



Meghalaya State Electricity Regulatory Commission

TARIFF ORDER

Case No. 27 of 2022

Aggregate Revenue Requirement

&

Generation Tariff for FY 2023-24

For

Meghalaya Power Generation Corporation Limited

MEGHALAYA STATE ELECTRICITY REGULATORY COMMISSION

1ST Floor (Front Block Left Wing), New Administrative Building

Lower Lachumiere, Shillong-793001

East Khasi Hills District, Meghalaya

CONTENTS

ORDER	5
1. Introduction.....	8
1.1. Meghalaya Power Generation Corporation Limited	8
1.2. Meghalaya State Electricity Regulatory Commission	8
1.3. Filing of Tariff Petition	9
1.4. Multiyear Tariff Regulations.....	9
1.5. Admission of the Petition	9
1.6. Public hearing process.....	9
2. Company Profile and performance Overview	11
2.1. Existing Generating stations and Generation Capacity	11
2.2. Upcoming Projects	12
2.3. Historical Yearly Generation for Last Five Years.....	12
2.4. Operational Norms.....	13
2.5. Design Energy- Existing Generating Stations.....	15
2.6. Computation of Net Energy Generation- Existing Stations:	17
3. Summary of the Petition for ARR and Determination of Generation Tariff for FY 2023-24.....	18
3.1. Separate Petition for MePGCL's Generating Projects	18
3.2. ARR filed for MLHEP for FY 2023-24.....	19
3.3. ARR filed for New Umtru for FY 2023-24.	20
3.4. ARR filed for Lakroh Mini HEP for FY 2023-24.....	21
3.5. ARR filed for MePGCL Old Projects including Sonapani for FY 2023-24.....	22
4. Public Hearing Process	23
5. Commission's Approach	58
6. Analysis of Project wise ARR for MLHEP, New Umtru, Lakroh MHP and MePGCL Old Projects for FY 2023-24.....	60
6.0. Analysis of Project wise ARR and Consolidated Generation Tariff for FY 2023-24	60
6.1. ARR of MLHEP for FY 2023-24	60
6.2. ARR of NUHEP for FY 2023-24	62
6.3. ARR of 1.5 MW Lakroh MHP for FY 2023-24	65
6.4. ARR for FY 2023-24 for MePGCL old plants and Sonapani.....	67
6.5. Consolidated ARR for MePGCL Old Projects including Sonapani, MLHEP, New Umtru and Lakroh projects for FY 2023-24	71
7. Determination of Annual Fixed Charges for FY 2023-24	72
8. Directives.....	77
Annexure-I.....	81
Annexure-II.....	86
Annexure-III.....	87

LIST OF TABLES

Table 1.1: Details of Public Notice.....	9
Table 2.1: Installed Capacity of MePGCL.....	11
Table 2.2 : Details of upcoming Stations	12
Table 2.3: Historical Energy Generation.....	12
Table 2.4: Normative Annual Plant Availability Factor	13
Table 2.5 : NAPAF's for all Generating stations.....	13
Table 2.6 : Auxiliary Consumption and Transformation Loss	14
Table 2.7: Auxiliary Consumption and Transformation Loss approved by the Honourable Commission	14
Table 2.8: Auxiliary consumption and Transformation losses.....	14
Table 2.9: Design Energy as approved by MSERC in Tariff Order FY 2020-21	15
Table 2.10 : Net Generation approved and Actual for FY 2020-21	17
Table 3.1 : Annual Fixed Charges for FY 2023-24 - MLHEP.....	19
Table 3.2 : Capacity Charge and Energy Charges for MLHEP for FY 2023-24	19
Table 3.3 : Annual Fixed Charge for NUHEP for FY 2023-24.....	20
Table 3.4 : Computation of Tariff for NUHEP for FY 2023-24.....	20
Table 3.5 : Annual Fixed Charge for Lakroh MHP for FY 2023-24.....	21
Table 3.6 : Computation of Tariff for Lakroh MHP for FY 2023-24.....	21
Table 3.7 : Annual Fixed Charges for MePGCL Old plants and Sonapani for FY 2023-24	22
Table 3.8 : Annual Fixed Charges, Capacity Charge and Energy Charge for FY 2023-24	22
Table 6.1 : Annual Fixed Charges for FY 2023-24 – Myndtu Leshka HEP	60
Table 6.2 : Capacity and Energy Charges for Myndtu Leshka HEP for FY 2023-24	61
Table 6.3 : Approved ARR in MYT Order for MLHEP for FY 2023-24	61
Table 6.4 : Approved ARR for MLHEP for FY 2023-24	62
Table 6.5 : Annual Fixed Charges for FY 2023-24 – NUHEP	62
Table 6.6 : Capacity and Energy Charges for NUHEP for FY 2023-24 (Projected).....	63
Table 6.7 : Approved ARR in MYT Order for NUHEP for FY 2023-24	63
Table 6.8 : Approved ARR of NUHEP for FY 2023-24.....	64
Table 6.9 : Annual Fixed Charges for FY 2023-24 – Lakroh MHP	65
Table 6.10 : Capacity and Energy Charges for Lakroh for FY 2023-24 (Projected)	65
Table 6.11 : Approved ARR of Lakroh MHP in MYT Order for FY 2023-24	66
Table 6.12 : Approved ARR of Lakroh MHP for FY 2023-24.....	66
Table 6.13 : Annual Fixed Charges for FY 2023-24 for MePGCL old projects incl. sonapani	67
Table 6.14 : Capacity and Energy Charges for MePGCL Old plants including Sonapani for FY 2023-24 (Projected) ..	67
Table 6.15 : Approved ARR of MePGCL Old projects in MYT Order for FY 2023-24.....	68
Table 6.16 : Computation of Interest on Working Capital for ARR of FY 2023-24.	69
Table 6.17 : Approved ARR for MePGCL Old Projects including Sonapani for FY 2023-24.....	70
Table 6.18 : Consolidated Annual Revenue Requirement of MePGCL for FY 2023-24.....	71
Table 7. 1 : Consolidated Annual Fixed Charges for MePGCL as a whole for FY 2023-24	75
Table 7. 2 : Annual Fixed Charges for the FY 2023-24	76

ABBREVIATIONS

A&G	Administration & General
ARR	Aggregate Revenue Requirement
APTEL	Appellate Tribunal For Electricity
CAGR	Compound Annual Growth Rate
CD	Contract Demand
CoD	Commercial Operation Date
CERC	Central Electricity Regulatory Commission
CGS	Central Generating Stations
CoS	Cost of Supply
CWIP	Capital Work In Progress
DE	Debt Equity
EHT	Extra High Tension
FY	Financial Year
GOM	Government of Meghalaya
GFA	Gross Fixed Assets
HT	High Tension
KV	Kilo Volt
KVA	Kilo Volt Amps
KVAh	Kilo Volt Ampere hour
KW	Kilo Watt
kWh	kilo Watt hour
LT	Low Tension
MVA	Million Volt Amps
MU	Million Unit
MW	Mega Watt
MYT	Multi Year Tariff
MeECL	Meghalaya Energy Corporation Limited
MePGCL	Meghalaya Power Generation Corporation Limited
MePDCL	Meghalaya Power Distribution Corporation Limited
MePTCL	Meghalaya Power Transmission Corporation Limited
MSERC	Meghalaya State Electricity Regulatory Commission
ROE	Return on Equity
SLDC	State Load Despatch Centre
SBIMCLR	State Bank of India Marginal Cost Lending Rate