



TARIFF ORDER

TRUE-UP FOR FY 2023-24

PERFORMANCE REVIEW OF FY 2024-25

AND

**DETERMINATION OF AGGREGATE REVENUE REQUIREMENT
&**

RETAIL TARIFF FOR FY 2025-26

FOR

**POWER & ELECTRICITY DEPARTMENT
GOVERNMENT OF MIZORAM**

Petition (ARR & Tariff) No. 1 of 2024

**MIZORAM ELECTRICITY REGULATORY
COMMISSION
AIZAWL - MIZORAM**

CONTENTS

ORDER.....	1
1. Introduction	9
1.1. Mizoram Electricity Regulatory Commission	9
1.1.1. Further, the Commission shall also advise the State Government on all or any of the following matters namely:	10
1.1.2. The State Commission shall ensure transparency while exercising its powers and discharging its functions.....	10
1.1.3. In discharge of its functions, the State Commission is guided by the National Tariff Policy (NTP) has brought out by GOI in compliance to Section-3 of the E.Act 2003. The objectives of the NTP are to:.....	10
1.2. Power & Electricity Department (P & ED) and Tariff Petition	11
2. Summary of ARR & Tariff Petition for FY 2025-26	13
2.1. Aggregate Revenue Requirement (ARR)	13
2.2. Tariff	13
2.3. Prayer	16
3. Power Sector in Mizoram - An Overview.....	17
3.1. Geographical Reality	17
3.2. Power supply	17
3.2.1. Own Generation.....	17
3.2.2. Power Purchase	18
3.3. Transmission and Distribution	21
3.4. Distribution losses	22
3.5. Consumer profile and Energy sales	22
3.6. Demand	23
4. Public Hearing Process	25
4.1. Introduction:.....	25
4.2. Public Hearing:.....	25
4.3. Proceedings of Public Hearing:.....	25
5. True-up of ARR for 2023-24.....	29
5.1. Back ground	29
5.2. Energy sales	30
5.3. Distribution Loss & Energy Balance.....	31
5.4. P&ED's Own Generation	32
5.5. Power Purchase	34
5.6. Energy Balance.....	34
5.6.1. Fuel Cost	37
5.6.2. Cost of Generation	37
5.6.3. Power Purchase Costs	38
5.6.4. Inter State Transmission Charges	41
5.6.5. Intra -State Transmission Charges (State Transmission Charge).....	42
5.6.6. O & M Expenses	42
5.6.7. Depreciation	46
5.6.8. Interest & Finance Charges	47
5.6.9. Interest on Working Capital	48
5.6.10.Provision for Bad Debts.....	49
5.6.11.Non-Tariff Income/Other Incomes	50
5.6.12.Return on Equity	51
5.6.13.Revenue from approved tariffs	51

5.7.	Summary of actuals filed by P&ED for true up & approved by Commission.....	53
5.8.	Revenue gap/surplus after true up:	55
6.	Annual Performance Review (APR) for FY2024-25	57
6.1.	Back ground	57
6.2.	Energy Sales	58
6.3.	Number of Consumers	58
6.4.	Connected Load.	59
6.5.	Category wise sales	60
6.6.	Distribution Loss for FY 2024-25.....	62
6.7.	P&ED's Own Generation	63
6.8.	Power Purchase quantum:.....	66
6.9.	Energy Balance.....	68
6.10.	Fuel Cost	70
6.11.	Cost of Generation	70
6.12.	Power Purchase Cost.....	71
6.13.	Inter-state Transmission Charges for 2024-25 by P&ED	74
6.14.	Intra-state Transmission Charges.....	75
6.15.	O & M Expenses	75
6.16.	Depreciation	78
6.17.	Interest & Finance Charges	78
6.18.	Interest on Working Capital	79
6.19.	Interest on Consumer Security Deposit.....	80
6.20.	Provision for Bad Debts.....	80
6.21.	Contributions to Contingency Reserve fund.....	80
6.22.	Non-tariff Income	81
6.23.	Return on Equity	82
6.24.	Review of FY 2024-25 ARR filings	83
6.25.	Govt. Subsidy amount for FY 2024-25	85
7.	Analysis of ARR for FY 2025-26 and its Approval.....	87
7.1	Background	87
7.2	Overall Approach for present filing	88
7.2.1	Petition for determination of Tariff for the FY 2025-26.....	88
7.2.2	Approach for filing.....	89
7.3	Category wise sales Forecast.....	90
7.4	Distribution Loss	92
7.5	Power purchases & Own generation.....	93
7.5.1	P&ED Mizoram's Own Generation	93
7.5.2	Power Purchase	95
7.6	Energy Balance.....	96
7.6.1	The energy balance sheet submitted by the P&ED for FY2025-26.....	96
7.7	Aggregate Revenue Requirement components.....	99
7.7.1	Cost of Fuel	99
7.7.2	Cost of Generation	99
7.7.3	Power Purchase Cost.....	100
7.7.4	Inter-State Transmission Charges.....	104
7.7.5	Intra-State Transmission Charges.....	105
7.7.6	O&M Expenses	106
7.7.7	Capital Investment	108
7.7.8	Depreciation	109
7.7.8.1	Depreciation	109
7.7.9	Interest and Finance Charges	111

7.7.10 Interest on Working Capital	111
7.7.11 Interest on Consumer Security Deposit	112
7.7.12 Provision for Bad & Doubtful Debts	113
7.7.13 Contributions to Contingency Reserve Fund	113
7.7.14 Non-Tariff Income	114
7.7.15 Return on Equity	114
7.7.16 Efficiency Gains expected from Performance improvement by Licensee	114
7.7.17 Revenue from sale of power	115
7.8 Aggregate Revenue Requirement	117
7.9 Recovery of Revenue Gap for FY 2025-26	118
7.10 TOD Tariff for FY 2025-26	120
7.11 Revenue at Proposed Tariff	123
7.12 Additional Revenue at Proposed Tariff	124
7.13 Impact of Tariff on Consumers	126
7.14 Government Tariff Subsidy/Support	127
8 Tariff Principles and Design	131
8.1 Background	131
8.1.1 Section 8.3 of Tariff Policy lays down the following principles for tariff design:	131
8.2 Tariff Approved by the Commission	132
8.2.1 Tariff Categories	132
8.2.2 Existing & Proposed Tariff	133
8.2.3 Tariffs Approved by the Commission	134
9 Wheeling Charges	139
9.1 Background	139
9.2 ARR for Wheeling Business	139
9.3 Wheeling Tariff	141
10 Voltage wise Cost of Supply	143
10.1 Preamble	143
10.2 Background	143
10.3 Methodology adopted for Computation of Voltage wise Cost of Supply	143
10.4 Determination of Voltage wise Losses	144
10.5 Information required for arriving Voltage Wise Cost of Supply	145
10.6 Methodology adopted for determination of Cost of Supply	147
11 Transmission function ARR for FY2025-26	155
11.1 Introduction & Basis of MYT filing	155
11.2 Filing of Tariff proposal for FY 2025-26	156
11.3 OVERALL APPROACH FOR PRESENT FILING	156
11.4 Capacity allocation and Energy Requirement	158
11.5 Transmission Loss	160
11.6 Capital Expenditure & Capitalization	161
11.7 Aggregate Revenue Requirement	161
11.8 Return on Equity	162
11.9 Interest and Finance charges	162
11.10 Gross Fixed Assets and Depreciation	163
11.10.1 Gross Fixed Assets	163
11.10.2 Depreciation	164
11.11 Operation and Maintenance expenses	164
11.11.1 Employee Expenses	165
11.11.2 Administration and General Expenses	166
11.12 Repairs and Maintenance expenses	167
11.13 Interest on Working Capital	168

11.14	Contribution to Contingency Reserve Fund.....	169
11.15	Non- Tariff Income	170
11.16	Aggregate Revenue Requirement	171
11.17	Transmission Charges per Unit.....	171
12	Generation Function ARR for FY 2025-26	173
12.1	Background	173
12.2	Generation Charges for FY 2025-26	174
12.3	Aggregate Revenue Requirement for FY 2025-26.....	174
12.4	Details of SHPS (Small Hydro Power Stations).....	175
12.5	Capital Cost	176
12.6	Determination of Annual Revenue Requirement	181
13	Directives	195
	TARIFF SCHEDULE.....	211
	APPENDIX	213
	TARIFF SCHEDULE	213
	ANNEXURE-I	243
	ANNEXURE-II	247
	Annexure-III	248
	Annexure-IV	249
	Annexure-V	250
	Annexure-VI	251
	Annexure-VII	252
	Annexure-VIII	253
	Annexure-IX	254

LIST OF TABLES

Table 2.1: Aggregate Revenue Requirement projected by P & ED for FY 2025-26.....	13
Table 2.2: Existing Vs. Proposed Tariff for FY 2025-26	14
Table 3.1: Own Generating Stations output proposed during FY2025-26	17
Table 3.2: Available MW capacity share from All Generating Station sources	19
Table 3.3: Energy from all CGS and Own HEPS (actual power drawn in FY2023-24).....	20
Table 3.4: Network Details as on 31.03.2024	21
Table 3.5: Consumer Profile and Energy Sales for FY 2023-24 (Audited actuals).....	22
Table 5.1: Retail Energy Sales of FY 2023-24	31
Table 5.2: Distribution Loss for FY 2023-24	32
Table 5.3:P&ED Mizoram's Own Generation FY 2023-24	33
Table 5.4 : Power Purchase Units FY 2023-24	34
Table 5.5: Energy Balance FY2023-24 (figures in MU)	34
Table 5.6: Commission Approved T&D losses for FY 2023-24 (True-up).....	36
Table 5.7: Fuel Cost for FY 2023-24	37
Table 5.8: Power Purchase Cost FY 2023-24.....	38
Table 5.9: Actual Power Purchase Cost for FY 2023-24 approved by Commission.....	38
Table 5.10: Transmission Charges FY 2023-24.....	42
Table 5.11: Employee Cost FY 2023-24.....	43
Table 5.12: Repair & Maintenance Expenses FY 2023-24.....	44
Table 5.13: Administration & General Expenses FY 2023-24.....	45
Table 5.14: O&M Expenses approved by the Commission for true-up of FY 2023-24	46
Table 5.15: Depreciation FY 2023-24.....	46
Table 5.16: Capital Asset Grants used for Assets Creation	46
Table 5.17: Interest & Finance Charges FY 2023-24	47
Table 5.18: Interest on Working Capital FY 2023-24	48
Table 5.19: Provision for Bad & Doubtful Debt FY 2023-24.....	49
Table 5.20: Other Income FY 2023-24	50
Table 5.21: Return on Equity FY 2023-24	51
Table 5.22: Revenue from Sales of Energy during FY 2023-24.....	52
Table 5.23: True up of ARR FY 2023-24	54
Table 5.24: Aggregate Revenue Requirement of FY 2023-24 approved for true-up (Rs. Cr)	54
Table 6.1: Category-wise Growth in Number of Consumer FY 2024-25.....	59
Table 6.2: Consumer Category-wise Growth in Connected Load FY 2024-25	60
Table 6.3: Consumer Category-wise Growth in Energy Sales FY 2024-25	61
Table 6.4: Energy Sales FY 2024-25	62
Table 6.5: Distribution Loss for FY 2024-25	63
Table 6.6: P&ED Mizoram's Own Generation FY 2024-25	64
Table 6.7: Power Purchase Units FY 2024-25	66
Table 6.8: Power Purchase quantum approved by Commission for FY 2024-25.....	66
Table 6.9: Energy Balance FY 2024-25.....	68
Table 6.10: Fuel Cost FY 2024-25.....	70
Table 6.11: Cost of Generation FY 2024-25	70
Table 6.12: Percentage of RE Target	71
Table 6.13: Power Purchase Cost FY 2024-25	72
Table 6.14: RPO Compliance as per Commission FY 2024-25 APR	72
Table 6.15: Transmission Charges FY 2024-25.....	75
Table 6.16: Intra-state Transmission Charges FY 2024-25	75
Table 6.17: Employee Cost FY 2024-25.....	76
Table 6.18: Repair & Maintenance Expenses FY 2024-25.....	76
Table 6.19: Administration & General Expenses FY 2024-25.....	77

Table 6.20: O&M Expenses approved by the Commission after Review	77
Table 6.21: Depreciation FY 2024-25.....	78
Table 6.22: Interest & Finance Charges FY 2024-25.....	79
Table 6.23: Interest on Working Capital FY 2024-25	79
Table 6.24: Interest on Consumer Security Deposit FY 2024-25	80
Table 6.25: Provision for Bad & Doubtful Debt FY 2024-25	80
Table 6.26: Contribution to Contingency Reserve Fund FY 2024-25	81
Table 6.27: Other Income FY 2024-25	81
Table 6.28: Return on Equity FY 2024-25	82
Table 6.29: Revenue from retail Sales of Energy during FY 2024-25.....	82
Table 6.30: Review of ARR FY 2024-25	84
Table 6.31: Commission approved Review of ARR FY 2024-25.....	85
Table 7.1: Energy Sales FY 2025-26	90
Table 7.2: Energy sales approved by the Commission FY 2025-26	91
Table 7.3: Distribution Loss for FY 2025-26	92
Table 7.4: P&ED Mizoram's Own Generation FY 2025-26 (In MUs).....	93
Table 7.5: Power Purchase Units FY 2025-26	95
Table 7.6: Power purchase quantum approved by the Commission for FY 2025-26.....	95
Table 7.7: Energy Balance FY 2025-26.....	96
Table 7.8: Energy Balance approved by Commission for FY2025-26	97
Table 7.9: Fuel Cost FY 2025-26.....	99
Table 7.10: Cost of Generation FY 2025-26	99
Table 7.11: Percentage of RE Target for Wind RPO, HPO & Other RPO.....	100
Table 7.12: Power Purchase Cost FY 2025-26	101
Table 7.13: Power Purchase Cost projected by the P & ED for the FY 2025-26.....	102
Table 7.14: Power Purchase Cost approved by the Commission for the FY 2025-26	103
Table 7.15: Transmission Charges FY 2025-26.....	105
Table 7.16: Intra- State Transmission Charges FY 2025-26.....	105
Table 7.17: Employee Cost FY 2025-26.....	106
Table 7.18: Administration & General Expenses FY 2025-26.....	107
Table 7.19: Repair & Maintenance Expenses FY 2025-26.....	108
Table 7.20: O & M expenses approved by the Commission	108
Table 7.21: Depreciation FY 2025-26.....	109
Table 7.22: Depreciation approved by the Commission for FY 2025-26	110
Table 7.23: Interest & Finance Charges FY 2025-26.....	111
Table 7.24: Interest on Working Capital FY 2025-26	111
Table 7.25: Interest on Consumer Security Deposit FY 2025-26	112
Table 7.26: Provision for Bad & Doubtful Debt FY 2025-26.....	113
Table 7.27: Contribution to Contingency Reserve Fund FY 2025-26	113
Table 7.28: Other Income FY 2025-26	114
Table 7.29: Return on Equity FY 2025-26	114
Table 7.30: Revenue at Existing Tariff for FY 2025-26 by P&ED.....	115
Table 7.31: Revenue at existing Tariffs for FY 2025-26 approved by Commission.....	116
Table 7.32: Annual Revenue Requirement FY 2025-26.....	117
Table 7.33: Commission approved ARR for FY 2025-26 (Rs Crs).....	118
Table 7.34: Tariff – Existing vs. Proposed	119
Table 7.35: TOD Tariff- – Existing vs. Proposed	120
Table 7.36: TOD Tariff approved by Commission for FY 2025-26	122
Table 7.37: Revenue at Proposed Tariff by P&ED.....	123
Table 7.38: Additional Revenue at proposed Tariff.....	124
Table 7.39: Approved Revenue realisable at Existing Tariffs for FY 2025-26	125

Table 7.40 : Impact of Tariff	126
Table 7.41: Revenue Gap for FY 2025-26 as approved by the Commission	126
Table 7.42: Commission approved Full Cost Tariff based Revenue for FY 2025-26	129
Table 7.43: Average Cost of Power supply in Mizoram State for FY 2025-26	130
Table 8.1: Existing v/s Proposed Tariff for FY 2025-26 by P&ED.....	133
Table 8.2: Category wise Subsidised Tariff (Non-TOD) approved by Commission for FY 2025-26 .	134
Table 8.3: Category wise full cost Tariff (i.e., No subsidy) approved by the Commission for FY 2025-26.....	136
Table 8.4: TOD Tariff approved by Commission for FY 2025-26	137
Table 9.1: Allocation Matrix.....	139
Table 9.2: ARR of Wheeling Business for the FY 2025-26	140
Table 9.3: ARR of wheeling business approved by the Commission for FY 2025-26	140
Table 9.4: Wheeling for the FY 2025-26 filed by P&ED.....	141
Table 9.5: Commission approved Wheeling charges for FY 2025-26	141
Table 10.1: Voltage wise Technical losses considered for FY 2025-26.....	145
Table 10.2: Voltage wise Technical losses considered for FY 2025-26 by Commission	147
Table 10.3: Classification of Categories on the basis of Voltage of Power supply	147
Table 10.4: Voltage wise technical loss considered for FY 2025-26	148
Table 10.5: Apportionment of technical losses to voltage wise sale for FY 2025-26	148
Table 10.6: Apportionment of Commercial losses to voltage wise sale for FY 2025-26.....	149
Table 10.7: Voltage wise technical & Commercial losses derived by Commission for FY 2025-26.	149
Table 10.8: Allocation of power purchase cost for FY 2025-26.....	149
Table 10.9: Allocation of power purchase cost to the Energy sales for FY 2025-26.....	150
Table 10.10: Allocation of Network Cost for FY 2025-26.....	150
Table 10.11: Allocation of power purchase cost for FY 2025-26 by Commission.....	151
Table 10.12: Voltage-wise Allocation of Network Cost	151
Table 10.13: Cost of Supply at different Voltage Levels for FY 2025-26	151
Table 10.14: Allocation of power purchase cost to the Energy sales for FY 2025-26.....	152
Table 10.15: Allocation of Network Cost for FY 2025-26.....	152
Table 10.16: Voltage-wise Allocation of Network Cost by commission.....	153
Table 10.17: Voltage wise Cost of Supply for FY 2025-26 approved by Commission	153
Table 11.1: Power Availability sources/ share (Other than Own Generation)	158
Table 11.2: Power Sources for FY 2025-26- Own HEP Generation.....	159
Table 11.3: Estimated Transmission Network position in FY 2023-24	160
Table 11.4: Transmission Loss	160
Table 11.5: Gross Fixed Asset Movement projected by P & ED	164
Table 11.6: Depreciation projected by P & ED	164
Table 11.7: Employee Expenses projected by P&ED	165
Table 11.8: Employee Expenses now approved by commission for FY2025-26	166
Table 11.9: Administrative and General Expenses projected	166
Table 11.10: Repair and Maintenance expenses projected by P&ED	167
Table 11.11: Overall summary of O&M Expenditure for the MYT Period by P&ED	167
Table 11.12: Summary of O & M expenses Approved by Commission for Transmission	168
Table 11.13: interest on Working Capital projected by P & ED for 2025-26	169
Table 11.14: Contribution to Contingency Reserve Fund	170
Table 11.15: Aggregate Revenue Requirement filed by the P&ED	171
Table 11.16: Transmission ARR approved by Commission for FY2025-26	171
Table 11.17: Transmission Charges for FY2025-26	172
Table 11.18: Transmission charges approved by the Commission for FY 2025-26.....	172
Table 12.1: Details of Small Hydro Power Station considered by P & ED	175
Table 12.2: Normative Capital Cost.....	176

Table 12.3: Base Capital cost.....	177
Table 12.4: Indexed Capital Cost.....	178
Table 12.5: Capital Cost projected by P & ED for SHPS.....	179
Table 12.6: Capital Cost approved by the Commission for FY 2025-26.....	180
Table 12.7: Calculation of Depreciation for MYT period projected by P&ED, Mizoram.....	181
Table 12.8: Calculation of Depreciation by the Commission and approved for 2025-26	182
Table 12.9: Interest on Working Capital for 2025-26 projected by P & ED	183
Table 12.10: Operation and Maintenance Expenses Projected for FY2025-26	184
Table 12.11: O & M expenses arrived at by the Commission for FY 2025-26	184
Table 12.12: Annual Revenue Requirement projected by P&ED for FY 2025-26	185
Table 12.13: Annual Revenue Requirement Commission approved for FY2025-26.....	185
Table 12.14: Total Generation from all commissioned SHP plants.....	187
Table 12.15: Normative Auxiliary Consumption projected by P & ED	188
Table 12.16: Tariff for Generation projected by P & ED	188
Table 12.17: Generation Tariff approved by the Commission for 2025-26.....	189
Table 12.18: Energy Generation from Serlui 'B':	190
Table 12.19: Energy Charges for Serlui 'B'	191
Table 12.20: ARR of Generation Function projected by P & ED	192
Table 12.21: Generation Function ARR approved by the Commission for FY 2025-26	192

ABBREVIATIONS

Abbreviation	Description
A&G	Administrative and General
AAD	Advance Against Depreciation
APR	Annual Performance Review
ARR	Aggregate Revenue Requirement
CEA	Central Electricity Authority
CERC	Central Electricity Regulatory Commission
CWIP	Capital Work in Progress
DPS	Delayed Payment Surcharge
E.Act 2003	Electricity Act, 2003
FSA	Fuel Surcharge Adjustment
FY	Financial Year
GFA	Gross Fixed Assets
GOI	Government of India
HT	High Tension
IEGC	Indian Electricity Grid Code
IEX	Indian Energy Exchange
IR	Inter-Regional
ISGS	Inter State Generating Station
JERC	Joint Electricity Regulatory Commission for Manipur and Mizoram
kV	Kilovolt
kVA	Kilovolt-Ampere
kVAh	Kilovolt-Ampere hours
kW	kilowatt
kWh	kilowatt-hour
LT	Low Tension
MAT	Minimum Alternate Tax
MDI	Maximum Demand Indicators
MUs	Million Units
MYT	Multi Year Tariff
MZERC	Mizoram Electricity Regulatory Commission
NEEPCO	North Eastern Electric Power Corporation
NHPC	National Hydro Electric Power Corporation
NLDC	National Load Despatch Centre
NTI	Non-Tariff Income
NTPC	National Thermal Power Corporation
O&M	Operation and Maintenance
P&ED	Power & Electricity Department, Mizoram
PGCIL	Power Grid Corporation of India Ltd
PLF	Plant Load Factor
PLR	Prime Lending Rate
POSOCO	Power System Operation Corporation Limited

Abbreviation	Description
PPA	Power Purchase Agreement
PWW	Public Water Works
R&M	Repair and Maintenance
RAPDRP	Restructured Accelerated Power Development and Return Program
RDSS	Revamped Distribution Sector System
RE	Revised Estimate
R&M	Repairs & Maintenance
RoE	Return of Equity
RPO	Renewable Purchase Obligation
RTS	Roof Top Solar
SBAR	State Bank Advance Rate
SLDC	State Load Dispatch Centre
T&D	Transmission and Distribution
UI	Unscheduled Interchange
YOY	Year on Year

MIZORAM ELECTRICITY REGULATORY COMMISSION
E-18, TBL Bhawan, 2nd to 5th Floor, Peter Street,
Khatla, Aizawl, Mizoram – 796001

Petition (ARR & Tariff) No. 1 of 2024

In the matter of True up for FY2023-24, Annual Performance Review for FY 2024-25 and Determination of Aggregate Revenue Requirement (ARR), Wheeling Tariff and Retail supply Tariff for FY 2025-26 for P&ED, Mizoram.

FOR

Power & Electricity Department, Government of Mizoram**Petitioner**
(here in after referred to as P&ED)

Present

Mr. Benjamin L. Tlumtea
CHAIRPERSON

ORDER

1. The Power and Electricity Department, Government of Mizoram (herein after referred to as P&ED (Mizoram or Petitioner) is a deemed licensee in terms of section-14 of the Electricity Act 2003 (hereinafter referred to as Act), engaged in the business of generation, transmission and distribution of electricity in the State of Mizoram.

Regulation-17 of the JERC (M&M) (MYT) Regulations, 2014 adopted by Mizoram Electricity Regulatory Commission specify that the distribution licensee shall file ARR and Tariff Petition with all relevant data along with requisite fee as specified in Commission's Fees, Fines and Charges Regulations on or before 30th November of the preceding year. As per the directive of the Commission, the P&ED Mizoram has filed the ARR and Tariff Petition for true up for FY 2023-24 and Annual Performance review for FY 2024-25 and determination of ARR, wheeling tariff and retail supply tariff for FY 2025-26 vide letter No.T.23012/03/23-EC(P)/Com/67, Dt. **19th December 2024**.

2. **ARR and Tariff Petition for FY 2025-26** by P&ED, being an integrated utility and functioning as an undivided power entity, which is responsible for three (3) activities

such as **Generation, Transmission, and Distribution of electricity** within the State of Mizoram and also discharging trading functions through its **State Load Despatch Centre (SLDC)**.

The P&ED has filed the Petition for determination of ARR, wheeling tariff and retail tariff for FY 2025-26 along with true-up petition for FY 2023-24 and Annual Review Petition for FY 2024-25. In the petition P&ED had estimated Rs.754.69Crs of net ARR and with a projected gap of Rs. 199.77Crores for FY 2025-26 at the prevailing rates as per its ARR retail supply tariff filings, which is done in anticipation to be mitigated the same by Govt. subsidy U/s 65 of E.Act 2003 amount of Rs.199.77Crs during FY2025-26. There was a proposal by P&ED for tariff with Time of the Day based in FY 2025-26 for all category of consumers barring Agricultural consumers. While in the last year FY 2024-25, Govt. subsidy needed was determined at Rs.197.23 Crs in Tariff Order and the same was revised in their APR by P&ED to 181.49 Crs based on their estimated expenditure projection. As per the present submission the ARR projected for FY 2025-26 is as follows:

(Rs in Crores)	
Details of ARR elements	FY2025-26
Aggregate Revenue Requirement	754.69
Revenue from Retail Sales	448.17
Revenue from Outside State Sales (from 180.90MU units)	106.75
Gap of ARR Deficit	199.77

3. Admission of Petition and Public Hearing Process

The Commission observed that the ARR filed by the petitioner was incomplete and requires lacking crucial and vital information as was specified in Commission's (MYT) Regulations 2014.

Subsequently, the P&ED was asked to submit the required additional information vide Commission's letter **No.T.12017/1/2024-MZERC/10, Dt. 09.01.2025**. The ARR and Tariff Petition was admitted on **30.12.2024** and marked as Petition (ARR & Tariff) **No. 1 of 2024**. in order to avoid delay in processing of ARR submission and directed the P&ED to publish the summary of the ARR and Tariff proposal in an abridged form and manner as approved in accordance with section-64 of the Electricity Act 2003 to ensure public participation vide Commission's letter **No.T.12017/1/2024-MZERC/9, Dt: 30.12.2024**.

The P & ED department submitted its replies to the additional information vide their Email Dt.17.01.2025 (for directive replies). and Letter **No.T-23012/01/20-EC(P)/Com/74, dt: 28.01.2025**

The notification of the proposed ARR and the proposed Tariff schedule for FY 2025-26 was published by the P&ED in the following newspapers.

Sl. No	Name of News paper	Language	Date of publication
1	Newslink	English	11 th & 13 th January 2025
2	Vanglaini	Mizo	13 th & 14 th January 2025

Through the public notice, the stakeholders/general public was invited to file their objections and suggestions on the petition on or before 31-01-2025.

4. Notice for Public Hearing:

The Commission, to ensure transparency in the process of determination of ARR and Tariffs for 2025-26 and providing proper opportunity to all stakeholders and public in general and consumers for making suggestions/objections on the ARR and Tariff petition, has also decided to hold a public hearing at the headquarters of the state. Accordingly, a notification was published by the Commission in the following leading newspapers giving due intimation to all stakeholders, general public, interested parties, and consumers about the public hearing to be held at 11.00 AM onwards at Aijal Club, Tennis Court, Aizawl on 12.03.2025.

Sl. No.	Name of News-paper	Language	Date of Publication
1	Newslink	English	25 th & 26 th February 2025.
2	Vanglaini	Mizo	26 th & 27 th February 2025.

5. Public Hearing details:

The transparency in Public hearing was maintained by Commission in the meeting held on 12.03.2025 in Aijal Club, Tennis Court, khatla, Aizawl. The Commission received two objections/suggestions from Pu Thanglura, President, Mizoram Consumers Union and Pu. Vanlalruata, Tuikual South. The main issues raised by the objectors during the public hearing along with response of P&ED and Commission's comments there on are briefly reproduced in **Chapter - 4**.

6. Meeting of State Advisory Committee (SAC)

The proposal of the P&ED Mizoram was placed before the State Advisory Committee in its meeting held on 12-03-2025 in the Aijal Club, Tennis Court, Aizawl and discussed the ARR for FY 2025-26, wheeling & retail Tariff proposal for FY 2025-26 relating to P&ED, Mizoram. There was no objection from any of the members participated in the SAC meeting held on 11.03.2025 with regard to the revision of the existing tariff by the Commission for the FY 2025-26. The minutes of the SAC meeting held and the list of participants are placed at **Annexure - I** at the end of this Tariff Order of the Commission.

7. The Commission has reviewed the directives issued to the P&ED (the petitioner) in all the earlier Tariff orders from FY 2010-11 onwards to FY 2024-25 and noted that those directives felt complied with thoroughly were dropped, while continuing the pending ones. The directives which were partly complied with and the remaining directives are now consolidated and fresh directives now felt required are being issued afresh.
8. In exercise of the powers vested under section 62(1) read with section 62(3) and 64 (3a) of the Electricity Act 2003 and Regulation 5.2 of JERC (M&M) MYT Regulations, 2014 (Notified on 09.06.2014) adopted by Mizoram Electricity Regulatory Commission hereinafter referred to as “**Tariff Regulations 2014**”, and other enabling provisions in this behalf, the Commission issues this order for truing up of the ARR and revenues for FY 2023-24 and Annual Performance Review for FY 2024-25 besides approving of the Tariff Order for 2025-26 with Wheeling charges and retail supply business tariff for FY 2025-26 towards power supply to retail consumers within the State of Mizoram, duly taking into consideration of the facts presented by P&ED Mizoram in its petition and in their subsequent filings in the form of additional data, suggestions/objections made by stake holders, consumer organizations, general public in the public hearings and also the minutes of the State Advisory Committee and the response of the P&ED Mizoram to the suggestions/objections.

9. True-up for FY 2023-24

The P&ED had submitted its true-up petition for FY2023-24 together with approved audited annual accounts of FY2023-24 by their Statutory Auditor issued on dt: **24.07.2024**. The Commission, by Tariff Order dated 28.03.2023 had approved the Net ARR for FY 2023-24 to be Rs. 567.77Cr (before adjusting the OSS revenue of Rs.62.62Cr) and it was revised in APR order to Rs.639.67Cr in Tariff Order Dt 15.03.2024. With the actual figures now furnished by the P&ED based on the audited annual accounts for FY2023-24, the true-up calculation resulted in net ARR of **Rs. 695.59Cr** as against APR figure of Rs. 639.67Cr and the revenue surplus arrived at was **Rs. 16.75Cr by P&ED** after considering all the total revenue and the Govt. subsidy amount of Rs. **185.31Cr** from Mizoram Government. The P&ED in its ARR filing had indicated a surplus of Rs.**16.75Cr** upon considering Rs.185.31Cr an actual amount of subsidy received from state Government in FY 2023-24. This includes the release of additional revenue subsidy amount during FY 2023-24 duly certified by the Statutory Auditors of P&ED. Thereby, the revenue gap of the licensee (i.e., P&ED) derived by Commission results into revenue surplus to an amount of **Rs.21.44 Cr** after the net ARR of **Rs.668.07Cr** which amount will be subjected to claw-back adjustment as per the provisions of the Tariff Regulations 2014. As per Regulations 12.1(i) of the Tariff Regulations 2014 (as adopted by MZERC on its formation as new entity) one-third ($\frac{1}{3}^{\text{rd}}$) share of surplus amount of **Rs.7.15Cr** is being passed on as rebate to the consumers in the ARR for FY 2023-24 and the **remaining $\frac{2}{3}^{\text{rd}}$ excess amount of Rs.14.30Cr** would be retained by the Licensee at its disposal.

10. Annual Performance Review for FY 2024-25

The P&ED have submitted annual performance review (APR) petition for FY 2024-25 afresh based on its revised estimates now. The Commission too had reviewed the earlier approved net ARR of Rs.730.20 Cr as per the Tariff Order dated 15.03.2024 with due reference to the present P&ED revised APR net ARR amount to Rs.724.70 Cr before adjusting for any realised revenue at existing tariff, Outside state sales (OSS) revenue and State Government revenue subsidy of Rs.197.23Cr it is expecting to receive during 2024-25 financial year. But the Commission with the available information had revised

the net ARR to be **Rs.684.81Crs** and estimated its revenue from all sources to be **Rs.543.21Crs** thus leaving a revenue surplus of **Rs.55.63Crs** duly considering the assured Govt. subsidy amount of **Rs.197.23Crs**. **Thus, the Commission is not giving any opinion on the financial gap status as of now and it is too early to predict gap status at this juncture.**

11. Aggregate Revenue Requirement & Retail Tariff for FY 2025-26

The P&ED had submitted ARR petition for FY 2025-26 for a gross ARR amount of Rs.754.69Crs and with net revenue gap of **Rs.199.77 Crs** after adjusting for projected revenue realisation of **Rs.448.17Crs** from retail consumers and Outside State sales revenue of **Rs.106.75Crs**. Equating the above revenue deficit/Gap to come in the form of Government subsidy amount as it is still under consideration and to be announced by Govt of Mizoram. The Commission after detailed examination and scrutiny had arrived at a net ARR of Rs.629.73Crs and a revenue gap of **Rs.180.80Crs (Rupees One eighty point eighty Crores-only)** by adopting existing tariff (with no hike in tariff) based revenue along with freshly introduced TOD based tariff to all categories of consumers except for the Irrigation & Agriculture categories of LT & HT. If the Govt. subsidy amount so derived matches with the Commission derived gap, then the P&ED net Costs (i.e., net ARR) would get fully break-even. The Govt of Mizoram had announced a conditional Tariff subsidy amount for FY 2025-26 to be derived based on adopting **26.47%** on the Gross ARR to be finalised subject to a subsidy upper limit ceiling of **Rs.199.77Crs** as per their **letter No.B 19018/9/2022-P&E, Dt.18.12.2024** is placed at **Annexure-VIII** for kind reference. The above gap figure so derived by the Commission is lower than **Rs.181.7589Crs** so derived by adopting the **26.47%** on the **gross ARR of Rs.686.66Crs** (before Outside State sales revenue amount of **Rs.56.93Crs**) and it is well within the limits set by Government of Mizoram for subsidy derivation and thus Commission recommends the required tariff subsidy at **Rs.180.80Crs** finally.

12. This Order contains thirteen (13) chapters as detailed below:

1. Chapter 1: Introduction.
2. Chapter 2: Summary of ARR, wheeling charges and Tariff petition for FY 2025-26.
3. Chapter 3: Power Sector in Mizoram - An over view.
4. Chapter 4: Public hearing process.

5. Chapter 5: True-up of ARR for FY 2023-24.
 6. Chapter 6: Annual performance Review of ARR for FY 2024-25.
 7. Chapter 7: Analysis of ARR for FY 2024-25 and approvals of the Commission.
 8. Chapter 8: Tariff principles and design and determination of tariffs for FY 2025-26.
 9. Chapter 9: Wheeling charges for FY 2025-26.
 10. Chapter 10: Voltage wise cost of supply tariff for FY 2025-26
 11. Chapter 11: ARR of Transmission Function and Transmission charges for FY 2025-26.
 12. Chapter 12: ARR of Generation Function for FY 2025-26.
 13. Chapter 13: Directives issued.
13. The P&ED should ensure implementation of the Order from the effective date after issuance of a public notice, in such a font size which is clearly & conspicuously visible in two daily newspapers having wider circulation within the state within a week and submit in writing the compliance report of doing so to the Hon'ble Commission before the effective date itself.
14. This Order shall be effective from **1st April, 2025** and shall remain in force until the issuance of new Tariff Order by this Commission for ensuing year.



(Benjamin L. Tlumtea)
CHAIRPERSON

Place: Aizawl

Date: 24/03/2025

1. Introduction

1.1. Mizoram Electricity Regulatory Commission

In exercise of the powers conferred as per Electricity Act 2003, (hereinafter referred to as Act) the Government of Mizoram has constituted Electricity Regulatory Commission for the State of Mizoram to be known as “**Mizoram Electricity Regulatory Commission**” vide **GOM Notification No.A.11019/1/2023-P&E Dt.19.07.2024**, (hereinafter referred to as **Commission**). The Commission constituted with Chairperson and one member body designated to function as an autonomous authority responsible for regulation of the power sector in the State of Mizoram. The powers and functions of the Commission are as prescribed in the Act. The head office of the Commission is presently located at Aizawl, the capital town of Mizoram. The Commission became functional w.e.f. **23rd July, 2024**.

In accordance with the provisions of the Act, the Commission discharges the following functions:

- a). Determine the tariffs for generation, transmission, distribution of power supply whole sale/ bulk or retail and wheeling of electricity, as the case may be, within the State provided that where open access has been permitted to a category of consumers under Section-42, the State Commission shall determine the wheeling charges and surcharge thereon, if any, for the said category of consumers;
- b). Regulate electricity purchase and procurement process of distribution licensees including the price at which electricity shall be procured from the generating companies or licensees or from other sources through agreements for purchase of power for distribution and supply within the State;
- c). Facilitate intra-State transmission and wheeling of electricity;
- d). Issue licenses to persons seeking to act as transmission licensees, distribution licensees and electricity traders with respect to their operations within the State;
- e). Promote co-generation and generation of electricity from renewable sources of energy by providing suitable measures for connectivity with the grid and sale of electricity to any person, and also specify, for purchase of electricity from such

- sources, a percentage of the total consumption of electricity in the area of a distribution licensee;
- f). Adjudicate upon the disputes between the licensees and generating companies; and to refer any dispute for arbitration;
 - g). Levy fee for the purposes of this Act;
 - h). Specify State Grid Code consistent with the Grid Standards specified under Clause (h) of sub-section (1) of Section 79 of the Act;
 - i). Specify or enforce standards with respect to quality, continuity and reliability of service by licensees;
 - j). Fix the trading margin in the intra-State trading of electricity, if considered, necessary;
 - k). Discharge such other functions as may be assigned to it under the Act.

1.1.1. Further, the Commission shall also advise the State Government on all or any of the following matters namely:

- a). Promotion of competition, efficiency and economy in activities of the electricity industry;
- b). Promotion of investment in electricity industry;
- c). Reorganization and restructuring of electricity industry in the State;
- d). Matters concerning generation, transmission, distribution and trading of electricity or any other matter referred to the State Commission by the State Government.

1.1.2. The State Commission shall ensure transparency while exercising its powers and discharging its functions.

1.1.3. In discharge of its functions, the State Commission is guided by the National Tariff Policy (NTP) has brought out by GOI in compliance to Section-3 of the E.Act 2003. The objectives of the NTP are to:

- a). Ensure availability of electricity to consumers at reasonable and competitive rates;
- b). Ensure financial viability of the sector and attract investments;
- c). Promote transparency, consistency and predictability in regulatory approaches across jurisdictions and minimize perceptions of regulatory risks;

d). Promote competition, efficiency in operations and improvement in quality of supply.

1.2. Power & Electricity Department (P & ED) and Tariff Petition

P&ED, being an integrated utility, is responsible for generation, Transmission and Distribution of electricity in the State of Mizoram and it also discharges trading functions through its SLDC. As per the Tariff regulations, the utility is required to submit the ARR and the Petition in the month of November for fixing the Tariff for the next financial year.

The objectives of the P&ED are:

1. Focuses on demand and distribution network growth.
2. Lays emphasis on metering to help reduce distribution losses (100% metering)
3. Focuses on metering to raise correct demand.
4. Focuses on collection of revenue to reduce commercial losses and improve cash flow.
5. Concentrated efforts into computerization of billing for efficient billing and in turn better and faster recovery.
6. Focuses on to arrest power theft and correct metering and energy audit to improve efficiency.

2. Summary of ARR & Tariff Petition for FY 2025-26

2.1. Aggregate Revenue Requirement (ARR)

The P&ED Mizoram, in its petition has projected the Aggregate Revenue Requirement (ARR) and Tariffs for FY 2025-26 and expected revenue with the existing tariffs and the resultant gap. The ARR and revenue gap are shown in Table below.

Table 2.1: Aggregate Revenue Requirement projected by P & ED for FY 2025-26

Sl. No.	Particulars	Amount (Crs)
1	Cost of Generation	13.25
2	Cost of Power Purchase	495.91
3	Cost of Fuel	0.00
4	Transmission charges (CTU)	54.15
5	Intra- state Transmission Charges (STU)	48.30
6	Operation & Maintenance Expenses	154.33
7	Interest on Loan	0.00
8	Depreciation	0.16
9	Interest on Working Capital	0.00
10	Return on Equity	0.00
11	Prior period expenses	0.00
12	Provision for Bad Debt	0.00
13	Contribution to Contingency Reserve Fund	0.00
14	Total Revenue Requirement	766.09
15	Less: Non-Tariff Income	11.40
16	Less: Efficiency Gains & 1/3 rd surplus	0.00
17	Less: Revenue from units sold in Power-Exchanges	106.75
18	Net Revenue Requirement (14-15-16-17)	647.94
19	Revenue from Retail sales within Mizoram	448.17
20	Projected Deficit for Government Subsidy	199.77

(Source: Table 2.23 & 2.24 of Petition)

2.2. Tariff

The P&ED, Mizoram in its petition has submitted the existing and proposed tariffs for the FY 2025-26 as detailed in the table below.

Table 2.2: Existing Vs. Proposed Tariff for FY 2025-26

Sl. No.	Consumer Category	Existing Tariff		Proposed Tariff	
		Energy Charge (Rs. /Month)	Fixed Charge (In Rs.)	Energy Charge (Rs. /Month)	Fixed Charge (In Rs.)
1	Kutir Jyothi				
i)	First 20 kWh	2.55/kWh	25/Connct	2.55/kWh	25/Connct
ii)	All above 20 kWh	3.55/kWh	25/Connct	3.55/kWh	25/Connct
2	Domestic				
	A.Low Tension				
i)	First 100 kWh	4.90/kWh	50/CL/ kW	4.90/kWh	50/CL/ kW
ii)	Next 100 kWh	7.10/kWh	50/CL/ kW	7.10/kWh	50/CL/ kW
iii)	All above 200 kWh	8.20/kWh	50/CL/ kW	8.20/kWh	50/CL/ kW
	B.High Tension	8.65/kVAh	50/BD/ kVA	8.65/kVAh	50/BD/ kVA
3	Non-Profit Public purpose (New) / Non-Domestic (previously)				
	A.Low Tension				
i)	First 150 kWh	7.60/kWh	60/CL/ kW	7.60/kWh	60/CL/ kW
ii)	All above 150 kWh	8.30/kWh	60/CL/ kW	8.30/kWh	60/CL/ kW
	B. High Tension	8.75/kVAh	60/BD/ kVA	8.75/kVAh	60/BD/ kVA
4	Commercial				
	A.Low Tension				
i)	First 150 kWh	8.20/kWh	80/CL/ kW	8.20/kWh	80/CL/ kW
ii)	All above 150 kWh	8.45/kWh	80/CL/ kW	8.45/kWh	80/CL/ kW
	B. High Tension	8.90/kVAh	80/BD/ kVA	8.90/kVAh	80/BD/ kVA
5	Public Lighting	11.35/kWh	80/CL/ kW	11.35/kWh	80/CL/ kW
6	Irrigation & Agriculture				
	A. Low Tension	3.80/kWh	50/CL/ kW	3.80/kWh	50/CL/ kW
	B. High Tension	3.85/kVAh	50/BD/ kVA	3.85/kVAh	50/BD/ kVA
7	Public Water Works				
	A. Low Tension	11.10/kWh	90/CL/ kW	11.10/kWh	90/CL/ kW
	B. High Tension	9.85/kVAh	90/BD/ kVA	9.85/kVAh	90/BD/ kVA
8	Industrial				
A	A. Low Tension				
i)	First 400 kWh	7.10/kWh	80/CL/ kW	7.10/kWh	80/CL/ kW
ii)	All above 400 kWh	8.05/kWh	80/CL/ kW	8.05/kWh	80/CL/ kW
	B. High Tension				
	Option-1 (Existing)	9.05/kVAh	80/BD/ kVA	9.05/kVAh	80/BD/ kVA
	Option-2 (TOD based consumption)				
TOD energy usage hours during the day					
	6AM upto 5PM (Normal)	10.05/kVAh	80/BD/ kVA	8.80/kVAh	80/BD/ kVA
	5PM upto 10PM (Peak hrs)	11.55/kVAh	80/BD/ kVA	11.25/kVAh	80/BD/ kVA
	10PM upto 6AM (Off-Peak)	8.55/kVAh	80/BD/ kVA	6.85/kVAh	80/BD/ kVA
9	Bulk Supply	6.85/kVAh	90/BD/ kVA	6.85/kVAh	90/BD/ kVA
10.	Electric Vehicle Charging Station				
	A. LT category	8.20/kWh	75/CL/KW	8.20/kWh	75/CL/KW
	B. HT Category	8.65/kVAh	75/BD/kVA	8.65/kVAh	75/BD/kVA

Note: (CL=Contracted Load), (BD=Billing Demand), (Connct = Connection)

Alternatively, the P&ED had also proposed TOD Based Tariffs which are tabled below for all categories except for Irrigation & Agriculture Consumers.

Option-2- For Consumers Opting of ToD based Tariff Billing in FY2025-26

Sl. No.	Type of installation	FY 2024-25 (Approved)		FY 2025-26 (Proposed)	
		Energy Charges (/Month)	Fixed Charges (In `)	Energy Charges (/Month)	Fixed Charges (In `)
		A	B	A	B
1	Kutir Jyothi				
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)			2.45/kWh	25/Connection
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)			3.10/kWh	25/Connection
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)			1.95/kWh	25/Connection
2	Domestic				
A	LT				
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)			4.95/kWh	50/Contracted Load in Kw
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)			6.35/kWh	50/Contracted Load in Kw
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)			3.85/kWh	50/Contracted Load in Kw
B	HT				
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)			7.80/kVAh	50/Billing Demand in KVA
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)			10.00/kVAh	50/Billing Demand in KVA
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)			6.10/kVAh	50/Billing Demand in KVA
3	Non-Profit Public Purpose				
A	LT				
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)			6.95/kVAh	60/Contracted Load in Kw
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)			8.90/kVAh	60/Contracted Load in Kw
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)			5.40/kVAh	60/Contracted Load in Kw
B	HT				
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)			8.45/kVAh	60/Billing Demand in KVA
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)			10.80/kVAh	60/Billing Demand in KVA
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)			6.60/kVAh	60/Billing Demand in KVA
4	Commercial				
A	LT				
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)			7.10/kVAh	80/Contracted Load in Kw
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)			9.10/kVAh	80/Contracted Load in Kw
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)			5.55/kVAh	80/Contracted Load in Kw
B	HT				
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)			8.60/kVAh	80/Billing Demand in KVA
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)			11.00/kVAh	80/Billing Demand in KVA
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)			6.70/kVAh	80/Billing Demand in KVA
5	Public Lighting				
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)			8.80/kVAh	80/Contracted Load in Kw
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)			11.25/kVAh	80/Contracted Load in Kw
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)			6.85/kVAh	80/Contracted Load in Kw
6	Irrigation & Agriculture				
A	LT			Not considered for TOD Tariff	
B	HT				
7	Public Water Works				
A	LT				
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)			8.60/kVAh	90/Contracted Load in Kw
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)			11.00/kVAh	90/Contracted Load in Kw
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)			6.70/kVAh	80/Contracted Load in Kw
B	HT				
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)			8.80/kVAh	90/Billing Demand in KVA
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)			11.25/kVAh	90/Billing Demand in KVA
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)			6.85/kVAh	90/Billing Demand in KVA
8	Industrial				
A	LT				
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)			8.80/kVAh	80/Contracted Load in Kw
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)			11.25/kVAh	80/Contracted Load in Kw
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)			6.85/kVAh	80/Contracted Load in Kw
B	HT				
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)	10.05/kVAh	80/Billing Demand in KVA	8.80/kVAh	80/Billing Demand in KVA
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)	11.55/kVAh	80/Billing Demand in KVA	11.25/kVAh	80/Billing Demand in KVA
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)	8.55/kVAh	80/Billing Demand in KVA	6.85/kVAh	80/Billing Demand in KVA
9	Bulk Supply				
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)			7.35/kVAh	90/Billing Demand in KVA
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)			9.40/kVAh	90/Billing Demand in KVA
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)			5.75/kVAh	90/Billing Demand in KVA
10	Electric Vehicle (EV) Charging Station				
A	LT				
i)	From 09:00 Hrs. upto 16:00 Hrs. (Solar Hour)			5.74/kVAh	75/Contracted Load in Kw
ii)	From 16:00 Hrs. upto 09:00 Hrs. (Non-Solar Hour)			10.66/kVAh	75/Contracted Load in Kw
B	HT				
i)	From 09:00 Hrs. upto 16:00 Hrs. (Solar Hour)			6.05/kVAh	75/Billing Demand in KVA
ii)	From 16:00 Hrs. upto 09:00 Hrs. (Non-Solar Hour)			11.25/kVAh	75/Billing Demand in KVA

2.3. Prayer

- Approve the True-up for the FY 2023-24, APR for the FY 2024-25, Voltage-wise Cost of Supply & Tariff for the FY 2025-26 in respect of Distribution function, Transmission function & Generation function for P&ED Mizoram, formulated in accordance with the guidelines outlined in the regulations of Mizoram Electricity Regulatory Commission and the principles contained therein.
- Approve the terms and conditions of Tariff Schedule and various other matters as and the proposed changes therein;
- To condone any inadvertent delay/ omissions/ errors/ rounding off differences/ shortcomings and P&ED Mizoram may please be permitted to add/change/modify/alter the petition;
- Permit P&ED, Mizoram to file additional data / information as may be necessary.
- Pass such further and other orders as the Hon'ble Commission may deem fit and proper keeping in view the facts and circumstances of the case.

3. Power Sector in Mizoram - An Overview

3.1. Geographical Reality

The P&ED, Mizoram is responsible for supply and distribution of electricity in the State of Mizoram which has a total area of 21081 Sq KM **with eleven (11)** districts, viz. Aizawl, Mamit, Kolasib, Champhai, Serchhip, Lunglei, Lawngtlai, Khawzawl, Hnahthial, Saitual and Siaha. The State shares more than 700 Kms of international boundary with Bangladesh and Myanmar. The total population of Mizoram State is 10.97 Lakhs as per 2011 census. The per capita consumption based on energy at distribution input is about **575 kWh during FY 2023-24**. The P&ED projects to serve about 324698 consumers of various consumer categories during FY2025-26.

3.2. Power supply

3.2.1. Own Generation

P&ED has its own generating plants. The total installed capacity of the State-owned generating stations and the projected energy generation during FY2025-26 as furnished by P&ED is as in the Table below:

Table 3.1: Own Generating Stations output proposed during FY2025-26

Sl. No.	Station	Installed Capacity	Date of COD	Generation	Auxl. Cons	Net Energy
I	Small Hydel	(MWs)	Date	(MU)	(MU)	(MU)
1	Serlui-A	1.00	24.04.84	0.000	0.00	0.000
2	Tuirivang --	0.30	14.08.89	0.000	0.000	0.000
3	Tuipanglui	3.00	17.12.04	0.008	0.000	0.008
4	Lamsial	0.50	26.08.08	0.000	0.000	0.000
5	Khawiva	1.05	08.12.88	1.497	0.021	1.476
6	Tuipui	0.50	15.12.91	0.373	0.004	0.369
7	Teirei	3.00	12.10.99	2.143	0.043	2.100
8	Kau-Tlabung	3.00	05.05.05	7.611	0.002	7.609
9	Maicham-I	2.00	5.01.96	2.305	0.003	2.302
10	Maicham-II	3.00	11.11.09	3.415	0.004	3.411
11	Tlawva	5.00	13.05.2022	0.232	0.012	0.220
12	Kawlberm	4.00	15.12.2022	1.662	0.021	1.641
	Sub-Total	26.35		19.246	0.110	19.136
12	Serlui 'B'	12.00	In-Firm power	18.300	0.360	17.940
	Grand Total	38.35		37.546	0.470	37.076

Mini Hydel Stations of P&ED maintained by two outside Agencies

Sl. No.	Mini Hydel Stns	Installed Capacity	Actuals FY20-21	Actuals FY21-22	Actuals FY22-23	Actuals FY23-24
I	Amazon Engineering	(MWs)	(MU)	(MU)	(MU)	(MU)
1	Khawiva SHP	1.05	1.38	1.21	1.30	1.30
2	Tuipui	0.50	1.04	0.46	0.00	0.03
3	Kau-Tlabung	3.00	8.10	6.76	6.55	5.27
II	Assam Petroleum Ltd					
1	Teirei	3.00	4.93	4.05	4.90	2.41
	Grand Total	7.55	15.45	12.48	12.75	9.01

P&ED has replied that in addition to the above 38.35MWs., they also possess one more generation plant namely **Lengpui diesel set**. The rest of the plants are Mini Hydel plants having seasonal generation. Of late, P&ED have handed over three (3) plants to M/s. Amazon Engineering company to manage the plants listed above separately to the extent of 4.55MWs consisting of Khawiva (1.05MW), Tuipui (0.50MW) and Kau-Tlabung (3MW) SHP plants and one (1) plant namely Teirei (3MW) is being managed by M/s.Assam Petroleum as per its Generation ARR petition now submitted for FY2025-26. Upon ascertaining through additional information replies, it is noted that Serlui-A (1MW), Tuirivang (0.30MW), Tuipanglui (3MW) and Lamsial (0.50MW) totalling to 4.80 MW SHPs are not in operation mode and not generating any energy. Therefore, remaining plants effectively generating some power generation are maintained & operated by P&ED is only 26 MWs capacity excluding Serlui-B and Diesel Set at Lengpui Airport. The Serlui-B (12 MW capacity plant) is yet to achieve COD (Commercial Operation date) for various reasons relating to clearances issues. In FY 2024-25 P&ED had adopted PLF of 22.58% and in FY2025-26 at 17.4086% for Serlui-B. The overall PLF adopted for all the units in operation (38.35MWs) by P&ED including Outside agencies-maintained plants is 11.176% and auxiliaries adopted is at 0.14%, while the approved value is at 1% as per Regulation. Thus, P&ED is more dependent on Central Generating stations power only.

3.2.2. Power Purchase

The State mostly dependent upon outside state energy sources for meeting all its energy requirement. The State has got allocated share from Central Sector Generating Stations and total firm share from the Central Sector Generating Stations namely NEEPCO, NHPC and NTPC is 180.67MW. Besides, the P&ED is also procuring

TSECL power to a tune of 10.50 MW from NEC funded Baramura Gas based thermal power plant and OTPC power of 42MW from Palatana Gas based power plant in Tripura state. Of the total allocation capacity of 274.37MWs, the share from the generating stations outside the State is 233.17 MW, the State-owned generation from Mini Hydel and Diesel Set of 38.85MWs and State Solar generation of 2.35MWs so furnished by the P&ED is tabulated in the Table below:

Table 3.2: Available MW capacity share from All Generating Station sources

Sl. No.	Source	Plant Capacity (MW)	Licensee's Share in %	Share in MW
A	Central Generating Stations			
I	NTPC			
1	Bongaigaon TPS	750.00	5.415	40.613
2	Farakka STPS	1600.00	0.142	2.272
3	Kahalgaon STPS	840.00	0.142	1.193
4	Talcher STPS	1000.00	0.142	1.420
	NTPC-Total	4190.00		45.497
II	NHPC			
1	Loktak HEP	105.00	5.020	5.271
	NHPC-Total	105.00		5.271
III	NEEPCO			
1	Kopili HEP	200.00	4.610	9.22
2	Kopili - II HEP	25.00	6.040	1.51
3	Khandong HEP	50.00	3.940	1.97
4	Ranganadi HEP	405.00	5.700	23.09
5	Doyang HEP	75.00	5.250	3.94
6	Pare HEP	110.00	5.765	6.34
7	Tuirial HEP	60.00	100.00	60.00
8	AGBPP	291.00	5.4090	15.74
9	AGTPP	135.00	6.005	8.11
	NEEPCO-Total	1351.00		129.91
IV	TSECL			
1	B'mura - IV	21.00	25.000	5.25
2	B'mura - V	21.00	25.000	5.25
	TSECL-Total	42.00		10.50
V	OTPC			
1	Palatana	726.00	5.785	42.00
	OTPC-Total	726.00		42.00
VI	Other Stations/IPPs			
1	Power exchange through IEX			
	Others-Total	0.00	0.00	0.00
B	State generating Stations			
1	All Units	38.85	100%	38.85
	a) Plants (in Operation)	26.00	P&ED	26.00
	b) Plants (No generation)	4.80	P&ED	4.80
	c) Diesel set (Lengpui Airport)	0.50	P&ED	0.50
	d) Amazon & Assam (4MHPs)	7.55	Leased out	7.55
C	State Solar Generation	2.35	100%	2.35
D	Grand Plant Total	6455.20		274.37

(Source: Format – F1 of ARR Petition)

The energy drawn from various Central Generating Stations and from Tripura state is given in Table below:

Table 3.3: Energy from all CGS and Own HEPS (actual power drawn in FY2023-24)

Sl. No	Energy Procurement Source	Actual Drawn (MU)
A	Central Generating Stations	
I	NTPC	
1	Bongaigaon TPS	189.14
2	Farakka STPS	15.07
3	Kahalgaon STPS	8.18
4	Talcher STPS	10.15
	NTPC-Total	222.55
II	NHPC	
1	Loktak HEP	14.59
	NHPC-Total	14.59
III	NEEPCO	
1	Kopili HEP	13.07
2	Kopili - II HEP	8.92
3	Khandong HEP	0.00
4	Ranganadi HEP	66.67
5	Doyang HEP	8.35
6	Pare HEP	25.46
7	Tuirial HEP	100.35
	Free Power from Tuirial	13.68
8	AGBPP (Gas)	30.29
9	AGTPP (Gas)	14.37
	NEEPCO-Total	281.16
IV	TSECL – Tripura State Electricity Corp Ltd.	
1	Baramura – IV (Gas)	20.31
2	Bar'mura – V (Gas)	20.31
	TSECL-Total	67.71
V	OTPC – ONGC Tripura Power Corporation	
1	Palatana (Gas)	243.48
	OTPC-Total	243.48
VI	Other Stations/IPPs	
1	Rooftop Solar generation	37.42
2	Solar Generation (State)	2.00
3	NVVN Ltd	0.00
	Others-Total	39.42
B	State Own generating Stations	
1	From all Generating Plants & Leased Out	44.53
	State Generating Stations-Total	44.53
C	Power Exchange (IEX) purchases	0.00
D	UI / (Over Drawl)	0.00
	GRAND TOTAL Energy (MU)	886.34

(Source: Format F1 of Petition, page-9)

3.3. Transmission and Distribution

For drawing power from CGS and other outside state sources, there are 3 (three) Nos. of 132kV transmission lines and 1 (one) 400kV D/C line (charged at 132kV) owned by PGCIL connecting Mizoram as given below.

- i). 132kV S/C Tipaimukh (Manipur) – Aizawl
- ii). 132kV S/C Badarpur (Assam) – Aizawl
- iii). 132kV S/C Kumarghat (Tripura) – Aizawl
- iv). 400kV D/C Silchar- Aizawl (Melriat)

All these lines terminate at 132KV Luangmual SS, Aizawl and Melriat (PG) under PGCIL, from where power is drawn to different load centres through 132 kV lines of P&ED.

Being a hilly State with its population unevenly dispersed in the remote areas, the State of Mizoram is having large network of HT and LT lines as well as distribution sub-station/transformers.

The details of transmission and distribution network, owned & operated by P&ED and furnished as on 31.03.2024 are given in Table below:

Table 3.4: Network Details as on 31.03.2024

Sl. No.	Particulars	FY 2023-24			
		At year beginning	Additions made	With-drawn	End of year
1	Length of lines (ckt-km)				
	132 kV	1000	0		1000
	66 kV	128	0	0	128
	33 kV	1389	0	0	1389
	11 kV	5465	0	0	5465
	LT	3882	0	0	3882
	Total	11469	0	0	11469
2	Number of 33/11 kV substations	64	0	0	64
3	No. of Power Transformers (33/11 kV)	117	0	0	117
4	Total MVA capacity of Power Transformers	629	0	0	629
5	No. of Distribution Transformers	2385	0	0	2385
6	Total MVA capacity of Distribution Transformers	292	--	0	292
7	Number of consumer meters		-		
	LT (less than 0.5 accuracy class)	274622	9041		283663
	LT (better than 0.5 accuracy class)		-		
	HT (less than 0.5 accuracy class)	672	154		826
	HT (0.2 accuracy class)		-		
	HT (better than 0.2 accuracy class)		-		
	Total	275294	9195	0	284489
5	Number of Interface meters				

Sl. No.	Particulars	FY 2023-24			
		At year beginning	Additions made	With-drawn	End of year
	0.5 accuracy class	0	0	0	0
	0.2 accuracy class	0	0	0	0
6	Metered Sales (in MU)				
	a. Low Tension sale (LT)	335623	22366		357989
	b. High Tension sale (HT)	125143	9943	0	135087
	c. Extra High-Tension sale (EHT)	--			--
	Total	460766	32309	0	493075
7	Metered Consumers (in Nos.)		-		
	a. Low Tension (LT)	274622	9041		283663
	b. High Tension (HT)	672	154		826
	c. Extra High Tension (EHT)		-		
	Total	275294	9195	-	284489

3.4. Distribution losses

The distribution losses of P&ED system as filed were 28.01% during the year 2023-24 as against the approved Tariff Order Losses of 22.61% resulting in a deviation of 5.40%. The segregation of details between technical and commercial losses were not made available by P&ED anywhere in their ARR filing submission to examine.

3.5. Consumer profile and Energy sales

The consumers profile and corresponding energy sales during the year FY2023-24 are given in Table below:

Table 3.5: Consumer Profile and Energy Sales for FY 2023-24 (Audited actuals)

Sl. No.	Category	No. of Consumers	Connected Load (MW)	Sales (MU)
1(a)	Kutir Jyoti - LT	17274	5.285	4.81
1(b)	Domestic - LT	251553	322.028	304.83
1(c)	Domestic - HT	11	2.082	1.33
2(a)	Non-Profit Public purpose - LT	8640	18.872	12.13
2(b)	Non- Profit Public purpose - HT	62	11.402	6.72
3(a)	Commercial - LT	13804	43.475	41.69
3(b)	Commercial - HT	519	18.065	16.02
4	Public Lighting - LT	698	1.339	2.70
5(a)	Irrigation & Agriculture - LT	66	0.093	0.07
5(b)	Irrigation & Agriculture - HT	7	0.260	0.20
6(a)	Public Water Works - LT	10	0.734	0.22
6(b)	Public Water Works - HT	73	40.116	95.34
7(a)	Industrial - LT	1031	4.869	2.47
7(b)	Industrial - HT	27	8.916	13.57
8	Bulk Supply - HT	145	15.854	12.78
9	Temporary Connection & Theft -	11	1.107	0.61
10	Outside State Sale - UI / Trading			138.96
	GRAND TOTAL	293931	494.497	654.46

(Source: Form No: R3a of petition)

3.6. Demand

The allocation of power (firm and un-firm (un-allocated) from various central generating stations, NEC funded Baramura Gas Based Thermal Power Plant and all others was 274.37 MW during FY 2023-24. The peak load demand of Mizoram state during the FY 2023-24 of P&ED department was 159.12 MW as on 19.01.2024 and during FY 2024-25 (provisional) the peak load was 163.10 MW as on 27.01.2025. The P&ED procured 886.34 MU of energy during the year 2023-24 including own net generation of 44.53 MU. with **nil** RPO obligation related energy purchases.

4. Public Hearing Process

4.1. Introduction:

On admitting the ARR and retail Tariff Petition for FY 2025-26, the Commission directed the P&ED to make available the copies of the petition to the general public, post the petition on their website and also publish the same in newspapers in abridged form and invite comments/objections/suggestions from them. Two (2) written objection was received from various consumers from general public.

4.2. Public Hearing:

In order to ensure transparency in the process of determination of tariff as envisaged in the Electricity Act, 2003, Public Hearing was held at Aizawl on 12.03.2025 as scheduled in the Aijal Club, Tennis Court, Aizawl from 11:00 A.M. to 1:00 P.M. During the Public Hearing the participants from general public were given an opportunity to offer their views in respect of the ARR and Tariff Petition for FY 2025-26 of P&ED. The Commission received objections/suggestions from two (2) persons through affidavit within the stipulated time for submissions of objections/suggestions.

The list of stakeholders & general public who attended the Public Hearing is given in **Annexure-II**.

The Officers of P&ED who attended the Public Hearing have responded on the issues raised by the objectors during the hearing process.

4.3. Proceedings of Public Hearing:

The Commission received **Two (2) written objection** within the stipulated time from the general public of P&ED consumers. The objector wise, response of the P & ED, Mizoram against each objection are furnished below.

Objector 1: Pu Thanglura, President, Mizoram Consumers Union.

Objections No.1:

The cost of document copies related to the Tariff Petition for FY 2025-26 has risen from Rs.50 to Rs.200, a 300% increase from earlier Tariff Petitions. The query asks if there is a way to reduce this cost and the reason for the increase and the basis for the fixed price.

Commission reply:

As per clause 19.3 of the existing Fees, Fines and Charges Regulations, 2016, the cost of fee per page of the document shall be Rs.2/-. However, since the document is

more than 100 pages the Commission has fixed the fee at Rs.200/- for the whole document, effective from last year (FY2024-25), so as not to burden those who want a copy of it for examination. There are no intentions to further decrease it at present.

Objections No.2.

During the determination of Tariff Petition for FY 2022-23, the MCU submitted suggestion that time for submission of objections/suggestion be given for at least 25 days. It is suggested again that more time be given for submission of objection/suggestions.

Commission Reply:

The Commission noted the suggestions for further considerations.

Objections No.3

Distribution Loss: The projected Distribution Loss of 25.25% in the Tariff Petition for FY 2025-26 is too high. It is requested to reduce distribution loss to 18% from the approved figure earlier. The distribution loss in Tariff Petition FY 2020-21 was 19.64%, approved in FY 2021-22 was 18.1616%, what is the percentage of approved distribution loss in FY 2023-24 and FY 2024-25?

P&ED Reply:

The distribution loss 25.25% mentioned in the tariff petition for FY2025-26 is pure projected figure and cannot be changed now. However, the department expects that the distributions loss will reduce to not only 18%, but may be as low as 14% after the completion of the Revamped Distribution Sector Scheme (RDSS).

As highlighted in the tariff order for FY 2024-25, the distribution loss for FY2023-24 is 22.61% and the projected distribution loss for FY2024-25 is 21.62%

Objections No. 4

Revamped Distribution Sector Scheme (RDSS) has been implemented in the Tariff Petition since FY 2023-24 with a target to reduce Aggregate Technical & Commercial Losses (AT&C)/Distribution loss, what is the target for Mizoram? Is it true that All India average is 12-15%? There is AT&C Distribution loss target under RDSS, what is the target fixed for Mizoram is it correct that all India average is 12-15%?

P&ED Reply:

The expected AT&C Loss by P&ED, Mizoram after completion of Revamped Distribution Sector Scheme (RDSS) is around 14%. All India average AT&C loss for FY 2023-24 is around 14.37% (as per Raja Sabha unstarred question no.149).

Objections No. 5

What is the equivalent of Distribution loss of 25.25% in monetary unit?

P&ED Reply:

The distribution loss as per tariff petition FY 2025-26 is 25.25% and is equivalent to 19MU in term of power. As per the current average tariff i.e Rs.8/- per unit, the

projected/proposed distribution loss (25.25%) is equivalent to around Rs.155.20 Crores.

Objections No. 6

Employee Cost: The employ cost is the main factor that increases Annual Revenue Requirement (ARR) for FY 2025-26. As per the approved Order dt.28.03.2023, it is Rs.152.88 Crore while the figure for the same is Rs.130.10 crore in the current proposal for FY 2025-26 which decreases from the approved Order dt.28.03.2023, what is the main for the decrease?

P&ED Reply:

The employee cost Rs.152.88 Crore for FY 2025-26 is based on the Multi Year Tariff order for FY 2022-23 to FY 2027-28 approved by JERC for the upcoming 3 years. However, the actual employee cost of Rs.130.10 Crore is based on actual figure for FY 2023-24, projected figure for FY 2024-25. Therefore, the figure Rs.130.10 is considered to be more reliable.

Objections No. 7

Can you furnish detailed data for cadre wise Employee & staff strength for FY 2024-25 and FY 2025-26(projection)?

P&ED Reply:

The Employee details for FY 2024-25(up to September 2024) and FY 2025-26(projection) as per the tariff petition for FY 2025-26 dt. 19.12.2025 is as below:

Sl. NO	Particular	No. of Employee	
		2024-25	2025-26
1	Regular employees	1019	1341
2	Contract employees	10	10
3	Work charge	290	233
4	Provisional employees	1303	939
	Total	2622	2523

Objections No. 8

Is there a rebate provision for power supply disruption of more than one hour? Does the Regulation Supply code, the Electricity Act,2003 or the Central Electricity Authority Regulations mention rebate?

P&ED Reply:

There is no rebate provision for power supply disruption lasting more than 1 hour. There is no mention of rebate provision in Regulation Supply Code, Electricity Act,2003 or any other Regulations issued by Central Electricity Authority

Objectors No. 2. Pu. Vanlalruata, Tuikual South

Objections No.1

The employee cost of Rs.130.01 Cr. Is considered to be on higher side as the state maximum Power demand is just 150MW.

P&ED Reply:

The employee cost and the power demand could not be co-related because maintenance of lines, sub-station and consumer in Mizoram is very difficult due to poor communication, heavy rainfall and storm during monsoon season. Even though, the density of population is very thin comparing with other states where electrical infrastructure is expected to maintain regular and dependable power supply around the clock.

Objections No.2

Administration and general expenses is increased to Rs.7.15 Cr from Rs. 2.21 Cr of previous year. The increment is Rs.4.94 Cr in just one year cannot be accepted.

P&ED Reply:

The figure 2.21 Cr was a projected figure for FY 2025-26 which was approved by JERC(M&M) during FY 2022-23 at the time of MYT order for the period of FY 2023-24 to FY 2027-28. In other words, JERC(M&M) at a proved Rs.2.21 Cr against Rs.5.70 Cr proposed by P&ED for the same year. The reason being increase from Rs.5.70 Cr to Rs.7.21 Cr is to cater payment for compensation expense and other contingencies.

Objections No.3

Efficiency gains input is nil in the petition whereas it was projected to be Rs.15 Cr in the previous year. This indicates that the P&E department inconsistencies in bill management. In fact, having minimal consumers as compare to even other NE States the Department should improve in efficiency gains. The Department should put up more efforts in efficiency gains.

P&ED Reply:

Currently, under Revamp Distribution Sector (RDSS), P&ED has put its best effort to improve the quality of service and also billing & collection efficiency.

Commission's Comments:

The various objections raised by the above two (2) objectors and relevant replies in response to the said objections made by the P&ED department are noted by the Commission.

5. True-up of ARR for 2023-24

5.1. Back ground

Petitioner's Submission:

Multi Year Tariff Order for the control period of 5 years from FY 2023-24 to FY 2027-28 was issued by the Hon'ble Commission vide order dated 28.03.2023 under the erstwhile Joint Electricity Regulatory Commission for Manipur and Mizoram (Multi Year Tariff) Regulations, 2014 read with First Amendment Regulations, 2019.

The Hon'ble Commission determined the Aggregate Revenue Requirement for the FY 2023-24 to FY 2027-28 & Tariff for the FY 2023-24 vide Order dated 28.03.2023.

Regulation 10(1) & (2) of the Joint Electricity Regulatory Commission for Manipur and Mizoram (Multi Year Tariff) Regulations, 2014 as adopted by MZERC provides as follows:

"10.1 Where the Aggregate Revenue Requirement and expected revenue from tariff and charges of a Generating Company or Transmission Licensee or Distribution Licensee is covered under a Multi-Year Tariff framework, then such Generating Company or Transmission Licensee or Distribution Licensee, as the case may be, shall be subject to truing up of expenses and revenue during the Control Period in accordance with these Regulations.

10.2 The Generating Company or Transmission Licensee or Distribution Licensee shall file an Application for Truing up of the previous year and determination of tariff for the ensuing year, within the time limit specified in these Regulations"

Further, the Hon'ble Commission notified the First Amendment Regulations, 2019 is as follows:

"5.2 The filing of the Control Period under these Regulations shall be as under.

(i).....

(ii) From the second year of the Control Period onwards and upto the last year of the

Control Period, the petition in each year shall comprise of:

- a. Truing Up for the previous year with audited accounts, and Annual Performance Review (APR) with revision of ARR approved in MYT Order for current year and revised projection of ARR approved in MYT Order for the ensuing year in accordance with these Regulations;*
- b. Revenue from the sale of power at existing tariffs and changes for the current year;*
- c. Revenue gap for the ensuing year calculated based on the revised projection of ARR and truing up of the previous year;*
- d. Application for determination of tariff for the ensuing year.”*

The Hon’ble Commission carried out the review of the FY 2023-24 vide order dated 15.03.2024. The actual figures for the FY 2023-24 are now available. As required by the Regulations, P&ED Mizoram is submitting the Audited Annual Accounts for the FY 2023-24 and Asset & Depreciation Register.

Further, in accordance with the Regulation 10(1) & (2) of the Joint Electricity Regulatory Commission for Manipur and Mizoram (Multi Year Tariff) Regulations, 2014 & Regulation 5.2 (ii) of First Amendment Regulations, 2019 as given above, the P&ED Mizoram is submitting the present true-up petition for the FY 2023-24 on the basis of the audited Annual Accounts.

P&ED Mizoram requests the Hon’ble Commission to carry out the true-up of expenses in accordance with the Regulation 10 of the Joint Electricity Regulatory Commission for Manipur and Mizoram (Multi Year Tariff) Regulations, 2014 read with First Amendment Regulations, 2019.

Data given in this chapter is for the entire year i.e. FY 2023-24.

5.2. Energy sales

The actual sales vis-à-vis the sales approved by the Hon’ble Commission in its Tariff Order dated 28.03.2023 & 15.03.2024 for the FY 2023-24 is as summarized below:

Table 5.1: Retail Energy Sales of FY 2023-24

(In MUs)

Sl. No.	Category	Approved in T.O. dated 23.03.2023	As per Accounts
	LT Consumers		
1	Kutir Jyoti	6.21	4.81
2	Domestic	305.34	304.83
3	Non-Profit Public Purpose	9.74	12.13
4	Commercial	36.97	41.69
5	Public Lighting	2.61	2.70
6	Public Water Works	6.84	0.22
7	Agriculture	0.06	0.07
8	Industrial	2.80	2.47
9	Electric Vehicle Charging	2.00	0.00
	Total LT	372.57	368.93
	HT Consumers		
10	Domestic	3.62	1.33
11	Non-Profit Public Purpose	14.15	6.72
12	Commercial	14.10	16.02
13	Agriculture	0.10	0.20
14	Public Water Works	84.22	95.34
15	Industrial	8.27	13.57
16	Electric Vehicle Charging	0.75	0.00
17	Bulk Supply	14.80	13.39
	Total HT	140.01	146.57
18	Total LT & HT	512.58	515.50
19	Outside State - Trading	93.80	138.96
	Total	606.38	654.46

Commission analysis:

In the Tariff Order, the Commission approved energy sales of LT & HT category within the State including Outside State Sales at 606.38 MU which includes 93.80MU for Outside state sales (OSS) as against achieved actuals of 654.46MU together with 138.96MU of Outside State sales (OSS) in FY 2023-24 for true-up purpose and these figures are matching with the statutory auditor figures approved in the audited financial accounts. Hence, the actuals now submitted are approved by Commission for True-Up finalisation.

5.3. Distribution Loss & Energy Balance

The actual values of the distribution loss for the FY 2023-24 arrived in accordance with the actual energy sales & energy purchase.

Table 5.2: Distribution Loss for FY 2023-24

Sl. No.	Particulars	Approved in T.O. dated 28.03.2023	True-Up Actuals filed
1	Distribution Loss (DL)	22.61%	28.01%

Commission's analysis

Though, the distribution loss proposal made at 17.73% by P&ED through initial ARR filings petition, the Commission had approved Distribution Loss at 22.61% for FY2023-24 in its Tariff Order dt.28.03.2023 (As tabulated in Energy Balance by P&ED) as it was felt not feasible to achieve keeping in view their previous performance. But now for True-up sake, the P&ED had indicated actual distribution losses at 28.01% with an abnormally steep hike of 5.40% (i.e.,28.01%-22.61%) distribution losses over approved losses value. While in review order (APR) these **losses were revised to 17.50% by the Commission** duly keeping in view of the RDSS scheme-based losses so agreed to by P&ED with Ministry of Power to achieve while availing the RDSS scheme **vide MOP letter No.12/11(01)/2021-UR&SI-II (263835), Dt.21.03.2023**. It so happened that the Commission too was aware of this letter subsequently during the finalisation time of APR for FY2023-24, there was no way but to adopt the same for all practical purposes by the Commission for the APR Order and for the finalisation of present true-up proposal the Commission had adopted the Distribution Loss at 28.33% for FY 2023-24 with the little modification in the sequence of steps adopted in the Energy balance derivation over the earlier adopted approach to depict the realistic occurrences in energy handling. Besides, even in the Energy balance sheet also the distribution Losses were considered at 28.33% for true-up purpose.

But, even then losses now shown as achieved by the P&ED in 2023-24 is at 28.01% which is much higher by 10.51% than the Annual Performance Review (APR) order figure of 17.50% and it is also higher by 5.40% when compared with 2023-24 Tariff Order figure of (22.61%). Thus, the Commissions realised that the loss management efficiency of P&ED was never seen impressive instead showing a deteriorating trend in energy handling in distribution network than progressing to reduce losses.

5.4. P&ED's Own Generation

The P&ED Mizoram's own generation approved for the FY 2023-24 and actual value of own generation made by the P&ED Mizoram for the FY 2023-24 is provided

in the table below:

Table 5.3:P&ED Mizoram's Own Generation FY 2023-24

Sl. No.	Particulars	In (MUs)	
		Approved in T.O. dt.28.03.2023	As per Accounts
1	2	3	4
1	Total Generation (Net)	31.07	44.53
	Total	31.07	44.53

It is submitted that Amazon Engineering have been undertaking plants Operation & Maintenance (O&M) works of **Khawiva SHP, Tuipui SHP & Kau Tlabung SHP** and Assam Petroleum Ltd have been undertaking Operation & maintenance (O&M) of **Teirei SHP** on behalf of P&ED, Mizoram in the process of Power generation. Further, the Installed Capacity & energy generation is being included in the books of P&ED Mizoram. The net generation of 0.01MUs for Lengpui project is also included in the total net generation of 44.53 MUs.

Commission Analysis:

The net energy generated by both M/s. Amazon Engineering & M/s.Assam Petroleum on behalf of P&ED is intimated in response to additional information is 9.01MU & 11.56 during FY 2023-24 & FY2024-25 respectively and hence it can be inferred that out of the total 44.53MU, the Own generation by P&ED from the remaining SHPs is about **35.53MU**. Each Station wise energy generated by these four (4) plants managed by M/s. Amazon Engineering & M/s. Assam Petroleum Ltd during FY 2023-24 is tabulated below for a glance.

Sl. No.	Name of SHP Station	Installed Capacity (MW)	Net Generation in (MUs)
1	Khawiva (M/s.Amazon Engg.)	1.05	1.30
2	Tuipui (M/s.Amazon Engg.)	0.50	0.03
3	Kau-Tlabung (M/s/. Amazon Engg.)	3.00	5.27
4	Teirei (M/s.Assam Petroleum)	3.00	2.41
	Grand Total	7.55	9.01

As per the reply from P&ED about the O&M charges being paid to both leased companies for running the four (4) SHP plants it has paid at Rs.1.15Cr in FY 2023-24 and included this cost in Repairs & Maintenance charges As there is convention that

this cost is being reflected in R&M expenses of audited accounts, **no Generation ARR amount will be allowed based on norms once again to avoid doubling the cost in FY2025-26. Accordingly, these four (4) plants would not be considered for any Generation ARR amount estimation in future for P&ED.**

5.5. Power Purchase

The power purchase approved for the FY 2023-24 and actual units of power purchase made by the P&ED Mizoram for the FY 2023-24 is provided in the table below:

Table 5.4 : Power Purchase Units FY 2023-24

Sl. No.	Particulars	Approved in T.O. dated 28.03.2023	As per Accounts
1	2	3	4
1	Power Purchase Units (MUs)	752.37	841.81
	Total	752.37	841.81

Commission's Analysis

The Commission noted that the above power purchase quantum indicated is upon fully ignoring the Under-drawl quantum of 56.6571MU (as shown in Form-F1d) and it is also exclusive of Own generation of 44.53MU. **Otherwise the approved total power purchases quantum from all sources would finally be at 886.34MU, and also exclusive of under-drawl units of 56.6571MU.**

5.6. Energy Balance

The actual energy balance for the FY2023-24 and the approvals accorded are compared in the table provided below:

Table 5.5: Energy Balance FY2023-24 (figures in MU)

Sl. No.	Energy Balance	Approved in T.O. dated 28.03.2023	As per Accounts
A	Energy Requirement		
1	Energy Sales	512.58	515.50
2	Distribution Loss (%)	22.61%	28.01%
3	Distribution Loss (MUs)	149.79	200.62
4	Total Energy Requirement	662.37	716.11
B	Energy Availability		
5	Own Generation	31.07	44.53
6	Energy Purchase from ER	33.40	33.40

Sl. No.	Energy Balance	Approved in T.O. dated 28.03.2023	As per Accounts
7	Less: ER Pool Loss (%)	1.95%	1.88%
8	Less: ER Pool Loss (Mus)	0.65	0.63
9	Net Energy for ER	32.75	32.77
10	Energy Purchase from NER (Excl. Turial HEP)	522.36	654.96
11	UI / Deviation / IEX through exchange	0.00	0.00
12	Sub Total	555.11	687.73
13	Less: NER Pool Loss (%)	2.36%	2.33%
14	Less: NER Pool Loss (MUs)	13.10	16.02
15	Net Energy at NERLDC	542.01	671.71
16	Energy purchases from Turial HEP	170.93	100.35
17	Free Energy from Turial HEP	23.31	13.68
18	Amazon Engineering	0.00	0.00
19	Rooftop Solar Generation/Solar Purchase	0.07	37.42
20	Solar Generation	2.30	2.00
21	Energy Available	769.69	869.69
22	Less: Outside State - Trading	93.80	138.96
23	Total Energy Available	675.89	730.73
24	Less: Intra State Tr. Loss (%)	2.00%	2.00%
25	Less: Intra State Tr. Loss (MUs)	13.52	14.61
26	Net Energy Available	662.37	716.11
27	Less: Energy requirement at State Periphery	662.37	716.11
28	ENERGY SURPLUS/(DEFICIT)	0.00	0.00

Commission's Analysis

Despite, having given lots of chances earlier to improve was not properly acted upon to rectify/plug the loopholes. The general public/consumers shall not be burdened anymore on this aspect and hence the Commission seriously viewed this issue and adopts penalty for the poor show up by adopting 17.50% as its distribution losses irrespective of actual losses which are at higher level and this is the only way of compel the Licensee to strengthen and create a robust distribution network with lesser & reasonable losses in future. The impact on account of distribution losses (DL) so adopted by Commission at 17.50%, the P&ED instead of procuring 716.11MU it could have purchased 624.85MU energy during FY2023-24 at distribution input level **resulting in 91.26MU** of excess energy quantum (i.e., 716.11MU - 624.85MU) procured resulting in higher power purchase cost burden on consumers. **This**

cost reduction cut is without taking any impact due to sale of 138.96MU (Table-5.1) Outside State Sales (IEX Sales) during FY 2023-24. However, P&ED had not sustained any loss but made a gained from doing IEX Sales.

Therefore, Commission strongly infer the excess purchase is due to lack of diligent vigilance from P&ED staff which resulted into steep shot-up of commercial losses within the state such as theft, pilferage and raise of billing demand improperly leaving some sale of energy unaccounted. If in FY2020-21 high losses are attributed to Covid pandemic, the other following years losses are no way better and glaringly indicates thorough improvement needed in subsequent years.

Table 5.6: Commission Approved T&D losses for FY 2023-24 (True-up)

Sl. No.	Energy Balance - P&ED	2023-24
A	Energy Requirement	Actuals
1	Net Energy Sales (MU)	515.50
2	Distribution Loss (%) (derived)	28.33%
3	Distribution Loss (MUs)	203.79
4	Gross Energy at Distribution Input (MU)	719.29
B	Energy Availability	2023-24
5	Energy Purchase from ER (Input) (MU)	33.40
6	Less: ER Pool Loss (%)	1.88%
7	Less: ER Pool Loss (MUs)	0.628
8	Net Output Energy for ER (MU)	32.77
9	Energy Purchase from NER (Exl. Tuirial HEP) (MU)	654.96
10	Gross Energy purchased from all external sources (MU)	687.73
11	Add: UI Over Drawl	-
12	Less: Outside State Sales – Trading (MU)	-82.30
13	Less: UI Under draws (MU)	-56.66
14	Gross Energy handled at NER Grid (MU)	548.77
15	Less: NER Pool Loss (%)	2.33%
16	Less: NER Pool Loss (MUs)	12.79
17	Net Energy from sources outside Mizoram (MU)	535.99
18	Energy purchases from Tuirial HEP (MU)	100.35
19	Free Energy from Tuirial HEP (MU)	13.68
20	Own Generation from SHPs (MU)	44.53
21	Rooftop Solar Generation (MU)	37.42
22	State Solar Generation (MU)	2.00
23	Total Energy available at State Periphery (MU)	733.97
24	Less: Intra State Tr. Loss (%)	2.00%
25	Less: Intra State Tr. Loss (MUs)	14.68
26	Energy Injection at Discom Input (MU)	719.29

Sl. No.	Energy Balance - P&ED	2023-24
27	T&D Losses (MU) (3+25)	218.47
28	T&D Losses (%)	29.77%

The above energy balance figures for FY 2023-24 are now approved based on actual values furnished by P&ED through additional information basing on their ARR filings and the audited actual figures.

The extract of the NER Losses at 2.33% & ER Losses at 1.88% so published in their relevant compendiums for FY 2023-24 is attached as annexure-VI & VII respectively at the end of the Tariff Order for reference.

5.6.1. Fuel Cost

The values of fuel cost are compared with the same approved by the Hon'ble Commission in the Tariff Order dated 28.03.2023 & 15.03.2024 for the FY 2023-24. The actual fuel cost based on the audited annual accounts as compared to the approved figure is provided in the table below.

Table 5.7: Fuel Cost for FY 2023-24

Sl. No.	Particulars	Approved in T.O. dated 23.03.2023	Approved in T.O. dated 15.03.2024	As per Accounts
1	2	3	4	5
1	Cost of Fuel	0.00	0.00	0.00
	Total	0.00	0.00	0.00

Commission Analysis:

The Commission hereby prefers to approve **NIL fuel cost** for FY 2023-24 for true-up purposes, though P&ED submitted in the filing that Lengpui has generated 0.01MU in FY 2023-24 but no cost aspect has been claimed in True-up. **Logically as no power was availed from this plant to retail consumers supply. Hence, no fuel cost charge is allowed for this plant.**

5.6.2. Cost of Generation

Commission Analysis:

The petitioner is silent about this cost element in its true-up submission despite having got approved for Rs.5.56Cr in the Tariff Order for FY 2023-24. The petitioner is claiming **NIL** amount against Tariff Order approved value of Rs.5.56Cr, **now Commission feels it more appropriate to approve**

Rs.1.15Crs under this head for having paid to M/s. Amazon Engg. & Assam Petroleum Ltd in FY2023-24 towards operation & maintenance of four (4) SHPs with installed capacity of 7.55MWs but added incorrectly these charges under R&M expenses. Hence, those charges are allowed under this head of cost of Generation by Commission duly disallowing from the head R&M Expenses as was claimed in their petition.

5.6.3. Power Purchase Costs

Petitioner's submission

The Hon'ble Commission in the Tariff Order dated 28.03.2023 for the FY 2023-24 had approved a power purchase quantum of 783.44 MUs at a total cost of 359.92 Crores. P&ED Mizoram has actually procured 752.37 MUs during the FY 2023-24 at a total cost of ₹ 485.55 Crores. The actual power purchase cost based on the audited annual accounts as compared to the approved figure is provided in the table below.

Table 5.8: Power Purchase Cost FY 2023-24

(In Crores)				
Sl. No.	Particulars	Approved in T.O. dated 23.03.2023	Approved in T.O. dated 15.03.2024	As per Accounts
1	2	3	4	5
1	Power Purchase Cost	359.92	507.57	485.55
	Total	359.92	507.57	485.55

Commission's analysis

The power purchase cost approved for FY 2023-24 by the commission is detailed in the table below.

Table 5.9: Actual Power Purchase Cost for FY 2023-24 approved by Commission

Sl. No.	Generation Sources	Plant Capacity (MW)	P&ED Share (%)	P&ED Share (MW)	Energy Purchased (MU)	Total Charges (Rs./Crs)	Per unit cost (Rs/kWh)
A	Central Generating Stations						
I	NTPC						
1	Bongaigaon TPS	750	5.415	40.613	189.14	128.67	6.80
2	Farakka STPS	1600	0.142	2.27	15.07	7.98	5.30
3	Kahalgaon STPS	840	0.142	1.19	8.18	3.49	4.27
4	Talcher STPS	1000	0.142	1.42	10.15	2.92	2.88
	NTPC-Total	4190	0.59%	45.497	222.54	143.06	6.43
II	NHPC						
1	Loktak HEP	105	5.02	5.27	14.59	6.82	4.67
	NHPC-Total	105		5.27	14.59	6.82	4.67

Sl. No.	Generation Sources	Plant Capacity (MW)	P&ED Share (%)	P&ED Share (MW)	Energy Purchased (MU)	Total Charges (Rs./Crs)	Per unit cost (Rs./kWh)
III	NEEPCO						
1	Kopili HEP	200	4.61	9.22	13.07	3.07	2.35
2	Kopili - II HEP	25	6.04	1.51	8.92	2.16	2.42
3	Khandong HEP	50	3.94	1.97	0.00	0.00	0.00
4	Ranganadi HEP	405	5.70	23.09	66.67	20.37	3.06
5	Doyang HEP	75	5.25	3.94	8.35	6.51	7.80
6	Pare HEP	110	5.765	6.34	25.46	13.60	5.34
7	Tuirial HEP	60	100	60	100.35	73.71	6.46
	Free Power share				13.68		
8	AGBPP	291	5.409	15.74	30.29	32.43	10.71
9	AGTPP	135	6.005	8.11	14.37	12.82	8.92
	NEEPCO-Total	1351		129.91	281.16	164.67	5.86
IV	TSECL & OTPC						
1	B'mura – IV&V	42	50.00	10.50	40.62	29.72	7.32
2	Palatana	726	5.785	42.00	243.48	81.85	3.36
	TSECL& OPTC-Total	768		52.50	284.10	111.57	3.93
	Total CGS Energy Purchase	6414.00		233.18	802.39	426.12	5.31
B	State Own generation						
1	All Units (incl. Lengpui set)	38.85	100	38.85	44.53	0.00	0.00
	Owned Generation Total	38.85		38.85	44.53	0.00	0.00
C	IEX Exchange purchase				0.00	0.00	0.00
D	a) UI Over drawl				0	0	0
	b) UI Under drawl receipt				0	-22.82	0
	UI / Deviation-Total				0	-22.82	0
E	Other RE Energy						
	1. Solar purchases				37.42	14.740	3.94
	2.State Solar Generation	2.35			2.00	0	
F	RP Obligation /REC Certificate					0.06	
G	LC Enhance/Renew charges					22.43	
H	Reactive Energy Charges					0.07	
I	Supplementary Bills (Addl.)					21.52	
J	Prior Period Purchase FY22-23					-4.90	
k	REC Certificate Obligation					NIL	
l	Loss from IEX Sales made					0.00	
	GRAND TOTAL	6455.20		272.03	886.34	457.22	5.16

The Commission approves power purchase of 886.34MU excluding notional UI Under-Drawl of 56.6571 MU and all other procurement from various sources. Similarly, the compensation of Rs.22.82Crs (revised in Additional Information replies from Rs.22.47Crs) towards under-drawl from power purchase cost is deducted and the prior-period purchases amount of Rs.4.90Crs (of FY2022-23) is also disallowed to arrive at FY2023-24 purchase cost. In addition, no adjustment was needed for RPO Obligation certificates procurement since fully complied with in FY2023-24.

As per the **Schedule-18 of the Audited Accounts**, there are other items like Prior period Receivables of Rs.14.75Crs (Income) and Prior period depreciation of

Rs.0.7974Cr (expenditure). These items as they relate to previous years were adjusted in the balance sheet itself, but surprisingly the Prior period Purchase of Rs.4.8993Cr not dealt in Balance sheet but shown as current year expenditure in the Power Purchase cost is not a fair and prudent claim. Hence, this item is disallowed from inclusion in power purchase cost of FY2023-24.

With regard to procurement of Renewable Energy RPO certificate purchase obligation for FY 2023-24, the P&ED was not required to procure any certificates. (the detailed calculation is appended for reference). Since P&ED had also spent upto Rs.0.06Cr in the Power Purchase Cost additionally for true-up.

P&ED have to strictly comply with the provision of **Renewable Purchase Obligation and its Compliance) Regulations, 2010, clause-6 “Effects of default”** which is briefly reproduced below:

“1) If the obligated entities does not fulfil the renewable purchase obligation as provided in these regulations during any year and also does not purchase the certificates, **the Commission may direct the obligated entity to deposit into a separate fund, to be created and maintained by such obligated entity, such amount as the Commission may determine on the basis of the shortfall in units of RPO and the forbearance price decided by the Central Commission: Provided that the fund so created shall be utilised, as may be directed by the Commission, for purchase of the certificates: Provided further that the Commission may empower an officer of the State Agency to procure from the Power Exchange the required number of certificates to the extent of the shortfall in the fulfilment of the obligations, out of the amount in the fund.**”

Failing which the following clause - 6(2) will be invoked by the Commission in this mater

“2) Where any obligated entity fails to comply with the obligation to purchase the required percentage of power from renewable energy sources or the renewable energy certificates, it shall also be liable for penalty as may be decided by the Commission under section 142 of the Act: Provided that in case of genuine difficulty in complying with the renewable purchase obligation because of non-availability of certificates, the obligated entity can approach the Commission for carry forward of compliance requirement to the next year: Provided that where the Commission has consented to the carry forward of compliance requirement, the provision of clause (2) of the Regulation or the provision of section 142 of the Act shall not be invoked.”

Sl. No.	Particulars (P&ED)	Formula	Unit	2023-24
1	Energy consumption in Distribution area		MU	719.29
2	Total RPO Target (Overall)		%	28.08%
3	Total RE purchase requirement	1*2	MU	201.98
4	Hydro Renewable Energy Target		%	0.66%

Sl. No.	Particulars (P&ED)	Formula	Unit	2023-24
5	Hydro power purchase requirement	1*4	MU	4.75
6	Wind Renewable Energy Target		%	1.60%
7	Wind power purchase requirement	1*6	MU	11.54
8	Other Renewable Energy Target		%	24.82%
9	Other RE Purchase Requirement	1*8	MU	178.50
10	Distributed Renewable Energy Target		%	1.00%
11	Distributed RE purchase requirement	1*10	MU	7.19
12	Actual Hydro power achievement	Input Data	MU	3.25
13	Surplus / (Deficit) in Hydro RE purchase	(12-5)	MU	-1.50
14	HPO achievement	12/1	%	0.45%
15	WPO (Wind) actual achievement	Input Data	MU	0.00
16	Surplus / Deficit in WPO (wind) purchase	(15-7)	MU	-11.54
17	WPO achievement	15/1	%	0%
18	Other RE purchase (a+b+c+d+e)	Input data	MU	331.79
a	Co-generation		MU	0
b	Small Hydro		MU	41.28
c	Biomass		MU	0
d	Solar		MU	39.42
e	Others		MU	251.09
19	Surplus / Deficit in other RE purchase	(18-11)	MU	153.29
20	Other RPO achievement	18/1	%	46%
21	Distributed RE actually achievement	Input data	MU	0.00
22	Surplus/Deficit in Distribution RE purchase	(21-9)	MU	-7.16
23	Distribution RE achievement (%)	21/1	%	0.0%
24	Total RE purchase achievement	12+15+18+21	MU	335.04
25	RE Purchase achievement in %	24/1	%	46.58%
26	RPO to be fulfilled	(3-24)	MU	-133.06
27	RE Certificates procurement need if any		Crores	Nil

5.6.4. Inter State Transmission Charges

Petitioner's Submission

The Hon'ble Commission in the Tariff Order dated 28.03.2023 for the FY 2023-24 had approved transmission charges of ₹ 63.76 Crores. The actual transmission charges for the FY 2023-24 is ₹ 50.69 Crores. The actual transmission charges based on the audited annual accounts as compared to the approved figure is provided in the table below.

Table 5.10: Transmission Charges FY 2023-24

(In ₹ Crores)

Sl. No.	Particulars	Approved in T.O. dated 23.03.2023	Approved in T.O. dated 15.03.2024	As per Accounts
1	2	3	4	5
1	Transmission Charges	63.76	55.70	50.69
	Total	63.76	55.70	50.69

Commission's Analysis

The Commission after thorough scrutiny of these expenses in detail with the additional information data so provided by P&ED, it is noticed that an amount Rs.0.4784Cr of late payment surcharges were also included in the claim of Rs.50.6860Cr. Eventually, Commission after disallowing the said late payment surcharges paid to CTUIL, PGCIL, POSOCO approves Inter-State Transmission Charges (CTU Charges) at Rs.50.2076Cr only for FY2023-24 for this True-up purpose (or say Rs.50.21Cr), as the Commission is unwilling to pass-on those penalties to retail consumers unnecessarily.

5.6.5. Intra -State Transmission Charges (State Transmission Charge)

Commission Analysis:

The Licensee did not claim/indicate any Intra-state Transmission charges for FY 2023-24 basing upon the audited actuals submitted in the form of audited annual accounts approved by the statutory auditor. Accordingly, the Commission approves **Rs. Nil** amount against Intra-State Transmission Charges in FY2023-24 for True-up purpose in reality.

5.6.6. O & M Expenses

a) Employee Cost

Petitioner's submission

The Hon'ble Commission had approved employee cost of ₹ 144.95 Crores for the FY 2023-24 vide Tariff Order dated 28.03.2023. The audited accounts for department are not function wise, hence, segregated actual employee expenses for distribution function is not available. The actual employee cost provided below is total for the department as a whole.

It is submitted that in view of the fact that **the function wise segregated costs are not available and the audited costs are inclusive of the cost of generation & transmission function, P&ED Mizoram is not claiming the cost of generation & intra-state transmission charges separately.**

The Hon'ble Commission may kindly consider the above submission and true-up the employee cost for the FY 2023-24.

The approved employee cost and actual value of employee cost for FY 2023-24 is provided in the table below:

Table 5.11: Employee Cost FY 2023-24

(In ₹ Crores)				
Sl. No.	Particulars	Approved in T.O. dt 28.03.2023	Approved in T.O. dated 15.03.2024	As per Accounts
1	2	3	4	5
1	Employee Cost	144.95	128.25	193.12
	Total	144.95	128.25	193.12

Commission Analysis:

Accordingly, the Commission too approves the same amount of **Rs.193.12Cr**s for **true-up** relating to FY 2023-24 towards employee cost of entire P&ED utility for **all the three functions together in the absence of segregation for each function by P&ED as per their records submitted.**

b) Repairs & Maintenance

Petitioner's submission:

The Hon'ble Commission had approved repair & maintenance expenses of ₹ 11.96 Crores for the FY 2023-24 vide Tariff Order dated 28.03.2023. Repair & maintenance expenses approved as above only relates to the distribution function. However, the audited accounts for department are not function wise hence, segregated actual repair & maintenance expenses for distribution function is not available. The actual repair & maintenance expenses provided below are total for the department as a whole.

It is submitted that in view of the fact that **the function wise segregated costs are not available and the audited costs are inclusive of the cost of generation & transmission function, P&ED Mizoram is not claiming the cost of generation & intra-state transmission charges separately.**

The Hon'ble Commission may kindly consider the above submission and true-up the repair & maintenance expenses for the FY 2023-24.

The approved repair & maintenance expenses and actual value of repair & maintenance expenses for FY 2023-24 is provided in the table below:

Table 5.12: Repair & Maintenance Expenses FY 2023-24

(In ₹ Crores)

Sl. No.	Particulars	Approved in T.O. dated 28.03.2023	Approved in T.O. dated 15.03.2024	As per Accounts
1	2	3	4	5
1	Repair & Maintenance expenses	11.96	9.89	28.71
	Total	11.96	9.89	28.71

Further, it is submitted that ₹ 1.15 Crores out of ₹ 28.71 Crores is paid to M/s. Amazon Engineering & M/s. Assam Petroleum Ltd towards Operation & Maintenance chares for Khawiva SHP, Tuipui SHP, Kau Tlabung SHP & Teirei SHP plants during FY 2023-24.

Commission Analysis:

This amount of ₹28.71Cr includes the O&M Charges paid to M/s. Amazon Engineering & M/s Assam Petroleum to the tune of ₹1.15Cr. These charges in FY2022-23 was paid at ₹1.68Cr p.a and in comparison, lesser charges were paid this year but the reasons not specified.

Therefore, Commission now approves the R&M expenses at Rs.27.56Cr as against Rs.28.71 Crore claimed in FY 2023-24 for True-up purpose. The O&M amount of Rs.1.15Cr was treated as amount paid towards Generation cost expenditure for the leased out four (4) SHP plants to outsider for True-Up purpose.

c) Administration & General Expenses

Petitioner's submission

The Hon'ble Commission had approved Administration & General Expenses of ₹ 2.10 Crores for the FY 2023-24 vide Tariff Order dated 28.03.2023. Administration & General Expenses approved as above only relates to the distribution function. However, the audited accounts for department are not function wise hence, segregated actual Administration & General Expenses for distribution function is not available. The actual Administration & General Expenses provided below is total for the department as a whole.

It is submitted that in view of the fact that **the function wise segregated costs are not available and the audited costs are inclusive of the cost of generation & transmission function, P&ED Mizoram is not claiming the cost of generation & intra-state transmission charges separately.**

The Hon'ble Commission may kindly consider the above submission and true-up the Administration & General Expenses for the FY 2023-24. The approved Administration & General Expenses and actual value of Administration & General Expenses for the FY 2023-24 is provided in the table below:

Table 5.13: Administration & General Expenses FY 2023-24

(In ₹ Crores)

Sl. No.	Particulars	Approved in T.O. dated 28.03.2023	Approved in T.O. dated 15.03.2024	As per Accounts
1	2	3	4	5
1	Administration & General Expenses	2.10	4.54	4.27
	Total	2.10	4.54	4.27

Commission's Analysis

The Commission observes that P&ED has incurred lesser Administrative cost towards Travelling & Conveyance and Miscellaneous expenses than what was approved for in the APR Tariff Order figures for FY2023-24. Since, the audited actuals claimed for are lesser than the APR approved figure, **the Commission now approves actual claim of Administrative and General Expenses of Rs.4.27 Crores for entire department as a whole entity for the FY 2023-24 for True-up purpose.**

d) O&M Expenses

Abstract of actual O&M Expenses approved by Commission are as detailed in the Table below.

Table 5.14: O&M Expenses approved by the Commission for true-up of FY 2023-24

(Rs. Cr)		
Sl. No	Particulars	Amount
1	Employee Cost	193.12
2	R&M Expenses	27.56
3	Administration and General expenses	4.27
4	Total O&M Expenses approved	224.95

5.6.7. Depreciation

The Hon'ble Commission had not approved any amount for Depreciation for the FY 2023-24 vide Tariff Order dated 28.03.2023. The approved Depreciation and 1 % of the actual value of Depreciation as per the Fixed Asset & Depreciation Register for the FY 2023-24 is provided in the table below:

Table 5.15: Depreciation FY 2023-24

(In ₹ Crores)				
Sl. No.	Particulars	Approved in T.O. dated 28.03.2023	Approved in T.O. dated 15.03.2024	As per Accounts
1	2	3	4	5
1	Depreciation	0.00	0.00	0.51
	Total	0.00	0.00	0.51

Commissions Analysis

As seen from the audited accounts of FY 2023-24 the total depreciation during the year is Rs.50.8779 Crores. It is observed that 1% of the depreciation is Rs.0.5087 Crore was preferred by P&ED as its expenditure is mostly funded with grants received from Government which is the intention behind P&ED claiming for the above depreciation. The same amount of Rs.0.51Crs is allowed for True-up purpose.

Table 5.16: Capital Asset Grants used for Assets Creation

Item details	2023-24	2022-23	2021-22	2020-21
	Rs. Lakhs	Rs. Lakhs	Rs. Lakhs	Rs. Lakhs
Capital Subsidy balance	261570.01	261570.01	256003.46	249175.56
Add: subsidy Additions	7459.38	0.00	0.00	6827.9
Capital Subsidy (A)	269029.39	261570.01	256003.46	256003.46
Original Cost of Fixed Assets (B)	160795.28	157610.56	142211.30	137916.10
Excess of Capital Subsidy over OCFA	108234.11	103959.45	113792.16	118087.36

Item details	2023-24	2022-23	2021-22	2020-21
	Rs. Lakhs	Rs. Lakhs	Rs. Lakhs	Rs. Lakhs
OCFA upon Capital subsidy (%)	48.56%	39.75%	55.55%	53.87%

Since the Capital subsidy is always more than OCFA figure so far, the Commission accordingly approves 1% as nominal depreciation Rs.0.5087Cr (i.e., 1% of Rs.50.87Cr) for true-up purpose out of the total for FY2023-24. It is also a well-known fact that the depreciation is a **non-cash** item and any reduction in this amount will no way affects the P&ED financially in anyway but certainly benefits the Consumers in the form of lesser tariff burden.

5.6.8. Interest & Finance Charges

The interest & finance charges approved for the FY2023-24 and actual value of interest & finance charges made by the P&ED Mizoram for the FY 2023-24 is provided in the table below:

Table 5.17: Interest & Finance Charges FY 2023-24

(In ₹ Crores)				
Sl. No.	Particulars	Approved in T.O. dated 28.03.2023	Approved in T.O. dated 15.03.2024	As per Accounts
1	2	3	4	5
1	Interest & Finance Charges	0.00	0.00	0.14
	Total	0.00	0.00	0.14

Commissions Analysis:

The Interest and Finance charges payable by P&ED during FY 2023-24 was to the tune of Rs.13.71907lakhs towards State Government Loan lenders. The interest amount was charged to P&L A/c *but, in reality, it is not actually paid but only created an outstanding liability provision for the accrued interest as a book-entry adjustment and getting reimbursement from consumers.* The Interest being claimed in the annual accounts is not being paid but shown as outstanding liability even for the amount relating to earlier (past) years also. Since the liability is not discharged, the entire amount shall not be allowed even in the True-up exercise and the same will only be considered for reimbursement when actually paid in future with proof of payment.

Since these dues found to be left uncleared even after 31st march 2024, the entire interest portion of unpaid will be clawed back at one go while truing-up for FY 2024-

25 finally as these were already passed on to the consumers in the past but left unpaid till date and this is only an extra leeway given by the Commission to take suitable action as a last resort else the same will be recovered fully for certainty. **Therefore, no interest amount pertaining to FY2023-24 is allowed as pass through now and it will only be allowed when they were actually discharged in full to the utilities concern and produce the proof of payment in future true-up for Commission's reference.**

5.6.9. Interest on Working Capital

Petitioner's submission

P&ED has followed the same methodology applied in the Tariff Order dated 15.03.2024 & does not claimed any amount relates to Interest on Working Capital. The Interest on Working Capital as approved for the FY 2023-24 and actual value of Interest on Working Capital for the FY 2023-24 is provided in the table below:

Table 5.18: Interest on Working Capital FY 2023-24

(In ₹ Crores)				
Sl. No.	Particulars	Approved in T.O. dated 28.03.2023	Approved in T.O. dated 15.03.2024	As per Accounts
1	2	3	4	5
1	Interest on Working Capital	0.00	0.00	0.00
	Total	0.00	0.00	0.00

Commissions Analysis:

As per the MYT Regulation 2014, the interest on working capital is a permissible element of ARR expenditure as per the following relevant provision:

- (i). As per regulation 29(4) of JERC for Manipur and Mizoram (MYT) Regulations 2014 the distribution licensee shall be allowed on estimated level of working capital computed as follows:
 - a) O&M Expenses for one month; plus
 - b) Maintenance of spares at 1% of historical cost escalated at 6%; plus
 - c) Receivables equivalent to one month from sale of electricity at prevailing tariff minus.
 - d) Amount hold as Security deposit under clause (a) and (b) of sub-section (1) of 47 of the Act, from consumers except security deposit held in the form of Bank guarantee.

- e) Interest shall be allowed at a rate equal to the State Bank Advance Rate (SBAR) as on 1st April of this financial year in which the petition is filed.

It is thoroughly observed that so far P&ED had not drawn any kind of working capital loan during the entire financial year of 2023-24 or was there any history of such loans being drawn in the past. Moreover, the P&ED while arriving at the working Capital requirement (form-F4, page 179 of Formats) is ignoring the Consumer security deposit (CSD) possessed by them to the tune of Rs.29.9265Cr in FY 2023-24 (Schedule-27 of Audited Balance sheet), though the regulation had provided for it but still it prefers to claim higher amount in the form of interest on working capital ignoring CSD. It appears, P&ED is under mis-conception that Interest on Working Capital can be claimed irrespective of actual availment of short-term loan and same provision is not covered in the clause 29.3 & 29.4 of the MYT regulation 2014.

Thus, Commission feels that admitting of interest on Working Capital would only be an additional burden on retail consumers since no such expenditure was incurred by P&ED and it is fully dependent upon and was availing required funding from the State government itself for their day to day routine operations.

Hence, no detailed calculation need be made afresh for this purpose in FY 2023-24 and no amount is allowed for true-up under this head now and even in future also if the same situation prevails.

5.6.10. Provision for Bad Debts

Petitioner's submission:

The Hon'ble Commission did not approve Provision for Bad & Doubtful Debt for the FY 2022-23 and actual provisions made in the Accounts for the FY 2023-24 is also nil.

Table 5.19: Provision for Bad & Doubtful Debt FY 2023-24

(In ₹ Crores)

Sl. No.	Particulars	Approved in T.O. dated 23.03.2023	Approved in T.O. dated 15.03.2024	As per Accounts
1	2	3	4	5
1	Provision for Bad Debt	0.00	0.00	0.00
	Total	0.00	0.00	0.00

Commission's Analysis:

The **Commission also approves NIL bad debts provision for FY2023-24.**

The Licensee shall therefore make some useful and Special Intensive drive efforts for more revenue recoveries from its defaulting consumers. It is very much desired that the P&ED shall make this effort assiduously and see that the dues are promptly collected from consumers to avoid financial crunch during any part of the financial year in future.

5.6.11. Non-Tariff Income/Other Incomes**Petitioner submission:**

The Other Income approved and actual value of other income made by the P&ED Mizoram for the FY 2023-24 is provided in the table below:

Table 5.20: Other Income FY 2023-24

(In ₹ Crores)				
Sl. No.	Particulars	Approved in T.O. dated 28.03.2023	Approved in T.O. dt.15.03.24	As per Accounts
1	2	3	4	5
1	Non-Tariff Income	8.48	11.31	10.20
	Total	8.48	11.31	10.20

Commission Analysis:

The Commission in its Tariff Order dated 28.03.2023 had approved for Rs.8.48 Crore as Non-tariff Income for the FY 2023-24. But the P&ED has reported a revised actual amount of Rs.10.20Cr in their true-up submission now as per their **approved audited accounts**. Hence, the same amount is considered in true-up now by the Commission.

Efficiency gains improvement was already shown as Rs.8.00Cr in Tariff Order of FY2023-24 upon observing the poor performance by Licensee in revenue realisation. But the P&ED totally omitted to specify this efficiency gains item in their True-up submission table.

In view of the revenue surplus indicated in the ARR fling for FY2023-24, it is considered that the P&ED had performed and achieved it and hence it is considered as Zero amount for True-Up purpose.

Contribution to contingency reserve fund: Though an amount of Rs.3.23Cr was already allowed in the Tariff Order of FY2021-22 which was not actually spent by the Licensee for the intended purpose and simply remitted it to Govt. treasury after its collections from consumers. Even at the time of Truing up in FY2023-24 it was not clawed back by Commission and hence the same is now taken back by fully recovering it in this True-up adjustment process in full settlement of contingency reserve earlier granted twice.

True-Up surplus pertains to FY2021-22: Though, the amount was reflected as Rs.57.20Cr in FY2023-24, in reality it is appropriate to recover only Rs.52.53Cr. Hence, the amount of recovery will now be restricted/limited to Rs.52.53Cr only, thus rectifying the excess amount shown earlier benefiting the P&ED in true-up.

5.6.12. Return on Equity

The Hon'ble Commission did not approve return on equity for FY 2023-24. No provision for the return on equity is made in the Accounts by the P&ED Mizoram for FY 2023-24.

Table 5.21: Return on Equity FY 2023-24

(In ₹ Crores)				
Sl. No.	Particulars	Approved in T.O. dated 28.03.2023	Approved in T.O. dated 15.03.2024	As per Accounts
1	2	3	4	5
1	Return on Equity	0.00	0.00	0.00
	Total	0.00	0.00	0.00

Commission Analysis:

Since P&ED is a Government Department with no equity component in their Annual Audited Accounts, the **Return on Equity is not allowable** and hence not considered for FY 2023-24 by the Commission. This kind of similar treatment would continue so long there is no Equity Capital stake in the P&ED financial structure.

5.6.13. Revenue from approved tariffs

Petitioner Submission:

The revenue from sale of power approved for the FY 2023-24 vide Tariff Order dated

28.03.2023 and actual value of revenue from sale of power for the FY 2023-24 is provided in the table below:

Table 5.22: Revenue from Sales of Energy during FY 2023-24
(In ₹ Crores)

Sl. No.	Category	Approved in T.O. dated 23.03.2023	As per Accounts
	LT Consumers		
1	Kutir Jyoti	2.45	2.25
2	Domestic	186.39	203.21
3	Non-Profit Public Purpose	8.93	10.59
4	Commercial	35.22	38.76
5	Public Lighting	3.10	3.46
6	Public Water Works	7.71	0.44
7	Agriculture	0.03	0.03
8	Industrial	3.22	1.93
9	Electric Vehicle Charging	1.75	0.00
	Total LT	248.79	260.66
	HT Consumers		
10	Domestic	3.81	1.18
11	Non-Profit Public Purpose	14.01	12.76
12	Commercial	15.97	18.77
13	Agriculture	0.06	0.20
14	Public Water Works	99.47	110.63
15	Industrial	9.41	13.22
16	Electric Vehicle Charging	0.80	0.00
17	Bulk Supply	14.53	11.27
	Total HT	158.07	168.02
18	Total LT & HT	406.85	428.69
19	Outside State- Trading	62.62	98.33
	Total	469.47	527.02

Commission's Analysis:

The revenue realisation from retail consumers for FY 2023-24 so tabulated by P&ED above is adopted by the Commission with one adjustment relating to Outside State Sales amount made as it includes the under-drawl compensation revised amount of Rs.22.82Cr (as per additional information replies, instead of initial value of Rs.22.47Cr) against the quantum of 56.6571MU.

But the compensation received was treated as revenue realised from Outside state sales by P&ED. The same is now reversed by deducting the U/D compensation from sales value to properly depicting in the actual power

purchase cost finally and the boosted OSS sales value is depicted to a realistic value of Rs.75.51Crs (i.e.Rs.98.33crs - Rs.22.82Crs) (refer table-5.24).

Detailed revenue realised comparison table is placed below for reference.

Sl. No.	Consumer Category (FY 2023-24)	As per Accounts	As per Commission
	LT Consumers	Rs.Crs	Rs.Crs
1	Kutir Jyoti	2.25	2.25
2	Domestic	203.21	203.21
3	Non-domestic	10.59	10.59
4	Commercial	38.76	38.76
5	Public Lighting	3.46	3.46
6	Public Water Works	0.44	0.44
7	Agriculture	0.03	0.03
8	Industrial	1.93	1.93
9	Electric Vehicle Charging	0.00	0.00
	Total LT	260.66	260.66
	HT Consumers		
9	Domestic	1.18	1.18
10	Non-Domestic	12.76	12.76
11	Commercial	18.77	18.77
12	Public Water Works	110.63	110.63
13	Agriculture	0.20	0.20
14	Industrial	13.22	13.22
15	Electric Vehicle Charging	0.00	0.00
16	Bulk Supply	11.27	11.27
17	Theft & Pilferage	---	---
	Total HT	168.02	168.02
	Grand Total	428.69	428.69

However, the Commission approves the same revenue amount from retail sale of energy at Rs.428.69 Crores during FY 2023-24 based on the details made available by P&ED for Commission scrutiny for true-up purpose.

5.7. Summary of actuals filed by P&ED for true up & approved by Commission

Petitioner's submission:

It is submitted that in view of the fact the function wise segregated costs are not available and the audited costs are inclusive of the cost of generation & transmission function, P&ED Mizoram is not claiming the cost of generation & intra-state transmission charges separately.

The Annual Revenue Requirement approved and actual value of Annual Revenue

Requirement for the FY 2023-24 is provided in the table below:

Table 5.23: True up of ARR FY 2023-24

(In ₹ Crores)

Sl. No.	Item of Expense	Approved in T.O. dated 28.03.2023	Approved in T.O. dated 15.03.2024	As per Accounts
1	2	3	4	5
1	Cost of Fuel	0.00	0.00	0.00
2	Cost of Generation	5.56	5.56	0.00
3	Cost of Power Purchase	359.92	507.57	485.55
4	Transmission Charges	63.76	55.70	50.69
2	Intra-state Transmission Charges	53.20	0.00	0.00
3	Employee Costs	144.95	128.25	193.12
4	R&M Expenses	11.96	9.89	28.71
5	Administration and General Expenses	2.10	4.54	4.27
6	Depreciation	0.00	0.00	0.51
7	Interest charges	0.00	0.00	0.14
8	Interest on Working Capital	0.00	0.00	0.00
9	Provision for bad debts	0.00	0.00	0.00
10	Return on NFA /Equity	0.00	0.00	0.00
11	Contribution to Contingency Reserve Fund	0.00	0.00	0.00
12	Total Revenue Requirement	641.45	711.50	762.99
13	Less: Non-Tariff Income	8.48	11.31	10.20
14	Less: Net surplus in true-up	57.20	52.53	57.20
15	Less: Efficiency Gains (Outstanding dues collection)	8.00	8.00	0.00
16	Net Revenue Requirement	567.77	639.66	695.59
17	Less: Revenue from Sale of Power	469.47	540.68	527.02
18	Gross Revenue Surplus/(Gap/Deficit)	-98.30	-98.98	-168.57
19	Less: Revenue Subsidy & Grant from State Govt.	98.30	112.56	185.31
20	Net Revenue Surplus/(Gap/Deficit)	0.00	13.59	16.75

It is prayed that the Hon'ble Commission may kindly consider the above submission and approve the Aggregate Revenue Requirement and Gap for the FY 2023-24.

Commission Analysis:

Table 5.24: Aggregate Revenue Requirement of FY 2023-24 approved for true-up (Rs. Cr)

Sl. No.	Item of Expense (FY 2023-24)	Approved in T.O dt 28.03.23	As per Accounts	Commission Approved
1	Cost of Fuel	0.00	--	0
2	Cost of Generation	5.56	--	1.15
3	Cost of Power Purchase	359.92	485.55	457.22
4	Transmission Charges (CTU)	63.76	50.69	50.21
5	Intra-State Transmission Charges	53.20	--	0

Sl. No.	Item of Expense (FY 2023-24)	Approved in T.O dt 28.03.23	As per Accounts	Commission Approved
6	Employee Costs	144.95	193.12	193.12
7	R&M Expenses	11.96	28.71	27.56
8	Admin& General Expenses	2.10	4.27	4.27
9	Depreciation	--	0.51	0.51
10	Interest charges	--	0.14	0.00
11	Interest on Working Capital	--	--	0
12	Provision for bad debts	--	--	0
13	Return on NFA /Equity	--	--	0
14	Contingency Reserve Contribution.	--	--	-3.23
15	Total Revenue Requirement	641.45	711.51	730.80
16	Less: Non-Tariff Income	8.48	10.20	10.20
17	Less: FY21-22 true-up surplus	57.20	57.20	52.53
18	Less: Efficiency Gains (for poor performance)	8.00	--	0.00
19	Net Revenue Requirement	567.77	639.67	668.07
20	Less: Revenue from revised Tariff	406.85	428.69	428.69
	Less: Revenue from Outside Sales	62.62	98.33	75.51
21	Gross Revenue Deficit	98.30	168.57	163.87
22	Less: Revenue Subsidy from Govt.	98.30	185.31	185.31
23	Net Revenue Gap /(surplus) (21-22)	Nil	-16.75	-21.44

5.8. Revenue gap/surplus after true up:

It is interesting to note that the P&ED had only considered the entire subsidy amount of Rs.185.31 Crore that was shown under schedule-4 of the Audited Balances Sheet. Accordingly, the organisation has attained a considerable surplus financial status to the tune of **Rs.21.44Crs** which was not properly reflected in the ARR filings.

As per regulation 13.1(i) of the Tariff Regulations, 2014 (as adopted by MZERC), one-third ($\frac{1}{3}$ rd) of the gain amount **Rs.7.15Crs** shall be passed on as a rebate to all the consumers in the tariff fixation in FY 2025-26.

Eventually, **Rs.7.15Crs** being one-third ($\frac{1}{3}$ rd) portion of surplus amount of **Rs.21.44Crs** will now be passed on as a rebate in the ARR mount for FY 2025-26 as per the Regulation above cited. The remaining $\frac{2}{3}$ rd surplus is kept at the exclusive disposal of the P&ED for any of its useful purpose by retaining it with them instead of remitting it back to Government Treasury by doing so it may loose its identity to trace back for amount any time in future.

-- ##--

6. Annual Performance Review (APR) for FY2024-25

6.1. Back ground

Petitioner's Submission:

Multi Year Tariff Order for the control period of 5 years from FY 2023-24 to FY 2027-28 was issued by the Hon'ble Commission vide order dated 28.03.2023 under the Joint Electricity Regulatory Commission for Manipur and Mizoram (Multi Year Tariff) Regulations, 2014 read with First Amendment Regulations, 2019.

The Hon'ble Commission determined the Aggregate Revenue Requirement for the FY 2023-24 to FY 2027-28 & Tariff for the FY 2023-24 vide Order dated 28.03.2023. Further, Tariff Order for the FY 2024-25 was issued vide Order dated 15.03.2024.

Regulation 5.2 (iii) of the Joint Electricity Regulatory Commission for Manipur and Mizoram (Multi Year Tariff) Regulations, 2014 provides as follows:

"In case of Mid-term Review of Business Plan under Regulation 4.2 (i), the Petition shall comprise of:

- a. Truing Up for previous year;*
- b. Modification of the ARR for the remaining year of the Control Period, if any, with adequate justification for the same;*
- c. Revenue from the sale of power at existing tariffs and charges for the ensuing year;*
- d. Revenue gap for the ensuing year calculated based on ARR approved in the MYT Order and truing up for the previous year;*
- e. Application for determination of tariff for the ensuing year."*

Further, the Hon'ble Commission notified the First Amendment Regulations, 2019 is as follows:

"5.2 The filing of the Control Period under these Regulations shall be as under.

(i).....

(ii) From the second year of the Control Period onwards and upto the last year of the Control Period, the petition in each year shall comprise of:

- a. Truing Up for the previous year with audited accounts, and Annual Performance Review (APR) with revision of ARR approved in MYT Order for current year and revised projection of ARR approved in MYT Order for the ensuing year in accordance with these Regulations;*
- b. Revenue from the sale of power at existing tariffs and changes for the current year;*
- c. Revenue gap for the ensuing year calculated based on the revised projection of ARR and truing up of the previous year;*
- d. Application for determination of tariff for the ensuing year.”*

Further, the Hon’ble Commission had directed the P&ED Mizoram to file APR for the current Financial Year ie., FY 2024-25 along with the Tariff Petition for the next Financial Year ie., FY 2025-26.

In compliance with the above directive of the Hon’ble Commission, P&ED Mizoram is submitting the present petition for Review of FY 2024-25.

P&ED Mizoram requests the Hon’ble Commission to carry out the Review for the FY 2024-25 in accordance with the Joint Electricity Regulatory Commission for Manipur and Mizoram (Multi Year Tariff) Regulations, 2014 read with First Amendment Regulations, 2019.

Data given in this chapter is for the entire year i.e. FY 2024-25.

6.2. Energy Sales

It is submitted that the P&ED Mizoram has revised the projection of number of consumers, connected load & energy sales for the FY 2024-25 based on the audited actual figures of the FY 2023-24 and the actuals for the FY 2024-25 H1 (1st Half Year). The CAGR for the 3 years, 2 years and 1 year has been computed and appropriately applied to arrive at the revised number of consumers, connected load & energy sales for the FY 2024-25. This has been done as there was variation between the approved figure and the revised estimates of sales for the FY 2024-25. The details of projections are provided in the subsequent sections.

6.3. Number of Consumers

The estimates of category wise number of consumers have been revised based on the audited actual figures of the FY 2023-24 and the actuals for the FY 2024-25 (H1).

The CAGR for the 3 years, 2 years and 1 year has been computed and appropriately applied to arrive at the revised number of consumers. Based on the audited actuals of FY 2020-21 to FY 2023-24, the growth rate of number of consumers and the revised number of consumers is detailed in the table below.

Table 6.1: Category-wise Growth in Number of Consumer FY 2024-25

Sl. No.	Category	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	CAGR for 3 Years	CAGR for 2 Years	CAGR for 1 Year	Considered	FY 24-25
1	KJ(Domestic)	19790	21834	17441	17274	-4.43	-11.05	-0.96	5.00	18138
2	Domestic LT	223673	231040	243058	251553	3.99	4.34	3.50	5.00	264131
3	Domestic HT	25	22	11	11	-23.94	-29.29	-	5.00	12
	Total Domestic	243488	252896	260510	268838					282280
4	Non-Profit Public Purpose LT	6914	7742	8212	8640	7.71	5.64	5.21	7.71	9306
5	Non-Profit Public Purpose HT	11	17	55	62	77.96	90.97	12.73	12.73	70
	Total Non-Profit Public Purpose	6925	7759	8267	8702					9376
6	Commercial LT	11784	12646	13176	13804	5.42	4.48	4.77	5.42	14552
7	Commercial HT	280	339	497	519	22.84	23.73	4.43	5.00	545
	Total Commercial	12064	12985	13673	14323					15097
8	Public Lighting	1244	1316	520	698	-17.52	-27.17	34.23	5.00	733
9	PWS LT	9	11	177	10	3.57	-4.65	-94.35	5.00	11
10	PWS HT	70	70	55	73	1.41	2.12	32.73	5.00	77
11	Agl LT	35	37	52	66	23.55	33.56	26.92	10.00	73
12	Agl HT	2	3	23	7	51.83	52.75	-69.57	5.00	7
13	Industrial LT	1034	1023	1027	1031	-0.10	0.39	0.39	5.00	1083
14	Industrial HT	23	16	26	27	5.49	29.90	3.85	5.49	28
15	Bulk Supply HT (Incl. Temp.)	228	212	159	156	-11.88	-14.22	-1.89	5.00	164
	Grand Total	265122	276328	284489	293931					308928

Commission analysis:

The Commission has noted that there is reduction in number of consumers as against the values stated in the ARR filing for 2024-25. The earlier total consumer figure was at 334207, while it was drilled down in the fresh projection to 308928. In the projection no Electric Vehicle charging category was taken in to account. Instead of catering to more, the consumers are reduced a bit is unacceptable and hope this has no reflection on the consumer services being extended by the entity. This aspect needs more attention.

6.4. Connected Load.

The estimates of category wise connected load have been revised based on the

audited actual figures of the FY 2023-24 and the actuals for the FY 2024-25 (H1). The CAGR for the 3 years, 2 years and 1 year has been computed and appropriately applied to arrive at the revised connected load. Based on the audited actuals of FY 2020-21 to FY 2023-24, the growth rate of connected load and the revised connected load is detailed in the table below.

Table 6.2: Consumer Category-wise Growth in Connected Load FY 2024-25

Sl. No.	Category	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	CAGR for 3 Years	CAGR for 2 Years	CAGR for 1 Years	Considered	FY 2024-25
1	KJ(Domestic)	3.87	5.38	4.49	5.29	10.99	-0.84	17.84	5.00	5.55
2	Domestic LT	281.72	303.82	313.46	322.03	4.56	2.95	2.73	5.00	338.13
3	Domestic HT	5.70	4.51	2.10	2.08	-28.53	-32.08	-0.86	5.00	2.19
	Total Domestic	291.29	313.70	320.05	329.40					345.87
4	Non-Profit Public Purpose LT	14.71	17.10	94.42	18.87	8.66	5.04	-80.01	5.04	19.82
5	Non-Profit Public Purpose HT	0.44	2.81	10.00	11.40	196.82	101.54	14.03	14.03	13.00
	Total Non-Profit Public Purpose	15.15	19.91	104.42	30.27					32.83
6	Commercial LT	34.66	42.47	42.11	43.47	7.85	1.17	3.23	5.00	45.65
7	Commercial HT	9.94	17.23	15.88	18.06	22.05	2.39	13.75	5.00	18.97
	Total Commercial	44.59	59.70	58.00	61.54					64.62
8	Public Lighting	0.91	1.29	0.99	1.34	13.65	1.99	35.78	5.00	1.41
9	PWS LT	0.27	0.96	1.21	0.73	40.25	-12.53	-39.11	5.00	0.77
10	PWS HT	79.29	55.15	44.48	40.12	-20.32	-14.71	-9.80	5.00	42.12
11	Agl LT	0.11	0.08	0.07	0.09	-4.58	7.80	30.93	5.00	0.10
12	Agl HT	0.17	0.21	4.54	0.26	15.22	12.08	-94.27	5.00	0.27
13	Industrial LT	5.00	11.68	5.08	4.87	-0.86	-35.42	-4.19	5.00	5.11
14	Industrial HT	5.43	5.89	8.29	8.92	18.01	23.01	7.57	7.57	9.59
15	Bulk Supply HT (Incl. Temp.)	54.84	18.38	17.47	16.96	-32.37	-3.94	-2.90	5.00	17.81
	Grand Total	497.03	486.95	564.57	494.50					520.49

Commission Analysis:

Why the P&ED is attempting to re-project for year (FY 2024-25) that is coming to an end. Instead they must adopt this technique to estimate the probable values for FY 2025-26 instead of making an analysis for the values pertaining to a year that is almost coming to completion. The new projection is lower figure of 520.49MW than the Tariff Order approved connected load of 631.778MWs. This higher value during Tariff Order time must have the impact of higher revenue than it could yield. The precision in the estimation is not robust.

6.5. Category wise sales

The estimates of category wise sales have been revised based on the audited actual

figures of the FY 2023-24, the actuals for the FY 2024-25 (H1) and the revised number of consumers & connected load as detailed above. Further, CAGR for the 3 years, 2 years and 1 year has been computed and appropriately applied to arrive at the revised sales. Based on the audited actuals of FY 2020-21 to FY 2023-24, the growth rate of sales and the revised sales is detailed in the table below.

Table 6.3: Consumer Category-wise Growth in Energy Sales FY 2024-25

Sl. No.	Category	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	CAGR for 3 Years	CAGR for 2 Years	CAGR for 1 Years	Considered	FY 2024-25
1	2	3	4	5	6	7	8	9	10	11
1	KJ(Domestic)	7.19	5.63	4.88	4.81	-12.52	-7.58	-1.39	5.00	5.05
2	Domestic LT	271.90	276.95	291.22	304.83	3.89	4.91	4.68	5.00	320.08
3	Domestic HT	4.35	3.29	2.23	1.33	-32.65	-36.45	-40.41	5.00	1.39
	Total Domestic	283.43	285.87	298.32	310.97					326.52
4	Non-Profit Public Purpose LT	8.20	8.68	11.79	12.13	13.95	18.20	2.88	5.00	12.74
5	Non-Profit Public Purpose HT	0.25	12.84	3.98	6.72	198.16	-27.63	69.16	5.00	7.06
	Total Non-Profit Public Purpose	8.45	21.52	15.77	18.86					19.80
6	Commercial LT	34.20	35.10	38.81	41.69	6.83	8.99	7.43	6.83	44.54
7	Commercial HT	10.07	12.79	13.14	16.02	16.74	11.90	21.86	5.00	16.82
	Total Commercial	44.26	47.89	51.95	57.71					61.36
8	Public Lighting	2.11	2.35	2.48	2.70	8.49	7.20	8.76	7.20	2.89
9	PWS LT	0.79	6.20	6.32	0.22	-34.42	-81.01	-96.46	5.00	0.23
10	PWS HT	81.66	74.34	89.64	95.34	5.30	13.24	6.36	6.36	101.40
11	Agl LT	0.06	0.05	0.05	0.07	5.05	20.41	51.66	5.05	0.08
12	Agl HT	0.10	0.09	1.01	0.20	26.11	49.77	-80.12	5.00	0.21
13	Industrial LT	4.06	2.54	2.44	2.47	-15.29	-1.45	0.98	5.00	2.59
14	Industrial HT	5.54	7.04	10.98	13.57	34.78	38.77	23.58	10.00	14.92
15	Bulk Supply HT (Incl. Temp.)	14.45	16.37	14.11	13.39	-2.52	-9.56	-5.10	5.00	14.06
	Grand Total	444.92	464.27	493.08	515.50					544.07

The above table reflects the category wise CAGR for three years, two years and one year. Depending on the trend of the growth in individual categories over the period of three years, two years and one year, CAGR has been applied and the same is reflected in the column 10 of the above table. Accordingly, category wise revised sales estimate for the FY 2024-25 has been arrived.

Further, there has been substantial variations have been observed in the energy sales for other categories as well in the H1 of the FY 2024-25 which shall have substantial impact on the revenue & gap for the FY 2024-25.

In view of the above, category wise revised sales estimate is proposed for the consideration and approval of the Hon'ble Commission. The comparison of category wise revised sales estimate and the sales approved by the Hon'ble Commission for the FY 2024-25 is provided in the table below.

Table 6.4: Energy Sales FY 2024-25

(In MUs)				
Sl. No.	Category	Approved in T.O. dated 28.03.2023	Approved in T.O. dated 15.03.2024	As per Revised Estimate
	LT Consumers			
1	KJ (Domestic)	6.52	5.38	5.05
2	Domestic	320.61	321.98	320.08
3	Non-Profit Public Purpose	10.32	13.00	12.74
4	Commercial	37.94	44.04	44.54
5	Public Lighting	2.75	2.77	2.89
6	Agriculture	0.06	0.05	0.08
7	Public Water Works	7.18	6.97	0.23
8	Industrial	2.94	2.69	2.59
9	Electric Vehicle Charging	0.00	1.00	0.00
	Total LT	388.32	397.89	388.20
	HT Consumers			
10	Domestic	3.80	2.46	1.39
11	Non-Profit Public Purpose	14.86	4.38	7.06
12	Commercial	14.81	13.88	16.82
13	Agriculture	0.10	1.12	0.21
14	Public Water Works	86.49	98.40	101.40
15	Industrial	8.16	12.10	14.92
16	Electric Vehicle Charging	0.00	1.00	0.00
17	Bulk Supply	18.95	15.55	14.06
	Total HT	147.17	148.89	155.87
18	Total LT & HT	535.49	546.79	544.07
19	Outside State - Trading	92.11	138.01	178.00
	Total	627.60	684.79	722.07

Commission's Analysis

The estimations made for FY 2024-25, should have been extrapolated for FY 2025-26 which is the year of concern and not for the year under annual review and which is about to conclude by the time this order is issued. But there are no traces of adopting this method in deriving the annual sales for FY 2025-26 is not stated anywhere in the filing submission is not comprehensible. The purpose of this is not much of any use.

6.6. Distribution Loss for FY 2024-25

The distribution loss trajectory approved by the Hon'ble Commission for the FY

2024-25 & the estimated distribution loss considered by the P&ED Mizoram for the FY 2024-25 is provided in the table below. However, actual distribution loss shall be submitted for consideration of the Hon'ble Commission for Truing– up after the end of the financial year when the accounts are audited.

Table 6.5: Distribution Loss for FY 2024-25

Sl. No.	Particulars	Approved in T.O. dated 28.03.2023	Approved in T.O. dated 15.03.2024	As per Revised Estimate
1	2	3	4	5
1	Distribution Loss	21.62%	14.00 %	26.75%

Commissions Analysis:

Basically, the distribution losses in FY 2024-25 shall be matching with the RDSS based loss trajectory already determined by the fund disbursing authority. The RDSS based agreed loss information when called for the copy of letter issued by MoP vide its Letter No.12/11(01)/2021-UR&SI-II (263835) Dt.21.03.2023 was provided for verification during the finalisation this year Tariff Order. The following are the Loss trajectory fixed under the RDSS scheme:

Scheme period of RDSS	2021-22	2022-23	2023-24	2024-25
AT&C Losses	24.00%	21.00%	17.50%	14.00%

Strictly basing on the above finalised loss trajectory, the losses for FY2024-25 will be same as shown above. Hence, Commission too had frozen the actuals to the end of this FY2024-25 at the same level and altering the distribution losses at this juncture is futile and 26.75% now reflected in APR filing is un-acceptable. The Licensee must own the responsibility for the underperformance and hence, the losses cannot be passed on to consumers.

6.7. P&ED's Own Generation

The P&ED Mizoram's own generation approved by the Hon'ble Commission for the FY 2024-25 & the estimated own generation considered by the P&ED Mizoram for the FY 2024-25 is provided in the table below:

Table 6.6: P&ED Mizoram's Own Generation FY 2024-25

(In MUs)				
Sl. No.	Particulars	Approved in T.O.dt 28.03.23	Approved in T.O dated 15.03.2024	As per Revised Estimate
1	2	3	4	5
1	Total Generation (Net)	31.07	39.63	37.09
	Total	31.07	39.63	37.09

It is submitted that Amazon Engineering have been undertaking Operation & Maintenance (O&M) of **Khawiva SHP, Tuipui SHP & Kau-Tlabung SHP** and Assam Petroleum Ltd have been undertaking Operation & Maintenance (O&M) of **Teirei SHP** on behalf of P&ED Mizoram in the power generation. Further, the Installed Capacity & energy generation is also included in the books of P&ED Mizoram. **The net-generation of 0.01 MUs for Lengpui Project is included in the total net generation of 37.09 MUs.**

Commission's Analysis

As seen from the present APR filing submission by P&ED indicated Own generation capacity total is at 38.85 MW which includes 0.50MW of Lengpui diesel set. During the last year filing the P&ED had not considered the **Kawlberm SHP- 4MWs plant** which **was commissioned on 15th December 2022** into the installed capacity but the same is now included in the installed capacity of both years FY2024-25 & FY2025-26. Thus, the total installed capacity rose to 38.35MWs including the **Serlui-B station constantly awaiting Commercial Operation excluding the Lengpui diesel set.**

After having carefully observed, leaving aside the three (3) plants O&M operations are handled to **M/s. Amazon Engineering PVT Ltd** and the one **Teirei-3MWs SHP** other by **M/s. Assam Petroleum Ltd**, the effectively remaining SHPs in P&ED own operation are only the following plants tabulated below with installed capacity of 26MWs only but not the grand figure 38.35MWS as because there are some age-old plants with installed capacity of 4.80MWs which are not generating any power and also the Lengpui diesel set with 0.50MW capacity.

The following table will clearly depict the power station now in effective operation.

Sl. No.	SHP Name	Inst. Cap (MWs)	COD Date	Present Plant Status
A - SHP Power Plants not Generating Power				
1.	Serlui-A SHP	1.00	24.04.1984	Out of Commission
2.	Tuirivang SHP	0.30	14.08.1989	---- do ----
3.	Tuipanglui SHP	3.00	17.12.2004	No generation
4.	Lamsial SHP	0.50	26.08.2008	---- do ----
5.	Lengpui (diesel)	0.50	No data	Out of Commission
	Subtotal (A)	5.30	Nil Energy	
B – Effectively Power producing Small Hydro Plants (SHP)				
5.	Maicham-I	2.00	05.01.1996	Generating power
6.	Maicham-II	3.00	11.11.2009	-- do --
7.	Tlawva	5.00	13.05.2022	---- do ----
8.	Kawl bem	4.00	15.12.2022	---- do ----
9.	Serlui-B	12.00	Awaiting COD	Infirm power
	Subtotal (B)	26.00	Power Generated by P&ED	
C - SHPs managed by outside Agencies				Pvt Agency name
10.	Khawiva SHP	1.05	08.12.1988	Amazon Engg.
11.	Tuipui SHP	0.50	15.12.1991	-- do --
12.	Kau-Tlabung SHP	3.00	05.05.2005	-- do --
13.	Teirei SHP	3.00	12.10.1999	Assam Petroleum
	Subtotal (C)	7.55		
Grand Installed Capacity		38.85	Installed Capacity adopted in ARR	

Three (3) plants being maintained by M/s. Amazon Engineering and one (1) by M/s. Assam petroleum was also bunched-up and included in P&ED Own generation capacity in this year FY2024-25 as well as in FY 2025-26. but in reality, these plants were managed by two outside agencies stated above for which the P&ED is also paying **Rs.1.15Cr**s towards O&M charges to run them is what stated in APR filing towards Operating and maintenance charges in respect of these four plants. Thus, though these plants technically forming part of P&ED Own Generation since they are managed/maintained by an outsider but not by P&ED and besides some cost amount is being spent by P&ED for availing power supply from them **Hence, the P&ED instead of claiming Generation ARR individually as per norms for each such four plants should only claim the actual maintenance charges paid for these four (4) plants in FY 2025-26 and for this year this cost be shown under Generation cost instead of R&M Expenses.**

Thus, Commission draws an inference that effectively Own energy generation is only from five (5) SHP plants. The energy expected from outside agencies was clearly indicated separately in their filing but shown in Generation related ARR expecting about **11.554MU** of power from those plants. Accordingly, the balance

generation of 25.522MU (including Serlui-B output of 17.94MU) so projected is construed to have been contributed by Own SHPs as shown in the above table during FY 2024-25 as well as in 2025-26 also so as to make the total expected energy to be 37.076MU. But as per the Generation ARR filing submission the energy projected only for 37.09MU in all and this variation is left unexplained.

6.8. Power Purchase quantum:

The power purchase units approved for the FY 2024-25 is 761.37 Mus in the Tariff Order dated 15.03.2024. The revised estimate for power purchase units for the FY 2024-25 has been arrived at on the basis of actual power purchase for the H1 (1st half year) of the FY 2024-25 and actual purchase for H2 (2nd half year) of the FY 2023-24. Accordingly, the power purchase units estimate for the FY 2024-25 is revised at 914.32 MUs. The approved & estimated power purchase units for FY 2024-25 are provided in the table below:

Table 6.7: Power Purchase Units FY 2024-25

				In (MUs)
Sl. No.	Particulars	Approved in T.O. dated 28.03.2023	Approved in T.O dated 15.03.2024	As per Revised Estimate
1	2	3	4	5
1	Power Purchase Units	772.37	761.37	914.32
	Total	772.37	761.37	914.32

Commission Analysis:

The above figure of 914.82MU indicated in table is exclusive of 37.09MU of power from Own Generation of P&ED, but the total power purchase quantity approved in Tariff Order of FY2024-25 is 801MU from all sources. The estimations made by the P&ED in its review petition (APR) for FY2024-25 is based on the power share allocation and purchase of energy from Central generating stations capacity. The Commission now considers everything as it is and the details of share allocations and quantity of energy expected to procure in FY 2024-25 is detailed in the following table for reference:

Table 6.8: Power Purchase quantum approved by Commission for FY 2024-25

Sl. No	Energy Generation Source (2024-25)	Plant Capacity (MW)	Licensee's Share in %	Licensee's Share in MW	MU Purchased/generated (ex-bus)
A	Central Generating Stations	(MW)	(MW)	(MW)	(MU)
I	NTPC				

Sl. No	Energy Generation Source (2024-25)	Plant Capacity (MW)	Licensee's Share in %	Licensee's Share in MW	MU Purchased/generated (ex-bus)
1	Bongaigaon TPS	750.00	5.415	40.61	182.39
2	Farakka STPS	1600.00	0.142	2.27	15.79
3	Kahalgaon STPS	840.00	0.142	1.19	8.38
4	Talcher STPS	1000.00	0.142	1.42	9.24
	NTPC-Total	4190.00		45.49	215.80
II	NHPC				
1	Loktak HEP	105.00	5.020	5.27	25.06
	NHPC-Total	105.00		5.27	25.06
III	NEEPCO				
1	Kopili HEP	200.00	4.610	9.22	25.14
2	Kopili - II HEP	25.00	6.040	1.51	10.58
3	Khandong HEP	50.00	3.940	1.97	0.00
4	Ranganadi HEP	405.00	5.700	23.09	59.30
5	Doyang HEP	75.00	5.250	3.94	10.98
6	Pare HEP	110.00	5.765	6.34	21.83
7	a) Tuirial HEP	60.00	100.000	60.00	207.68
	b) Free Power share				28.32
8	AGBPP	291.00	5.410	15.74	33.41
9	AGTPP	135.00	6.000	8.10	13.48
	NEEPCO-Total	1351.00		129.91	410.72
IV	TSECL				
1	B'mura - IV	21.00	25.000	5.25	20.65
2	B'mura - V	21.00	25.000	5.25	
	TSECL-Total	42.00		10.50	20.65
V	OTPC				
1	Palatana	726.00	5.785	42.00	202.54
	OTPC-Total	726.00		42.00	202.54
B	State generating Stations				
	All Units (incl. Lengpui diesel set)	38.85	100	38.85	37.09
	Owned Generation Total	38.85		38.85	37.09
C	UI / Deviation & IEX Purchase				0
	UI / Deviation-Total				0
D	Other RE Energy				
	1.Roof-top solar Generation				37.35
	2.Solar Generation (State)	2.35		2.35	2.19
E	RPO Obligation / REC Certificate				0
F	LC Enhancement/Renewal charges				0
G	Bilateral Power Purchase				
1	Utility 1				
	Bilateral-Total				0.00
	GRAND TOTAL	6455.20		274.37	951.40

Since the financial year will be coming to an end by the time this order is issued, thus the Commission don't want to alter any values in this major

head of expenditure power purchase so submitted by the Licensee. Mere changing of these values may not yield any useful purpose.

6.9. Energy Balance

The revised estimate of energy balance based on the energy requirement and energy availability for the FY 2024-25 is provided in the table below:

Table 6.9: Energy Balance FY 2024-25

Sl. No	Energy Balance	Approved in T.O. dated 28.03.2023	Approved in T.O. dated 15.03.2024	As per Revised Estimate
A	Energy Requirement			
1	Energy Sales	535.49	546.78	544.07
2	Distribution Loss (%)	21.62%	14.00%	26.75%
3	Distribution Loss (MUs)	147.68	89.01	198.68
4	Total Energy Requirement	683.17	635.79	742.76
B	Energy Availability			
5	Own Generation	31.07	39.63	37.09
6	Energy Purchase from ER	33.40	27.81	33.41
7	Less: ER Pool Loss (%)	1.95%	2.00%	1.88%
8	Less: ER Pool Loss (Mus)	0.65	0.56	0.63
9	Net Energy for ER	32.75	27.25	32.78
10	Energy Purchase from NER (Exl. Tuirial HEP)	542.36	559.03	605.37
11	UI / Deviation	0.00	0.00	0.00
12	Sub Total	575.11	586.28	638.15
13	Less: NER Pool Loss (%)	2.36%	2.33%	2.33%
14	Less: NER Pool Loss (MUs)	13.57	13.66	14.87
15	Net Energy at NERLDC	561.54	572.62	623.28
16	Energy purchases from Tuirial HEP	170.93	121.90	207.68
17	Free Energy from Tuirial HEP	23.31	16.49	28.32
18	Amazon Engineering	0.00	0.00	0.00
19	Rooftop Solar Generation	0.07	34.02	37.35
20	Solar Generation	2.30	2.12	2.19
21	Energy Available	789.22	786.78	935.91
22	Less: Outside State - Trading	92.11	138.01	178.00
23	Total Energy Available	697.11	648.77	757.91
24	Less: Intra State Tr. Loss (%)	2.00%	2.00%	2.00%
25	Less: Intra State Tr. Loss (MUs)	13.94	12.98	15.16
26	Net Energy Available	683.16	635.80	742.76
27	Less: Energy requirement at State Periphery	683.17	635.79	742.76
28	ENERGY SURPLUS/(DEFICIT)	0.00	0.00	0.00

Commission's Analysis

The distribution Losses so projected by P&ED at 26.75% is far higher when compared with the RDSS scheme-based targets of 14.00% and the gap between the two is

12.75% which is apparently difficult to bridge the gap. Despite, fully aware of the set target of 14.00% to achieve, the P&ED had filed the distribution Losses at 26.75% leave aside the efficiency in revenue collections to 100% of billed revenue during the year.

Since, the modified figures were known by the Commission now is not in a position to make any useful decision at this fag-end of the financial year except the await the actuals to be known during their true-up submission in due course and no suggestive energy balance figures are indicated now in this APR order for this year but certainly the actual **distribution loss value would be considered for the true-up**. But this results in reduction of distribution Loss indicated as excess procurement of 110.12MU estimated in their energy balance for FY 2024-25 in their APR filing is visible in the table below:

Table 6.10: Energy Balance FY 2024-25 by Commission

Sl. No.	Details of Energy Balance for FY 2024-25	Approved
A	State Grid Energy requirement for Distribution activity	(MU)
1	Retail Sale of energy (LT & HT) - (Actuals)	544.07
2	Distribution Loss (%)	26.75%
3	Distribution Loss (MU) - (4-1)	198.69
4	Energy at Distribution Periphery – (1+3)	742.76
B	Sources of Energy Availability	(MU)
5	Purchases from Eastern Region (ER) - Input)	33.41
6	a) Inter-State Losses on ER Energy (%) (Refer Annexure-VII)	1.88%
	b) Inter-State Losses on ER Energy (MU)	0.628
7	Net ER Energy after Losses (5 - 6b)	32.78
8	Purchases from North Eastern Region (Excl. Tuirial energy)	605.37
9	Gross Energy from all external sources (7+8)	638.15
10	Add: UI over drawl Energy (Net) & UI Deviations	0.00
11	Less: Sale of energy at IEX (incl. of UI Under-drawl)	-182.24
12	Energy handled at NER grid (9 to 11)	455.91
13	a) Inter-State Trans. loss in NER (%) - (Refer Annexure-VI)	2.33%
	b) Inter-State Trans. loss in NER (MU)	10.62
14	Net energy from sources outside Mizoram (12-13b)	445.29
15	Energy purchases from Tuirial HEP	207.68
16	Free Power from Tuirial HEP	28.32
17	Own Generation & Lease-out station energy	37.09
18	Roof top Solar & Solar Generation	37.35
19	State Solar Generation	2.19
20	Gross Energy at State Periphery (MU) - (14 to 19)	757.92
21	Intra-State Losses (%) – (as per ARR filed)	2.00%
22	Intra-State Losses (MU)	15.16
23	Energy available for distribution Input (MU) – (20- 22)	742.76

6.10. Fuel Cost**Petitioner's submission**

The values of fuel cost approved for the FY 2024-25 are not proposed to be revised at this stage. However, the actuals shall be submitted at the time of truing-up.

Table 6.11: Fuel Cost FY 2024-25**(In ₹ Crores)**

Sl. No.	Particulars	Approved in T.O. dated 28.03.2023	As per Revised Estimate	Deviation
1	2	3	4	5
1	Cost of Fuel	0.00	0.00	0.00
	Total	0.00	0.00	0.00

Commission's Analysis

The above fuel cost pertains to DG Set used at Lengpui Airport which equipment is being used on a standby basis but not reported to have kept it under usage. Thus, the Commission now approves Nil Fuel Cost for FY 2024-25 after performance review and it will be linked to the actual costs if any at the time of truing-up, despite P&ED made 0.01MU projection for this year.

6.11. Cost of Generation**Petitioner's submission**

The values of cost of generation approved for the FY 2024-25 vide Tariff Order dated 15.03.2024 are not proposed to be revised at this stage. However, the actuals shall be submitted at the time of truing-up

Table 6.12: Cost of Generation FY 2024-25**(In ₹ Crores)**

Sl. No.	Particulars	Approved in T.O. dated 28.03.2023	Approved in T.O. dated 15.03.2024	As per Revised Estimate
1	2	3	4	5
1	Cost of Generation	5.74	9.16	9.16
	Total	5.74	9.16	9.16

Commission Analysis:

The Commission after considering of the factual details pertaining to FY2023-24, now approves generation cost for FY 2024-25 at Rs.5.74Crs as approved under MYT Order Dt.28.03.2023 and to watch for the actuals if any spent.

6.12. Power Purchase Cost

Petitioner's submission

The Hon'ble Commission in the Tariff Order for the FY 2024-25 had approved a power purchase quantum of 761.37 MUs at a total cost of ₹ 494.78 Crores in the Tariff Order dated 15.03.2024. As submitted above the estimate of power purchase quantum for the FY 2023-24 is proposed to be revised to 914.32 MUs. Accordingly, the power purchase cost is also proposed to be revised. The detail calculation is provided in the Format No. F1(i) & F1a(i). Further, Power purchase cost for the FY 2024-25 has been arrived at in following manner: -

- i. Actual power purchase cost for the H1 of the FY 2024-25 has been considered.
- ii. For estimating the power purchase cost of H2, the estimated quantum of power purchase units for H2 has been taken from actual power purchase unit of FY 2023-24 and source wise average cost of FY 2023-24 escalated at 5.72% has been applied.

Further, the cost towards RPO has been arrived in accordance with the RPO targets prescribed in the RPO regulations 2023. The target for Wind RE, Hydro RE, Distributed RE & Other RE % is given in the table below:

Table 6.13: Percentage of RE Target

Sl. No.	FY	Wind RPO	Hydro RE	Distributed RE	Other RE	Total
1	2	3	4	5	6	7
1	2024-25	0.67%	0.38%	1.50%	27.35%	29.91%

For all the RPO category, the prescribed target as per above table has been applied on the base figure of **742.76 MUs** for the FY 2024-25.

P&ED Mizoram shall meet the requirement of Wind RE, Hydro RE & Other RE from its power procurement which is projected in total at 216.51 MUs for the FY 2024-25. Accordingly, there is no fund needed for meeting Wind RE, Hydro RE & Other RE target, its already projected as achieve.

Further, P&ED Mizoram shall meet the requirement of Distributed RE from its power procurement which is projected at 5.57 MUs for the FY 2024-25. Accordingly, there is no fund needed for meeting Distributed RE target, its already projected as achieve.

So, there is no need to project any cost towards purchase of REC certificates to meet the RPO obligation.

The comparison of the approved power purchase cost and the revised estimate as arrived above is given in the table below.

Table 6.14: Power Purchase Cost FY 2024-25

(In ₹ Crores)

Sl. No.	Particulars	Approved in T.O. dated 28.03.2023	Approved in T.O. dated 15.03.2024	As per Revised Estimate
1	2	3	4	5
1	Power Purchase Cost	359.66	494.78	494.55
	Total	359.66	494.78	494.55

Commissions Analysis

The power purchase cost of Rs.494.55Crores as per APR filing made by P&ED without RPO Obligation amount. It is **re-assessed at Rs.478.08Cr**s after cross checking the fulfilment of RPO Obligation is a **Nil** amount for the proposed energy draws by P&ED in FY2024-25. Besides, the supplementary bills amount is taken as 24.70Cr only as against the proposed figure of Rs.41.17Cr by P&ED.

The MZERC had revised the above indicated RPO obligation compliance vide its notification dt.18th November 2024. The RPO compliance as derived by Commission is appended below for comprehension.

Table 6.15: RPO Compliance as per Commission FY 2024-25 for APR

Sl. No.	Particulars (P&ED)	Formula	Unit	2024-25 (APR)
1	Energy Consumption in Distribution area		MU	742.76
2	Total RPO Target (Overall)		%	29.91%
3	Total RE purchase requirement	1*2	MU	222.16
4	Hydro Renewable Energy Target		%	0.38%
5	Hydro Power purchase requirement	1*4	MU	2.82
6	Wind Renewable Energy Target		%	0.67%
7	Wind Power purchase requirement	1*6	MU	4.98
8	Distributed Renewable Energy Target		%	0.75%
9	Distributed Renewable Energy requirement	1*8	MU	5.57
10	Other Renewable Energy Target		%	28.11%
11	Other RE Purchase Requirement	1*10	MU	208.79
12	HPO (Hydro) actual achievement	Input Data	MU	1.86
13	Surplus / (Deficit) in HEP purchase	12-5	MU	-0.96

Sl. No.	Particulars (P&ED)	Formula	Unit	2024-25 (APR)
14	HPO achievement (%)	12/5	%	66%
15	WPO (Wind) actual achievement	Input Data	MU	0.00
16	Surplus/ Deficit in WPO (Wind Power) purchase	15-7	MU	-4.98
17	WPO achievement (%)	15/7	%	0%
18	Other RE purchase (a+b+c+d+e)	Input data	MU	475.66
a	Co-generation		MU	0
b	Small Hydro		MU	35.23
c	Biomass		MU	0
d	Solar		MU	39.54
e	Others		MU	400.89
19	Surplus / Deficit in Other RE purchase	18-11	MU	266.87
20	Other RPO achievement (%)	18/11	%	228%
21	Distributed RE actually achievement	Input data	MU	0.00
22	Surplus/Deficit in Distribution RE purchase	21-9	MU	-5.57
23	Distribution RE achievement (%)	21/9	%	0%
24	Total RE purchase achievement	12+15+18+21	MU	477.52
25	RPO Surplus(+)/deficit (-) to be fulfilled	24-3	MU	255.36
26	RE Purchase achievement in %	24/3	%	214.94%
27	RE Certificates procurement need if any		Crores	0.00

As seen from the above detailed calculation made for RPO obligation fulfilment, it is noticed that the P&ED had complied the RPO obligation needs based on the provisions of the Regulation issued by Mizoram Electricity Regulatory Commission vide notification no.T.13012/1/24-MZERC/8, Dt.18th November 2024 as this regulation is applicable to P&ED department from FY2024-25 onwards until the issuance of any new regulation in this regard. As can be seen from the above table the energy procurement is more the target amount by 243.36MU in FY2024-25.

Based on the above RPO obligation of P&ED for the Financial year 2024-25, the power purchase cost allowable for P&ED under APR Review is derived separately and tabulated with all relevant details for each element wise in comparison with Tariff Order figure as well as with the APR petition figures for clear elaboration.

The Details of Commission approved Power Purchase cost for FY2024-25 after APR review is tabulated below for comparison sake.

Power Purchase cost approved the Commission after APR Review for FY 2024-25											
Sl. No.	Energy Source - P&ED (FY2024-25)	MWs	Tariff Order (15.3.2024)			P&ED Filed (APR values)			Approved (APR Order)		
		Licensee's share	Units (MU)	Total Cost (Rs Cr)	CPU (Rs/ kWh)	Units (MU)	Total Cost (Rs Cr)	CPU (Rs/ kWh)	Units (MU)	Total Cost (Rs Cr)	CPU (Rs/ kWh)
A	CGS - NTPC Stations										
1	NTPC Bongaigaon Unit I - NER	40.613	111.73	98.99	8.86	182.39	139.64	7.66	182.39	139.64	7.66
2	Farakka STPS - ER	2.272	13.29	9.23	6.95	15.79	7.51	4.76	15.79	7.51	4.76
3	Kahalgaoon STPS - ER	1.193	7.58	4.09	5.40	8.38	3.71	4.43	8.38	3.71	4.43
4	Talcher STPS - ER	1.42	6.94	2.42	3.49	9.24	2.13	2.31	9.24	2.13	2.31
	Sub Total - NTPC	45.497	139.54	114.73	8.22	215.80	152.99	7.09	215.80	152.99	7.09
B	CGS - NHPC										
1	Loktak HEP	5.271	12.55	6.90	5.50	25.06	9.82	3.92	25.06	9.82	3.92
	Sub-Total - NHPC	5.271	12.55	6.90	5.50	25.06	9.82	3.92	25.06	9.82	3.92
C	NEEPCO										
1	Kopili - I HE	9.220	36.64	15.39	4.20	25.14	6.04	2.40	25.14	6.04	2.40
2	Kopili - II HE	1.510	0.00	0.00	#DIV/0!	10.58	2.61	2.47	10.58	2.61	2.47
3	Khandong HE	1.970	16.12	5.56	3.45	0.00	0.00	#DIV/0!	0.00	0.00	#DIV/0!
4	Ranganandi HE Project	23.085	0.00	0.00	#DIV/0!	59.30	19.92	3.36	59.30	19.92	3.36
5	Doyang HE Project	3.938	8.73	7.24	8.29	10.98	8.18	7.45	10.98	8.18	7.45
6	Pare HEP	6.342	27.74	15.73	5.67	21.83	11.89	5.45	21.83	11.89	5.45
7	Tuirial HEP	60.00	121.90	87.52	6.32	207.68	91.66	3.88	207.68	91.66	3.88
8	Tuiria HEP - Free Power	-	16.49			28.32			28.32		
9	Assam GBPP	15.740	18.50	22.16	11.98	33.41	35.48	10.62	33.41	35.48	10.62
10	Agartala GTPP	8.107	14.47	15.73	10.87	13.48	12.16	9.02	13.48	12.16	9.02
	Sub-total	129.911	260.59	169.33	6.50	410.72	187.94	4.58	410.72	187.94	4.58
D	Other Supplies										
1	Baramura GBPP Unit IV & V	10.50	83.83	61.78	7.37	20.65	14.87	7.20	20.65	14.87	7.20
2	OTPC - Pallatana	42.00	228.72	101.09	4.42	202.54	72.34	3.57	202.54	72.34	3.57
	Sub-total	52.50	312.55	162.87	5.21	223.19	87.21	3.91	223.19	87.21	3.91
	Total CGS & Other Purchases	233.18	725.23	453.83	6.26	874.77	437.96	5.01	874.77	437.96	5.01
E	Short-term power purchase										
	IEX Purchase		-	-	0.00	0.00	0.00	0.00	0.00	0.00	#DIV/0!
	Sub-total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	#DIV/0!
F	State Own Generation										
	P&ED maintained Units	38.85	39.63			37.09	0.00		37.09	0.00	-
	Amazon Generaion										
G	UI Overdrawl		-	-	0.00	0.00	-	#DIV/0!	0.00	0.00	#DIV/0!
	UI Underdrawls		-	-	0.00	0.00	-	0.00	0.00	0.00	#DIV/0!
H	REC Certificate/Obligation			27.48		-	0.00		-	0.00	
I	Roof-top Solar Generation		34.02	13.40	3.94	37.35	15.17	4.06	37.35	15.17	4.06
J	Solar Generation (State)	2.35	2.12	0.00	0.00	2.19	-		2.19	-	
K	Reactive Energy charges			0.06			0.03			0.03	
L	LC Enhance/Renewal chrg.						0.22			0.22	
M	Addl. Supplementary Bills			0.00	0.00		41.17	0.00		24.70	-
	TOTAL POWER PURCHASE	272.03	801.00	494.77	6.18	951.40	494.55	5.20	951.40	478.08	5.03

6.13. Inter-state Transmission Charges for 2024-25 by P&ED

The estimate of transmission charges for the FY 2024-25 is proposed to be revised based on the actuals for the FY 2023-24 and H1 of FY 2024-25. The comparison of the approved transmission charges and the revised estimate is given in the table below.

Table 6.16: Transmission Charges FY 2024-25**(In ₹ Crores)**

Sl. No.	Particulars	Approved in T.O. dated 28.03.2023	Approved in T.O. dated 15.03.2024	As per Revised Estimate
1	2	3	4	5
1	Transmission Charges	67.40	57.93	55.01
	Total	67.40	57.93	55.01

Commission analysis:

The Commission also approves Inter-state transmission charges (PGCIL charges) at Rs. 55.01 Crores for FY 2024-25 as submitted by P&ED after the review.

6.14. Intra-state Transmission Charges

The values of intra-state transmission charges approved for the FY 2024-25 are not proposed to be revised at this stage. However, the actuals shall be submitted at the time of truing-up.

Table 6.17: Intra-state Transmission Charges FY 2024-25**(In ₹ Crores)**

Sl. No.	Particulars	Approved in T.O. dated 28.03.2023	Approved in T.O. dated 15.03.2024	As per Revised Estimate
1	2	3	4	5
1	Intra-state Transmission Charges	54.53	45.74	45.74
	Total	54.53	45.74	45.74

Commission Analysis:

The Commission approves **Rs.25.74Cr**s of intra-state transmission charges for FY 2024-25 under APR purpose. Review of this cost element behaviour was made with reference to earlier years Audited statements when True-up claimed is taken-up. Historically, this cost element was always be nil as per the actuals spent based on audited accounts.

6.15. O & M Expenses**i. Employee Cost:****Petitioner's submission**

The value of employee cost approved for the FY 2024-25 is ₹ 135.59 Crores in the Tariff Order dated 15.03.2024. The revised estimate of employee cost for the FY 2024-25 has been arrived at on the basis of actual employee cost for the H1 (1st

half year) of the FY 2024-25 of ₹ 87.84 Crores for P&ED Mizoram. Accordingly, the employee cost estimate for the FY 2024-25 is revised at ₹ 122.97 Crores for **only relates to the distribution function**.

The approved & estimated employee cost for the FY 2024-25 is provided in the table below:

Table 6.18: Employee Cost FY 2024-25

(In ₹ Crores)

Sl. No.	Particulars	Approved in T.O. dated 28.03.2023	Approved in T.O. dated 15.03.2024	As per Revised Estimate
1	2	3	4	5
1	Employee Cost	147.56	135.59	122.97
	Total	147.56	135.59	122.97

Commissions Analysis

The Employee cost now projected for FY 2024-25 is lesser than what has been approved in the Tariff Order. Thus, the amount of Rs.122.97Cr is now approved by the Commission.

ii. Repairs & Maintenance

Petitioner's submission

The value of Repair & Maintenance Expenses approved for the FY 2024-25 is ₹10.46 Crores in the Tariff Order dated 15.03.2024. The revised estimate of Repair & Maintenance Expenses for the FY 2024-25 has been arrived at on the basis of actual Repair & Maintenance Expenses for the H1 (1st half year) of the FY 2024-25 of ₹ 20.87 Crores for P&ED Mizoram. Accordingly, the Repair & Maintenance Expenses estimate for the FY 2024-25 is revised at ₹ 16.24 Crores for **only relates to the distribution function**. The approved & estimated Repair & Maintenance Expenses for the FY 2024-25 is provided in the table below:

Table 6.19: Repair & Maintenance Expenses FY 2024-25

(In ₹ Crores)

Sl. No.	Particulars	Approved in T.O. dated 28.03.2023	Approved in T.O. dated 15.03.2024	As per Revised Estimate
1	2	3	4	5
1	Repair & Maintenance Expenses	12.65	10.46	16.24
	Total	12.65	10.46	16.24

Commission analysis:

The R&M cost now projected for FY 2024-25 is more than what has been approved in the Tariff Order. However, the amount of Rs.16.24Crs so projected is now approved by the Commission for APR purpose.

iii. Administration & General Expenses

The value of Administration & General Expenses approved for the FY 2024-25 is ₹ 4.05 Crores in the Tariff Order dated 15.03.2024. The revised estimate of Administration & General Expenses for the FY 2024-25 has been arrived at on the basis of actual Administration & General Expenses for the H1 (1st half year) of the FY 2024-25 of ₹ 4.83 Crores for P&ED Mizoram. Accordingly, the Administration & General Expenses estimate for the FY 2024-25 is revised at ₹ 6.77 Crores for **only relates to the distribution function**. The approved & estimated Administration & General Expenses for the FY 2024-25 is provided in the table below:

Table 6.20: Administration & General Expenses FY 2024-25**(In ₹ Crores)**

Sl. No.	Particulars	Approved in T.O. dated 28.03.2023	Approved in T.O. dated 15.03.2024	As per Revised Estimate
1	2	3	4	5
1	Administration & General Expenses	2.15	4.05	6.77
	Total	2.15	4.05	6.77

Commission's Analysis:

The Commission accordingly approves Administration and General Expenses at Rs. 6.77 Crore for the FY 2024-25 as estimated by P&ED and these values will be verified with actuals at the time of true up.

iv. Abstract of O&M Expenses Filed Vs. Approved for 2024-25:**Table 6.21: O&M Expenses approved by the Commission after Review**

Sl. No.	Expenses details	APR by P&ED (Rs.Crs)	Commission approved (Rs.Crs)
1	Employee Cost	122.97	122.97
2	Repair & Maintenance Expenses	16.24	16.24
3	Administration & General Expenses	6.77	6.77
	Total O&M Expenses	145.98	145.98

6.16. Depreciation

Petitioner's submission

The Hon'ble Commission has approved the Depreciation for the FY 2024-25. In this regard it is submitted that the GFA for the FY 2023-24 has got revised in accordance with the audited annual accounts for which true-up proposal is being submitted. The Fixed Asset & Depreciation Register for the FY 2023-24 is also being submitted. Therefore, the GFA & corresponding depreciation for the FY 2024-25 also stands revised. The Depreciation is estimated for the FY 2024-25 at ₹ 0.17 Crores which is 1% of the estimated amount for **only relates to the distribution function**.

In view of the above it is requested that the Hon'ble Commission may kindly consider & approve the revised depreciation for the FY 2024-25. The depreciation approved by the Hon'ble Commission and revised depreciation for the FY 2024-25 is provided in the table below:

Table 6.22: Depreciation FY 2024-25

(In ₹ Crores)

Sl. No.	Particulars	Approved in T.O. dated 28.03.2023	Approved in T.O. dated 15.03.2024	As per Revised Estimate
1	2	3	4	5
1	Depreciation	0.00	1.58	0.17
	Total	0.00	1.58	0.17

Commission Analysis

The licensee had projected lesser depreciation amount of Rs.0.17 Crores for APR. The Commission now approves the same amount so projected for FY2024-25 as against the Tariff Order figure of Rs.1.58Crs. However, the allowable depreciation will be limited to 1% of actuals value as per Audited accounts when finalised & approved for.

6.17. Interest & Finance Charges

The Hon'ble Commission did not approve interest & finance charges for the FY 2024-25. P&ED also does not claim any amount relates to interest & finance charges for the FY 2024-25. However, the actuals shall be submitted at the time truing-up. The interest & finance charges as approved & proposed by P&ED for the FY 2024-25 are provided in the table below:

Table 6.23: Interest & Finance Charges FY 2024-25

(In ₹ Crores)

Sl. No.	Particulars	Approved in T.O. dated 28.03.2023	Approved in T.O. dated 15.03.2024	As per Revised Estimate
1	2	3	4	5
	Interest & Finance Charges	0.00	0.00	0.00
	Total	0.00	0.00	0.00

Commission's Analysis

This is only a book entry in annual accounts but actual liability was not discharged for now and also even in the past. **Therefore, these charges can't be allowed now for the sole reason to avoid unnecessary burden on consumers.** It will be considered later upon producing the verifiable proof of payment effected to Lender in future ARR finalisation when done. It was also categorically stated in the additional information replies that all the loans were repaid in full and hence no interest on Debt was claimed successively for FY 2024-25 and FY 2025-26 also.

6.18. Interest on Working Capital**Petitioner's Submission**

P&ED has followed the same methodology applied in the Tariff Order dated 15.03.2024 & does not claimed any amount relates to Interest on Working Capital. The Interest on Working Capital as approved for the FY 2024-25 and actual value of Interest on Working Capital for the FY 2024-25 is provided in the table below:

Table 6.24: Interest on Working Capital FY 2024-25

(In ₹ Crores)

Sl. No.	Particulars	Approved in T.O. dated 28.03.2023	Approved in T.O. dated 15.03.2024	As per Revised Estimate
1	2	3	4	5
1	Interest on Working Capital	0.00	0.00	0.00
	Total	0.00	0.00	0.00

Commission's Analysis

As per the MYT Regulation 2014, the interest on working capital is a permissible element of ARR expenditure. However, it is observed that P&ED had not availed any working capital loan during the entire financial year or was there any history of such loans being drawn in the past. The admitting of Interest on working capital

now without actually spent would only cause additional burden on the consumers and there is no need for allowing this cost element as they are fully dependent/availing funding only from the State government and no other financial source was drawn for day to day routine operations. Hence, no calculation is made for this purpose in FY 2024-25 and **NIL amount of IWC is allowed.**

But these charges will be considered for allowing if short-term loans are availed practically during the period adopting the same analogy as that of Return on Equity element to off-load the unnecessary burden on Consumers.

6.19. Interest on Consumer Security Deposit

The Hon'ble Commission did not approve interest on Consumer Security Deposit for the FY 2024-25 and the P&ED Mizoram too had not proposed for the same.

Table 6.25: Interest on Consumer Security Deposit FY 2024-25

(In ₹ Crores)

Sl. No.	Particulars	Approved in T.O. dated 28.03.2023	Approved in T.O. dated 15.03.2024	As per Revised Estimate
1	2	3	4	5
1	Interest on Consumer Security Deposit	0.00	0.00	0.00
	Total	0.00	0.00	0.00

Commission too did not approve any amount for this expenditure item.

6.20. Provision for Bad Debts

The Hon'ble Commission did not approve Provision for Bad & Doubtful Debt for the FY 2024-25 and the P&ED Mizoram is not proposing any provisions for the same.

Table 6.26: Provision for Bad & Doubtful Debt FY 2024-25

(In ₹ Crores)

Sl. No.	Particulars	Approved in T.O. dated 28.03.2023	Approved in T.O. dated 15.03.2024	As per Revised Estimate
1	2	3	4	5
1	Provision for Bad Debt	0.00	0.00	0.00
	Total	0.00	0.00	0.00

Commission too approves NIL amount for this expenditure item.

6.21. Contributions to Contingency Reserve fund

The Hon'ble Commission did not approve Contribution to Contingency Reserve Fund

for the FY 2024-25 and the P&ED Mizoram is not proposing any provisions for the same.

Table 6.27: Contribution to Contingency Reserve Fund FY 2024-25

(In ₹ Crores)

Sl. No.	Particulars	Approved in T.O. dated 28.03.2023	Approved in T.O. dated 15.03.2024	As per Revised Estimate
1	2	3	4	5
1	Contribution to Contingency Reserve Fund	0.00	0.00	0.00
	Total	0.00	0.00	0.00

Commission Analysis:

It was categorically stated by P&ED that it is not in a position to invest Contingency Reserve fund as all the money is being deposited into Government treasury and without consent of Government of Mizoram (GoM) the fund creation in a non-drawl account is not possible in the absence of independent financial control to P&ED. Hence, the creation of fund proposal is hence forth withdrawn by the Commission and the fund so far collected was clawed back in true-up of FY 2023-24 itself in full and final settlement of all earlier allowed amounts.

6.22. Non-tariff Income

The Other Income approved for the FY 2024-25 is ₹ 11.96 Crores in the Tariff Order dated 15.03.2024. Further, the other income estimate has been reworked based on the changed determinants. The other income approved & estimated is provided in the table below:

Table 6.28: Other Income FY 2024-25

(In ₹ Crores)

Sl. No.	Particulars	Approved in T.O. dated 28.03.2023	Approved in T.O. dated 15.03.2024	As per Revised Estimate
1	2	3	4	5
1	Non-Tariff Income	8.96	11.96	10.78
	Total	8.96	11.96	10.78

Commission Analysis:

Non-Tariff Income: The Commission accordingly approves **Rs.10.78 Crores**

towards Non-tariff Income for the FY 2024-25 same as per the estimate of P&ED now for APR purpose.

Efficiency Gains: The Commission had adopted Rs.2.00Cr towards Efficiency Gains amount for FY2024-25 in the Tariff Order itself. But this figure was omitted by P&ED in the APR submission. However, the same is ignored duly considering their revenue surplus achieved in FY2023-24.

6.23. Return on Equity

The Hon'ble Commission did not approve return on equity for the FY 2024-25 and the P&ED Mizoram is not proposing for the same.

Table 6.29: Return on Equity FY 2024-25

(In ₹ Crores)				
Sl. No.	Particulars	Approved in T.O. dated 28.03.2023	Approved in T.O. dated 15.03.2024	As per Revised Estimate
1	2	3	4	5
1	Return on Equity	0.00	0.00	0.00
	Total	0.00	0.00	0.00

Commission Analysis:

The Commission also approved NIL amount towards Return on Equity for FY 2024-25, because of the same prevailing situation of no equity investment so far made for this purpose.

Revenue from sale of power

Petitioner's Submission:

The P&ED Mizoram has considered the revised estimate of energy sale as detailed in para 1.2 above for calculating the estimated revenue from sale of power. The comparison of approved revenue & revised estimate for the FY 2024-25 is provided in the table below:

Table 6.30: Revenue from retail Sales of Energy during FY 2024-25

(In ₹ Crores)			
Sl. No.	Category	Approved in T.O. dated 15.03.2024	As per Revised Estimate
	LT Consumers		
1	KJ(Domestic)	2.06	2.05

Sl. No.	Category	Approved in T.O. dated 15.03.2024	As per Revised Estimate
2	Domestic	195.91	191.26
3	Non-Profit Public Purpose	17.59	11.78
4	Commercial	40.89	43.30
5	Public Lighting	3.25	3.54
6	Agriculture	0.02	0.03
7	Public Water Works	7.88	0.34
8	Industrial	2.48	2.46
9	Electric Vehicle Charging	0.86	0.00
	Total LT	270.94	254.77
	HT Consumers		
10	Domestic	2.52	1.61
11	Non-Profit Public Purpose	5.14	8.26
12	Commercial	15.59	19.49
13	Agriculture	0.81	0.02
14	Public Water Works	113.58	123.84
15	Industrial	13.61	16.75
16	Electric Vehicle Charging	0.99	0.00
17	Bulk Supply	14.23	13.44
	Total HT	166.47	183.40
18	Total LT & HT	437.41	438.17
19	Outside State - Trading	95.56	105.04
	Total	532.97	543.21

Commission Analysis

The Commission provisionally approves the projected revenue from existing tariffs from all sources at Rs.438.17 Crore during FY 2024-25 from the retail sale of 544.07MU units and the revenue expected to be realisable from outside State sales is from the IEX sale is Rs.105.04Crs by selling 178MU as per this APR filing.

As revising these values at this juncture will not serve any purpose in this eleventh hour. However, the final actuals need be compared with approved Audited accounts to determine the gap status in due course.

6.24. Review of FY 2024-25 ARR filings

The Annual Revenue Requirement approved for FY 2024-25 and revised value of Annual Revenue Requirement for FY 2024-25 is provided in the table below:

Table 6.31: Review of ARR FY 2024-25**(In ₹ Crores)**

Sl. No.	Item of Expense	Approved in T.O. dated 28.03.2023	Approved in T.O. dated 15.03.2024	As per Revised Estimate
1	2	3	3	4
1	Cost of Fuel	0.00	0.00	0.00
2	Cost of Generation	5.74	9.16	9.16
3	Cost of Power Purchase	395.66	494.78	494.55
4	Transmission Charges	67.40	57.93	55.01
5	Intra State Transmission	54.53	45.74	45.74
6	Employee Costs	147.56	135.59	122.97
7	R&M Expenses	12.65	10.46	16.24
8	Administration and General Expenses	2.15	4.05	6.77
9	Depreciation	0.00	1.58	0.17
10	Interest charges	0.00	0.00	0.00
11	Interest on Working Capital	0.00	0.00	0.00
12	Interest on Consumer Security Deposit	0.00	0.00	0.00
13	Provision for bad debts	0.00	0.00	0.00
14	Return on NFA /Equity	0.00	0.00	0.00
15	Contribution to Contingency Reserve Fund	0.00	0.00	0.00
16	Total Revenue Requirement	685.69	759.29	750.61
17	Less: Non-Tariff Income	8.96	11.96	10.78
18	Less:1/3 Surplus transferred from FY21-22		15.13	15.13
19	Less: Efficiency Gains (for dues collection)	15.00	2.00	0.00
20	Net Revenue Requirement	661.73	730.20	724.70
21	Less: Revenue from Sale of Power		532.97	543.21
22	Gross Revenue Surplus/(Gap/Deficit)		-197.23	-181.49
23	Less: Revenue Subsidy & Grants from State Govt.		197.23	197.23
24	Net Surplus/ (Gap/Deficit) (23-22)		0.00	15.74

It is prayed that the Hon'ble Commission may kindly consider the above submissions and approve the review of Aggregate Revenue Requirement and Gap for the FY 2024-25. Further, Actual Revenue Subsidy & Grants from State Govt. shall be submitted for consideration of the Hon'ble Commission for Truing-up after the end of the financial year when the accounts are audited.

Commission Analysis:**Table 6.32: Commission approved Review of ARR FY 2024-25**

Expenditure Items for	MYT 24-25 28/3/2023	T.O 24-25 15/3/2024	APR for FY 2024-25	Commission Approved
FY 2024-25	(Crs)	(Crs)	(Crs)	(Crs)
Cost of Fuel	0.00	0.00	0.00	0.00
Cost of Generation	5.74	9.16	9.16	5.74
Power Purchase cost	395.66	494.78	494.55	478.08
PGCIL Transmission Charges	67.40	57.93	55.01	55.01
Intra-Trans Charges	54.53	45.74	45.74	25.74
Employee Cost	147.56	135.59	122.97	122.97
R&M Expenses	12.65	10.46	16.24	16.24
Adm & Genrl Expenses	2.15	4.05	6.77	6.77
Depreciation	0.00	1.58	0.17	0.17
Interest (Debt) charges	0.00	0.00	0.00	0
Int. on W/Cap Charges	0.00	0.00	0.00	0
Bad Debts Provision	0.00	0.00	0.00	0
Return on Equity	0.00	0.00	0.00	0
Contingency Reserve Fund	0.00	0.00	0.00	0
Gross Revn. Requirement	685.69	759.29	750.61	710.72
Less: Non-Tariff Income	8.96	11.96	10.78	10.78
Less: Efficiency Gains	15.00	2.00	0.00	0.00
Less: True-Up surplus 2022-23	0.00	15.13	15.13	15.13
Net ARR derived	661.73	730.20	724.70	684.81
Revn. From OSS/LEX Sale	61.49	95.56	105.04	105.04
Revenue from Sale of Power	0.00	437.41	438.17	438.17
Net Gap Bfr subsidy	600.24	197.23	181.49	141.60
Govt Subsidy (U/s-65 EAct)		197.23	197.23	197.23
Net Revenue Gap -(Surplus)	600.24	0.00	-15.74	-55.63

6.25. Govt. Subsidy amount for FY 2024-25**Commission's Analysis:**

As against the revised revenue surplus of Rs.15.74 Crore so assessed by the P&ED, the surplus noticed by the Commission is at Rs. 55.63Crs after review analysis. The final gap status will have to be determined only after considering the actual expenditure spent and subsidy actually received from Government known at the time of truing-up in due course. However, as per the present approval of expenditures the surplus is arrived at provisionally as Rs.55.63Crs (as per the above table). It is too early to make any conclusive decide upon the surplus it at this juncture.

7. Analysis of ARR for FY 2025-26 and its Approval

7.1 Background

The P&ED Mizoram's tariff determination is now governed by "Joint Electricity Regulatory Commission for Manipur & Mizoram (Multi Year Tariff) Regulations, 2014" (referred to as "MYT Regulations, 2014") which came into force from 09.06.2014. Further, the Hon'ble Commission has notified First Amendment Regulations, 2019. The MYT Regulations, 2014 read with First Amendment Regulations, 2019 provide a framework for calculating tariffs on a cost-plus basis and allow the licensee to recover operational expenses including depreciation, interest on working capital, debt and return on equity amongst others.

Multi Year Tariff Order for the 3rd control period of 5 years from FY 2023-24 to FY 2027-28 was issued by the Hon'ble Commission vide order dated 28.03.2023 under the Joint Electricity Regulatory Commission for Manipur and Mizoram (Multi Year Tariff) Regulations, 2014 read with First Amendment Regulations, 2019.

The Hon'ble Commission determined the Aggregate Revenue Requirement for the FY 2023-24 to FY 2027-28 & Tariff for the FY 2023-24 in the MYT Order dated 28.03.2023.

Regulation 5.2 (iii) of the Joint Electricity Regulatory Commission for Manipur and Mizoram (Multi Year Tariff) Regulations, 2014 provides as follows:

"In case of Mid-term Review of Business Plan under Regulation 4.2 (i), the Petition shall comprise of:

- a. Truing Up for previous year;*
- b. Modification of the ARR for the remaining year of the Control Period, if any, with adequate justification for the same;*
- c. Revenue from the sale of power at existing tariffs and charges for the ensuing year;*
- d. Revenue gap for the ensuing year calculated based on ARR approved in the MYT Order and truing up for the previous year;*
- e. Application for determination of tariff for the ensuing year."*

Further, the Hon'ble Commission notified the First Amendment Regulations, 2019 is as follows:

"5.2 The filing of the Control Period under these Regulations shall be as under.

(i).....

ii) *From the second year of the Control Period onwards and upto the last year of the Control Period, the petition in each year shall comprise of:*

- a. *Truing Up for the previous year with audited accounts, and Annual Performance Review (APR) with revision of ARR approved in MYT Order for current year and revised projection of ARR approved in MYT Order for the ensuing year in accordance with these Regulations;*
- b. *Revenue from the sale of power at existing tariffs and changes for the current year;*
- c. *Revenue gap for the ensuing year calculated based on the revised projection of ARR and truing up of the previous year;*
- d. *Application for determination of tariff for the ensuing year.”*

As per the above regulation, the Joint Electricity Regulatory Commission for Manipur and Mizoram requires the P&ED Mizoram to apply for determination of tariff for the ensuing year which in the instant case is FY 2025-26. Accordingly, based on the Aggregate Revenue Requirement approved by the Hon’ble Commission for the FY 2025-26, P&ED Mizoram is required to propose the tariff for sale of energy during the FY 2025-26.

It is submitted that there has been changes in certain parameters and determinants of ARR for the FY 2025-26 based on the performance during the FY 2023-24 & FY 2024-25 (H1). Accordingly, P&ED Mizoram is submitting the revised ARR & proposal for determination of tariff for the FY 2025-26.

P&ED Mizoram requests the Hon’ble Commission to kindly consider the submission and approve the revised ARR & tariff for the FY 2025-26 in accordance with the Joint Electricity Regulatory Commission for Manipur and Mizoram (Multi Year Tariff) Regulations, 2014 read with First Amendment Regulations, 2019.

7.2 Overall Approach for present filing

7.2.1 Petition for determination of Tariff for the FY 2025-26

P&ED Mizoram hereby submits its petition for approval of Tariff for the FY 2024-25. This petition is submitted in compliance with the Regulation 5(ii)(d) of the MYT Regulations, 2014 read with First Amendment Regulations, 2019. The petitioner is attempting to comply with the various guidelines in the Act and regulations within the limitations of availability of data.

P&ED Mizoram is filing the petition based on the overall frame work of parameters approved by the Hon'ble Commission in the MYT Order. However, P&ED Mizoram has also proposed revisions in certain determinants of ARR. P&ED Mizoram has studied the past trends and taken cognizance of other internal and external developments to estimate the likely performance during the FY 2025-26.

7.2.2 Approach for filing

The MYT Regulations, 2014 segregate the items impacting tariffs into controllable and uncontrollable factors. Items that are uncontrollable are passed through to the consumers. Further, the MYT Regulations, 2014 identifies the uncontrollable and controllable parameters as follows:

The Uncontrollable Factors

The “uncontrollable factors” comprises of the following factors:

- (i) Force Majeure events;
- (ii) Change in law, judicial pronouncements and Orders of the Central Government, State Government or Commission;
- (iii) Variation in the price of fuel and/ or price of power purchase according to the FPPPA formula approved by the Hon'ble Commission from time to time;
- (iv) Variation in the number or mix of consumers or quantities of electricity supplied to consumers
- (v) Transmission Loss;
- (vi) Variation in market interest rates; (vii) Taxes and Statutory levies;
- (viii) Taxes on Income;
- (ix) Non-Tariff Income;

The Controllable factors

Controllable factors include, but are not limited to the following:

- (i) Variations in capitalization on account of time and/or cost overruns/ efficiencies in the implementation of a capital expenditure project not attributable to an approved change in scope of such project, change in statutory levies or force majeure events;
- (ii) Variation in Interest and Finance Charges, Return on Equity, and Depreciation on account of variation in capitalization, as specified in clause (i) above;
- (iii) Variations in technical and commercial losses of Distribution Licensee;
- (iv) Variations in performance parameters;
- (v) Variations in working capital requirements;

(vi) Failure to meet the standards specified in the Joint Electricity Regulatory Commission for the states of Manipur and Mizoram (Standard of Performance for Distribution and Transmission Licensees) Regulations, 2010, as amended from time to time except these exempted in accordance with those Regulations;

(vii) Variations in labour productivity;

(viii) Variation in operation & maintenance expenses;

(ix) Variation in Wires Availability.

In view of the above, the present petition has been filed keeping the controllable factors unchanged as far as possible. However, changes have been proposed where new developments have taken place making it necessary to incorporate the same in the ARR.

The subsequent sections provide the various expenses as approved by the Hon'ble Commission and proposed additional expenses for the FY 2025-26.

7.3 Category wise sales Forecast

Petitioner's submission

Energy sales

The P&ED Mizoram proposes to revise the energy sales for various categories of consumers based on the actual sales for the FY 2023-24 & revised estimate of FY 2024-25. The energy sales for the FY 2025-26 as approved by the Hon'ble Commission and revised sales figures are provided in the table below:

Table 7.1: Energy Sales FY 2025-26

(In MUs)				
Sl. No.	Category	Approved in T.O. dated 28.03.2023	Proposed by P&ED Mizoram	Deviation
	LT Consumers			
1	Kutir Jyoti	6.85	5.30	-1.55
2	Domestic	336.64	336.08	-0.56
3	Non-Profit Public Purpose	10.93	13.38	2.45
4	Commercial	38.94	47.58	8.64
5	Public Lighting	2.90	3.10	0.20
6	Agriculture	0.06	0.08	0.02
7	Public Water Works	7.54	0.25	-7.29
8	LT Industrial	3.09	2.72	-0.37

Sl. No.	Category	Approved in T.O. dated 28.03.2023	Proposed by P&ED Mizoram	Deviation
9	Electric Vehicle Charging	0.00	0.00	0.00
	Total LT	406.95	408.49	1.54
	HT Consumers			
10	Domestic	3.99	1.46	-2.53
11	Non-Profit Public Purpose	15.61	7.41	-8.20
12	Commercial	15.55	17.66	2.11
13	Agriculture	0.11	0.22	0.11
14	Public Water Works	90.96	107.85	16.89
15	HT Industrial	8.56	16.41	7.85
16	Electric Vehicle Charging	0.00	0.00	0.00
17	Bulk Supply	19.90	14.76	-5.14
	Total HT	154.68	165.79	11.11
18	Total LT & HT	561.62	574.28	12.65
19	Outside State-Trading	90.58	180.90	90.32
	Total	652.20	755.18	102.97

Commission's Analysis

The retail energy sales projections made for the FY2025-26 by the licensee are approved at the same level by the Commission and the break-up details of retail sales quantum for FY 2025-26 are tabulated below.

Table 7.2: Energy sales approved by the Commission FY 2025-26

Sl. No.	Category	Approved by Commission
	LT Consumers	(MU)
1	Kutir Jyoti	5.30
2	Domestic	336.08
3	Non-Profit Public Purpose	13.38
4	Commercial	47.58
5	Public Lighting	3.10
6	Agriculture	0.08
7	Public Water Works	0.25
8	LT Industrial	2.72
9	Electrical Vehicle Charging Stations	0.00
	Total LT	408.49
	HT Consumers	
10	Domestic	1.46
11	Non-Profit Public Purpose	7.41
12	Commercial	17.66
13	Agriculture	0.22
14	Public Water Works	107.85
15	HT Industrial (Opt-1&2)	16.41
16	Electric vehicle Charging – HT	0.00

Sl. No.	Category	Approved by Commission
17	Bulk Supply	14.76
	Total HT	165.79
	LT & HT Total	574.28

The Commission approves retail energy sales during FY 2025-26 at 574.28 MU as was projected by the P&ED, Mizoram including zero EV Charging Stations sales of LT & HT and zero H.T Industrial (TOD) category sales and Outside State sales quantum has been drilled down to 173.10MU finally against P&ED projection of 180.90MU after considering the distribution Losses at 14.00% instead of 25.25% so filed in ARR.

7.4 Distribution Loss

Petitioner's submission

It is submitted that the P&ED Mizoram is making all efforts to meet the trajectory of distribution loss given by the Hon'ble Commission in the MYT Order. Accordingly, P&ED Mizoram is proposing the distribution loss percent for the FY 2025-26 for approval of the Hon'ble Commission. However, actuals & deviations if any shall be submitted for consideration & approval at the time of True-up. The distribution loss for the FY 2025-26 as proposed by P&ED Mizoram & approved by the Hon'ble Commission is provided in the table below:

Table 7.3: Distribution Loss for FY 2025-26

Sl. No.	Particulars	Approved in T.O. dated 28.03.2023	Proposed by P&ED Mizoram	Deviation
1	2	3	4	5
1	Distribution Loss	20.67%	25.25%	4.58%

Commissions Analysis

Keeping in view of the RDSS based losses targets set for 2024-25 already the Distribution Losses relevant for FY 2025-26 should have been frozen at 14.00% as the Targets set for 2024-25 under the RDSS Scheme loss trajectory were not achieved P&ED and a lot more need to be done to reach such loss values. In this regard, though the P&ED filed the distribution losses to be 25.25%, the Commission felt it sapient to adopt the Distribution Loss at 25% instead of unreachable losses target set under the RDSS scheme at 14.00% for FY 2025-26. Having perceived the reality and feasibility of the P&ED present position to reach such target of 14% the Commission felt it more appropriate to set the Distribution loss at achievable level

of 25% only and not below. Hence, the Energy balance, power purchase quantum and the outside State Sales were re-derived with 25% loss values which are indicated below at relevant foregoing paras.

7.5 Power purchases & Own generation

7.5.1 P&ED Mizoram's Own Generation

The P&ED Mizoram's own generation for the FY 2025-26 as approved by the Hon'ble Commission & P&ED Mizoram revised the own generation based on the actual generation for the FY 2023-24 & revised estimate for the FY 2024-25. Details are provided in the table below:

Table 7.4: P&ED Mizoram's Own Generation FY 2025-26 (In MUs)

Sl. No.	Particulars	Approved in T.O. dated 28.03.2023	Proposed by P&ED Mizoram	Deviation
1	2	3	4	5
1	Total Generation (Net)	31.07	37.09	6.02
	Total	31.07	37.09	6.02

It is submitted that Amazon Engineering have been undertaking Operation & Maintenance (O&M) of Khawiva SHP, Tuipui SHP & Kau Tlabung SHP and Assam Petroleum Ltd have been undertaking Operation & Maintenance (O&M) of Teirei SHP on behalf of P&ED Mizoram. Further, the Installed Capacity & energy generation is included in the books of P&ED Mizoram. The net generation of 0.01 MUs for Lengpui Project is included in the total net generation of 37.09 MUs.

Commission's Analysis

As seen from the present ARR filing submission by P&ED indicates Own generating capacity at 38.85MW with net energy availability at 37.09MU. Now in this filing the P&ED had also considered the **Kawlhem-4MWs SHP** energy into gross Own installed capacity which was commissioned on 15th December 2022. Thus, the total P&ED installed capacity rose to 38.35MWs including the Serlui-B station constantly awaiting its Commercial Operation declaration and while ignoring the 0.50MWs of Lengpui diesel set capacity installed at Lengpui Airport.

After having carefully observed, leaving aside the three (3) plants managed by **M/s. Amazon Engineering PVT Ltd** and the one (1) Teirei-3MWs SHP now stated to by **M/s. Assam Petroleum Ltd**, the effectively remaining SHPs in operation are the

following tabulated plants with installed capacity of 26MWs only but not the grand total figure of 38.35MWS as because there are some old plants with installed capacity of 4.80MWs are not generating any energy. The following table clearly depict the power stations now in effective operation.

Sl. No.	SHP Name	Inst. Cap (MWs)	COD Date	Present Plant Status
A - SHP Power Plants not Generating Power				
1.	Serlui-A SHP	1.00	24.04.1984	Out of Commission
2.	Tuirivang SHP	0.30	14.08.1989	---- do ----
3.	Tuipanglui SHP	3.00	17.12.2004	No generation
4.	Lamsial SHP	0.50	26.08.2008	---- do ----
5.	Lengpui (diesel)	0.50	No data	Out of Commission
	Subtotal (A)	5.30		Nil Energy
B – SHPs Effectively producing Power owned by P&ED				
5.	Maicham-I	2.00	05.01.1996	Generating power
6.	Maicham-II	3.00	11.11.2009	-- do --
7.	Tlawva	5.00	13.05.2022	---- do ----
8.	Kawlberm	4.00	15.12.2022	---- do ----
9.	Serlui-B	12.00	Awaiting COD	Infirm power
	Subtotal (B)	26.00		Power is being Generated
C - SHPs managed by outside Agencies				Name of Pvt Agency
10.	Khawiva SHP	1.05	08.12.1988	Amazon Engg.
11.	Tuipui SHP	0.50	15.12.1991	-- do --
12.	Kau Tlabung SHP	3.00	05.05.2005	-- do --
13.	Teirei SHP	3.00	12.10.1999	Assam Petroleum
	Subtotal (C)	7.55		
Grand Installed Capacity		38.85	Installed Capacity shown in ARR	

The three (3) plants are being maintained by M/s. Amazon Engineering and the one (1) managed by M/s. Assam petroleum were also included in their own generation. But in reality, these plants were leased-out to outside agencies besides P&ED have been paying the O&M charges to the tune of **Rs.1.15Cr**s as intimated to Commission for FY2023-24 in their petition submission towards Operating and Maintenance charges for these four plants. Thus, though these plants technically forming part of P&ED Own Generation since they are managed/maintained by an outsider but not by P&ED and besides some cost amount is being spent by P&ED for availing power supply from them. Hence, the P&ED instead of claiming Generation ARR individually as per norms for each such four plants should only claim the actual maintenance charges paid for these four (4) plants.

The Commission, thus draws an inference that effectively Own energy generation is only from five (5) plants. The energy expected from outside agencies is not clearly indicated in their filing but shown in Generation related ARR expecting about

11.554MU from those plants. Accordingly, the balance generation of 25.522MU so projected is construed to **be contributed by Own Power producing SHPs as shown in the Generation ARR filing for FY 2025-26** so as to make the total expected energy to be 37.076MU but not 37.09MU as projected by P&ED.

7.5.2 Power Purchase

Petitioners Submission:

It is submitted that the power purchase units for the FY 2025-26 have been revised based on the actual purchase for the FY 2023-24 & revised estimate for the FY 2024-25. The power purchase units for the FY 2025-26 as approved by the Hon'ble Commission & revised estimate is provided in the table below:

Table 7.5: Power Purchase Units FY 2025-26

(In MUs)

Sl. No.	Particulars	Approved in T.O. dated 28.03.2023	Proposed by P&ED Mizoram	Deviation
1	2	3	4	5
1	Power Purchase Units	796.70	943.96	147.26
	Total	796.70	943.96	147.26

Commission's Analysis

The power purchase quantum for FY 2025-26 approved by the Commission from all available sources works out to **889.636MU** are detailed in the table below.

Table 7.6: Power purchase quantum approved by the Commission for FY 2025-26

Sl. No	Source	Installed Capacity (MW)	P&ED Share (%)	P&ED Share (MW)	Energy Purchase (MU)
A	Central Generating Stations				
I	NTPC				
1	Bongaigaon TPS	750	5.415	40.61	91.00
2	Farakka STPS	1600	0.142	2.27	15.79
3	Kahalgaoon STPS	840	0.142	1.19	8.38
4	Talcher STPS	1000	0.142	1.42	9.24
	NTPC-Total	4190		45.49	124.41
II	NHPC				
1	Loktak HEP	105	5.02	5.27	25.06
	NHPC-Total	105		5.27	25.06
III	NEEPCO				
1	Kopili HEP	200	4.61	9.22	25.14
2	Kopili - II HEP	25	6.04	1.51	10.58
3	Khandong HEP	50	3.94	1.97	12.00
4	Ranganadi HEP	405	5.70	23.09	59.30

Sl. No	Source	Installed Capacity (MW)	P&ED Share (%)	P&ED Share (MW)	Energy Purchase (MU)
5	Doyang HEP	75	5.25	3.94	10.98
6	Pare HEP	110	5.765	6.34	21.83
7	Tuirial HEP	60	100	60.00	207.68
	Free Power Units				28.32
8	AGBPP	291	5.41	15.74	33.41
9	AGTPP	135	6.00	8.10	13.48
	NEEPCO-Total	1351		129.91	422.72
IV	TSECL				
1	B'mura - IV	21	25	5.25	38.29
2	B'mura - V	21	25	5.25	
	TSECL-Total	42		10.50	38.29
V	OTPC				
1	Palatana	726	5.785	42.00	202.54
	OTPC-Total	726		42.00	202.54
C	Own Generation	38.85	100	38.85	37.076
D	UI / Deviation				---
E	Roof-Top Generation				37.35
F	Solar Generation	2.35		2.35	2.19
G	RPO Obligation				0.00
	GRAND TOTAL	6455.20		274.38	889.636

UI purchase transactions values were not considered now as P&ED have adequate surplus power. However, the P&ED may resort to UI purchases only to tide over any exigencies in order to meet the short-term power requirement and to overcome interruption in supply of power within State. However, the RPO obligation requirement was also derived by Commission based on approved power purchases quantum. There no need found by Commission to procure RPO obligation certificates since of the obligation is fulfilled based on the MZERC notification Dt.18th November 2024 provisions.

The detailed calculation for RPO obligation cost arrived at is tabulated under the power purchase cost item in the forthcoming para of this chapter for reference.

7.6 Energy Balance

7.6.1 The energy balance sheet submitted by the P&ED for FY2025-26

Table 7.7: Energy Balance FY 2025-26

Sl. No.	Energy Balance	Approved in T.O. dated 28.03.2023	Proposed by P&ED Mizoram	Deviation
A	Energy Requirement			

Sl. No.	Energy Balance	Approved in T.O. dated 28.03.2023	Proposed by P&ED Mizoram	Deviation
1	Energy Sales	561.62	574.28	12.66
2	Distribution Loss (%)	20.67%	25.25%	4.58%
3	Distribution Loss (MUs)	146.33	194.00	47.67
4	Total Energy Requirement	707.95	768.28	60.33
B	Energy Availability			
5	Own Generation	31.07	37.09	6.02
6	Energy Purchase from ER	33.40	33.41	0.01
7	Less: ER Pool Loss (%)	1.95%	1.88%	0.00
8	Less: ER Pool Loss (Mus)	0.65	0.63	-0.02
9	Net Energy for ER	32.75	32.78	0.03
10	Purchase from NER (Exl. Tuirial HEP)	566.69	635.00	68.31
11	UI / Deviation	0.00	0.00	0.00
12	Sub Total	599.44	667.78	68.35
13	Less: NER Pool Loss (%)	2.36%	2.33%	0.00
14	Less: NER Pool Loss (MUs)	14.15	15.56	1.41
15	Net Energy at NERLDC	585.29	652.22	66.93
16	Energy purchases from Tuirial HEP	170.93	207.68	36.75
17	Free Energy from Tuirial HEP	23.31	28.32	5.01
18	Amazon Engineering	0.00	0.00	0.00
19	Rooftop Solar Generation	0.07	37.35	37.28
20	Solar Generation	2.30	2.19	-0.11
21	Energy Available	812.97	964.86	151.88
22	Less: Outside State - Trading	90.58	180.90	90.32
23	Total Energy Available	722.39	783.96	61.56
24	Less: Intra State Tr. Loss (%)	2.00%	2.00%	0.00
25	Less: Intra State Tr. Loss (MUs)	14.45	15.68	1.23
26	Net Energy Available	707.94	768.28	60.33
27	Less: Energy needed at State Periphery	707.95	768.28	60.33
28	ENERGY SURPLUS/(DEFICIT)	0.00	0.00	0.00

Commissions' Analysis

The energy balance so projected by P&ED for FY 2025-26 is revised by the Commission duly adopting the applicable ER and NER loss values so published in their compendium of FY2023-24 and those other losses as approved by the Commission is provided in the table below:

Table 7.8: Energy Balance approved by Commission for FY2025-26

Sl. No.	Energy Balance FY 2025-26	P&ED Projected	Now Approved
A	Energy Requirement	MU	MU
1	Energy Sales (MU)	574.28	574.28
2	Distribution Loss (%)	25.25%	25.00%
3	Distribution Loss (MUs)	193.99	191.43
4	Total Energy Requirement	768.27	765.71

Sl. No.	Energy Balance FY 2025-26	P&ED Projected	Now Approved
B	Energy Availability		
5	Energy Purchase from ER	33.41	33.41
6	Less: ER Pool Loss (%)	1.88%	1.88%
7	Less: ER Pool Loss (Mus)	0.63	0.63
8	Net Energy for ER (MU)	32.78	32.78
9	Purchase from NER (Exl. Tuirial HEP)+	635.00	543.61
10	Energy procured from all external sources (8+9)	667.78	576.39
11	Add: UI Over-drawl	-	-
12	Less: Outside State - Trading		-96.49
13	Gross Energy handled at NER Grid	667.78	479.90
14	Less: NER Pool Loss (%)	2.33%	2.33%
15	Less: NER Pool Loss (MUs)	15.56	11.18
16	Net Energy from sources outside Mizoram (13-15)	652.22	468.72
17	Energy purchases from Tuirial HEP	207.68	207.68
18	Free Energy from Tuirial HEP	28.32	28.32
19	Rooftop Solar Generation	37.35	37.35
20	Solar Generation	2.19	2.19
21	State Own Generation	37.09	37.076
22	Energy Purchases total	964.85	781.34
23	Less: Outside State - Trading	-180.90	
24	Total Energy Available at State Periphery	783.95	781.34
25	Less: Intra State Tr. Loss (%)	2.00%	2.00%
26	Less: Intra State Tr. Loss (MUs)	15.68	15.63
27	Net Energy Available for Distribution Input	768.27	765.71
28	Less: Input Energy for Distribution	768.27	765.71
29	T&D Losses (MU)	209.67	207.05
30	T&D Losses (%)	26.47%	26.50%

In this process, for this year the Commission had adopted a step by step procedure that is practically occurs in energy handling with an intention to depict the situation much closer to reality and arrived at the losses and the Outside state sales quantum after drilling down the projected energy quantum from costly stations judiciously to economise the total cost. In this process, the Commission had to assume the transmission losses to be at 2% of the energy input at state periphery point of P&ED network for entire FY2025-26 need.

Thus, the applying 25% Distribution Losses in energy balance derivation resulted in surplus of power at **96.49MU** (instead of the projected quantum of 180.900MU) which the P&ED may contemplate to sell through traders or under IEX sale @ 5.90/kWh. The Commission have already made a directive in this matter upon observing the losses quantum in the Tariff Order Dt 20th March 2020. However, as already explained, the NERLDC losses were adopted at **2.33%** as per NER Compendium data for FY 2023-24 and ERLDC losses were considered at **1.88%** as per its annual compendium for 2023-24 for FY 2025-26 in the absence of accurate

data for FY2025-26. (Both the compendium pages are placed at Annexure-VI & VII at the end of the Tariff Oder.)

7.7 Aggregate Revenue Requirement components

7.7.1 Cost of Fuel

The fuel cost for the FY 2025-26 as approved by the Hon'ble Commission is provided in the table below. P&ED Mizoram is not proposing any changes to the approved cost.

Table 7.9: Fuel Cost FY 2025-26

(In ₹ Crores)

Sl. No.	Particulars	Approved in T.O. dated 28.03.2023	Proposed by P&ED Mizoram	Deviation
1	2	3	4	5
1	Cost of Fuel	0.00	0.00	0.00
	Total	0.00	0.00	0.00

Commission Analysis:

The Commission too approved NIL charges towards fuel costs for FY 2025-26, basing on the historical cost data on this head of account.

7.7.2 Cost of Generation

Petitioners Submission:

The Cost of Generation for the FY 2025-26 as approved by the Hon'ble Commission & revised estimate is provided in the table below.

Table 7.10: Cost of Generation FY 2025-26

(In ₹ Crores)

Sl. No.	Particulars	Approved in T.O. dated 28.03.2023	Proposed by P&ED Mizoram	Deviation
1	2	3	4	5
1	Cost of Generation	5.93	13.25	7.32
	Total	5.93	13.25	7.32

Commission Analysis:

Upon scrutiny of the Generation function ARR filed separately by the P&ED for FY 2025-26, the Commission strongly consider to approve Generation ARR cost amount for all the plant together which will also include the O&M amount of being paid to four (4) leased-out stations as mentioned below.

Generation function ARR approved by Commission

Particulars	FY2025-26
ARR of Generation Cost	5.93 Crs

The Commission adopts the MYT based Generation ARR calculation so made earlier for this FY2025-26. The detailed explanation has been indicated under Generation ARR chapter separately dealt in this Tariff Order which includes the plant maintenance charges of Rs.1.15Crs being proposed to pay to outside agencies maintaining the said four plants in the earlier paras.

7.7.3 Power Purchase Cost**Petitioner's submission**

The Hon'ble Commission in the Tariff Order dated 28.03.2023 had approved a power purchase quantum of 796.70 MUs at a total cost of ₹ 435.92 Crores for the FY 2025-26. As submitted above the estimate of power purchase quantum for the FY 2025-26 is proposed to be revised to 943.96 MUs. It is submitted that the power purchase cost for the FY 2025-26 has been revised based on the actual purchase for the FY 2023-24 & revised estimate for the FY 2024-25. Accordingly, the power purchase cost is also proposed to be revised.

Further, the cost towards RPO has been arrived in accordance with the RPO targets prescribed in the RPO regulations. The target for Wind RE, Hydro RE, Distributed RE & Other RE % for the FY 2025-26 is given in the table below:

Table 7.11: Percentage of RE Target for Wind RPO, HPO & Other RPO

Sl.No.	FY	Wind RE	Hydro RE	Distribution RE	Other RE	Total
1	2	3	4	5	5	6
1	2024-25	1.45%	1.22%	2.10%	28.24%	33.01%

For all the RPO category, the prescribed target as per above table has been applied on the base figure of 768.28 MUs for the FY 2025-26.

P&ED Mizoram shall meet the requirement of Wind RE, Hydro RE & Other RE from its power procurement which is projected in total at 245.54 MUs for the FY 2025-26. **Accordingly, there is no fund needed for meeting Wind RE, Hydro RE & Other RE target, its already projected as achieve.**

Further, P&ED Mizoram shall meet the requirement of Distributed RE from its power procurement which is projected at 8.07 MUs for the FY 2025-26. Accordingly, there is no fund needed for meeting Distributed RE target, its already projected as achieve. **So, there is no need to project any cost towards purchase of REC certificates to meet the RPO obligation.**

Detailed power purchase station wise units and cost is provided in the Format – F1 (ii) & F1a (ii). Considering the above the Hon'ble Commission is requested to allow the power purchase costs as projected by P&ED Mizoram for the FY 2025-26. The comparison of the approved power purchase cost and the revised estimate as arrived above is given in the table below.

Table 7.12: Power Purchase Cost FY 2025-26

(In ₹ Crores)

Sl. No.	Particulars	Approved in T.O. dated 28.03.2023	Proposed by P&ED Mizoram	Deviation
1	2	3	4	5
1	Power Purchase Cost	435.92	495.91	59.99
	Total	435.92	495.91	59.99

Commission analysis:

As against the above projected power purchase quantity of 981.04MU and projected cost of Rs.495.91Cr by the P&ED, the Commission after careful examination had approved the following quantum and cost each year-wise but the value indicated for year FY2025-26 are derived upon some percentage increase over FY 2023-24 actual prices of each station and those values quoted for certain stations were compared with the MSPDCL quoted prices and altered them where ever felt needed (as because both are availing the power from same sources) and for the rest of the stations same prices given by P&ED are adopted as it is. The station wise quantum and cost details as per P&ED and also as per Commission approved are tabulated separately below for reference.

Table 7.13: Power Purchase Cost projected by the P & ED for the FY 2025-26

Sl. No.	Sources of Energy FY 2025-26	Plant Capacity (MW)	P&ED Share (%)	P&ED Share (MWs)	Energy (MU)	Total Cost (Rs.Crs)	CPU (Rs./kWh)
A	CGS - NTPC Stations						
1	NTPC Bongaigaon Unit I	750	5.415	40.61	182.39	147.63	8.09
2	Farakka STPS	1600	0.142	2.27	15.79	7.93	5.02
3	Kahalgaoon STPS	840	0.142	1.19	8.38	3.93	4.69
4	Talcher STPS	1000	0.142	1.42	9.24	2.25	2.44
	Sub Total - NTPC	4190		45.49	215.80	161.74	7.49
B	CGS - NHPC						
1	Loktak HEP	105	5.02	5.27	25.06	10.38	4.14
	Sub-Total - NHPC	105		5.27	25.06	10.38	4.14
C	NEEPCO						
1	Kopili - I HEP	200	4.61	9.22	25.14	6.38	2.54
2	Kopili - II HEP	25	6.04	1.51	10.58	2.76	2.61
3	Khandong HE	50	3.94	1.97	12.00	4.26	3.55
4	Ranganandi HE Project	405	5.70	23.09	59.30	21.06	3.55
5	Doyang HE Project	75	5.25	3.94	10.98	8.65	7.88
6	Pare HEP	110	5.766	6.34	21.83	12.57	5.76
7	Tuirial HEP	60	100	60.00	207.68	96.91	4.11
8	Tuiria HEP - Free Power				28.32		
9	Assam GBPP	291	5.409	15.74	33.41	37.51	11.23
10	Agartala GTPP	135	6.005	8.10	13.48	12.86	9.54
	Sub-total	1351		129.91	422.72	202.95	4.80
D	Other Supplies						
1	Baramura GBPP Unit IV & V	42	25	10.50	38.29	28.30	7.39
2	OTPC - Pallatana	726	5.785	42.00	202.54	76.47	3.78
	Sub-total	768		52.25	240.83	104.77	4.35
	Total CGS & Other Purchases	6414		233.18	904.419	479.85	5.31
E	Short-term power purchase						
	IEX Purchase				0	0	0
	Sub-total				0	0	0
F	State Own Generation						
	P&ED Owned plants	38.85	100	38.85	37.09	0	
G	UI Over drawl				0	0	0
	UI Under draws				0	0	0
H	Roof-top Solar Generation				37.35	16.04	4.29
I	Solar Generation	2.35	100	2.35	2.19	0	0.00
J	REC Certificate/Obligation					0.00	
K	Reactive Energy charges					0.03	
L	LC Enhance/Renewal charges.					0	
M	Addl. Supplementary Bills					0	
	GRAND TOTAL	6455.20		274.38	981.04	495.91	5.05

As such the Commission has now considered power purchase from all those stations projected by P&ED with suitable revision in the quantity from each of those stations whose average cost is expensive and thus the total power purchase quantity approved for FY2025-26 has been limited to **889.636MU** as against the 981.04MU

filed by the P&ED. Accordingly, the applicable Power purchase cost is approved at Rs.443.88Crs by Commission for FY 2025-26 as detailed in the table below:

Table 7.14: Power Purchase Cost approved by the Commission for the FY 2025-26

Sl. No.	Energy Source	Plant Capacity (MW)	Share (%)	P&ED Share (MWs)	Energy Purchase (MU)	Total Cost (Rs./Crs)	CPU (Rs/ kWh)
A	CGS - NTPC Stations						
1	NTPC Bongaigaon Unit I	750	5.415	40.61	91.00	73.57	8.085
2	Farakka STPS	1600	0.142	2.27	15.79	7.93	5.02
3	Kahalgaon STPS	840	0.142	1.19	8.38	3.93	4.69
4	Talcher STPS	1000	0.142	1.42	9.24	2.25	2.44
	Sub Total - NTPC	4190		45.49	124.41	87.68	7.05
B	CGS - NHPC						
1	Loktak HEP	105	5.02	5.27	25.06	10.32	4.12
	Sub-Total - NHPC	105		5.27	25.06	10.32	4.12
C	NEEPCO						
1	Kopili - I HE	200	4.61	9.22	25.14	6.38	2.54
2	Kopili - II HE	25	6.04	1.51	10.58	2.76	2.61
3	Khandong HE	50	3.94	1.97	12.00	4.26	3.55
4	Ranganandi HE Project	405	5.70	23.09	59.30	20.16	3.40
5	Doyang HE Project	75	5.25	3.94	10.98	8.65	7.88
6	Pare HEP	110	5.766	6.34	21.83	12.01	5.50
7	Tuirial HEP	60	100	60.00	207.68	96.91	4.11
8	<i>Tuiria HEP - Free Power</i>				28.32		
9	Assam GBPP	291	5.409	15.74	33.41	36.75	11.00
10	Agartala GTPP	135	6.005	8.10	13.48	12.54	9.30
	Sub-total	1351		129.91	422.72	200.42	4.74
D	Other Supplies						
1	Baramura GBPP Unit IV & V	42	25	10.50	38.29	28.30	7.39
2	OTPC - Pallatana	726	5.785	42.00	202.54	76.47	3.78
	Sub-total	768		52.50	240.38	104.77	4.35
	Total CGS & Other Purchases				813.02	403.19	4.96
E	Short-term power purchase						
	IEX Purchase				---		
	Sub-total				0		
F	State Own Generation						
	P&ED maintained Units	38.85	100	38.85	37.076	0	0.00
G	UI Over drawl				0	0	
	UI Under draws				0	0	
H	Roof-top Solar Generation				37.35	16.04	4.29
I	Solar Generation	2.35	100	2.35	2.19	0	0
J	REC Certificate/Obligation					NIL	
K	Reactive Energy charges					0.03	
L	LC Enhance/Renew charges.					0	
M	Addl. Supplementary Bills					24.62	
	GRAND TOTAL	6455.20		274.38	889.636	443.88	4.99

The above purchase cost is after due examination of RPPO obligation quantum and found to nil amount upon through examination. While the Commission adopted RPPO obligation calculation is tabulated below for reference.

Sl. No.	Particulars (P&ED)	Formula	Unit	2025-26 Final
1	Energy Consumption in Distribution area		MU	765.71
2	Total RPO Target (Overall)		%	33.01%
3	Total RE purchase requirement	1*2	MU	252.76
4	Hydro Renewable Energy Target		%	1.22%
5	Hydro Power purchase requirement	1*4	MU	9.34
6	Wind Renewable Energy Target		%	1.45%
7	Wind Power purchase requirement	1*6	MU	11.10
8	Distributed Renewable Energy Target		%	1.05%
9	Distributed Renewable Energy requirement	1*8	MU	8.04
10	Other Renewable Energy Target		%	29.29%
11	Other RE Purchase Requirement	1*10	MU	224.28
12	HPO (Hydro) actual achievement	Input Data	MU	1.86
13	Surplus / (Deficit) in HEP purchase	12-5	MU	-7.48
14	HPO achievement (%)	12/5	%	20%
15	WPO (Wind) actual achievement	Input Data	MU	0.00
16	Surplus/ Deficit in WPO (Wind Power) purchase	15-7	MU	-11.10
17	WPO achievement (%)	15/7	%	0%
18	Other RE purchase (a+b+c+d+e)	Input data	MU	475.66
a	Co-generation		MU	0
b	Small Hydro		MU	35.23
c	Biomass		MU	0
d	Solar		MU	39.54
e	Others		MU	400.89
19	Surplus / Deficit in Other RE purchase	18-11	MU	251.38
20	Other RPO achievement (%)	18/11	%	212%
21	Distributed RE actually achievement	Input data	MU	0.00
22	Surplus/Deficit in Distribution RE purchase	21-9	MU	-8.04
23	Distribution RE achievement (%)	21/9	%	0%
24	Total RE purchase achievement	12+15+18+21	MU	477.52
25	RPO Surplus(+)/deficit (-) to be fulfilled	24-3	MU	224.76
26	RE Purchase achievement in %	24/3	%	188.92%
27	RE Certificates procurement need if any		Crores	0.00

7.7.4 Inter-State Transmission Charges

Petitioners Submission:

It is submitted that the transmission charges for the FY 2025-26 has been revised

based on the actual transmission charges for the FY 2023-24 & revised estimate for the FY 2024-25. The transmission charges for the FY 2025-26 as approved by the Hon'ble Commission & revised estimate is provided in the table below.

Table 7.15: Transmission Charges FY 2025-26

(In ₹ Crores)

Sl. No.	Particulars	Approved in T.O. dated 28.03.2023	Proposed by P&ED Mizoram	Deviation
1	2	3	4	5
1	Transmission Charges	71.26	54.15	-17.11
	Total	71.26	54.15	-17.11

Commission's Analysis:

These Inter-state transmission charges (PGCIL) as was approved by the Commission for FY 2025-26 in the MYT Order is higher compared to Rs.54.15Crs now projected by the Licensee. This revised cost is found to be reasonable basing on the actual trend. Hence, Commission too adopted the cost value of **Rs.54.15Crs** so projected by the Licensee instead of the MYT Order value.

7.7.5 Intra-State Transmission Charges

The Intra- State Transmission Charges for the FY 2025-26 as approved by the Hon'ble Commission & revised estimate is provided in the table below.

Table 7.16: Intra- State Transmission Charges FY 2025-26

(In ₹ Crores)

Sl. No.	Particulars	Approved in T.O. dated 28.03.2023	Proposed by P&ED Mizoram	Deviation
1	2	3	4	5
1	Intra-State Transmission Charges	56.25	48.30	-7.95
	Total	56.25	48.30	-7.95

Commission Analysis:

These Intra-state transmission charges as was approved by the Commission for FY 2025-26 in the MYT Order is higher compared to **Rs.48.30Crs** now projected by the Licensee for this year. The Commission approves the revised Transmission charges claimed at Rs.48.30Crs and the item wise relevant details are available in the Transmission function ARR chapter for comprehension.

7.7.6 O&M Expenses

Operation & maintenance expenses comprise of the following heads of expenditure viz.

- Employee Expenses
- Administration & General Expenses
- Repair & Maintenance Expenses

(a) Employee Expenses

It is submitted that the Employee cost for the year FY 2025-26 has been revised based on the actual Employee cost for the FY 2023-24 & revised estimate for the FY 2024-25. The actual employee cost for the FY 2024-25 (H1) i.e. 1st April, 2024 to 30th September, 2024 is ₹87.84 Crores for P&ED Mizoram as a whole (Distribution, Transmission & Generation). Similarly, ₹ 87.84 Crores projected for FY 2024-25 (H2) for P&ED Mizoram as a whole (Distribution, Transmission & Generation). Accordingly, the employee expenses for the FY 2025-26 based on cost estimated in FY 2024-25 after escalating the same by 5.72% year over year to factor in the rise in the rates. The employee cost of ₹ 130.01 Crores as projected **for the FY 2025-26 only relates to the distribution function.** The Employee cost for the FY 2025-26 as projected & approved by the Hon'ble Commission is provided in the table below.

Table 7.17: Employee Cost FY 2025-26

(In ₹ Crores)				
Sl. No.	Particulars	Approved in T.O. dated 28.03.2023	Proposed by P&ED	Deviation
1	2	3	4	5
1	Employee Cost	152.88	130.01	-22.87
	Total	152.88	130.01	-22.87

Commission's Analysis

It is not understood as to how it is adequate looking at the actuals spent for FY 2023-24 at Rs.193.12Cr for the entity while P&ED claims for Rs.130.01Cr without any justification. Even in FY2024-25 also the total claim for Employee cost for all three functions together is at Rs.122.97Cr. Keeping in view the Licensee projection, the Commission accords approval of employee cost at Rs.130.01Cr without making any change for FY2025-26.

(Rs. Crs)

Particulars	Approved in MYT order	P&ED projected	Approved by Commission
Employee cost	152.88	130.01	130.01

So long the P&ED don't indicate the functional wise employee details, the estimation of distribution cost for ARR purpose will be on a crude approach basis and same needs to be realised by Licensee.

(b) Administrative and General Expenses

Petitioner's submission

It is submitted that the Administration & General Expenses for the FY 2025-26 has been revised based on the actual Administration & General Expenses for the FY 2023-24 & revised estimate for the FY 2024-25. The actual A&G expenses for the FY 2024-25 (H1) i.e. 1st April, 2024 to 30th September, 2024 is ₹ 4.83 Crores for P&ED MIZORAM as a whole (Distribution, Transmission & Generation). Similarly, ₹ 4.83 Crores projected for FY 2024-25 (H2) for P&ED Mizoram as a whole (Distribution, Transmission & Generation). Accordingly, the A&G expenses for the FY 2025-26 based on cost estimated in FY 2025-26 after escalating the same by 5.72% year over year to factor in the rise in the rates. The Administration & General Expenses of ₹ 7.15 Crores as projected **only relates to the distribution function**. The Administration & General Expenses for the FY 2025-26 as projected & approved by the Hon'ble Commission is provided in the table below.

Table 7.18: Administration & General Expenses FY 2025-26

(In ₹ Crores)

Sl. No	Particulars	Approved in T.O. dated 28.03.2023	Proposed by P&ED	Deviation
1	2	3	4	5
1	Administration & General Expenses	2.21	7.15	4.94
	Total	2.21	7.15	4.94

Commission's Analysis

Since the A&G Expenses now claimed for FY 2025-26 at 7.15Cr for the entire entity. The Commission approves A & G expenses at ₹.7.15Cr for FY 2025-26 by adopting the ARR filing figure.

c) Repairs and Maintenance Expenses

It is submitted that the Repair & Maintenance Expenses for the FY 2025-26 has been revised based on the actual Repair & Maintenance Expenses for the FY 2023-24 &

revised estimate for the FY 2024-25. P&ED Mizoram has projected the R&M expenses in accordance with the Regulation 89.6 of The Joint Electricity Regulatory Commission for Manipur and Mizoram (Multi Year Tariff) Regulations, 2014. The actual R&M expenses for the FY 2024-25 (H1) i.e. 1st April, 2024 to 30th September, 2024 is ₹ 20.87 Crores for P&ED Mizoram as a whole (Distribution, Transmission & Generation). Similarly, ₹ 20.87 Crores projected for FY 2024-25 (H2) for P&ED Mizoram as a whole (Distribution, Transmission & Generation). Accordingly, the R&M expenses for the FY 2025-26 based on cost estimated in FY 2024-25 after escalating the same by 5.72% year over year to factor in the rise in the rates. The Repair & Maintenance Expenses of ₹ 17.17 Crores as projected **only relates to the distribution function**. The Repair & Maintenance Expenses for the FY 2024-25 as projected & approved by the Hon'ble Commission is provided in the table below.

Table 7.19: Repair & Maintenance Expenses FY 2025-26

In ₹ Crores)				
Sl. No.	Particulars	Approved in T.O. dated 28.03.2023	Proposed by P&ED	Deviation
1	2	3	4	5
1	Repair & Maintenance	13.37	17.17	3.80
	Total	13.37	17.17	3.80

Commission Analysis:

The Commission also considers to approve R & M expenses at the same level projected by the petitioner for the distribution function only and upon excluding the Maintenance charges being paid to outside agencies leasing the four SHPs state in the foregone paras of FY2023-24 it would be Rs.15.62Cr after subtracting Rs.1.55Cr payable to outside agencies on provisional basis.

The Summary of O & M expenses approved by the commission are Tabulated below:

Table 7.20: O & M expenses approved by the Commission

Summary of approved O&M Expenses		(₹. Crores)
		2025-26
a) Employee cost		130.01
b) Admin & General expenses		7.15
c) Repairs & maintenance expenses		15.62
O&M expenses approved		152.78

7.7.7 Capital Investment**Commission Analysis:**

Summary of CWIP from FY 2023-24 to FY 2025-26 is furnished by the P&ED vide **Form**

F2C is provided in the table below. But, P&ED didn't offer any detailed explanation on any of the aspect of investments in their written submission.

(Figures in Rs.Crs)

Sl. No.	Particulars	FY 2023-24	FY 2024-25	FY 2025-26
A	Opening Balance of CWIP	1032.90	1081.82	1083.82
B	Fresh Investment during the year	72.27	28.00	18.50
C	Investment capitalised out of opening CWIP	23.35	25.99	0.00
D	Investment capitalised out of fresh investment			
	Total Capitalisation during the year (C+D)	23.35	25.99	0.00
	Closing Balance of CWIP (A + B - C - D)	1081.82	1083.82	1,102.32

7.7.8 Depreciation

7.7.8.1 Depreciation

Petitioners' submission

P&ED Mizoram has projected the depreciation in accordance with the Regulation-28 of The Joint Electricity Regulatory Commission for Manipur and Mizoram (Multi Year Tariff) Regulations, 2014.

In this regard it is submitted that the GFA for the FY 2023-24 has got revised in accordance with the audited annual accounts for which true-up proposal is being submitted. The Fixed Asset & Depreciation Register for the FY 2023-24 is also being submitted. Therefore, the GFA & corresponding depreciation for the FY 2024-25& FY 2025-26 also stands revised. The Depreciation is estimated for the FY 2024-25 at ₹ 0.16 Crores which is 1% of the projected depreciation & **only relates to the distribution function**. Details of category wise Assets & Depreciation is provided in the Format – F2 & F2a.

In view of the above it is requested that the Hon'ble Commission may kindly consider & approve the revised depreciation for the FY 2025-26. The depreciation approved by the Hon'ble Commission and revised depreciation for the FY 2025-26 is provided in the table below:

Table 7.21: Depreciation FY 2025-26

(In ₹ Crores)

Sl. No.	Particulars	Approved in T.O. dated 28.03.2023	Proposed by P&ED	Deviation
1	2	3	4	5

1	Depreciation	0.00	0.16	0.16
	Total	0.00	0.16	0.16

Commission's Analysis**Table 7.22: Depreciation approved by the Commission for FY 2025-26****(₹. Cr)**

Sl. No.	Particulars	2019-20 (Rs.Crs)	2020-21 (Rs.Crs)	2021-22 (Rs.Crs)	2022-23 (Rs.Crs)	2023-24 (Rs.Crs)
1	Closing balance of Contributions, Grants & subsidies for Capital Assets costs (Schedule-34)	2432.15	2491.76	2560.03	2615.70	2690.29
2	Gross Block of Assets (OCFA) Sch-19	1294.02	1379.16	1422.11	1576.10	1607.95
3	Excess of capital subsidy over OCFA	1138.13	1112.60	1137.92	1039.60	1082.34
4	The Ratio of Gross block to Capital Subsidies (%) – (2/1x100)	53.20%	55.35%	55.55%	60.26%	40.23%
5	Own funds spent for Assets	0%	0%	0%	0%	0%
6	Eligibility to claim depreciation on assets in each year in the past	Nil	Nil	Nil	Nil	Nil

As seen from the ratio of Gross Block of Assets to Capital Subsidies (row-4) so far received for creation & capitalisation of assets is only just 40% and hence, it appears no own funds were spent by P&ED in any of the above previous years. Hence, the option of claiming 10% of the annual depreciation claiming under the pretext of 10% own fund investment is also not a fact as the Capital Subsidy amount is very much higher (twicer) than the Gross Asset values so far created noted from the Audited Balance Sheets upto FY2023-24.

Though, the licensee had been continuously claiming depreciation in their ARR for all years of MYT period, this issue was also debated in the public hearing for understanding the opinion of the public and Licensee. The Licensee has deeply expressed its concern for disallowing the minimal 1% value of the total depreciation as it will send wrong signals to the general public despite possessing huge value of assets spread across all over the state catering to consumers energy needs of all walks of life and but no nominal depreciation was considered for in ARR. Thus, P&ED had requested to reconsider the nominal depreciation amount of 1% of overall depreciation reflected in the financial accounts.

Hence, depreciation amount of Rs.0.16 Crs is approved for by the commission for FY 2025-26. Howsoever, this consideration now given by the Commission is only from FY 2024-25 onwards and not applicable for FY2022-23 and also for FY 2023-

24 and no such claim if any made would not be entertained for those two-year mentioned above.

7.7.9 Interest and Finance Charges

Petitioner's submission

The Hon'ble Commission did not approve interest & finance charges for the FY 2025-26. P&ED also does not claim any amount relates to interest & finance charges for the FY 2025-26. However, the actuals shall be submitted at the time truing-up.

The interest & finance charges as approved & proposed by P&ED for the FY 2025-26 are provided in the table below.

Table 7.23: Interest & Finance Charges FY 2025-26

(In ₹ Crores)

Sl. No.	Particulars	Approved in T.O. dated 28.03.2023	Proposed by P&ED Mizoram	Deviation
1	2	3	4	5
1	Interest & Finance Charges	0.00	0.00	0.00
	Total	0.00	0.00	0.00

Commission's Analysis

The Licensee too didn't claim any interest & finance cost for FY 2025-26 and same depiction/reflection is seen in form-3b. Hence, no charges under this head of account is allowed in the ARR determination for this year.

7.7.10 Interest on Working Capital

Petitioner's Submission

P&ED has followed the same methodology applied in the Tariff Order dated 15.03.2024 & does not claimed any amount relates to Interest on Working Capital. The Interest on Working Capital as approved for the FY 2025-26 and actual value of Interest on Working Capital for the FY 2025-26 is provided in the table below:

Table 7.24: Interest on Working Capital FY 2025-26

(In ₹ Crores)

Sl. No.	Particulars	Approved in T.O. dated 28.03.2023	Proposed by P&ED Mizoram	Deviation
1	2	3	4	5
1	Interest on Working Capital	0.00	0.00	0.00

Sl. No.	Particulars	Approved in T.O. dated 28.03.2023	Proposed by P&ED Mizoram	Deviation
	Total	0.00	0.00	0.00

Commission's Analysis

As per the MYT Regulation 2014, the interest on working capital is a permissible element of ARR expenditure. However, it is observed that P&ED had not obtained any working capital loan during the entire financial year or was there any history of such loans being drawn. The admission of Working Capital Interest will only burden the consumers by an extra charge for which they need not pay for it for the services rendered by P&ED and hence there is no need for allowing this cost element as P&ED is fully dependent/availing funding only from the State government and not from any other source for their day to day routine revenue expenses.

Hence, the Commission **disapproves** Interest on Working Capital amount for FY 2025-26 adopting the same analogy as in the case of Return on Equity to off-load the unnecessary burden on Consumers.

7.7.11 Interest on Consumer Security Deposit

The interest on Consumer Security Deposit approved for the FY 2025-26 was on the basis of closing balance of Consumer Security Deposit. The interest on Consumer Security Deposit as approved and the revised estimate for the FY 2025-26 are provided in the table below:

Table 7.25: Interest on Consumer Security Deposit FY 2025-26

(In ₹ Crores)

Sl. No	Particulars	Approved in T.O. dated 28.03.2023	Proposed by P&ED Mizoram	Deviation
1	2	3	4	5
1	Interest on Consumer Security Deposit	0.00	0.00	0.00
	Total	0.00	0.00	0.00

Commission's Analysis:

The Hon'ble Commission too did not approve Interest on consumer security deposit for the FY 2025-26.

7.7.12 Provision for Bad & Doubtful Debts

Petitioner's submission

The Hon'ble Commission did not approve Provision for Bad & Doubtful Debt for the FY 2025-26.

Table 7.26: Provision for Bad & Doubtful Debt FY 2025-26

(In ₹ Crores)

Sl. No.	Particulars	Approved in T.O. dated 28.03.2023	Proposed by P&ED Mizoram	Deviation
1	2	3	4	5
1	Provision for Bad Debt	0.00	0.00	0.00
	Total	0.00	0.00	0.00

Commission's Analysis

In view of the above the Commission would not consider/allow such provision for bad debts during MYT period. In case of these bad debts found unrecovered, the P&ED which has to mitigate such losses by its improved and efficient performance only and it cannot be passed on to consumers in the form of ARR cost.

7.7.13 Contributions to Contingency Reserve Fund

Petitioner Submission:

The Contingency Reserve Fund for the FY 2025-26 as approved by the Hon'ble Commission and the revised interest on working capital is provided in the table below:

Table 7.27: Contribution to Contingency Reserve Fund FY 2025-26

(In ₹ Crores)

Sl. No	Particulars	Approved in T.O. dated 28.03.2023	Proposed by P&ED Mizoram	Deviation
1	2	3	4	5
1	Contribution to Contingency Reserve Fund	0.00	0.00	0.00
	Total	0.00	0.00	0.00

Commission Analysis:

The Hon'ble Commission did not approve any provision for creation of contingency reserve fund for the FY 2025-26.

7.7.14 Non-Tariff Income**Petitioner's submission**

The Other Income for the FY 2025-26 as approved by the Hon'ble Commission is provided in the table below. P&ED Mizoram is not proposing any changes to the approved Other Income.

Table 7.28: Other Income FY 2025-26**(In ₹ Crores)**

Sl. No.	Particulars	Approved in T.O. dated 28.03.2023	Proposed by P&ED Mizoram	Deviation
1	2	3	4	5
1	Non-Tariff Income	9.47	11.40	1.93
	Total	9.47	11.40	1.93

Commission's Analysis

The Non-Tariff Income so projected by the Licensee is approved at the same level without any modification for the FY 2025-26 at Rs.11.40Cr.

7.7.15 Return on Equity**Petitioner's submission**

The Hon'ble Commission did not approve Return on Equity for the FY 2025-26.

Table 7.29: Return on Equity FY 2025-26**(In ₹ Crores)**

Sl. No.	Particulars	Approved in T.O. dated 28.03.2023	Proposed by P&ED Mizoram	Deviation
1	2	3	4	5
1	Return on Equity	0.00	0.00	0.00
	Total	0.00	0.00	0.00

Commission's Analysis

Since P&ED is a Government Department, Return on Equity is not considered for in the absence of identifiable Equity component in their Audited annual Accounts statement.

7.7.16 Efficiency Gains expected from Performance improvement by Licensee**Commissions Analysis:**

The Licensee on his own accord projected ₹15Cr as the efficiency gains amount in each year of the entire MYT period. The Commission adopts ₹.8.00Cr towards the Efficiency gains improvement amount for FY 2023-24 as reduction from Gross ARR amount to arrive at the Net ARR of FY 2023-24 and allows ₹15Cr for each year of

the remaining MYT period. But in the present filing the Licensee had made no projection towards Efficiency gains for FY 2025-26 its performance to gain some additional income without causing undue burden on sincere and honest consumers for the cause of some few delinquent consumers.

The following are the various efficiency gains parameters to measure the achievement (already once specified in FY2022-23 Tariff Order) and the licensee shall invariably provide the same data in their future filings

Efficiency Gains achievement measuring parameters	
1	Collection of pending dues
2	Curbing of theft and Malpractices
3	Physical verification & reassessment of Contracted loads
4	Rectification of wrong of wrong category classification
5	Mixed Load identification and billing as per clause 1.11 of the General terms & conditions of the Tariff schedule

However, after careful consideration Commission adopted **nil** amount towards efficiency gains instead of Rs.15.00Cr indicated in MYT Order for FY 2025-26 in view of the surplus status indicated for FY2023-24 onwards.

7.7.17 Revenue from sale of power

P&ED Mizoram has calculated the Revenue from sale of power for the FY 2025-26 on the basis of the revised sale and existing tariff. The Revenue from sale of power for the FY 2025-26 on the basis of the existing tariff & Revenue on the basis of the revised sale is provided in the table below:

Table 7.30: Revenue at Existing Tariff for FY 2025-26 by P&ED
(In ₹ Crores)

Sl. No.	Category	Revenue at Existing Tariff
	LT Consumers	
1	Kutir Jyoti	2.03
2	Domestic	193.92
3	Non-Profit Public Purpose	12.10
4	Commercial	45.21
5	Public Lighting	3.78
6	Agriculture	0.04
7	Public Water Works	0.36
8	LT Industrial	2.45
9	Electric Vehicle Charging	0.00
	Total LT	259.89
	HT Consumers	
10	Domestic	1.56

Sl. No.	Category	Revenue at Existing Tariff
11	Non-Profit Public Purpose	8.63
12	Commercial	20.07
13	Agriculture	0.10
14	Public Water Works	126.11
15	HT Industrial	17.97
16	Electric Vehicle Charging	0.00
17	Bulk Supply	13.84
	Total HT	188.28
18	Total LT & HT	448.17
19	Outside State - Trading	106.75
	Total	554.92

Commission's Analysis:

The above revenue calculation had not considered the revenue from sale of Industrial HT Option-2 (TOD) category consumers and also the Electrical Vehicle Charging station both in LT and HT category. In the FY 2023-24, the Commission had introduced these new categories by fixing separate tariff to those categories of consumers. But the Licensee did not indicate any quantity of units for sale to these categories in this year. No tariff revision was proposed by P&ED in this year. Accordingly, the Commission had made no quantity projection for deriving the revenue to be realised in 2025-26 from EV charging stations for LT & HT both, since no sales were recorded/observed in 2024-25 also. The details are tabulated below:

Table 7.31: Revenue at existing Tariffs for FY 2025-26 approved by Commission
(In ₹ Crores)

Sl. No.	Category	Revenue at Existing Tariff
	LT Consumers	
1	Kutir Jyoti	2.026
2	Domestic	200.315
3	Non-Profit Public Purpose	11.864
4	Commercial	44.139
5	Public Lighting	3.660
6	Agriculture	0.037
7	Public Water Works	0.365
8	LT Industrial	2.452
9	Electric Vehicle Charging	0.000
	Total LT	264.858
	HT Consumers	
10	Domestic	1.556
11	Non-Profit Public Purpose	8.390
12	Commercial	19.588

Sl. No.	Category	Revenue at Existing Tariff
13	Agriculture	0.113
14	Public Water Works	123.343
15	HT Industrial (Opt-1&2)	17.602
16	Electric Vehicle Charging	0.00
17	Bulk Supply	13.479
	Total HT	184.071
18	Total LT & HT	448.929

7.8 Aggregate Revenue Requirement

It is submitted that P&ED Mizoram has proposed revisions in few components of Aggregate Revenue Requirement approved by the Hon'ble Commission in the MYT Order dated 28.03.2023 and the same has been discussed in the paras above. The approved ARR and the revised ARR & the corresponding Revenue Gaps at existing tariff is provided in the table below:

Table 7.32: Annual Revenue Requirement FY 2025-26

(In ₹ Crores)

Sl. No.	Item of Expense	Approved in T.O. dated 28.03.2023	Proposed by P&ED	Deviation
1	2	3	4	5
1	Cost of Fuel	0.00	0.00	0.00
2	Cost of Generation	5.93	13.25	7.32
3	Cost of Power Purchase	435.92	495.91	59.99
4	Transmission Charges	71.26	54.15	-17.11
5	Intra State Transmission	56.25	48.30	-7.95
6	Employee Costs	152.88	130.01	-22.87
7	R&M Expenses	13.37	17.17	3.80
8	Administration and General Expenses	2.21	7.15	4.94
9	Depreciation	0.00	0.16	0.16
10	Interest charges	0.00	0.00	0.00
11	Interest on Working Capital	0.00	0.00	0.00
12	Interest on Consumer Security Deposit	0.00	0.00	0.00
13	Provision for bad debts	0.00	0.00	0.00
14	Return on NFA /Equity	0.00	0.00	0.00
15	Contbn to Contingency Reserve Fund	0.00	0.00	0.00
16	Total Revenue Requirement	737.82	766.09	28.27
17	Less: Non-Tariff Income	9.47	11.40	1.93
18	Less: 1/3rd Surplus transferred	0.00	0.00	0.00
19	Less: Efficiency Gains	15.00	0.00	-15.00
20	Net Revenue Requirement	713.35	754.69	41.34

Commission's Analysis

Based on the approved costs the Aggregate Revenue Requirement for MYT period is indicated in the table below:

Table 7.33: Commission approved ARR for FY 2025-26 (Rs Crs)

Sl. No.	Particulars	Projected by P&ED	Commission Approved
1	Cost of Fuel	0.00	0.00
2	Cost of Generation	13.25	5.93
3	Cost of Power Purchase	495.91	443.88
4	Inter-State Transmission charges	54.15	54.15
5	Intra- state Transmission Charges	48.30	48.30
6	Operation & Maintenance Exps	154.33	152.78
	a) Employee Cost	130.01	130.01
	b) Repairs & maintenance	17.17	15.62
	c) Administrative & General Expenses	7.15	7.15
7	Interest on Loan	0.00	0.00
8	Depreciation	0.16	0.16
9	Interest on Working Capital	0.00	0.00
10	Return on Equity	0.00	0.00
11	Provision for Bad Debt	0.00	0.00
12	Contingency Res. Fund contribution	0.00	0.00
13	Total Revenue Requirement	766.10	705.20
14	Less: Non-Tariff Income	11.40	11.40
15	Less: Efficiency Gains	0.00	0.00
16	Less: 1/3 rd True-Up surplus of FY 2023-24	0.00	7.15
17	Net ARR requirement [13- (14 to 16)]	754.70	686.66
18	Less: Revenue from OSS/ IEX Sales	106.75	56.93
19	ARR after Revenue from Outside state sales	647.95	629.73
20	Revenue from Retail Sales	448.17	448.93
21	Revenue Surplus/ (Deficit)-→ (20-19)	199.78	180.80

Tariff Proposal for FY 2025-26

Petitioner's Submission:

P&ED Mizoram in the previous sections has discussed the Aggregate Revenue Requirement for the FY 2025-26 and the revenue gap at the existing tariff. In this section, tariff proposal of the Department for recovery of the ARR has been discussed.

7.9 Recovery of Revenue Gap for FY 2025-26

Petitioner's Submission:

The estimated gap for the FY 2025-26 has been computed by deducting the revenue at existing tariff from the net ARR as detailed above.

P&ED Mizoram does not propose to recover the Gap as these may result in huge burden on the consumers. Tariff is a sensitive subject having substantial impact on social, economic and financial well-being of the public at large as well as the viability and growth of power sector. Recovery of entire Gap through tariff increase is not practicable as this would make power unaffordable to the general consumers. P&ED Mizoram being a Government Department funded by budgetary support from State Government, there is no proposal of any hike for gap recovery.

In view of the above, the tariff proposal for the FY 2025-26 for various categories of consumers is given below along with the comparison with existing tariff.

Table 7.34: Tariff – Existing vs. Proposed

Sl. No.	Type of installation	Existing		Proposed	
		Energy Charges (₹/Month)	Fixed Charges (In ₹ per kW or kVA)	Energy Charges (₹/Month)	Fixed Charges (In ₹ per kW or kVA)
		A	B	A	B
1	Kutir Jyothi				
i)	First 20 kWh	2.55/kWh	25/Connection	2.55/kWh	25/Connection
ii)	Balance above 20 kWh	3.55/kWh	25/Connection	3.55/kWh	25/Connection
2	Domestic				
A	Low Tension				
i)	First 100 kWh	4.90/kWh	50/Contracted Load in kW	4.90/kWh	50/Contracted Load in kW
ii)	Next 100 kWh	7.10/kWh	50/Contracted Load in kW	7.10/kWh	50/Contracted Load in kW
iii)	Balance above 200 kWh	8.20/kWh	50/Contracted Load in kW	8.20/kWh	50/Contracted Load in kW
B	HT - Domestic	8.65/kVAh	50/Billing Demand in kVA	8.65/kVA	50/Billing Demand in kVA
3	Non-Profit Public Purpose				
A	Low Tension				
i)	First 150 kWh	7.60/kWh	60/Contracted Load in kW	7.60/kWh	60/Contracted Load in kW
iii)	Balance above 150 kWh	8.30/kWh	60/Contracted Load in kW	8.30/kWh	60/Contracted Load in kW
B	High Tension- NPPP	8.75/kVAh	60/Billing Demand in kVA	8.75/kVA	60/Billing Demand in kVA
4	Commercial				
A	Low Tension				
i)	First 150 kWh	8.20/kWh	80/Contracted Load in kW	8.20/kWh	80/Contracted Load in kW
iii)	Balance above 150 kWh	8.45/kWh	80/Contracted Load in kW	8.45/kWh	80/Contracted Load in kW
B	High Tension	8.90/kVAh	80/Billing Demand in kVA	8.90/kVA	80/Billing Demand in kVA
5	Public Lighting	11.35/kWh	80/Contracted Load in kW	11.35/kW	80/Contracted Load in kW
6	Irrigation & Agriculture				
A	LOW TENSION	3.80/kW	50/Contracted Load in kW	3.80/kWh	50/Contracted Load in kW
B	HIGH TENSION	3.85/kVA	50/Billing Demand in kVA	3.85/kVA	50/Billing Demand in kVA
7	Public Water Works				
A	LOW TENSION	11.10/kW	90/Contracted Load in kW	11.10/kW	90/Contracted Load in kW
B	HIGH TENSION	9.85/kVA	90/Billing Demand in kVA	9.85/kVA	90/Billing Demand in kVA
8	Industrial services				
A	LOW TENSION				

Sl. No.	Type of installation	Existing		Proposed	
		Energy Charges (₹/Month)	Fixed Charges (In ₹ per kW or kVA)	Energy Charges (₹/Month)	Fixed Charges (In ₹ per kW or kVA)
	i) First 400 kWh	7.10/kW	80/Contracted Load in kW	7.10/kWh	80/Contracted Load in kW
	ii) Balance above 400	8.05/kW	80/Contracted Load in kW	8.05/kWh	80/Contracted Load in kW
B	HIGH TENSION	9.05/kVAh	80/Billing Demand in kVA	9.05/kVAh	80/Billing Demand in kVA
9	Bulk Supply	6.85/kVAh	90/Billing Demand in kVA	6.85/kVAh	90/Billing Demand in kVA
10	Electric Vehicle (EV) Charging Station				
A	LOW TENSION	8.20/kW	75/Contracted Load in kW	8.20/kWh	75/Contracted Load in kW
B	HIGH TENSION	8.65/kVA	75/Billing Demand in kVA	8.65/kVA	75/Billing Demand in kVA

7.10 TOD Tariff for FY 2025-26

As per directive given by the Hon'ble Commission hereby P&ED propose the TOD Tariff for all the category except Irrigation & Agriculture category. The TOD tariff proposal for the FY 2025-26 for various categories of consumers is given below along with the comparison with existing tariff.

Table 7.35: TOD Tariff- – Existing vs. Proposed

Sl. No.	Type of installation	Existing (FY2024-25)		Proposed (FY2025-26)	
		Energy Charges (₹/Month)	Fixed Charges (In ₹)	Energy Charges (₹/Month)	Fixed Charges (In ₹)
		A	B	A	B
1	Kutir Jyothi				
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)			2.45/kWh	25/Connection
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)			3.10/kWh	25/Connection
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)			1.95/kWh	25/Connection
2	Domestic				
A	LT				
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)			4.95/kWh	50/Contracted Load in Kw
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)			6.35/kWh	50/Contracted Load in Kw
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)			3.85/kWh	50/Contracted Load in Kw
B	HT				
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)			7.80/kVAh	50/Billing Demand in KVA
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)			10.00/kVAh	50/Billing Demand in KVA
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)			6.10/kVAh	50/Billing Demand in KVA
3	Non-Profit Public Purpose				
A	LT				
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)			6.95/kVAh	60/Contracted Load in Kw
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)			8.90/kVAh	60/Contracted Load in Kw
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)			5.40/kVAh	60/Contracted Load in Kw
B	HT				
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)			8.45/kVAh	60/Billing Demand in KVA
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)			10.80/kVAh	60/Billing Demand in KVA
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)			6.60/kVAh	60/Billing Demand in KVA
4	Commercial				
A	LT				
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)			7.10/kVAh	80/Contracted Load in Kw

Sl. No.	Type of installation	Existing (FY2024-25)		Proposed (FY2025-26)	
		Energy Charges (₹/Month)	Fixed Charges (In ₹)	Energy Charges (₹/Month)	Fixed Charges (In ₹)
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)			9.10/kVAh	80/Contracted Load in Kw
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)			5.55/kVAh	80/Contracted Load in Kw
B	HT				
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)			8.60/kVAh	80/Billing Demand in KVA
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)			11.00/kVAh	80/Billing Demand in KVA
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)			6.70/kVAh	80/Billing Demand in KVA
5	Public Lighting				
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)			8.80/kVAh	80/Contracted Load in Kw
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)			11.25/kVAh	80/Contracted Load in Kw
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)			6.85/kVAh	80/Contracted Load in Kw
6	Irrigation & Agriculture				
A	LT			Not considered for TOD Tariff	
B	HT				
7	Public Water Works				
A	LT				
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)			8.60/kVAh	90/Contracted Load in Kw
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)			11.00/kVAh	90/Contracted Load in Kw
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)			6.70/kVAh	80/Contracted Load in Kw
B	HT				
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)			8.80/kVAh	90/Billing Demand in KVA
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)			11.25/kVAh	90/Billing Demand in KVA
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)			6.85/kVAh	90/Billing Demand in KVA
8	Industrial				
A	LT				
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)			8.80/kVAh	80/Contracted Load in Kw
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)			11.25/kVAh	80/Contracted Load in Kw
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)			6.85/kVAh	80/Contracted Load in Kw
B	HT				
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)	10.05/kVAh	80/Billing Demand in KVA	8.80/kVAh	80/Billing Demand in KVA
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)	11.55/kVAh	80/Billing Demand in KVA	11.25/kVAh	80/Billing Demand in KVA
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)	8.55/kVAh	80/Billing Demand in KVA	6.85/kVAh	80/Billing Demand in KVA
9	Bulk Supply				
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)			7.35/kVAh	90/Billing Demand in KVA
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)			9.40/kVAh	90/Billing Demand in KVA
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)			5.75/kVAh	90/Billing Demand in KVA
10	Electric Vehicle (EV) Charging Station				
A	LT				
i)	From 09:00 Hrs. upto 16:00 Hrs. (Solar Hour)			5.74/kVAh	75/Contracted Load in Kw
ii)	From 16:00 Hrs. upto 09:00 Hrs. (Non-Solar Hour)			10.66/kVAh	75/Contracted Load in Kw
B	HT				
i)	From 09:00 Hrs. upto 16:00 Hrs. (Solar Hour)			6.05/kVAh	75/Billing Demand in KVA
ii)	From 16:00 Hrs. upto 09:00 Hrs. (Non-Solar Hour)			11.25/kVAh	75/Billing Demand in KVA

Commission's Analysis:

The Commission have derived the category wise Time of the Day (TOD) tariff for all category of consumers except the Irrigation and Agriculture category consumers for the first time in FY 2025-26 and the **detailed revenue calculation sheet** is attached to as Annexure-IX at the end of this Tariff Order for reference and the approved TOD rates are given below:

Table 7.36: TOD Tariff approved by Commission for FY 2025-26

Sl. No.	Category Consumers (P&ED)	Fixed Charge (kW/kVA)	Energy Charge (kWh/ kVAh)
1	2	3	4
1	KJ(Domestic)		
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)	25	2.45
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)	25	3.10
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)	25	1.95
2	Domestic-LT		
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)	50	5.00
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)	50	6.35
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)	50	3.85
3	Domestic-HT		
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)	50	7.80
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)	50	10.00
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)	50	6.10
4	Non-Profit Public Purpose-LT		
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)	60	6.95
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)	60	8.90
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)	60	5.40
5	Non-Profit Public Purpose-HT		
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)	60	8.45
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)	60	10.80
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)	60	6.60
6	Commercial-LT		
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)	80	7.10
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)	80	9.10
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)	80	5.55
7	Commercial-HT		
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)	80	8.60
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)	80	11.00
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)	80	6.70
8	Public Lighting		
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)	80	8.80
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)	80	11.25
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)	80	6.85

Sl. No.	Category Consumers (P&ED)	Fixed Charge (kW/kVA)	Energy Charge (kWh/ kVAh)
9	PWS LT		
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)	90	8.60
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)	90	11.00
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)	90	6.70
10	PWS HT		
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)	90	8.80
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)	90	11.25
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)	90	6.85
11	Irrgn & Agri - LT	50	3.80
12	Irrgn & Agri - HT	50	3.85
13	Industrial-LT		
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)	80	7.00
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)	80	8.95
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)	80	5.45
14	Industrial-HT		
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)	80	9.05
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)	80	11.40
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)	80	7.05
15	Bulk Supply HT		
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)	90	7.70
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)	90	9.70
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)	90	6.20
16	Electric Vehicle (EV) charging station (LT)		
i)	From 09:00 Hrs. upto 16:00 Hrs. (Solar Hour)	75	5.74
ii)	From 16:00 Hrs. upto 09:00 Hrs. (Non-Solar Hour)	75	10.66
17	Electric Vehicle (EV) charging station (HT)		
i)	From 09:00 Hrs. upto 16:00 Hrs. (Solar Hour)	75	6.05
ii)	From 16:00 Hrs. upto 09:00 Hrs. (Non-Solar Hour)	75	11.25

The total revenue yield from the TOD based tariff will also be equal to the total revenue accrued from Non-TOD based tariff figure. The variation in the Tariff is only applicable for Energy part of Tariff only based on the various peak hour consumption to be made by various consumers during FY2025-26.

7.11 Revenue at Proposed Tariff

Based on the Tariff proposed, following is the summary of the revenue

Table 7.37: Revenue at Proposed Tariff by P&ED

Sl. No.	Category	Revenue at Proposed Tariff
	LT Consumers	

Sl. No.	Category	Revenue at Proposed Tariff
1	Kutir Jyoti	2.03
2	Domestic	193.92
3	Non-Profit Public Purpose	12.10
4	Commercial	45.21
5	Public Lighting	3.78
6	Agriculture	0.04
7	Public Water Works	0.36
8	LT Industrial	2.45
9	Electric Vehicle Charging	0.00
	Total LT	259.89
	HT Consumers	
10	Domestic	1.56
11	Non-Profit Public Purpose	8.63
12	Commercial	20.07
13	Agriculture	0.10
14	Public Water Works	126.11
15	HT Industrial (Opt-1&2)	17.97
16	Electric Vehicle Charging	0.00
17	Bulk Supply	13.84
	Total HT	188.28
18	Total LT & HT	448.17
19	Outside State - Trading	106.75
	Total	554.92

7.12 Additional Revenue at Proposed Tariff

Based on the tariff proposed above, P&ED Mizoram has not proposed for any additional revenue at the proposed tariff rates.

Table 7.38: Additional Revenue at proposed Tariff

(In ₹ Crore)

Sl. No.	Particulars	FY 2025-26
1	2	3
1	Additional Revenue from Proposed tariff revision	0.00
	Total	0.00

Commission's Analysis:

In the above proposed revenue gap of Rs.199.77Cr, Licensee presumed to receive entire amount as Government subsidy and accordingly proposed no Tariff hike in FY 2025-26. The Government of Mizoram issued a tariff subsidy related letter vide Letter No.B.19018/9/2022-P&E, Dt. 18th December 2024 (copy enclosed as annexure-VIII at the end of the Tariff Order). It was stated by the Govt. of Mizoram that it may give maximum subsidy amounting of ₹199.77Cr or the amount derived by adopting 26.47% on the gross derived

ARR after finalisation whichever is less. Adopting 26.47% on gross ARR amount of ₹686.66Cr (before adjusting the Revenue realised from Outside Trading sales) as approved by Commission would yield ₹181.758Cr as the assured amount of government subsidy. Therefore, entire deficit of Rs.180.80Cr would be fully covered by the Government subsidy and eventually the unmet gap will be Nil since the gap of Rs.180.80Cr is lower than the eligible subsidy amount of Rs.181.758Cr. Accordingly, the Commission had too strongly felt that there is no action needed for any upward revision for the existing tariffs (Non-TOD) of various retail consumer categories to generate any additional revenue over and above ₹448.93Cr resulting from prevailing/existing tariffs now in force.

The realisable revenue from each consumer category for FY2025-26 is tabulated below:

Table 7.39: Commission approved Revenue at Existing Tariffs for FY 2025-26

Sl. No.	Category FY 2025-26	Energy Sales	Revenue at Existing Tariff	CPU
	LT Consumers	(MU)	Rs.Crs	Rs./kWh
1	Kutir Jyoti	5.30	2.03	3.82
2	Domestic	336.09	200.31	5.96
3	Non-Profit Public Purpose	13.38	11.86	8.87
4	Commercial	47.59	44.14	9.27
5	Public Lighting	3.10	3.66	11.81
6	Public Water Works	0.25	0.36	14.40
7	Agriculture	0.08	0.04	5.00
8	LT Industrial	2.72	2.45	9.01
9	Electric Vehicle Charging	0	0.00	0.00
	Total LT	408.51	264.86	6.48
	HT Consumers			
10	Domestic	1.46	1.56	10.66
11	Non-Profit Public Purpose	7.41	8.39	11.32
12	Commercial	17.66	19.59	11.09
13	Public Water Works	107.85	123.34	11.44
14	Agriculture	0.22	0.11	5.15
16	HT Industrial (Opt-1&2)	16.41	17.60	10.73
17	Electric Vehicle Charging	0	0.00	0.00
18	Bulk Supply	14.76	13.48	9.13
	Total HT	165.77	184.07	11.10
19	Total LT & HT	574.28	448.93	7.82

Note: Detailed calculation based on approved subsidised Tariff is placed as Annexure – III

7.13 Impact of Tariff on Consumers

Petitioners Submission:

The revenue gap and the average tariff hike proposed are presented in the table below:

Table 7.40 : Impact of Tariff

Sl. No.	Particulars	Units	FY 2025-26	
			Existing	Proposed
1	ARR	₹ in Crores	754.69	754.69
2	Revenue from tariff	₹ in Crores	448.17	448.17
3	Revenue from sale of power outside the state	₹ in Crores	106.75	106.75
4	Total Revenue	₹ in Crores	554.92	554.92
5	Gap (1 – 2 - 3)	₹ in Crores	199.77	199.77
6	Sales within State	MUs	574.28	574.28
7	Sale of power outside the state	MUs	180.90	180.90
8	Total Sales	MUs	755.18	755.18
9	Average Cost of Supply within state $\{(1-3)/6\}$	₹ per kWh	11.28	11.28
10	Average Revenue (2/6)	₹ per kWh	7.80	7.80
11	Pure Gap (9-10)	₹ per kWh	3.48	3.48
12	Average Hike in Tariff	₹ per kWh		0.00
13	Hike in Tariff	%		0.00

Hence, it is submitted that the average increment of tariff required to recover the gap attribute to FY 2025-26 is ₹ 3.48 that but the P&ED, Mizoram has not proposed any hike.

Commissions Analysis:

Table 7.41: Revenue Gap for FY 2025-26 as approved by the Commission

Sl. No.	Particulars	Units	Existing Tariff	Post Revision
1	Net Aggregate Revenue Requirement	Rs. Crs	686.66	686.66
2	Less: Outside state sales revenue	Rs. Crs	56.93	56.93
3	ARR after Outside State Sales (1 - 2)	Rs. Crs	629.73	629.73
4	Revenue from retail sale of power	Rs. Crs	448.93	448.93
5	Revenue Gap (3 – 4)	Rs. Crs	180.80	180.80
6	Assured Tariff subsidy from Govt.	Rs. Crs	199.77	199.77
7	Unmet Revenue Gap (5 – 6)	Rs. Crs	0.000	0.00
8	Retail Sales within State	MUs	574.28	574.28
9	Outside State power Sales	MUs	96.49	96.49
10	Total Sales from all Sources (8 + 9)	MUs	670.77	670.77

Sl. No.	Particulars	Units	Existing Tariff	Post Revision
11	Average Cost of Supply within state (3/8)	Rs./kWh	10.966	10.966
12	Average Revenue (4/8)	Rs./kWh	7.82	7.82
13	Pure Gap rate (11-12) or (6/8)	Rs./kWh	3.146	3.146
14	Average Hike in Tariff - (7/8)	Rs./kWh		0.000
15	Hike adopted in Tariff (7/4)	%		0.000%

7.14 Government Tariff Subsidy/Support

As seen from the above, it is clear that the revenue from sale of power is not sufficient to meet the ever-increasing expenditure and the P&ED shall continue to depend upon the subsidy/support from Government of Mizoram as the retail consumers are predominately Domestic category and very negligible from other Commercial categories from LT & HT. The net revenue gap of **₹.180.80 Crores** so arrived at by the Commission shall be met totally within the announced Government subsidy/support.

The ARR & Tariff Petition for FY 2025-26 filed by the P&E Department was done with the prior approval of the State Government. The Licensee, in their submitted Tariff Petition, had proposed no tariff hike over the prevailing tariffs of FY 2024-25 despite the revenue gap of **₹.199.77 Crs** to be off-set by Government tariff subsidy. While the Commission arrived the revenue gap to **Rs.180.80Crs** with no tariff hike in this year. The State Government of Mizoram issued an assurance letter to this effect vide their letter dated:18th December 2024 issued by Under Secretary(tech) of GoM in assurance of tariff subsidy is placed at (Annexure-VIII). In addition, in the said letter issued by Govt. of Mizoram vide **No.B.19018/9/2022-P&E, Dt.18th December 2024** it is an assurance of blanket Tariff subsidy to all class of consumers and with a conditional subsidy depending upon the deficit by the State Government amounting to Rs.199.77Crs or 26.47% be applied over upon the final ARR whichever is less. Be given as subsidy, in order to achieve the objective of year on year tariffs progressively to reflect the cost of electricity supply, the grant of subsidy shall have to be reduced every year in decrementing fashion and ultimately make the power utility to manage without Government subsidy support.

The Section-65 of the Electricity Act 2003 mandates that the State Government shall

release subsidy amount due to the Licensee in advance so as to enable the licensee to implement the subsidized tariffs to their consumers as per subsidised Tariff rates in Table-8.2 (Detailed Revenue calculation at subsidised Tariff is given at **Annexure-III**).

The Ministry of Power have recently given amendment to Rule-15 of Electricity Rule 2005 (which is called Electricity Second Amendments Rules 2023) dated 26th July, 2023 and the amended details are given below:

Subsidy accounting and payment. -

- (1) The accounting of the subsidy payable under section 65 of the Act, shall be done by the distribution licensee, in accordance with the Standard Operating Procedures issued by the Central Government, in this regard.
- (2) A quarterly report shall be issued by the State Commission for each distribution licensee, in its jurisdiction, giving findings whether demands for subsidy were raised by the distribution licensee in the relevant quarter based on accounts of the energy consumed by the subsidised category and consumer category wise per unit subsidy declared by the State Government, the actual payment of subsidy in accordance with section 65 of the Act and the gap in subsidy due and paid as well as other relevant details.

Explanation:

For the purpose of this rule, (The term “Unit” means Kilo Watt Hour (kWh) or Kilo Watt (kW) or Horse Power (HP) or Kilo Volt Ampere (kVA), in accordance with the relevant Regulations or the Tariff Orders issued by the Appropriate Commission.

- (3) The quarterly report shall be submitted by the distribution licensee within thirty days from end date of the respective quarter and the State Commission shall examine the report, and issue it with corrections, if any, in accordance with sub-rule (2), within thirty days of the submission.
- (4) In case the subsidy has not been paid in advance, then the State Commission shall issue order for implementation of the tariff without subsidy, in accordance with provisions of the section 65 of the Act.
- (5) If subsidy accounting and the raising bills for subsidy is not found in accordance with the Act or Rules or Regulations issued there under, the State Commission shall take appropriate action against the concerned officers of the licensee for non-compliance as per provisions of the Act.

Note: The procedural steps to adopted while dealing with Subsidy Accounting were clearly defined and notified by MoP (Standard of Operating Procedures) vide its Letter No. F.No.14/12/2022-UR&SI-II-Part-(I)-(E-263842) dated 01st July, 2022 which are to be followed scrupulously.

Accordingly, the State Government should release the above stated subsidy amount in Twelve (12) equal monthly instalments amounting to **₹ 15.067 Crores (Rupees Fifteen point zero-six-seven crores only) every month in advance as enshrined in Section-65 of E.Act 2003**. However, in the event of delay or non-receipt of subsidy in advance in any month from the Government, the licensee shall adopt the

applicable full cost tariff (FCT) rates indicated at **Table 8.3 of chapter-8** while issuing the monthly energy demand bill for that relevant month/months.

Ministry of Power has issued rules mandating distribution licensees to provide 24x7 power supply with instances of frequent interruptions resulting in penal action to ensure uninterrupted supply to the consumers.

State Governments may provide subsidies to distribution licensees which must be paid in advance as mandated in the Act. If the state government fails to provide advance subsidy payments the Commission **Suo-moto** directs distribution licensees to charge the full cost tariff. It is made clear that such advance subsidies should further be utilised and result in improving the performances of the distributing licensees.

Detailed calculation of Revenue at FCT is placed at **Annexure-IV** for reference.

A brief summary of Full cost tariff-based revenue from various consumers is tabulated below for reference.

Table 7.42: Commission approved Full Cost Tariff based Revenue for FY 2025-26

PED, Mizoram - Expected Revenue from Full Cost Tariff in FY2025-26 (Non-ToD tariff based)								
Sl. No.	Category - FY2025-26 (Full Cost Tariff)	Energy Sales	Revenue (Full Cost)	Total Rev (CPU)	Fixed Charge	Fixed (CPU)	Energy Charge	Energy (CPU)
A	LT Supply	MU	Rs.Crs	Rs./Unit	Rs.Crs	Rs./kWh	Rs.Crs	Rs./kWh
1	KutirJyoti	5.30	5.07	9.57	0.57	1.08	4.50	8.49
2	LT Domestic	336.09	332.37	9.89	21.30	0.63	311.07	9.26
3	Non-Profit Public P	13.38	16.15	12.07	1.50	1.12	14.65	10.95
4	Commercial LT	47.59	62.64	13.16	4.60	0.97	58.04	12.20
5	LT Industries Micro/ Small	2.72	3.73	13.71	0.52	1.89	3.21	11.82
6	Public Lighting	3.10	4.17	13.46	0.14	0.46	4.03	13.00
7	Public Water-Works	0.25	0.39	15.66	0.09	3.49	0.30	12.16
8	Irrigation and Agriculture	0.08	0.11	13.77	0.01	0.77	0.10	13.00
9	Electric Vehicle- LT	0.00	0.00					
	LT Supply Sub Total	408.51	424.65	10.39	28.72	0.70	395.92	9.69
B	HT Supply							
1	Domestic	1.46	1.62	11.13	0.15	1.05	1.47	10.08
2	Non-Profit Public P	7.41	8.74	11.80	1.19	1.60	7.56	10.20
3	Commercial	17.66	20.80	11.78	2.12	1.20	18.68	10.58
4	Public Water-Works	107.85	135.20	12.54	5.31	0.49	129.90	12.04
5	Irrgn & Agriculture	0.22	0.30	13.53	0.02	0.87	0.28	12.66
6	Industrial HT	16.41	19.47	11.86	1.10	0.67	18.37	11.19
7	TOD Industrial	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	Bulk Supply	14.76	18.95	12.84	2.24	1.52	16.71	11.32
9	Electric Vehicle- HT	0.00	0.00					
	HT Supply Sub Total	165.77	205.08	12.37	12.13	0.73	192.95	11.64
	TOTAL (LT & HT)	574.28	629.73	10.97	40.86	0.71	588.87	10.25

There could be a situation, where the outstanding monthly subsidy pending was released by the government after passage of much time elapse and thereby consumers were to be billed at full cost tariffs in those relevant month or months when subsidy was not paid in advance. Given the situation, the entire excess amount so charged to all consumers on account of full cost tariff adoption shall have to be refunded as deduction by treating such excess amount laying with Licensee **as an advance payment** to the licensee be settled **at one time** in the immediate monthly billing cycle where bills are being issued to respective consumers soon after receipt of such pending subsidy relating to the past month/months. If in case, the excess amount so refundable is exceeding the monthly billing amount to be so adjusted in case of any consumer/consumers, then such excess amount unrefunded may be carried forward and be adjusted in the immediately following monthly bill/bills to be issued to such consumer/consumers until full settlement is done in toto.

Lastly, the brief summary of the Commission calculations in support of subsidy amount deduced, the average of supply and the average revenue realisation details are tabulated in the following table.

Table 7.43: Average Cost of Power supply in Mizoram State for FY 2025-26

Sl. No	Particulars	Units	Proposed by P&ED	Commission Approved
1	Net overall ARR	Rs. Cr	754.70	686.66
2	Sale of surplus power revenue	Rs. Cr	106.75	56.93
3	Net ARR within the state (1-2)	Rs. Cr	647.95	629.73
4	Net Revenue from Retail Sales	Rs. Cr	448.17	448.93
5	Net Revenue Gap (3-4)	Rs. Crs	199.77	180.80
6	Govt. subsidy/ Support	Rs. Cr	199.77	199.77
7	Energy sale within the state	MU	574.28	574.28
8	Average Cost of Supply (3/7)	Rs/KWH	11.28	10.97
9	Avg. rate of Revenue realization - (4/7)	Rs/KWH	7.80	7.82
10	Avg. rate of Subsidy per unit (7-8)	Rs/kWh	3.48	3.15

8 Tariff Principles and Design

8.1 Background

While determining the revenue requirement and in fixation of the retail supply tariff of the P&ED, Mizoram for the FY 2025-26 the Commission had been guided by the provisions of the Electricity Act, 2003, the National Tariff Policy (NTP), CERC Regulations on Terms and Conditions of Tariff and JERC Regulations for Manipur and Mizoram (Multi Year Tariff) Regulation, 2014 adopted by MZERC. Section 61 of the E. Act 2003 laid down the broad principles, which shall guide determination of retail supply tariffs. As per these statutory provisions, the tariff shall “Progressively reflect cost of supply” and also reduce cross subsidies components “within the period to be specified by the Commission”. The Act also lays special emphasis on safeguarding consumer interests and mandates that tariff determination should be guided by the factors, which encourage competition, efficiency, economical use of resources, good performance and optimum investment.

The Tariff Policy notified by Government of India in January 2006 and also in 2016 provides comprehensive guidelines for determination of tariff and in working out the revenue requirement of power utilities. The Commission had made conscious endeavour to follow these guidelines as far as possible.

NTP mandates that the Multi-Year-Tariff (MYT) framework be adopted for determination of tariff from 1st April 2006. Consequently, the Commission had introduced the MYT Regime in the State from 2015-16 onwards.

8.1.1 Section 8.3 of Tariff Policy lays down the following principles for tariff design:

1. In accordance with the National Electricity Policy, consumers below poverty line whose consumption is below a specified level, say 30 units per Month, may receive a special support in the form of cross subsidy. Tariffs for such group of consumers will be at least 50% of the average cost of supply. This provision will be re-examined after five years.

2. For achieving the objective that the tariff shall progressively reflect the cost of supply of electricity the roadmap is within $\pm 20\%$ of the average cost of supply except in the case of government category services like Public Lighting and Public Water Services under LT&HT at the expressed strong opinions of the general public in the Public Hearings conducted. The road map would have intermediate milestones, based on the approach of a gradual reduction in cross subsidy.
3. For example, if the average cost of service is ₹.3/- per unit, at the end of year 2010-11 the tariff for the cross subsidized categories excluding those referred to in para-1 above should not be lower than ₹.2.40 per unit and that for any of the cross-subsidizing categories should not go beyond ₹.3.60 per unit.
4. While fixing tariff for agricultural use, it is imperative to keep in view of usage of ground water resources in a sustainable manner in addition to the average cost of supply component. The tariff for agricultural use may be set at different levels for different parts of the State depending on the condition of the ground water table to prevent excessive depletion of ground water.”

National Electricity Policy (NEP) aims at increased access to electricity, supply of reliable and quality power at reasonable rates, minimum lifeline consumption and financial turnaround of consumer interest. The Commission has considered factors as far as possible which aim at achieving the objectives of NEP while determining the revenue requirement of the P&ED and designing the retail tariff for its consumers. The Commission considered a special treatment to **Kutir Jyoti** connection and **Agricultural** sector. It has also aimed at to raise the per capita consumption of the State. The Commission endeavours that the tariff progressively reflects Cost of Supply in a shortest possible period and the government subsidy is reduced gradually. The tariffs have been rationalized with regards to inflation, paying capacity of consumers and avoidance of high tariff shock.

8.2 Tariff Approved by the Commission

8.2.1 Tariff Categories

In the last year ARR and Tariff Petition of FY 2024-25, P&ED had proposed changes to some existing categories of consumers and the same is being continued in this

FY2025-26 also.

Various categories proposed by P&ED for FY2025-26 and approved by Commission:

The Commission considers in retaining the existing/proposed categories as follows:

- 1 (a) Kutir Jyoti (LT) (b) Domestic (LT) (c) Domestic (HT)
- 2 (a) Non-Profit Public Purpose LT 2 (b) Non-Profit Public Purpose HT
- 3 (a) Commercial LT 3 (b) Commercial HT
- 4 Public Lighting LT
- 5 (a) Irrigation & Agriculture-LT 5 (b) Irrigation & Agriculture-HT
- 6 (a) Public Water Works-LT 6 (b) Public Water Works-HT
- 7 (a) Industrial-LT 7 (b) Industrial-HT Opt-1 and Opt-2 TOD based Tariff
- 8 Bulk Supply HT 9 Electric Vehicle charging Stations at LT
10. Electric Vehicle charging Stations at HT.

8.2.2 Existing & Proposed Tariff

P&ED in its tariff petition for FY 2025-26 has proposed any revision to the existing two-part retail supply tariffs for FY 2025-26 and TOD tariff for all categories except Irrigation and agriculture Category.

The summary of the Non-TOD tariff proposal by P&ED for FY 2025-26 is furnished in table below:

Table 8.1: Existing v/s Proposed Tariff for FY 2025-26 by P&ED

Sl. No.	Type of installation	Existing		Proposed	
		Energy Charges (₹/Month)	Fixed Charges (In ₹)	Energy Charges (₹/Month)	Fixed Charges (In ₹)
		(A)	(B)	(A)	(B)
1	Kutir Jyothi				
i)	First 20 kWh	2.55/kWh	25/Connection	2.55/kWh	25/Connection
ii)	Balance above 20 kWh	3.55/kWh	25/Connection	3.55/kWh	25/Connection
2	Domestic				
A	LT				
i)	First 100 kWh	4.90/kWh	50/Contracted Load in KW	4.90/kWh	50/Contracted Load in KW
ii)	Next 100 kWh	7.10/kWh	50/Contracted Load in KW	7.10/kWh	50/Contracted Load in KW
iii)	Balance above 200 kWh	8.20/kWh	50/Contracted Load in KW	8.20/kWh	50/Contracted Load in KW
B	HT	8.65/kVAh	50/Billing Demand in KVA	8.65/kVAh	50/Billing Demand in KVA
3	Non-Profit Public Purpose				
A	LT				
i)	First 150 kWh	7.60/kWh	60/Contracted Load in KW	7.60/kWh	60/Contracted Load in KW
iii)	Balance above 150 kWh	8.30/kWh	60/Contracted Load in KW	8.30/kWh	60/Contracted Load in KW
B	HT	8.75/kVAh	60/Billing Demand in KVA	8.75/kVAh	60/Billing Demand in KVA
4	Commercial				
A	LT				
i)	First 150 kWh	8.20/kWh	80/Contracted Load in KW	8.20/kWh	80/Contracted Load in KW
iii)	Balance above 150 kWh	8.45/kWh	80/Contracted Load in KW	8.45/kWh	80/Contracted Load in KW
B	HT	8.90/kVAh	80/Billing Demand in KVA	8.90/kVAh	80/Billing Demand in KVA
5	Public Lighting	11.35/kWh	80/Contracted Load in KW	11.35/kWh	80/Contracted Load in KW
6	Irrigation & Agriculture				
A	LT	3.80/kWh	50/Contracted Load in KW	3.80/kWh	50/Contracted Load in KW

Sl. No.	Type of installation	Existing		Proposed	
		Energy Charges (₹/Month)	Fixed Charges (In ₹)	Energy Charges (₹/Month)	Fixed Charges (In ₹)
B	HT	3.85/kVAh	50/Billing Demand in KVA	3.85/kVAh	50/Billing Demand in KVA
7	Public Water Works				
A	LT	11.10/kWh	90/Contracted Load in KW	11.10/kWh	90/Contracted Load in KW
B	HT	9.85/kVAh	90/Billing Demand in KVA	9.85/kVAh	90/Billing Demand in KVA
8	Industrial				
A	LT				
i)	First 400 kWh	7.10/kWh	80/Contracted Load in KW	7.10/kWh	80/Contracted Load in KW
ii)	Balance above 400 kWh	8.05/kWh	80/Contracted Load in KW	8.05/kWh	80/Contracted Load in KW
B	HT				
	Option - 1	9.05/kVAh	80/Billing Demand in KVA	9.05/kVAh	80/Billing Demand in KVA
	Option - 2 (TOD) usage				
	i) from 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)	10.05/kVAh	80/Billing Demand in KVA	10.05/kVAh	80/Billing Demand in KVA
	ii) from 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)	11.55/kVAh	80/Billing Demand in KVA	11.55/kVAh	80/Billing Demand in KVA
	iii) from 22:00 Hrs. upto 06:00 Hrs. (Off-Peak TOD)	8.55/kVAh	80/Billing Demand in KVA	8.55/kVAh	80/Billing Demand in KVA
9	Bulk Supply	6.85/kVAh	90/Billing Demand in KVA	6.85/kVAh	90/Billing Demand in KVA
10	Electric Vehicle (EV) Charging Station				
A	LT category	8.20/kWh	75/Contracted Load in KW	8.20/kWh	75/Contracted Load in KW
B	HT Category	8.65/kVAh	75/Billing Demand in KVA	8.70/kVAh	75/Billing Demand in KVA

8.2.3 Tariffs Approved by the Commission

(a) Subsidized Tariff Approved for FY 2025-26

The Commission worked out the average rate to be **₹.7.82/kWh** for FY 2025-26 upon adopting the existing tariffs applicable in FY 2024-25 based on the revised number of consumers, load and energy consumption projected for FY 2025-26 in their filing submission. Having considered the petition of P&ED Mizoram for approval of Aggregate Revenue Requirement (ARR) and determination of Retail Tariff for supply of energy and having approved the Aggregate Revenue Requirement (ARR) with a gap of **₹.180.80Crore** vide **Para 7.8, Table-7.33 of Chapter-7**, as against the proposed gap of **₹.199.77Cr**s without any tariff hike by P&ED is detailed below:

Table 8.2: Category wise Subsidised Tariff (Non-TOD) approved by Commission for FY 2025-26

Sl. No.	Type of installation	Existing Tariff Rates		Approved Tariff Rates	
		Energy (in ₹.)	Fixed (in ₹.)	Energy (in ₹.)	Fixed (in ₹.)
		A	B	A	B
1	Kutir Jyoti (KJ)				
i)	First 20 kWh	2.55/kWh	25/Connection	2.55/kWh	25/Connection
ii)	Balance >20 kWh	3.55/kWh	25/Connection	3.55/kWh	25/Connection
2	Domestic				
A	Low Tension (LT)				
i)	First 100 kWh	4.90/kWh	50/CL/kW	4.90/kWh	50/CL/kW
ii)	Next 100 kWh	7.10/kWh	50/CL/kW	7.10/kWh	50/CL/kW

Sl. No.	Type of installation	Existing Tariff Rates		Approved Tariff Rates	
		Energy (in ₹.)	Fixed (in ₹.)	Energy (in ₹.)	Fixed (in ₹.)
		A	B	A	B
iii)	Balance > 200 kWh	8.20/kWh	50/CL/kW	8.20/kWh	50/CL/kW
B	High Tension (HT)	8.65/kVAh	50/BD/kVA	8.65/kVAh	50/BD/kVA
3	Non-Profit Public Service (Previously Non-Domestic)				
A	Low Tension (LT)				
i)	First 150 kWh	7.60/kWh	60/CL/kW	7.60/kWh	60/CL/kW
iii)	Balance > 150 kWh	8.30/kWh	60/CL/kW	8.30/kWh	60/CL/kW
B	High Tension (HT)	8.75/kVAh	60/BD/kVA	8.75/kVAh	60/BD/kVA
4	Commercial				
A	Low Tension (LT)				
i)	First 150 kWh	8.20/kWh	80/CL/kW	8.20/kWh	80/CL/kW
iii)	Balance > 150 kWh	8.45/kWh	80/CL/kW	8.45/kWh	80/CL/kW
B	High Tension (HT)	8.90/kVAh	80/BD/kVA	8.90/kVAh	80/BD/kVA
5	Public Lighting				
		11.35/kWh	80/CL/kW	11.35/kWh	80/CL/kW
6	Public Water Works				
A	Low Tension (LT)	11.10/kWh	90/CL/kW	11.10/kWh	90/CL/kW
B	High Tension (HT)	9.85/kVAh	90/BD/kVA	9.85/kVAh	90/BD/kVA
7	Irrigation & Agriculture				
A	Low Tension (LT)	3.80/kWh	50/CL/kW	3.80/kWh	50/CL/kW
B	High Tension (HT)	3.85/kVAh	50/BD/kVA	3.85/kVAh	50/BD/kVA
8	Industrial				
A	Low Tension (LT)				
i)	First 400 kWh	7.10/kWh	80/CL/kW	7.10/kWh	80/CL/kW
ii)	Balance > 400 kWh	8.05/kWh	80/CL/kW	8.05/kWh	80/CL/kW
B	High Tension (HT)				
	Option-1 (existing)	9.05/kVAh	80/BD/kVA	9.05/kVAh	80/BD/kVA
	Option-2 (TOD) power usage in various durations			Optional	Optional
i)	from 06.00 Hrs upto 17.00Hrs (Normal)	10.05/ kVAh	80/BD/ kVA	10.05/kVAh	80/BD/ kVA
ii)	from 17.00 Hrs upto 22.00Hrs (Peak)	11.55/kVAh	80/BD/ kVA	11.55/kVAh	80/BD/ kVA
iii)	from 22.00 Hrs upto 06.00Hrs (Off-peak)	8.55/kVAh	80/BD/ kVA	8.55/kVAh	80/BD/ kVA
9	Bulk Supply				
		6.85/kVAh	90/BD/kVA	6.85/kVAh	90/BD/kVA
10	Electric Vehicle Charging Stations				
	A. LT category	8.20/kWh	75/CL/KW	8.20/kWh	75/CL/KW
	B. HT Category	8.65/kVAh	75/BD/kVA	8.65/kVAh	75/BD/kVA

Note: CL= Contracted Load, BD = Billing Demand

Note: -Fixed charge for LT Supply is at per kW of Contracted Load except for Kutir Jyoti and for HT Supply it is per kVA of Billing Demand. In the case of Energy charge it is at per kWh for LT supply and at per kVAh for HT supply and all LT high value services ought to have provided with MDI meters.

The above table depicts fixed and energy charge only. However, Tariff Charges with

detailed narrative description are given in the Tariff Schedule chapter of this Order.

(b) Approved Full Cost – Non-TOD based Tariffs

With the approved ARR for FY 2025-26, the Commission also works out the average cost of supply at the rate of **₹.10.97/kWh**. In the event of non-receipt of subsidy in advance in any respective month from the State Government, the Commission considers to indicate the Full Cost Tariff (FCT) for charging the consumer during such month/months is tabulated below:

Table 8.3: Category wise full cost Tariff (i.e., No subsidy) approved by the Commission for FY 2025-26

Sl. No.	Consumer Category	Approved Full Cost Tariff (FCT)	
		Energy Charges (Rs/month)	Fixed Charges (Rs.)
1	Kutir Jyoti		
i)	First 20 kWh	7.89/kWh	25/Connection
ii)	Balance above 20 kWh	10.98/kWh	25/Connection
2	Domestic		
A	Low Tension		
i)	First 100 kWh	9.11/kWh	50/kW of Contracted Load
ii)	Next 100 kWh	9.84/kWh	50/kW of Contracted Load
iii)	Balance above 200 kWh	10.29/kWh	50/kW of Contracted Load
B	High Tension	9.07/kVAh	50/kVA of Billing Demand
3	Non-Profit Public Service		
A	Low Tension		
i)	First 150 kWh	10.74/kWh	60/kW of Contracted Load
ii)	Balance above 150 kWh	11.73/kWh	60/kW of Contracted Load
B	High Tension	9.18/kVAh	60/kVA of Billing Demand
4	Commercial		
A	Low Tension		
i)	First 150 kWh	12.04/kWh	80/kW of Contracted Load
ii)	Balance above 150 kWh	12.40/kWh	80/kW of Contracted Load
B	High Tension	9.52/kVAh	80/kVA of Billing Demand
5	Public Lighting	13.00/kWh	80/kW of Contracted Load
6	Public Water Works		
A	Low Tension	12.16/kWh	90/kW of Contracted Load
B	High Tension	10.84/kVAh	90/kVA of Billing Demand
7	Irrigation & Agriculture		
A	Low Tension	13.00/kWh	50/kW of Contracted Load
B	High Tension	11.39/kVAh	50/kVA of Billing Demand
8	Industrial		
A	Low Tension		
i)	First 400 kWh	11.81/kWh	80/kW of Contracted Load
ii)	Balance above 400 kWh	12.27/kWh	80/kW of Contracted Load
B	High Tension (Op-1)	10.07VAh	80/kVA of Billing Demand
	High Tension (Op-2)	0.00/kVAh	80/kVA of Billing Demand

Sl. No.	Consumer Category	Approved Full Cost Tariff (FCT)	
		Energy Charges (Rs/month)	Fixed Charges (Rs.)
9	Electric Vehicle charging Stns (LT)	0.00/kWh	75/kW of Billing Demand
10	Electric Vehicle charging Stns (HT)	0.00/kVAh	75/kVA of Billing Demand
11	Bulk Supply	10.19/kVAh	90/kVA of Billing Demand

(c) Approved Time of the Day (TOD) Tariff:

The TOD tariff for FY2025-26 for all the categories except Irrigation and Agriculture categories is given in the table below:

Table 8.4: TOD Tariff approved by Commission for FY 2025-26

Sl. No.	Category Consumers (P&ED)	Fixed Charge (kW/kVA)	Energy Charge (kWh/ kVAh)
1	2	3	4
1	KJ(Domestic)		
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)	25	2.45
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)	25	3.10
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)	25	1.95
2	Domestic-LT		
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)	50	5.00
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)	50	6.35
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)	50	3.85
3	Domestic-HT		
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)	50	7.80
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)	50	10.00
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)	50	6.10
4	Non-Profit Public Purpose-LT		
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)	60	6.95
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)	60	8.90
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)	60	5.40
5	Non-Profit Public Purpose-HT		
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)	60	8.45
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)	60	10.80
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)	60	6.60
6	Commercial-LT		
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)	80	7.10
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)	80	9.10
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)	80	5.55
7	Commercial-HT		
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)	80	8.60
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)	80	11.00
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)	80	6.70

Sl. No.	Category Consumers (P&ED)	Fixed Charge (kW/kVA)	Energy Charge (kWh/ kVAh)
8	Public Lighting		
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)	80	8.80
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)	80	11.25
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)	80	6.85
9	PWS LT		
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)	90	8.60
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)	90	11.00
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)	90	6.70
10	PWS HT		
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)	90	8.80
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)	90	11.25
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)	90	6.85
11	Irrgn & Agri - LT	50	3.80
12	Irrgn & Agri - HT	50	3.85
13	Industrial-LT		
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)	80	7.00
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)	80	8.95
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)	80	5.45
14	Industrial-HT		
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)	80	9.05
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)	80	11.40
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)	80	7.05
15	Bulk Supply HT		
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)	90	7.70
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)	90	9.70
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)	90	6.20
16	Electric Vehicle (EV) charging station (LT)		
i)	From 09:00 Hrs. upto 16:00 Hrs. (Solar Hour)	75	5.74
ii)	From 16:00 Hrs. upto 09:00 Hrs. (Non-Solar Hour)	75	10.66
17	Electric Vehicle (EV) charging station (HT)		
i)	From 09:00 Hrs. upto 16:00 Hrs. (Solar Hour)	75	6.05
ii)	From 16:00 Hrs. upto 09:00 Hrs. (Non-Solar Hour)	75	11.25

(d) Miscellaneous Charges and Important Conditions of Supply

The detail Tariffs including rates for un-metered categories of consumer, miscellaneous charges and Important Conditions of Supply furnished by P&ED are examined and approved as given in the **Tariff Schedule in the Appendix.**

###

9 Wheeling Charges

9.1 Background

Wheeling charges has been calculated in accordance with the Regulation-71 read with Regulation-72 of the Joint Electricity Regulatory Commission for Manipur and Mizoram (Multi Year Tariff) Regulations, 2014 adopted by MZERC. Since, **the P&ED is not maintaining separate accounts for the Distribution Wire Business & Retail Supply Business**; the ARR of the wheeling business is arrived at in accordance with the allocation matrix as prescribed in the Regulation-72 of the said MYT Regulation. The allocation matrix is given as below.

Table 9.1: Allocation Matrix

Sl. No	Particulars	Wire Business (%)	Retail Supply Business (%)
1	2	3	4
1	Cost of Power Purchase	0	100
2	Stand by Charges	0	100
3	Employee Expenses	60	40
4	Administration & General Expenses	50	50
5	Repair & Maintenance Expenses	90	10
6	Depreciation	90	10
7	Interest & Finance Charges	90	10
8	Interest on Working Capital	10	90
9	Interest on Consumer security Deposit	10	90
10	Provision for Bad Debt	0	100
11	Income Tax	90	10
12	Intra- state Transmission Charges	0	100
13	Contribution to contingency reserves	100	0
14	Return on Equity	90	10
15	Non-Tariff Income	10	90

9.2 ARR for Wheeling Business

The ARR of the wheeling Business arrived at in accordance with the above methodology is provided below:

Table 9.2: ARR of Wheeling Business for the FY 2025-26**(Rs. Crs)**

Sl. No.	Particulars	FY 2025-26	
		Total	Wheeling
1	2	3	4
1	Cost of Power Purchase	495.91	0.00
2	Cost of Generation	13.25	0.00
3	Cost of Fuel	0.00	0.00
4	Employee Cost	130.01	78.00
5	Administration & General Expenses	7.15	3.58
6	Repair & Maintenance Expenses	17.17	15.45
7	Transmission charges	54.15	0.00
8	Intra- state Transmission Charges	48.30	0.00
9	Interest on Loan	0.00	0.00
10	Interest on Working Capital	0.00	0.00
11	Interest on Consumer Security Deposit	0.00	0.00
12	Return on Equity	0.00	0.00
13	Provision for Bad debt	0.00	0.00
14	Depreciation	0.16	0.14
15	Contribution to Contingency Reserve Fund	0.00	0.00
16	Revenue Requirement	766.09	97.18
17	Non-Tariff Income	11.40	1.14
18	Net Revenue Requirement (15-16-17)	754.69	96.04

Commissions Analysis

ARR for wheeling business arrived based on approved ARR and methodology vide Table 9.1 supra is as detailed in table below.

Table 9.3: ARR of wheeling business approved by the Commission for FY 2025-26

Sl. No	Particulars FY 2025-26	Total ARR	Wires Business	Retail business	Wires ARR	Retail ARR
A	Expenditure	Rs.Crs	(%)	(%)	Rs.Crs	Rs.Crs
1	Cost of Generation	5.93	0%	100%	-	5.93
2	Cost of fuel	0.00	0%	100%	-	0.00
3	Cost of power purchase	443.88	0%	100%	-	443.88
4	Inter-State Transmission Charges	54.15	0%	100%	-	54.15
5	Intra-State Transmission charges	48.30	0%	100%	-	48.30
6	O&M Expenses	152.78			95.64	57.14
	Employee Expenses	130.01	60%	40%	78.01	52.00
	Repair & Maintenance expn.	15.62	90%	10%	14.06	1.56
	Administrative & General Expn	7.15	50%	50%	3.58	3.58
7	Depreciation	0.16	90%	10%	0.14	0.02
8	Interest on Loan	0.00	90%	10%		
9	Interest on Working Capital	0.00	10%	90%		
10	Interest on consumer Security Deposit	0.00	10%	90%		
11	Contribn to Contingency Reserve	0.00	100%	0%		

Sl. No	Particulars FY 2025-26	Total ARR	Wires Business	Retail business	Wires ARR	Retail ARR
12	Provision for bad debts	0.00	0%	100%		
13	Return on Equity	0.00	90%	10%		
14	Income Tax	0.00	90%	10%		
	Total Gross ARR - (A)	705.20			95.78	609.42
B	Less: Non-Tariff Income	11.40	10%	90%	1.14	10.26
	Less: Efficiency Gains	0.00	0%	100%		
	Less: 1/3 rd of surplus in FY 2023-24	7.15	0%	100%		7.15
	Deductions total – B	18.55			1.14	17.41
	Net Aggregate Revenue Requirement (A-B)	686.65			94.64	592.01

9.3 Wheeling Tariff

Based on the revised ARR, P&ED Mizoram proposes the revised wheeling Tariff at ₹ 1.67/kWh as detailed below:

Table 9.4: Wheeling for the FY 2025-26 filed by P&ED

Sl. No.	Particular	FY2025-26
1	ARR for wheeling function	96.04
2	Total Energy sold	574.28
3	Wheeling Tariff (Rs. /unit)	1.67

Table 9.5: Commission approved Wheeling charges for FY 2025-26

Sl. No.	Particular	FY 2025-26
1	ARR for wheeling function (Rs.Crs)	94.64
2	Total Energy at Distribution input (MU) (&&)	765.71
3	Wheeling Tariff (Rs./unit)	1.236

The P&ED estimated the wheeling Tariff at ₹1.67/kWh, while the Commission has approved these wheeling charges at ₹1.236/kWh for FY 2025-26.

&& - As per the MOP amendment Notification Dt.10th January2024 to Electricity rules 2005, the Wheeling charges shall be determined on ARR for Wheeling with the Energy Wheeling during the year but not the Energy Sold.

10 Voltage wise Cost of Supply

10.1 Preamble

P&ED is computing the voltage-wise cost of supply keeping in view the guidelines indicated by the Hon'ble APTEL its order dated 10.05.2012 in Appeal No.14 of 2011, appeal no. 26 of 2011 and appeal no. 27 of 2011. This section deals with the voltage wise cost of supply by the Petitioner for the FY 2025- 26.

10.2 Background

The Petitioner is submitting to the Hon'ble Commission for determination of ARR for the upcoming FY 2025-26 as notified under Joint Electricity Regulatory Commission for Manipur and Mizoram (Multi Year Tariff) Regulations, 2014 read with First Amendment Regulations, 2019. The Petitioner has proposed the distribution losses @ **25.25%** for the FY 2025-26.

10.3 Methodology adopted for Computation of Voltage wise Cost of Supply

The Hon'ble APTEL has proposed a simple methodology to functionalize use of Cost of Supply model. The APTEL notes that identical consumers connected at different nodes of distribution system need not to be differentiated. In addition, it is adequate to determine voltage-wise cost of supply considering the major cost elements which would be applicable to all the categories of the consumers connected at the same voltage level at different locations in the distribution system.

In the method suggested by the Hon'ble APTEL, there are five major components to arrive at the voltage wise cost of supply. These elements are:

- **Technical losses at each voltage level of the network:** This value of the technical losses is found by the field studies. Sampling of the feeders which are representative of the consumers in the system will help in identifying the technical losses at each voltage levels. The APTEL recognizes the difficulty in collecting data for technical loss at 11 kV and LT level, hence the suggestion to compute losses using maximum possible representative feeders for various consumer categories at respective voltage levels.
- **Commercial losses at each voltage level of the network:** The commercial loss of the system is the difference between approved loss in the ARR and the total

technical loss computed from system study. This difference is to be apportioned according to the sales in each voltage level to arrive at the commercial loss at each voltage level.

- **Voltage wise sales:** The energy sale at a particular voltage level is the sum of energy sold for all the categories of consumers connected at the said voltage level. Due to its share of sales in total sales, the consumers of the 132/220 kV network will be apportioned a share of the commercial losses. The Hon'ble APTEL recognizes that in reality, there may be minimal technical losses at that level and very low probability of commercial losses. However, the APTEL is of the opinion that the consumers at 132/220 kV, being a part of the distribution system will bear these apportioned losses.
- **Power Purchase Cost:** The power purchase cost is the cost of energy purchased for sustaining the energy sales at each voltage level. This power purchase units for each voltage level is arrived by finding the energy input at each voltage level and adding the losses (technical and commercial) for the same voltage level and upstream. The energy input at each voltage level is the sum of the sales at the voltage level and the losses for the corresponding voltage level.
- **Network Cost:** The network costs are the costs like O&M, interest and finance charges, depreciation, return on equity etc. These costs are a part of the ARR which in turn provides the average cost of supply. Thus, the network cost is essentially the difference between the ARR value and the power purchase cost. The APTEL has suggested apportioning these costs according to the sales volume in each of the voltage level.

The above elements will help to establish the voltage wise Cost of Supply. Due to the methodology applied to apportion losses in the various voltage levels, all the consumer categories at a particular voltage level will have same cost of supply. In this regard, APTEL has noted that refinements in the methodology may be done when more data becomes available.

10.4 Determination of Voltage wise Losses

Transmission & Distribution losses in a system are comprised of two separate

components – Technical losses and Commercial losses.

- Technical losses occur naturally and consist mainly of power dissipation in electricity system components such as transmission & distribution lines and transformers.
- Commercial losses are caused by actions external to the power system and consist primarily of non-payment by customers, electricity theft, and errors in accounting and record-keeping. Since the rationale behind these two components is quite distinct, quantifying them separately is imperative for arriving at meaningful conclusions.

At each voltage level, the technical losses consist of two major Components: Transmission losses which refer to the losses in the current carrying wires; and Transformation losses which refer the losses incurred during the voltage transformation in the system. Aggregating the losses in these two elements at each voltage level would give the technical loss at that level. The losses remaining would be the commercial losses.

10.5 Information required for arriving Voltage Wise Cost of Supply

Petitioners Submission:

Following is the list of details required in order to carry out voltage wise cost of supply:

- Voltage wise technical losses
- Overall T&D losses
- Voltage wise energy sales
- Power Purchase Cost
- Network Costs

It is submitted that the Petitioner has computed voltage wise losses based on certain assumptions after observing the sample feeder data available.

The Petitioner has computed voltage wise cost of supply in view of distribution loss percentage approved by the Hon'ble commission for FY 2025-26 in the Tariff Order dated 28.03.2023.

Table 10.1: Voltage wise Technical losses considered for FY 2025-26

Sl. No.	Voltage Level (kV)	Technical loss (%)	Cumulative loss (%)
1	220/132 kV	3.08%	3.08%

Sl. No.	Voltage Level (kV)	Technical loss (%)	Cumulative loss (%)
2	33 kV	3.95%	7.90%
3	11 kV	4.90%	12.76%
4	LT (0.4 kV)	7.52%	20.97%

Commission analysis:

Fixation of Voltage-wise Technical Loss:

The voltage-wise technical losses indicated by the Petitioners were based on the limited field study/sample data only. No detailed study has been made to estimate the technical losses based on the feeder wise load data, conductor size and length etc. APTEL in its guidelines has indicated that the T&D loss as approved by the Commission in its Tariff Order has to be considered while computing the voltage wise cost of supply. Due to lack of needed data for segregation of technical and commercial losses, the Commission could not separately fix the technical and commercial loss level within the total distribution loss approved for FY 2025-26.

The P&ED had submitted the overall T&D Losses at 25.25% in their ARR submission but now here furnished different voltage wise losses adding up to cumulative losses of 20.97% as per their calculation is not correlatable as it should have been only **18.13%** for the values provided for. The details of the Computation are given below:

Voltage	Losses	Input	Losses	Output	Cumm.Loss
220/132	3.08%	100.00	3.08	96.92	3.08%
33	3.95%	96.92	3.83	93.09	6.91%
11	4.90%	93.09	4.56	88.53	11.47%
LT	7.52%	88.53	6.66	81.87	18.13%
			18.13		18.13%

Besides, the data submitted is not consistent and not reliable to adopt for voltage wise cost of supply determination.

Therefore, it is considered appropriate to assume technical and commercial loss levels for realistic assessment of Cost of Supply within overall T&D loss level, i.e. Transmission Loss of **2%** as approved for P&ED and Distribution Loss of **14.00%** which is yielding to overall T&D losses derived to be **15.72%** as approved by the Commission for FY 2025-26.

The Commission has considered the following voltage-wise technical loss for FY 2025-26 for computing voltage wise cost of supply:

Table 10.2: Voltage wise Technical losses considered for FY 2025-26 by Commission

Sl. No.	Voltage Level (kV)	Technical Loss (%)	Cumulative Loss (%)
1	220/132 kV	2.00%	2.00%
2	33 kV	4.28%	6.194%
3	11 kV	6.75%	12.526%
4	LT (0.4 kV)	14.26%	25.00%

The Petitioner has arrived at voltage wise sales considering the projected sale of power for the FY 2025-26, across various categories at the respective voltages mentioned in the table below:

Table 10.3: Classification of Categories on the basis of Voltage of Power supply

Sl. No.	Voltage Level	Categories
1	220/132 kV	PHE
2	33 kV	Ispat, Power Grid, Assam Rifles, etc.
3	11 kV	Hospital, Hotel etc.
4	LT (0.4 kV)	Kutir Jyothi, Domestic, Non-Profit Public Purpose, Public Lighting etc.

The Petitioner further submits that the voltage wise cost of supply study is based on the sample data certain parameters such as total loss, energy input etc.

Voltage Wise Technical Loss: The Petitioner submits that it has taken suitable assumptions to arrive at the loss at 132 kV.

10.6 Methodology adopted for determination of Cost of Supply

Petitioner Submission:

Due to lack of data for segregation of technical and commercial losses, it is not feasible to fix the technical and commercial loss levels within proposed loss levels.

In order to understand component of technical losses in total T&D loss, technical loss at each voltage level needs to be grossed. Following is the total technical loss at each voltage level and cumulative losses at subsequent voltage levels.

Table 10.4: Voltage wise technical loss considered for FY 2025-26

Sl. No.	Voltage Level (kV)	Technical loss (%)	Cumulative loss (%)
1	220/132 kV	3.08%	3.08%
2	33 kV	3.95%	7.90%
3	11 kV	4.90%	12.76%
4	LT (0.4 kV)	7.52%	20.97%

Commission Analysis:

Even from the above Table the cumulative losses derived by P&ED is not correct and it should have been as per the following Table with different values for the projected voltage wise losses and the overall losses would be at 18.13% but not 20.97% under any circumstances.

Voltage	Losses	Input	Losses	Output	Cum. Loss
220/132	3.08%	100.00	3.08	96.92	3.08%
33	3.95%	96.92	3.83	93.09	6.91%
11	4.90%	93.09	4.56	88.53	11.47%
LT	7.52%	88.53	6.66	81.87	18.13%
	19.45%		18.13		18.13%

Petitioner Submission:

Following is the apportionment of technical losses to the voltage wise sale by petitioner.

Table 10.5: Apportionment of technical losses to voltage wise sale for FY 2025-26

Sl. No	Voltage Level (KV)	Technical Losses (%)	Cumulative Loss (%)	Energy Sale (MU)	Energy input (MU)	Technical Loss (MU)
1	2	3	4	5	6	7 = (6-5)
1	220/132 kV	3.08%	3.08%	1.75	1.80	0.06
2	33 kV	3.95%	7.90%	15.30	16.62	1.31
3	11 kV	4.90%	12.76%	86.96	99.67	12.72
4	LT (0.4 kV)	7.52%	20.97%	470.27	595.05	124.78
	Total			574.28	713.15	138.87

Commercial losses (difference of total losses and grossed up technical losses) shall be apportioned pro rata to energy sales at each voltage level.

Table 10.6: Apportionment of Commercial losses to voltage wise sale for FY 2025-26

Sl. No	Voltage Level (KV)	Energy Sales (MU)	Technical Loss (MU)	Sales Incl. Technical Loss (MU)	Commercial Loss (MU)	Energy Input at State Periphery (MU)
1	2	3	4	5	6	7
1	220/132 kV	1.75	0.06	1.80	0.05	1.85
2	33 kV	15.30	1.31	16.62	0.61	17.23
3	11 kV	86.96	12.72	99.67	3.56	103.23
4	LT (0.4 kV)	470.27	124.78	595.05	25.27	620.32
	Total	574.28	138.87	713.15	29.49	742.64

Commission Analysis:

As the derivation of cumulative losses is made inappropriately by the P&ED, the following will be the apportionment of Technical Losses to various voltage wise losses for FY2025-26 as per the approved figures of Commission.

Table 10.7: Voltage wise technical & Commercial losses derived by Commission for FY 2025-26

Voltage Level (KV)	Voltage wise (Losses)	Cuuml. Losses (%)	Sales (MU)	Discom Input (MU)	Tech. Losses (MU)	Comm. Losses (MU)	Energy at State Periphery
(1)	(2)	(3)	(4)	(5)	6=(5-4)	(7)	8=(5+7)
220/132	2.00%	2.00%	1.75	1.7857	0.04	0.051	1.84
33	4.28%	6.19%	15.30	16.31	1.01	0.464	16.77
11	6.75%	12.53%	86.96	99.41	12.45	2.827	102.24
400V	14.26%	25.00%	470.27	627.03	156.76	17.832	644.86
Total			574.28	744.54	170.26	@ 21.17	765.71

a- The overall Commercial Losses are derived separately and apportioned to various voltages basing on each voltage Input energy proportion to Total Input Energy. The values are adopted from approved figures of Commission.

Petitioner Submission:

The Projected Power Purchase Cost (including PGCIL, POSOCO & ERLDC transmission costs) of the Petitioner for the FY 2025-26 is provided below:

Table 10.8: Allocation of power purchase cost for FY 2025-26

Particulars	FY 2025-26
Gross Power Purchase (MU)	981.04
Less: ER & NER Pool Loss (MU)	16.19
Less: Outside State Sale (MU)	180.90
Net Power Purchase (MU)	783.96

Particulars	FY 2025-26
Power Purchase Cost (Rs. Crore)	495.91
Inter-State Transmission charges (Rs. Crore)	54.15
Cost of Generation (Rs. Crore)	13.25
Less: Revenue from Outside Sale (Rs. Crore)	106.75
Total Cost (Rs. Crore)	456.55
Average Power purchase Cost (inc. PGCIL charge) (Rs./kWh)	5.82

Following is the allocation of power purchase cost to the total energy sales.

Table 10.9: Allocation of power purchase cost to the Energy sales for FY 2025-26

Sl. No.	Voltage Level (KV)	Energy Sale (MU)	Energy Sales + Technical loss + Comml. Loss (MU)	Projected Unit cost of power purchase (Rs. /unit)	Power Purchase Cost (Rs. Crore)	Cost of Power per unit sale of Energy (Rs. /unit)
1	2	3	4	5	6 = (4*5)	7= (6÷3)
1	220/132 kV	1.75	1.85	5.82	1.08	6.18
2	33 kV	15.30	17.23	5.82	10.03	6.56
3	11 kV	86.96	103.23	5.82	60.12	6.91
4	LT (0.4 kV)	470.27	620.32	5.82	361.26	7.68
	Total	574.28	742.64		432.49	7.53

The details of fixed distribution costs for the FY 2025-26 are provided below, which are excluding power purchase and PGCIL charges.

Table 10.10: Allocation of Network Cost for FY 2025-26

Sl. No.	Particulars	Amount (Rs. Cr)
1	Employee Cost	130.01
2	R&M costs	17.17
3	A&G expenses	7.15
4	Depreciation	0.16
5	Interest & Finance Charges	-
6	Interest on Working Capital	-
7	Return on Equity	-
8	Intra-state Transmission charges	48.30
9	Less: Non-Tariff Income	11.40
10	Total cost	191.39

Commission Analysis:

Average Power Purchase cost applicable to P&ED for FY 2025-26 is as per the following Tables.

Table 10.11: Allocation of power purchase cost for FY 2025-26 by Commission

Particulars	FY 2025-26
Gross Power Purchase (MU)	889.64
Less: ER & NER Pool Loss (MU)	11.81
Less: Outside State Sale (MU)	-96.49
Net Power Purchase (MU)	781.34
Power Purchase Cost (Rs. Crore)	443.88
Inter-State Transmission charges (Rs. Crore)	54.15
Intra-State Transmission charges	48.30
Total Cost (Rs. Crore)	546.33
Average Power purchase cost per unit - (Rs. /kWh)	6.992

Petitioner Submission:

Further, the Petitioner has worked out the voltage wise cost of per unit supply based on the methodology followed by the Hon'ble Commission in the tariff order dated 25th March, 2022. Accordingly, the Petitioner has apportioned the network cost of Rs.4016.33 Crore arrived in the above table among the consumers of various voltage level i.e., 220/132 kV, 33 kV, 11 kV and LT levels, equitably on pro-rata basis as detailed below:

Table 10.12: Voltage-wise Allocation of Network Cost

Sl. No.	Voltage Level (KV)	Energy Sale (MU)	Energy Sales + Technical loss + Comml. Loss (MU)	Network Cost (Rs. Crore)	Cost of Power per unit sale of Energy (Rs./unit)
1	2	3	4	6 = (4*5)	7= (6÷3)
1	220/132 kV	1.75	1.85	0.48	2.73
2	33 kV	15.30	17.23	4.44	2.90
3	11 kV	86.96	103.23	26.61	3.06
4	LT (0.4 kV)	470.27	620.32	159.87	3.40
	Total	574.28	742.64	191.39	3.33

Table 10.13: Cost of Supply at different Voltage Levels for FY 2025-26

Sl. No.	Supply Voltage	Cost of power purchase (Rs. /unit)	Network cost (Rs. /unit)	Cost of supply (Rs./unit)
1	2	3	4	5
1	220/132 kV	6.18	2.73	8.91
2	33 kV	6.56	2.90	9.46
3	11 kV	6.91	3.06	9.97
4	LT (0.4 kV)	7.68	3.40	11.08

It is prayed that the Hon'ble Commission may kindly consider the above submission and approve the Voltage wise cost of supply as projected by the Petitioner for the FY 2025-26.

Commission Analysis:

The allocation of power Purchase cost to various voltages is derived as follows:

Table 10.14: Allocation of power purchase cost to the Energy sales for FY 2025-26

S. No.	Voltage Level (KV)	Sales (MU)	Actual Purchase	Voltage wise PP cost	Assigned PP Cost
1	220/132kV	1.75	1.84	1.31	7.49
2	132/33kV	15.30	16.77	11.97	7.82
3	33/11kV	86.96	102.24	72.95	8.39
4	400V	470.27	644.86	460.10	9.78
5	Total	574.28	765.71	546.33	9.51

The details of fixed distribution network costs for the FY 2025-26 are provided below:

Table 10.15: Allocation of Network Cost for FY 2025-26

Sl. No.	Particulars	Amount (Rs. Cr)
1	Employee Cost	130.01
2	R&M costs	15.62
3	A&G expenses	7.15
4	Depreciation	0.16
5	Interest & Finance Charges	-
6	Interest on Working Capital	-
7	Return on Equity	-
8	Less: Non-Tariff Income	-11.40
9	Total network cost derived	141.54

Table 10.16: Voltage-wise Allocation of Network Cost by commission

Voltage Level	Category of sales	Energy Sale (MU)	Sales + Technical + Comml. Loss	Voltage wise Network Cost	Network CPU of energy sale
			(MU)	(Rs. Cr)	(Rs. Cr)
220/132kV	PHE	1.75	1.84	0.34	1.940
132/33kV	Ispat, Power Grid, Assam Rifles etc	15.30	16.77	3.10	2.027
33/11kV	Hospital, Hotel etc	86.96	102.24	18.90	2.173
400V	Kutir Jyothi, Domestic, Non-Profit PP, Public Lighting etc	470.27	644.86	119.20	2.535
	Total	574.28	765.71	141.54	2.465

Table 10.17: Voltage wise Cost of Supply for FY 2025-26 approved by the Commission

Voltage Level (kV)	Cost of Power (CPU)	Network Cost (CPU)	Per Unit CoS Rate
220/132	7.49	1.94	9.43
33	7.82	2.03	9.85
11	8.39	2.17	10.56
400V	9.78	2.53	12.32

11 Transmission function ARR for FY2025-26

11.1 Introduction & Basis of MYT filing

P&ED's tariff determination is now governed by "Joint Electricity Regulatory Commission for Manipur & Mizoram (Multi Year Tariff) Regulations, 2014 adopted by MZERC" (referred to as "MYT Regulations, 2014") read with First Amendment Regulations, 2019 which came into force from 09.06.2014. The MYT Regulations, 2014 provide a framework for calculating tariffs on a cost-plus basis for a period of five years and allow the licensee to recover operational expenses including depreciation, interest on working capital and debt, and return on equity amongst others. The MYT Regulations, 2014 provide for the methodology & principles to be followed for determination of Transmission charges.

Multi Year Tariff Order for the control period of 5 years from FY 2023-24 to FY 2027-28 was issued by the Hon'ble Commission vide order dated 28.03.2023 under the (Multi Year Tariff) Regulations, 2014.

In that Tariff Order, the Hon'ble Commission determined the Aggregate Revenue Requirement for the FY 2023-24 to FY 2027-28.

P&ED Mizoram is submitting the present petition for determination of ARR for the FY 2025-26.

Further, the Regulations segregate the items impacting tariffs into controllable and uncontrollable factors. Items that are uncontrollable are passed through to the consumers. The MYT Regulations, 2014 identifies the uncontrollable and controllable parameters as follows:

UNCONTROLLABLE FACTORS: -

The "uncontrollable factors" comprises of the following factors:

- (i). Force Majeure events;
- (ii). Change in law, judicial pronouncements and Orders of the Central Government, State Government or Commission;
- (iii). Variation in the price of fuel and/or price of power purchase according to the FPPA formula approved by the Commission from time to time; (for distribution function);
- (iv). Variation in the number or mix of consumers or quantities of electricity supplied to consumers;

- (v). Transmission Loss;
- (vi). Variation in market interest rates;
- (vii). Taxes and Statutory levies;
- (viii). Taxes on Income;
- (ix). Non-Tariff Income;

CONTROLLABLE FACTORS: -

Controllable factors include, but are not limited to the following:

- (i). Variations in capitalization on account of time and/or cost overruns/ efficiencies in the implementation of a capital expenditure project not attributable to an approved change in scope of such project, change in statutory levies or force majeure events;
- (ii). Variation in Interest and Finance Charges, Return on Equity and Depreciation on account of variation in capitalization, as specified in clause (i) above;
- (iii). Variations in technical and commercial losses of Distribution Licensee;
- (iv). Variations in performance parameters;
- (v). Variations in working capital requirements;
- (vi). Failure to meet the standards specified in the Joint Electricity Regulatory Commission for the states of Manipur and Mizoram (Standard of Performance for Distribution and Transmission Licensees) Regulations, 2010, as amended from time to time except where exempted in accordance with those Regulations;
- (vii). Variations in labour productivity;
- (viii). Variation in operation & maintenance expenses;
- (ix). Variation in Wires Availability.

11.2 Filing of Tariff proposal for FY 2025-26

P&ED Mizoram hereby submits its proposal for approval of Transmission Tariff for the FY 2025-26. This proposal is being submitted in compliance with the provisions of MYT Regulations, 2014.

11.3 OVERALL APPROACH FOR PRESENT FILING

a) Transmission Charges for FY 2025-26:

P&ED Mizoram hereby submits its petition for approval of Transmission Tariff for the FY 2025-26. This petition is being submitted in compliance with the provisions of MYT Regulations, 2014. The petitioner has attempted to comply with the various guidelines in the Act and regulations within the limitations of availability of data.

P&ED, Mizoram is filing the petition based on the past performance and expected changes in each element of cost and revenue for the ensuing year. P&ED has studied the past trends and taken cognizance of other internal and external developments to project the likely performance during the FY 2025-26.

b) Approach for the Filing

The subsequent sections provide projection for various expenses as approved by the Hon'ble Commission and the projected expenses for the FY 2025-26.

Projections of various cost components required for determination of Aggregate Revenue Requirement along with the rationale for estimation of such cost, the philosophy adopted by P&ED for projecting power to be transmitted for the FY 2025-26 has been covered in various sections.

For the purpose of projecting the financial & technical parameters, P&ED has considered its actual performance during FY 2023-24 and FY 2024-25 (H1) as base and has projected the figures for the FY 2025-26 with supporting rationales.

c) AGGREGATE REVENUE REQUIREMENT FOR FY 2025-26

This section outlines the Aggregate Revenue Requirement of the P&ED for FY 2025-26, which takes into consideration:

- i. Actual Performance in FY 2023-24;
- ii. Estimated Performance for FY 2024-25 based on the Actual performance for the period 01.04.2024 to 30.09.2024;
- iii. Projection based on the Actual performance in FY 2023-24 and estimated performance in FY 2024-25;
- iv. Principles outlined in MYT Tariff Regulations of JERC (M&M).

Past trends have been taken into cognizance in case of certain elements as deemed necessary. The present section has been structured in the following manner:

- **Determination of Energy to be transmitted**
 - o Energy input Projections
 - o Loss Trajectory
 - o Energy Balance
- **Proposed Capital Expenditure and capitalization**
 - o **Scheme wise details**
 - Capital Expenditure
 - Asset Capitalization

- **Determination of the Aggregate Revenue Requirement**
 - o Power Generation/Purchase Costs
 - o Transmission Charges
 - o Operation and Maintenance Expenses
 - o Depreciation
 - o Interest charges (including interest on working capital)
 - o Return on NFA
 - o Provision for Bad and Doubtful Debts
 - o Return on Equity

11.4 Capacity allocation and Energy Requirement

The Transmission capacity requirement and allocation to the long term & medium-term users of the license area is determined based on the expected transmission of energy in the area during the period under consideration. The Transmission function of P&ED primarily handles power required by the Distribution function and hence the forecast/projection would completely depend on the sales/energy transmission projection of the distribution function. Accordingly, the transmission system requirement projection by the P&ED for FY 2025-26 is as given in the succeeding paragraphs.

The energy requirement of the state is mainly met from outside Generating sources as the State's HEPs generations are seasonal in nature. The share allocation of Mizoram from various Central Sector Generating Stations & Own generation capacity is provided in the tables below. Apart from the allocation from the Central Sector Generating Stations & own sources, Mizoram has to resort to additional short-term purchases through other sources i.e. UI/Deviation over drawal & IEX/PXIL through exchange.

Table 11.1: Power Availability sources/ share (Other than Own Generation)

Sl. No.	Source	Plant Capacity (MW)	Licensee's Share in %	Licensee's Share in MW
A	Central Generating Stations			
I	NTPC			
	Bongaigaon TPS	750	5.415	40.613
	Farakka STPS	1600	0.142	2.268
	Kahalgaon STPS	840	0.142	1.190
	Talcher STPS	1000	0.142	1.417
	NTPC-Total	4190		45.487
II	NHPC			
	Loktak HEP	105	5.020	5.271

Sl. No.	Source	Plant Capacity (MW)	Licensee's Share in %	Licensee's Share in MW
	NHPC-Total	105		5.271
III	NEEPCO			
	Kopili HEP	200	4.610	9.220
	Kopili - II HEP	25	6.040	1.510
	Khandong HEP	50	3.940	1.970
	Ranganadi HEP	405	5.700	23.085
	Doyang HEP	75	5.250	3.938
	Pare HEP	110	5.765	6.342
	Tuirial HEP	60	100.00	60.000
	AGBPP	291	5.410	15.743
	AGTPP	135	6.000	8.100
	NEEPCO-Total	1351		129.907
IV	TSECL			
	B'mura - IV	21	25.00	5.250
	B'mura - V	21	25.00	5.250
	TSECL-Total	42		10.500
V	OTPC			
	Palatana	726	5.785	42.000
	OTPC-Total	726		42.000
VI	Grand Total	6414		233.165

Table 11.2: Power Sources for FY 2025-26- Own HEP Generation

Sl. No.	Name of Station	Installed Capacity (MW)
1.	Serlui-A	1.00
2.	Tuirivang	0.30
3.	Khawiva HEP	1.05
4.	Tuipui HEP	0.50
5.	Maicham-I	2.00
6.	Teirei HEP	3.00
7.	Tuipanglui	3.00
8.	Kau-Tlabung HEP	3.00
9.	Lamsial	0.50
10.	Maicham-II	3.00
11.	Tlawva	5.00
12.	Kawlbem	4.00
13.	Serlui-B	12.00
	Total	38.35

Commission Analysis:

To transmit power within the State, P&ED has the following transmission network position indicated for FY 2023-24, but there is no update on the following data:

Table 11.3: Estimated Transmission Network position in FY 2023-24

Sl. No	Particulars	Beginning of the year	Additions in the year	Withdrawal from service	At the end of year
	Type of Line		(ckt-km)	(ckt-km)	(ckt-km)
1	132 Kv	895	22	--	918
2	66 kV	95	2	--	97
3	33 kV	1563	31	--	1594
	11 kV	5667	113		5780
	LT	3478	70		3548
4	33/11 kV SS	68	1	--	69
5	(33/11KV) PTs in MVA capacity	97	2	--	99

11.5 Transmission Loss

Petitioner's submission:

P&ED has been trying to reduce the transmission losses during recent years. P&ED submits that the system improvement works executed every year under the plan schemes have also contributed to the reduction of transmission losses. However, it may also be noted that reduction of transmission losses may not be possible beyond a certain level due to topographical conditions and technical limitations. The Department is currently not equipped to measure the exact energy flowing into and out of the state grid at various levels due to the in adequate metering equipment. Therefore, State Transmission losses has been calculated on the basis of the net input energy in the State Transmission System periphery. The transmission losses have been considered at 2% as approved by the Hon'ble Commission in the Tariff Order for the FY 2025-26. The table below provides the calculation of transmission loss for the period.

Table 11.4: Transmission Loss

Sl. No.	Description	Unit (MU)/%	Approved in T.O 28.03.23	Proposed by P&ED	Deviation
1	Energy available at State Trans. Grid including local generation	Mus	694.88	783.96	89.08
2	Transmission Loss %	%	2%	2%	0.00
3	Transmission Loss (1 X 2)	MUs	13.90	15.68	1.78
4	Net Energy available for sale at Transmission level (1 - 3)	MUs	680.98	768.28	87.29

Commission Analysis:

The above tabulated data on transmission loss is an outcome of the commission Tariff Order of FY 2024-25 and P&ED has made meagre any additional contribution

to the data for FY2025-26. As seen from the **Form No. P4 – Physical Statistics of the network**, the data pertaining to Number of Interface meters for 0.5 & 0.2 accuracy class meters has now indicated meter installed number data deliberately. Obviously, the P&ED has no other option but to bank upon the Transmission Loss for all the 5 years in MYT at 2% transmission loss levels only and no progress has ever attempted to depict in the MYT filing for Transmission function is very much perturbing. There is no action plan indicated as to how they manage to achieve this task of 2% transmission loss constantly and measure the loss accurately. Otherwise, the loss over and above 2% would get added to distribution loss and reflect their performance badly on distribution function ultimately.

The Commission accordingly approves transmission loss at 2.00% for FY 2025-26.

11.6 Capital Expenditure & Capitalization

P&ED has undertaken significant capital expenditure during the previous years and has plans to implement schemes for development of infrastructure during the FY 2025-26. The infrastructure of P&ED is insufficient to cater to the present & projected load and hence to meet the increasing demand, capital expenditure is absolutely necessary.

The objective of incurring the capital expenditure is to continue the up-gradation and strengthening of the transmission network to meet the desirable standards of performance and provide better network reliability and sustainable performance.

Commission Analysis:

The above statement has no relevance to the actual performance being noticed in the form of loss reduction strategies and still unable to provide accurate transmission losses sustained in the state with authenticity. They could not even specify the number of interface meters installed in the transmission network right from FY 2021-22 onwards. Where all the investments made so far in transmission activity had not given any fruitful results and needs thorough scrutiny. The capital investments seem to be not used for intended purpose. This is something very much causing displeasure to the Commission to note this window dressing performance on paper only.

11.7 Aggregate Revenue Requirement

Based on the provisions of the Tariff Regulations, the estimate for the Aggregate

Revenue Requirement (ARR) would consist of the following elements:

- Return on Equity
- Interest and Finance charges on Loan Capital
- Depreciation
- Operation and Maintenance Expenses
- Interest on working capital

The above Aggregate Revenue Requirement is netted off for Non-Tariff Income for determining the net ARR for transmission function of P&ED Mizoram.

11.8 Return on Equity

Petitioner's submission

Regulation 26 of the Joint Electricity Regulatory Commission for Manipur and Mizoram (Multi Year Tariff) Regulations, 2014 read with Regulation 22 provides the methodology for calculation of the Interest & Finance Charges. It provides that 30% of the capital employed shall be considered as equity and balance 70% is to be considered as loan.

In this regard it is submitted that the P&ED being a Government Department, the entire capital employed till date has been funded through fund infusion by the Government in form of budgetary support which are generally **in the nature of grants and aids through financial institutions.**

In view of the above, the financial principal of debt-equity ratio of 70:30 and return on equity thereon as provided in regulation 26 read with regulation 22 may not be applicable to the P&ED. **Therefore P&ED has not considered return on equity while computing the ARR.**

Commission's analysis

Keeping in view of the above highlighted submission of the Licensee, **the Commission too had not considered any ROE for transmission function** separately for FY 2025-26 as has been followed as a convention being adopted in the earlier years also as the same is considered in the distribution function itself.

11.9 Interest and Finance charges

Petitioner's submission

Regulation 27 of the Joint Electricity Regulatory Commission for Manipur and Mizoram (Multi Year Tariff) Regulations, 2014 provides the methodology for calculation of the Interest & Finance charges. It provides that 30% of the capital employed shall be considered as equity and balance 70% is to be considered as loan. The regulation provides for normative loan irrespective of actual loan availed by the utility. Repayment of loan and interest are also to be considered on normative basis.

In this regard it is submitted that the P&ED being a Government Department, the entire capital employed till date has been funded through fund infusion by the Government inform of budgetary support which are generally in the nature of grants.

In view of the above, the financial principal of debt-equity ratio of 70:30 as provided in regulation 27 read with regulation 22 may not be applicable to the P&ED. **Therefore P&ED has not considered Interest and finance charges while computing the ARR.**

Commission's analysis

Keeping in view of the above submission by the Licensee duly highlighted, the Commission **too did not consider any Interest and Finance charges** for transmission function for FY 2025-26 onwards as has been following as a convention applied even in the past as the same is once again considered fully in the distribution ARR function itself.

11.10 Gross Fixed Assets and Depreciation

11.10.1 Gross Fixed Assets

Petitioner's submission

P&ED has projected the Gross Fixed Asset in accordance with the Regulation 23 of the Joint Electricity Regulatory Commission for Manipur and Mizoram (Multi Year Tariff) Regulations, 2014.

It is submitted that opening value of gross fixed assets (GFA) for the FY 2023-24 has been taken from Fixed Asset Register as on 31.03.2024 & the audited accounts for the FY 2023-24 and the same has been increased by estimated addition during the FY 2024-25. Thereafter, planned additions during the FY 2025-26 have been

considered and accordingly, GFA has been computed for the FY 2025-26. The GFA movement is given in the table below:

Table 11.5: Gross Fixed Asset Movement projected by P & ED

(₹. Cr)

Particulars	Approved in T.O 28.03.2023	Proposed by P&ED	Deviation
Opening Balance	167.04	328.32	161.28
Additions during the year	40.10	40.10	0.00
Closing Balance	207.14	368.42	161.28

11.10.2 Depreciation

Petitioner's submission

P&ED Mizoram has projected the depreciation in accordance with the Regulation 28 of The Joint Electricity Regulatory Commission for Manipur and Mizoram (Multi Year Tariff) Regulations, 2014.

The Depreciation as approved by the Hon'ble Commission & proposed by the P&ED Mizoram is in the Table below:

Table 11.6: Depreciation projected by P & ED

(Rs. Cr)

Particulars	Approved in T.O 28.03.2023	Proposed by P&ED	Deviation
Opening GFA	167.04	328.32	161.28
Additions During the Year	40.10	40.10	0.00
Closing GFA	207.14	368.42	161.28
Average GFA	187.09	348.37	161.28
Avg. Depreciation	3.13	2.81	-0.32
Total depreciation	5.86	9.80	3.94
10% Depreciation	0.59	0.10	-0.49

Commission's Analysis

In the absence of any function wise asset details pertaining to Transmission portion the amount of depreciation as projected is provisionally approved for Rs.0.10Cr for FY2025-26

11.11 Operation and Maintenance expenses

Petitioner's submission

Operation & Maintenance expenses comprise of the following heads of expenditure viz.

- Employee Expenses
- Administration & General Expenses
- Repairs & Maintenance Expenses

The operation & maintenance expenses have been arrived at in accordance with the Regulation 62.5 of the Joint Electricity Regulatory Commission for Manipur and Mizoram (Multi Year Tariff) Regulations, 2014. It is submitted that the P&ED Mizoram is an integrated utility carrying out the three functions of Generation, Transmission & Distribution and the complete segregation of function wise accounts has not been done yet. In view of the above the operation & maintenance expenses has been allocated among the various functions on the principle allowed by the Hon'ble Commission in the Tariff order for the FY 2014-15.

The allocated actual expenses for the FY 2023-24 has been considered as the operation & maintenance expenses and the same has been escalated at the escalation factor of 5.72% to arrive at the operation & maintenance expenses for the FY 2024-25. The operation & maintenance expenses for the FY 2025-26 has been determined by further escalating the estimated operation & maintenance expenses for the FY 2024-25 by the escalation factor of 5.72% Year on Year.

Accordingly, details of operation & maintenance expenses viz. Employee Expenses, Administration & General Expenses & Repairs & Maintenance Expenses are provided in the subsequent sections.

11.11.1 Employee Expenses

The expense head of employee cost consists of salary and allowance, bonus, Leave Travel Concession (LTC) & Honorarium etc. The Employee Expenses as approved by the Hon'ble Commission & proposed by the P&ED Mizoram is given in the table below.

Table 11.7: Employee Expenses projected by P&ED

Particulars	Approved in T.O 28.03.2023	Proposed by P&ED	Rs.Crores
			Deviation
Employee Expenses	46.31	37.14	-9.17

Commission Analysis:

The employee cost now approved for FY 2025-26 is Rs.37.14Cr as the same value is preferred by P&ED.

Moreover, in the past P&ED was initially claiming Transmission ARR and later on it claims all its cost elements under Distribution function itself and discarding the earlier ARR amount preferred. This means the ARR filing for Transmission is done for the sake of it to file an ARR only.

The projection so made by the Licensee is made without the break-up details of employee strength existing in transmission function and many a time failed to provide the break-up in the past. Hence, the transmission employee cost is not basing on number of employees. However, the commission approves the following amount for transmission function subject to reducing these values finally in finalizations of distribution function as a whole.

Table 11.8: Employee Expenses now approved by commission for FY2025-26

₹.Cr	
Financial year	Now revised Employee cost
Employee Cost	37.14

11.11.2 Administration and General Expenses

Petitioner's submission

A&G expenses comprise of the following broad subheads of expenditure, viz.

- Domestic Travelling Expenses
- Office Expenses
- Legal, Regulatory & Consultancy Fees
- Insurance etc.

The expense head of A&G expenses consists of Domestic Travelling Expenses, Office Expenses, Legal Regulatory & Consultancy Fees & Insurance etc. The A&G Expenses as approved by the Hon'ble Commission & proposed by the P&ED Mizoram is given in the table below.

Table 11.9: Administrative and General Expenses projected

(Rs. Cr)			
Particulars	Approved in T.O 28.03.2023	Proposed by P&ED	Deviation
Administration & General Expenses	1.63	2.04	-0.41

Commission's analysis

The Commission's earlier approved Administration and General Expenses for FY2025-26 of Rs.1.63Cr is increased to **Rs.2.04Cr** as preferred by the Licensee.

11.12 Repairs and Maintenance expenses**Petitioner's submission**

P&ED Mizoram has been undertaking various Repairs and Maintenance activities as a step towards improvement of systems, reduction in breakdowns, reduction in response time and increasing preventive maintenance. The R&M Expenses as approved by the Hon'ble Commission & proposed by the P&ED Mizoram is given in the table below.

P&ED has projected the R&M expenses in accordance with the Regulation 89.6 of The Joint Electricity Regulatory Commission for Manipur and Mizoram (Multi Year Tariff) Regulations, 2014 and the methodology described in the para 4.4. It is therefore kindly requested that Hon'ble Commission may approve the R&M expenses as projected.

Table 11.10: Repair and Maintenance expenses projected by P&ED**(₹. Cr)**

Particulars	Approved in T. O. dated 28.03.2023	Proposed by P&ED Mizoram	Deviation
Repair & Maintenance Expenses	7.31	9.01	1.70

Commission's analysis:

The Commission approves R&M Expenses for FY 2025-26 at Rs9.01Cr as against the MYT approved value of Rs.7.31Cr so projected by P & ED indicated in the above table. These values will be reduced from the distribution figure finalization.

O&M Expenditure:**Petitioners Submission**

The overall O&M Expenditure are tabulated below:

Table 11.11: Overall summary of O&M Expenditure for the MYT Period by P&ED**(₹. Crore)**

Sr. No.	Particulars	Approved in T. O. dated 28.03.2023	Proposed by P&ED Mizoram	Deviation
1	Employee Expenses	46.31	37.14	-9.17
2	Administration & General Expenses	1.63	2.04	0.41

Sr. No.	Particulars	Approved in T. O. dated 28.03.2023	Proposed by P&ED Mizoram	Deviation
3	Repair & Maintenance Expenses	7.31	9.01	1.70
4	Total O&M Expenses	55.25	48.20	-7.05

It is submitted that P&ED Mizoram has proposed the revised O&M Expenditure against the O&M Expenditure by the Hon'ble Commission vide MYT Order dated 28.03.2023.

Commission's analysis:

Table 11.12: Summary of O & M expenses Approved by Commission for Transmission

(₹. Crore)

Sl. No.	Particulars	Now approved by Commission
1	Employee Expenses	37.14
2	Administration & General Expenses	2.04
3	Repair & Maintenance Expenses	9.01
4	Total O&M Expenses	48.20

To the extent of above approved O&M expenses amount for Transmission function, there will be equal amount of reduction in the O&M expenses for Distribution besides the Generation function cost of O&M also as there is no proper assessment of this cost each function wise from the actual values of FY 2022-23.

11.13 Interest on Working Capital

Petitioner's submission

As per the Regulations, for the purpose of computation of normative working capital and Interest on working capital, the components of working capital are as follows:

- Operation and maintenance expenses for one month; plus
- Maintenance spares at one (1) percent of the historical cost escalated at 6% from the date of commercial operation; plus
- Receivables equivalent to one (1) month of the expected revenue from sale of electricity at the prevailing tariffs; minus
- Amount held as security deposits under clause (a) and clause (b) of sub-section (1) of Section 47 of the Act from consumers except the security deposits held in the form of Bank Guarantees;

Interest is required to be calculated at a rate equal to the State Bank Advance Rate (SBAR) as on 1st April of the financial year in which the Petition is filed.

The P&ED Mizoram has projected the Interest on Working Capital as nil after follows the same methodology approved in the Tariff order dated 15.03.2024 for the FY 2024- 25 to approved the Transmission Tariff.

The Interest on working capital approved by Hon'ble Commission & proposed by the P&ED Mizoram is given in the table below:

Table 11.13: interest on Working Capital projected by P & ED for 2025-26

(₹. Cr)

Sl. No.	Particulars	Approved in T. O. dated 28.03.2023	Proposed by P&ED Mizoram	Deviation
1	O&M Exp for 1 Month		4.02	4.02
2	Maintenance Spares @1% of historical Cost escalated @6% from COD		3.48	3.48
3	One Month Receivables		4.02	4.02
4	Total		11.52	11.52
5	Rate of Interest		15.00%	15.00%
6	Interest as per Regulation		1.73	1.73
7	Interest for the Year	0.00	0.00	0.00

Commission's Analysis

The Commission **disapproves Interest on Working Capital claimed** for FY2025-26 though projected by P&ED as there are no short-term loans have drawn during the past also to claim this element. It will only be considered on having actually availing Short-term loans in future during true-up time. This is the same analogy applicable to Distribution function also in each year.

11.14 Contribution to Contingency Reserve Fund

Regulation 62.7 of the Joint Electricity Regulatory Commission for Manipur and Mizoram (Multi Year Tariff) Regulations, 2014 provides that the Transmission licensee shall be allowed an annual appropriation of 0.5% of the original cost of fixed assets towards Contingency Reserve. It further provides that the maximum cumulative provision under the Contingency Reserve shall not exceed 5% of original cost of fixed assets. In our current scenario it is very difficult to create this type of funds. So, the P&ED Mizoram has not proposed any contingency reserve fund for the FY 2025-26. The Contribution to Contingency Reserve Fund as approved by the Hon'ble Commission & proposed by the P&ED Mizoram is given in the table below.

Table 11.14: Contribution to Contingency Reserve Fund

(₹. In Crores)

Particulars	Approved in T. O. dated 28.03.2023	Proposed by P&ED Mizoram	Deviation
Opening GFA	167.04	328.32	161.28
Additions During the Year	40.10	40.10	0.00
Closing GFA	207.14	368.42	161.28
Rate	0.25	0.25	0.00
Total Contribution to Contingency Reserve Fund	0.42	0.00	-0.42

Commission's Analysis

As per the regulation, for the purpose of contribution to contingency Reserve fund, the rate to be adopted is @0.25% on the Opening value of OCFA but not on the average figure. Now any contribution to Contingency Reserve Fund should be based on @ 0.25% instead of 0.5% as proposed by the Licensee.

However, the P&ED expressed its inability to invest the contribution amount so collected in a non-drawl bank account for creation of contingency Reserve in the case of distribution function, hence the same treatment is applied to transmission also. Like in distribution function, any amount approved earlier is withdrawn fully. So is the treatment even here and the values earlier approved under MYT Order will be withdrawn and Nil amount is approved for this cost element in FY 2025-26.

11.15 Non- Tariff Income**Petitioner's Submission**

Regulation 63 of The Joint Electricity Regulatory Commission for Manipur and Mizoram (Multi Year Tariff) Regulations, 2014 provides that the Non-Tariff income shall be deducted from the ARR in calculating the Tariff. Non-tariff income includes revenue from rent on land and building, statutory investments, interest on delayed payments and other charges. The P&ED Mizoram has not considered Non-Tariff income for computing the ARR of the transmission function for the FY 2025-26.

Commission's Analysis

P & ED is an integrated utility. As such, Non-Tariff income so collected is being entirely accounted for under distribution business. The P&ED is conveniently not projecting NTI for Transmission activity, However, Non- Tariff income has not been

considered for the transmission business by the Commission also for FY 2025-26 now.

11.16 Aggregate Revenue Requirement

Based on the above projections, the ARR for the transmission function of P&ED Mizoram for the FY 2025-26 works out as under:

Table 11.15: Aggregate Revenue Requirement filed by the P&ED

(Rs. Cr)				
Sl. No.	Particulars	Approved in T. O. dated 28.03.2023	Proposed by P&ED Mizoram	Deviation
1	Return on Equity	0.00	0.00	0.00
2	Interest & Finance Charges	0.00	0.00	0.00
3	Depreciation	0.59	0.10	-0.49
4	O&M Expenses	55.25	48.20	-7.05
5	Interest on Working Capital	0.00	0.00	0.00
6	Contribution to Contingency Reserve Fund	0.42	0.00	0.00
7	Non-Tariff Income	0.00	0.00	0.00
8	Income from Other Business	0.00	0.00	0.00
	Total	56.25	48.30	-7.96

P&ED Mizoram requests the Hon'ble Commission to kindly consider the submission and approve the ARR for the FY 2025-26 in accordance with the Joint Electricity Regulatory Commission for Manipur and Mizoram (Multi Year Tariff) Regulations, 2014.

Commission Analysis:

Table 11.16: Transmission ARR approved by Commission for FY2025-26

(₹. Crores)				
Sl. No.	Particulars	Approved in T. O. dated 28.03.2023	Proposed by P&ED Mizoram	Now approved for
1	Return on Equity	0.00	0.00	0.00
2	Interest & Finance Charges	0.00	0.00	0.00
3	Depreciation	0.52	0.10	0.10
4	O&M Expenses	53.60	48.20	48.20
5	Interest on Working Capital	0.00	1.68	0.00
6	Contribution to Contingency Reserve Fund	0.41	0.00	0.00
7	Non-Tariff Income	0.00	0.00	0.00
8	Income from Other Business	0.00	0.00	0.00
	Total	54.53	48.30	48.30

11.17 Transmission Charges per Unit

Petitioner's submission

Based on the above projections, the ARR for the transmission function of P&ED Mizoram for the FY 2025-26 works out as under:

Table 11.17: Transmission Charges for FY2025-26

Sl. No.	Particulars	Unit	Approved in T. O. dated 28.03.2023	Proposed by P&ED Mizoram
1	Aggregate Revenue Requirement	₹ in Crores	56.25	48.30
2	Total MW allocation	MW	248.14	271.52
3	Total transmitted energy (less: external loss)	MU	707.95	768.28
4	Transmission Charges	₹/MW/Month	188915.53	148234.39
5	Transmission Charges	₹/MW/Day	6210.92	4873.46
6	Transmission Tariff	₹/kWh	0.80	0.63

P&ED Mizoram requests the Hon'ble Commission to kindly consider the submission and approve the Transmission Charges for the FY 2025-26 in accordance with the Joint Electricity Regulatory Commission for Manipur and Mizoram (Multi Year Tariff) Regulations, 2014

Commissions Analysis

The Commission has calculated the transmission tariff with approved data as detailed in the table below.

Table 11.18: Transmission charges approved by the Commission for FY 2025-26

Sl. No.	Particulars	Proposed by P&ED Mizoram	Approved for FY2025-26
1	Net ARR (Crores)	48.30	48.30
2	Total Allocation (MWs)	271.52	271.52
3	Total Energy Transferred at State. Periphery (MUs)	768.28	667.77
4	Transmission Charges (Rs. /MW/ month)	148234.39	148239.54
5	Transmission Charges (Rs. /MW /day)	4873.46	4873.62
6	Transmission Tariff (Rs. /kWh)	0.63	0.723

12 Generation Function ARR for FY 2025-26

12.1 Background

P&ED Mizoram's tariff determination is now governed by "Joint Electricity Regulatory Commission for Manipur & Mizoram (Multi Year Tariff) Regulations, 2014" (referred to as "MYT Regulations, 2014") read with First Amendment Regulations, 2019 which came into force from 09.06.2014. However, Regulation 35.1 of the MYT Regulations, 2014 provide as follows:

"The Regulations specified in this Chapter shall apply for determining the tariff for supply of electricity to a Distribution Licensee from conventional sources of generation and hydro generation stations of capacity more than 25 MW:

Provided that determination of tariff for supply of electricity to a Distribution Licensee from Renewable Energy sources of generation shall be in accordance with terms and conditions as stipulated in the relevant Regulations/Orders of the Commission."

The Joint Electricity Regulatory Commission for Manipur & Mizoram in exercise of powers conferred under Section 61 read with Section 181 (2) of the Electricity Act, 2003 (36 of 2003), and all other powers enabling it in this behalf, issued Joint Electricity Regulatory Commission for Manipur & Mizoram (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2010 vide notification dated 31.05.2010. Subsequently the Regulation was amended to incorporate certain changes and notified as the Joint Electricity Regulatory Commission for Manipur & Mizoram (Terms and Conditions for Tariff Determination from Renewable Energy Sources) (First Amendment) Regulations, 2014.

Regulation 3 of the above regulations provides as follows:

"These regulations shall apply in all cases where tariff, for a generating station or a unit thereof based on renewable sources of energy, is to be determined by the Commission under Section 62 read with Section 86 of the Act.

Provided that in cases of wind, small hydro projects, biomass power, non-fossil fuel-based cogeneration projects, solar PV and solar thermal power projects, these regulations shall apply subject to the fulfilment of eligibility criteria specified in

regulation 4 of these Regulations.”

Further, regulation 4(2) provides that these regulations shall apply to the Small Hydro Project with installed capacity lower than or equal to defining the eligibility criteria for applicability of the Renewable Energy sources regulations 25 MW. The extract of the regulation is reproduced below:

“Small hydro project – located at the sites approved by State Nodal Agency/ State Government using new plant and machinery, and installed power plant capacity to be lower than or equal to 25 MW at single location”.

The Power & Electricity Department, Government of Mizoram owns 12 Small Hydro Projects with installed capacity below 25 MW. Accordingly, the P&ED Mizoram has submitted the proposal for determination of tariff as per The Joint Electricity Regulatory Commission for Manipur & Mizoram (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2010 read along with First Amendments Regulations, 2014.

12.2 Generation Charges for FY 2025-26

P&ED Mizoram hereby submits its petition for approval of Generation Charges for the FY 2024-25. This petition is being submitted in compliance with the provisions of Renewable Energy Sources Tariff Regulations, 2010 and its subsequent amendments. The petitioner has attempted to comply with the various guidelines in the Act and regulations within the limitations of availability of data.

P&ED Mizoram is filing the petition based on the past performance and expected changes in each element of cost and revenue for the ensuing year. P&ED Mizoram has studied the past trends and taken cognizance of other internal and external developments to estimate the likely performance during the FY 2025-26.

12.3 Aggregate Revenue Requirement for FY 2025-26

This section outlines the Aggregate Revenue Requirement of the P&ED Mizoram for the FY 2025-26, which takes into consideration:

- a) Actual Performance in FY 2023-24;
- b) Estimated Performance for FY 2024-25 based on the Actual performance for

the period 01.04.2023 to 30.09.2024;

- c) Projection based on the Actual performance in FY 2023-24 and estimated performance in FY 2024-25;
- d) Principles / Normative Parameters outlined in Tariff Regulations of JERC (M&M).

Past trends have been taken into cognizance in case of certain elements as deemed necessary. The petition has been structured in the following manner:

SHP details

- Installed capacity & COD
- Capital Cost
- Design Energy

Proposed Capital Expenditure and capitalization

- Scheme wise details
- Capital Expenditure
- Asset Capitalisation

Determination of the Aggregate Revenue Requirement

- Loan & Finance Charges
- Depreciation
- Return on Equity
- Interest on Working Capital
- Operation and Maintenance Expenses

12.4 Details of SHPS (Small Hydro Power Stations)

Details of Own SHPS are provided in the table below.

Table 12.1: Details of Small Hydro Power Station considered by P & ED

Sl. No.	Name of Station	Installed Capacity (MW)	Date of COD
1	Serlui- 'A'	1.00	24.04.1984
2	Tuirivang	0.30	14.08.1989
3	Khawiva	1.05	08.12.1988
4	Tuipui	0.50	15.12.1991
5	Teirei	3.00	12.10.1999
6	Kau-Tlabung	3.00	05.05.2005
7	Maicham-I	2.00	05.01.1996
8	Tuipanglui	3.00	17.12.2004
9	Lamsial	0.50	26.08.2008
10	Maicham-II	3.00	11.11.2009
11	Tlawva (New)	5.00	13.05.2022
12	Kawlberm (New)	4.00	15.12.2022

Sl. No.	Name of Station	Installed Capacity (MW)	Date of COD
12	Serlui- 'B'	12.00	Not yet Commissioned
	Grand Total	38.35	

In this regard it is submitted that since the Serlui 'B' SHP has not been commissioned till date the same has not been considered for the calculation of Capital cost, ARR & Generation Tariff thereof in accordance with The Joint Electricity Regulatory Commission for Manipur & Mizoram (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2010 read along with First Amendments Regulations, 2014.

However, the SHP is generating infirm power and the same is being injected in the state grid. The rate at which the energy supplied by the SHP is to be considered while arriving at the total cost of generation has been dealt with separately in the subsequent section of this submission.

Further, it is submitted that P&ED Mizoram is not operating the Khawiva SHP, Tuipui SHP, Teirei SHP & Kau Tlabung SHP and these SHPs except Teirei SHP have been operated and managed by M/s Amazon Engineering Pvt. Ltd. and, Teirei SHP is operated and managed by M/s Assam Petroleum Ltd.

However, P&ED MIZORAM has procured the energy generated from the above SHPs and has incorporated the same in the own generation for the year.

12.5 Capital Cost

Regulation 28 of the JERC for Manipur & Mizoram (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2010 provides that the capital cost of Small Hydro Projects shall be determined as per the normative parameters defined in the regulation. The extract of the regulation is reproduced below:

- (1) The normative capital cost for small hydro projects during first year of Control Period (FY 2012-13) shall be as follows:

Table 12.2: Normative Capital Cost

Sl. No	Project Size	Capital Cost (Rs. in Lakh /MW)
1	Below 5 MW	770

Sl. No	Project Size	Capital Cost (Rs. in Lakh /MW)
2	5 MW to 25 MW	700

- (2) The capital cost for subsequent years shall be determined on the basis of indexation formula as outlined under Regulation 29.

Further, regulation 29 provides the Capital Cost Indexation Mechanism. The provisions of the regulation are reproduced below:

The following indexation mechanism shall be applicable in case of small hydro power projects for adjustments in capital cost over the Control Period with the changes in Wholesale Price Index for **Steel and Electrical Machinery**.

$$CC(n) = P\&M(n) * (1+F1+F2+F3)$$

$$P\&M(n) = P\&M(0) * (1+d(n))$$

$$d(n) = [a * \{(SI(n-1)/SI(0)) - 1\} + b * \{(EI(n-1)/EI(0)) - 1\}] / (a+b)$$

Where,

CC(n) = Capital Cost for nth year

P&M(n) = Plant and Machinery Cost for nth year

P&M(0) = Plant and Machinery Cost for the base year

Note: - **P&M(0)** is to be computed by dividing the base capital cost (for the first year of the control period) by (1+F1+F2+F3) i.e.

Table 12.3: Base Capital cost

Small hydro Project	Base Capital Cost (Rs. Lakh/MW)	Factor (1+F1+F2+F3)	P&M (0) (Rs. Lakh/MW)
SHP (<5MW)	770	1.40	550
SHP (5 - 25 MW)	700	1.40	500

d(n) = Capital Cost escalation factor for year (n) of Control Period

SI(n-1) = Average WPI Steel Index prevalent for calendar year (n-1) of the Control Period

SI(0) = Average WPI Steel Index prevalent for calendar year (0) at the beginning of the Control Period i.e. **April,2011 to December March,2012**

EI(n-1) = Average WPI Electrical Machinery Index prevalent for calendar year (n-1) of the Control Period.

EI(0) = Average WPI Electrical and Machinery Index prevalent for calendar year at the beginning of the Control Period i.e. **April,2011 to March,2012**

a = Constant to be determined by Commission from time to time, (In default it is 0.6), for weightage to **Steel Index**.

b = Constant to be determined by Commission from time to time, (In default it is 0.4), for weightage to **Electrical Machinery Index**.

F1 = Factor for Land and Civil Work (0.16)

F2 = Factor for Erection and commissioning (0.10)

F3 = Factor for IDC and Financing Cost (0.14)

Capital Cost of the SHPS has been calculated in accordance with the above defined norms and mechanism. The calculation of index capital cost is detailed below.

Table 12.4: Indexed Capital Cost

Sl. No.	Factors	Reference Year	Value
i	d(n)	2024-25	
ii	SI(n-1)	2023-24	137.10
iii	SI(0)	2011-12	100.00
iv	EI (n-1)	2023-24	131.40
v	EI (0)	2011-12	100.00
vi	a		0.60
vii	b		0.40
viii	F1+F2+F3		0.40
ix	P&M(0)	<5 MWs	550.00
X	P&M(0)	5MW to 25 MWs	500.00

For <5 MW Category

$$\begin{aligned}
 d(n) &= [a \cdot \{(SI(n-1)/SI(0))-1\} + b \cdot \{(EI(n-1)/EI(0))-1\}] / (a+b) \\
 &= [0.6 \cdot \{(137.00/100.00)-1\} + 0.40 \cdot \{(131.40/100.00)-1\}] / (0.60+0.40) \\
 &= \mathbf{0.348}
 \end{aligned}$$

$$\begin{aligned}
 P\&M(n) &= P\&M(0) \cdot \{1+d(n)\} \\
 &= 550 \{1+ 0.348\} \\
 &= \mathbf{741.51}
 \end{aligned}$$

$$\begin{aligned}
 CC(n) &= P\&M(n) \cdot (1+F1+F2+F3) \\
 &= 741.51 (1+0.40) \\
 &= \mathbf{1038.11}
 \end{aligned}$$

For 5 to 25 MW Category

$$\begin{aligned}
 d(n) &= [a \cdot \{(SI(n-1)/SI(0))-1\} + b \cdot \{(EI(n-1)/EI(0))-1\}] / (a+b) \\
 &= [0.6 \cdot \{(137.10/100.00)-1\} + 0.40 \cdot \{(131.40/100.00)-1\}] / (0.60+0.40) \\
 &= \mathbf{0.348}
 \end{aligned}$$

$$P\&M(n) = P\&M(0) \cdot \{1+d(n)\}$$

$$= 500\{1+ 0.348\}$$

$$= 674.10$$

$$CC(n) = P\&M(n)*(1+F1+F2+F3)$$

$$= 674.10 (1+0.40)$$

$$= 943.74$$

Therefore, the indexed cost of project per MW is ₹. **1038.11 Lakhs** for project belongs to <5MW category & Rs.943.74 Lakhs for projects belongs to 5 and up to 25 MW category. The indexed capital costs of the 11 SHPs is calculated accordingly in the table below.

Table 12.5: Capital Cost projected by P & ED for SHPS
(₹. Crs)

Sl. No.	Name of Station	Installed Capacity (MW)	Capital Cost (@Rs.1038.11/943.74 Lakhs/MW)
1	Serlui 'A'	1.00	10.38
2	Tuirivang	0.30	3.11
3	Khawiva	1.05	10.90
4	Tuipui	0.50	5.19
5	Maicham-I	2.00	20.76
6	Teirei	3.00	31.14
7	Tuipanglui	3.00	31.14
8	Kau-Tlabung	3.00	31.14
9	Lamsial	0.50	5.19
10	Maicham-II	3.00	31.14
11	Tlawva	5.00	47.19
12	Kawlberm	4.00	41.52
	Grand Total	26.35	268.80

Commission's Analysis

After having carefully observed, leaving aside the three (3) plants leased to **M/s. Amazon Engineering PVT Ltd** and the Teirei-3MWs SHP now stated to have leased out to by **M/s. Assam Petroleum Ltd**, the effective remaining SHPs in operation are the following tabulated plants with installed capacity of 26MWs only but not the grand figure 38.35MWs as because there are some old plants with installed capacity of 4.80MWs are not generating any power.

The following table clearly depict the power station now in effective operation.

Sl. No.	SHP Name	Inst. Cap (MWs)	COD Date	Present Plant Status
A - SHP Power Plants not Generating Power				
1.	Serlui-A SHP	1.00	24.04.1984	Out of Commission

Sl. No.	SHP Name	Inst. Cap (MWs)	COD Date	Present Plant Status
2.	Tuirivang SHP	0.30	14.08.1989	---- do ----
3.	Tuipanglui SHP	3.00	17.12.2004	No generation
4.	Lamsial SHP	0.50	26.08.2008	---- do ----
5.	Lengpui (diesel)	0.50	No data	Out of Commission
	Subtotal (A)	5.30	Nil Energy	
B – Effective Power producing Small Hydro Plants (SHP)				
5.	Maicham-I	2.00	05.01.1996	Generating power
6.	Maicham-II	3.00	11.11.2009	-- do --
7.	Tlawva	5.00	13.05.2022	---- do ----
8.	Kawlberm	4.00	15.12.2022	---- do ----
9.	Serlui-B	12.00	Awaiting COD	Infirm power
	Subtotal (B)	26.00	Power is being Generated	
C - SHPs managed by outside Agencies				Name of Pvt Agency
10.	Khawiva SHP	1.05	08.12.1988	Amazon Engg.
11.	Tuipui SHP	0.50	15.12.1991	-- do --
12.	Kau Tlabung SHP	3.00	05.05.2005	-- do --
13.	Teirei SHP	3.00	12.10.1999	Assam Petroleum
	Subtotal (C)	7.55		
Grand Installed Capacity		38.85	Installed Capacity shown in ARR	

Thus, Commission felt relevant to considers Capital costs of the remaining effective four Hydro stations (includes omitted new plant Kawlberm) which are in operation and the Serlui-B (12MWs) generating in-firm power so detailed at the same level it was approved in MYT Tariff Order. However, the effective SHP plants were already considered in the MYT Tariff barring the newly commissioned Kawlberm-4MW SHP plant which will be taken into tariff calculation now which was omitted last year and the details are Tabulated below.

Table 12.6: Capital Cost approved by the Commission for FY 2025-26

(₹. Crs)

Sl. No.	Name of Station	Installed Capacity (MW)	Capital Cost@ (Rs.9.6111/ Rs.8.7374 Crs/MW)
1	Maicham-I	2.00	19.22
2	Maicham-II	3.00	28.83
3	Tlawva	5.00	43.69
4	Kawlberm	4.00	38.44
	Grand Total	14.00	130.18

For the SHPs managed by Outside agencies, the P&ED is paying the maintenance charges to them which will be treated as O&M expenses for those plants and no need for Capital cost derivation. In the case of those SHP plants out of commission will be ignored from the ARR of Generation function cost is a reasonable approach.

12.6 Determination of Annual Revenue Requirement

12.6.1 Loan and Finance Charges

Loan has not been availed by the P&ED, therefore interest on Loan and Finance charges has been considered as Nil for calculating of the AFC.

Commission Analysis:

The interest & finance charges on account of availment of Long-term Loans for construction of projects **was not considered for in this tariff calculation** as the Licensee had categorically stated about non-availing of any outside loan for the above projects.

12.6.2 Depreciation

Petitioner's Submission

Depreciation has been calculated in accordance with the regulation 15 of the JERC for Manipur & Mizoram (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2010 along with amendments & further on the basis of Tariff Order issued dated 15.03.2024. The Depreciation as approved by the Hon'ble Commission & proposed by the P&ED Mizoram is given in the table below.

Table 12.7: Calculation of Depreciation for MYT period projected by P&ED, Mizoram
(Rs. Crs)

Sl. No.	Name of Station	Approved in T. O. dated 28.03.2023	Proposed by P&ED Mizoram	Deviation
1	Serlui 'A'	0.0000	0.0000	0.0000
2	Tuirivang	0.0000	0.0000	0.0000
3	Khawiva	0.0000	0.0000	0.0000
4	Tuipui	0.0006	0.0006	0.0000
5	Maicham-I	0.0023	0.0024	0.0001
6	Teirei	0.0034	0.0037	0.0003
7	Tuipanglui	0.0034	0.0037	0.0003
8	Kau-Tlabung	0.0034	0.0037	0.0003
9	Lamsial	0.0006	0.0000	-0.0006
10	Maicham-II	0.0034	0.0037	0.0003
11	Tlawva	0.0229	0.0248	0.0019
12	Kawlbem	0.0000	0.0218	0.0218
13	Total	0.0400	0.0642	0.0242

Commission's Analysis

The depreciation rate as revised in the Regulation for Renewable Energy Sources (first Amendment) regulation 2014 under clause-8 is adopted on the useful life of 35 (thirty-five) year for the Small Hydro Plant indicated in the said Regulation 2014. The details of the depreciation calculation & approved by the Hon'ble Commission is tabulated below year wise for the MYT.

Table 12.8: Calculation of Depreciation by the Commission and approved for 2025-26
(Rs. Cr)

Sl. No.	Name of Station	Date of COD	Capital Cost	No.of Years		Depreciation		
				since COD	Balance Life	upto 12th yr	from 13th Yr	FY25-26
1	Maicham-I	05.01.1996	19.22	29	6	1.01	0.23	0.23
2	Maicham-II	11.11.2009	28.83	16	19	1.51	0.34	0.34
3	Tlawva	11.08.2022	43.69	3	32	2.29	0.51	2.29
4	Kewlbem	15.12.2022	38.44	3	32	2.017	0.452	2.017
								4.88

The above depreciation is 4.88Crs is approved as depreciation for these plants in working condition. of which 1% of the above is allowed for this year at .0.049

12.6.3 Return on Equity

Petitioner's submission

The Fixed Assets of P&ED Mizoram are funded through the budgetary support by the Government of Mizoram and Grants and Aids through Financial Institutions under various schemes like RGGVY, APDRP etc. Approximately 90% of the funding is done through the Government funding/Grants. However, in line with the previous orders of the Hon'ble Commission in this regard Return on Equity has not been considered for computing the ARR for the financial year.

Commission's Analysis

Under the circumstances explained in supra by the P&ED, the Commission didn't consider Return on Equity for FY 2025-26. The Commission approves no ROE amount for this year.

12.6.4 Interest on Working Capital

Petitioner's submission

Interest on working capital has been calculated as nil in accordance with the regulation 17 of the JERC for Manipur & Mizoram (Terms and Conditions for Tariff

determination from Renewable Energy Sources) Regulations, 2010 along with amendments & further on the basis of Tariff Order issued dated 15.03.2024. The Interest on working capital as approved by the Hon'ble Commission & proposed by the P&ED Mizoram is given in the table below:

Table 12.9: Interest on Working Capital for 2025-26 projected by P & ED

(Rs. Cr)

Sl. No.	Name of Station	Approved in T. O. dated 28.03.2023	Proposed by P&ED Mizoram	Deviation
1	Serlui 'A'	0.00	0.00	0.00
2	Tuirivang	0.00	0.00	0.00
3	Khawiva	0.00	0.00	0.00
4	Tuipui	0.00	0.00	0.00
5	Maicham-I	0.00	0.00	0.00
6	Teirei	0.00	0.00	0.00
7	Tuipanglui	0.00	0.00	0.00
8	Kau-Tlabung	0.00	0.00	0.00
9	Lamsial	0.00	0.00	0.00
10	Maicham-II	0.00	0.00	0.00
11	Tlawva	0.00	0.00	0.00
12	Kawlbem	0.00	0.00	0.00
13	Total	0.00	0.00	0.00

Commission's Analysis

As a matter of uniformity in principle in the case of interest on working capital the Commission approves NIL interest on working capital for FY 2025-26 due to non-availing of any kind of short-term loans by the Licensee not even in one occasion and any approval of this item would only burden the consumers unduly. This amount will be considered upon P&ED substantial its working capital loan availment in future for consideration by the Commission.

12.6.5 O & M expenses

Petitioner's Submission

Operation and Maintenance Expenses has been calculated in accordance with the regulation 18 of the JERC for Manipur & Mizoram (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2010 along with amendments. The Operation and Maintenance Expenses of the SHPs as approved by the Hon'ble Commission & proposed by the P&ED Mizoram is given in the table below:

Table 12.10: Operation and Maintenance Expenses Projected for FY2025-26**(Rs. Crs)**

Sl. No.	Name of Station	Approved in T. O. dated 28.03.2023	Proposed by P&ED Mizoram	Deviation
1	Serlui 'A'	2.87	0.00	8.41
2	Tuirivang		0.00	
3	Khawiva		0.51	
4	Tuipui		0.24	
5	Maicham-I		0.97	
6	Teirei		1.46	
7	Tuipanglui		1.46	
8	Kau-Tlabung		1.46	
9	Lamsial		0.00	
10	Maicham-II		1.46	
11	Tlawva		1.75	
12	Kawlberm		1.95	
13	Total	2.87	11.28	8.41

Commission Analysis:**Table 12.11: O & M expenses arrived at by the Commission for FY 2025-26****(Rs. Cr)**

Sl. No.	Name of Station	Capacity (MWs)	Normative O&M Exp/MW			FY- 2025-26
			Norm/ MW	Lakhs/ FY12-13	Escl.rate /Yr	
1	Maicham-I	2.00	25	50.00	5.72%	0.975
3	Maicham-II	3.00	25	75.00	5.72%	1.462
4	Tlawva	5.00	18	90.00	5.72%	1.754
5	Kawlberm	4.00	25	100.00	5.72	1.949
		14.00	Grand Total			6.140

In adopting the normative O&M cost per MW, the cost adopted for 5 MW SHP plant Tlawva, the cost approved in the amendment on 8th August 2014 for Renewable Energy Regulation 2010 was Rs.18 lakhs /MW. But the P&ED had claimed Rs125 Lakhs/MW in their petition is now revised.

The Commission approves the full O&M expenses for four plants at Rs. 6.140Crs based on the methodology adopted in the Tariff Order Dt 12.03.2018. But in the Distribution ARR filings, the licensee has adopted the employee cost for the entire sector, stating its difficulty in segregation of these charges each functional wise. Hence, the Commission feels it appropriate to adopt 56% of the total O&M cost to be attributable towards Employee cost towards Generation function. Therefore, the O&M Expenses

are to be reduced to some extent in order to avoid the duplication of employee cost already reflected in full under Distribution function. In addition, for meeting the O&M expenses of the stations under Amazon Engineering, the Commission is considering to allow it under O&M expenses to the tune of Rs.1.15CrS instead of allowing it under the power purchase cost. Therefore, the overall O&M expenses allowed is Rs.3.4412CrS plus Rs.1.15crs towards O&M maintenance cost of four stations managed by Amazon Engineering.

12.6.6 Aggregate Revenue Requirement (ARR)

Petitioner's submission

The ARR of the SHPs has been arrived at based on the components of tariff as detailed in the previous sections. The table below provides the ARR of SHPs.

Table 12.12: Annual Revenue Requirement projected by P&ED for FY 2025-26

(Rs. Cr)

Sl. No.	Name of Station	Approved in T. O. dated 28.03.2023	Proposed by P&ED Mizoram	Deviation
1	Serlui 'A'	5.24	0.00	6.10
2	Tuirivang		0.00	
3	Khawiva		0.51	
4	Tuipui		0.24	
5	Maicham-I		0.98	
6	Teirei		1.47	
7	Tuipanglui		1.47	
8	Kau-Tlabung		1.47	
9	Lamsial		0.00	
10	Maicham-II		1.47	
11	Tlawva		1.78	
12	Kawlben		1.97	
13	Total	5.24	11.35	6.10

Commission's analysis

The ARR approved for all commissioned the SHP stations excluding the Serlui-B by the Commission is detailed below in the table.

Table 12.13: Annual Revenue Requirement Commission approved for FY2025-26

Sl. No.	Name of Plant	Deprn	O&M Expns	2025-26 (Rs. Crs)
1	Maicham-I	0.23	0.975	1.205
2	Maicham-II	0.34	1.462	1.802

Sl. No.	Name of Plant	Deprn	O&M Expns	2025-26 (Rs. Crs)
3	Tlawva	2.29	1.754	4.044
44	Kawlberm	2.02	1.949	3.966
	Grand Total	4.88	6.14	11.017
Allowable ARR for 2025-26		1% of Depr	56% allowed	
	ARR approved	0.0488	3.4412	3.49

Therefore, Commission approves **Rs.3.49Crs** the revised ARR for the above commissioned SHP generating stations at the values indicated above for FY 2025-26 excluding the Serlui-B station related ARR amount for the MYT period. The deduction of O&M Expenses is on account of some portion of O&M expenses were allowed in Distribution & transmission ARR. Hence it is taken only at 56% approximately.

The Station leased out to Amazon Engineering and M/s/Assam Petroleum were not considered in the O&M charges or depreciation of P&ED but it will be separately added to arrive as 1.15Crs provisionally in the ARR amount of generation function at the end and some stations not contributing to energy generating were ignored now in the calculation of ARR for their non-contribution to power generation.

12.6.7 Capacity Utilization factor

Petitioner's submission

Capacity Utilisation Factor has been calculated in accordance with the regulation-30 of the JERC for Manipur & Mizoram (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2010 along with amendments. The extract of the regulation is reproduced below:

“Capacity Utilisation factor for the small hydro projects in Manipur and Mizoram shall be 45%.

Explanation: For the purpose of this Regulation normative CUF is net of free power to the home state if any, and any quantum of free power if committed by the developer over and above the normative CUF shall not be factored into the tariff.”

Whereas, P&ED Mizoram has been proposed the Auxiliary consumption and Net generation based on the Actual performance in FY 2023-24 and estimated performance in FY 2024-25. The details are provided in the table below:

Table 12.14: Total Generation from all commissioned SHP plants

Sl. No.	Name of Station	Installed Capacity (MW)	Generation at 45% CUF	Projected Gross Energy (MU)
1	Serlui 'A'	1.00	3.942	0.00
2	Tuirivang	0.30	1.183	0.00
3	Khawiva	1.05	4.139	1.497
4	Tuipui	0.50	1.971	0.373
5	Maicham-I	2.00	7.884	2.305
6	Teirei	3.00	11.826	2.143
7	Tuipanglui	3.00	11.826	0.008
8	Kau-Tlabung	3.00	11.826	7.611
9	Lamsial	0.50	1.971	0.00
10	Maicham-II	3.00	11.826	3.415
11	Tlawva	5.00	19.710	0.232
12	Kawlberm	4.00	15.768	1.662
	Grand Total	26.35	103.872	19.246

Commission's Analysis

The Commission approved gross generation from the above stations is at 19.246 MU for FY 2025-26 excluding the first four SHP stations in the above table so projected by P&ED in their submissions. This assumption is made by Commission in the absence of any verifiable concrete information from Licensee. The station wise net energy table is place in the subsequent paras for relevance.

12.6.8 Auxiliary Consumption**Petitioner's submission**

Auxiliary Consumption has been calculated in accordance with the regulation 30 of the JERC for Manipur & Mizoram (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2010 along with amendments. The extract of the regulation is reproduced below:

"Normative auxiliary consumption for the small hydro projects shall be 1.00%"

Whereas, P&ED Mizoram has been proposed the Auxiliary consumption and Net generation based on the Actual performance in FY 2023-24 and estimated performance in FY 2024-25. The details are provided in the table below:

Table 12.15: Normative Auxiliary Consumption projected by P & ED

Sl. No.	Name of Station	Gross Generation (MUs)	Auxiliary Consumption (MUs)	Projected Net Generation (MUs)
1	Serlui 'A'	0.000	0.000	0.000
2	Tuirivang	0.000	0.000	0.000
3	Khawiva	1.497	0.021	1.476
4	Tuipui	0.373	0.004	0.369
5	Maicham-I	2.305	0.003	2.302
6	Teirei	2.143	0.043	2.100
7	Tuipanglui	0.008	0.000	0.008
8	Kau-Tlabung	7.611	0.002	7.609
9	Lamsial	0.000	0.000	0.000
10	Maicham-II	3.415	0.004	3.411
11	Tlawva	0.232	0.012	0.220
12	Kawlberm	1.662	0.021	1.641
	Total	19.246	0.110	19.136

Commission's analysis

The Licensee has not made any realistic projection, but done it on normative basis without any practicality of whether the power station is contributing any energy for consumption. The information is totally not supported by verifiable evidence. Whereas in the net purchase quantum, so projected for FY 2025-26 in power purchases was shown as 37.09MU from all sources comprising of 38.35MW installed capacity which excludes the Lengpui DG set. However, the net available energy is identified to be 37.09MU ultimately by the end of FY 2025-26.

12.6.9 Generation Tariff**Petitioner's submission**

Generation tariff of the SHPs has been calculated on the basis of the ARR and net generation of the SHPs. Tariff per unit for all the SHPs for the FY 2024-25 is provided in the table below:

Table 12.16: Tariff for Generation projected by P & ED

Sl. No.	Name of Station	Net Generation (In Mus)	ARR (₹ in Crores)	Tariff
1	Serlui 'A'	0.000	0.00	0.00
2	Tuirivang	0.000	0.00	0.00
3	Khawiva	1.476	0.51	3.47
4	Tuipui	0.369	0.24	6.63
5	Maicham-I	2.302	0.98	4.24
6	Teirei	2.100	1.47	6.98

Sl. No.	Name of Station	Net Generation (In Mus)	ARR (₹ in Crores)	Tariff
7	Tuipanglui	0.008	1.47	
8	Kau-Tlabung	7.609	1.47	1.93
9	Lamsial	0.000	0.00	0.00
10	Maicham-II	3.411	1.47	4.30
11	Tlawva	0.220	1.78	
12	Kawlbem	1.641	1.97	

Commission's Analysis

As observed from the above P&ED projected Tariff table, the projected ARR claimed in respect of four (4) stations managed by outside agencies is Rs.3.69Cr for an expected net energy of 11.554MU resulting in an average Tariff of Rs. 3.194/Unit. While in the case of five (5) own functioning stations the total ARR claimed is Rs.7.67Cr for the net energy of 7.582MU is Rs.10.116/unit.

In finalizing the Generation Tariff for each functioning SHP plants and actively serving, those four (4) plants being handled by M/s. Amazon Engg Pvt Ltd and M/s. Assam Petroleum is separately assigned with a lumpsum amount of Rs.1.15Cr which was actually paid by P&ED in FY 2023-24 towards four plants maintenance charges and for the remaining four plants the ARR cost values are assigned individually as approved by the Commission. Tariff for each generating station for the following twelve (12) stations for FY 2025-26 is tabulated below.

Table 12.17: Generation Tariff approved by the Commission for 2025-26

Sl. No.	Name of Station	Net Generation (Mus)	ARR (₹ in Crs)	Tariff (Rs./kWh)
1	Serlui 'A'	0.000	0.00	0.00
2	Tuirivang	0.000	0.00	0.00
3	Tuipanglui	0.008	0.00	0.00
4	Lamsial	0.000	0.00	0.00
5	Khawiva	1.476	1.15	0.995
6	Tuipui	0.369		
7	Kau-Tlabung	7.609		
8	Teirei	2.100		
9	Maicham-I	2.302	3.49	4.603
10	Maicham-II	3.411		
11	Tlawva	0.220		
12	Kawlbem	1.641		
	Grand Total	19.136	4.64	2.425

The average tariff rate payable towards the effective eight (8) plants is arrived at as Rs.2.425/kWh. The tariff in the case of **Serlui-B plant** which is still reeling under difficulties to achieve Commercial Operation date (CoD) is shown separately in the foregoing paras of this order.

12.6.10 TARIFF FOR THE ENERGY SUPPLIED FROM SERLUI 'B' SHP

As submitted in para 4.1 above since the Serlui 'B' SHP has not been commissioned till date the same has not been considered for the calculation of Capital cost, ARR & Generation Tariff thereof in accordance with The Joint Electricity Regulatory Commission for Manipur & Mizoram (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2010 read along with First Amendments Regulations, 2014.

However, the SHP is generating infirm power and the same is being injected in the state grid. The details of energy supplied from the SHP & the rate for the energy charge considered for arriving at the total cost of generation of the generation function is detailed in the subsequent sections.

Petitioner's submission

Energy Generation

The energy generated from the Serlui 'B' SHP is provided in the table below:

Table 12.18: Energy Generation from Serlui 'B':

(In Mus)

Generation details of Serlui -B				
Sl. No.	Name of Station	Approved in T.O dated 28/03/2023	Proposed by P&ED	Deviation
1	Gross Generation		18.30	
2	Auxiliary Consumption		0.36	
3	Net Generation	6.49	17.94	11.45

Energy Charges

Rate of energy charge has been considered as Rs. 1.06 per unit in accordance with the Hon'ble Commission approved in the Tariff Order dated 28.03.2023. The total energy charge for FY 2025-26 has been provided accordingly. The table below provided the details of energy charges.

Table 12.19: Energy Charges for Serlui 'B'**(Rs. Crores)**

Energy Charges for Serlui 'B'				
Sl. No.	Name of Station	Approved in T. O. dated 28.03.2023	Proposed by P&ED Mizoram	Deviation
1	Net Generation	6.49	17.94	11.45
2	Rate	1.06	1.06	0.00
3	Total Energy Charge	0.69	1.90	1.21

Commission analysis:

The energy projected by P&ED from Serlui-B is by adopting 50.19% PLF for station still reeling under restriction for its full-fledged commissioning for various inexplicable reasons. Until last year FY 2022-23 The reason for adopting such high PLF for this plant and the sudden steep jump in PLF from FY2023-24 has been explained that they adopted historical actual generation in FY 2022-23 and H1 of FY2023-24 is not convincing to adopt.

Therefore, the Commission fees it appropriate to consider the net energy generation at 12.13MU being the actuals in FY2022-23 and not any more from Serlui-B for FY 2025-26 so long it do not achieve full-fledged commissioned plant status. Accordingly, the energy charges payable will also be at Rs. 1.286 Cr per Annum by adopting the energy unit rate as proposed by the P&ED for the indicated net generation of 12.13MU for this year prior to its full-fledged commissioning.

Energy Charges for Serlui 'B' (Commission approved)				
Sl. No.	Name of Station	Approved in T. O. dated 28.03.2023	Proposed by P&ED Mizoram	Now approved
1	Net Generation (MU)	6.49	17.94	12.13
2	Rate (adopted)	1.06	1.06	1.06
3	Total Energy Charge (Rs.Crs)	0.69	1.90	1.286

12.6.11 Aggregate Revenue Requirement (ARR)**Petitioner's submission**

Total ARR of the Generation function comprising of the commissioned SHPs and Serlui 'B' SHP which is generating infirm power is detailed in the table below:

Table 12.20: ARR of Generation Function projected by P & ED**(Rs. Cr)**

Sl. No.	Name of Project	Approved in T. O. dated 28.03.2023	Proposed by P&ED Mizoram	Deviation
1	Serlui 'A'	5.24	0.00	7.32
2	Tuirivang		0.00	
3	Khawiva		0.51	
4	Tuipui		0.24	
5	Maicham-I		0.98	
6	Teirei		1.47	
7	Tuipanglui		1.47	
8	Kau-Tlabung		1.47	
9	Lamsial		0.00	
10	Maicham-II		1.47	
11	Tlawva		1.78	
12	Kawlberm		1.97	
13	Serlui 'B'	0.69	1.90	
Total		5.93	13.25	7.32

P&ED Mizoram requests the Hon'ble Commission to kindly consider the submission and approve the ARR for the FY 2025-26.

Commission Analysis:

The ARR now approved for all stations in operation and Serlui 'B' (not yet commissioned) by the Commission is as detailed below:

Table 12.21: Generation Function ARR approved by the Commission for FY 2025-26**(Rs. Crs)**

Sl. No.	Name of Project	Approved in T. O. 28.03.23	Proposed by P&ED, Mizoram	Approved by Commission
1	Serlui 'A'	5.05	0.00	Nil
2	Tuirivang		0.00	
3	Tuipanglui		1.47	
4	Lamsial		0.00	
5	Khawiva		0.51	1.15
6	Tuipui		0.24	
7	Kau-Tlabung		1.47	
8	Teirei		1.47	
9	Maicham-I		0.98	3.49
10	Maicham-II		1.47	
11	Tlawva		1.78	
12	Kawlberm		1.97	

Sl. No.	Name of Project	Approved in T. O. 28.03.23	Proposed by P&ED, Mizoram	Approved by Commission
13	Serlui 'B'	0.69	1.90	1.29
	Total	5.74	13.25	5.93

Rs.1.15Crs of leasing charges are considered for the four (4) stations leased to M/s. Amazon Engineering and M/s. Assam Petroleum together and accordingly the cost is added in Generation cost, though Licensee has ignored this practical transaction for the above four stations.

13 Directives

13.1 General

The Commission has issued certain directives to P&ED in the past Tariff Orders, with an objective of attaining operational efficiency and streamlining the flow of information, which would be beneficial to the sector and the Petitioner, both in the short-term and long-term. The Commission expected that P&ED would take prompt action on the directives and monitor their implementation. However, in some cases, though action has been initiated, but overall seriousness with which the directives were issued by the Commission does not appear to have been realized by the P&ED and the status of compliances is not upto the mark.

As regards all the directives issued by the Commission in the Tariff Order dated March 15, 2024, P&ED has submitted the report to the Commission on compliance. Since, the erstwhile Commission was reconstituted as Mizoram Electricity Regulatory Commission (MZERC) with effect from dt.23.07.2024, hence the MZERC has reviewed the compliance of directives as submitted by P&ED and rearranges them by modifying the existing directive numbering. The status of existing directives with Commission's comment and new directives are as follows:

Status of Directives issued in the Tariff Order dated March 15, 2024

Directive 1 (Directive 4 in T.O for FY2024-25): Management Information System

The P&ED has not maintained proper data in respect of sales, revenue and revenue expenses as also the category wise/ slab wise number of consumers, connected load/ demand etc. for proper analysis of the past data based on actual and estimate of proper projections for consideration in the ARR and Tariff Petition.

The P&ED is directed to take steps to build credible and accurate data base and management information system to meet the requirements for filing ARR& Tariff Petition as per regulatory requirement and also suit the Multi Year Tariff principles which the Commission may consider at the appropriate time under Regulation-11 of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2008. *The formats software and hardware may synchronize with the Regulatory Information*

and Management System (RIMS) circulated by Central Electricity Regulatory Commission (CERC).

The P&ED should get a study conducted on computerized data base, on electronic media and shall give a proposal as to how the department proposes to achieve this. The P&ED is directed to provide age wise analysis before the next ARR and initiate action to update the arrears by 31/03/2011.

Compliance:

Power & Electricity Department Mizoram has maintained proper data in respect of sales of energy, revenue and expenses, category wise/slab wise number of consumers, connected load/demand etc. manually in the form of Consumer's Profile & Consumption data, Energy Audit & Accounting, etc. and, details of computerized consumers' data being implemented under RAPDRP can be extracted by using the applied billing software, i.e. SAP-ISU and this can be provided if required. While, in the case of the remaining consumers who are yet to be covered under Computerized Billing System using SAP - ISU, consumer indexing is under process and it is not possible to furnish status achieved. However, tender for Information Technology system with Operational technology (IT/OT works) works under Revamped Distribution Sector Scheme (RDSS) is already awarded to Inventive Software Solution (P) pvt Ltd on dated 05.08.2024 and the project is expected to completed within one year as per the timeline of Ministry of Power (MoP). After successful implementation of IT/OT the department is expected to have facility for Regulatory Information and Management System (RIMS).

Commission's comment

This directive was issued quiet long ago and the information hitherto called for submission is not relevant at present in view of the new IT system which has been taken up under RDSS. P&ED is requested to complete this IT with OT works as per the timeline of MOP. This directive is henceforth **dropped**.

Directive 2 (Directive 5 in T.O for FY2024-25): Pilferage of Energy

The P&ED has furnished the T&D losses at 41.7% during 2009-10 and projected the losses at 39.5% for 2010-11. The Department has not segregated the losses into technical and commercial losses. It is feasible that the losses projected may include

commercial losses on account of pilferage.

Pilferage of energy may be by illegal tapings from electrical lines, tampering of meters etc. The Commission feels that there is a need to launch an extensive drive to revoke illegal connections, if any, check meter tampering replacement of defective meters proper account of consumer of un-metered services and keep constant vigil so that corrective measures could be taken to reduce the AT & C losses. Requisite action may be taken as per the provisions under sections-135 and 138 of Electricity Act, 2003.

The P&ED is directed to furnish an action plan to arrest the pilferage.

Compliance:

The directive may be dropped as stated in the P&ED Tariff Order for FY2024-25 Page No.180. However, as desired by the Hon'ble Commission under Commission's comment, quarterly status report on number of cases being booked and penalties recovered in FY2024-25 shall be intimated to the hon'ble Commission.

Commission's comment

The directive is henceforth **dropped**. However, the P&ED should ensure that the report for FY2024-25 is duly submitted and quarterly report for the FY2025-26 onwards has been maintained properly for submission to the Commission immediately as and when called for it.

Directive 3 (Directive 6 in T.O for FY2024-25):

Metering of Consumer installations / Replacement of non- functional defective meters and providing meters to un-metered connections.

Compliance:

As desired by the hon'ble commission, Quarterly report of number of defective meters being replaced and updated number of Public Lighting Metering under AMC and LAD shall be submitted to the Commission for the year 2024-25.

Commission's comments

The P&ED should ensure that no connection is given without correct meter, the report for the FY2024-25 is to be duly submitted. Subject to the contentions of the Commission the directive will be disposed of.

Directive 4 (Directive 8 in T.O for FY2024-25): Transmission and Distribution Losses

The P&ED has projected the transmission and distribution loss at 39.5% (35% Distribution loss + 4.5% Transmission losses) for the year 2010-11.

The P&ED is directed to get Energy Audit conducted by providing meters on all the feeders (132 kV, 66 kV, and 11 kV) and at distribution transformers to identify the high loss areas and take appropriate measures to reduce both technical and commercial losses to the level fixed by the Commission. The P&ED shall also comply with loss reduction trajectory for T&D losses for the next three years.

The investment required to reduce the losses shall be included in the investment plan for augmentation of T&D system be submitted to the Commission. Effective technical and administrative measures shall be taken to reduce the commercial losses. The action plan for energy audit and loss reduction measures shall be furnished to the Commission by June 2011.

Compliance

The T&D Loss for FY 2021-22 and 2022-23 as per audited Energy in line with audit format prescribed by Bureau of Energy Efficiency (BEE), Ministry of Power, Govt. of India is calculated as 18.94% and 19.37% respectively. Since submission of energy auditing for every financial year by accredited Energy Auditors and Energy Managers to BEE is mandatory for publication as per Bureau of Energy Efficiency (Manner and Intervals for Conduct of Energy Audit in electricity distribution companies) Regulations, 2021, Power & Electricity Department Mizoram conducted Energy Auditing for the FY 2021-22 and FY 2022-23 with consultant of a BEE empaneled firm, i.e. A-Z Energy Engineers Pvt. Ltd. A copy of the audited report of the FY 2021-22 and FY 2022-23 is available in **soft copy if required**. Also, the Energy Audit Report for FY 2023-24 is under process and T&D loss for FY 2023-24 is expected to be furnish soon. Action has been taken by replacing damaged/ rectifying doubtful meters at transmission as well as distribution level for assessing real time T&D losses and, Power & Electricity Department Mizoram has taken action since the FY2022-2023 to reduce T&D Loss and Commercial related losses under Loss Reduction (LR) work and IT/OT works of Revamped Distribution Sector Scheme (RDSS). Necessary action has been taken for obtaining actual T&D losses within the state under SAMAST Project and, Feeder & DT metering under RDSS.

Commission's comments

As per the above status of compliance, the P&ED has been conducting energy audit

with consultant of a BEE empanelled firm, i.e. A-Z Energy Engineers Pvt. Ltd. The P&ED also has been taking action since FY2022-23 to reduce T&D and Commercial losses under RDSS by replacing damaged meters and rectifying doubtful meters at transmission and distribution levels. However, it is observed that the Distribution losses are still in increasing trend even in FY 2023-24 true-up filing submission at alarming 28.01% and the losses too have gone past the approved losses many folds with no sign of any improvement. This indicates the glaring lack of control of P&ED on curtailment of Losses. Again, the Loss projections made in APR filing for FY 2024-25 is now at 26.75% while it has to be around 14% loss level as compared to RDSS AT&C loss trajectory level of 14% which may not be unreachable in the near future. The increasing losses indicates prevalence of lots of commercial related losses unnoticed in distribution sector rather than technical losses.

The P&ED should take action to identify the high loss areas from the energy audit and take appropriate measures to reduce both technical and commercial losses in those areas immediately. The P&ED should also take more effort to arrest pilferage and non-billing consumer at different places. Besides, it is advised to precisely indicate the T&D Losses by next year ARR filing submission. P&ED should explain in detail to the Commission as to how the collection efficiency and AT&C loss level are being planned to improve during the FY2025-26 for various consumers in Mizoram and submit the explanation latest by **26.6.2025**.

Directive 5 (Directive 10 in T.O for FY2024-25): Investment and Capping of Capital Expenditure.

Annual Investment Plan should be submitted to the Commission and approval of Commission should be obtained for all major capital works costing ₹5.00 Crores and above before execution of the works.

Compliance

As desired by the hon'ble commission, P&ED shall apply for approval of the Commission before execution of major capital works costing Rs.5.00 crores and above after obtaining approval of the State government in this regard as P&ED is government department under the Government of Mizoram.

Commission's comments

Noted. The P&ED is bound to obtain prior approval of the Commission **before execution of the major capital works costing Rs.5 crores and above in future**. It is the prerogative that for projects executed unilaterally can be disallowed by the Commission in the absence of prior approval leading to ignorance of those assets being capitalised and consequential recurring benefits financially. In view of the commitment given by the P&ED above, the directive is henceforth **dropped**.

Directive 6 (Directive 11 in T.O for FY2024-25): High Employee Cost of the Department

The employee cost projected by the P&ED is on very high side and alarming. P&ED is therefore directed to take measures to control the high employee cost.

Compliance

Considering an increase in annual increment of regular employees and hike in dearness allowance as well as regularization of provisional employees are the main factor for high employee cost of the department. Also, P&E Deptt like some other department under the State Government, filling up of vacant post, transfer and posting is the prerogative of the state government. Any new recruitment in staff if any shall be intimated to the Hon'ble Commission for approval of such recruitment from the Hon'ble Commission.

Commission's comments

This directive is intended to be more cautious/judicious in the recruitment of staff based on the need basis but not for allied reasons. It was already directed in Tariff Order for 2020-21 that any further recruitment in staff needs to be intimated to the Commission beforehand with proper justification of such appointment and seek approval of the same before claiming in the future ARR submissions. So far, no suitable action taken report was ever reported by the P&ED on this aspect.

The P&ED should note that the approval of the Commission is necessary for examination of the additional recruitment cost to be reflected in ARR. Otherwise, if the employee cost is very high with respect to other costs of operation, the Commission will allow costs upto justifiable level only.

Directive 7 (Directive 16 in T.O for FY2024-25): Restructuring of Staff

P&ED has stated that the number of employees as on 31st March, 2012 is 4575. It is very high. The Department however, has pleaded shortage of staff for poor performance. The Commission has observed that deployment of the existing staff is not rational. P&ED is directed to prepare a restructuring plan by 31st December, 2014 and submit a report.

Compliance

Power &Electricity Department Mizoram has already laid out a proposal plan for restructuring of staff in different functions viz. Transmission, Distribution and Generation and, the proposal was submitted to the Government on Dt 27.06.2023 vide letter No. A. 11013/19/2020-EC(P)/106 and reply from the Government is still awaited. Unless and until re-structuring is implemented by the Government of Mizoram till date, functional wise employees & staff utilization in the organization, i.e. Power & Electricity Department Mizoram cannot be provided to the Hon'ble Commission

Commission's comments

The pointed issue is that P&ED shall provide the function wise employees & staff utilisation in the organisation. The progress intimated by addressing the State Government is a desirable change noticed by Commission in this matter.

The proposed restructuring plan along with the decision of the Government in this matter shall be submitted to the Commission as soon as possible.

Directive 8 (Directive 19 in T-O for FY2024-25): Survey and physical verification of consumer's connections.

To conduct survey and physical verifications to find out their actual connected load and category in which supply is being availed and to analyse category wise single phase and 3 phase connections with their annual energy consumption and status of meters. This work should be completed by 31.10.2014 and details be furnished in next tariff petition invariably.

Compliance

As desired by the hon'ble Commission, efforts in respect of spot verification of consumer's connections shall be continuously taken by P&ED to earn correct revenue.

Moreover, Annexure – III is being re-submitted vide No.T-23037/02/22-EC(P)/Com/6 dt.16.01.2025 as desired by the hon'ble commission.

Commission's comments

This directive is linked with the compliance of Directive 10 mentioned below and henceforth **dropped**. However, P&ED should note that the revenue yield enhancement due to proper classification is very much desired on a righteous way. The Commission wishes the Licensee to make this exercise continuously to earn more revenue in future.

Directive 9 (Directive 28 in T.O for FY2024-25): Segregation of expenses among generation, transmission and distribution.

From annual accounts of FY 2015-16 onwards all expenses such as employee cost, R&M expenses and Administration & General expenses and interest charges and depreciation shall be segregated among the **three functions**, viz. generation, transmission and Distribution.

Compliance

Head of Department level Sub Committee for restructuring of the Department was formed in the 18th Department Operational Co-Ordination Committee (DOCC) and the concept note was laid out in the 19th DOCC meeting held on 26.05.2023 which was approved by the Meeting and was submitted to the Government on Dt 27.06.2023 vide letter No. A. 11013/19/2020-EC(P)/106. A copy of the letter sent to the Govt. is enclosed as ANNEXURE - IV and reply from the Government is still awaited.

Commission's comment

The P&ED should pursue function-wise segregation of accounts and expenditure vigorously. The status of progress shall be communicated to the Commission **quarterly**.

Directive 10 (Directive 33 in T.O for FY2024-25): Installation of meters with MDI facility

P&ED should start using meters having MDI facility as CEA Meter Regulation, 2006. Contracted load/demand as well as connected load/demand should be recorded for consumers and fixed charge billed based on contracted load/demand. Contracted load/demand should be reviewed annually based on MDI record and supply code,

2013. All consumers under RAPDRP towns should be completed by 30.09.2016. Quarterly progress should be submitted to the Commission.

Compliance

As desired by the hon'ble Commission, Annexure-V : status of achievement of Energy meters with MDI facility under P&ED during 3rd & 4th Quarter of the FY 2022-2023 **is resubmitted to the Commission vide Letter No.T-23037/02/22-EC(P)/Com/6 dt.16.01.2025**

Commission's comment

This directive is **dropped** as the Commission is satisfied with the report furnished.

Directive 11 (Directive 40 in T.O for FY2024-25): Pre-Paid meters and Smart meters

The P&ED is directed to examine the feasibility of installation of pre-paid meters/smart meters in a phased manner so as to improve revenue collection and reduce leakages in power consumption which will cause reduction in distribution losses.

Compliance:

The feasibility of installation of pre-paid / smart meters is already examined and 2,92,081 Nos. of pre-paid /smart meters is prepared to be installed under Smart metering works of RDSS. LOA on installation of smart metering is given to Satnam Global infra Ltd. on dated 14th October 2024 and the installation is expected to be complete with 27 months from the date of signing of Contract Agreement (contract agreement sign on dated 21.11.2024) as per the timeline given by Ministry of Power (MoP), Govt. of India.

Commission's Comments

As above it is noted that Smart metering installation has been undertaken under RDSS. The progressive reply in this matter is appreciated. However, the actual progress achieved with number of consumers installed with smart meters should be submitted to the Commission quarterly during the FY2025-26 onwards. Besides, **the copy of the contract awarding letter to the M/s Satnam Global infra Ltd should be provided to Commission latest by 26.6.2025 for record.**

Directive 12 (Directive 42 in T.O for FY2024-25): P&ED has to request State Government to allocate head of account for Generation, Transmission & Distribution

P&ED should request the State Govt. to allocate different heads of account for (i) Generation, (ii) Transmission and (iii) Distribution. Projection /Estimated expenditure should be classified accordingly or segregate the accounts by Department itself. Audited figure should also be in line with the allocated heads of account.

Compliance:

Department level Sub Committee for restructuring of the Department was formed in the 18th Department Operational Co-Ordination Committee (DOCC) and the concept note was laid out the 19th DOCC meeting held on 26.05.2023 which was approved by the Meeting and was sent to the Government on Dt 27.06.2023 vide letter No. A. 11013/19/2020-EC(P)/106. Unless and until Restructuring of Department is initiated it is not possible to allocate head of account for Generation, Transmission & Distribution in actual practice.

Commission's Comments

The P&ED should continue to take up & discuss this matter with Finance Department of the State until it allocates individual accounts heads for each function-wise separately. The Copy of the letter addressed to Government should be communicated to the Commission latest by 26.6.2025.

Directive 13 (Directive 46 in T.O for FY2024-25): P&ED should strive to achieve AT&C Loss set in UDAY Scheme signed under unilateral agreement.**Compliance:**

As desired by the hon'ble Commission, detailed report in connection with T&D losses is furnished under Energy balance calculation Table No.2.5 of Part-III(A) in the ARR filing for FY 2025-2026.

Commission's Comments

The reply provided is very casual in nature and no way relevant to the content of the above directive. The referred table contains the Energy Balance table but not address the intended content of the Directive. However, this directive shall be treated as **dropped** henceforth as it is linked to Directive 4 above.

Directive 14 (Directive 1 under New Directive in T.O for FY2024-25): Voltage wise Cost of supply submission

The Licensee shall submit the voltage-wise cost of supply in the next year ARR filing duly providing all the relevant details with regard to each distribution voltage level along with voltage wise losses being incurred. This data is very much essential for arriving at the cost of supply to various categories of consumers at the time of tariff determination duly adhering to the National Tariff Policy principles.

Compliance:

As per the directive of the Hon'ble Commission, voltage wise cost of supply is included in the tariff petition for FY 2025-26.

Commission's Comments

Noted and the Directive is treated as complied and henceforth dropped. The submitted information is being examined by the Commission for finalisation of Voltage wise cost of supply for FY2025-26.

Directive 15 (Directive 4 under New Directive in T.O for FY2024-25): INSTALLATION OF SMART METERS

Smart meters have the advantages of remote metering and billing, implementation of peak and off-peak tariff and demand side management through demand response. These would become essential in future for load generation balancing due to increasing penetration of intermittent generation like wind and solar power. in line with Clause 8.4 of National Tariff Policy 2016, the Commission, therefore mandate Smart meters for the following consumers:

- a) Consumers with monthly consumption of 500 units and more at the earliest but not later than 31.12.2019.
- b) Consumers with monthly consumption above 200 units by 31.12.2019.
- c) The Smart meters shall also be provided to all those consumers who sell back electricity to the grid as and when they require by 15.03.2020.

Action taken report on installation of smart meters for the consumers stated above may be submit by the 1st week of January 2020 and again by end of March 2020 to the Commissions to monitor progress.

Compliance:

The feasibility of installation of pre-paid / smart meters is already examined and 2,92,081 Nos. of pre-paid /smart meters is prepared to be installed under Smart metering works of RDSS. LOA on installation of smart metering is given to Satnam Global infra Ltd. on dated 14th October 2024 and the installation is expected to be complete with 27 months from the date of signing of Contract Agreement (contract agreement sign on dated 21.11.2024) as per the timeline given by Ministry of Power (MoP), Govt. of India.

Commission's Comments

As above, it is noted that Smart metering installation has been undertaken under RDSS. The progressive reply in this matter is appreciated. This Directive is hence forth **dropped** as it is linked to Directive 11 above.

Directive 16 (Directive No.2 under Fresh Directive in T.O for FY2024-25)**Outstanding Interest and Financial charges to State Government Loans**

Keeping In view of the above, the actual Interest & Finance charges amount of Rs. 1.90 Crores for the FY 2018-19 though not paid back to State government Loans, the Commission approves these charges in true-up **but directs the P&ED to clear all the outstanding arrears to the respective lenders by the end of the FY 2020-21 as all those interest charges were passed on to the consumers and were reimbursed to the Department. In case of failure to repay these charges, then the entire amount outstanding as on 31.03.2021 would be clawed back by the Commission in the ensuing ARR determination.**

Compliance:

As the Hon'ble Commission did not approve interest & finance charges for the FY 2025-26. P&ED also does not claim any amount relates to interest & finance charges for the FY 2025-26. However, the actuals shall be submitted at the time trueing-up.

Commission's Comments:

As actual has been examined at the time of True-up exercise, the directive is henceforth **dropped**.

Directive 17 (Directive No.3 under Fresh Directive in T.O for FY2024-25):-Levy of penalties for non-payment of revenue dues

The Commission feels, that the imposing of penalties/late payment surcharges is not happening at the level expected and unless penalties are strictly imposed the revenue collections is bound to be poor and the Organisation will have to face financial crunch on account of their own inaction. This is not a healthy practice and P&ED shall take serious note of the situation and order for intensive special revenue collections drive and see that these huge dues from sale of power comes down very soon by drawing an action plan and intimate the same to the Commission.

Compliance:

As desired by the hon'ble Commission, 1st and 2nd of Quarterly Report on levy of penalties for non-payment of revenue dues for the FY2024-2025 is being submitted to the Commission vide Letter No. T 23037/02/2022-EC(P)/Com/4 Dt. 16.04.2025.

Commission's Comments:

Noted. In view of the seriousness given towards imposing penalties the directive is henceforth **dropped**.

Directive 18 (Directive No.5 under Fresh Directive in T.O for FY2024-25): Levying of the applicable charges in the case of Mixed Loads services:

Where any part of the connection given under one specific category, it shall not be utilized for any other purpose other than for which it is released that involves different higher applicable rate in the tariff schedule. A separate connection shall have to be taken invariably for such other loads/purpose under appropriate category, failing which the entire consumption (i.e., existing category consumption and additional consumption for different purpose) shall be billed in the category of consumption that corresponds to a higher applicable tariff for which any part of that connection is utilised.

Compliance:

Necessary action has been taken by P&ED to implement levying of the applicable charges in the case of mixed loads services in line with Electricity Supply Code Regulations issued by State Regulatory Commission and, action taken report shall be submitted to the Commission for every quarter.

Commission's Comments:

Noted. The P&ED should take action as required by the Electricity Supply Code Regulations and submit action taken report every quarter. The directive is henceforth **dropped**.

**Directive 19 (Directive 1 under Fresh Directives in FY 2022-23 in T.O for FY 2024-25):
Functional wise submission of ARR with relevant Appendix prescribed.**

From FY 2023-24 onwards, the licensee shall file ARR submission for it each functional separately with corresponding Appendix and annexures strictly as per the MYT Regulation guidelines without seeking any exemption for its compliance.

Compliance:

Submission of function wise ARR is compiled in the Tariff Petition for FY 2025-26. However, as P&ED is a single integrated utility with no to allocate head of account for Generation, Transmission & Distribution in actual practice. Hence, submission of Functional wise ARR is made base on project. However, the actual data of the department will be reflected in the true up order.

Commission Comments:

The latest submission is a routine submission with same old excuses as made in the past and no new actual details of function wise ARR is indicated. It is not treated as complied with and it is still in force.

**Directive 20 (Directive 2 under Fresh Directives in FY 2022-23 in T.O for FY 2024-25):
Submission of Non-domestic, Commercial and LT Industrial categories
with no unit slabs from FY2023-24.**

There shall not be any multiple slabs in the case of Non-domestic, Commercial and LT Industrial consumer Categories and submit with single slab of usage.

Compliance:

In line with the existing policy of the Government of Mizoram, proposal for introduction of single slab in the tariff structure is not proposed by P&ED.

Commission Comments:

No single slab submission for Non-public Profit purpose categories was adopted and still have more than one slabs in the submission made in FY 2024-25 & FY2025-26. Hence, the directive is not complied by P&ED.

Directive 21 (Directive No.1 under Fresh directives for FY 2024-25 in T.O for FY2024-25): To Purchase REC certificates pertaining to FY 2022-23:

As per the power purchase cost approval given in APR ORDER FOR FY 2022-23, the P&ED is required to procure RE Certificate to the tune of Rs.1.74Cr, but the same was not fulfilled by P&ED during the scrutiny by Commission, the P&ED True-Up proposal and it was confirmed by P&ED in their replies to Additional Information queries called for. Commission now direct the P&ED to refer to clause-6(1) of the Renewable Purchase Obligation and its Compliance) Regulations, 2010 and comply with the stipulated provisions of the said clause and report the compliance within 15 days of issuance of this Order. Failing which the clause 6(2) will be invoked by the Commission in this matter without any hesitance.

Compliance:

As per annual performance Review (APR) for FY 2022-23, projected/ estimated requirement for procurement of REC certificate is Rs. 1.74 crore. However, as per actual Renewable Energy required to be procured for RPO of FY 2022-23 based on compliance report of RPO obligation was 2.55MU. Hence, Renewable Energy was procured at the cost of Rs. 1.39 crore from NVVN Ltd during FY 2022-23 through Short Term Open Access (STOA) for complying of Renewable purchase obligation as mandated by Ministry of power, Gov't. of India and Joint electricity regulation for Manipur & Mizoram, the same is reflected in the Tariff True Up Petition for FY2022-23 and already approve by JERC (Manipur & Mizoram) in the tariff order for FY 2024-25.

Commissions' Comments:

P&ED compliance report is noted. The directive is henceforth **dropped**.

New Directives

In continuation to the above directive, the Commission hereby issues the following new directives to P&ED:

Directive 1: Consumer services related issues

The service lines, transformers and associated equipment need proper maintenance by the Petitioner for smooth and continuous power supply to the consumers. The

Commission, therefore, directs P&ED to pay special attention for meeting the Standards of Performance (SoP) parameters as specified in existing regulations and amendments thereof and compensation paid to consumers for default in complying with SoP.

The Ministry of Power, Government of India has issued the Electricity (Rights of Consumers) Amendment Rules, 2024 and other notification, where timelines for new connection in urban and rural areas; pre-specified connection charges up to 150 kW and issuance of simplified bills in regional languages for ease of understanding have been mentioned. The Commission has taken up the task to include these changes in the Electricity Supply Code Regulations. However, this would take some time and therefore, P&ED is directed to comply with the Electricity (Rights of Consumers) Amendment Rules, 2024 with regard to alignment of timelines as specified in the Rules for the benefit of the consumers.

Directive 2: Reduction in Distribution Loss

Distribution loss is a critical factor, which critically affects the cost of supply of electricity as well as the financial health of a Distribution Licensee. P&ED should identify one Division in each Circle where the Distribution Loss inclusive of commercial loss is the highest and submit a detailed Action Plan for reduction of the same latest by 30.06.2025.

TARIFF SCHEDULE

APPENDIX

TARIFF SCHEDULE

1. General Conditions of Supply (For all categories of Consumers):

1.1 Rebate/Surcharge for availing supply at voltage higher/lower than base voltage: In spite of feasibility/availability to given supply at the specified voltage for the corresponding load as stipulated in clause-3.2 of the JERC for Manipur and Mizoram (Electricity Supply Code) Regulations, 2013 adopted by MZERC (with up to date amendments).

- (i) For consumers having contracted load up to 50 kW only, but the supply is given at higher voltage (HT/EHT level), then a rebate of 5% would be admissible on the energy and fixed charges applicable to that class of consumer for such period, he/she is so availing the supply at that voltage level.
- (ii) For consumers having contracted load above 50 kW, but the consumer desires to draw supply at a voltage lower than that of base voltage he/she is eligible avail for corresponding load as per clause of supply code mentioned above, the consumer shall be required to pay additionally an extra charge of 10% on the bill amount (Energy charge & Fixed charge) calculated at the applicable voltage category tariff to which he/she should have normally availed.
- (iii) All voltages mentioned above are normally available rated voltages as per clause 3.2 of the Electricity Supply Code Regulations, 2013, with up to date amendments.

1.2 Payment: All payments shall be made by way of Cash/Banker's Cheque/by Demand Draft/through Money Order/E- transfer on line. While in the case of cash payments (the cash amount limit will be determined and notified by the Licensee in advance suiting his convenience).

1.3. Validity of existing Recharge Voucher: In the case of a consumer with prepaid meter supply having purchased recharge voucher prior to the effective date of new tariff, the existing voucher shall be continued until such time the recharged voucher amount is fully exhausted without levying any extra charge to such consumer. Therefore, as far as possible the Licensee shall issue recharge voucher(s) cautiously

in such a way that the voucher validity period doesn't exceed the number of days beyond the effective date from which new tariffs comes into force.

1.4. Due date: In case monthly bill is being paid by cheques mode it shall be issued **three (3) days** in advance from the normal due date specified for that bill. While, in the case of payment through online bank transfer/credit card, it shall be **one (1) day** in advance from the normal due date specified for that bill. The licensee shall ensure that the bill is delivered to the consumer by hand/post/courier at **least ten (10) days** prior to the payment due date of the bill. (Clause 6.1 & 6.5) of the Electricity Supply Code Regulations, 2013 with up to date amendments).

1.5. Surcharge for late payment of bills: If payment is not received within the stipulated due date, a surcharge @ **two percent (2%) per month** (at simple interest) will be levied upon the outstanding principal amount for the actual number of days of delay occurred for every successive period of thirty (30) days or part thereof or until such period of time the due amount is left unpaid in full.

1.6. Single Point Delivery: This tariff is based on the supply being given through a single point of delivery and metering at one voltage level. If Supply is also availed by the same consumer from another point at other/different voltage level, then such consumption shall be metered separately and be billed accordingly treating it as a separate connection.

1.7. Voltage and frequency: All voltages and frequency shall be as per the provisions of clause 3.1 and 3.2 of the Electricity Supply Code Regulations, 2013 (with all latest amendments made).

1.8. Power Factor Incentive / Surcharge: -

- a) If the average monthly power factor of a HT consumer/LT 3Phase consumer /LT Industrial consumer increases above 95%, he shall be paid **an incentive** at the following rate:

Type of Event	Incentive
For each one percent increase by which his average monthly power factor is above	One percent (1%) of the total amount of the bill under the head " energy charge "

Type of Event	Incentive
95%, up to unity power factor.	

- b) If the average monthly power factor of the HT consumer/LT 3Phase consumer / LT industrial consumer falls below 90%, he shall pay a **surcharge in addition** to his normal tariff, at the following rate:

Type of Event	Surcharge
For each one percent by which his average monthly power factor falls below 90% up to 85%	One percent (1%) of the total amount of the bill under the head 'energy charge'

- c) If average monthly power factor of the HT consumer/LT 3- phase consumer /LT industrial consumer falls below 85%, he shall pay a **surcharge in addition** to his normal tariff at the following rate:

Type of Event	Surcharge
For each one percent by which his average monthly power factor falls below 85%.	Two percent (2%) of the total amount of the bill under the head 'energy charge'

- d) If the average monthly power factor of the HT consumer/LT 3Phase consumer /LT industrial consumer falls below 70%, then the Licensee shall have the right to disconnect supply to such consumer's installation after serving a notice of fifteen (15) days period. Supply may be restored only after steps have been taken to improve the power factor to desired level to the Utilities (licensees) satisfaction. However, this is without prejudice to the right to levying surcharge for such low power factor in the event of supply not being disconnected to such consumer.
- e) For this purpose, the "average monthly power factor" is defined as the ratio of total 'Kilo Watt hours' to the total 'Kilo Volt Ampere hours' recorded during the month. This ratio will be rounded-off to two-digit figures after decimal point. Figure 5 or above, in the third place after decimal point be rounded-off to the next higher figure to make it to a two-digit figure after the decimal point.
- f) Notwithstanding the above, if the average monthly power factor of a new consumer is found to be less than 90% at any time during the first 6 (six) months from the date of release of connection, and later on if he maintains the average monthly power factor at level not less than 90% in subsequent three months,

then the surcharge so levied in the earlier bill on account of low power factor during the said period, shall be withdrawn and credited in the next month's consumption bill.

1.9. Transformer loss: In the case of HT supplies where metering of the HT service connection is on the Low-Tension side i.e. on the secondary side of the transformer, the average losses in the transformer calculated as per the provisions at clause 5.7 of the Electricity Supply Code Regulations, 2013 with its amendments thereof from time to time shall be added to the energy consumption indicated by the meter. However, metering of the HT service connection on the LT side of the transformer shall not continue more than six months from the effective date of the Tariff Order for FY 2025-26. If it is continued beyond the six months, the transformer loss shall no longer be added to the energy consumption and the consumer shall be billed based on the energy consumption indicated by the meter:

1.10. Rounding of Contracted Load/billing demand: For the purpose of calculation of fixed/demand charge in the monthly billing, the contracted load/billing demand shall be taken on actual basis as recorded by DISCOM official. Where the contracted load/billing demand found below 0.5 kW/ kVA shall be taken as 0.5 kW/kVA as the case may be. While all contracted load/billing demand recorded above 0.5 kW/kVA shall be taken as per actual recorded details available in the consumer historical profile data maintained by the Licensee.

The Licensee should update Contracted load/Billing demand as per the provisions of clause-4.108 of Electricity Supply Code Regulations, 2013 (with up to date amendments).

1.11. Mixed Load: - No part of the connection given for any specific purpose under defined category shall not be utilized for a different purpose(s) other than for which such service connection was released which attracts a tariff higher than already released service category. A separate additional connection shall have to be taken invariably for such loads/purpose under different applicable category, failing which the entire consumption (i.e., existing category consumption and additional energy consumed for different purpose) shall be billed in that applicable category

corresponding to higher tariff rate for which any part of that service connection is utilised.

1.12. Rounding of Rupees: Each components of bill, such as energy charge, fixed/demand charge, meter rent, surcharge, rebate of any kind, etc, including interest, involving fraction of a rupee should be rounded-off individually to nearest rupee (fraction of 50 paise and above be rounded-off to the next higher rupee and fraction lesser than 50 paise be ignored). In case of non-availability/scarcity of small change of rupees lesser than Rs.10/-, the consumer may be permitted to tender next higher amount divisible by 10 and however the excess amount so tendered by consumer shall be adjusted as credit in the next bill and interest on such excess will not be allowed or paid.

1.13. System of L.T Supply

1.13.1 Low Tension Supply

- i) Alternating Current 50 Hz, single phase 230 Volts up to 8 kW.
- ii) Alternating Current, three phase, 400 Volts, for loads above 8 kW and up to 50 kW subject to the availability of supply. Wherever 3-phase connection is required for load less than or equal to 8 kW, necessary justification shall be provided along with such request for consideration of licensee for extending such supply.

1.13.2. HT Supply: Supply of Electricity to the Consumers at voltage above 400V as per clause-3.2 of Electricity Supply Code Regulations, 2013. with up to date amendment.

1.14. The maximum demand: The maximum demand means the highest load measured in average kVA or kW at the point of supply of a consumer during any consecutive period of 30 (thirty) minutes during the month or the maximum demand recorded by the MDI during the month.

1.15. Billing demand: As defined in Clause 2.3(12) of the Electricity Supply Code Regulations, 2013 with latest amendments. The clause reads as follows:

“Billing Demand means highest of the following: -

(i) The Contract demand, or (ii) the maximum demand indicated by the meter during the billing cycle, or (iii) the Connected load sanctioned wherever contract demand has not been provided in the supply agreement.”

1.16. Government Subsidy: Section 65 of E.Act 2003 is hereby reproduced:

“ Provision of subsidy by State Government:- If the State Government requires the grant of any subsidy to any consumer or class of consumers in the tariff determined by the State Commission under section 62, the State Government shall, notwithstanding any direction which may be given under section 108, pay, in advance and in such manner as may be specified, the amount to compensate the person affected by the grant of subsidy in the manner the State Commission may direct, as a condition for the licence or any other person concerned to implement the subsidy provided for by the State Government:

Provided that no such direction of the State Government shall be operative if the payment is not made in accordance with the provisions contained in this section and the tariff fixed by the State Commission shall be applicable from the date of issue of orders by the Commission in this regard.”

Therefore, if the government subsidy is received promptly, the licensee shall adopt tariff ‘A’ (Subsidised Tariff) or in the event of non-receipt of said subsidy, the Licensee is at liberty to implement tariff ‘B’ (Full Cost Tariff i.e., without Subsidy) during the currency of period of its non-receipt.

There could be a situation, where the outstanding monthly subsidy due from Government was released with delay after passage of much time elapsing and thereby consumers are to be billed at full cost tariffs in that relevant month or months during which no subsidy was paid. Later on, if subsidy arrears were released and received by Licensee, the entire excess amount so charged to all consumers on account of full cost tariff adoption shall have to be refunded as deduction by treating such excess amount laying with Licensee **as advance payment** by the licensee **at one time** in the immediate monthly billing cycle

where bills are being issued to respective consumers soon after receipt of such subsidy relating to the past month/months. If in case, the excess amount so refundable is exceeds the monthly billing amount to be so adjusted to any consumer/ consumers, then such excess amount left unrefunded may be carried forward and be adjusted in the following monthly bill/bills to be issued to such consumer/ consumers until full refund settlement is made to consumer(s).

1.17. Applicable Taxes or Duties:

The tariff notified above does not include any taxes (including GST) or duties etc., on electrical energy that may be payable at any time in accordance with changes in any Law or Central Government/State Government Rules in force. Such charges, if any, shall be payable in addition to tariff charges by the consumer/user.

Accordingly, applicable GST shall be charged/levied on (i) **Application Fee** for releasing any Service connection (ii) Rental Charges against metering equipment, (iii) Testing Fee for meters/transformers, capacitor etc. and (iv) Labour Charges to be borne by customers for shifting of meters or shifting of service lines.

1.18. Contingency: In case of any inconsistency between provisions of this Tariff schedule and the Electricity Supply Code Regulations 2013 (with up to date amendments). the provision, meaning and contend of the said Supply Code shall only prevails.

A: SUBSIDISED TARIFF**2 LT SUPPLY****2.1 LT Category-1: Kutir-Jyoti Service**

Applicability: Applicable to all household who has been given connection under Kutir-Jyoti Scheme or similar connection under any scheme of the State Government or Central Government for the benefit of poorer section for domestic purpose. If the total consumption in three months exceed 45 kWh, as per existing norms of KJS unless superseded by other new norms, the connection should be converted to LT Category-2 (Domestic).

Permitted Load: Initially starts with one single light point connection which can be extended later on by one or two light points or as per norms specified by the competent authority from time to time.

Rates: (Option-1)

a) Fixed charge		Rs 25.00 per month per Connection
b) Energy charge (per month)		
i)	First 20 kWh	@ Rs 2.55 per kWh
ii)	All units above 20 kWh	@ Rs 3.55 per kWh

Note-1- if the total consumption of any consecutive three months is more than 45 kWh, the consumer shall be re-categorized/converted under normal domestic category permanently from the very 1st/2nd/3rd month of that consecutive three months. Whenever, total units consumed exceeds the specified limit of 45 kWh from that month instance the bill be served treating the consumer permanently under domestic category. (clause 4.90 of the erstwhile JERC for Manipur and Mizoram (Electricity Supply Code) Regulations, 2013 with latest amendments may be referred to)

Note-2: Where a Kutir Jyoti /BPL consumer was converted as domestic consumer, the re-categorised/converted consumer shall be required to deposit load security/meter security amount as applicable for a domestic consumer but it should not contravene the provisions of clause 5.9 of the JERC for Manipur and Mizoram (Electricity Supply Code) Regulations, 2013 with latest amendments.

No ToD tariff will be applicable for consumers who opts for Option-1 tariff

Rates: (Option-2- ToD Tariff based)

a) Fixed charge	Rs 25.00 per month per Connection	
b) Energy charge (per month)		
i)	06.00Hrs to 17.00Hrs (Normal)	@ Rs 2.45 per kWh
ii)	17.00Hrs to 22.00Hrs (Peak)	@ Rs 3.10 per kWh
iii)	22.00Hrs to 06.00Hrs (Night/Off-PeK)	@ Rs 1.95 per kWh

Note:- Though TOD Based Tariffs has been introduced under Option-2 its applicability will start when Distribution Licensee put up all necessary arrangements (such as metering, data communication & billing software etc) is put in place.

2.2 LT Category - 2: Domestic Service

Applicability: Applicable for supply of energy exclusively for domestic purposes only in domestic premises. **The Domestic consumer is qualified to be in this category, if dwelling house has attached kitchen/kitchen facility.** This is applicable for each floor for a multi storied building. The Tariff is applicable to supplies for general domestic purposes such as Light, Fans, Heating devices, Television, VCR/VCP, Radio, Refrigerator, Air-conditioner, lift motors and all others appliances only for bona-fide residential used. This tariff is also applicable to Orphanage/recognised charitable Institutions where no fees/rental collection of any kind whatsoever are being charged. *This will not be applicable to institutions conducting commercial activities of any nature.*

Tariff Rate applicable

A consumer may opt for one of the following options depending on his requirements by prior intimation to concerned billing unit of P&ED MIZORAM. A consumer may change his option only after one year of availing that particular option.

Initially, unless the consumer applied for Option – 2, all the existing consumer under this category shall be treated under Option – 1

Rates: (Option-1)

a) Fixed charge		Rs. 50.00 per month per kW of contracted load
b) Energy charge (per month)		
i)	First 100 kWh	@ Rs 4.90 per kWh
ii)	Next 100 kWh	@ Rs 7.10 per kWh
iii)	All units above 200 kWh	@ Rs. 8.20 per kWh

No ToD tariff will be applicable for consumers who opts for Option-1 tariff

Rates: (Option-2- ToD Tariff based)

a) Fixed charge	Rs 50.00 per month per kilowatt (kW)	
b) Energy charge (per month)		
i)	06.00Hrs to 17.00Hrs (Normal)	@ Rs 5.00 per kWh
ii)	17.00Hrs to 22.00Hrs (Peak)	@ Rs 6.35 per kWh
iii)	22.00Hrs to 06.00Hrs (Night/Off-Peak)	@ Rs 3.85 per kWh

Note 1: Even though, TOD tariff has been determined under Option – 2, the consumer may start only when the Distribution Licensee put all necessary system (Metering arrangement, data communication & billing software etc.) is kept in place.

Note 2: If any part of the domestic connection is utilized for any use other than dwelling purpose like commercial, industrial, etc., a separate connection should be taken for such loads under appropriate category, failing which the entire consumption shall be treated as the case may be, in the corresponding category with applicable tariff.

2.3 LT Category 3: Non-Profit Public Service (Non-Domestic previously)

Applicability: Applicable for supply of energy to all lights, all types of fans, heating devices, Television, VCR/VCP, Radio, Computers, Refrigerator, Air Conditioner, lift motors, water pump and all other electrical appliances **for the purpose of public interest including other small power.** This tariff includes power loads for Non-Profit Public purposes like Government offices/ establishments / institutions and also where no rental charges are levied such as offices, hospitals, nursing homes, clinics, dispensaries, health centres, schools, colleges, libraries, research institutes, boarding / lodging houses, government rest houses, tourist lodges, guest house, circuit house, rest houses, Go-downs; Public building/hall, community halls/YMA halls (not for hiring), religious premises such as Churches, Temples, Mosques, Gurudwaras and religious offices.

This category shall include NGO's offices and any other establishment (Not setup for the purpose of undertaking some sort of trading/profit-making). This tariff is also applicable to orphanage/recognized charitable institutions where no fees/rental of any kind whatsoever are charged/levied.

Tariff Rate applicable

A consumer may opt for one of the following options depending on his requirements by prior intimation to concerned billing unit of P&ED MIZORAM. A consumer may change his option only after one year of availing that particular option.

Initially, unless the consumer applied for Option – 2, all the existing consumer under this category shall be treated under Option – 1

Rates: (Option-1)

a) Fixed charge		Rs 60.00 per month per kW of contracted load
b) Energy charge (per month)		
i)	First 150 kWh	@ Rs 7.60 per kWh
ii)	All units above 150 kWh	@ Rs 8.30 per kWh

No ToD tariff will be applicable for consumers who opts for Option-1 tariff

Rates: (Option-2- ToD Tariff based)

a) Fixed charge	Rs 60.00 per month per kW of contracted Load.	
b) Energy charge (per month)		
i)	06.00Hrs to 17.00Hrs (Normal)	@ Rs 6.95 per kWh
ii)	17.00Hrs to 22.00Hrs (Peak)	@ Rs 8.90 per kWh
iii)	22.00Hrs to 06.00Hrs (Night/Off-peak)	@ Rs 5.40 per kWh

Note 1: Even though, TOD tariff has been determined under Option – 2, the consumer may start only when the Distribution Licensee put all necessary system (Metering arrangement, data communication & billing software etc.) is kept in place

2.4 LT Category - 4: Commercial Service

Applicability: Applicable for supply of energy to all lights, all types of fans, heating devices, Television, VCR/VCP, Radio, Computers, Refrigerator, Air Conditioner, Lift motors, Water pump and all other appliances for private gains including other small power. This tariff includes power loads for commercial purposes like Semi-government/non-government offices, shops, book stalls / shops, parlours, hospitals, educational institutes, nursing homes, clinics, dispensaries, health centres, restaurants, bars, hotels, clubs, guest houses, rest houses (*includes home Stay houses*), tourist lodges, picnic spots, resorts, farm/garden houses, clubs, markets, optical houses, stadiums, meeting/conference halls, all types of studios, tea stalls, professional chambers (like Advocates, chartered Accountants, consultants, Doctors, etc.), private trusts, marriage houses, public halls, show rooms, centrally air-conditioning units, commercial establishments, X-ray plants, diagnostic centres, pathological labs, carpenters and furniture makers, repair workshops, laundries, typing institutes, internet cafes, STD/ISD PCO's, FAX/photocopy shops, tailoring shops, Non- Government Institutions such as schools, colleges, libraries, research institutes,

boarding/lodging houses, railway stations, fuel/oil stations/pumps, bottling or filling stations/plants, service stations, Railway/Bus stations/terminals, All India radio/T.V/Cable TV establishment with sub-operators' installations, printing presses, commercial trusts, societies, banks, financial institutions, theatres, cinema halls, circus, coaching institutes, common facilities in multi-storeyed commercial offices/buildings, Public Museums, Crematoriums, graveyards, orphanages/recognized charitable institutions where rental or fees of any kind are charged, non-recognized charitable institutions, power supply to telecommunication system/towers, leased of Government property(ies) to private party(ies) such as Guest house, tourist lodges, restaurants and others commercial applications those not covered under any other categories. It shall also include store/stock yard, parking lot, Storage godowns and any other applications for private/company/government gain.

It will broadly apply to all offices/establishment so setup for the purpose of trading/profit making.

Tariff Rate applicable

A consumer may opt for one of the following options depending on his requirements by prior intimation to concerned billing unit of P&ED MIZORAM. A consumer may change his option only after one year of availing that particular option.

Initially, unless the consumer applied for Option – 2, all the existing consumer under this category shall be treated under Option – 1

Rates:

a) Fixed charge		Rs 80.00 per month per kW of contracted load
b) Energy charge (per month)		
i)	First 150 kWh	@ Rs 8.20 per kWh
ii)	All units above 150 kWh	@ Rs 8.45 per kWh

No ToD tariff will be applicable for consumers who opts for Option-1 tariff

Rates: (Option-2- ToD Tariff based)

a) Fixed charge	Rs 80.00 per month per kW of contracted Load.	
b) Energy charge (per month)		
i)	06.00Hrs to 17.00Hrs (Normal)	@ Rs 7.10 per kWh
ii)	17.00Hrs to 22.00Hrs (Peak)	@ Rs 9.10 per kWh
iii)	22.00Hrs to 06.00Hrs (Night/Off-peak)	@ Rs 5.55 per kWh

Note 1: Even though, TOD tariff has been determined under Option – 2, the consumer may start only when the Distribution Licensee put all necessary system (Metering arrangement, data communication & billing software etc.) is kept in place

2.5 LT Category - 5: Public Lighting Service (Street/thorough fare lighting)

Applicability: Applicable to Public Street Lighting System in Municipality, City, Town, Sub-Town/Village, etc. including Signal system and Road and Park lighting in areas of Municipality, City, Town, Sub-Town/Village, etc.

Tariff Rate applicable

A consumer may opt for one of the following options depending on his requirements by prior intimation to concerned billing unit of P&ED MIZORAM. A consumer may change his option only after one year of availing that particular option.

Initially, unless the consumer applied for Option – 2, all the existing consumer under this category shall be treated under Option – 1

Rates (Option-1)

a) Fixed charge	Rs 80.00 per month per kW of contracted load.
b) Energy charge (per month)	
For all units (kWh)	@ Rs 11.35 per kWh

No ToD tariff will be applicable for consumers who opts for Option-1 tariff

Rates: (Option-2- ToD Tariff based)

a) Fixed charge	Rs 80.00 per month per kW of contracted Load.	
b) Energy charge (per month)		
i)	06.00Hrs to 17.00Hrs (Normal)	@ Rs 8.80 per kWh
ii)	17.00Hrs to 22.00Hrs (Peak)	@ Rs 11.25 per kWh
iii)	22.00Hrs to 06.00Hrs (Night/Off-peak)	@ Rs 6.85 per kWh

Note 1: Even though, TOD tariff has been determined under Option – 2, the consumer may start only when the Distribution Licensee put all necessary system (Metering arrangement, data communication & billing software etc.) is kept in place

2.6 LT Category – 6: Public Water Works

Applicability: Applicable to all public water supply system and sewerage pumping.

Tariff Rate applicable

A consumer may opt for one of the following options depending on his requirements by prior intimation to concerned billing unit of P&ED MIZORAM. A consumer may change his option only after one year of availing that particular option.

Initially, unless the consumer applied for Option – 2, all the existing consumer under this category shall be billed under Option-1.

Rates:(Option-1)

a) Fixed charge	Rs 90.00 per month per kW of contracted load.
b) Energy charge (per month)	
For all units (kWh)	@ Rs 11.10 per kWh

No ToD tariff will be applicable for consumers who opts for Option-1 tariff

Rates: (Option-2- ToD Tariff based)

a) Fixed charge	Rs 90.00 per month per kW of contracted Load.
b) Energy charge (per month)	
i) 06.00Hrs to 17.00Hrs (Normal)	@ Rs 8.60 per kWh
ii) 17.00Hrs to 22.00Hrs (Peak)	@ Rs 11.00 per kWh
iii) 22.00Hrs to 06.00Hrs (Night/Off-peak)	@ Rs 6.70 per kWh

Note 1: Even though, TOD tariff has been determined under Option – 2, the consumer may start only when the Distribution Licensee put all necessary system (Metering arrangement, data communication & billing software etc.) is kept in place

2.7 LT Category -7: Irrigation & Agriculture Service

Applicability: This tariff is applicable to irrigation/pumping for agricultural purpose only.

Rates:

a) Fixed charge	Rs 50.00 per month per kW of contracted load.
b) Energy charge (per month)	
For all units (kWh)	@ Rs 3.80 per kWh

No TOD Tariff is proposed for this category in FY2025-26 as per guidelines.

2.8 LT Category – 8: Industrial Service

Applicability: Applicable for supply of energy for Industrial purposes, such as manufacturing/ processing / preserving of goods as such, cold storage plants/units, all types of workshops using electrical energy for such works, power looms, weaving houses, carpentry works, steel fabrication works, tyre re-treading works, black-smiths, Gold-smiths, saw mills, flour/rice mills, oil mills, re-rolling mills, motor body building works, coffee/ginger/turmeric processing units, winery plants, fruits processing plants, Ice candy units, fodder cutting units, poultry farming/ hatchery units, silk rearing/processing units, pisciculture, prawn culture units, mushroom production units, floriculture in green houses, sugarcane crushing, milk/meat processing units, bamboo processing units, paper/steel/aluminium recycling units, construction of

power generating stations/substations and power supply to any generating stations.

Tariff Rate applicable

A consumer may opt for one of the following options depending on his requirements by prior intimation to concerned billing unit of P&ED MIZORAM. A consumer may change his option only after one year of availing that particular option.

Initially, unless the consumer applied for Option – 2, all the existing consumer under this category shall be billed under Option-1.

Rates: (Option-1)

a) Fixed charge	Rs 80.00 per month per kW of contracted load.
b) Energy charge (per month)	
First 400 kWh	@ Rs 7.10 per kWh
All units above 400 kWh	@ Rs 8.05 per kWh

No ToD tariff will be applicable for consumers who opts for Option-1 tariff

Rates: (Option-2- ToD Tariff based)

a) Fixed charge		Rs 80.00 per month per kW of contracted Load.
b) Energy charge (per month)		
i)	06.00Hrs to 17.00Hrs (Normal)	@ Rs 7.00 per kWh
ii)	17.00Hrs to 22.00Hrs (Peak)	@ Rs 8.95 per kWh
iii)	22.00Hrs to 06.00Hrs (Night/Off-peak)	@ Rs 5.45 per kWh

Note 1: *Even though, TOD tariff has been determined under Option – 2, the consumer may start only when the Distribution Licensee put all necessary system (Metering arrangement, data communication & billing software etc.) is kept in place*

2.9 LT Category – 9: Electric Vehicle Charging Stations

Applicability: This tariff is applicable to those consumers who use electricity installations exclusively for charging Electric Vehicles (i.e., two-wheeler to four-wheeler). The consumer shall obtain a separate service connection for this purpose.

Tariff Rate applicable

A consumer may opt for one of the following options depending on his requirements by prior intimation to concerned billing unit of P&ED MIZORAM. A consumer may change his option only after one year of availing that particular option.

Initially, unless the consumer applied for Option – 2, all the existing consumer under this category shall be billed under Option-1.

Rates: (Option-1)

a) Fixed charge	Rs 75.00 per month per kW of contracted load.
b) Energy charge (per month)	
All units consumed	@ Rs 8.20 per kWh

No ToD tariff will be applicable for consumers who opts for Option-1 tariff

Rates: (Option-2- ToD Tariff based)

a) Fixed charge	Rs 75.00 per month per kW of contracted Load.	
b) Energy charge (per month)		
i)	09.00Hrs to 16.00Hrs (Solar Hours)	@ Rs 5.74 per kWh
ii)	16.00Hrs to 9.00Hrs (Non-Solar Hours)	@ Rs 10.66 per kWh

Note 1: Even though, TOD tariff has been determined under Option – 2, the consumer may start only when the Distribution Licensee put all necessary system (Metering arrangement, data communication & billing software etc.) is kept in place

Note-2: Consumers can charge their Own Electric Vehicles (for personal usage) at their respective house/residence, paying the charge applicable to the consumer category he/she belongs to.

3: HT SUPPLY

Applicability: - The tariffs are applicable for Consumer availing supply at voltage above 400Volts irrespective of connected load/contracted demand. It is mandatory to supply with voltage above 400V, to consumer having a contracted Load of above 50 kW or Contracted Demand of above **55.56 kVA**, as per clause 3.2 of erstwhile JERC for M&M (Electricity Supply Code) Regulations, 2013, with upto date amendment.

3.1 HT Category - I: Domestic Service

Applicability: This tariff is applicable for the similar purposes as already defined in LT category- 2 above and rates are as follows:

Tariff Rate applicable

A consumer may opt for one of the following options depending on his requirements by prior intimation to concerned billing unit of P&ED MIZORAM. A consumer may change his option only after one year of availing that particular option.

Initially, unless the consumer applied for Option – 2, all the existing consumer under this category shall be billed under Option-1.

Rates: (Option-1)

a) Demand charge	Rs 50.00 per month per kVA of Billing Demand.	
b) Energy charge (per month)		
	All kVAh	@ Rs 8.65 per kVAh

Rates: (Option-2- ToD Tariff based)

a) Fixed charge	Rs 50.00 per month per kVA of Billing Demand.
-----------------	---

b) Energy charge (per month)		
i)	06.00Hrs to 17.00Hrs (Normal)	@ Rs 7.80 per kVAh
ii)	17.00Hrs to 22.00Hrs (Peak)	@ Rs 10.00 per kVAh
iii)	22.00Hrs to 06.00Hrs (Night/Off-peak)	@ Rs 6.10 per kVAh

Note 1: Even though, TOD tariff has been determined under Option – 2, the consumer may start only when the Distribution Licensee put all necessary system (Metering arrangement, data communication & billing software etc.) is kept in place

3.2 HT Category - 2: Non-Profit Public Service

Applicability: This tariff is applicable for the similar purposes as already defined in LT Category-3 above and rates are as follows:

Tariff Rate applicable

A consumer may opt for one of the following options depending on his requirements by prior intimation to concerned billing unit of P&ED MIZORAM. A consumer may change his option only after one year of availing that particular option.

Initially, unless the consumer applied for Option – 2, all the existing consumer under this category shall be billed under Option-1.

Rates: (Option-1)

a) Demand charge	Rs 60.00 per month per kVA of Billing Demand.
b) Energy charge (per month)	
All kVAh	@ Rs 8.75 per kVAh

Rates: (Option-2- ToD Tariff based)

a) Fixed charge	Rs 60.00 per month per kVA of Billing Demand.	
b) Energy charge (per month)		
i)	06.00Hrs to 17.00Hrs (Normal)	@ Rs 8.45 per kVAh
ii)	17.00Hrs to 22.00Hrs (Peak)	@ Rs 10.80 per kVAh
iii)	22.00Hrs to 06.00Hrs (Night/Off-peak)	@ Rs 6.60 per kVAh

Note 1: Even though, TOD tariff has been determined under Option – 2, the consumer may start only when the Distribution Licensee put all necessary system (Metering arrangement, data communication & billing software etc.) is kept in place

3.3 HT Category - 3: Commercial Service

Applicability: This tariff is applicable for the similar purposes as already defined in LT Category-4 above and rates are as follows:

Tariff Rate applicable

A consumer may opt for one of the following options depending on his requirements

by prior intimation to concerned billing unit of P&ED MIZORAM. A consumer may change his option only after one year of availing that particular option.

Initially, unless the consumer applied for Option – 2, all the existing consumer under this category shall be billed under Option-1.

Rates: (Option-1)

a) Demand charge	Rs 80.00 per month per kVA of Billing Demand.
b) Energy charge (per month)	
All kVAh	@ Rs 8.90 per kVAh

Rates: (Option-2- ToD Tariff based)

a) Fixed charge	Rs 80.00 per month per kVA of Billing Demand.	
b) Energy charge (per month)		
i)	06.00Hrs to 17.00Hrs (Normal)	@ Rs 8.60 per kVAh
ii)	17.00Hrs to 22.00Hrs (Peak)	@ Rs 11.00 per kVAh
iii)	22.00Hrs to 06.00Hrs (Night/Off-peak)	@ Rs 6.70 per kVAh

Note 1: Even though, TOD tariff has been determined under Option – 2, the consumer may start only when the Distribution Licensee put all necessary system (Metering arrangement, data communication & billing software etc.) is kept in place

3.4 Category 4: Public Water Works (PWW)

Applicability: This tariff is applicable for the similar purposes as already defined in LT Category- 6 above and rates are as follows:

Tariff Rate applicable

A consumer may opt for one of the following options depending on his requirements by prior intimation to concerned billing unit of P&ED MIZORAM. A consumer may change his option only after one year of availing that particular option.

Initially, unless the consumer applied for Option – 2, all the existing consumer under this category shall be billed under Option-1.

Rates: (Option-1)

a) Demand charge	Rs 90.00 per month per kVA of Billing Demand.
b) Energy charge (per month)	
All kVAh	@ Rs 9.85 per kVAh

Rates: (Option-2- ToD Tariff based)

a) Fixed charge	Rs 90.00 per month per kVA of Billing Demand.	
b) Energy charge (per month)		
i)	06.00Hrs to 17.00Hrs (Normal)	@ Rs 8.80 per kVAh
ii)	17.00Hrs to 22.00Hrs (Peak)	@ Rs 11.25 per kVAh
iii)	22.00Hrs to 06.00Hrs (Night/Off-peak)	@ Rs 6.85 per kVAh

Note 1: Even though, TOD tariff has been determined under Option – 2, the consumer may start only when the Distribution Licensee put all necessary system (Metering arrangement, data communication & billing software etc.) is kept in place.

3.5 HT Category - 5: Irrigation & Agriculture Service

Applicability: This tariff is applicable for the similar purposes as already defined in LT Category- 7 above and rates are as follows:

Rates:

a) Demand charge	Rs 50.00 per month per kVA of Billing Demand.
b) Energy charge (per month)	
All kVAh	@ Rs 3.85 per kVAh

No TOD Tariff is proposed for this category in FY2025-26 as per guidelines.

3.6 HT Category -6: Industrial Service

Applicability: This Tariff is applicable for all the similar purpose as already defined in LT Category – 8 above and rates are as follows:

A consumer may give change of existing supply option to another depending on their requirements by making a prior intimation to concerned billing unit working under P&ED, Mizoram.

Individuals those willing to switch over to avail power supply under Option-2 (ToD) shall invariably exercise such choice of swift-over to option-2 in writing to the Department official concern else all the existing HT Industrial consumer would be treated as covered under existing category i.e., Option–1 only.

Note: Any Consumer once exercised his willingness to change over may apply for such change of option/reverting to old option will be allowed/permitted only after the expiry of one (I) year period completion from the date of such switching to the present supply option.

Option-1 Rates: (TOD tariff is not be applicable)

a) Demand charge	Rs 80.00 per month per kVA of Billing Demand
b) Energy charge (per month)	
All kVAh	@ Rs 9.05 per kVAh

Option-2 Rates: (on switching over to TOD power supply from option-1)

a) Demand charge		Rs 80.00 per month per kVA of Billing Demand
b) Energy Charge (per month) power consumption in three (3) varied time slots during every day		
i)	06.00Hrs to 17.00Hrs (Normal)	@ Rs 9.05 per kVAh
ii)	17.00Hrs to 22.00Hrs (Peak)	@ Rs 11.40 per kVAh
iii)	22.00Hrs to 06.00Hrs (Night/Off-peak)	@ Rs 7.05 per kVAh

Note 1: Even though, TOD tariff has been determined under Option – 2, the consumer may start only when the Distribution Licensee put all necessary system (Metering arrangement, data communication & billing software etc.) is kept in place.

3.7 HT Category - 7: Bulk supply within the State

Applicability: Applicable for HT Consumers having single point metering of mixed load of housing complex, multi-storeyed building, Military Engineering Service (MES), Border Road Task Force (BRTF), etc. where the supply is used predominantly for domestic purpose (**with domestic load not less than 85 % of the total load**) and internal maintenance of power supply is carried out by the bulk consumers themselves, Tariff Rate applicable is as follows:

Tariff Rate applicable

A consumer may opt for one of the following options depending on his requirements by prior intimation to concerned billing unit of P&ED MIZORAM. A consumer may change his option only after one year of availing that particular option.

Initially, unless the consumer applied for Option – 2, all the existing consumer under this category shall be billed under Option-1.

Rates: (Option-1)

a) Demand charge	Rs 90.00 per month per kVA of Billing Demand.
b) Energy charge (per month)	
All kVAh	@ Rs 6.85 per kVAh

Rates: (Option-2- ToD Tariff based)

a) Fixed charge	Rs 90.00 per month per kVA of Billing Demand.	
b) Energy charge (per month)		
i)	06.00Hrs to 17.00Hrs (Normal)	@ Rs 7.70 per kVAh
ii)	17.00Hrs to 22.00Hrs (Peak)	@ Rs 9.70 per kVAh
iii)	22.00Hrs to 06.00Hrs (Night/Off-peak)	@ Rs 6.20 per kVAh

Note 1: Even though, TOD tariff has been determined under Option – 2, the consumer may start only when the Distribution Licensee put all necessary system (Metering arrangement, data communication & billing software etc.) is kept in place.

3.8 HT Category - 8: Electric Vehicle Charging Station

Applicability: This tariff is applicable for the similar purposes as already defined in LT Category-9 above and rates are as follows.

Tariff Rate applicable

A consumer may opt for one of the following options depending on his requirements by prior intimation to concerned billing unit of P&ED MIZORAM. A consumer may change his option only after one year of availing that particular option.

Initially, unless the consumer applied for Option – 2, all the existing consumer under this category shall be billed under Option-1.

Rates: (Option-1)

a) Fixed charge	Rs 75.00 per month per kVA of contracted load.
b) Energy charge (per month)	
All units consumed	@ Rs 8.65 per kVAh

Option-2 Rates: (on switching over to TOD power supply from option-1)

a) Demand charge		Rs 75.00 per month per kVA of Billing Demand
b) Energy Charge (per month) power consumption in two (2) varied time slots during every day		
i)	09.00Hrs to 16.00Hrs (Solar Hours)	@ Rs 6.05 per kWh
ii)	16.00Hrs to 9.00Hrs (Non-Solar Hours)	@ Rs 11.25 per kWh

Note 1: Even though, TOD tariff has been determined under Option – 2, the consumer may start only when the Distribution Licensee put all necessary system (Metering arrangement, data communication & billing software etc.) is kept in place

Note-2: Consumers can charge their Own Electric Vehicles (for personal usage) at their respective house/residence, paying the charge applicable to the consumer category he/she belongs to.

B: FULL COST TARIFF (FCT) (i.e., WITH NO SUBSIDY) for FY2025-26

Sl. No.	Consumer Category	Approved Full Cost Tariff (FCT)	
		Energy Charges (Rs/month)	Fixed Charges (Rs.)
1	Kutir Jyoti		
i)	First 20 kWh	7.89/kWh	25/Connection
ii)	Balance above 20 kWh	10.98/kWh	25/Connection
2	Domestic		
A	Low Tension		
i)	First 100 kWh	9.11/kWh	50/kW of Contracted Load
ii)	Next 100 kWh	9.84/kWh	50/kW of Contracted Load
iii)	Balance above 200 kWh	10.29/kWh	50/kW of Contracted Load
B	High Tension	9.07/kVAh	50/kVA of Billing Demand
3	Non-Profit Public Service		
A	Low Tension		
i)	First 150 kWh	10.74/kWh	60/kW of Contracted Load
ii)	Balance above 150 kWh	11.73/kWh	60/kW of Contracted Load
B	High Tension	9.18/kVAh	60/kVA of Billing Demand
4	Commercial		
A	Low Tension		
i)	First 150 kWh	12.04/kWh	80/kW of Contracted Load
ii)	Balance above 150 kWh	12.40/kWh	80/kW of Contracted Load
B	High Tension	9.52/kVAh	80/kVA of Billing Demand
5	Public Lighting	13.00/kWh	80/kW of Contracted Load
6	Public Water Works		
A	Low Tension	12.16/kWh	90/kW of Contracted Load
B	High Tension	10.84/kVAh	90/kVA of Billing Demand
7	Irrigation & Agriculture		
A	Low Tension	13.00/kWh	50/kW of Contracted Load
B	High Tension	11.39/kVAh	50/kVA of Billing Demand
8	Industrial		
A	Low Tension		
i)	First 400 kWh	11.81/kWh	80/kW of Contracted Load
ii)	Balance above 400 kWh	12.27/kWh	80/kW of Contracted Load
B	High Tension (Op-1)	10.07VAh	80/kVA of Billing Demand
	High Tension (Op-2)	0.00/kVAh	80/kVA of Billing Demand
9	Electric Vehicle charging Stns (LT)	0.00/kWh	75/kW of Billing Demand
10	Electric Vehicle charging Stns (HT)	0.00/kVAh	75/kVA of Billing Demand
11	Bulk Supply	10.19/kVAh	90/kVA of Billing Demand

4. Temporary Supply:

Applicability: Temporary power supply shall be given through correct meter and carried out as per procedure laid down in clause 4.56 to 4.70 of the Electricity Supply Code Regulations, 2013 with latest amendments. If the applicant provides the materials for service line, it shall be treated as per clause 4.133 of the Electricity Supply Code Regulations, 2013 with latest

amendments. **If the licensee/Discom desired to delegate power to its various level of officers, it may be done so through an executive order issued by the licensee/Discom. However, in all cases, overall duration should not violate the supply code duration mentioned above.** If the service line is arranged by consumer, it shall be treated as per clause 4.133 of the Electricity Supply Code Regulations, 2013 with latest amendments and be returned to the consumer after the period is over. Bill shall be served at the following rates:

Rates:

a) Fixed /Demand Charge	1.5 times the rate of fixed/demand charge of the applicable tariff category for which power supply is given.
b) Energy Charge per month	1.5 times the rate of the highest rated slab of the applicable tariff category for which energy is supplied.

5. Computation of un-metered energy:

5.1 Street light billing: - (1) As per Section 55 of Electricity Act 2003 and also as per clause 5.1 of the Electricity Supply Code Regulations, 2013 with latest amendments, no installation should be serviced without appropriate and correct meter. Keeping in view, the elapse of many more years from E. Act 2003 promulgation and also after several years elapsed from the supply code effective date, the formula for computation of energy consumed for unmetered supply in crude way is felt unnecessary and hence withdrawn. **P&ED should install meters for all street lighting supply at all points along with DT metering and bill them accordingly.**

5.2 P&ED has achieved 100% metering of all consumers as per report in the 18th State Advisory Committee meeting. Hence, separate computation methodology is no longer required and hence deleted fully & withdrawn forthwith. **(5.1 above shall not be applicable).** Billing under defective, burnt, lost meter shall be made as per the Electricity Supply Code Regulations, 2013 with latest amendment.

5.3 For Un-authorized consumer/theft (includes by-pass of meter)/pilferage and cases cover by section 135 of the Act: The energy consumed shall be computed as per Annexure 11.1.19 of the Electricity Supply Code Regulations, 2013. **with up to date amendment.** The energy so computed shall be evaluated as follows:

(a) Load less than 10 kW

(1) **First instance:** - Three (3) times of the rate of the applicable tariff (fixed and variable charges) for which the stolen energy was utilized.

(2) **Second and subsequent instances:** - Six (6) times of the rate of the applicable tariff

(fixed and variable charges) for which the stolen energy was utilized.

(b) Load exceeding 10 kW

(1) **First instance:** - Three (3) times of the rate of the applicable tariff (fixed and variable charges) for which the stolen energy was utilized.

(2) **Second and subsequent instances:** - Six (6) times of the rate of the applicable tariff (fixed and variable charges) for which the stolen energy was utilized.

6. Miscellaneous Charges (Part of Non-Tariff Income)

6.1 Meter Rent for (non-Smart/Smart) meters: Monthly charges for hiring of the meter, indicator shall be as follows:

6.1.1 LT Metering: (Non-Smart) meters

a) AC, Single phase 1Ø Energy meter whole current	Rs.20.00 per month
b) AC, Three phase 3Ø Energy meter, whole current	Rs.35.00 per month.
c) AC, three phase 3Ø Energy meters, CT operated	Rs.50.00 per month
d) Any other type of meter/indicator	Rs.100.00 per month

For Smart Meters rental charges for LT	
a) AC, Single phase 1Ø Energy meter whole current	Rs.50.00 per month
b) AC, Three phase 3Ø Energy meter, whole current	Rs.60.00 per month.

6.1.2 HT Metering: (Non-Smart meter rental)

a) AC, three phase 3Ø Energy meter, CT & PT operated	Rs.200.00 per month.
b) Any other type of meter/indicator	Rs.300.00 per Month.

For Smart Meter Rentals for HT	
AC, three phase 3Ø Smart Energy meter, CT & PT operated	Rs.250.00 per month.

6.2. Pole/Tower usage charge per month

6.2.1 For supporting of internet/media/telephone cables:

This charge shall be borne by Operator/Distributor of visual media network.

- a) Rs.10.00 per pole per cable per month in case of internet cable/ media cables/visual media cables
- b) Rs.20.00 per pole per month per cable in case of landline telephone cable. (a cable having up to 5 pair of lines shall be taken as one cable for this purpose) Telephone cable having more than 5 pairs shall be considered as 2, 3 etc, by dividing actual number of pairs by 5 to arrive at equivalent number of cables. Any fraction shall be rounded to next higher integer.

6.3. Other charges for meter:**(a) Meter shifting charge:**

- i) Rs.200.00 per shifting if it resulted from reconstruction/ modification of building by consumer or at consumer's request. Material to be borne by interest party.
- ii) Free of cost if shifting is done in the interest to licensee. Required material to be borne by licensee.

Meter shifting shall be carried out as per Chapter – 5 of the Electricity Supply Code Regulations, 2013. with up to date amendment.

(b) The cost of replacement and execution charge:

Utility shall have stock of energy meter as per clause 5.51 of the Electricity Supply Code Regulations, 2013. with up to date amendment. Replacement of meter shall be carried out as per clause 5.31 to 5.50 of the same code mentioned above. Charges for other materials will be extra.

i) Execution charge for re-installation/installation of meter:

- a) For existing consumer, it shall be Free of cost.
- b) For disconnected consumer with meter removed: Rs.100.00
- c) For new consumer, it shall be included in the cost of service connection under the nomenclature **execution charges**.

ii) Cost of Energy Meters supplied by Licensee:

If the consumer prefers to buy meter from the Licensee for new connection or for replacement for a faulty meter, the price will be at the Licensee's purchase rate if supplied by the Licensee after collection of Rs.100/- towards storage charges (*Prima facie energy meters installed for usage shall be of those approved or tested & approved by the Licensee*).

However, when the cause leading to subsequent replacement instance either due to manufacturing defect or fault on the part of licensee then, **it shall be done free of cost.**

c) Testing charge of Meter at the request of consumers: (Testing charge is inclusive of costs of meter re-sealing materials/equipment).

Sl. No	Type of Meter for testing	Charges payable
i)	For AC, Single phase LT energy meter	Rs.75.00 per meter per testing.
ii)	For AC, three phase LT energy meter whole current	Rs.100.00 per meter per testing.
iii)	For AC, three phase LT energy meter, CT operated	Rs.200.00 per meter per testing.

Sl. No	Type of Meter for testing	Charges payable
iv)	For energy meter, AC three Phase, CT & PT operated	Rs.300.00 per meter per testing.
v)	For any other type of meter HT supply	Rs.300.00 per meter per testing.

In case the meter supplied by the Licensee fitted to the consumer premises is found to be defective from initial fitting, testing and replacement of meter shall be carried out as per clause 5.31 to 5.50 of the Electricity Supply Code Regulations, 2013. with up to date amendment.

6.4 Testing charge of Consumer's Installation:

The first test and inspection will be carried out free of cost as per Clause 4.47 of Electricity Supply Code Regulations, 2013. Should any further test or inspection be necessitated due to fault in the installation or due to non-compliance with the condition of supply by the consumer an extra charge of **Rs.150.00** (excluding GST) per test, payable in advance, shall be levied. In the event of the consumer failing to pay the testing charge in advance within stipulated time, the Licensee will be at liberty to disconnect the consumer's premise from the supplier's main.

6.5 Disconnection and Reconnection:

(1) **Disconnection:** -Disconnection of an installation in all cases will be **free of charges**.

(2) **Reconnection:** - Reconnection charge shall be as follows: -

(i)	For AC single phase LT supply	Rs.100.00
(ii)	For AC three phase LT supply	Rs.150.00
(iii)	For AC HT supply	Rs.400.00

Note: - Any extra material required during reconnection will be charged extra.

6.6 Change of category:

Change of category will be carried out as per clause 4.72 to 4.80, clause 4.85 to 4.86 and 4.90 to 4.93 of the Electricity supply Code Regulations, 2013. with up to date amendment.

6.7 Mutation Fee: -Mutation fee i.e. fee for change of name shall be Rs 50.00 per change. This shall be carried out as per clause 4.81 to 4.84 of the Electricity Supply Code Regulations, 2013 with up to date amendment.

6.8 Charges for Replacement of Connection Wire, Cut-out, Fuse, meters etc.:

Cost of replacement after initial fixation of connection wire, cut-out, fuses, meters etc. will be borne by the consumers and shall be payable by the consumer in advance. If the Licensee supplies the materials, or the consumer may arrange required materials as per the required specifications of the Licensee. The execution charges shall be as follows:

(1) For Cable and wire (if meter cost borne by consumer):

(a)	Single phase connection:	Rs. 400.00 per connection.
(b)	Three phase connection:	Rs. 600.00 per connection.
(c)	HT three phase connection:	Rs. 900.00 per 100 meters of the HT line.

Note: - In case if meter is provided by Licensee, the additional cost payable by consumer(s) will be as specified by the Licensee along with applicable Taxes if any.

(2) For Cut-Out & Fuse: -

1) per Cut-Out - Rs 10.00
2) per Fuse - Rs 3.00

1) For Replacement of meters

a) Single Phase: Rs.40/-	b) Three Phase: Rs.60/-
c) CT operated: Rs.80/-	d) CT & PT operated: Rs.80/-

Works shall be executed only on production of payment receipt from concerned office.

6.9 Re-rating charge of Consumer's Installation:

This charge is for meeting expenses toward spot verification of load and other connected recording works. Charge for re-rating of the consumer's installation at the request of the consumer shall be Rs.150.00 per rerating per connection. Inspection for re-rating should be carried out only on advance payment in the concerned office and on production of such payment receipt.

The aforesaid charges do not include the charges payable by the consumer for other works connected due to change of connected load (like additional load security, etc. However excess security paid by consumer should be returned by way of adjustment in monthly bill in one instalment). Rerating shall be carried out as per clause 4.94 to 4.107 of the Electricity Supply Code Regulations, 2013. with up to date amendment.

6.10 Security Deposits: -**(i) Meter Security deposit (if Licensee's meter is used):**

The amount of Security deposit for meter security shall normally be the price of the meter as fixed by the licensee from time to time in line with **section 55 of Electricity Act 2003**.

(ii) Load Security deposit:

The amount of load shall be calculated as per the procedure prescribed in clause 4.123 – 4.127 and determine as per Annexure 11.18 of the Electricity Supply Code Regulations, 2013 with up to date amendment. **However, consumer with prepaid meter shall not be required to pay load security deposit.**

6.11- Charges for Replacement of tamper proof Meter Housing Box:

For AC single phase LT or three phases LT without CT or with CT, the energy meter box if replaced from Licensee's store: The charge will be as per Licensee's purchase rate.

The execution charges shall be as follows:

- | | |
|--------------------------|------------------------------|
| a) Single Phase: Rs.20/- | b) Three Phase: Rs.30/- |
| c) CT operated: Rs.40/- | d) CT & PT operated: Rs.40/- |

6.12- Charges for Testing of Transformer Oil:

(a) For first sample of oil: Rs.150.00 per sample.

(b) For the next additional sample of oil of the equipment received at the same time of the first sample: Rs.100.00 per sample.

6.13- Service Lines & Service Connection:

(a) Type of Service Connection: Type of service connection and distance for service connection line length will be as per clause 4.2 read with clause 5.10 of the Electricity Supply Code Regulations, 2013. with up to date amendment.

(b) Cost of Service Connection: As stipulated in Clause 4.37 & 4.131 of the Electricity Supply Code Regulations, 2013. If the consumer desires to arrange service connection materials, the Licensee (not below rank of Junior Engineer concerned) will check all the materials.

6.14 Cost of Application Form: The application form shall be free of cost vide clause- 4.14 of the Electricity Supply Code Regulations, 2013. with up to date amendment.

ANNEXURES

ANNEXURE-I**MINUTES OF 27th MEETING OF
THE STATE ADVISORY COMMITTEE OF MIZORAM****Date: 11th MARCH (Tuesday), 2025 Time :11:00 A.M.****Venue: AIJAL CLUB, CONFERENCE HALL, AIZAWL.****The list of Members and Participants who attended the Committee is appended.**

The meeting was chaired by Mr. Benjamin L. Tlumtea, Chairperson of the Commission, who welcomed the members and special invitees. Miss Lalchanchinmawii, Assistant Secretary of the Commission, conducted the introduction of members and special invitees. The agenda items were discussed as follows:

Agenda 1 : Confirmation of the Minutes of the 26th Meeting of SAC held on 13.03.2024

The Chairman sought the members' input on any concerns or objections regarding the minutes of the 26th SAC meeting. Upon receiving doubts on some point and clarifications thereon and affirmation, the minutes were formally confirmed.

Agenda 2 : Review of action taken on the minutes of the 26th meeting of SAC.

Public Awareness and Vigilance report etc: It was noted that the recommendation from the 26th meeting to constitute a Co-ordination Committee between the Power & Electricity (P&E) Department and the Aizawl Municipal Corporation (AMC) for street light maintenance in Aizawl City had not yet been fulfilled. Mr. Lalremruata Kullai, Joint Commissioner, AMC informed the committee that a Co-ordination committee between AMC and P&E Department had been formed for better management and operation of Street lights in Aizawl city and first meeting is scheduled to be held on Dt. 17.03.2025. After discussions, it was agreed to include Chief Engineer (SO), P&E Department and a representative from the Smart City Cell, UD&PA as a special invitee. It was also recommended that Awareness programme for all LC members in Aizawl may be conducted by AMC. Moreover, the meeting decided that Street lights performance report at Villages may be compiled and reported to next SAC meeting by LAD. Mr. Malsawmdawngliana, Joint Secretary, P&E Department, emphasized the need for greater public awareness that the maintenance of street lights falls under the responsibility of LAD and AMC (not the P&E Department) as stipulated in the Electricity Supply Code.

Prepaid Metering and Smart metering: As invited by the Chairman, Er. Lalnithanga, Engineer-in-chief, P&ED informed the meeting that Prepaid Smart Metering project will cover all consumers in the state under Revamped Distribution Sector Scheme (RDSS) subsuming pilot project at Zarkawt Feeder and Letter of Award had been issued to the Contractor. As some members raised concern about connectivity issues, Er. Lalnithanga clarified that GSM(SIM)/RF/PLCC/OPGW communication technology will be used as per feasibility. He also informed the meeting that Government consumers including PHED will be covered in the first phase of the Smart metering project with a target completion date of March, 2026 for the whole project.

Meter Testing Facilities: P&ED reported that there are 6 portable meter testing kits (viz. 1 no each in Darlawn PSD, Champhai Power PSD, DSD-III, Mamit PD and 2 nos in MRT S/D Aizawl). Er. Lalnithanga, Engineer-in-chief, P&ED informed the meeting that no new procurement is being proposed since the Contractor (AMISP) of RDSS Smart metering project will be taking care of procurement of Meters, Meters testing, installation and replacement of smart meters for the coming 10 years. Therefore, already procured portable meter testing kits will be efficiently used for current requirement untill successfully completion of the RDSS Smart Meter Project.

Agenda 3: Agenda submitted by Mr. Thanglura, President, MCU & Member, SAC.

Suggestion to discuss whether the provision of Electricity bill rebate due to frequent disruption can be incorporated in the regulations or Supply code.

As invited by the Chairman, Mr. Thanglura elaborated his request to discuss whether the provision of Electricity bill rebate due to frequent disruption can be incorporated in the regulations or Supply code as Mizoram consumers especially in Aizawl district are suffering from frequent power supply disruption for an hour or more for almost every day. P&ED replied that such kind of rebate provision is not seen in regulations or Supply code. Er. Lalnithanga, Engineer-in-chief, P&ED reported that most of power disruption these days in Aizawl area is due to ongoing RDSS work. Moreover, he informed the meeting that some of the crucial Sub-stations are provided alternative source, various steps including new equipment/technologies are being taken and introduced in the Transmission & Distribution level to minimize power disruption. Meanwhile, Forum of Regulators (FOR) is being considering Automatic Compensation system as per MoP directives. Er.H.Thanthianga, Assistant Chief (Engineering), MZERC, clarified that Standard of Performance Regulations allow for compensation claims if there is a default in performance of the distribution licensee in line with the provisions of Clause 13 of Electricity (Rights of Consumer) Rules, 2020 and the Commission is working to expedite the implementation of this provision.

Suggestion to discuss the possibility inclusion of online application for Service connection and online payment of connection fee in the Regulations/Supply Code.

Mr. Thanglura elaborated the necessity and importance of his suggestion as requested by the Chairman. The Commission (MZERC) replied that provision of Online application for service connection & online payment of connection fee is already incorporated in Clause 7 of Electricity (Rights of Consumers) Rules, 2020 and Clause 3 of JERC (Electricity Supply Code) 16th Amendment Regulations, 2022 adopted by MZERC. P&ED also informed that current SAP billing Software is already developed with online application for service connection & online payment of connection fee. Besides, new billing Software under IT/OT in RDSS will be featured with better online application for service connection & online payment of connection fee facilities.

Suggestion to discuss how far action has been taken for corporatization of Power sector.

The Chairman requested P&E Dept to give a report on progress of Corporatization proposal. P&E Dept reported that a consultant (ASCI, Hyderabad) for corporatization was engaged and a report had been submitted to State Govt. After that, Unbundling/Restructuring proposal was also submitted to State Govt and no reply had been received from the State Govt. on these reports/proposals. P&E Deptt also elaborated the advantages, disadvantages and feasibility of Corporatization along with status of neighboring NE States. The Chairman informed the meeting that besides the provision mentioned in Electricity Act, 2003 and directives from MoP on corporatization, as per MoA of APDRP Scheme signed between Govt. of Mizoram and Govt. of India, P&E Deptt. is expected to be converted into a Power Corporation by 2006/07, and Sanction order of RDSS also time lined segregation of state Power Department Accounts by function wise by 2025. After deliberated discussion, following the letter submitted to State Govt. on 18th February 2025, the meeting decided to write to state Government to consider for Unbundling/separating business units and segregation of accounts by function wise as foremost necessary steps towards corporatization of Power Deptt.

Agenda 4: Determination of Retail Tariff of P&E Deptt for FY 2025-26

As invited by the Chairperson, Er. Lalhminghluah, SE (Commercial), P&ED gave a PowerPoint presentation of the Tariff Petition of True-up for FY 2023-24, Review for FY 2024-25, Tariff for FY 2025-26. The chairman informed that Public Hearing on Tariff Petition of P&E deptt will be held as per scheduled i.e. on 12th March 2025.

The Chairman formally declared the meeting adjourned, expressing gratitude to all attendees.

Sd/-
(BENJAMIN L. TLUMTEA
Chairperson

Memo No.F.20012/1/2024-MZERC : Dated Aizawl, the 13th March, 2025.

Copy to:

1. P.S to Hon'ble Chief Minister, Gov't of Mizoram for kind information to the Hon'ble Chief Minister.
2. P.S to Hon'ble Minister, i/c P&E Department, Gov't of Mizoram for kind information to Hon'ble Minister, i.c P&E Department.
3. PS to Secretary, P&E Department, Gov't of Mizoram for kind information to the Secretary and for taking necessary action on the Minutes of the Meeting.
4. All Members / Invitees of the State Advisory Committee for kind information and for taking necessary action on the Minutes of the Meeting.
5. Guard File.

(LALCHANCHINMAWII)
Assistant Secretary

List of Members and Participants attended
27th Meeting of the State Advisory Committee of Mizoram

Date & Time: 11th March, 2025 (Tuesday) 11:00 a.m.

Venue: Aijal Club, Conference Hall, Aizawl

Sl. No.	Name	Designation
1.	BENJAMIN L. TLUMTEA	CHAIRPERSON, MZERC
2.	H. THANTHANGA	ASSISTANT CHIEF (ENGINEERING), MZERC
3.	LALCHANCHINMAWII	ASSISTANT SECRETARY, MZERC
4.	LALREMRUATA SAILO	ASSISTANT CHIEF (FINANCE), MZERC
5.	H. LALNUNFELA	PAY & ACCOUNTS OFFICER, MZERC
6.	K. LALREMSANGI	PRINCIPAL PRIVATE SECRETARY, MZERC
7.	LALRAMHLUN PUROULTE	PRIVATE SECRETARY, MZERC
8.	DOLLY SAIDINGPUII SAILO	STENO, MZERC
9.	LALREMRUATI	STENO, MZERC
10.	K. HARI PRASAD	CONSULTANT, MZERC
11.	V.SAI SHARAN	CONSULTANT, MZERC
12.	LALNITHANGA	ENGINEER-IN-CHIEF, P&E
13.	J.H. MALSAWMA	CHIEF ENGINEER (DISTRIBUTION), P&E
14.	NGURSAILOVA SAILO	CHIEF ENGINEER (SO), P&E
15.	C.LALROPIANGA	CHIEF ENGINEER (D), P&E
16.	LALTLANTHANGA	CHIEF ENGINEER (RE), P&E
17.	LALHMINGLUA	SUPERINTENDING ENGINEER (COMMERCIAL), P&E
18.	H. LALRUATKIMA	SUPERINTENDING ENGINEER, SLDC, P&E
19.	ZOTHANSANGA	SUPERINTENDING ENGINEER, P&E
20.	H. VANLALHLIMA	SUPERINTENDING ENGINEER, P&E
21.	LALRINMAWIA	SUPERINTENDING ENGINEER (PI), P&E
22.	LALNUNPUII	DIRECTOR, ZEDA
23.	R.L. MUANPUII	CHIEF ELECTRICAL INSPECTOR
24.	LALRAMNGHAKA	EXECUTIVE ENGINEER (COMMERCIAL), P&E
25.	K. LALNUNZIRA	ASSISTANT ENGINEER (COMMERCIAL), P&E
26.	WILFRED VANLALLIANA	ASSISTANT ENGINEER (COMMERCIAL), P&E
27.	DAVID LALNUNPUIA	JUNIOR ENGINEER (COMMERCIAL) P&E
28.	LALSAWMLIANI	JUNIOR ENGINEER (COMMERCIAL) P&E
29.	SANJIB MAJHI	CONSULTANT, P&E
30.	LALROPUA HMAR	SUPERINTENDING ENGINEER, PHE
31.	LALREMRUATA KULLAI	JT. COMMISSIONER, AMC
32.	P.C. LALHMUCHHUAKA	DD, LAD
33.	NGHAKLIANMAWIA	PRESIDENT, MUP
34.	VANLALRUATA	TUIKUAL SOUTH
35.	THANGLURA	VENGLHUI
36.	LALLUNGHNEMA	REPUBLIC VENG
37.	H. LALBIAKPUIA	G.S., MIZORAM CONSUMERS' UNION
38.	C.N. TLUANGA	SR. VICE PRESIDENT, MCCI
39.	VICTORY CHAWISANGZELA	ZONET NEWS REPORTER
40.	LALRINHLUI	NORTH EAST LIVE
41.	CAROLINE LALROSANGI	DDK

ANNEXURE-II

LIST OF PARTICIPANTS ATTENDED
THE PUBLIC HEARING ON ARR & TARIFF PROPOSAL PETITION FOR FY 2025-26
SUBMITTED BY POWER & ELECTRICITY DEPARTMENT, GOVT. OF MIZORAM

Venue: Aijal Club, Conference Hall, Aizawl, Mizoram.

Date & Time: 12th March, 2025 (Wednesday) at 11.00 a.m. to 1.00 pm

Sl. No.	Name	Designation
1.	BENJAMIN L.TLUMTEA	CHAIRPERSON, MZERC
2.	J.H.MALSAWMA	CHIEF ENGINEER (DISTRIBUTION), P&E
3.	H.THANTHIANGA	ASSISTANT CHIEF (ENGINEERING), MZERC
4.	LALCHANCHINMAWII	ASSISTANT SECRETARY, MZERC
5.	LALREM RUATA SAILO	ASSISTANT CHIEF (FINANCE), MZERC
6.	H. LALNUNFELA	PAY & ACCOUNTS OFFICER, MZERC
7.	K. LALREMSANGI	PRINCIPAL PRIVATE SECRETARY, MZERC
8.	LALRAMHLUN PUROULTE	PRIVATE SECRETARY, MZERC
9.	K. HARI PRASAD	CONSULTANT, MZERC
10.	V.SAI SHARAN	CONSULTANT, MZERC
11.	NGURSAILOVA SAILO	CHIEF ENGINEER (SO), P&E
12.	LALTLANTHANGA	CHIEF ENGINEER (RE), P&E
13.	LALHMINGLUA	SUPERINTENDING ENGINEER (COMMERCIAL), P&E
14.	R.L. MUANPUII	CHIEF ELECTRICAL INSPECTOR
15.	LALNUNPUII	DIRECTOR, ZEDA
16.	LALRINMAWIA	SUPERINTENDING ENGINEER (PI), P&E
17.	H. LALRUATKIMA	SUPERINTENDING ENGINEER, SLDC, P&E
18.	LALRAMNGHAKA	EXECUTIVE ENGINEER (COMMERCIAL), P&E
19.	K. LALNUNZIRA	ASSISTANT ENGINEER (COMMERCIAL), P&E
20.	WILFRED VANLALLIANA	ASSISTANT ENGINEER (COMMERCIAL), P&E
21.	DAVID LALNUNPUIA	JUNIOR ENGINEER (COMMERCIAL) P&E
22.	LALSAWMLIANI	JUNIOR ENGINEER (COMMERCIAL) P&E
23.	SANJIB MAJHI	CONSULTANT, P&E
24.	VANLALRUATA	TUIKUAL SOUTH
25.	THANGLURA	VENGLHUI
26.	LALLUNGHNEMA	REPUBLIC VENG
27.	C.N. TLUANGA	SR. VICE PRESIDENT, MCCI
28.	H. LALBIAKPUIA	G.S., MIZORAM CONSUMERS' UNION
29.	C.LALHMACHHUANA	PRESS (ZALEN)
30.	LALHMUNZAUVA	ZAWLBUK/ DNOMZ.COM
31.	ESTHER L.CHAWNGTHU	COPY EDITOR, DDK
32.	LALHUAPZAUVA	I&PR
33.	VANEIHCHHI	I&PR

Annexure-III

Commission approved Expected Revenue from prevailing Tariff (Non-TOD) for FY 2025-26 w.e.f 1.04.2025											
Sl. No.	P&ED Consumer Category	Consumers	Connected Load (in kW)	Annual Sales (in MU)	Sales/Consumer /Month (in kWh)	Fixed Charge (₹ /kW)	Energy Charge (₹ /kWh)	Annual Revenue Fixed Charges (₹ Crs)	Annual Revenue Energy Charge (₹ Crs)	Annual Revenue (₹ Crs)	Avg. per unit (₹ /kWh)
1	2	3	4	5	6	7	8	9	10	11=(9+10)	12=11/5
1	KJ(Domestic)					Conc/kW	₹ /kWh	₹ /kWh			
i)	First 20 kWh	11687		2.50	17.83		2.55	0.35	0.64	0.988	
ii)	Above 20 kWh	7358		2.80	31.71		3.55	0.22	0.82	1.038	
	Sub Total	19045	5826.87	5.30		25		0.57	1.45	2.026	3.82
2	Domestic					₹ /CL/kW	₹ /kWh				
i)	First 100 kWh	179990		155.84	72.15		4.90	0.00	76.36		
ii)	101 - 200 kWh	62247		92.62	124.00		7.10	-	49.33		
iii)	Above 200 kWh	35100		87.63	208.05		8.20	-	53.32		
	Sub Total	277337	355036.14	336.09		50		21.30	179.01	200.315	5.96
3	Domestic HT	12	2295.26	1.46		50	8.65	0.15	1.40	1.556	10.66
	Total Domestic	296394	363158.27	342.85				22.03	181.87	203.897	5.95
4	Non-Profit Public										
i)	First 150 kWh	7861		6.67	70.76		7.60	-	5.07		
ii)	Above 150 kWh	2163		6.70	258.31		8.30	-	5.29		
	Sub Total	10024	20822.62	13.38		60		1.50	10.36	11.864	8.87
5	Non-Profit PP HT	79	14825.63	7.41		60	8.75	1.19	7.20	8.390	11.32
	Total Non-Profit PP	10103	35648.25	20.79				2.69	17.57	20.254	9.74
6	Commercial										
i)	First 150 kWh	10539		18.38	145.33		8.20	-	15.07		
ii)	Above 150 kWh	4802		29.21	506.91		8.45	-	24.47		
	Sub Total	15341	47930.87	47.59		80		4.60	39.54	44.139	9.27
7	Commercial HT	572	19916.16	17.66	2572.84	80	8.90	2.12	17.46	19.588	11.09
	Total Commercial	15913	67847.03	65.25				6.73	57.00	63.727	9.77
8	Public Lighting	770	1476.06	3.10		80	11.35	0.14	3.52	3.660	11.81
9	PWS LT	11	808.98	0.25		90	11.10	0.09	0.28	0.365	14.59
10	PWS HT	80	44228.18	107.85		90	9.85	5.31	118.04	123.343	11.44
11	Agl LT	80	102.49	0.08		50	3.80	0.006	0.030	0.037	4.57
12	Agl HT	8	286.66	0.22		50	3.85	0.019	0.094	0.113	5.15
13	Industrial LT										
i)	First 400 kWh	999		2.00	166.83		7.10	-	1.42		
ii)	Above 400 kWh	138		0.72	434.78		8.05	-	0.52		
	Total Industrial LT	1137	5368.38	2.72		80		0.52	1.94	2.452	9.01
14	Industrial HT (Opt-1)	30	10317.13	16.41	45583.33	80	9.05	1.10	16.50	17.602	10.73
	Industrial HT (Opt-2)	0	0.00	0.00	0.00	80	10.52	0.00	0.00	-	#DIV/0!
15	EV charging Stns (LT)	0	0.00	0.00		75	8.20	0.00	0.00	-	#DIV/0!
16	EV charging Stns (HT)	0	0.00	0.00		75	8.65	0.00	0.00	-	#DIV/0!
17	Bulk Supply HT	172	18699.25	14.76		90	6.85	2.24	11.23	13.479	9.13
	Grand Total	324698	547941	574.28				40.86	408.07	448.93	7.82

Annexure-IV

Commission Approved Expected Revenue from Full Cost Tariffs (No Subsidy) w.e.f 1.04.2025 in FY 2025-26											
Sl. No.	Consumer Category (P&ED)	Consumers	Connected Load (in kW)	Annual Sales (in MU)	Sales/Consumer /Month (in kWh)	Fixed Charge (₹ /kW)	Energy Charge (₹ /kWh)	Annual Revenue		Annual Revenue (₹ Crs)	Avg. per unit (₹ /kWh)
								Fixed Charges (₹ Crs)	Energy Charge/ (₹ Crs)		
1	2	3	4	5	6	7	8	9	10	11=(9+10)	12=11/5
1	KJ(Domestic)					Conc/kW	(₹ /kWh)	(₹ /kWh)			
i)	First 20 kWh	11687	2633.08	2.50	17.83		7.89	0.35	1.973	2.323	
ii)	Above 20 kWh	7358	3193.79	2.80	31.71		10.98	0.22	2.529	2.750	
	Sub Total	19045	5826.87	5.30		25		0.57	4.502	5.073	9.57
2	Domestic					₹ /CL/kW	(₹ /kWh)				
i)	First 100 kWh	179990	159836.70	155.84	72.15		9.11	9.59	142.03	151.616	
ii)	101 - 200 kWh	62247	83475.15	92.62	124.00		9.84	5.01	85.72	90.724	
iii)	Above 200 kWh	35100	111724.29	87.63	208.05		10.29	6.70	83.33	90.032	
	Sub Total	277337	355036.14	336.09		50		21.30	311.07	332.372	9.89
3	Domestic HT	12	2295.26	1.46		50	9.07	0.15	1.47	1.625	11.13
	Total Domestic	296394	363158.27	342.85				22.03	317.04	339.070	9.89
4	Non-Profit Public										
i)	First 150 kWh	7861	12023.27	6.67	70.76		10.74	0.87	7.17	8.036	
ii)	Above 150 kWh	2163	8799.35	6.70	258.31		11.73	0.63	7.48	8.115	
	Sub Total	10024	20822.62	13.38		60		1.50	14.65	16.151	12.07
5	Non-Profit PP HT	79	14825.63	7.41		60	9.18	1.19	7.56	8.743	11.80
	Total Non-Profit PP	10103	35648.25	20.79				2.69	22.21	24.894	11.97
6	Commercial										
i)	First 150 kWh	10539.0	25566.22	18.38	145.33		12.04	2.45	22.13	24.58	
ii)	Above 150 kWh	4802.0	22364.66	29.21	506.91		12.40	2.15	35.92	38.06	
	Sub Total	15341	47930.87	47.59		80		4.60	58.04	62.645	13.16
7	Commercial HT	572	19916.16	17.66	2572.84	80	9.52	2.12	18.68	20.800	11.78
	Total Commercial	15913	67847.03	65.25				6.73	76.72	83.445	12.79
8	Public Lighting	770	1476.06	3.10		80	13.00	0.14	4.03	4.172	13.46
9	PWS LT	11	808.98	0.25		90	12.16	0.09	0.30	0.391	15.66
10	PWS HT	80	44228.18	107.85		90	10.84	5.31	129.90	135.203	12.54
11	Agl LT	80	102.49	0.08		50	13.00	0.006	0.104	0.110	13.77
12	Agl HT	8	286.66	0.22		50	11.39	0.019	0.278	0.298	13.53
13	Industrial LT										
i)	First 400 kWh	999	4437.18	2.00	166.83		11.81	0.43	2.36	2.79	
ii)	Above 400 kWh	138	931.20	0.72	434.78		12.27	0.09	0.85	0.94	
	Total Industrial LT	1137	5368.38	2.72		80		0.52	3.21	3.730	13.71
14	Industrial HT (Opt-1)	30	10317.13	16.41	45583.33	80	10.07	1.10	18.37	19.47	11.86
	Industrial HT (Opt-2)	0	0.00	0.00	0.00	80	0.00	0.00	0.00	-	#DIV/0!
15	EV charging Stns (LT)	0	0.00	0.00		75	0.00	0.00	0.00	-	#DIV/0!
16	EV charging Stns (HT)	0	0.00	0.00		75	0.00	0.00	0.00	-	#DIV/0!
17	Bulk Supply HT	172	18699.25	14.76		90	10.19	2.24	16.70	18.95	12.84
	Grand Total	324698	547941	574.28				40.86	588.87	629.73	10.97

Annexure-V

Abstract of Full Cost Tariff, Subsidised Tariff and Category wise subsidy allocated in FY2025-26										
P&ED Department (FY 2025-26)		Energy	Full Cost Tariff				Subsidised Tariff			
		Annual Sales (MU)	Fixed Charge	Energy Charge	Annual Revenue (₹ Crs)	Avg. per unit (₹ /kWh)	Fixed Charge	Energy Charge	Annual Revenue (₹ Crs)	Avg. per unit (₹ /kWh)
1	KJ(Domestic)		Conc/kW	(₹ /kWh)			Conc/kW	(₹ /kWh)		
i)	First 20 kWh	2.50	25	7.89	2.32	9.29	25	2.55	0.988	3.95
ii)	Above 20 kWh	2.80	25	10.98	2.75	9.82	25	3.55	1.038	3.71
	Sub Total	5.30			5.07	9.57			2.026	3.82
2	Domestic		(₹ /CL/kW)	(₹ /kWh)			(₹ /CL/kW)	(₹ /kWh)		
i)	First 100 kWh	155.84	50	9.11	151.62	9.73	50	4.90	85.95	5.52
ii)	101 - 200 kWh	92.62	50	9.84	90.72	9.80	50	7.10	54.34	5.87
iii)	Above 200 kWh	87.63	50	10.29	90.03	10.27	50	8.20	60.03	6.85
	Sub Total	336.09			332.37	9.89			200.31	5.96
3	Domestic HT	1.46	(₹ /kVA/BD)	(₹ /kVAh)	1.62	11.13	(₹ /kVA/BD)	(₹ /kVAh)	1.56	10.66
	Total Domestic	342.85			339.07	9.89			203.90	5.95
4	Non-Profit Public Service		(₹ /CL/kW)	(₹ /kWh)			(₹ /CL/kW)	(₹ /kWh)		
i)	First 150 kWh	6.67	60	10.74	8.04	12.04	60	7.60	5.94	8.90
ii)	Above 150 kWh	6.70	60	11.73	8.11	12.10	60	8.30	5.93	8.84
	Sub Total	13.38			16.15	12.07			11.86	8.87
5	Non-Profit PP- HT	7.41	60	9.18	8.74	11.80	60	8.75	8.39	11.32
	Total Non-Profit PP	20.79	(₹ /kVA/BD)	(₹ /kVAh)	24.89	11.97	(₹ /kVA/BD)	(₹ /kVAh)	20.25	9.74
6	Commercial		(₹ /CL/kW)	(₹ /kWh)			(₹ /CL/kW)	(₹ /kWh)		
i)	First 150 kWh	18.38	80	12.04	24.58	13.37	80	8.20	17.53	9.54
ii)	Above 150 kWh	29.21	80	12.40	38.06	13.03	80	8.45	26.61	9.11
	Sub Total	47.59			62.64	13.16			44.14	9.27
7	Commercial HT	17.66	80	9.52	20.80	11.78	80	8.90	19.59	11.09
	Total Commercial	65.25	(₹ /kVA/BD)	(₹ /kVAh)	83.45	12.79	(₹ /kVA/BD)	(₹ /kVAh)	63.73	9.77
8	Public Lighting	3.10	(₹ /CL/kW)	(₹ /kWh)	4.17	13.46	(₹ /CL/kW)	(₹ /kWh)	3.66	11.81
9	PWS LT	0.25	80	13.00	0.39	15.66	80	11.35	0.36	14.59
10	Agl LT	0.08	90	12.16	0.11	13.77	90	11.10	0.04	4.57
			(₹ /kVA/BD)	(₹ /kVAh)			(₹ /kVA/BD)	(₹ /kVAh)		
11	PWS HT	107.85	50	13.00	135.20	12.54	50	3.80	123.34	11.44
12	Agl HT	0.22	90	10.84	0.30	13.53	90	9.85	0.11	5.15
13	Industrial LT		(₹ /CL/kW)	(₹ /kWh)			(₹ /CL/kW)	(₹ /kWh)		
i)	First 400 kWh	2.00	80	11.39	2.79	13.94	80	3.85	1.85	9.23
ii)	Above 400 kWh	0.72	80	12.27	0.94	13.09	80	7.10	0.61	8.42
	Total Industrial LT	2.72			3.73	13.71			2.45	9.01
14	Industrial HT (Opt-1)	16.41	(₹ /kVA/BD)	(₹ /kVAh)	19.47	11.86	(₹ /kVA/BD)	(₹ /kVAh)	17.60	10.73
	Industrial HT (Opt-2)	0.00	80	10.07	0.00	#DIV/0!	80	9.05	0.00	#DIV/0!
	EV charging Stns (LT)	0.00	75	0.00	0.00	#DIV/0!	75	10.52	0.00	#DIV/0!
	EV charging Stns (HT)	0.00	75	0.00	0.00	#DIV/0!	75	8.20	0.00	#DIV/0!
15	Bulk Supply HT	14.76	90	8.65	18.95	12.84	90	8.65	13.48	9.13
	CL- denotes Contracted Load	574.28	BD- denotes Billing Demand		629.73	10.97			448.93	7.82
									180.80	3.15

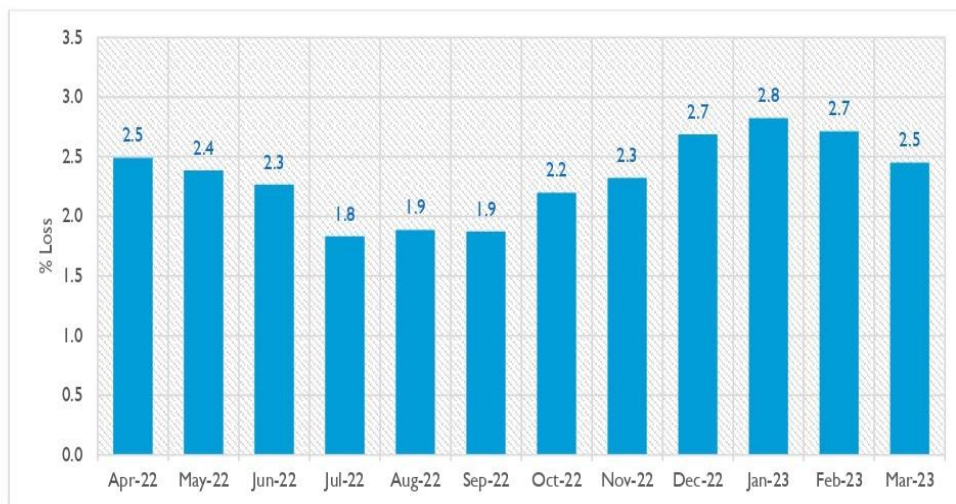
Annexure-VI

NER Losses indicated in their Compendium for FY 2023-24

CH-5: MARKET OPERATIONS

REGIONAL TRANSMISSION LOSS OF NER DURING FY 2023-24

Monthly Average Regional Transmission Loss in %:



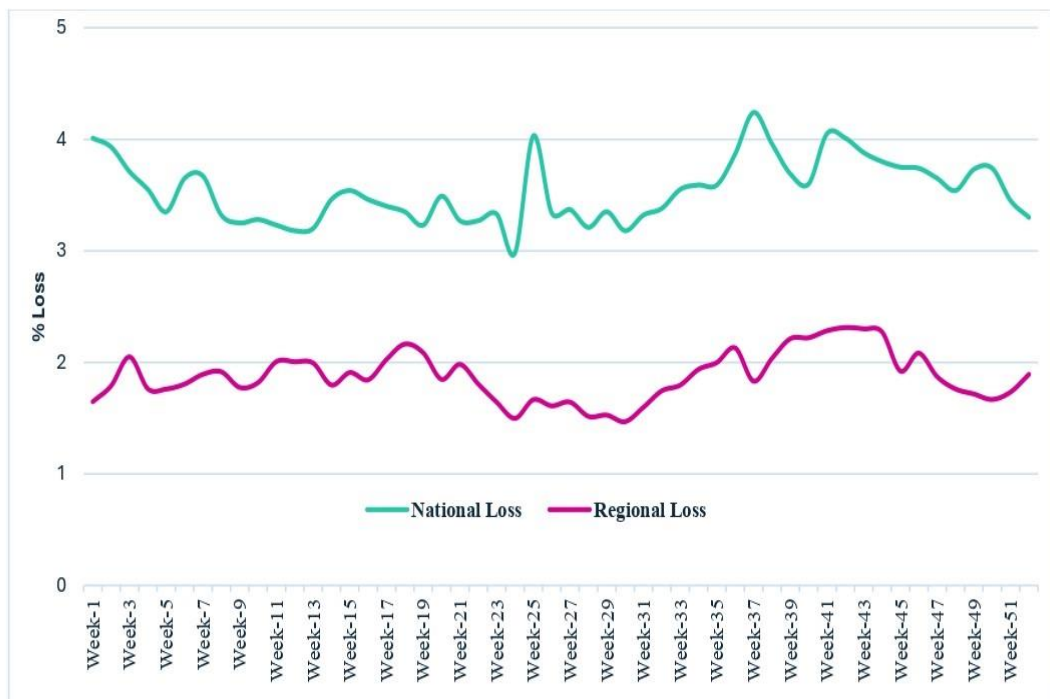
Average Regional Transmission Loss for FY 2023-24 is 2.33%

Annexure-VII

Eastern Region Losses as per their Annual Compendium for FY 2023-24



6.7. National vs Regional % Transmission loss



	National Loss (%)	Regional Loss (%)
Maximum	4.24	2.31
Minimum	2.98	1.47
Average	3.54	1.88

Annexure-VIII

IMMEDIATE

**GOVERNMENT OF MIZORAM
POWER & ELECTRICITY DEPARTMENT**

B.19018/9/2022-P&E

Aizawl, the 18th Dec, 2024.

To

✓
The Engineer-in-Chief,
Power & Electricity Department,
Mizoram : Aizawl.

Subj : Filing of Tariff Petition for FY 2025-2026, True up petition of FY 2023-2024 and APR for the FY 2024-2025.

Ref : No. T.23012/03/2023-EC(P)/Com/64 dt.26.11.2024

Sir,

With reference to above, I am directed to convey concurrence of Finance Department, Govt. of Mizoram vide their I.D. No. FIN(EA) :423/2024-25 dt. 16.12.2024 as reproduced below, for your information and immediate necessary action:

Concurrence of Finance Department(EA) is hereby conveyed for the Draft Tariff Petition for the FY 2025-26, True Up Petition of FY 2023-24 and APR for the FY 2024-25 is hereby returned vetted with a condition that the State Government may pay the Revenue Gap for 2025-26 amounting to ₹ 199.77 crore as subsidy or 26.47% of the approved Annual Revenue Requirement whichever is less.

This issues with the approval of the Hon'ble Chief Minister on 09.12.2024.

One copy of the above Petitions is enclosed herewith.

Yours faithfully,

Enclo : As above

S.E. (Comd)
ng
cc
①

(LALRINAWMA)

Under Secretary (Tech) to the Govt. of Mizoram
Power & Electricity Department

Annexure-IX

P&ED- FY2025-26 - Revenue Realisable with TOD based Tariff

Sl. No.	Category	Number of Consumers	Conn. Load (in kW)	Annual Sales (in MU)	Fixed Charge (kW/kVA)	Energy Charge (kWh/ kVAh)	Yearly Revenue (Rs.Crs)		Total = (FC+VC)	CPU (₹/kWh)
1	2	3	4	5	6	7	8	9	10	11
1	KJ(Domestic)									
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)	19045		1.061	25	2.45		0.26		
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)	19045		3.182	25	3.10		0.99		
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)	19045		1.061	25	1.95		0.21		
	Sub Total	19045	5826.87	5.304	25		0.57	1.45	2.02	3.82
2	Domestic-LT									
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)	277337		168.040	0	5.00		84.07		
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)	277337		117.628	0	6.35		74.69		
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)	277337		50.412	0	3.85		19.42		
	Sub Total	277337	355036.14	336.080	50		21.30	178.18	199.49	5.94
3	Domestic-HT									
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)	12		0.732	0	7.80		0.63		
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)	12		0.512	0	10.00		0.57		
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)	12		0.220	0	6.10		0.15		
	Sub Total	12	2295.26	1.463	50		0.15	1.35	1.51	10.29
4	Non-Profit Public Purpose-LT									
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)	10024		5.351	0	6.95		3.72		
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)	10024		7.357	0	8.90		6.55		
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)	10024		0.669	0	5.40		0.36		
	Sub Total	10024	20822.62	13.377	60		1.50	10.63	12.13	9.07
5	Non-Profit Public Purpose-HT									
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)	79		2.966		8.45		2.79		
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)	79		4.078		10.80		4.89		
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)	79		0.371		6.60		0.27		
	Sub Total	79	14825.63	7.414	60		1.19	7.95	9.14	12.32
6	Commercial-LT									
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)	15341		26.178		7.10		18.58		
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)	15341		19.033		9.10		17.32		
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)	15341		2.3791		5.55		1.32		
	Sub Total	15341	47930.87	47.5900	80		4.60	37.22	41.82	8.79
7	Commercial-HT									
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)	572		8.83		8.60		8.44		
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)	572		7.95		11.00		9.71		
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)	572		0.88		6.70		0.66		
	Sub Total	572	19916.16	17.66	80		2.12	18.81	20.93	11.85
8	Public Lighting									
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)	770		0.00		8.80		0.00		
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)	770		1.706		11.25		1.92		
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)	770		1.396		6.85		0.96		
	Sub Total	770	1476.06	3.101	80		0.14	2.87	3.02	9.73
9	PWS LT									
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)	11		0.148		8.60		0.13		
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)	11		0.099		11.00		0.11		
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)	11		0.000		6.70		0.00		
	Sub Total	11	808.98	0.247	90		0.09	0.24	0.32	13.10
10	PWS HT									
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)	80		64.71		8.80		63.24		
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)	80		43.14		11.25		53.93		
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)	80		0.00		6.85		0.00		
	Sub Total	80	44228.18	107.85	90		5.31	117.16	122.47	11.36
11	Irrgn & Agri - LT	80	102.49	0.080	50	3.80	0.006	0.03	0.04	4.57
12	Irrgn & Agri - HT	8	286.66	0.222	50	3.85	0.019	0.10	0.11	5.14
13	Industrial-LT									
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)	1137		1.088		7.00		0.76		
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)	1137		0.816		8.95		0.73		
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)	1137		0.816		5.45		0.44		
	Sub Total	1137	5368.38	2.720	80		0.52	1.94	2.45	9.02
14	Industrial-HT									
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)	30		6.566		9.05		6.60		
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)	30		4.924		11.40		6.24		
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)	30		4.924		7.05		3.86		
	Sub Total	30	10317.13	16.414	80		1.10	16.69	17.79	10.84
15	Bulk Supply HT									
i)	From 06:00 Hrs. upto 17:00 Hrs. (Normal TOD)	172		5.905		7.70		5.05		
ii)	From 17:00 Hrs. upto 22:00 Hrs. (Peak TOD)	172		5.905		9.70		6.36		
iii)	From 22:00 Hrs. upto 6:00 Hrs. (Off-Peak TOD)	172		2.952		6.20		2.03		
	Sub Total	172	18699.25	14.761	90		2.24	13.44	15.69	10.63
	Grand Total	324697	547940.67	574.28			40.86	408.07	448.93	7.82



MIZORAM ELECTRICITY REGULATORY COMMISSION

AIZAWL : : MIZORAM

TBL Bhawan, 2nd to 5th Floor,
Peter Street, E-18, Khatla, Aizawl, Mizoram, 796001

Website: www.mzerc.mizoram.gov.in

e-mail: mzerc24@gmail.com

Ph: 0389 2333625/2335625