0.06	0.06	0.06	0.07	0.07
Normative Secondary fuel oil Consumption	ml/kWh	0.50	0.50	0.50	0.50	0.50
Gross Calorific Value of Secondary fuel oil	kcal/ml	10	10	10	10	10
Heat Contribution from Secondary fuel oil	kcal/kWh	5	5	5	5	5
Heat Contribution from Coal	kcal/kWh	2134	2134	2134	2134	2134
Gross Calorific Value of Coal	kcal/kg	3221.55	3221.55	3221.55	3221.55	3221.55
Specific coal consumption	kg/kWh	0.66	0.66	0.66	0.66	0.66
Transit Loss	%	0.80%	0.80%	0.80%	0.80%	0.80%
Specific coal consumption (incl. Transit Loss)	kg/kWh	0.67	0.67	0.67	0.67	0.67
Rate of Energy Charge	**Rs./kWh**	**3.56**	**3.67**	**3.78**	**3.89**	**4.01**

9.7.4 Hence, the provisional Tariff approved by the Commission for Bhusawal Unit 6 for the 5th Control Period is summarised as under:

Table 9.9: Provisional Tariff approved by the Commission for the 5th Control Period

Particulars	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
Net Generation (MU)	4631.78	4631.78	4644.47	4631.78	4631.78
Annual Fixed Charges for recovery at normative availability (Rs. Crore)	1326.53	1317.13	1309.28	1300.14	1291.88
Energy Charge Rate (Rs./kWh)	3.561	3.668	3.778	3.891	4.008

10 SUMMARY OF APPROVED TARIFF

10.1 TARIFF FOR THERMAL GENERATING STATIONS

10.1.1 The approved tariff for thermal generating stations of MSPGCL for the 5th Control Period is as shown in the Table below:

Table 10.1: Approved tariff for thermal generating stations

Station/Unit	FY 2025-26		FY 2026-27		FY 2027-28		FY 2028-29		FY 2029-30	
	AFC	ECR	AFC	ECR	AFC	ECR	AFC	ECR	AFC	ECR
	Rs. Crore	Rs./kWh	Rs. Crore	Rs./kWh	Rs. Crore	Rs./kWh	Rs. Crore	Rs./kWh	Rs. Crore	Rs./kWh
Bhusawal	152.31	5.174	163.37	5.329	176.01	5.489	189.41	5.654	203.68	5.824
Chandrapur	1133.90	4.467	1245.27	4.614	1386.59	4.769	1527.06	4.928	1665.30	5.076
Khaperkheda	701.48	3.728	748.96	3.840	797.35	3.955	830.05	4.074	861.25	4.196
Koradi	343.48	3.595	336.56	3.703	345.35	3.814	356.24	3.928	361.86	4.046
Nashik	452.76	5.243	484.61	5.401	519.47	5.563	539.34	5.729	557.78	5.901
Uran	233.67	5.232	241.57	5.232	252.58	5.232	265.61	5.232	280.03	5.232
Paras Units 3 & 4	516.01	4.026	568.81	4.202	630.21	4.328	640.52	4.458	650.13	4.592
Parli Units 6 & 7	555.85	5.369	610.62	5.530	631.38	5.696	650.28	5.867	671.26	6.043
Khaperkheda Unit 5	661.75	3.328	650.06	3.428	557.19	3.531	591.95	3.684	629.33	3.794
Bhusawal Units 4 & 5	1073.41	4.275	915.22	4.404	947.33	4.536	982.40	4.702	1034.21	4.843
Koradi Units 8, 9 & 10	2079.98	3.323	2136.50	3.378	2206.81	3.420	2293.05	3.296	2004.37	3.103
Chandrapur Units 8 & 9	1202.81	3.660	1202.56	3.617	1197.45	3.580	1204.22	3.210	1055.16	3.074
Parli Unit 8	354.38	5.236	379.56	5.393	394.99	5.375	414.46	5.543	385.78	5.716
Total	**9461.80**		**9683.68**		**10042.70**		**10484.58**		**10360.15**	

10.1.2 As regards the recovery of Annual Fixed Cost, Regulation 51 (A) of MYT Regulations, 2024, stipulates as follows:

"51.1 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 …"

10.1.3 The billing of Capacity Charges for thermal stations shall be done as per Regulation 51 (A) of the MYT Regulations, 2024, wherein Capacity Charges shall be recovered under two segments of year viz. High demand season and Low Demand Season as declared by SLDC, 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 SLDC.

10.1.4 As per Regulation 51.11 of the MYT Regulations, 2024, the thermal generating stations of MSPGCL 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 peak and off-peak hours, on a cumulative basis within each Season (High Demand Season or Low Demand Season).

10.2 TARIFF FOR HYDRO STATIONS

Commission's Analysis and Ruling

10.2.1 The approved tariff for hydro stations of MSPGCL for the 5th Control Period is as shown in the Table below:

Table 10.2: Capacity Charge and ECR for Koyna, Bhira TR and Tillari

Particulars	Units	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
Capacity Charge						
Koyna	Rs. Crore	238.40	239.64	241.47	240.86	240.86
Bhira TR	Rs. Crore	7.51	7.59	7.77	8.00	8.16
Tillari	Rs. Crore	13.13	13.31	13.67	13.97	14.33
Energy Charge Rate						
Koyna	Rs./kWh	0.76	0.77	0.77	0.77	0.77
Bhira TR	Rs./kWh	1.08	1.09	1.12	1.15	1.17
Tillari	Rs./kWh	1.25	1.27	1.30	1.33	1.37

Table 10.3: AFC for Other Hydro Stations

Particulars	Units	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
Capacity Charge	Rs. Crore	413.61	428.47	446.70	440.81	445.86

10.2.2 **The Commission directs MSPGCL that Billing shall be done for Koyna, Bhira TR and Tillari separately, clearly indicating the capacity charges, energy charges and incentive, if any.**

10.2.3 The AFC approved for other hydro stations shall be recoverable in twelve equal monthly instalments.

11 COMMISSION'S DIRECTIVES

11.1 DIRECTIVES IN ORDER DATED 30 MARCH, 2020 IN CASE NO. 296 OF 2019

Cost Benefit Analysis of Coal Beneficiation

11.1.1 The Commission directed MSPGCL to carry out the proper cost benefit analysis of coal beneficiation after receiving the tenders and before going ahead for placing the contracts for coal beneficiations. MSPGCL should try to ensure that the effective landed price of washed coal at thermal stations in terms of Rs./kcal is lower than the landed price of coal at thermal stations in terms of Rs./kcal. MSPGCL submitted that the cost benefit analysis has been submitted in the FUP. The Commission once again directs MSPGCL to comply with this direction.

11.2 DIRECTIVES IN ORDER DATED 31 MARCH, 2023 IN CASE NO. 227 OF 2022

Additional capitalisation of Bhusawal Units 4&5 for FY 2022-23

11.2.1 The Commission directed MSPGCL to include the said amount in its claim of final true-up for FY 2022-23 along with all the supporting documents for prudence check by the Commission.

11.2.2 In compliance to the directive, MSPGCL submitted the details in its final true-up claim for FY 2022-23, along with all supporting documents for the Commission's review.

Reimbursement of expenses from GoM

11.2.3 The Commission directed MSPGCL to pass through the expenses reimbursed by GoM to MSEDCL and submit the status of the same in the MYT Petition for the next Control Period.

11.2.4 In compliance to the directive, MSPGCL submitted that no reimbursement of expenses has been received from MEDA or GoM under the Mukhyamantri Saur Krushi Vahini Yojana, except for evacuation facility costs, as per GRs dated 14.06.2017 and 17.03.2018.

Generation loss due to O&M factors

11.2.5 The Commission directed MSPGCL to submit a plan within three months to ensure the improvement in its O&M practices for reduction in generation loss due to O&M factors.

11.2.6 In compliance to the directive, MSPGCL submitted that it has taken adequate caution in its submissions and implemented an action plan to reduce generation loss by improving O&M practices since FY 2023-24, resulting in notable improvements in generation performance and key plant parameters.

Operation of Uran Power Station in Combined Cycle

11.2.7 The Commission directed MSPGCL to optimally utilise the gas available and operate the Uran Power Station in combined cycle mode to the maximum extent possible. The Commission also directs MSPGCL to submit the complete details and justification in case Uran Power Station is operated in open cycle mode for a certain period of the year at the time of true-up.

11.2.8 In compliance to the directive, MSPGCL submitted that it has been optimizing gas utilization at Uran Power Station and operating in combined cycle mode to the maximum extent possible. Due to the failure of the A0 steam turbine in 2022, GT-5 and GT-6 are currently available only in open cycle mode, while B0 block (GT-7, GT-8, and B0 steam turbine) is operational in combined cycle mode. Open cycle operations are undertaken only when unavoidable, primarily due to limited gas availability. To restore A0 block and further minimize open cycle operations, MSPGCL has undertaken an emergency Capex scheme for A0 restoration. The work is in progress, with completion expected by November 2024, subject to unforeseen delays.

Detailed Action Plan towards Coal Shortage

11.2.9 MSPGCL shall submit its detailed action plan for long term solution based on scientific study on the alternative of procurement of coal to the financial impact of the same. coal short while filing the MYT petition for the next control period.

11.2.10 In compliance to the directive, MSPGCL submitted that it has formulated a long-term strategy for alternative coal procurement, considering commercial mines, rationalization of coal linkages, e-auctions, and captive mining. Additionally, technological upgrades at thermal power plants are planned to enhance efficiency and reduce fuel costs, ensuring optimized operational performance.

Compensation under the Grid Code

11.2.11 The Commission directed MSPGCL to take recourse to the provisions of the MERC (State Grid Code) Regulations, 2020 and the claim compensation accordingly from the Buyer.

11.2.12 In compliance to the directive, MSPGCL submitted that it has been raising compensation bills on a monthly basis since FY 2022-23, in accordance with the MERC (State Grid Code) Regulations, 2020.

Coal beneficiation

11.2.13 The Commission directed MSPGCL to carry out the proper cost benefit analysis of coal beneficiation for each year from FY 2022-23 onwards and submit the same in the true-up of the respective years. MSPGCL should try to ensure that the effective landed price of washed coal at thermal station in terms of Rs./kcal is lower than the landed price of normal mined coal at thermal station in terms of Rs./kcal.

11.2.14 In response to the above direction, MSPGCL submitted that it has carried out a cost-benefit analysis of coal beneficiation for each year and submitted the details. Agreements have been executed for the procurement and supply of beneficiated coal.

Co-firing of biomass pellets

11.2.15 The Commission directed MSPGCL to comply with the notification of GoI regarding the co-firing of biomass pellets in its coal-based power plants.

11.2.16 In compliance with the directive, MSPGCL submitted that it has initiated the procurement process for biomass pellets through multiple tenders. While tenders for Bhusawal TPS and Koradi TPS are under revision due to inadequate responses, the tender for Khaperkheda TPS has been finalized, with supply expected from October 2024. Further tenders for other power stations will be processed sequentially.

Grade slippage

11.2.17 The Commission directed MSPGCL to take all the necessary and adequate steps to minimize the grade slippage and submit the efforts taken by MSPGCL in the true-up of respective years for considering the relaxed norms approved in this Order on its merit.

11.2.18 In compliance to this directive MSPGCL submitted as under:

- MSPGCL has deployed engineers, chemists, and technicians at WCL, SECL, MCL, and SCCL sidings to monitor coal quality, quantity, and third-party sampling activities.
- Experienced retired employees have been placed at loading sites to supervise coal preparation, witness sampling, and ensure better quality control.
- MSPGCL has appointed an SMC agency at WCL sidings to oversee third-party sampling, supervise raw coal dispatch, and ensure round-the-clock coal quality monitoring.
- MSPGCL is working to minimize GCV differences between loading and unloading points as per Hon'ble Commission's directives. Regular reviews and communications with TPSA and SMC agencies are conducted to maintain quality standards.
- MSPGCL has set specific GCV variation limits, ensuring that the difference between loading and unloading end does not exceed 650 kcal/kg, and within WCL loading end, it remains within 300 kcal/kg.
- MSPGCL has raised concerns regarding FSA compliance, coal quality, and

sampling issues through official letters and meetings with coal companies, CIL, MoC, and MoP.

- Factors like topping up wagons with high-grade coal, limited sampling coverage (10% of wagons instead of 25%), manual sampling from the top layer, and lack of true randomness in road and conveyor belt sampling contribute to GCV variations.
- MSPGCL has proposed using Auger machines for sampling, increasing wagon sampling to 25%, and ensuring truly randomized sampling in road-based and conveyor belt coal supply.
- MSPGCL has escalated the issue to MoC, CIL, and senior government officials, including letters from Maharashtra's Hon'ble Deputy CM and MSPGCL's CMD to the Union Minister of Coal.
- Since 2016, MSPGCL engaged CSIR-CIMFR for third-party coal sampling, but persistent GCV differences led to a shift in responsibility to a new third-party agency under PFC in November 2023.
- MSPGCL's measures have resulted in a reduction of the GCV gap, from 897 kcal/kg in FY 2022-23 to 839 kcal/kg in FY 2023-24.
- MSPGCL continues to implement measures to further reduce grade slippage and improve coal quality, with regular submissions to the Hon'ble Commission in the true-up process.

Incidental expenses towards fly ash utilisation

11.2.19 The Commission directed MSPGCL to submit its claim of expenses in this regard duly submitting the compliance to the notifications of GoI along with justification under the relevant provisions of the Regulations in the true-up of the respective years for prudence check by the Commission.

11.2.20 In compliance to the directive, MSPGCL provided the details of ash generation and utilization for FY 2022-23 and FY 2023-24, with utilization percentages varying across power stations. For the MYT period (FY 2025-26 to FY 2029-30), MSPGCL has projected an expenditure of Rs. 3324.39 Crore to enhance ash utilization, including dry ash utilization, pond ash utilization, and infrastructure development.

Provisional tariff of Bhusawal Unit 6

11.2.21 The Commission directed MSPGCL to file a separate Petition for approval of provisional tariff of Bhusawal Unit 6 after incurring atleast 75% of the estimated capital cost and in compliance to the provisions of the Regulations.

11.2.22 In compliance with the directive, MSPGCL submitted that it has filed a separate petition (Case No. 236 of 2023) for the approval of the tariff for Bhusawal Unit 6.

11.3 DIRECTIVES ISSUED IN THIS ORDER

Utilisation of Imported Coal (Para 2.3.14)

11.3.1 The Commission directs MPSGCL to utilise the imported coal only after exploring all other options of domestic coal sources and to comply with the directives of MoP.

Generation loss due to O&M factors (Para 4.3.13)

11.3.2 The Commission directs MSPGCL to submit a plan within three months to ensure the improvement in its O&M practices for reduction in generation loss due to O&M factors.

Operation of Uran Power Station in Combined Cycle (Para 4.7.4)

11.3.3 The Commission directs MSPGCL to optimally utilise the gas available and operate the Uran Power Station in combined cycle mode to the maximum extent possible. The Commission also directs MSPGCL to submit the complete details and justification in case Uran Power Station is operated in open cycle mode for a certain period of the year at the time of true-up.

Coal Quality Monitoring and Compliance (Para 4.10.13)

11.3.4 The Commission directs MSPGCL to submit a quarterly report on the quality of coal supplied by the coal supplier, the details of coal grade slippage and the penalty levied as per the FSA.

Penalty in Coal Washing Contracts (Para 4.11.13)

11.3.5 The Commission directs the MSPGCL to finalise the penalty amount in all the coal washing contracts for FY 2022-23 and FY 2023-24 and submit the following information within 6 months from the date of this Order:

- Complete computations of Penalty amount for each washing contract
- Penalties levied in each washing contract
- Reasons for variation in Penalty levied and penalty computed as per provisions of the Contract, if any
- Amount of penalty already considered in True up claimed in this Petition and additional Penalty amount to be passed on to consumers
- Comparison of Effective Price of Landed Cost of Washed coal in Rs./kcal with landed cost of raw coal in Rs./kcal.

Penalty in Coal Washing Contracts (Para 4.11.14)

11.3.6 The Commission directs MSPGCL to pass on the penalty levied in coal washing contracts to MSEDCL through monthly Fuel Cost Adjustment

Submission of Actual Cost and Overruns (Para 4.13.18 and 5.13.3)

11.3.7 The Commission directs MSPGCL to submit the complete details of actual cost with cost and time over run along with supporting documents after completion of the Scheme/ Project.

Power Procurement Details and Reconciliation (Para 5.12.20)

11.3.8 The Commission directs MSPGCL to provide the complete details of such power procured along with the relevant documentary evidence and the reconciliation with its audited accounts during the final true-up for FY 2024-25.

Capitalization and Project Implementation Delay (Para 5.13.4)

11.3.9 The Commission directs MSPGCL to submit the complete details of such capitalisation along with proper justification, documentary evidence and detailed analysis of delay in implementation of the project at the time of final truing up for FY 2024-25.

Submission of Employee Expenses for the MYT Period (5.16.14 & Para 8.16.30)

11.3.10 The Commission herby directs MSPGCL to provide a justification for increase in employee expenses including the impact of wage revision and compare the same vis-à-vis the pay revisions scale applicable for the State Government Departments. The same shall be considered at the time of MYT proceedings for undertaking prudence check of O&M expenses as part of the truing up process for relevant years.

11.3.11 The Commission directs MSPGCL to submit details of the employee expenses at the time of truing up of projection years. The details shall comprise employee category, number of employees in that category, applicable pay band as per the provision of the 7th Pay Commission approved by the Government of Maharashtra and actual salary of the respective employee category in tabular format.

Wage Revision Claim (Para 5.16.19)

11.3.12 The Commission directs MSPGCL to submit the details of actual wage revision along with proper justification and required documentary evidence during the final true-up for FY 2024-25.

Cost-Benefit Analysis of Coal Beneficiation (Para 7.10.6)

11.3.13 The Commission directs MSPGCL to carry out the proper cost benefit analysis of coal beneficiation for each year from FY 2025-26 onwards and submit the same in the true-up of the respective years. MSPGCL should ensure that the effective landed price of washed coal at thermal station in terms of Rs./kcal is lower than the landed price of normal mined coal at thermal station in terms of Rs./kcal. In case at the time of truing up it is observed that the landed cost of washed coal in Rs./kcal is higher than the landed price of normal mined coal in terms of Rs./kcal, the Commission will limit the landed price of washed coal in Rs/kcal equivalent to landed price of normal mined coal. Any loss on this account will have to be borne by MSPGCL itself and shall not be passed on to beneficiaries.

Petition for Input Cost Determination for GP II Coal (7.10.25 & 8.11.6)

11.3.14 The Commission directs MSPGCL to file a separate Petition for determination of input price for Gare Palma II coal as per the provisions of the MYT Regulations, 2024.

Submission of FGD Completion Cost Details (Para 8.13.15)

11.3.15 The Commission directs MSPGCL to submit the complete details of the actual cost towards installation of FGD with details of cost and time over run along with supporting documents within 3 months from the date of capitalisation of FGD.

Separate Petition for R&M of Old Units (Para 8.13.17)

11.3.16 The Commission directs MSPGCL to submit a separate Petition for R&M proposed for the Old units in line with the MYT Regulations, 2024 with the complete details, justification, DPR, cost benefit analysis and the impact of the replacement of existing assets.

Separate Petition for Expenditure on Flexible Operation (Para 8.13.20)

11.3.17 The Commission has not considered the capital expenditure forwards flexible operation at this stage and directs MSPGCL to submit a separate Petition for approval of Expenditure towards flexible operation with complete details.

Submission of Actual Wage Revision Details with Justification (Para 8.16.39)

11.3.18 The Commission directs MSPGCL to submit the details of actual wage revision during the Control Period FY 2025-26 to FY 2029-30 along with proper justification and required documentary evidence at the time of true-up and the same will be considered by the Commission subject to prudence check.

Separate Petition Submission with Justification and Expense Breakdown for Ash Transportation (Para 8.16.41)

11.3.19 The Commission directs MSPGCL to submit a separate Petition on this issue along with proper justification and break up of Capital and Revenue expenditure for the approval of the Commission. The Commission will allow the impact of these expenses at the time of true up subject to prudence check.

Separate Billing for Koyna, Bhira TR, and Tillari (Para 10.2.2)

11.3.20 The Commission directs MSPGCL that Billing shall be done for Koyna, Bhira TR and Tillari separately, clearly indicating the capacity charges, energy charges and incentive, if any.

12 APPLICABILITY OF THE ORDER

12.1.1 This Order shall come into effect from 1 April, 2025.

12.1.2 The Petition of Maharashtra State Power Generation Company Limited in Case No. 187 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

Annexure-I: List of Persons who attended the Technical Validation Session held on 28 November, 2024

Sr. No.	Name	Company / Institution
1.	Shri. Sanjay Marudkar	MSPGCL
2.	Shri. Balasaheb Thite	MSPGCL
3.	Shri. Abhay Harne	MSPGCL
4.	Shri. Rajesh Patil	MSPGCL
5.	Shri. Prasanna Kotecha	MSPGCL
6.	Shri. Sahebrao A. Nikalje	MSPGCL
7.	Shri. Anil A. Bapat	MSPGCL
8.	Shri. N V Rade	MSPGCL
9.	Shri. R R Kulkarni	MSPGCL
10.	Shri. Pankaj Sharma	MSPGCL
11.	Shri. Sushant Patil	MSPGCL
12.	Shri. Sunil Sonpethkar	MSPGCL
13.	Shri. Prashant Rangdal	MSPGCL
14.	Shri. Yogesh Mohart	MSPGCL
15.	Shri. Chetan S Patil	MSPGCL
16.	Shri. Dinesh V Suryawanshi	MSPGCL
17.	Ms. Gitanjali S Zirmute	MSPGCL
18.	Shri. K Y Pimple	MSPGCL
19.	Shri. Sushant Patil	MSPGCL
20.	Shri. J R Vasave	MSPGCL
21.	Shri. Ramandeep Singh	Consultant for MSPGCL
22.	Shri. Anil Patkare	Consultant for MSPGCL
23.	Shri. Suresh Gehani	Consultant for MERC
24.	Shri. Ashwin G	Consultant for MERC

Annexure-II: List of Persons who attended the e-Public Hearing held on 8 January, 2025

Sr. No.	Name	Company/Institution
1	Shri. P. Anbalagan, IAS	CMD, MSPGCL
2	Shri. Sanjay Marudkar	MSPGCL
3	Shri. Balasaheb Thite	MSPGCL
4	Shri. Abhay Harne	MSPGCL
5	Shri. Rajesh Patil	MSPGCL
6	Shri. Prasanna Kotecha	MSPGCL
7	Shri. Sahebrao A. Nikalje	MSPGCL
8	Shri. Anil A. Bapat	MSPGCL
9	Shri. Ramandeep Singh	Consultant for MSPGCL
10	Shri. Anil Patkare	Consultant for MSPGCL
11	Adv. Deepa Chawan	MSEDCL
12	Shri. Ashok Sreenivas	Prayas Energy Group