

TARIFF ORDER

TRUE-UP FOR FY 2022-23 APR REVIEW FOR FY 2023-24 DETERMINATION OF AGGREGATE REVENUE REQUIREMENT AND RETAIL TARIFF ORDER FOR FY 2024-25

OF

MANIPUR STATE POWER DISTRIBUTION COMPANY LIMITED

Petition (ARR & Tariff) No.3 of 2024

JOINT ELECTRICITY REGULATORY COMMISSION FOR MANIPUR AND MIZORAM

CONTENTS

	R	
1. Intr	oduction	
1.1.	JERC for Manipur and Mizoram (JERC, M&M)	9
1.2.	Manipur State Power Distribution Company Ltd (MSPDCL)	11
2. Sun	nmary of ARR and Tariff Petition for FY 2024-25	13
2.1.	Aggregate Revenue Requirement (ARR)	13
3. Pov	ver Sector in Manipur- An Overview	15
3.1.	Geographical Reality	15
3.2.	Power Supply	15
3.3.	Distribution Loss	18
3.4.	Consumer Profile	
3.5.	Demand	
3.6.	Energy Audit	
3.7.	Energy Metering	
4. Pub	olic Hearing Process	
4.1.	Introduction	
4.2.	Public Hearing	
4.3.	Proceedings of Public Hearing	
5. Fina	al True up for FY 2022-23	
5.1.	Background	
5.2.	Energy Sales	
5.3.	Energy Balance and Distribution loss	
5.4.	AT&C Losses achieved by MSPDCL from FY2020-21 to FY2022-23:	
5.5.	Energy Purchase	
5.6.	Power Purchase Cost	
5.7.	Transmission Charges	
5.8.	Operation and Maintenance Expenses	
	Employee Cost	
	R&M Expenses	
	Administration and General Expenses	
5.9.	Interest on Working Capital	
5.10.		
5.11.	·	
_	Return on Equity	48
	Write-Off of Bad Debts	_
	Non-Tariff Income	
5.15.	Aggregate Revenue Requirement	
5.16.	Revenue Gap	
-	nual Performance Review for FY 2023-24	
6.1.	Background	
6.2.	Energy sales	
6.3.	Energy Balance and Transmission & Distribution Loss	
6.4.	Energy Purchase and procurement cost	
6.5.	Transmission Charges	
6.6.	Operation & Maintenance Expenses	
6.7.	Interest on Working Capital	
6.8.	Gross Fixed Assets and Depreciation	
6.9.	Interest on Loan	

6.10.	Return on Equity	69
6.11.	Non-Tariff income	70
6.12.	Aggregate Revenue Requirement	71
6.13.	Revenue Gap	72
7. Ana	lysis of ARR for FY 2024-25 and its approval	73
7.1.	Background	73
7.2.	Energy Sales	74
7.2.1.	Approach for Sales	74
7.2.2.	Summary for growth and projections	74
	Category-wise energy sold	
7.3.	Consumer Profile	
7.4.	Connected Load	78
7.5.	T&D loss.	80
7.6.	Energy Balance	81
7.7.	Power Purchase Quantum and Cost	
7.7.1.	Power Purchase Quantum & Cost approved	
	Renewable Purchase Obligations (RPO)	
7.8.	Transmission Charges	
7.9.	Operation and Maintenance Expenses	
7.9.1.	Employee Expenses	
	R&M Expenses	
	A&G Expenses	
7.10.	Capitalisation Capital Expenditure Plan	
7.11.	Gross Fixed Assets & Depreciation	
7.12.	Interest and Finance charges	
7.13.	Interest on Working Capital	
7.14.	Return on Equity	
7.15.	Non-Tariff Income & Bad debts	
7.16.	True-Up surplus back-log adjustments	
7.17.	Aggregate Revenue Requirement	
7.18.	ARR for FY 2024-25 for MSPDCL is proposed as follows:	
7.19.	Revenue gap for FY 2024-25	
7.20.	Tariff Proposal for FY 2024-25	
_	Government Subsidy/ Support	
	ff Principles and Design	
8.1.	Background	
8.2.	Tariffs Proposed by the MSPDCL and Approved by the Commission	
	tage-wise cost of supply	
9.1.	Introduction	
9.2.	Methodology adopted for Computation of Voltage-wise cost of supply:	
	APTEL's guidelines on alignment of tariff to cost of supply	
	Methodology suggested by APTEL	
	Pre-requisite for arriving at the voltage wise Cost of Supply (CoS):	
9.3.	Determination of Voltage-wise Technical losses	
9.4.	Computation of Voltage-wise Cost of Supply	
9.4.1.	Energy Sales approved for FY 2024-25	
9.4.2.	Voltage-wise Technical Loss considered for FY 2024-25:	
9.4.3.	Allocation of Power Purchase Cost for FY 2024-25	
9.4.4.	Allocation of Network Cost for FY 2024-25	
9.4.5.	Cost of supply at different voltage levels	
9.5.	Detailed Study to assess Voltage wise Technical Losses	
J.J.		152

10.	Wheeling Charges for FY 2024-25	133
10.1.	Background	133
10.2.	ARR for wheeling business projected by MSPDCL	133
10.3.	Wheeling Tariff	135
11.	Directives	137
11.1.	General	137
12.	Fuel and Power Purchase Cost Adjustment	163
12.1.	Background	163
TARIFF	SCHEDULE	165
ANNEX	(URES	191
ANNEX	(URE - I	193
ANNEX	(URE - II	194
ANNEX	(URE – III	195
ANNEX	(URE – IV	196
Annex	ure-V	197
Annex	ure VI	198
Annex	ure VII	199
Annex	ure VIII	201

LIST OF TABLES

Table 2.1: Projected ARR for Control period of FY2024-25	13
Table 3.1: Energy Allocation in Megawatts from all Outside State sources	
Table 3.2: Energy Purchase for FY 2022-23 (MU)	
Table 3.3: Distribution Network as on 31.3.2022	
Table 5.1: Category-wise Energy Sales (MU) for FY 2022-23	
Table 5.1: Category-wise Energy Sales (Mo) for F1 2022-23	
Table 5.2: Actual Transmission and Distribution Losses for FY 2022-23	
Table 5.4: Energy balance (MU) for FY 2022-23	
Table 5.5: Distribution loss & Energy Balance approved by Commission for 22-23	
Table 5.6: Energy Purchased in MU for FY 2022-23 as per MSPDCL	
Table 5.7: Power Purchase Cost for FY 2022-23 (Rs. Crore)	
Table 5.8: Power Purchase Approved by Commission in true-up for FY2022-23	
Table 5.9: Transmission Charges for FY 2022-23 (Rs. Crore)	
Table 5.10: Employee Expenses for FY 2022-23 (Rs. Crore)	
Table 5.11: Actual Employee Strength of MSPDCL in FY 2022-23	
Table 5.12:Break-up of R&M Expenses for FY 2022-23 (Rs. Crore)	
Table 5.13: R&M Expenses for FY 2022-23 (Rs. Crore)	
Table 5.14:Break-up of R&M Expenses approved for FY 2022-23 (Rs. Crore)	
Table 5.15: A&G Expenses for FY 2022-23 (Rs. Crore)	
Table 5.16: A&G Expenses for FY 2022-23 (Rs. Crore)	
Table 5.17: Actual O&M Expenses for FY 2022-23 (Rs. Crore)	
Table 5.18: Actual O&M Expenses approved (Rs. Crore)	
Table 5.19: Interest on Working Capital for FY 2022-23 (Rs. Crore)	
Table 5.20: Actual Depreciation for FY 2022-23 (Rs. Crore)	44
Table 5.21: Depreciation for FY 2022-23 (Rs. Crore)	45
Table 5.22: Break-up of Loan for FY 2022-23 (Rs. Crore)	
Table 5.23: Interest on Loan for FY 2022-23 (Rs. Crore)	
Table 5.24: Return on Equity for FY 2021-22 (Rs. Crore)	48
Table 5.25: Break-up of Non-tariff Income for FY 2022-23 (Rs. Crore)	49
Table 5.26: Non-tariff Income for FY 2022-23 (Rs. Crore)	49
Table 5.27: Non-tariff Income approved for FY 2022-23 (Rs. Crore)	49
Table 5.28: Aggregate Revenue Requirement for FY 2022-23 (Rs. Crore)	50
Table 5.29: Commission approved ARR after True-Up (Rs. Crore)	51
Table 5.30: Category wise revenue comparison MSPDCL Vs Commission method:	53
Table 5.31: Revenue Gap for FY 2022-23 (Rs. Crore)	
Table 6.1: Category-wise Energy Sales (MU)	
Table 6.2: Estimated Transmission and Distribution Losses for 2023-24	57
Table 6.3:Transmission and Distribution Losses for APR of FY 2023-24	57
Table 6.4:Energy balance (MU) for APR FY 2023-24	58
Table 6.5: Power Purchase Cost and Quantum for APR FY 2023-24	
Table 6.6: Power Purchase Cost and Quantum for APR FY 2023-24 by Commission	
Table 6.7:Transmission charges for APR FY 2023-24	
Table 6.8: O&M Expenses for APR FY 2022-23	
Table 6.9: Interest on Working Capital for APR FY 2023-24	
Table 6.10: Depreciation for APR FY 2023-24	
Table 6.11: Depreciation for APR FY 2023-24	
Table 6.12: Interest on Loan for APR FY 2023-24	
Table 6.13: Loan details for APR FY 2023-24	
Table 6.14: Return on Equity for APR FY 2023-24	
Table 6.15: NTI for APR FY 2023-24	
10010 01201 101 101 101 11 1 2020 27	, 0

Table 6.16: Aggregate Revenue Requirement for APR of FY2023-24 (Rs. Crore)	71
Table 6.17: Aggregate Revenue Requirement approved (Rs. Crore)	71
Table 6.18: Estimated Revenue Gap for APR of FY2023-24 (Rs. Crore)	72
Table 6.19: Approved Revenue Gap of FY2023-24 for APR (Rs. Crore)	72
Table 7.1: Actual category-wise Energy Sales (MU)	74
Table 7.2: Category-wise Energy Sales CAGR (%)	75
Table 7.3:Category-wise Projected Energy Sales (MU) for FY 2024-25	76
Table 7.4:Category-wise Projected Number of Consumers	77
Table 7.5: Category wise Number of consumers CAGR (%)	
Table 7.6: Category wise connected load CAGR (%)	
Table 7.7:Category wise Projected Connected load based on CAGR (MW)	
Table 7.8: T&D loss trajectory (%)	
Table 7.9: Distribution loss (%) approved by Commission for 2024-25	
Table 7.10: Projected Energy Balance for 2024-25	
Table 7.11: Commission adopted Energy balance for quantum of purchase in 2024-25	
Table 7.12: Projected MSPDCL Allocation from CGS for FY 2024-25	
Table 7.13: Power Purchase quantum & cost approved by Commission	
Table 7.14: RPO Compliance	
Table 7.15:Transmission Charges for FY 2024-25 (Rs. Crore)	
Table 7.16: Employee expenses for FY 2024-25 (Rs. Crore)	
Table 7.17: Employee expenses for FY2024-25 (Rs. Crore)	
Table 7.18: R&M expenses for FY 2024-25 (Rs. Crore)	
Table 7.19:A&G expenses for FY 2024-25 (Rs. Crore)	
Table 7.20: O&M expenses for FY 2024-25 (Rs. Crore)	
Table 7.21: Approved O&M expenses for FY2024-25 (Rs. Crore)	
Table 7.22: Capital Expenditure (Rs. Crore)	
Table 7.23: GFA for FY 2024-25 (Rs. Crore)	
Table 7.24: Loan Details for FY 2024-25 (Rs. Crore)	
Table 7.25: IoWC for FY 2024-25 (Rs. Crore)	
Table 7.26: Return on Equity	
Table 7.27: Non-tariff income (Rs Crore)	
Table 7.28: Aggregate Revenue Requirement (Rs. Crore)	
Table 7.29: Approved ARR for FY2024-25 by the Commission	
Table 7.30: Commission approved Revised Revenue for FY2024-25	
Table 7.31: Combined ARR of MSPDCL proposed for FY2024-25 (Rs. Crore)	
Table 7.32: Revenue Gap for FY2024-25 at existing Tariff (Rs. Crore)	
Table 7.33: Projected ACOS and Avg. Realisation at existing tariff (Rs. Crore)	
Table 7.34: Average tariff increase required (FY 2024-25)	
Table 7.35: Revenue Gap after subsidy for FY 2024-25 by the Commission	
Table 7.36: Existing & Proposed Tariff Structure with Subsidy by MSPDCL	
Table 7.37: Proposed Tariff Structure at Full cost Tariff for FY2024-25 by MSPDCL	
Table 7.38: Commission approved Retail supply Tariff Structure for FY2024-25	
Table 7.39:: Commission proposed Full Cost Tariff (without Subsidy) for FY 2024-25	
Table 7.40 : Commission derived MSPDCL Full Cost Tariff revenue for FY 2024-25	
Table 7.41: Average Cost of Unit Supply for FY2024-25 (MSPDCL Vs. Commission)	
Table 8.1: Existing and Proposed Tariff for FY 2024-25 by MSPDCL	
Table 8.2: Category wise Tariffs Approved by the Commission for FY 2024-25	
Table 8.3: Category wise Full Cost Tariff (No Subsidy) for FY 2024-25 by the Commission	
Table 9.1: Voltage-wise Technical Losses adopted for MSPDCL for FY 2024-25	
Table 9.2: Voltage-wise Technical Losses adopted for FY 2024-25	
Table 9.3: Classification of Categories based on Voltage of power supply	

Table 9.4: apportionment of Commercial losses to voltage wise sales for FY 2023-24	127
Table 9.5: PP cost and network Cost details provided by MSPDCL for FY 2023-24	127
Table 9.6: Voltage wise Energy Sales (MUs) approved for FY 2024-25	128
Table 9.7: Formulae for arriving at the technical losses at various voltage levels	129
Table 9.8: Computation of Technical losses at various voltage levels	129
Table 9.9: Computation of Commercial losses at various voltage levels	130
Table 9.10: Average Power Purchase Cost	130
Table 9.11: Allocation of power purchase cost	130
Table 9.12: Network cost approved for FY 2024-25	
Table 9.13:Allocation of Network cost voltage wise for FY 2024-25	131
Table 9.14: Cost of supply at different voltage levels approved for FY 2024-25	
Table 10.1: Allocation Matrix	133
Table 10.2: ARR for Wires Business for FY 2024-25 projected by MSPDCL	133
Table 10.3: ARR for Wires Business for FY 2024-25 projected by MSPDCL	
Table 10.4: ARR of wheeling business approved by the Commission for FY 2024-25	
Table 10.5: Wheeling Tariff approved by the Commission for FY 2024-25	135

ABBREVIATIONS

Abbreviation	Description	
A&G	Administrative and General	
AAD	Advance Against Depreciation	
ARR	Aggregate Revenue Requirement	
CAG	Controller and Auditor General of India	
CEA	Central Electricity Authority	
CERC	Central Electricity Regulatory Commission	
CWIP	Capital Work in Progress	
DG	Diesel Generation	
DPS	Delayed Payment Surcharge	
EA, 2003	Electricity Act, 2003	
EDM	Electricity Department, Manipur	
EHT	Extra High Tension	
FCT	Full Cost Tariff	
FSA	Fuel Surcharge Adjustment	
FY	Financial Year	
GFA	Gross Fixed Assets	
GOI	Government of India	
HT	High Tension	
IEGC	Indian Electricity Grid Code	
ISGS	Inter State Generating Station	
IR	Inter-Regional	
JERC	Joint Electricity Regulatory Commission for Manipur and Mizoram	
kV	Kilovolt	
kVA	Kilovolt-ampere	
kW	kilowatt	
kWh	kilowatt-hour	
LT	Low Tension	
MAT	Minimum Alternate Tax	
MDI	Maximum Demand Indicators	
MSPCL	Manipur State Power Company Limited	
MSPDCL	Manipur State Power Distribution Company Limited	
MUs	Million Units	
MYT	Multi Year Tariff	
NLDC	National Load Despatch Centre	
NTI	Non-Tariff Income	
O&M	Operation and Maintenance	
PGCIL	Power Grid Corporation of India Ltd	
PLF	Plant Load Factor	
PLR	Prime Lending Rate	
POSOCO	Power System Operation Corporation Ltd.	
PPA	Power Purchase Agreement	
PWW	Public Water Works	
RDSS	Revamped distribution Sector Scheme	
RE	Revised Estimate	
REC	Renewable Energy Certificate	
R&M	Repair and Maintenance	
RoE	Return on Equity	

Abbreviation	Description
RPO	Renewable purchase Obligation
RTS	Roof Top solar
RGGVY	Rajiv Gandhi Gramin Vidyutikaran Yojana
SBAR	State Bank Advance Rate
SLDC	State Load Despatch Centre
T&D	Transmission and Distribution
UI	Unscheduled Interchange

JOINT ELECTRICITY REGULATORY COMMISSION FOR MANIPUR AND MIZORAM

TBL Bhawan, 2nd to 5th Floor, E-18, Peter street, Khatla, Aizawl, Mizoram – 796001

Petition (ARR & Tariff) No. 3 of 2024

In the matter of

Trueing up for FY 2022-23, Annual Performance Review for FY 2023-24 and determination of Aggregate Revenue Requirement (ARR), Wheeling Tariff and Retail supply Tariff for FY 2024-25 for sale of electricity by the Manipur State Power Distribution Company Limited (MSPDCL) in the State of Manipur

AND

Manipur State Power Distribution Company Limited ----- Petitioner

Present

Mr. R. Thanga CHAIRPERSON

Er. Benjamin L. Tlumtea MEMBER

ORDER

- The Manipur State Power Distribution Company Limited (hereinafter referred to as MSPDCL) is a distribution licensee in terms of section-14 of the Electricity Act 2003 (hereinafter referred to as Act), engaged in the business of distribution of electricity in the state of Manipur.
- 2. JERC (M&M) (MYT) Regulations, 2014 specify that the distribution licensee shall file ARR and Tariff Petition in all aspects along with requisite fee as specified in Commission's fees, fines and charges regulations, on or before 30th November of the preceding year.

MSPDCL has filed MYT Tariff petition for determination of ARR for FY 2024-25 and retail tariffs for FY 2024-25 along with Annual Performance Review for FY2023-24 and True-up petition for FY2022-23 on Dt.26th December2023 vide its letter No. 2/99/2023/MSPDCL-ARR/2617-20, IMPHAL Dated: 26.12.2023.

3. ARR & Tariff Petition for FY 2024-25

As per the directive of the Commission, the MSPDCL has filed the Petition for True-up for FY 2022-23 and APR for FY 2023-24 and determination of Aggregate Revenue Requirement (ARR) and Retail Supply Tariff for FY 2024-25. In the petition MSPDCL has estimated net ARR of Rs.1093.09 Crores for FY 2024-25 and the revenue expected from existing tariff is at Rs. 597.21 Crore, the revenue from Outside State sale is at Rs.40.38Crs and after assuming a tariff subsidy support of Rs.366.19Crores expected from the Govt. of Manipur for FY 2024-25 MSPDCL had indicated an unmet revenue gap of Rs.89.32 Crore, which the MSPDCL now proposes to recover it through revision of tariff to an extent of 15.00% hike over prevailing rates. The MSPDCL had newly proposed to introduce meter rental charges for Smart Meters of single phase and three-Phase meters afresh this year though it was not mentioned in the prayer submitted.

4. Admission of the petition

The Commission observed that the ARR petition filed by the Petitioner was incomplete and lacking critical and vital information required as specified in JERC for M&M Multi Year Tariff Regulations, 2014. Therefore, MSPDCL was asked to resubmit the missing information in the ARR petition vide Commission letters No.H.20013/46/23-JERC/7, dated 15.01.2024 & No.H.20013/46/23-JERC/11, dated 29.01.2024. Upon receipt of additional information, the tariff Petition was admitted on 13.02.2024 and marked as petition (ARR and Tariff) No. 3 of 2024 and taken up the processing of ARR submissions made vide their letter No.2/99/2023/MSPDCL-ARR/2617-20, Dt 26.12.2023. The MSPDCL has submitted additional information/clarifications etc called for. vide its letters (1) No.2/99/2023/MSPDCL-ARR/2712-13, Dt 08.02.2024, (2) No.2/99/2023/MSPDCL-ARR/2710-11, Dt 08.02.2024 (3) No.2/99/2023/MSPDCL-ARR/2907-9, Dt 28.02.2024 (4) No.2/99/2023/MSPDCL-ARR/2829-30, Dt 19.02.2024.

5. True up petition for FY 2022-23

As per Regulation 10(2) of JERC (M&M) (MYT) Regulations, 2014 the licensee shall file an application for True up of the previous year (FY 2022-23) along with Audited Annual Accounts. MSPDCL has submitted true up petition along with ARR petition for FY 2024-25 along with the Statutory Auditors approved audited annual accounts for FY 2022-23. The MSPDCL has furnished the net ARR of Rs.893.05 Crore for FY 2022-23 and shown an unmet deficit/Gap of Rs.159.29 Crores after a category wise revenue receipt of Rs.469.26Crs and also the government tariff subsidy amount of Rs.264.50Crore. Details of revenue realised from the Outside State sales amounting to Rs.33.09Crs were furnished for scrutiny of FY2022-23 in their ARR true-up filings. The true-up had been taken up with the data readily available from approved audited Balance Sheet and relevant other background details called for. The Revenue shown a realised is the under realisation of revenue for the units sold and not matching with the probable revenue to be realised as per the billing mechanism. Hence, the final True-up proposal is examined and admitted at Rs.Nil surplus for FY2022-23 as detailed in the relevant chapter.

6. Annual Performance Review for FY 2023-24

The JERC M&M (MYT) Regulations 2014 had issued an amendment Dt 27th March 2019 which mandates the licensee (i.e., MSPDCL) to submit the annual performance review to the Commission for the current year ARR with reference to revised estimates. Accordingly, review for FY 2023-24 was carried out by MSPDCL which resulted in revised net **APR** (Annual Performance Review) of Rs.926.95Crs with an estimated **NIL** revenue gap (Deficit) after considering category wise revenue realisable amount of Rs.**568.24Crs** and revenue of Rs.38.02Crs from sale of surplus power in arrival of revenue gap. The requirement of overall Govt subsidy was stated as Rs.358.71Crs.

7. Aggregate Revenue Requirement & Retail Tariff for FY 2024-25

The MSPDCL have submitted ARR & tariff petition for FY 2024-25 for determination of ARR and to revised Tariff for FY 2024-25 with gross ARR amount of Rs.1052.73Crs and with net revenue gap of Rs.366.19Crs after adjusting for projected revenue realisation from existing rates from all sources of Rs.597.21Crs (excluding additional revenue of Rs.89.32Crs) before adjusting the Government tariff subsidy amount of Rs.366.19Crs and

after such adjustment the proposed unmet gap was Rs.89.32Crs to be recovered through 15% overall tariff revision. The Commission after detailed examination, analysis and scrutiny arrived at the net ARR at Rs.947.13Crs and net revenue gap of Rs.255.57Crs only considering the revenue realisation as per prevailing tariff rates of FY2023-24. The above is done after due consideration of Outside State sales income, adopted zero revision in Retail supply Tariff to existing categories and considering the Manipur Government subsidy amount of Rs.255.57Crs as against Rs.366.19Crs of subsidy support so stated MSPDCL had confirmed through their letter No.2/99/2023/ MSPDCL-ARR/715-17, Dt.04.05.2024. The tariff Order could not be issued w.e.f 1st April 2024 due to proclamation of Election code of conduct due to 2024 Lok Sabha elections on 16th March 2024 and its consequential restrains to comply with.

8. **Public Hearing Process**

Regulation-17 of the MYT Regulations, 2014 provides giving adequate opportunity to all stake holders and general public for making suggestions/objections on the Tariff Petition as mandated under section-64 of the Electricity Act 2003. Accordingly, the Commission directed MSPDCL vide letter No.H.20013/46/23-JERC/19, dated 13.02.2024-to publish the ARR and Tariff Petition for the FY 2024-25 in an abridged form as public notice in newspapers having wide circulation in the state inviting suggestions /objections on the Tariff Petition.

Accordingly, MSPDCL has published the summary of Tariff Petition in an abridged form as public notice in the following newspapers and the Tariff petition was also placed on the website of MSPDCL. The **last date of submission** to file their suggestions/objections by general public was fixed on **02**th **March 2024**.

SI. No.	Name of Newspaper	Language	Date of publication
1.	Sangai Express	English	15 th & 16 th February, 2024
2.	Poknapham	Manipuri	15 th & 16 th February, 2024

The Commission have received one objection/suggestion from All Manipur Power Consumers' Association (AMPCA) on the ARR petition filed by the MSPDCL for FY2024-25. The Commission passed on the objection received to MSPDCL for communicating their

response in reply form upon the objections raised vide Commission letter No H 20013/46/23-JERC(part) dated 4th March 2024.

The Commission, in order to ensure transparency in the process of Tariff determination and for providing proper opportunity to all stake holders and general public making/expressing their suggestions/objections on the Tariff petition and for the convenience of the consumers and general public across the state, decided to hold a public hearing at the headquarters of the Manipur state at Imphal.

9. Notice for Public Hearing

Accordingly, the Commission published a notice in the following leading newspapers giving due intimation to the general public, interested parties, objectors and the consumers about the public hearing to be held at Conference hall of JERC(M&M), Aizawl by virtual mode basis on 19.03.2024 at 1.00PM

SI. No	Name of the News paper	Language	Date of Publication
1	Poknapham	Manipuri	6 th & 7 th March 2024.
2	The Imphal Free Press	English	6 th March 2024.

10. Public Hearing

The Public hearing was held as scheduled on 19.03.2024 at Conference Hall, Aizawl from 1:00 PM to 2.30 PM on virtual Mode basis. During the public hearing, one objector was provided a time slot for presenting before the Commission his/her views on the petition of the MSPDCL. The main issues raised by the single objector during the public hearing and corresponding response of the MSDPCL is narrated in **Chapter-4**.

- 11. The State Advisory Committee could not be conducted due to the non-conducive communal disturbances prevailing at Imphal though sincere efforts were made in this matter and hence no minutes and list of participants were attached at Annexure-I at the end of this Tariff Order for FY 2024-25.
- 12. The Commission taken into consideration the facts presented by the MSPDCL in its Petition and subsequent filings, the suggestions/objections received from stakeholders, consumer organizations, general public and recommendations of State Advisory

Committee and response of the MSPDCL to those suggestions/objections for approval of the ARR and tariff petition for FY 2024-25.

- 13. The Commission has reviewed the directives issued earlier in the Tariff orders for FY 2010-11 to FY 2023-24 and noted that some of the directives were compiled with and some are partially attended with. The Commission has dropped the directives those were fully complied and the remaining directives are consolidated again and fresh directives are issued for further necessary action by MSPDCL.
- 14. In exercise of the powers vested under section-62 read with section-64 of the Electricity Act 2003 and Regulation-16 JERC for M&M (Multi Year Tariff) Regulations, 2014 (hereinafter referred to as Tariff Regulations) and other enabling provisions in this behalf the Commission issues this order approving of the ARR and Tariffs for retail supply of electricity in the state of Manipur.
- 15. This order is in Twelve (12) chapters as detailed below:
 - Chapter 1: Introduction.
 - Chapter 2: Summary of ARR and Tariff Petition for FY 2024-25.
 - Chapter 3: Power Sector in Manipur An Overview.
 - Chapter 4: Public Hearing process.
 - Chapter 5: Final True up for FY 2022-23.
 - Chapter 6: Annual Performance Review for FY 2023-24.
 - Chapter 7: Analysis of ARR and proposals for FY 2024-25 and Commission's decisions.
 - Chapter 8: Tariff Principles and Design.
 - Chapter 9: Voltage wise cost of supply
 - Chapter 10: Wheeling Charges for FY 2024-25.
 - Chapter 11: Directives.
 - Chapter 12: Fuel and Power Purchase Cost Adjustment
- 16. The MSPDCL 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 local daily newspapers having wide circulation in the State within a week and submit compliance of the same to the Commission by the MSPDCL before effective date itself.

17. This Order shall be effective from **16th June**, **2024** onwards and shall remain in force until the issue of next Tariff Order by the Commission.

Bayo Llumb

(BENJAMIN L. TLUMTEA)

MEMBER

(R. THANGA) CHAIRPERSON

Place: Aizawl

Date: 14/06/2024

 WISPUCE Tariff Order for FY 2024-25

1. Introduction

1.1. JERC for Manipur and Mizoram (JERC, M&M)

In exercise of the powers conferred by the Electricity Act 2003, (hereinafter referred to as Act) the Government of India constituted Electricity Regulatory Commission for the States of Manipur and Mizoram to be known as "Joint Electricity Regulatory Commission for Manipur and Mizoram" vide GOI. Gazette (Extra Ordinary) Notification No. 23/3/2002 R&R dated 18/01/2005, (hereinafter referred to as Commission) as per the authorization given by the Government of Manipur and the Government of Mizoram vide Memorandum of Agreement dated 23/07/2004. The Commission constituted is a two-member body designated to function as an autonomous authority responsible for regulation of the power sector in States of Manipur and 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 January 24th, 2008.

- a). In accordance with the Act, the Commission discharges the following functions:
 - i. Determine the tariff for generation, transmission, distribution and wheeling of electricity, wholesale, bulk or retail, as the case may be, within the State: Provided that where open access has been permitted to a category of consumers under Section 42 of the Act, the State Commission shall determine only the wheeling charges and surcharge thereon, if any, for the said category of consumers;
 - ii. 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;
 - iii. Facilitate intra-State transmission and wheeling of electricity
 - iv. Issue licenses to persons seeking to act as transmission licensees, distribution licensees and electricity traders with respect to their operations within the State;
 - v. 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;
- vi. Adjudicate upon the disputes between the licensees and generating companies; and to refer any dispute for arbitration;
- vii. Levy fee for the purposes of this Act;
- viii. Specify State Grid Code consistent with the Central Grid Code specified under Clause (h) of sub-section (1) of Section 79 of the Act;
 - ix. Specify or enforce standards with respect to quality, continuity and reliability of service by licensees;
 - x. Fix the trading margin in the intra-State trading of electricity, if considered, necessary;
 - xi. Discharge such other functions as may be assigned to it under the Act.
- b). Further, the Commission also advises the State Government on all or any of the following matters namely:
 - i). Promotion of competition, efficiency and economy in activities of the electricity industry;
 - ii). Promotion of investment in electricity industry;
 - iii). Reorganization and restructuring of electricity industry in the State;
 - iv). Matters concerning generation, transmission, distribution and trading of electricity or any other matter referred to the State Commission by the State Government.
- c). The State Commission ensures transparency while exercising its powers and in discharging its functions.
- d). In discharge of its functions, the State Commission is guided by the national Tariff Policy (NTP) was brought out by GOI in compliance to Section 3 of the Act. The objectives of the NTP are to:
 - Ensure availability of electricity to consumers at reasonable and competitive rates;
 - Ensure financial viability of the power sector and attract investments;
 - Promote transparency, consistency and predictability in regulatory approaches across jurisdictions and minimize perceptions of regulatory risks;

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

1.2. Manipur State Power Distribution Company Ltd (MSPDCL)

In pursuance Electricity Act 2003, herein after referred to as Act, the erstwhile State Electricity Department was unbundled into 2 (two) state owned functionally independent successor entities is (i) Manipur State Power Company Ltd (herein after referred has MSPCL) a deemed transmission licensee and (ii) Manipur State Power Distribution Company Ltd (herein after referred has MSPDCL) a deemed distribution Licensee w.e.f 1st of Feb 2014, by a Gazette notification of the Government of Manipur vide Manipur State Electricity Reforms Transfer Scheme 2013 dated 31st December 2013. MSPDCL is a 100% subsidiary of MSPCL and undertakes power distribution within the state of Manipur. MSPDCL holds the entire network in the state for all voltage levels of 11kV and below. All the existing generation assets of about 45MW which are primarily function as back up generation facilities are transferred to MSPDCL. These generation assets are included as other business for MSPDCL. MSPDCL also carries out the trading activity.

The objectives of the MSPDCL are:

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

MSPDCL Tariff Order for FY 2024-25
Wish Det Tahin Order for 11 2024-25

2. Summary of ARR and Tariff Petition for FY 2024-25

2.1. Aggregate Revenue Requirement (ARR)

The MSPDCL in its petition filing has submitted the Petitions relating to True up of FY 2022-23, Annual Performance Review for FY 2023-24 and the determination of ARR for FY2024-25 and Tariff revision proposal filing for FY 2024-25.

Table 2.1: Projected ARR for Control period of FY2024-25

(Rs. Cr)

SI. No	Particulars	FY2024-25
1	Power Purchase Cost	597.24
2	Inter-State Transmission Charges	97.00
3	Intra-State Transmission Charges	112.06
4	SLDC & NRLDC Charges	1.49
5	Employee Cost	107.37
6	R&M Expenses	14.73
7	Administration & General Expenses	8.34
8	Depreciation	20.92
9	Interest and Finance Charges	56.70
10	Interest on Working Capital	7.87
11	Bad Debts	17.20
12	Total Cost	1040.92
13	Return on Equity	1.56
14	Add: Income Tax	0
15	Add; True-up gap for past years	61.47
16	Less: Non-Tariff Income	-10.84
17	Net ARR	1093.09
18	Retail Sales revenue at Tariff rates of FY2023-24	597.21
19	Revenue from surplus energy sale	40.38
20	Overall Revenue from all sources	637.59
21	Revenue Deficit/(Surplus)	455.51

Prayer

MSPDCL requests the Hon'ble Commission to:

- i). Admit the Petition for Final True-up for FY 2022-23.
- ii). Approve the amounts claimed in the true up of FY 2022-23.
- iii). Admit the petition and approve the APR for FY2023-24.
- iv). Approve the amounts claimed in the ARR for FY 2024-25.
- v). Approve the category-wise tariffs proposed by MSPDCL for FY 2024-25.

- vi). Condone any inadvertent omissions/ errors/ shortcomings and permit the Petitioner to add/change/modify/alter this filing and make further submissions as may be required at a future date;
- vii). Permit submission of any additional information required by the Commission during the processing of this Petition;
- viii). Pass such other and further orders as are deemed fit and proper in the facts and circumstances of the case.

####

3. Power Sector in Manipur- An Overview

3.1. Geographical Reality

Manipur, like other States of the North-Eastern Region, has been gifted with a fairly high hydro power potential. However, the major portion still remains untapped due to financial and environmental bottlenecks. Currently, the State is having one furnace oil based generating station at Leimakhong (6x6 MW) in standby mode, and a few diesel generating stations. Therefore, the State is mostly dependent upon outside sources for meeting majority of its energy requirement. It is currently getting power from Bongaigaon TPS NTPC, NHPC, NEEPCO, ONGC Tripura Power Corporation (OTPC) Unit I and Unit II, and Baramura Gas Turbine Power Project (BGTPP). Based on the scheduled firm share allocation from the above stated Central Sector generating stations to MSPDCL for current financial year from NEEPCO, NHPC, OTPC-I and II, BGTPP of Tripura State Electricity Corporation Limited (TSECL) and NTPC Bongaigaon is currently around 2909MW. However, currently MSPDCL's share is around 248.82 MW from installed and operating central generating stations' power projects.

For the purpose of evacuating power from different sources in the North-Eastern Region, the inter-state transmission network owned and maintained by PGCIL as well as the intra-state transmission network owned by the Manipur State Power Corporation Limited (MSPCL) is being utilised. The existing intra-state transformation capacity of 132 kV Substations in Manipur is 822.15 MVA and the length of the 33 kV lines is 1753.201 CKT kms of single circuit lines and 87.9 km of double circuit lines. Currently, MSPDCL has 192 Feeders of 11 kV and above (rural and urban) and 7904 numbers of DTs (rural and urban). Also, MSPDCL's MVA capacity of LT network and 8205 numbers of (rural and Urban) HT network are 599.06 MVA and 164.85 MVA, respectively.

3.2. Power Supply

a) Own Generation

The MSPDCL has own generation plants of Micro hydel, diesel with installed capacity of 45.11 MW. But there is no own generation contribution shown from these stations from FY 2018-19 onwards to FY 2023-24.

b) Power Purchase from Generating Station sources Outside the State

The MSPDCL is mostly dependent on Central Generating Stations (CGS) located in different parts of the North Eastern Region for meeting its energy requirement. The total firm share from own generation and the Central Sector Generating Stations like NTPC, NEEPCO, NHPC, OTPC, Tripura and others are 248.82 MW as shown in the Table below. The actual peak and off-peak availabilities are however always less because of low plant load factors.

Table 3.1: Energy Allocation in Megawatts from all Outside State sources

SI.	MSPDCL Generation sources	Ins./Cap	Share
No		(MW)	(MW)
Α	NEEPCO(Hydro)		
1	Kopili I HEP	200	15.03
2	Kopili II HEP	25	1.77
3	Khandong HEP	50	3.35
4	Ranganadi HEP	405	34.4
5	Doyang HEP	75	5.99
	Sub total	755	60.54
В	NEEPCO (Gas Based)		
1	Assam Gas based Power Project	291	23.96
2	Agartala Gas Turbine Power Project	130	10.85
	Sub total	421	34.81
С	NHPC (Loktak HEP)		
1	Purchased	105	44.34
	Sub total	105	44.34
D	NTPC – New Plants		
1	Bongaigoan Unit-1,2,&3	750	25.825
	Sub total	750	25.825
E	TRIPURA		
1	Baramura (Gas Based) (IV & V)	42	-
	Sub total	42	•
F	OTPC		
1	Pallatana- (Unit I & II)	726	52.00
	Sub Total	726	52.00
G	Others		
1	Pare HEP	110	9.30
2	Lower Subansiri Stage I	500	22.00
	Grand Total	3409.00	248.82

The above tabled details are carried forward from FY 2023-24 data and the Licensee did not provide these details in its filing for FY 2024-25.

MSPDCL has been allocated power from various Central Generating Stations in North Eastern Region, viz., NEEPCO, NHPC, OTPC-Palatana, and NTPC Bongaigaon and other sources for power purchase under long term PPAs. The actual power purchase quantum and energy availability as compared to quantum approved for in the Tariff Order for FY 2022-23 are as detailed in the Table below:

Table 3.2: Energy Purchase for FY 2022-23 (MU)

(All in MU)

SI.	Si. Causes of Danier (Tariff o		2022-23
No.	Source of Power	approved)	Actuals
Α	CGS - NEEPCO	319.00	332.46
1	Kopili -l HEP	1.000	0.00
2	Kopili-II HEP	3.00	0.00
3	Khandong HEP	15.00	0.00
4	Ranganadi HEP	110.00	114.79
5	Doyang HEP	15.00	13.41
6	Assam GBPP	105.00	132.89
7	Agartala GTPP I & II	70.00	71.37
В	CGS – NHPC	242.00	162.18
1	Loktak HEP Purchased Power	180.00	106.01
2	Loktak HEP- Free Power	62.00	56.17
С	NTPC - New Plants	158.00	192.77
1	NTPC Bongaigaon Unit I to III	158.00	192.77
D	Others	297.00	397.25
1	Baramura GBPP Unit IV and V	32.00	11.18
2	OTPC Palatana	225.00	342.42
3	Para HEP	40.00	43.65
4	Renewable – Solar	0.000	-
5	Renewable – Non-Solar	0.00	-
	Total CGS & other purchases	1016.00	1084.66
	IEX & Banking transaction		
6	IEX Purchases	30.45	68.51
7	Banked mode Purchase	0	113.84
8	Banking mode Sales	0	-142.82
9	IEX Sales	-35.00	-68.75
	UI Over Drawal		14.72
	UI Under Drawls		-14.77
	Overall Net Purchases (MU)	1011.45	1055.39

As can be seen from the above Table, the actual power purchase quantum from CGS in FY 2022-23 was 1084.66 MU, which is higher than the tariff Order approved quantum of 1016MU for FY2022-23. The requirement in the state is higher in winter months when hydro availability is lower and MSPDCL has to purchase from outside to meet the state

demand. To manage this, purchase through banking mechanism has been planned. Also, actual deviation is managed by MSPDCL by way of purchase/sell of power from IEX as per requirement or by availing the banking facility with other traders. It can be seen that the net power purchase from all sources for FY 2022-32 is 1055.39MU before applying NER losses.

Manipur, being a hilly state with its population unevenly dispersed and spread over remote corners. The details of Distribution network, owned & operated by MSPDCL as on 31.03.2022, are given in Table below.

SI.
No.State network capacityNumber, Capacity and length1400 kV sub-Station1 No.s with 315MVA capacity & 45.1 KM length2132 kV Sub-Station18 No.s with 811MVA capacity & 776 KM length333kV Substations170 nos with 955MVA capacity & 1770KM length411kV and above216 feeders, 9576 No's of DTR

903 MVA capacity and 20363KM Length

210 MVA capacity and 8113 KM length.

Table 3.3: Distribution Network as on 31.3.2022

3.3. Distribution Loss

LT Net Work

HT Net Work

The Distribution Losses as per the filing is 12.07% by MSPDCL in FY 2022-23 is lower than 20.50% approved by Hon'ble Commission in its ARR order dated 23.03.2022. The technical and commercial losses are not provided with segregation.

The quantum of distribution losses is primarily due to the higher LT line lengths and the hilly / complex terrain of Manipur State. The long LT distribution lines and distribution at 11 kV are leading to higher distribution losses in the state. In the recent past, due to various initiatives in rural electrification, significant progress was made by MSPDCL in addition to the rural consumers. However, it is pertinent to note that the new consumer addition happened in most remote areas by extending the distribution network of MSPDCL. Due to smaller load and low consumption level, technical line losses would be quite high in those areas. MSPDCL is trying its best to serve them continuously and maintain these systems with its workforce efficiently. With the present state of complex terrain, long LT distribution lines, scatter LT domestic consumers, the actual LT distribution losses in Manipur are higher than the Commission approved distribution losses as given in its ARR order. Further, MSPDCL is in the process of expanding the

coverage of prepaid meters to reduce unauthorized usage of electricity and the T&D losses. As the coverage of prepaid meters increased in the state in the future years, the T&D losses gradually improved.

3.4. Consumer Profile

The category wise consumers and corresponding energy sales during the year 2022-23 are not submitted by the licensee and hence no details.

3.5. Demand

The energy demand of the MSPDCL is met by supply of power from central generating stations of North Eastern Region and Baramura Gas Based Plants in Tripura State. The actual annual energy requirement for retail sale during FY 2022-23 is 1030.48 MU.

3.6. Energy Audit

The MSPDCL is not conducting Energy Audit effectively either at the incoming stage or at the consumer end. At present, the MSPDCL is arriving at the losses by taking the input at 11kV point and compare it with energy sales at consumer end and showing the difference as distribution loss. Proper energy audit should be carried out to find out the actual distribution loss. Feeder wise energy audit is not done.

3.7. Energy Metering

MSPDCL didn't provide any data on this topic to give any elaboration.

MSPDCL Tariff Order for FY 2024-25	

4. Public Hearing Process

4.1. Introduction

On admitting the ARR and Tariff Petition for FY 2023-24, the Commission directed the MSPDCL to make available the copies of petition to the general public, post the petition on their website and also publish the same in newspapers in an abridged form and invite comments/objections/suggestions from them.

One written objection is received, received from All Manipur Power Consumers Association, Imphal.

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 Conference Hall of JERC(M&M), Aizawl on 19.03.2024 from 1:00 PM. to 2.30 PM on virtual Mode basis keeping in view the non-conducive & Tense situation prevailing at Imphal. During the Public Hearing one participant from All Manipur Power Consumers' Association on behalf of general public have partaken to offer their views in respect of the ARR and Tariff Petition for FY 2024-25 of MSPDCL. The list of participants who attended the Public Hearing is given in Annexure-II. The Officers of MSPDCL who attended the Public Hearing responded on the issues raised by the sole objector Sri. Konthoujam Sanatomba, General Secretary, All Manipur Power Consumers' Association.

4.3. Proceedings of Public Hearing

Objector: Mr.Konthoujam Sanatomba, General Secretary, All Manipur Power Consumers' Association (AMPCA).

Objections:

All the people of Manipur have been suffering from the pandemic of Corona-19 for 2/3 years. In the hard days of their time due to the Corona-19 another hardest suffering also has been made to the people of Manipur due to the occurrence of conflict/war like situation between the Manpuris Meiteis and Chin Kuki Narcotic Terrorists since the 3rd of May, 2023 till now. Many houses (in terms of thousand) have been burn and many homeless people (in terms of lac) have been taking shelter in the Relief Camps. They are suffering a lots, physically, mentally,

- educationally, financially if any due to the endless crisis.
- 2. The per capital income of Manipur is the lowest in comparison with other state of India neighbouring states. Having below poverty line all the people is struggling for their livelihood.
- 3. To make power tariff revision in the prevailing situation of Manipur may not be justice.
- In the light of the above-mentioned facts and figures, AMPCA requested not to arrange for Revising the Power Tariff FY 2024-25 in the interest of the people of Manipur.

Reply from MSPDCL, to objections of AMPCA:

- 1. MSPDCL would like to state that Manipur has no State-owned power generation and is totally dependent on the purchase of the allocated shares from Central Power Generating Stations.
- 2. It is also to mention that all the powers supplied to the state is being purchased from the central power generation utilities (CPSU). The rate of power purchase is totally dependent on the rates of these CPSUs.
- 3. Also, Gas and Coal run Stations are dependent on the Coal and Gas rates globally. The rise in Coal and Gas prices in the International Market impacts the Energy Charge Rate (ECR) resulting in the increase in Power purchase rate of upto 22% from FY 2021-22 to FY 2022-23 and is expected to rise further in FY 2023-24.
- 4. With the increasing demand of power every year MSPDCL is further burdened to purchase power in a very high rate whereas Hon'ble Commission permitted for nominal tariff increase in last two years i.e. 1.44% in FY 2022-23 and 0% in FY 2023-24.
- 5. It is also to mention that average cost of supply projected in the ARR & Tariff petition FY 2024-25 is Rs.11.72/unit and average revenue realization projected at existing Tariff is Rs.6.65/unit. For meeting this gap, MSPDCL proposed for state subsidy and tariff increase.
- 6. Without the tariff hike, the MSPDCL will be further burdened and will not be in a position to pay off the Power Purchase Bills regularly. This will lead to Power regulation as per the guidelines of the Ministry of Power. Ultimately the whole state will suffer if such a situation arises.

Commission's Comments

The Objections raised by the AMPCA and replies of the MSPDCL are noted.

5. Final True up for FY 2022-23

5.1. Background

MSPDCL is, hereby, submitting petition for Final true up of FY 2022-23 as per Regulation 10.2 of JERC (Multi Year Tariff) Regulations, 2014 based on audited annual accounts. As per Regulation 10.6 of JERC (Multi Year Tariff) Regulations, 2014, the Commission has to undertake true up based on audited accounts and pass an order recording approved aggregate gain or loss on account of controllable factors and the amount of such gains or losses that may be shared in accordance with Regulation 13 of JERC (Multi Year Tariff) Regulations, 2014.

It may be noted that the present true-up Petition is based on the comparison of the actual expenses and revenue for FY 2022-23 with the expenses and revenue considered by the Hon'ble Commission in the Annual Revenue Requirement (ARR) of FY 2022-23 as decided in the JERC tariff Order of April, 2022.

5.2. Energy Sales

Petitioners Submission

MSPDCL caters to a diverse consumer mix comprising of:

- Kutir Jyoti and LT Domestic
- LT & HT Commercial,
- LT & HT Industry
- Public Street Lighting
- Public Water Works
- · Agriculture consumers.
- Bulk Consumers

LT Domestic category is the largest consumer category and comprises around 60% of the total sales of MSPDCL. The number of consumers in this category has increased rapidly in the recent years on account of the rural electrification schemes such as RGGVY, DDUGJY and Saubhagya scheme. The actual category-wise energy sales as compared to the energy sales approved by the Hon'ble Commission in ARR for FY 2022-23 is given in the Table below:

Table 5.1: Category-wise Energy Sales (MU) for FY 2022-23

SI No.	Particulars	Approved in	Approved in	Actual (2022- 23)
110.		ARR Order	APR Order	
		2022-23	2022-23	
Α	LT Supply			
1	Kutir Jyoti	4.23	3.96	0.00
2	Domestic	470.7	552.18	519.37
3	Commercial LT	65.16	64.94	101.26
4	Public Lighting	3.69	5.67	16.90
5	PWW	1.29	1.38	4.04
6	Irrigation and Agriculture	0	1.22	3.56
7	Cottage and Small Industries	22.95	20.76	25.80
	Total LT	568.02	650.11	670.93
В.	HT Supply			
8	Commercial HT	21.97	21.72	32.79
9	PWW	24.66	26.34	78.45
10	Irrigation and Agriculture	0.75	0.80	2.31
11	Medium Industries	4.62	4.72	6.38
12	Large Industries	10.66	9.28	12.62
13	Bulk Supply	93.98	101.07	31.91
	Total HT	156.64	163.93	164.46
	Grand Total (LT & HT)	724.66	814.04	835.39

The actual energy sales by MSPDCL in FY 2022-23 is 835.39 MU. The actual sales are higher than the ARR approved figures on account of rise in domestic category consumption due to rise in number of consumers because of various household electrifications schemes which started gaining pace from FY 19. The actual sales are in line with the provisionally approved APR figures.

The Hon'ble Commission is requested to approve the consumption parameters as submitted in the above table as same is uncontrollable on the part of MSPDCL.

Commission Analysis:

Commission has approved the category wise actual sales at 724.66 MU in Tariff Order for FY 2022-23 and subsequently revised it in APR order for 814.04MU subject to verification of their reflection in the audited annual accounts upon their submission along with true-up petition in due course. The details of sales as tabulated above as actuals are approved for FY 2022-23:

5.3. Energy Balance and Distribution loss

Petitioner's Submission:

The computation of actual Transmission & Distribution losses for FY 2022-23 is shown in the Table below:

Table 5.2: Actual Transmission and Distribution Losses for FY 2022-23

S No	Particulars	Unit	Details
1	Own Generation	MU	0
2	Power purchase from CGS	MU	1084.66
3	Add: UI Over drawl	MU	14.72
4	Add: IEX purchases	MU	68.50
5	Add: Returned Banking Energy	MU	113.84
6	Less: IEX sales	MU	68.75
7	Less: Banking mode sales	MU	142.82
8	Gross Energy handled at NER	MU	1070.15
9	Pool Losses	%	2.36%
10	Energy Losses at NER	MU	25.26
11	Net Energy available at NER after losses	MU	1044.89
12	Less: UI Under drawl	MU	14.77
13	Gross Energy handled at State Periphery	MU	1030.12
14	Total Sales (LT+HT)	MU	835.39
15	Distribution loss	MU	194.73
16	Transmission and Distribution loss	%	18.90%

The actual T&D Losses of 18.90% achieved by MSPDCL in FY 2022-23 against the approved figure of 20.50% approved by Hon'ble Commission in its ARR order for FY 2022-23.

Commission Analysis:

In the above table Row-15 says Distribution loss of 194.73MU and immediately in Row-16 the same value is expressed as T&D Losses without any justification shows the lack of awareness and the subtle difference by the Licensee in inter-changing the losses to its convenience is unexpected and warns it to be cautious in future when wording them with clarity.

Petitioners submission of Losses:

Table 5.3: Transmission and Distribution Losses for FY 2022-23

Particulars	Approved in Actual	
Distribution Loss	20.50%	18.90%

It is submitted that energy availability for FY 2022-23 has been computed based on the actual Power purchase. Further, the transmission licensee, MSPCL operates the 33kV network which is the input point of the distribution network. It may to be noted that MSPDCL network periphery included only 11kV system and below whereas 33 KV and

above transmission network falls under the MSPCL network. Therefore, segregating the MSPDCL distribution losses and MSPCL network losses, in absence of proper metering arrangements is not possible. Further, the Hon'ble Commission has stated that w.e.f. 01.02.2014, MSPDCL shall be responsible for distribution losses. In absence of an accurate figure of losses for 33 kV and above network, the Commission had calculated the losses without subtracting the intra state transmission losses (@ 8.895% in the ARR order) which led to overall T&D losses of 20.50%. Because of huge differences in the figures of intra state transmission losses of claimed and approved as well as year wise difference, we have shown the combined T&D losses here.

The quantum of distribution losses is primarily due to the higher LT line lengths and the hilly / complex terrain of Manipur State. The long LT distribution lines and distribution at 11 kV are leading to higher distribution losses in the state. In the recent past, due to various initiatives in rural electrification, significant progress was made by MSPDCL in addition to the rural consumers. However, it is pertinent to note that the new consumer addition happened in most remote areas by extending the distribution network of MSPDCL. Due to smaller load and low consumption level, technical line losses would be quite high in those areas. MSPDCL is trying its best to serve them continuously and maintain these systems with its workforce efficiently. With the present state of complex terrain, long LT distribution lines, scatter LT domestic consumers, the actual LT distribution losses in Manipur are higher than the Commission approved distribution losses as given in its ARR order. Further, MSPDCL is in the process of expanding the coverage of prepaid meters to reduce unauthorized usage of electricity and the T&D losses. As the coverage of prepaid meters increased in the state in the future years, the T&D losses gradually improved.

Hence, MSPDCL requests the Hon'ble Commission to approve the actual distribution loss, as shown in the Table above.

Table 5.4: Energy balance (MU) for FY 2022-23

SI. No	Particulars	Unit	Approved in ARR Order 22-23	Actuals FY22-23
Α	Energy Requirement			
1	Energy Sales	MU	724.66	835.39
2	Distribution loss	%	20.50%	18.90%
3	Distribution loss	MU	186.86	194.73
4	Energy Requirement	MU	911.52	1030.12
В	Energy Availability			
5	Own Generation (Net)	MU	0	0
6	Power Purchase	MU	1103.70	1084.66
7	Less: External Losses	%	2.54%	2.36%
8	Less: External Energy Losses	MU	28.03	25.60
9	Net energy available at state periphery (5+6-8)	MU	1075.67	1059.06
10	Intra-State Transmission Loss	%	7.80%	7.80%
11	Intra-State Transmission Loss	MU	83.90	82.61
12	Energy Available for Distribution	MU	991.76	976.46
13	Surplus / (Deficit)	MU	80.24	-53.67
14	Surplus grossed up by Intra-state Transmission Loss for sale outside the state	MU	87.03	-53.71

The significant difference in actual energy surplus and approved energy surplus in FY 2022-23 is due to the difference in level of transmission and distribution loss and higher availability. Hence, MSPDCL requests the Hon'ble Commission to approve the energy balance, as shown in the Table above.

Commission's Analysis

While, the pooled losses percentage for North Eastern Region (NER) was adopted by MSPDCL at 2.36% in FY 2022-23. In reality, the NER pooled losses should have been at 2.33% based on the value published in their Annual compendium for FY2022-23. It is noted from the MIZORAM filing that the NER losses were considered at 2.33% only, The Intra-state transmission losses to be adopted for FY 2022-32 are at 8% as MSPCL indicated in their True-up filing for FY2022-23 now. But, MSPDCL is reluctant to adopt the Transmission Losses submitted by MSPCL, instead they stated overall T&D Losses at 18.90%. Even upon adopting the NER Pooled losses at 2.36% and Transmission Losses at 8%, the Distribution Losses and overall T&D losses as per MSPDCL calculation should have been 11.85% and 18.90% respectively. The actual distribution losses arrived at by the Commission duly adopting the NER Losses at 2.33% and MSPCL losses at 7.8%, the distribution Losses and T&D losses are derived as 11.65% and 18.54% respectively. The

variation is because the Banking sales, IEX sales and Under-Drawl units indicated were handled throughout by MSPDCL in the submission as net figures and hence, they need not be applied with NER Losses, but this analogy was seen rightly adopted only for Under drawl quantum but not for Banking & IEX sale units in the Energy Balance table submitted.

In the additional Information reply, the following table was provided by MSPDCL for Energy Balance they tabulated in arriving 18.90% T&D Loss, which contains **full of errors** explained after the table is placed below.

SNo	Particulars	Unit	Approved in APR Order	Actuals FY22-23	MSPDCL figures should be
Α	Energy Requirement		(1)	(2)	(3)
1	Energy Sales	MU	814.03	835.39	835.39
2	Transmission and Distribution loss	%	22.54%	18.90%	18.90%
3	Transmission and Distribution loss	MU	236.86	194.73	194.73
4	Total Energy Requirement	MU	1050.89	1030.12	1030.12
В	Energy Availability				
5	Own Generation (Net)	MU	0	0	0
6	Power Purchase from long term sources	MU	1206.98	1084.66	1084.66
7	Add: UI Over drawl	MU	13.20	14.72	14.72
8	Add: IEX purchases	MU	74.56	68.50	69.50
9	Add: Return of Banked Energy		137.41	113.84	113.84
10 a	Less: Banking mode Sales	MU	\searrow	-142.82	-142.82
10 b	Less: IEX Sales	MU		><	
11	Gross Input Energy (6 to 10)	MU	1432.15	1138.90	1139.90
12	Less: External Losses	%	2.36%	2.25%	2.36%
13	Less: External Energy Losses	MU	33.80	25.60	26.90
14	Energy after Pooled Losses	MU	1398.35	1113.30	1113.30
15 a	Less: Banking mode sales		-136.37	\nearrow	\nearrow
15 b	Less: IEX Sales		0	\nearrow	-68.75
15 c	Less: Under Drawl units		0	>>	-14.77
16	Net energy available at state periphery		1261.98	1113.30	1029.48
17	Intra-State Transmission Loss	%	7.80%	>>	\nearrow
18	Intra-State Transmission Loss	MU	98.43	\nearrow	
19	Energy Available for Distribution	MU	1163.55	1113.30	1029.48
20	Energy at State periphery		1163.55	1059.06	1029.48
21	Energy for Distribution Input		1050.89	1030.12	1030.12
22	Surplus (20-21)	MU	112.66	28.94	-0.64
23	Surplus grossed up by Intra-state Transmission Loss for outside State sale	MU	0	28.94	-0.64

Point-1: The column-(1) is not as per Tariff Order but modified to suit the

requirement of Licensee, thus there is a surplus value seen at row-(22) under column-(1). This figure has appeared because of ignoring the two figures (a) IEX Sale of 110.43MU and (b) Ui under drawls of 1.76MU. When Commission approves energy balance would not leave any surplus value in this fashion at row-22. It appears, the licensee tampered the approved values of Commission intentionally and misrepresented approved value.

- **Point-2:** Under Col-(2) of the table, the external losses adopted at 2.2478%, but not 2.36% as indicated in the Energy balance of true-up submission **table-2**. The figure at Row-20 col-(2) should have been 1113.30MU but to Commissions surprise the value got altered to 1059.06 all of a sudden for no plausible reason.
- **Point-3:** The value at col-(2) of row-22 is now appearing as 83.14MU is on account of totally ignoring the IEX Sales of 68.75MU and UI Under Drawls of 14.77MU, which for all practical purposes should not have been ignored. There is a slight variation in the summation because of losses adoption variation. <u>Column-(3)</u> of the above table is in the fashion the data should have been furnished for <u>Commission perusal</u>, **but in vain.**

As seen from the above reply, the Licensee sincerity is fundamentally not reliability in providing the needed information and always misleading the attention of the Commission. This practice will boomerang adversely on credibility of the Licensee in future. Many a times, it is so noticed by the Commission that the MSPDCL submission figures are very much inaccurate arithmetically and the presentation of Tables lacks clarity and are done very untidy due to casual approach in their petition preparation, which is quiet annoying by the Commission as this is not expected from a distribution entity which is in existence for a period more than a decade. Taking excuse for such petty and basic things is very deplorable.

However, MSPDCL now claiming 18.90% as T&D losses by MSPDCL as against their last year True-up approved figure of 24.18% is an indication of their better performance in FY2022-23 looking at the present figures needs mentioning. The Energy Balance during FY 2022-32 is re-worked as detailed in the table below:

Table 5.5: Distribution loss & Energy Balance approved by Commission for 22-23

SI No	Particulars (FY 2022-23)	Unit	Tariff Order 23/3/2022	APR Approved	True-Up (MSPDCL)	Actuals (Apprvd)
Α	Distribution Energy Requirem	ent				
1	Retail Energy Sales	MU	724.68	814.03	835.39	835.39
2	Distribution loss	%	20.50%	22.54%	11.85%	11.65%
3	Distribution losses	MU	186.90	236.86	112.33	110.14
4	Energy for Distribution Input	MU	911.58	1050.89	947.72	945.53
В	Energy Availability	Unit				
5	Power Purchase (all Sources)	MU	1022.01	1206.98	1084.66	1084.66
6	Add: IEX Purchases	MU	31.45	74.56	68.51	68.51
7	Add: UI Over drawl	MU	0	13.20	14.72	14.72
8	Add: Banking units Returns	MU	80.00	137.41	113.84	113.84
9	Less: Banking Sales	MU			-142.82	
10	Less: IEX Sales	MU			-68.75	
11	Gross Energy at NERLDC	MU	1132.46	1432.15	1070.16	1281.73
12	Less: NER (pooled) Losses	%	2.54%	2.36%	2.36%	2.36%
13	Less: NER pooled Losses	MU	28.76	33.80	25.26	29.86
14	Net Energy after NER Losses	MU	1103.70	1398.35	1044.90	1251.87
15	Less: Banking Sales (Net)	MU	-80.00	-136.37	0.00	-142.82
16	Less: IEX Sales (Net)	MU	-35.00	-110.43	0.00	-68.75
17	Less: UI Under drawl	MU	0	-11.76	-14.77	-14.77
18	Add: Own Generation (Net)	MU	0	0	0	0
19	Energy at State periphery	MU	988.70	1139.79	1030.13	1025.53
20	Transmission Losses (MSPCL)	%	7.80%	7.80%	8.00%	7.80%
21	State Transmission Loss	MU	77.12	88.90	82.41	79.99
22	Energy at Distribution input	MU	911.58	1050.89	947.72	945.53
23	Overall Losses (T & D) - MU	MU	257.76	325.76	194.74	190.14
24	Overall Losses (T & D) - %	%	26.70%	28.58%	18.90%	18.54%

Basing upon the present MSPDCL filing, the Commission now approves distribution losses at 11.65% for FY2022-23 and the detailed sequence of calculations are as per the last & final column of the above energy balance table. The sequence of item-wise steps is akin to procedure followed in Tariff Order of FY2022-23 and subsequent orders issued thereafter. In this process, each of the power purchase values so provided by Licensee were considered as it is unaltered, except certain items were appropriately sequenced in the energy balance determination where felt improper. The Licensee being a distribution company shall only concentrate upon distribution losses and its percentage but on both T&D Losses achieved for assessing its performance as this not in its purview because of being Distribution Licensee status. *The overall actual T&D Losses would work out to* 18.54% as a whole for the same energy input of 1025.53MU at State periphery level.

5.4. AT&C Losses achieved by MSPDCL from FY2020-21 to FY2022-23:

The MSPDCL has been under the purview and availing the funding under RDSS scheme. In this regard, the Commission is providing their actual achievement towards AT&C losses is detailed below based on the relevant schedules of Audited Accounts Statement:

Sl.No.	MSPDCL	Rs. Lacs	Rs.Lacs	Rs.Lacs
Α	Trade Receivables (Sch-11)	2020-21	2021-22	2022-23
В	Opening Balance	49465.37	54483.31	60291.03
С	Add: Additions in year	9329.18	11877.27	2777.23
D	Less: Legacy Bad debt written-Off	-4311.24	-6069.54	-7630.27
E	Closing Balance	54483.31	60291.03	60291.03

MSPDCL	Rs. Lacs	Rs.Lacs	Rs.Lacs
Actual Sales made (Sch-15)	40625.48	45975.91	46926.58
Less: Pending Receivables (from Row-C)	9329.18	11877.27	2777.23
Net Sales revenue collected	31296.3	34098.64	44149.35
Collection Efficiency (%)	77.036%	74.166%	94.082%
Distribution Loss (%)	22.99%	24.18%	18.54%
AT& C Losses (%)	40.67%	43.77%	23.36%

The actual distribution losses are adjusted duly adopting the collection efficiency factoring the unrealised debtors from the reflected sales revenue to depict the AT&C losses so achieved by the Licensee in the respective years from FY2020-21 to FY 2022-23. The performance in FY2022-23 is far encouraging in FY2022-23 compared with the previous year's actuals. Besides, the Legacy dues of Rs.43,112.43 lakhs so transferred from Electricity Dept, Govt of Manipur as on 1st February 2014 were fully wiped-off in the form of provision for bad debts by the end of FY2022-23 in their financial accounts and whatever closing debtors of Rs.60291.03 lakhs now existing in FY2022-23 are totally pertains to the dues after MSPDCL assumes the Corporate Entity only.

5.5. Energy Purchase

Petitioners submission:

The actual Power Purchase cost as against the power purchase cost approved in the ARR/ Tariff Order for FY 2022-23 is shown in the Table below:

Table 5.6: Energy Purchased in MU for FY 2022-23 as per MSPDCL

SI. No	Source	Approved ARR Order 2022-23	 Actual Purchased
Α	CGS - NEEPCO		
1	Kopili - I HE	1.00	

SI. No	Source	Approved ARR		Actual
31. 140		Order 2022-23	APR Order	Purchased
2	Kopili - II HE	3.00		
3	Khandong HE	15.00		
4	Ranganandi HE Project	110.00	107.13	114.79
5	Doyang HE Project	15.00	14.23	13.41
6	Assam GBPP	105.00	142.24	132.89
7	Agartala GTPP I & II	70.00	68.72	71.37
В	CGS - NHPC			
1	Loktak HEP	180.00	127.58	106.01
2	Loktak Free power	62.00	63.26	56.17
С	Other			
1	Baramura GBPP Unit IV and V	32.00	11.18	11.18
2	OTPC Pallatana Unit I & II	225.00	399.40	342.42
D	New Plants			
1	NTPC Bongaigaon Unit I			
2	NTPC Bongaigaon Unit II	158.00	232.83	192.77
3	NTPC Bongaigaon Unit III			
4	Monarchak Gas BPP (NEEPCO)			
5	Kameng HEP Stage I			
6	Kameng HEP Stage II			
7	Para HEP	40.00	40.41	43.65
8	Tuirial HEP			
9	Lower Subansiri Stage I			
10	Lower Subansiri Stage II			
11	Renewable – Solar			
12	Renewable – Non-Solar			
	TOTAL	1016	1206.98	1084.66
1	IEX Sale	-35	-110	-68.75
2	IEX Purchase	30.45	74.56	68.51
3	UI Over-drawl		13.2	14.72
4	UI Under-drawl		-11.76	
	Total	1011.45	1172.98	1099.14

As can be seen from the above Table, the actual power purchase quantum in FY2022-23 was 1167.89 MU, which is higher than the approved quantum of 1011 MU.

The Hon'ble Commission is requested to approve the power purchase based on the actuals as shown in the table above.

Commission's Analysis

It is surprise to see where from the quantum 1167.89MU is quoted by MSPDCL as the same value is not found in the above table furnished by MSPDCL.

Commission arrives at the actual purchase quantum for FY2022-23 as 1025.53.11MU at State periphery after due consideration of the Banking & IEX sales and UI Under drawl transactions. The energy quantum required as distribution Input is noted as 943.48MU finally after applicable pooled losses at 2.33% for NER region. The deviation between MSPDCL figure of 1099.14MU and the figure 1067.93Mu is due to omission of certain Banking and Under drawl transactions which have taken places during the year and the final quantum utilised after considering all the transactions and the pooled losses the figure in MSPDCL petition should be around 949.78MU if properly depicted with sincere commitment in the petition is conspicuously lacking & missing. Having noticed the jugglery of figures, queries on this were sent to Licensee for rectification in mid of January 2024, but the MSPDCL had taken least interest to rectify the mess of figures in each of the energy related tables and communicated the replies again on 8th February 2024 without any alteration is very much deplorable. This is not the discipline and decorum expected from a Licensee. The comments with regard to distribution losses were already made at the relevant place in above paras.

5.6. Power Purchase Cost

Petitioner's submission

The actual Power Purchase cost as against the power purchase cost approved in the ARR/ Tariff Order for FY 2022-23 is shown in the Table below:

T.O Approved 2022-23 As filed by MSPDCL SI. **Power Station Sources** No. (MU) Rs.Crs CPU (MU) Rs.Crs CPU Α **CGS - NEEPCO** 115.22 332.46 4.83 319.00 3.61 160.44 Kopili - 1 HEP 0.44 1 1.00 4.40 2 Kopili - 2 HEP 3.00 1.46 4.87 3 Khandong HEP 15.00 2.63 1.75 4 Ranganandi HEP 110.00 24.64 114.79 2.24 26.21 2.2833 5 10.61 Doyang HEP 15.00 7.07 13.41 7.21104 9.67 6 Assam GBPP 132.89 105.00 43.73 4.16 82.42 6.20212 5.90444 Agartala GTPP 1&2 70.00 31.71 4.53 71.37 42.14

Table 5.7: Power Purchase Cost for FY 2022-23 (Rs. Crore)

SI.	Danier Chation Common	T.O Ap	proved 2	022-23	As file	ed by MS	PDCL
No.	Power Station Sources	(MU)	Rs.Crs	CPU	(MU)	Rs.Crs	CPU
В	CGS - NHPC	242.00	66.24	2.74	162.18	38.90	2.40
1	Loktak HEP	180.00	66.24	2.73719	106.01	38.90	2.39857
2	Free Loktak Power	62.00			56.17		
С	Other	257.00	117.57	4.575	353.60	106.91	3.02347
1	Baramura GBPP 4 & 5	32.00	19.50	6.094	11.18	5.13	4.58855
2	OTPC Pallatana 1 & 2	225.00	98.07	4.359	342.42	101.78	2.97237
D	New Plants	204.01	190.14	9.320	236.42	139.33	5.893
1	NTPC Bongaigaon Units	158.00	168.11	10.64	192.77	118.17	6.130
2	Para HEP	40.00	20.02	5.01	43.65	21.16	4.848
4	Renewable - Solar	0.75	0.34	4.53			
5	Renewable - Non Solar	5.26	1.67	3.17			
	Total CGS Energy (A to D)	1022.01	489.17	4.786	1084.66	445.58	4.10802
Е	Short-Term Sources	110.45	8.53	0.772	-14.50	60.68	-41.848
1	IEX Purchases	30.45	8.53	2.80	68.51	54.69	7.98
2	Banking Energy Received	80.00	0.00	0.00	113.84	0.00	0.00
3	Ui Over Drawls			#DIV/0!	14.72	5.99	4.07
4	IEX Sales (NET)				-68.75		
5	Banking Energy Sales (NET)				-142.82		
	Total Short & CGS Energy (A to E)	1132.46	497.70	4.395	1070.16	506.26	4.73069
	NERLDC pooled Losses (%)	2.54%	><	><	2.36%	>	\nearrow
	NERLDC pooled Losses (MU)	28.76			25.26		
F	Energy at State Periphery	1103.70	497.70	4.509	1044.90	506.26	4.845
1	IEX Sales (NET)	-35.00					
2	Banking Energy Sales (NET)	-80.00					
3	UI Under Drawls				-14.77	0.00	
4	REC Certificates to procure		32.10			0.00	
5	Supplementary Bills		40.00			83.52	
6	Late Payment Surcharges (LPS)		0.00				
	Grand Total	988.70	569.80	5.763	1030.13	589.78	5.725

As per the above table, the actual power purchase cost is Rs. 589.78 Crore for FY 2022-23. The actual cost is higher than the approved figure of Rs. 567.77 Crore in ARR of 2022-23. The Petitioner has paid Rs. 83.52 Crore of supplementary bills to the generators. These bills were raised by the generators as a result of additional costs allowed by the Regulators. The payment of these supplementary bills are uncontrollable on part of the Petitioner. Therefore, the Petitioner requests the Hon'ble Commission to approve the supplementary bills of Rs. 83.52 Crore for FY 20 22-23.

The Hon'ble Commission is requested to approve the power purchase cost as submitted in the above table as the same is uncontrollable and unavoidable on part of MSPDCL.

Commission Analysis:

The excess amount incurred for power purchase more than the need will be disallowed while approving the True-up for FY 2022-23 upon verification with the Audited Financial Accounts and the relevant additional information given.

In response to the additional information queries, the MSPDCL had provided the breakup details of the supplementary bill amount of Rs.83.52Crs claimed in the power purchases cost.

The Details as obtained are placed in abridged fashion to understand the allow ability of the total amount and the amount admitted by the Commission;

SI. No.	Details of expenditure item	Claimed by MSPDCL (Rs.Crs)	Approved by Commission (Rs.Crs)
1.	Supplementary bills for FY2022-23	83.5292	83.5292
2.	Less: Revision of AFC Kopili from 2019 to 2024	Nil	0.2446
	(Note: FY2023-24 is not relevant, hence disallowed)		
3.	Net amount allowed in FY2022-23	83.5292	83.2846
4.	Less: Late payment Surcharges paid (Late payments can't	Nil	9.9672
	be passed on in true-up)		
5.	Net amount eligible for approval	83.5292	73.3184

The actual power purchase cost allowable for true-up purpose is as follows:

(Intentionally Kept Blank)

Table 5.8: Power Purchase Approved by Commission in true-up for FY2022-23

SI.	Down Station Sources	T.O A	ppvd 202	2-23	As claim	ed by M	SPDCL	ACTUAL a	pproved	2022-23
No.	Power Station Sources	(MU)	Rs.Crs	CPU	(MU)	Rs.Crs	CPU	(MU)	Rs.Crs	CPU
Α	CGS - NEEPCO	319.00	115.22	3.61	332.46	160.44	4.83	332.46	160.44	4.83
1	Kopili - 1 HEP	1.00	0.44	4.40						
2	Kopili - 2 HEP	3.00	1.46	4.87						
3	Khandong HEP	15.00	2.63	1.75						
4	Ranganandi HEP	110.00	24.64	2.24	114.79	26.21	2.2833	114.79	26.21	2.28
5	Doyang HEP	15.00	10.61	7.07	13.41	9.67	7.21104	13.41	9.67	7.21
6	Assam GBPP	105.00	43.73	4.16	132.89	82.42	6.20212	132.89	82.42	6.20
7	Agartala GTPP 1&2	70.00	31.71	4.53	71.37	42.14	5.90444	71.37	42.14	5.90
В	CGS - NHPC	242.00	66.24	2.74	162.18	38.90	2.40	162.18	38.90	2.40
1	Loktak HEP	180.00	66.24	2.73719	106.01	38.90	2.39857	106.01	38.90	2.40
2	Free Loktak Power	62.00			56.17			56.17		
U	Other	257.00	117.57	4.575	353.60	106.91	3.02347	353.60	106.91	3.02
1	Baramura GBPP 4 & 5	32.00	19.50	6.094	11.18	5.13	4.58855	11.18	5.13	4.589
2	OTPC Pallatana 1 & 2	225.00	98.07	4.359	342.42	101.78	2.97237	342.42	101.78	2.972
D	New Plants	204.01	190.14	9.320	236.42	139.33	5.893	236.42	139.33	5.89
1	NTPC Bongaigaon Units	158.00	168.11	10.64	192.77	118.17	6.130	192.77	118.17	6.130
2	Para HEP	40.00	20.02	5.01	43.65	21.16	4.848	43.65	21.16	4.848
4	Renewable - Solar	0.75	0.34	4.53						
5	Renewable - Non Solar	5.26	1.67	3.17						
	Total CGS Energy (A to D)	1022.01	489.17	4.786	1084.66	445.58	4.10802	1084.66	445.58	4.11
Е	Short-Term Sources	110.45	8.53	0.772	-14.50	60.68	-41.848	197.07	60.68	3.08
1	IEX Purchases	30.45	8.53	2.80	68.51	54.69	7.98	68.51	54.69	7.98
2	Banking Energy Received	80.00	0.00	0.00	113.84	0.00	0.00	113.84	0.00	0.00
3	Ui Over Drawls			#DIV/0!	14.72	5.99	4.07	14.72	5.99	4.07
4	IEX Sales (NET)				-68.75					
5	Banking Energy Sales (NET)				-142.82					
	Total Short & CGS Energy (A to E)	1132.46	497.70	4.395	1070.16	506.26	4.73069	1281.73	506.26	3.94982
	NERLDC pooled Losses (%)	2.54%	$\overline{}$	$\overline{}$	2.36%	$\overline{}$	$\overline{}$	2.33%	\bigvee	$\overline{}$
	NERLDC pooled Losses (MU)	28.76	$\overline{}$	>>	25.26	>>	>>	29.86	>>	>>
F	Energy at State Periphery	1103.70	497.70	4.509	1044.90	506.26	4.845	1251.87	506.26	4.044
1	IEX Sales (NET)	-35.00						-68.75	0	
2	Banking Energy Sales (NET)	-80.00						-142.82		
3	UI Under Drawls				-14.77	0.00		-14.77	-3.52	
4	REC Certificates to procure		32.10			0.00			0.00	
5	Supplementary Bills		40.00			83.52			73.32	
6	Late Payment Surcharges (LPS)		0.00							
	Grand Total	988.70	569.80	5.763	1030.13	589.78	5.725	1025.53	576.06	5.617

Power purchase amount approved for True-up purpose (Rs. Crs) 576.06

Loss on account of Outside Sales and Banking Energy sales in the year Nil

Power Purchase cost Approved after loss reduction adjustment (Rs. Crs) 576.06

S.No.	CGS purchase cost derivation	MU	Rs.Crs	CPU
а	CGS units & cost incurred	1084.66	445.58	4.108
b	Ui Over drawl	14.72	5.99	4.069
С	Ui Under Drawl	-14.77	-3.52	2.383
d	Transmission Charges incurred		89.68	
е	Supplementary bills allowed		73.32	
	Total cost for CGS Power	1084.61	611.05	5.634

S.No.	Details of items	MU	MU	Rs.Crs	CPU
1	Total IEX Sales made in FY2022-23		68.75		
2	Banking energy:				
	a) Received Energy	113.84			
	b) Sold Energy	-142.82			
	Net banking energy (a-b)	-28.98	28.98		
3	Gross energy used for IEX & Banking		97.73		
4	Off-set by IEX Purchases qty		-68.51	54.69	7.983
5	Balance qty used from CGS power		29.22	16.46	5.634
6	Revenue Realised from IEX Sales		68.75	24.90	3.622
	Profit gained by IEX Sales (6-5)			8.44	
	Loss sustained by IEX Sales (5-6)			nil	

5.7. Transmission Charges

Petitioner's Submission

The transmission charges include the charges paid to PGCIL, MSPCL and SLDC charges. The summary of transmission charges approved by the Commission in ARR order and the actual charges paid by MSPDCL for FY 2022-23 is as follows:

Table 5.9: Transmission Charges for FY 2022-23 (Rs. Crore)

SI. No	Particulars	Approved in ARR Order	Approved in APR Order	Actual
1	PGCIL Charges	93.8	104.20	87.98
2	MSPCL Charges	93.86	0.00	64.20
3	SLDC Charges	0	0.00	0.70
4	NERLDC Charges	0.71	0.71	1.00
	Grand Total	188.37	104.91	153.88

The transmission charges are uncontrollable in nature as the same are levied based on approved cost and orders of CERC and JERC as applicable for inter-state and intra state transmission respectively.

As such, MSPDCL requests the Hon'ble Commission to approve the actual Transmission Charges of Rs. 153.88 Cr. for FY 2022-23, as shown in the Table above.

Commission Analysis:

The approved MSPCL charges in the Tariff order Dt 23th March 2022 were at Rs.92.21 Crs and the same was revised in APR order to Rs.104.91Crs includes the NERLDC charges pertains to Inter State transmission charges payable to PGCIL and other agencies by MSPDCL. But in the charges now claimed by MSPDCL includes the amount not paid to MSPCL, but only transmitted the government grant so directed by GOM while releasing the funds. Hence, this is only a mere act of forwarding

government money to MSPCL and no money is actually paid out of own funds of MSPDCL, besides there is no monthly billing demand from MSPCL side. In fact, there is no monthly billing mechanism exists between MSPCL & MSPDCL till this date and as a result there is no need to consider these charges in true-up till such time, there exists a real money payment mechanism is in place and verifiable between these two entities. The licensee replied in this matter against query-16 is not tenable, as this issue is already addressed in detail in the review order dt 17th August 2023 and it is binding on licensee and never take such plea hence forward.

Hence, these intra-State transmission charges of Rs.50.67Crs relevant for FY 2022-23 are fully disallowed from Transmission charges claim. *The adopted amount of Rs.64.20Crs as shown above pertains to FY 2021-22 and thus it was shown erroneously by MSPDCL instead of Rs.50.67Crs*. Thereby, the approved transmission charges for FY2022-23 is amounting to Rs.88.98Crs (i.e., 87.98Crs +1.00Crs of NERLDC charges) are only allowed and the SLDC charge of Rs.0.70Crs paid towards SLDC is disallowed because Commission did not fix any such charges for MSPCL to collect in FY 2022-23 and MSPDCL should not have paid these charges.

5.8. Operation and Maintenance Expenses

The Operation and Maintenance (O&M) expenses comprises of Employee Expenses, Repair and Maintenance (R&M) Expenses and Administrative and General (A&G) Expenses. In the FY 2022- 23, MSPDCL has incurred the O&M expenses as follows:

5.8.1. Employee Cost

Petitioners Submission

Employee Expenses includes the Basic Pay, Dearness Pay, Dearness allowances, house rent allowances, and other allowances, new pension scheme paid to the MSPDCL cadre, staff etc. The liabilities for terminal benefits for the employees transferred from the erstwhile Electricity Department of Manipur are directly borne by the State Government and are not included in the employee cost claimed here.

The reason for increase in employee expenses in FY 2023 is

- i. 7th Pay arrears which has been accumulated for the last 2-3 years and paid in FY 2023.
- ii. Creation of provision for gratuity, leave encashment and commutation of regular employees.

The actual employee expenses based on audited accounts for FY 2022-23 as compared with those approval in the Tariff Order are shown in the Table below:

Table 5.10: Employee Expenses for FY 2022-23 (Rs. Crore)

Particulars	Approved in ARR order 2022-23	Approved in APR Order 2022-23	Actual
Total Employee Expenses	77.15	72.02	96.07

The break-up of actual employee strength during FY 2022-23 is shown below:

Table 5.11: Actual Employee Strength of MSPDCL in FY 2022-23

SI. No	Particulars	Employee Strength as on 31st March 2022	Employee Strength as on 31st March 2023
1	Regular	1139	938
2	Work charge	121	76
3	Muster roll	22	17
4	Contract	15	2
	Total	1297	1033

MSPDCL, thus, requests the Hon'ble Commission to approve the actual Employee Expenses of Rs. 96.07 Crore for FY 2022-23.

Commission Analysis:

The employees cost comprises of Regular Employees, Work Charged, Muster Roll and Contract employees also. The employee cost now approved is at Rs.88.78Crs for FY2022-23 after scrutiny excluding the provision amount of Rs.7.2933Crs created for Leave encashment and gratuity is basing upon Actuarial Valuation Report by LIC of India on 27th February 2023. It is only a mere book entry made with no fund involvement. It can also be seen the creation of provision afresh under current liabilities for Rs.7.2933Crs in Balance Sheet.

When the actual disbursement takes place physically from the created provisional fund, then such amount so paid will be considered in the same years true-up and until such time the fund is resting in as provision. It is the responsibility of the Licensee to produce the proof of such payment in the ensuing year for reimbursement if any, but not now in FY2022-23 true-up.

5.8.2. R&M Expenses

Petitioner's Submission

Repair and Maintenance (R&M) Expenses includes all expenditure incurred on the maintenance and upkeep of distribution assets. It includes the expenses on repairs and maintenance of Plant and Machinery, Transformers, Lines, cable network, Vehicles, Office equipment, etc. The actual R&M expenses based on audited accounts for FY

2022-23 are given below as per the different accounting heads used for booking R&M expenses:

Table 5.12:Break-up of R&M Expenses for FY 2022-23 (Rs. Crore)

SI. No	Particulars	Actuals
1	Repair & Maintenance Expenses (Plant and Machinery)	
2	Repair & Maintenance Expenses (Others)	1.66
3	O&M Expenses	15.19
4	Stores and Consumables	1.21
	Total	25.40

The actual R&M expenses as compared as compared to the approved expenses are as follows:

Table 5.13: R&M Expenses for FY 2022-23 (Rs. Crore)

Particulars	Approved in ARR order 2022-23	Approved in APR Order 2022-23	Actual
R&M Expenses	8.25	11.78	13.18

The actual R&M expenses are higher than the approved values by the Hon'ble Commission for FY 2022-23. The R&M expenses approved by Hon'ble Commission in the ARR order of FY 2022-23 has been around 1% of the approved GFA. The reason of this is that the R&M expenses are projected on low baseline. However, the actual R&M expenses are around 2% of the asset base The Petitioner submits that, R&M expenses are uncontrollable in nature as the distribution utility is required to spend on maintenance of network to comply with the Standards of Performance laid by the Commission.

Hence, in the above context, MSPDCL therefore, requests the Hon'ble Commission to approve the actual R&M expenses of Rs. 13.18 Crore for FY 2022-23.

Commission Analysis:

Table 5.14:Break-up of R&M Expenses approved for FY 2022-23 (Rs. Crore)

SI. No	Particulars	As claimed by MSPDCL	Commission Approved
1	R&M Expenses (Plant and Machinery)	7.34	4.4444
2	R&M Expenses (Others)	1.66	0.5013
3	O&M Expenses	15.19	0.3956
4	Stores and Consumables	1.21	7.8366
	Total	25.40	13.1779

On verification of R&M Expenses as per audited Accounts Statement, the R&M expenses claimed by MSPDCL erroneously relating to last year (i.e., FY2021-22) but not relevant to FY 2022-23. Accordingly, the expenses relevant to this year (2022-23) Rs.13.18Crs are only allowed ignoring the higher claim of Rs.25.40Crs. The Licensee is advised to be more cautious in claiming amounts relevant to current year figures only and eschew to habit of casual attitude and maintain the accuracy in your claims in future.

5.8.3. Administration and General Expenses

Petitioner's Submission

Administrative and General (A&G) Expenses includes all expenditure incurred in operating a business such as:

- Travel and conveyance expenses
- Consultancy and regulatory fees
- IT services and outsourcing cost
- Office Expenses
- Publication Expenses
- Other administration Expenses
- Telephone
- Hiring of vehicle etc.

The A&G expenses incurred by MSPDCL in FY 2022-23 based on audited accounts are as follows:

Table 5.15: A&G Expenses for FY 2022-23 (Rs. Crore)

Particulars			
	(in lakhs)		
Auditors Remuneration	1		
ROC Filing Fees	4		
Advertisement Expenses	3		
Bank Charges	5		
BEE charges	83		
Consultancy Charges	82		
Ex-gratia payment	27		
JERC Fees and Expenses	38		
Office Expenses	53		
O&M Expenses	40		
Legal Fees and Charges	7		
Festival	50		
Saubhagya Post Capitalisation Exp	237		
Printing & Stationary Expenses	7		
Repair & Maintenance Expenses (Plant and Machinery)	444		
Repair & Maintenance Expenses (Others)	50		
Stores and Consumables	784		
Prepaid Vending Charges	17		
Telephone Expenses	9		
Travelling Exp	17		
Vehicle hiring, Repairs and Maintenance	68		
Interest and Penalty	1		
Purchase of LED lights	-		
Preliminary Expenses Written Off	-		
Prior period expenses	38.97		
(-) R&M Expenses	1318		
Total	1044		

The actual A&G expenses as compared to the approved figure in ARR of FY 2022-23 is as follows:

Table 5.16: A&G Expenses for FY 2022-23 (Rs. Crore)

Particulars	Approved in ARR order 2022-23	Approved in APR Order 2022-23	Actual
A&G Expenses	6.12	6.24	7.46

MSPDCL requests the Hon'ble Commission to approve the actual A&G expenses of Rs. 7.46 Crore based on the audited accounts for FY 2022-23 and based on the detailed break-up of the actual cost as provided above.

Commission Analysis:

The Commission had noticed Interest and penalty amount under the Administrative and general Expenses amounting to Rs.0.0113Crs and a claim of Rs.0.3897Crs of prior period expenses included in the A&G expenses claimed by MSPDCL. Both these amounts are not admissible for True-up in FY 2022-23. However, the A&G Expenses allowable is **Rs.7.0588Crs** only.

Petitioners submission:

The total O&M expenses incurred in FY 2022-23 as per audited accounts are shown in the Table below:

Table 5.17: Actual O&M Expenses for FY 2022-23 (Rs. Crore)

SI. No	Particulars	Approved in ARR order 2022-23	Approved in APR Order 2022-23	Actual
1	Employee Expenses	77.15	72.02	96.07
2	R&M Expenses	6.12	6.24	13.18
3	A&G Expenses	8.25	11.78	7.46
	Total	91.52	90.04	116.71

The actual O&M expenses are thus, higher than the O&M expenses approved by the Hon'ble Commission in the Tariff Order for FY 2022-23. MSPDCL requests the Hon'ble Commission to approve the actual O&M expenses of Rs. 116.71 Crore for FY 2022-23.

Commission Analysis:

The Commission approved the following expenses towards O&M Expenses for FY 2022-

23. The total O&M expenses approved for FY 2022-23 in true-up is as Tabulated below:

Table 5.18: Actual O&M Expenses approved (Rs. Crore)

SI. No	Particulars	Approved in Tariff Order	Approved APR Order	Actual	Commission approved
1	Employee Expenses	77.15	72.02	96.07	88.78
2	R&M Expense	6.12	6.24	13.18	13.18
3	A&G Expense	8.25	11.78	7.46	7.06
	Total	91.52	90.04	116.71	109.02

5.9. Interest on Working Capital

Petitioner's Submission

As per Regulation 29.4 of JERC Terms and Conditions of Tariff Regulations 2014, Distribution Licensee shall be allowed interest on the estimated level of working capital for the financial year, computed as follows:

- a). Operation and maintenance expenses for one month; plus
- b). Maintenance spares at one (1) per cent of the historical cost escalated at 6% from the date of commercial operation; plus
- c). Receivables equivalent to one (1) month of the expected revenue from sale of electricity at the prevailing tariffs; minus
- d). 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 shall be allowed 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 computation of normative Interest on Working Capital (IoWC) for MSPDCL for FY 2022-23, is shown in the Table below:

Table 5.19: Interest on Working Capital for FY 2022-23 (Rs. Crore)

SI. No.	Particulars	Approved in ARR Order 22-23	Approved in APR Order 22-23	Actual (2022-23)
1	O & M Expenses one month			9.73
2	Maintenance of spares @ 1% of GFA Escalated by 6%			26.23
3	Receivable one month			38.72
4	Less: Total Security Deposit			27.23
5	Net WC requirement			47.08
6	Interest Rate			12.90%
	Interest of Working Capital	0.00	0.00	6.12

MSPDCL requests the Hon'ble Commission to approve the IoWC of Rs.6.12 Crore for FY 2022- 23.

Commission's Analysis:

The admissibility of this charge would depend upon actual availment of short-term

borrowings towards working capital needs by the Licensee. In order to reduce the unnecessary financial burden on the retail consumers, also keeping in view the continuous government financial support for revenue related expenditure and finding no compelling need to draw **any short-term loans** for working capital needs the Commission don't wish to approve these charges in order not to burden retail consumers unnecessarily.

Thus, the Commission totally disallows Interest on Working Capital amount projected by the Licensee on normative basis and moreover no such expenditure was ever seen incurred on this head even to consider. The opinion of similar kind was already expressed categorically by the Commission previously and advised not to venture to claim these charges.

5.10. Gross Fixed Assets and Depreciation

Petitioner's Submission

The depreciation for FY 2022-23 has been claimed as per the audited accounts.

Table 5.20: Actual Depreciation for FY 2022-23 (Rs. Crore)

S No.	Particulars	Approved in ARR Order 22-23	Approved in APR Order 22- 23	Actual (2022-23)
1	Depreciation	1.84	1.83	19.14

The detailed break up of actual depreciation booked in accounts is shown below:

(Intentionally Kept Blank)

Table 5.21: Depreciation for FY 2022-23 (Rs. Crore)

	(Gross Blo	ck		Accou	ınted Depre	ciation	Net Block
Particulars	Opening Balance as on 01-04- 2022	Addi- tions	Closing Balance as on 31-03- 2023	Opening Balance as on 01-04- 2022	Charged during the period	Amortisa- tion of deferred income	Closing Balance as on 31-03- 2023	Balance as on
Tangible Ass	ets						-	1
Distribution	Assets							
Plant & Machinery	2326.93	0.00	2326.93	221.17	14.05	37.42	272.64	2054.29
Building	51.22	18.14	69.36	3.75	0.28	0.66	4.69	64.67
Furniture & fittings	1.29	0.11	1.40	0.85	0.12	0.00	0.97	0.43
Computer	9.75	0.03	9.77	4.31	2.49	0.00	6.80	2.98
Heavy Equipments	0.05	0.00	0.05	0.00	0.00	0.00	0.00	0.05
Heavy	0.88	0.00	0.88	0.33	0.05	0.00	0.38	0.50
Office Equipments	0.04	0.00	0.04	0.04	0.00	0.00	0.04	0.00
Vehicle	5.74	0.12	5.86	3.92	0.60	0.00	4.53	1.33
Land	0.35	0.00	0.35	0.00	0.00	0.00	0.00	0.35
Software	15.47	0.00	15.47	15.05	0.10	0.00	15.15	0.31
Generation A	Assets							
Plant & Machinery	49.25	0.00	49.25	11.00	1.25	0.00	12.25	37.00
Building	13.48	0.00	13.48	1.95	0.21	0.00	2.16	11.32
Furniture & fittings	0.03	0.00	0.03	0.03	0.00	0.00	0.03	0.00
Computer	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Office Equipments	0.05	0.00	0.05	0.05	0.00	0.00	0.05	0.00
Vehicle	0.03	0.00	0.03	0.03	0.00	0.00	0.03	0.00
Total	2474.56	18.40	2492.95	262.48	19.14	38.08	319.71	2173.25

In the above table, the depreciation charged on the assets booked as capital reserve / equity is Rs. 19.14 Crore.

The assets transferred to MSPDCL at the time of restructuring of erstwhile EDM are not booked as grants but as capital reserve/ equity. As such, the depreciation should be allowed on the entire assets transferred from the erstwhile EDM into the corporate entity of MSPDCL. MSPDCL requests the Hon'ble Commission to approve the depreciation of Rs.19.14 Crore for FY 2022-23.

Commission's analysis

The actual amount of depreciation reflected in Audited annual accounts is only Rs.19.14 CRs for FY 2022-23. In case of MSPDCL, it is construed that the capital grants and other funds are only being utilized all the time for asset creation and major chunk is being availed from Manipur Government only, which can be witnessed from Audited Accounts. Hence, the depreciation amount now be allowed at 10% of the actual depreciation with an assumption that MSPDCL might have invested only smaller portion of its own fund amount for asset creation. Thus, the depreciation now allowable as a matter of gesture is Rs.1.914Crs only for true-up purpose for FY 2022-23. With regard to treatment when assets were transferred un restructuring was clearly explained in the Review Order given on 17th August 2023. The Licensee shall not repeat the same argument even after such Commission Order which amounts to disobedience of the issued orders.

5.11. Interest on Loan

Petitioner's Submission

The major part of capital expenditure undertaken by MSPDCL is funded by the State Government's grants and Central Government's grant. However, in addition to these sources of funds, MSPDCL has also taken some amount of loan from REC for RAPDRP-B Project and RGGVY project for meeting counterpart funding as per Gol scheme guidelines. The repayment of loans during the year has been considered as per principal repayment made, and the repayment has been considered proportionately based on the opening loan balance.

The details of loans with the computation of Interest on loan are shown in the Table below:

Table 5.22: Break-up of Loan for FY 2022-23 (Rs. Crore)

SI No.	Particulars	RGGVY	SS- II	Loan 3 (REC- RAPDRP- B)	Installation of 130W LED Street Lights & 20m High Mast Lighting	Prepaid Meter Loan Valley (16113)	Prepaid Meter Loan Valley (16114)	SLTTL	LPS
1	Opening Loan	8.50		23.90	6.46	40.06	23.01	79.5	78.2
2	Addition during the Year	1.60			6.45	32.30	24.40	31.98	29.32
3	Repayment during the year	1.70		3.90	0.00	0.00		0	0
4	Closing Loan	8.40	0.00	20.00	12.91	72.36	47.41	111.48	107.52
5	Average Loan	8.45		21.95	9.69	56.21	35.21	95.49	92.86
6	Rate of Interest	Multiple		11.70%	10.50%	10.60%	10.60%	9.50%	9.75%
7	Interest & Finance Charges	1.94		2.57	0.96	5.50	3.97	9.07	9.05

Table 5.23: Interest on Loan for FY 2022-23 (Rs. Crore)

Particulars	Approved in ARR order 2022-23	Approved in APR Order 2022-23	Actual
Interest & Finance	17.62	0.00	33.06

MSPDCL requests the Hon'ble Commission to kindly approve the interest on loan of Rs. 33.06 Crore for FY 2022-23.

Commission Analysis:

The Licensee preferred to claim n extraneous figure of Rs.33.06Crs as interest on Loans for True-up purpose while the actual finance cost so reflected in audited accounts is only Rs.18.557Crs. This is totally an unethical attempt made by the Licensee for claiming higher amount than actually spent during the year. Same issue was questioned in **additional queries No-12**, but the reply so provided is irrelevant. Instead of providing the break-up for Rs.18.557Crs had once again repeated the same data which was already shown in petition. The licensee is ignorant that True-up is carried out purely dependent on audited actuals but not the provisional or anticipated expenditure. This concept is fundamental and his claims can't go past the audited actuals under any circumstances.

It is also once again observed that high-mast lighting and LED street lighting which was categorically disallowed by the Commission and directive is also pending on this issue, is still being shown in their loan amount. Besides, they have obtained additional loans to the tune of Rs.6.45Crs during FY 2022-23 is observed with astonishment. The Commission had earlier issued directions vide Tariff Order Dt 23.03.2022 to pass on the entire loans amount to municipal Administration department and get back the reimbursement of the amount spent so far duly referring to supply code extract as to why it is the sole responsibility of Local body but not of distribution company. This can no longer be tolerated by Commission and take suitable action to return/pass on this loan to local body and report compliance.

Since, the finance cost as per audited accounts is Rs.18.557Crores and no breakup details were furnished by Licensee, the Commission wish to <u>disallow double</u> <u>the amount</u> of High-Mast Loan interest amount Rs.0.96Crs as a penalty from the above amount of Rs.18.557Crs and approve the interest on Loan amounting to Rs.16.637Crs for the lackadaisical attention shown by MSPDCL in this matter despite a direction exists.

5.12. Return on Equity

Petitioner's Submission

As per audited accounts, the RoE is computed on paid up capital of Rs. 10.05 Crore at the rate of 15.50% as stated in clause 26.1 of JERC (Multi Year Tariff) regulations 2014

Table 5.24: Return on Equity for FY 2021-22 (Rs. Crore)

SI. No	Particulars	Approved in ARR order 2022-23	Approved in APR Order 2022-23	Actual
1	Average Equity	10.05	10.05	10.05
2	RoE %	15.50%	15.50%	15.50%
3	Return on Equity	1.56	1.56	1.56
4	MAT Rate applicable	0.00%	0.00%	0.00%
	Net RoE (Grossed up by MAT rate)	1.56	1.56	1.56

MSPDCL requests the Hon'ble Commission to approve the Return on Equity of Rs.1.56 Crore for FY 2022-23.

Commission Analysis:

The Commission approves the return on equity at **Rs.1.56 Crs** without considering the Income tax component and the remaining amount will be admitted depends upon the incidence of tax on actual basis. **The Financial formats from S1 to S4 was omitted by MSPDCL** and not submitted in the ARR submission for its verification.

5.13. Write-Off of Bad Debts

Petitioner's Submission

As per the audited accounts for FY 2022-23, the receivables from consumers are Rs. 630.68 Crore including inherited legacy debts of EDM since the time of unbundling. MSPDCL has booked 15.6 crore as bad debts in the accounts for FY 2022-23.

Commission's analysis

The writing-off the Bad debts is not acceptable to the Commission, for the reason that the Licensee had not made any assiduous efforts so far in collection of the pending legacy dues accumulated to the tune of above Rs.431 Crs to the end of 31.03.2021. Bad debts withdrawal can only be allowed when Commission is thoroughly satisfied that despite the best efforts by Licensee the dues are proved to be non-recoverable and the onus of such proving rests with the MSPDCL. Hence, bad debts write off is dis allowed totally. No approval for Bad debts amount is made by Commission.

5.14. Non-Tariff Income

Petitioner's Submission

The Hon'ble Commission approved Non-Tariff Income of Rs. 8 Crore in the ARR for FY 2022-23. The actual Non-Tariff Income earned by MSPDCL in FY 2022-23 was Rs. 9.65 Crore, as shown in the Table below:

Table 5.25: Break-up of Non-tariff Income for FY 2022-23 (Rs. Crore)

SI.	Particulars	Approved in	Approved in	Actual
No.		ARR Order	APR Order	(2022-23)
		22-23	22-23	
1	Interest Income			4.40
2	Agency Charges @ 3.75%			1.65
3	Others			3.60
	Total			9.65

The actual Non-tariff income as compared to the approved figure in ARR of FY 2022-23 is as follows:

Table 5.26: Non-tariff Income for FY 2022-23 (Rs. Crore)

SI. No	Particulars	Approved in ARR Order 22-23	Approved in APR Order 22-23	Actual (2022-23)
1	Non-tariff Income	8.00	8.00	9.65

MSPDCL requests the Hon'ble Commission to approve the actual Non-Tariff Income of Rs. 9.65 Crore for FY 2022-23.

Commission's analysis

Table 5.27: Non-tariff Income approved for FY 2022-23 (Rs. Crore)

SI.	Particulars	Approved in	Approved in	Actual	Commission
No.		ARR Order	APR Order	by	Approved
		22-23	22-23	MSPDCL	
1	Interest Income			4.40	5.7202
2	Agency Charges @ 3.75%			1.65	1.6461
3	Others			3.60	3.5967
	Total	8.00	8.00	9.65	10.963

The Licensee had undermined the interest income from Rs.5.72Crs to Rs.4.40Crs. This could be due to continuous erroneous claimed made in each cost element in this filing and no other reason could be imputed for this erratic submission ever made. Now Commission approve the Non-Tariff Income for Rs.10.963Crs in FY 2022-23.

5.15. Aggregate Revenue Requirement

Based on the above component-wise expenses, the Aggregate Revenue Requirement

computed for FY 2022-23 by MSPDCL against the figures approved by the Commission in the Tariff Order for FY 2022-23, is given in the Table below:

Table 5.28: Aggregate Revenue Requirement for FY 2022-23 (Rs. Crore)

SI. No.	Particulars	ARR Order	Approved in APR Order	Actual (2022-23)
		22-23	22-23	500.70
Α	Cost of power purchase	567.77	536.70	589.72
В	Transmission charges	188.37	104.91	153.88
С	O&M Expenses	91.52	90.04	116.71
1	Employee Expenses	77.15	72.02	96.07
2	A&G Expenses	6.12	6.24	7.46
3	R&M Expenses	8.25	11.78	13.18
D	Depreciation	1.84	1.83	19.14
Е	Interest on Loan	17.62	0.00	33.06
F	Interest on Working Capital	0.00	0.00	6.12
G	Bad Debt	0.00	0.00	15.60
Н	Total Cost	867.12	733.48	934.23
	Add: RoE	1.56	1.56	1.56
J	Add: Income Tax	0.00	0.00	0.00
К	Total	868.68	735.04	935.79
L	Less: Non Tarif Income	8.00	8.00	9.65
М	Less: Efficiency Gains	40.00	0.00	0.00
N	Aggregate Revenue Requirement			
IN	(ARR)	820.68	727.04	926.14
0	Revenue from sale of surplus power	14.32	61.18	33.09
Р	Net ARR	806.36	665.86	893.05

The revenue from sale of power to consumers for FY 2022-23 was Rs. 418.96 Crore as approved by Hon'ble Commission in its ARR order for FY 2022-23. The actual revenue from sale of power to consumers in FY 2022-23 is Rs. 469.26 Crore as per audited accounts. MSPDCL requests the Hon'ble Commission to approve the same.

Commission's analysis

As explained against each cost element of ARR items, the ARR approval has been made by the Commission with due verification of the Statutory auditors certified annual accounts figures of FY2022-23. The MSPDCL exceeded the APR approved value of Rs.727.04 Crs and now claims for Rs.926.14 Crs as actuals is apparently high and needs thorough scrutiny. The true-up petition is finalisation by Commission based on Audited annual accounts of FY 2022-23 and the approved ARR details are as follows:

Table 5.29: Commission approved ARR after True-Up (Rs. Crore)

SI.		T.O. Dt	Approved	Actuals	True-Up
No.	Particulars for FY 2022-23	23/3/2023	in APR	claimed	Approved
Α	Cost of power purchase	569.79	536.70	589.72	576.06
В	Inter Transmission charges	91.50	104.20	87.98	87.98
С	Intra State Transmission charge	93.86	0.00	64.20	0.00
D	SLDC & NERLDC Charges	0.71	0.71	1.70	1.00
Ε	O&M Expenses	91.52	90.04	116.71	109.02
1	Employee Expenses	77.15	72.02	96.07	88.78
2	A&G Expenses	6.12	6.24	7.46	7.06
3	R&M Expenses	8.25	11.78	13.18	13.18
F	Depreciation	1.96	1.83	19.14	1.91
G	Interest on Loan	17.62	0.00	33.06	16.64
Н	Interest on Working Capital	0.00	0.00	6.12	0
I	Bad Debt write-off	0.00	0.00	15.60	0
J	Add: Return on Equity	1.56	1.56	1.56	1.56
K	Add: Income Tax	-	-	-	0
	Gross Aggrt. Revn. Requirement	868.51	735.04	935.79	794.16
L	Less: Non Tarif Income	8.00	8.00	9.65	10.96
M	Less: Efficiency Gains	0.00	0.00	0.00	0.00
	Net Aggr. Rev. Requirement	860.51	727.04	926.14	783.20
Ν	Revenue from surplus power sale	7.93	61.18	33.09	29.57
0	Net ARR after OSS	852.58	665.86	893.05	753.63
R	Revenue from Retail Sales	551.19	608.28	469.26	<mark>#</mark> 543.54
S	Revenue Surplus / (Deficit)	301.39	57.58	423.79	210.09
Р	Govt. Subsidy U/s 65 of E.Act 2003	301.39	290.38	264.50	210.09
Q	Final Gap after subsidy	0	232.80	159.29	0
	Gap Status	0	Surplus	Deficit	Nil

^{# -} The revenue from retail sales amount is limited to suit gap need, instead of adopting full realisable revenue of Rs.638.93Crs for the sales quantum achieved in FY22-23 strictly adopting Commission approved revenue deriving methodology to avoid display of surplus.

It was replied by MSPDCL in their additional information that the revenue from Outside State Sales is Rs.24.90Crs only instead of Rs 28.42Crs as preferred in the petition which includes under drawl compensation amount of Rs.3.52Crs. The overall Outside State Sales of Rs.24.90Crs is also added along with Roof-top solar revenue of Rs.4.67Crs. The under-drawl amount was withdrawn here and adjusted in power purchase cost so approved. Only NERLDC charges are allowed based on the details provided by MSPDCL subsequently and SLDC charges are disallowed as these charges were not fixed by Commission.

It is once again notice that the revenue realisable for the sales quantum achieved by MSDPCL and figured in the audited accounts is extremely lower compared to the

methodology being followed by the Commission for revenue assessment adopting prudent revenue calculation methodology. The realisable revenue from the sale of 835.79MU shall have to at Rs.638.92Crs as against the actual revenue of Rs.464.60Crs with a steep under recovery of Rs.174.32Crs is an alarming issue. Thereby, the under realised revenue due to inherent leakage by MSPDCL is Rs.174.32Crs (Rs.638.92Crs-Rs.464.60Crs) is an alarming issue to be considered on top-most priority because of loss of realisable revenue by the entity shall be arrested immediately and any explanation/justification in this matter Commission would not entertain any more.

The same issue was critically discussed in detail with MSPDCL Officials and made lot many useful suggestions during the public hearing time (at Imphal in March 2023) to plug the <u>perennial</u> revenue leakage, but all the efforts didn't see the desired results. Even from the category wise revenue break-up details provided in response to queries, the HT category revenue was arrived at without adopting power factor (0.90) for KWH to KVAH and KW to KVA. As a result, the revenue was under collected from HT consumers is Rs.23.28 Crs. Besides, it is also noticed that the revenue collections from Domestic and Kutir Jyothi consumers together is also alarmingly very low which is to the tune of Rs.151.05 Crs. In all the under recovery of revenue collections due to defective billing mechanism is Rs.174.32Crs in FY 2022-23. Similar kind of issue was found even in FY2021-22 revenue amount also and Commission explained in detail in True-up chapter last year (FY 2021-22) by stating the missing amount as Rs.119.99Crs and taken up the issue in to cognisance by MSPDCL management through Tariff Order.

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Table 5.30: Category wise revenue comparison MSPDCL Vs Commission method:

		As pe	er MSPDC	CL record	As pe	er Commi	ssion	
SI.	Consumer Categories	Fixed	Energy	Total	Fixed	Energy	Total	
No.	(FY 2022-23)	Charge	Charge	Revenue	Charge	Charge	Revenue	Variance
		Rs.Crs	Rs.Crs	Rs.Crs	Rs.Crs	Rs.Crs	Rs.Crs	Rs.Crs
		1	2	3	4	5	6	(6-3)
1	Kutir Jyoti	0.43	96.39	96.82	0.43	0.8316	1.26	-95.56
2	Domestic	55.69	31.98	87.66	55.69	278.56	334.25	246.59
3	Non-Domestic / Commercial	9.32	71.58	80.90	9.32	71.58	80.90	0
4	Public Lighting	0.10	16.22	16.33	0.10	16.23	16.33	0
5	Public Water Works	0.06	3.96	4.02	0.06	3.96	4.02	-0
6	LT-Irrigation and Agriculture	0.03	1.62	1.65	0.03	1.62	1.65	0
7	Cottage and Small Industry	1.71	14.45	16.15	1.71	14.45	16.16	0.01
8	HT Commercial	3.30	29.18	32.48	3.67	32.43	36.10	3.62
9	HT Public Water Works	2.22	73.46	75.68	2.47	83.68	86.15	10.47
10	HT-Irrigation and Agriculture	0.05	1.40	1.44	0.05	1.55	1.60	0.16
11	HT Medium Industry	0.58	5.10	5.68	0.65	5.67	6.31	0.63
12	HT Large Industry	1.57	11.48	13.06	1.75	12.75	14.50	1.45
13	Bulk Supply (HT)	6.20	26.52	32.71	6.89	32.80	39.68	6.97
	Grand Total	81.25	383.34	464.59	82.82	556.11	638.93	174.33

The Commission in its MYT order for FY2022-23 categorically stated (at para below Table-6.22 for FY2022-23) that, if revenue billed for FY 2022-23 don't match with the revenue derived by the methodology followed by Commission, true-up will be done based on Commission derived revenue to assess the Gap/surplus. Now that the accounted revenue is far lower, the Commission wish to consider the correct revenue so as to nullify any gap that is found. Accordingly, the approved gap for FY2022-23 is derived as "NIL" since the accounted revenue of Rs.464.59Crs is unimaginably far lesser than Rs.638.92Crs so derived by Commission adopting the same parameters such as Consumers, Contracted Loads, slab-wise energy sold during FY2022-23.

It is relevant to state the observation of the Commission is that the number of consumers, Connected Load (in MW) and units sold for each year from 2022-23 as mentioned in the initial petition don't match with the figure submitted by MSPDCL in the revenue realisation sheets in respect of three (3) years. The Data initially submitted got altered conveniently by petitioner to suit his convenience. Even the Energy sale figure for FY 2022-23 mentioned in category-wise sales, energy balance in the petition as 835.39MU is once again altered to 835.79MU (with 0.40MU variation) in the revenue calculation sheet. This kind of inconsistent data submission is very much despicable and set right the habit immediately.

Besides, it is interesting to observe that from FY22-23 to FY23-24, though no change in Tariff and not much difference in units sold but the revenue amount arrived for

FY23-24 is higher compared to FY22-23 revenue. Upon verifying the per unit cost for the difference in units sold in two years is tabulated below to understand the issue:

Financial Year	Total Sales (MU)	Total Revenue (Rs.Crs)	CPU Rs./kWh
For 2023-24	855.35	568.24	6.64
For 2022-23	835.79	464.59	5.56
Difference	19.56	103.65	52.99

This huge revenue assessment variation of Rs.103.65Crs is because of more revenue collection shown from domestic consumers in FY2023-24 when compared to FY2022-23 (previous year actuals). At the same time the per unit cost of variation is also very at 52.99/kWh is abnormal and alarming state of affairs. There needs revamping of revenue billing mechanism now in place under implementation to arrest huge revenue leakage to organisation. Of course, even for FY2023-24 & FY2024-25 also, the HT billing revenue assessment was done without power factor correction is very saddening to notice by the Commission despite repeatedly pointing it out many a times.

5.16. Revenue Gap

Petitioner's Submission

The Revenue Gap of MSPDCL for FY 2022-23 as against the Revenue Gap approved by the Hon'ble Commission in the ARR Order for FY 2022-23 is shown in the Table below:

Table 5.31: Revenue Gap for FY 2022-23 (Rs. Crore)

SI. No.	Particulars	Approved in ARR Order 2022-23	Approved in APR Order 2022-23	Actuals accounted FY2022-23
1	Net ARR after considering outside sale income	806.36	665.86	893.05
2	Total Revenue from consumer tariff	418.96	608.28	469.26
3	Revenue Gap before Govt. Subsidy (1-2)	387.40	57.58	423.79
4	State Government Revenue Subsidy	172.40	290.38	264.5
5	Revenue Gap / (Surplus) (4-3)	215.00	(232.8)	159.29

Conclusion on gap:

Commission's Analysis:

The final Gap so arrived at by the Commission after True-Up process exercise of FY 2022-23 with due consideration to the Audited Accounts Statement figures is **Nil** as detailed in the earlier paras of this chapter and also at Table 5.29 above for element wise details.

6. Annual Performance Review for FY 2023-24

6.1. Background

The Petitioner humbly submits that the present APR is based on actual provisional expenses of FY 2023-24 from first six-month data available for FY 2023-24. The comparison of the projected expenses and revenue has been made with the expenses and revenue considered by Hon'ble Commission in the ARR of FY 2023-24 as approved in the JERC tariff Order in Petition (ARR & Tariff) (henceforth referred as 'Approved' order with reference to FY 2023-24). However, the Petitioner requests Hon'ble Commission to review the expenses and revenue for FY 2023-24 based on the trend observed as per actual data.

6.2. Energy sales

Petitioner's Submission

MSPDCL caters to a diverse consumer mix comprising of:

- Kutir Jyoti and LT Domestic
- LT & HT Commercial,
- LT & HT Industry
- Public Street Lighting
- Public Water Works
- Agriculture consumers.
- Bulk Consumers

LT Domestic category is the largest consumer category and comprises around 60% of the total sales of MSPDCL. The number of consumers in this category has increased rapidly in the recent years on account of the rural electrification schemes such as RGGVY, DDUGJY and Saubhagya scheme. The sales as projected for the whole year; actual category-wise energy sales for six months as compared to the energy sales approved by the Hon'ble Commission for FY 2023-24 is given in the Table below:

Table 6.1: Category-wise Energy Sales (MU)

SI. No.	Particulars	Approved in ARR Order 23-24	Six months actuals	Revised Projections (B)
Α	LT Supply			
1	Kutir Jyoti	3.96	0.00	0
2	Domestic	607.4	254.94	509.88
3	Commercial LT	71.43	50.97	101.94
4	Public Lighting	5.73	1.94	3.88
5	PWW	1.38	5.05	10.1
6	Irrigation and Agriculture	0	0.00	0
7	Cottage and Small Industries	20.97	7.30	14.6
	Total LT	710.87	320.2	640.4
В.	HT Supply			
8	Commercial HT	23.89	17.96	35.92
9	PWW	28.97	22.71	45.42
10	Irrigation and Agriculture	1	0.41	0.82
11	Medium Industries	4.77	4.57	9.14
12	Large Industries	10.21	9.38	18.76
13	Bulk Supply	103.08	52.45	104.9
	Total HT	171.92	107.48	214.96
	Grand Total (LT & HT)	882.79	427.68	855.36

MSPDCL requests the Commission to approve the revised sales projections for FY 2023-24.

Commission Analysis:

The energy projections for FY 2023-24 furnished now is provisionally accepted at this level itself, since, it is almost at the fag-end of the year of 2023-24 now, we may even await the actual sales figures and hence Commission makes no change in the sales projected and approves with an expectation of reaching the energy projection submitted for FY 2023-24 as the growth trend is very high is LT category over tariff Order sales figures and Kutir Jyothi consumption is moved to zero is unbelievable.

6.3. Energy Balance and Transmission & Distribution Loss

Petitioner's Submission

The computation of revised Transmission & Distribution losses for FY 2023-24 is shown in the Table below:

Table 6.2: Estimated Transmission and Distribution Losses for 2023-24

SI. No	Particulars	Unit	Details
1	Own Generation	MU	0.00
2	Power purchase from CGS	MU	1093.14
3	Add: UI Over drawl	MU	13.52
4	Add: IEX purchases	MU	63.50
5	Add: Returned Banking Energy	MU	77.00
6	Less: IEX sales	MU	83.41
7	Less: Banking mode sales	MU	53.09
8	Gross Energy handled at NER	MU	1109.05
9	Pool Losses	%	2.36%
10	Energy Losses at NER	MU	26.17
11	Net Energy available at NER after losses	MU	1082.88
12	Less: UI Under drawl	MU	13.68
13	Gross Energy handled at State Periphery	MU	1069.20
14	Total Sales (LT+HT)	MU	855.36
15	Distribution loss	MU	213.84
16	Transmission and Distribution loss	%	20.0%

The projected T&D Losses of 20.0% is expected be achieved by MSPDCL in FY 2023-24 against the approved figure of 18.82% approved by Hon'ble Commission in its ARR order. Because of the law and order situation of the state, system strengthening works like augmentation of LT lines, replacement of DTRs, replacement of naked line with AB Cables and conversion from conventional meter to prepaid meter has been delayed. T&D loss is expected to increase a bit as a result.

Table 6.3:Transmission and Distribution Losses for APR of FY 2023-24

SI. No	Particulars	Approved in ARR Order 23-24	Revised Projections (B)	
1	Distribution Loss	18.82%	20.0%	

It is submitted that energy availability for FY 2023-24 has been computed based on the actual Power purchase from April to September 2023 and previous year's pattern. Further, the transmission licensee, MSPCL operates the 33kV network which is the input point of the distribution network. It may to be noted that MSPDCL network periphery included only 11kV system and below whereas 33 kV and above transmission network falls under the MSPCL network. Therefore, segregating the MSPDCL distribution losses and MSPCL network losses, in absence of proper metering arrangements is not possible. Further, the Hon'ble Commission has stated that w.e.f. 01.02.2014, MSPDCL shall be responsible for distribution losses. In absence of an accurate figure of losses for 33 kV and above network, the Commission had calculated the losses without subtracting the intra state transmission losses.

The quantum of distribution losses is primarily due to the higher LT line lengths and

the hilly / complex terrain of Manipur State. The long LT distribution lines and distribution at 11 kV are leading to higher distribution losses in the state. In the recent past, due to various initiatives in rural electrification, significant progress was made by MSPDCL in addition to the rural consumers. However, it is pertinent to note that the new consumer addition happened in most remote areas by extending the distribution network of MSPDCL. Due to smaller load and low consumption level, technical line losses would be quite high in those areas. MSPDCL is trying its best to serve them continuously and maintain these systems with its workforce efficiently. With the present state of complex terrain, long LT distribution lines, scatter LT domestic consumers, the actual LT distribution losses in Manipur are higher than the Commission approved distribution losses as given in its ARR order. Further, MSPDCL is in the process of expanding the coverage of prepaid meters to reduce unauthorized usage of electricity and the T&D losses. As the coverage of prepaid meters increased in the state in the future years, the T&D losses gradually improved.

Table 6.4:Energy balance (MU) for APR FY 2023-24

SI.	Particulars	Unit	FY 2023-24
No			
1	Energy Sales	MU	855.36
2	T&D Loss	%	20.00%
3	T&D Loss	MU	213.84
4	Energy Requirement at State periphery (1+3)	MU	1069.20
5	Inter-State Transmission Losses	%	2.36%
6	Inter-State Transmission Losses	MU	26.17
7	Total Energy Requirement (4+6)	MU	1095.04
8	Total Energy Available from Long Term Sources	MU	1093.14
9	Net Surplus / (Deficit) at State Periphery (7-8)	MU	-1.90
10	Net Surplus Energy Surplus/Deficit for Short Term Sale/Purchase	MU	-1.95

Based on the projected sales to consumers, projected distribution loss, interstate (as per average loss data from NERLDC) and intra state losses (as approved), projected power purchase and the energy balance is calculated and the surplus power available for banking / surplus sale is estimated and MSPDCL request the Hon. Commission to approve the same.

Commission analysis

The T&D loss level now projected by the Licensee is at 20% as is not comparable to the Tariff Order approved distribution Losses of 18.82%. Accordingly, the distribution losses now projected shall be lesser by 7.52% of Transmission Losses of MSPCL. Earlier, the ARR figure submitted was also at 19.18% but not 20% as now stated. However, the T&D

This is now showing a downward trend rather than achieving a progressive trend in energy handling. In fact, the T&D losses now projected are far higher than what has been achieved in FY2021-22 figures of 16.95% considered by the Commission. Hence the projection now made is not acceptable as there is no noticeable improvement indicated in the submission. Therefore, the distribution Loss figures indicated in the Tariff Order Dt 28.03.2023 at 18.82% will not undergo a change with the required modification and arrived at distribution loss and T&D Losses in the Annual performance review for FY 2023-24 are 13.49% and 19.90% respectively. The details are tabulated below:

SI No	Particulars (FY 2023-24)	Unit	APR (MSPDCL)	(Now Apprvd)
Α	Distribution Energy Requirement			
1	Energy for Retail Sales	MU	855.36	855.36
2	Distribution loss	%	20.12%	13.49%
3	Distribution loss	MU	215.42	133.33
4	Energy need at Distribution Input	MU	1070.78	988.69

В	Energy Availability (2023-24)	Unit	APR (MSPDCL)	(Now Apprvd)
5	Power Purchase from CGS & Others	MU	1093.15	1093.15
6	Add: IEX Purchases	MU	63.50	63.50
7	Add: UI Over drawl	MU	13.52	13.52
8	Add: Banking units Returns	MU	77.00	77.00
9	Less: IEX Sales (Gross)	MU	-83.41	
10	Less: Banking Mode sales (Gross)	MU	-53.09	
11	Gross Energy handled at NER Level	MU	1110.67	1247.17
12	Less: External (pooled) Losses	%	2.36%	2.33%
13	Less: External Energy pooled Losses	MU	26.21	29.06
14	Energy after External Losses (11-13)	MU	1084.46	1218.11
15	Less: IEX Sales (Net)	MU		-83.41
16	Less: Banking Mode sales (Net)	MU		-53.09
17	Less: UI Under drawl	MU	-13.68	-13.68
18	Add: Own Generation (Net)	MU	-	-
19	Available Energy at State periphery	MU	1070.78	1067.93
20	Intra-State Transmission Loss	%	0.00%	7.42%
21	Intra-State Transmission Loss	MU	-	79.24
22	Energy Available at Distribution input	MU	1070.78	988.69
23	Distbn Losses - MU	MU	215.42	133.33
24	Distbn Losses - (%)	%	20.12%	13.49%
25	Net Energy available for Retail Sale	MU	855.36	855.36
26	T&D Losses (%)	%	20.12%	19.90%
27	T&D Losses (MU) - (21+23)	MU	215.42	212.57

With regard to the loss reduction, the commission wants the circle wise monthly sale details each month for monitoring and in this regard the following directive is being given in this aspect:

"The MSPDCL shall invariably submit the details to the Commission on 15th of each month following the month in which the quantum of energy input/received by each circle and also the quantum of energy sold in that month by each circle separately for each of the twelve (12) months promptly starting from April to March without fail. The information so furnished by the licensee would form the basis to arrive at the Distribution losses incurred by the MSPDCL in the entire year for truing-up purpose in future. Besides, the Licensee shall also submit the details of the quantity of Outside state sales achieved in each month starting from April to March for record along with the Circle wise sales information."

6.4. Energy Purchase and procurement cost

Petitioner's Submission

MSPDCL receives allocated power from various Central Generating Stations in North Eastern Region, viz., NEEPCO, NHPC, OTPC- Palatana, and NTPC Bongaigaon for power purchase under long term PPAs. The proposed power purchase for FY 2023-24 has been projected based on the annual allocation of different power projects.

However, the actual power purchase quantum is likely to vary based on the energy availability, hydrology, operational conditions of the plants etc. While estimating the power purchase for FY 2023-24, actual power purchase during the first six months is considered along with the pattern of availability of plants in next six months.

The revised energy purchase for FY 2023-24 is proposed in the Table below:

Approved in ARR Order23-24 **Revised Projections** Source Total Cost Average rate Purchased **Total Cost Average rate** Purchased (Rs Cr) (MU) (Rs Cr) (Rs/kWh) (MU) (Rs/kWh) **CGS - NEEPCO** Α 7.23 63.52 Kopili - I HE 8.17 1.29 1.70 2.36 1 Kopili - II HE 4.75 0.83 1.75 6.63 1.64 2.47 Khandong HE 10.87 2.47 2.27 0.00 0.00 0.00 Ranganandi HE 106.40 25.11 2.36 91.43 23.95 2.62 Project 7.75 5 Doyang HE Project 12.41 8.44 6.80 12.55 6.18 Assam GBPP 129.85 64.28 4.95 146.24 95.84 6.55 Agartala GTPP I & II 34.8 4.87 40.70 71.43 66.80 6.09 B CGS - NHPC

Table 6.5: Power Purchase Cost and Quantum for APR FY 2023-24

CI		Approv	ed in ARR Or	der23-24	Revised Projections		
SI. No.		Purchased	Total Cost	Average rate	Purchased	Total Cost	Average rate
		(MU)	(Rs Cr)	(Rs/kWh)	(MU)	(Rs Cr)	(Rs/kWh)
1	Loktak HEP	143.85	53.87	3.74	30.52	13.99	4.58
2	Loktak Free power	60.91	0	0.00	20.22	0.00	
С	Other						
	Baramura GBPP Unit						
1	IV and V	0.00	0.00	0.00	0.00	0.00	0.00
	OTPC Pallatana Unit I						
-	& II	306.42	107.68	3.51	328.04	109.70	3.34
\vdash	New Plants						
	NTPC Bongaigaon	231.87	153.78	6.63	349.60	207.82	5.94
3	Unit I, II & III						
	Monarchak Gas						
	Based PP (NEEPCO)						
5	Kameng HEP Stage I						
6	Kameng HEP Stage II						
7	Para HEP	39.79	20.44	5.14	33.89	18.11	5.34
8	Tuirial HEP						
9	Lower Subansiri	77.09	38.54	5.00			
	Stage I						
10	Lower Subansiri						
	Stage II						
11	Renewable –Solar		19.24				
12	Renew –Non-Solar		0				
E	TOTAL	1259.16	537.65	4.27			
	Short-Term Power Pu	ırchase					
1	IEX Purchase	50.35	27.89	5.54	63.50	41.28	6.50
F	UI						
1	UI Over-drawl	13.01	3.38	2.60	13.52	5.38	3.98
	Supplementary bills		0.87			19.82	
	Total	1322.52	569.79	4.31	1170.16	587.67	5.02

MSPDCL, therefore, requests the Hon'ble Commission to approve the revised power purchase costs for FY 2023-24.

Commission Analysis:

The Commission approves the energy procurement and its associated cost at Rs.626.59Crs for FY 2023-24, with RPO obligation amount of Rs.38.91Crs as it matters in the Compliance and the details are shown in Power Purchase Cost table below. But the depiction of IEX Sales and Banking Sale before pooled losses is not felt right and it needs modification. In addition, the pooled losses so adopted is to be revised to 2.33% instead of adopted 2.36%. This change is made after seeing the latest NER Transmission Losses as specified in their annual compendium of FY22-23.

The RPO obligation is now determined under the assumption that the HPO energy of

77.09MU earlier projected to procure from Lower Subansiri Stg-1 is not accomplished in FY2023-24 and other RE purchase from Solar which was shown as **NIL** in Table-58. Page-45 of your submission is considered in APR Review. As a result, the MSPDCL shall procure the REC Certificates worth **Rs.38.91Crs** in compliance of obligation in 2023-24. The consideration of 202.46MU from old HEP is not allowed as the adjustment of HPO obligation will prevail only for energy from Hydro LHPs (including PSPs) commissioned after 8th March 2019 only and not from Old stations.

Please refer to para-14 of MOP's order vide F.No.09/13.2021-RCM, Dt.22July 2022 in this matter. The MSPDCL hence not complied any RPO obligation in FY 2023-24 is the reply given by MSPDCL to additional information query reply. MSPDCL had requested to adjust their hydro procurement during the year to set-off against the gap of other RE sources after meeting the HPO obligation. In this regard, MSPDCL be aware that failure to comply this RPO obligation will enable Commission to invoke the provisions of clause-3 & 6 of Renewable Purchase Obligation & its Compliance Regulation 2010 and matter will be dealt accordingly if no action is taken in this matter before submission of True-up claim submission when due.

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Table 6.6: Power Purchase Cost and Quantum for APR FY 2023-24 by Commission

SI.	Danier Chatian Cannaca	T.O A	ppvd 202	3-24	APR (Filed) 202	23-24	JERC 2023-24		
No.	Power Station Sources	(MU)	Rs.Crs	CPU	(MU)	Rs.Crs	CPU	(MU)	Rs.Crs	CPU
Α	CGS - NEEPCO	399.23	144.10	3.609	330.88	171.58	5.19	330.88	171.58	5.19
1	Kopili - 1 HEP	63.52	8.17	1.286	7.23	1.70	2.351	7.23	1.70	2.351
2	Kopili - 2 HEP	4.75	0.83	1.747	6.63	1.64	2.474	6.63	1.64	2.474
3	Khandong HEP	10.87	2.47	2.272						
4	Ranganandi HEP	106.40	25.11	2.360	91.43	23.95	2.619	91.43	23.95	2.619
5	Doyang HEP	12.41	8.44	6.801	12.55	7.75	6.175	12.55	7.75	6.175
6	Assam GBPP	129.85	64.28	4.950	146.24	95.84	6.554	146.24	95.84	6.554
7	Agartala GTPP 1&2	71.43	34.80	4.872	66.80	40.70	6.093	66.80	40.7	6.093
В	CGS - NHPC	204.76	53.87	2.631	50.74	13.99	2.76	50.74	13.99	2.76
1	Loktak HEP	143.85	53.87	2.631	30.52	13.99	2.757	30.52	13.99	2.757
2	Free Loktak Power	60.91			20.22			20.22		
С	Other	306.42	107.68	3.514	328.04	109.70	3.34	328.04	109.70	3.34
1	Baramura GBPP 4 & 5									
2	OTPC Pallatana 1 & 2	306.42	107.68	3.514	328.04	109.70	3.3441	328.04	109.70	3.3441
D	New Plants	348.75	212.76	6.101	383.49	225.93	5.89	383.49	225.93	5.89
1	NTPC Bongaigaon Units	231.87	153.78	6.632	349.60	207.82	5.945	349.60	207.82	5.945
2	Para HEP	39.79	20.44	5.137	33.89	18.11	5.344	33.89	18.11	5.344
3	Lower Subangsiri Stg-1	77.09	38.54	4.999	0.00			0.00		
4	Renewable - Solar									
5	Renewable - Non Solar									
	Total CGS Energy (A to D)	1259.16	518.41	4.117	1093.15	521.20	4.77	1093.15	521.20	4.77
Е	Short-Term Sources	174.68	31.27	1.790	154.02	46.66	3.029	154.02	46.66	3.02948
1	IEX Purchases	50.35	27.89	5.54	63.50	41.28	6.50	63.50	41.28	6.50
2	Banking Energy Received	111.32		0.00	77.00	-	0.00	77.00		0.00
3	Ui Over Drawls	13.01	3.38	2.60	13.52	5.38	3.98	13.52	5.38	3.98
4	IEX Sales (NET)				-83.41					
5	Banking Energy Sales (NET)				-53.09					
6	UI Under Drawls				-13.68					
	Total Short & CGS Energy (A to E)	1433.84	549.68	3.834	1096.99	567.86	5.18	1247.17	567.86	4.55
	NERLDC pooled Losses (%)	2.36%	\times	\times	2.36%	\times	\times	2.33%	\times	\times
	NERLDC pooled Losses (MU)	33.84	\times	\times	25.89	\times	\times	29.06	\times	\times
F	Energy at State Periphery	1400.00	549.68	3.926	1071.10	567.86	5.302	1218.11	567.86	4.662
1	IEX Sales (NET)	-115.32						-83.41		0.00
2	Banking Energy Sales (NET)	-111.32						-53.09		0.00
3	UI Under Drawls							-13.68		0.00
4	REC Certificates procured		19.24			0.00			38.91	
5	Supplementary Bills					19.82			19.82	
6	Late Payment Surcharges (LPS)									
	Grand Total	1173.36	568.92	4.84863	1071.10	587.68	5.49	1067.93	626.59	5.87

RPO Obligation compliance commitment for FY 2023-24 as approved by Commission is tabled below for quick reference

SI. No.	Particulars (RPO approved by Commission)	Formula	Unit	2023-24
1	Energy Sale excl. Inter- State Sale		MU	855.36
2	Total RPO Target		%	27.08%
3	Total RE purchase requirement	1*2	MU	231.63
4	HPO Target		%	0.66%
5	Hydro power purchase requirement	1*4	MU	5.65
6	WPO Target		%	1.60%
7	Wind power purchase requirement	1*6	MU	13.69
8	Other RPO Target		%	24.81%
9	Other RE Purchase Requirement	1*8	MU	212.21
10	Energy Storage purchase obligation target		%	1.00%
11	Energy Storage purchase requirement	1*10	MU	8.55
12	Actual Hydro power purchase	Input value	MU	0.00
13	Surplus / Deficit in Hydro power purchase	12-5	MU	-5.65
14	HPO achievement	12/1	%	0.00%
15	Wind power purchase	Input value	MU	0
16	Surplus / Deficit in wind power purchase	15/7	MU	-13.69
17	WPO achievement	15/1	%	0.00%
18	Other RE purchase	a+b+c+d+e	MU	0
	a. Co-generation	Input value	MU	0
	b. Small Hydro	Input value	MU	0
	c. Biomass	Input value	MU	0
	d. Solar	Input value	MU	0
	e. Others	Input value	MU	0
19	Surplus / Deficit in other RE purchase	18-9	MU	-212.21
20	Other RPO achievement	18/1	%	0.00%
21	Energy Storage Purchase	Input value	MU	0
22	Surplus / Deficit in other RE purchase	21/11	MU	-8.55
23	Energy Storage Purchase achievement	21/1	%	0%
24	Total RE purchase achievement	12+15+18+21	MU	0
25	Total RPO achievement	24/1	%	0.00%
26	RPO to be fulfilled	3-24	MU	231.63
27	RE Certificate cost for procurement		Rs.Crs	38.91

6.5. Transmission Charges

Petitioner's Submission

The transmission charges include the charges paid to PGCIL, MSPCL and SLDC charges. The summary of transmission charges approved by the Commission in ARR order and the revised projections for FY 2023-24 is as follows:

Table 6.7:Transmission charges for APR FY 2023-24

SI.	Particulars	Approved in ARR	Revised
No.		Order 23-24	Projections
1	PGCIL Charges	109.41	92.38
2	MSPCL Charges	52.56	74.00
3	SLDC Charges	0	0.74
4	NERLDC Charges	0.71	0.71
	Total	162.68	167.83

The transmission charges are uncontrollable in nature as the same are levied based on approved cost and orders of CERC and JERC as applicable for inter-state and intra state transmission respectively.

As such, MSPDCL requests the Hon'ble Commission to approve the Revised transmission cost.

Commission Analysis:

Since the variation proposed is not much compared to the Tariff order figures, the Commission approves all the costs proposed excluding the MSPCL charges amount of Rs.74.00Crs.and SLDC charges of Rs.0.74Crs. The MSPCL charges are not being paid by MSPDCL until now, for the basic reason of non-existence of billing mechanism between both the entities since their formation as Corporate entities and same thing is also indicated in the True-Up orders issued for earlier years. The SLDC charges payable to MSPCL amounting to Rs.0.74Crs is not having the approval of the Commission to collect, hence disapproved. Thus, the total amount approved is Rs.93.09Crs towards all Transmission charges.

6.6. Operation & Maintenance Expenses

Petitioner's Submission

The Operation and Maintenance (O&M) expenses comprises of Employee Expenses, Repair and Maintenance (R&M) Expenses and Administrative and General (A&G) Expenses. In the FY 2023- 24 based on six months data, revised projection of the O&M expenses as follows:

Table 6.8: O&M Expenses for APR FY 2022-23

SI.	Particulars	Approved in	Revised
No.		ARR Order 23-24	Projections
1	Employee Expenses	79.22	101.57
2	A&G Expenses	8.95	7.89
3	R&M Expenses	12.45	13.93
	Total	100.62	123.39

Accordingly, MSPDCL submits Hon'ble Commission to approve the proposed O&M costs of Rs. 123.39 Crore for FY 2023-24.

Commission Analysis:

The total O&M Expenses now provisionally approved for FY2023-24 at Rs.123.39Crs as projected by MSPDCL after Commission APR review without any change.

6.7. Interest on Working Capital

Petitioner's submission

As per Regulation 29.4 of JERC Terms and Conditions of Tariff Regulations 2014, Distribution Licensee shall be allowed interest on the estimated level of working capital for the financial year, computed as follows:

- a). Operation and maintenance expenses for one month; plus
- b). Maintenance spares at one (1) per cent of the historical cost escalated at 6% from the date of commercial operation; plus
- c). Receivables equivalent to one (1) month of the expected revenue from sale of electricity at
- d). the prevailing tariffs; minus
- e). 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 shall be allowed 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 computation of normative Interest on Working Capital (IoWC) as per Regulation 29.4 of JERC Terms and Conditions of Tariff Regulations 2014 for MSPDCL for FY 2023-24, is shown in the Table below:

Table 6.9: Interest on Working Capital for APR FY 2023-24

S No.	Particulars	Approved in ARR Order 23-24	Revised Projections
1	O & M Expenses one month		10.28
2	Maintenance, spares @ 1% of GFA Escalated by 6%		23.44
3	Receivable one month		47.35
4	Less: Total Security Deposit	Disallowed	27.23
5	Net WC requirement		53.84
6	Interest Rate		13.45%
	Interest of Working Capital		7.24

MSPDCL requests the Hon'ble Commission to approve the IoWC of Rs 7.24 Crore for FY 2022-23.

Commission's Analysis

As seen from the submission, there was no reference of actual need for drawal of short-term loans during the year for working capital needs. The very purpose of allowing the interest on working capital is to reimburse the short-term loan interest cost involved for running the day to day business of the utility. It is a known fact that MSPDCL is dependent solely upon the Government of Manipur for all its day to day funding in the form of Grant-in-Aid (revenue purpose) towards meeting salaries and other expenses. Therefore, allowing interest on working capital on a notional basis would only burden the retail supply consumers for no reason and disallowing it has no actual financial impact on MSPDCL. Therefore, it will have to be disallowed in the ARR computation by the Commission for not having actually availed Short-term loans as the general public too have expressed in the public hearing for disallowing this expenditure perpetually. More so, the MSPDCL is having majority of consumers are having pre-paid meter and thereby there is no delay in revenue realization and in fact revenue is collected in advance and hence there is no need for borrowing short-term loans for working capital needs.

Thus, the Commission <u>fully disapproves</u> the claim to consider interest on working capital so proposed by MSPDCL for FY2023-24.

6.8. Gross Fixed Assets and Depreciation

Petitioner's Submission

The depreciation on the GFA is calculated as per the JERC (MYT) Regulations 2014.

The assets transferred to MSPDCL at the time of restructuring of erstwhile EDM are not booked as grants but as capital reserve/ equity. As such, the depreciation should be allowed on the entire assets transferred from the erstwhile EDM into the corporate entity of MSPDCL.

For calculating the GFA, the figures of the last year have been used. On the basis of the projected GFA, the additional depreciation has been calculated. The additional depreciation is on the new assets added to the GFA. The depreciation on the older assets has been calculated as per the accounts.

The depreciation for FY2023-24 is shown as below:

Table 6.10: Depreciation for APR FY 2023-24

S No.	Particulars	Approved in ARR Order 23-24	Revised Projections
1	Opening GFA	0	2171.00
2	Addition during the Year	0	39.00
3	Closing GFA	0	2210

S No.	Particulars	Approved in ARR Order 23-24	Revised Projections
4	Average GFA	0.00	2190.00
5	Average Rate of Depreciation	0.00%	0.87%
6	Depreciation	2.65	18.99

Table 6.11: Depreciation for APR FY 2023-24

SI. No.	Particulars	Approved in ARR Order 23-24	Revised Projections
1	Depreciation	2.65	18.99

Commission Analysis:

As per the content of this filing, it is construed that the funds utilized for such creation are fully spent from grants of government only. Therefore, the additions to GFA by transfer amounting to Rs.39.00Crs as shown for the year is not eligible for depreciation under the regulatory accounting ambit.

The opening GFA shown as on 1.04.2023 is not matching with the audited accounts balance of last year. The depreciation figures now adopted appears quiet arbitrarily done for the sake of ARR filing and not with due diligence. However, the depreciation amount now approved by the Commission for FY 2023-24 APR purpose is same as that already approved for in the Tariff Order at Rs.2.65Crs only and will be reviewed at the time of True-up based on audited figures.

6.9. Interest on Loan

Petitioner's Submission

The major part of capital expenditure undertaken by MSPDCL is funded by the Central / State Government's grants and consumer contribution. However, in addition to these sources of funds, MSPDCL has also taken a significant amount of loan from REC for RAPDRP-B Project and RGGVY project. The repayment of loans during the year has been considered as per actual repayment, and the repayment has been considered proportionately based on the opening loan balance.

Table 6.12: Interest on Loan for APR FY 2023-24

SI.No.	Particulars	Approved in ARR Order 23-24	Six months actuals	Revised Projections
1	Opening Loan			380.08
2	Addition during the year			163.40
3	Repayment during the year			19.98
4	Closing Loan			523.50
5	Average Loan			212.57
6	Rate of Interest			multiple

SI.No.	Particulars	Approved in ARR Order 23-24	Six months actuals	Revised Projections
7	Interest & Finance Charges			
8	Interest on CSD			
	Total Interest	5.22	0.00	52.14

The details of loans with the computation of Interest on loan are shown in the Table below:

Table 6.13: Loan details for APR FY 2023-24

SI. No.	Particulars	RGG VY	SS-II	Loan 3 (REC- RAPDRP - B)	Installation of 130W LED Street Lights & 20m High Mast Lighting	Prepaid Meter Loan Valley (16113)	Prepaid Meter Loan Valley (16114)	SLTTL	LPS
1	Opening Loan	8.40	0.00	20.00	<mark>12.91</mark>	72.36	47.41	111.48	107.52
2	Addition during the Year	0.00	76.05	0.00	<mark>2.74</mark>	10.20	20.60	0	53.81
3	Repayment during the year	2.64		3.98	0.00	0.00		6.64	6.72
4	Closing Loan	5.76	76.05	16.02	<mark>15.65</mark>	82.56	68.01	104.84	154.61
5	Average Loan	7.08	38.03	18.01	<mark>14.28</mark>	77.46	57.71		
6	Rate of Interest	multipl e	11.00%	11.70%	<mark>10.50%</mark>	10.60%	10.60%	9.50%	9.75%
7	Interest & Finance Charges	1.55	4.18275	2.24	<mark>1.50</mark>	8.21	6.12	10.59	17.75

Commission Analysis:

Any loans that pertains to High Mast Lights will not be allowed, as they (Lights & Fitments) pertain to MAHUD department for Street Lights Purpose. But, it is noticed that this loan amount of Rs.12.91Crs is still being continued in MSPDCL, besides fresh loan amount of Rs.2.74Crs is proposed to obtain during the year making the total liability to Rs.15.65Crs. The Commission has already directed the Licensee to transfer the debt repayment obligation it to MAHUD deptt, but no suitable action appears to have taken despite Commission instructions given in this regard.

However, the interest amount now proposed by MSPDCL for Rs.52.41Crs is not approved in APR review for FY 2023-24 as these charges are being capitalised. If allowed it will be double counted and burdening the consumers is unfair. The actuals incurred will be considered at the time of truing-up of the expenditure of FY 2023-24, upon verification of submitted approved audited accounts statement and it will now be considered at Rs.5.22Crs as was already allowed in the Tariff Order.

6.10. Return on Equity

Petitioner's Submission

As per audited accounts, the RoE is computed on paid up capital of Rs. 10.05 Crore at the rate of 15.50% as stated in clause 26.1 of JERC (Multi Year Tariff) regulations 2014

Table 6.14: Return on Equity for APR FY 2023-24

SI. No	Particulars	Approved in ARR order 2022-23	Revised Projections
1	Average Equity	10.05	10.05
2	RoE %	15.50%	15.50%
3	Return on Equity	1.56	1.56
4	MAT Rate applicable	0.00%	0.00%
	Net RoE (Grossed up by MAT rate)	1.56	1.56

MSPDCL requests the Hon'ble Commission to approve the Return on Equity of Rs.1.56 Crore for FY 2023-24.

Commission Analysis:

The Commission provisionally approves the return on equity at Rs.1.56 Crs without considering the Income tax component and the same will be admitted depends upon the incidence of tax on actual basis duly correlating with Audited Annual Accounts.

6.11. Non-Tariff income

Petitioner's Submission

The actual Non-tariff income as compared to the approved figure in ARR of FY 2023-24 is as follows:

Table 6.15: NTI for APR FY 2023-24

S No.	Particulars	Approved in ARR Order 23-24	Six months actuals	Revised Projections (B)
1	Non-tariff Income	7.14	3.60	10.23

MSPDCL requests the Hon'ble Commission to approve the actual Non-Tariff Income of Rs. 10.23 Crore for FY 2023-24.

Commission's analysis

Keeping in view of the huge pending dues still to be recovered, the projected Non-Tariff Income (NTI) towards recovery of revenue dues is insufficient and it shall be at a higher level above Rs.10.23 Crs now projected. The projection of NTI shall be based on the outstanding dues and also the need to enhance/improve the revenue collections close to 100%. However, the Commission too prefers to retain the NTI amount at Rs.10.23 Crs as was already projected by the licensee for this financial year as there is no point in altering it at this fag-end of the financial year. The projection should have been more accurate at the time of initial filing itself.

6.12. Aggregate Revenue Requirement

Petitioner's Submission

Based on the above component-wise expenses, the Aggregate Revenue Requirement computed for FY 2023-24 by MSPDCL against the figures approved by the Commission in the Tariff Order for FY 2023-24, is given in the Table below:

Table 6.16: Aggregate Revenue Requirement for APR of FY2023-24 (Rs. Crore)

SI No.	Particulars	Approved in ARR Order 2023-24	Revised Projections
Α	Cost of power purchase	569.79	587.67
В	Transmission charges	162.68	167.829
С	O&M Expenses	100.62	123.39
1	Employee Expenses	79.22	101.57
2	A&G Expenses	8.95	7.89
3	R&M Expenses	12.45	13.93
D	Depreciation	2.65	18.99
E	Interest on Loan	5.22	52.14
F	Interest on Working Capital	0.00	7.24
G	Bad Debt	0.00	16.38
Н	Total Cost	840.96	973.64
1	Add: RoE	1.56	1.56
J	Add: Income Tax	0.00	0.00
K	Total	842.52	975.20
L	Less: Non Tarif Income	7.14	10.23
М	Less: True up surplus of 7 years	46.50	
N	Aggregate Revenue Requirement (ARR)	788.88	964.97
0	Revenue from sale of surplus power	7.93	38.02
Р	Net ARR	780.95	926.95

Commission Analysis:

The details of the APR based ARR approved by the Commission after thorough scrutiny of all the cost elements for FY 2023-24 is as follows:

Table 6.17: Aggregate Revenue Requirement approved (Rs. Crore)

SI. No	Commission Approved Expenditure (FY2023-24)	Amount Rs. <i>C</i> rs
1	Cost of power purchase	626.59
2	Inter-State Transmission charges	92.38
3	Intra-state Transmission charges	0.00
4	NERLDC Charges	0.71
5	O&M Expenses	123.39
	a) Employee Expenses	101.57
	b) R&M Expense	13.93
	c) A&G Expense	7.89
6	Depreciation	2.65
7	Interest on Loan (excl. High Mast Loan)	5.22
8	Interest on Working Capital	0.00
9	Bad Debt	0.00

SI. No	Commission Approved Expenditure (FY2023-24)	Amount Rs. <i>C</i> rs
10	Return on Equity	1.56
	Gross ARR - approved (A)	852.50
	Deductions/Recoveries	
11	Less: Non-Tariff Income	10.23
12	Less: Efficiency Gains	0.00
13	Less:7yrs True-up (FY15-16 to FY21-22)	46.50
14	Total deductions (B)	56.73
15	Aggregate Revenue Requirement (A-B)	795.77

6.13. Revenue Gap

Petitioner's Submission

The Projected Revenue Gap of MSPDCL for FY 2023-24 is shown in the Table below:

Table 6.18: Estimated Revenue Gap for APR of FY2023-24 (Rs. Crore)

SI No.	Particulars	Revised Projections
1	Net ARR after considering outside sale income	926.95
2	Total Revenue from consumer tariff at existing rates	568.24
3	Revenue Gap before Govt. Subsidy (1-2)	358.70
4	Revised Estimate of State Government Revenue Subsidy required	358.70
5	Revenue Gap / (Surplus) (4-3)	0.00

As can be seen from the above Table, the Revenue Gap in APR of FY 2023-24 will be met by State Government subsidy of Rs 352.11 Crore.

Commission Analysis:

The above revenue gap of <u>Rs.795.77Crs</u> was derived by the Commission without the income from Outside State sales amount of Rs.38.02Crs and the revenue realisable at existing tariffs. The Revenue gap table of MSPDCL should have been as follows for APR purpose:

Table 6.19: Approved Revenue Gap of FY2023-24 for APR (Rs. Crore)

SI. No	Particulars	Approved by Commission
1	Net ARR before considering outside sale income	795.77
2	Total Revenue from consumer tariff at existing rates	568.24
3	Revenue from Outside State Sales	38.02
4	Revenue Gap before Govt. Subsidy (1-2-3)	189.51
4	State Government Revenue Subsidy (tariff order based)	166.87
5	APR based Revenue deficit noted (4-3)	-22.64

Thus, the real revenue & financial surplus or deficit occurring to MSPDCL would be known at a later date which will be dealt with suitably during truing-up finalization based on the expenditure finalized in audited annual accounts statements for FY 2023-24.

7. Analysis of ARR for FY 2024-25 and its approval

7.1. Background

The Hon'ble Commission came up with its Joint Electricity Regulatory Commission for Manipur and Mizoram (Multi Year Tariff) Regulations, 2014 applicable from 1st April 2015.

This section outlines the ARR of FY 24-25 of MSPDCL as per the JERC (Manipur and Mizoram) MYT Regulations, 2014 covering the following projections:

- Sales, No. of Consumers and Connected load
- Energy requirement and Energy balance
- Power purchase cost

MSPDCL is submitting its ARR and Tariff Petition for determination of Tariff and ARR for FY 2024-25 broadly on the basis of the principles outlined in MYT Tariff Regulations notified by JERC. MSPDCL has considered the past trends and taken cognizance of other internal and external developments to estimate the likely performance for FY 2024-25.

The following sections explain in detail the basis and forecasts of the following elements for FY 2024-25:

- 1). Category wise Energy Sales & Revenues at the existing tariff
- 2). T&D Losses and Energy Requirement
- 3). Determination of Aggregate Revenue Requirement by forecasting the following costs, other income & returns:
 - Power Purchase Cost
 - Employee Cost
 - Repairs & Maintenance Cost
 - Admin & General Cost
 - Capital Investment Plan
 - Interest Cost
 - Depreciation
 - Return on Equity
 - Non-Tariff Income

7.2. Energy Sales

As per section 88.1 of MYT regulations 2014; The Distribution Licensee shall submit a forecast of the expected sales of electricity to each tariff category/sub-category and to each tariff slab within such tariff category/sub-category to the Commission for approval along with the Business Plan, as specified in these Regulations.

Also, as per section 88.3 of MYT regulations 2014; The sales forecast shall be consistent with the load forecast prepared as part of the long-term power procurement plan submitted as a part of Business Plan and shall be based on past data and reasonable assumptions regarding the future.

7.2.1. Approach for Sales

It has been observed from past experience that the historical trend method has proved to be a reasonably accurate and well accepted method for estimating the load, number of consumers and energy consumption. In light of the above, MSPDCL has estimated the above for various customer categories primarily based on the CAGR trends during past years. Wherever the trend has seemed unreasonable or unsustainable, the growth factors have been corrected by the company, to arrive at more realistic projections.

7.2.2. Summary for growth and projections

The growth rates observed in the energy sold to each consumer category has been analysed for the purpose of sales projections. The analysis of the growth rate helps us understand the behavior of each category and hence forms the basis of forecasting the sales for each category.

7.2.3. Category-wise energy sold

The Break-up of the sales and the Compounded Annual Growth Rate (CAGR) for different periods (2 year and year on year) thereof are as follows.

2023-24 (6 months SI. **Particulars** 2020-21 2021-22 2022-23 actual and No. 6 months projections) LT Supply Α. Kutir Jyoti 1 4.46 4.36 0 0 2 Domestic 478.93 523.6 519.37 509.88 101.94 Commercial LT 70.26 65.94 101.26 4 **Public Lighting** 4.55 4.12 16.9 3.88

Table 7.1: Actual category-wise Energy Sales (MU)

SI. No.	Particulars	2020-21	2021-22	2022-23	2023-24 (6 months actual and 6 months projections)
5	PWW	1.57	1.37	4.04	10.1
6	Irrigation and Agriculture				
(i)	Agriculture	0.00	0.00	3.56	0.00
(ii)	Irrigation (Others)	1.43	1.23	0	0
7	Cottage and Small Industries	24.68	20.77	25.8	14.6
	Total LT	585.88	621.39	670.93	640.40
В.	HT Supply				
8	Commercial HT	23.58	21.31	32.79	35.92
9	PWW	25.43	25.59	78.45	45.42
10	Irrigation and Agriculture				
(i)	Agriculture	0.00	0.00	2.31	0
(ii)	Irrigation (Others)	0.93	0.79	0.4	0.82
11	Medium Industries	5.00	4.18	6.38	9.14
12	Large Industries	9.32	8.69	12.62	18.76
13	Bulk Supply	98.05	96.25	31.91	104.9
	Total HT	162.31	156.81	164.86	214.96
	Grand Total (LT & HT)	748.19	778.19	835.79	855.36

As can be seen, MSPDCL overall energy sales are significantly dependent on the domestic consumers to the extent of around 60%. MSPDCL is of the view that there are various factors contributing to the growth in the energy sales and beyond the control of the utility including factors such as Rural Electrification, Government Policy, economic climate, weather conditions and force majeure events like natural disasters, etc. It is also submitted that the sales in Domestic category have increased due to launch of Saubhagya Scheme. The growth rates, on CAGR basis, for projection have been calculated as below:

Table 7.2: Category-wise Energy Sales CAGR (%)

SI No.	Particulars	2-year	1-year	Growth Rate Assumed
A.	LT Supply			
1	Kutir Jyoti	-100%	-100%	0%
2	Domestic	4%	-1%	4%
3	Commercial LT	20%	54%	10%
4	Public Lighting	93%	310%	1%
5	PWW	60%	195%	10%
6	Irrigation and Agriculture			
(i)	Agriculture			0%
(ii)	Irrigation (Others)	-100%	-100%	0%

SI No.	Particulars	2-year	1-year	Growth Rate Assumed
7	Cottage and Small Industries	2%	24%	1%
	Total LT	7%	8%	10%
В.	HT Supply			
8	Commercial HT	18%	54%	10%
9	PWW	76%	207%	10%
10	Irrigation and Agriculture			
(i)	Agriculture			0%
(ii)	Irrigation (Others)	-34%	-49%	0%
11	Medium Industries	13%	53%	1%
12	Large Industries	16%	45%	10%
13	Bulk Supply	-43%	-67%	0%
	Total HT	1%	5%	
	Grand Total (LT & HT)	6%	7%	

The category wise CAGR has been derived from the actual sales volume of FY 2022-23.

Table 7.3: Category-wise Projected Energy Sales (MU) for FY 2024-25

SI. No.	Particulars	2024-25
A.	LT Supply	
1	Kutir Jyoti	0.00
2	Domestic	530.97
3	Commercial LT	112.13
4	Public Lighting	3.92
5	PWW	11.11
6	Irrigation and Agriculture	
(i)	Agriculture	0.00
(ii)	Irrigation (Others)	0.00
7	Cottage and Small Industries	14.75
	Total LT	672.88
В.	HT Supply	
8	Commercial HT	39.51
9	PWW	49.96
10	Irrigation and Agriculture	
(i)	Agriculture	0.00
(ii)	Irrigation (Others)	0.82
11	Medium Industries	9.23
12	Large Industries	20.64
13	Bulk Supply	104.90
	Total HT	225.06
	Grand Total (LT & HT)	897.94

7.3. Consumer Profile

Petitioner's Submission

Manipur State Power Distribution Company Limited caters to a diverse consumer mix constituting of domestic, commercial, HT Industry, LT Industry and agriculture consumers. The number of consumers in various categories is summarized in table below:

Table 7.4:Category-wise Projected Number of Consumers

SI. No.	Particulars	Number of consumers FY 2020-21	Number of consumers FY 2021-22	Number of consumers FY 2022-23	Number of consumers FY 2023-24
Α.	LT Supply	Actuals	Actuals	Actuals	Projected
1	Kutir Jyoti	15,907	15,907	0	0
2	Domestic	13,307	13,307		
(i)	First - 100 kWh/Month	410,953	411,237	416,205	418856
(ii)	Next - 100 kWh/Month	35,012	35,434	37,960	38997
(iii)	Above 200 kWh/Month	11,387	12,019	15,270	16835
3	Commercial LT			23,27	2000
(i)	First - 100 kWh/Month	16,534	17,216	17,414	17748
(ii)	Next - 100 kWh/Month	3,801	4,091	5,194	5641
(iii)	Above 200 kWh/Month	3,457	5,486	5,524	6198
4	Public Lighting	471	471	494	505
5	PWW	41	42	42	43
6	Irrigation and Agriculture				
(i)	Agriculture	0	0	0	0
(ii)	Irrigation (Others)	48	48	48	48
7	Cottage and Small Industries	2,384	2,385	2,385	2402
	Total LT	499,995	504,336	514,942	521,216
В.	HT Supply				
8	Commercial HT	993	1,088	1,109	1172
9	PWW	189	202	208	221
10	Irrigation and Agriculture				
(i)	Agriculture	0	0	0	0
(ii)	Irrigation (Others)	26	21	21	21
11	Medium Industries	88	99	112	125
12	Large Industries	39	44	47	50
13	Bulk Supply	412	412	416	426
	Total HT	1,747	1,866	1,913	2,015
	Grand Total (LT & HT)	501,742	506,202	516,855	523,231

The Break-up of the category-wise number of consumers and the CAGR growth rates for different periods (4-year, 3 year, 2 year and year on year) are as follows:

Table 7.5: Category wise Number of consumers CAGR (%)

SI. No	Particulars					Growth Rate
A.	LT Supply					
1	Kutir Jyoti	-2%	-3%	-100%	-100%	-100%
2	Domestic					
(i)	First - 100 kWh/Month	0%	0%	0.6%	1%	1%
(ii)	Next - 100 kWh/Month	3%	3%	4.1%	7%	3%
(iii)	Above 200 kWh/Month	9%	10%	15.8%	27%	10%
3	Commercial LT					
(i)	First - 100 kWh/Month	1%	2%	2.6%	1%	2%
(ii)	Next - 100 kWh/Month	9%	10%	16.9%	27%	9%
(iii)	Above 200 kWh/Month	12%	16%	26.4%	1%	12%
4	Public Lighting	3%	2%	2.4%	5%	2%
5	PWW	13%	6%	1.2%	0%	1.2%
6	Irrigation and Agriculture					
(i)	Agriculture	0%	0%	0.0%	0%	0%
(ii)	Irrigation (Others)	5%	1%	0.0%	0%	1%
7	Cottage and Small Industries	1%	0%	0.0%	0%	1%
	Total LT					
B.	HT Supply					
8	Commercial HT	23%	17%	5.7%	2%	5.7%
9	PWW	4%	6%	4.9%	3%	6%
10	Irrigation and Agriculture					
(i)	Agriculture	0%	0%	0.0%	0%	0%
(ii)	Irrigation (Others)	-6%	-8%	-10.1%	0%	0%
11	Medium Industries	26%	12%	12.8%	13%	12%
12	Large Industries	15%	7%	9.8%	7%	7%
13	Bulk Supply	-1%	2%	0.5%	1%	2%
	Total HT					
	Grand Total (LT & HT)					

Commission's Analysis

The above category wise Consumers numbers projected by the Licensee is approved by the Commission for the MYT period at the same level depicted by MSPDCL.

7.4. Connected Load

Petitioner's Submission

The growth rate for projecting connected load has been assumed to be 40% of the growth rate assumed for projecting the sales. The table below mentions the growth rate assumed for the projection of connected load for FY 2024-25.

Table 7.6: Category wise connected load CAGR (%)

SI.	Particulars	Growth Rate
No.		
A.	LT Supply	
1	Kutir Jyoti	0.0%
2	Domestic	
(i)	First - 100 kWh/Month	4.0%
(ii)	Next - 100 kWh/Month	4.0%
(iii)	Above 200 kWh/Month	4.0%
3	Commercial LT	
(i)	First - 100 kWh/Month	4.0%
(ii)	Next - 100 kWh/Month	4.0%
(iii)	Above 200 kWh/Month	4.0%
4	Public Lighting	0.4%
5	PWW	0.00%
6	Irrigation and Agriculture	
(i)	Agriculture	0.00%
(ii)	Irrigation (Others)	0.00%
7	Cottage and Small Industries	0.40%
	Total LT	
В.	HT Supply	
8	Commercial HT	4.0%
9	PWW	4.00%
10	Irrigation and Agriculture	
(i)	Agriculture	0.00%
(ii)	Irrigation (Others)	0.00%
11	Medium Industries	0.40%
12	Large Industries	4.00%
13	Bulk Supply	0.40%
	Total HT	
	Grand Total (LT & HT)	

The connected load in various categories is summarized in table below:

Table 7.7:Category wise Projected Connected load based on CAGR (MW)

SI	Particulars	Connected	Connected	Connected	Connected	Connected
No.		Load (MW)	Load (MW)	Load(MW)	Load (MW)	load (MW)
		FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
A.	LT Supply					
1	Kutir Jyoti	6.97	7.37	0	0	0
2	Domestic					
(i)	First – 100 kWh/Month	575.38	586.24	587.64	611.14	635.59
(ii)	Next - 100 kWh/Month	83.06	84.36	84.83	88.22	91.75
(iii)	Above 200 kWh/Month	40.59	41.30	41.45	43.11	44.83
3	Commercial LT					
(i)	First - 100 kWh/Month	43.24	43.41	44.79	46.58	48.45
(ii)	Next - 100 kWh/Month	9.30	9.42	9.64	10.02	10.42
(iii)	Above 200 kWh/Month	35.68	36.44	36.96	38.44	39.98
4	Public Lighting	1.21	1.21	1.22	1.23	1.23
5	PWW	0.44	0.48	0.45	0.45	0.45
6	Irrigation and Agriculture					
(i)	Agriculture	0.00	0.00	0.00	0.00	0.00
(ii)	Irrigation (Others)	0.37	0.37	0.37	0.37	0.37

SI No.	Particulars	Connected Load (MW) FY 2020-21	Connected Load (MW) FY 2021-22	Connected Load(MW) FY 2022-23	Connected Load (MW) FY 2023-24	Connected load (MW) FY 2024-25
7	Cottage and Small Industries	19.27	19.27	20.30	20.38	20.46
	Total LT	815.51	829.85	834.61	866.91	893.53
В.	HT Supply					
8	Commercial HT	19.89	21.84	26.20	27.25	28.34
9	PWW	15.50	17.06	17.61	18.31	19.04
10	Irrigation and Agriculture					
(i)	Agriculture	0.00	0.00	0.00	0.00	0.00
(ii)	Irrigation (Others)	1.09	0.74	0.76	0.76	0.76
11	Medium Industries	4.20	4.54	4.61	4.62	4.64
12	Large Industries	12.17	12.07	12.49	12.99	13.51
13	Bulk Supply	50.98	51.53	49.19	49.39	49.58
	Total HT	103.82	107.76	110.86	113.32	115.87
	Grand Total (LT & HT)	919.33	937.61	945.47	980.23	1009.40

Commission Analysis:

The category wise Connected load projection submitted by MSPDCL is observed and Commission approves the figures indicated in the filings for FY 2024-25.

7.5. T&D loss

Petitioner's submission

Being a hilly terrain and characterized by population spread out throughout the State, the system network of the State consists of long length of distribution and LT lines, with aging components which are being upgraded through various schemes. The MSPDCL (erstwhile EDM) has achieved a significant reduction in transmission & distribution losses in the past.

The actual LT distribution losses in Manipur is higher than the distribution losses approved by the Commission. Continuous efforts made towards implementation of prepaid metering, system strengthening and other infrastructure improvement projects has started to show its effect in the form of higher revenue collection and decline in losses.

Table 7.8: T&D loss trajectory (%)

Particulars	2021-22	2022-23	2023-24	2024-25
T&D Loss	24.58%	18.9%	20%	18%

The MSPDCL submits to the Commission to approve the distribution losses submitted herein.

Commission's Analysis

Being a distribution licensee, the MSPDCL has no purview to comment about the transmission losses which is the exclusive prorogation of MSPCL and it amounts to

encroaching their limits by MSPDCL. Therefore, MSPDCL shall limit themselves to Distribution Losses only in their petition and shall know their set limitation.

The following Distribution Loss is approved by the Commission for FY 2024-25

Table 7.9: Distribution loss (%) approved by Commission for 2024-25

Particulars	As per MSPDCL	Commission approved
Distribution Loss	8.66%	8.50%

However, the transmission Losses are not relevant to be referred to by the Licensee in its ARR filing petition as the subject purely pertains to MSPCL and not MSPDCL. However, the same is stated here for MSPDCL clarity.

7.6. Energy Balance

Petitioners Submission

Based on the projected sales and the T&D loss trajectory as shown above in Table 47, the projections for energy requirement at the State Periphery for FY 2024-25 is shown in the table below:

Table 7.10: Projected Energy Balance for 2024-25

SI No	Particulars	Unit	Details
1	Own Generation	MU	0.00
2	Power purchase from CGS	MU	1098.58
3	Add: UI Over drawl	MU	13.52
4	Add: IEX purchases	MU	65.00
5	Add: Returned Banking Energy	MU	77.00
6	Less: IEX sales	MU	-85.00
7	Less: Banking mode sales	MU	-67.00
8	Gross Energy handled at NER	MU	1136.09
9	Pool Losses	%	2.36%
10	Energy Losses at NER	MU	26.81
11	Net Energy available at NER after losses	MU	1109.27
12	Less: UI Under drawl	MU	-14.23
13	Gross Energy handled at State Periphery	MU	1095.05
14	Total Sales (LT+HT)	MU	897.94
15	Distribution loss	MU	197.11
16	Transmission and Distribution loss	%	18.0%

Commission analysis:

The above table is full of arithmetical inaccuracies and accordingly the T&D loss figure arrived at as 18% is also erroneous. Despite, advising to revise and resubmit through Additional information query, the MSPDCL did not even recognised its glaring error in the normal arithmetical totaling. In reality the

T&D Loss as per the above figure would work out to 15.44% only. The color patched cells are wrongly derived. The detailed and corrected table is laced below.

The Energy balance for FY 2024-25 is tabulated below showing the comparison between MSPDCL & Commission deduced energy balance which will clearly indicate the minute details of energy for comprehension of the projections made by the licensee.

Table 7.11: Commission adopted Energy balance for quantum of purchase in 2024-25

SI No	Particulars (FY 2024-25)	Unit	ARR (MSPDCL)		(Now Apprvd)	
Α	Distribution Energy Requirement					
1	Energy for Retail Sales	MU	89	97.94		897.94
2	Distribution loss	%	8	.66%		8.50%
3	Distribution loss	MU	8	35.13		83.43
4	Energy need at Distribution Input	MU	98	33.07		981.37
В	Energy Availability (2024-25)		Unit	AF (MSP		(Now Apprvd)
5	Power Purchase from CGS & Others		MU	109	98.58	1098.58
6	Add: IEX Purchases		MU	6	55.00	65.00
7	Add: UI Over drawl		MU	1	13.52	13.52
8	Add: Banking units Returns		MU	7	77.00	77.00
9	Less: IEX Sales (Gross)		MU	-8	35.00	
10	Less: Banking Mode sales (Gross)		MU	-6	57.00	
11	Gross Energy handled at NER Level		MU	110	02.10	1254.10
12	Less: External (pooled) Losses		%	2	.36%	2.33%
13	Less: External Energy pooled Losses		MU	2	26.01	29.22
14	Energy after External Losses (11-13)		MU	107	76.09	1224.88
15	Less: IEX Sales (Net)		MU			-85.00
16	Less: Banking Mode sales (Net)		MU			-67.00
17	Less: UI Under drawl		MU	-1	L4.23	-14.23
18	Add: Own Generation (Net)		MU		-	-
19	Available Energy at State periphery		MU	106	51.86	1058.65
20	Intra-State Transmission Loss		%	7	.42%	7.30%
21	Intra-State Transmission Loss		MU	78	3.79	77.28
22	Energy Available at Distribution input		MU	98	33.07	981.37
23	Distbn Losses - MU		MU	8	35.13	83.43
24	Distbn Losses - (%)		%	8	.66%	8.50%
25	Net Energy available for Retail Sale		MU	89	97.94	897.94
26	T&D Losses (%)		%	15	.44%	15.18%
27	T&D Losses (MU) - (21+23)		MU	16	3.92	160.71

The above losses shall be the celling limits and actuals shall be endeavored to be kept lower in reality by MSPDCL. The Inter State Losses so adopted are considered from the NER latest compendium annual transmission loses of FY2022-23. Any higher losses above 8.50% would be dealt with penalty at the time of True-up.

7.7. Power Purchase Quantum and Cost

The energy requirement for the MSPDCL is met by supply of power from Central Generating Stations and a small quantum is purchased through short term market. MSPDCL mainly relies on the allocations of power from Central Generating Stations like NHPC, NEEPCO, OTPC Pallatana Unit I and Unit II.

MSPDCL for the purpose of estimation of the power availability during FY 2024-25 has considered the following sources of power:

- NHPC (Loktak HEP) Central Public Sector Generating Stations, (NE Region);
- NTPC Bongaigaon Unit I-III
- NEEPCO (Hydro) Central Public Sector Eastern Region Generating Stations, (NE Region);
- NEEPCO (Gas) Central Public Sector Eastern Region Generating Stations, (NE Region);
- OTPC, Pallatana-Unit I and Unit II
- Power purchase from short-term sources (IEX).
- Over-drawl under unscheduled interchange during peak hours at lean period.

The power purchase cost has been calculated by multiplying the average power purchase rate and the projected energy to be procured from the generating stations. Tariff rate has been derived for each of the stations based the allocations and the average cost (Rs/kwh) for FY 2020-21, FY 2021-22 and FY 2022-23.

The allocation of tied up CGS for FY 2024-25 is shown in the table below:

Table 7.12: Projected MSPDCL Allocation from CGS for FY 2024-25

SI. No.	Power Purchase Plant	Installed Capacity (MW)	Units (MU)	Cost (Rs Cr)
Α	CGS – NEEPCO			
1	Kopili -I HEP	200.00	7.23	1.75
2	Kopili-II HEP	25.00	6.63	1.69
3	Khandong HEP	50.00	5.44	0.82
4	Ranganadi HEP	405.00	91.43	24.66
5	Doyang HEP	75.00	12.55	8.77
6	Assam GBPP	291.00	146.24	98.72

SI.	Power Purchase Plant	Installed	Units	Cost
No.		Capacity (MW)	(MU)	(Rs Cr)
7	AGTPP	130.00	66.80	41.92
	Sub-Total		336.31	179.63
В	CGS – NHPC			
1	Loktak HEP Purchased Power	105.00	30.52	14.41
2	Loktak HEP- Free Power		20.22	
	Sub-Total		50.74	14.41
С	Others			
1	Baramura GBPP Unit IV and V	42.00	0.00	0.00
2	OTPC Palatana	726.00	328.04	112.99
	Sub-Total		328.04	112.99
D	New Plants			
1	NTPC Bongaigaon Unit I - III	750	349.60	214.05
2	Monarchak Gas Based PP (NEEPCO)			
3	Kameng HEP Stage I			
4	Kameng HEP Stage II			
5	Pare HEP	110	33.89	18.65
6	Tuirial HEP		0.00	0.00
7	Lower Subansiri Stage I	500	0.00	0.00
8	Lower Subansiri Stage II		0.00	0.00
9	Renewable – Solar		0.00	0.00
10	Renewable – Non-Solar		0.00	0.00
	Sub -Total		383.49	232.71
E	Short-Term Power Purchase			
	IEX Purchase		65.00	30.13
	Sub -Total		65.00	30.13
F	UI			
	UI Over drawal		13.52	5.38
	Supplementary bills			22.00
	Sub -Total			
G	REC			
	Solar			
	Non-Solar			
	Grand Total		1177.09	597.24

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7.7.1. Power Purchase Quantum & Cost approved

Commission analysis:

The power purchase quantum approved for FY 2024-25 is given in the table below:

Table 7.13: Power Purchase quantum & cost approved by Commission

SI.		ARR (Filed) 202	4-25	Commis	ssion App	roved
No.	Power Station Sources	(MU)	Rs.Crs	CPU	(MU)	Rs.Crs	CPU
Α	CGS - NEEPCO	336.32	178.33	5.30	336.32	178.33	5.30
1	Kopili - 1 HEP	7.23	1.75	2.42	7.23	1.75	2.42
2	Kopili - 2 HEP	6.63	1.69	2.55	6.63	1.69	2.55
3	Khandong HEP	5.44	0.82	1.51	5.44	0.82	1.51
4	Ranganandi HEP	91.43	24.66	2.70	91.43	24.66	2.70
5	Doyang HEP	12.55	8.77	6.99	12.55	8.77	6.99
6	Assam GBPP	146.24	98.72	6.75	146.24	98.72	6.75
7	Agartala GTPP 1&2	66.80	41.92	6.28	66.80	41.92	6.28
В	CGS - NHPC	50.74	14.41	2.84	50.74	14.41	2.84
1	Loktak HEP	30.52	14.41	2.84	30.52	14.41	2.84
2	Loktak Free Power	20.22			20.22		
С	Other	328.04	112.99	3.44	328.04	112.99	3.44
1	Baramura GBPP 4 & 5	0.00	0.00		0.00	0.00	
2	OTPC Pallatana 1 & 2	328.04	112.99	3.44	328.04	112.99	3.44
D	New Plants	383.49	232.71	6.07	383.49	232.71	6.07
1	NTPC Bongaigaon Units	349.60	214.05	6.12	349.60	214.05	6.12
2	Para HEP	33.89	18.65	5.50	33.89	18.65	5.50
4	Renewable - Solar						
5	Renewable – Non-Solar						
	Total CGS Energy (A- D)	1098.59	538.44	4.90	1098.59	538.44	4.90
Е	Short-Term Sources	155.52	35.51	2.28	155.52	35.51	2.28
1	IEX Purchases	65.00	30.13	4.635	65.00	30.13	4.635
2	Banking Energy Received	77.00	-	0.000	77.00	0.00	0.000
3	Ui Over Drawls	13.52	5.38	3.979	13.52	5.38	3.979
4	IEX Sales (NET)	-85.00					
5	Banking Energy Sales (NET)	-67.00					
	Total Short & CGS Energy	1102.11	573.95	5.208	1254.11	573.95	4.577
	NERLDC pooled Loss (%)	2.36%	\bigvee	\bigvee	2.33%	$\geq \leq$	\searrow
_	NERLDC pooled Loss (MU)	26.01	570.05	5.334	29.22	570.05	1.505
F	Energy at State Periphery	1076.10	573.95	5.334	1224.89	573.95	4.686
1	IEX Sales (NET)				-85.00		
2	Banking Energy Sales(NET)	44.00			-67.00		
3	UI Under Drawls	-14.23	0.00		-14.23	45.40	
4	REC Certificates to buy		0.00			45.12	
5	Supplementary Bills		22.00			22.00	
6	Late Payment Surcharges						
<u> </u>	Grand Total	1061.87	595.95	5.61	1058.66	641.07	6.06

The power purchase quantum and cost projected for FY 2024-25 by MSPDL is shown as Rs.597.24Crs but after recasting the values given in Table-49 it is noticed as Rs.595.95Crs only. It can also be seen that no provision is made for RPO obligation in their power

purchase cost projected for FY 2024-25 by stating that their Hydro procurement from Old CGS station are to be adjusted for the RPO obligation. But this argument is not right because for hydro power to be procured from a station commissioned after 8th March 2019 for such adjustment. In this case all the hydro energy is being procured from stationed but before March 2019. Thus, the Commission had arrived at the required RPO obligation cost and included in the power purchase cost and the detailed calculation is placed under the RPO Obligation item below.

The power purchase cost now approved by the Commission for FY 2024-25 is to the tune of Rs.641.07Crs to meet the required sales quantum of 897.94MU so projected by the Licensee for this year.

7.7.2. Renewable Purchase Obligations (RPO)

JERC has issued RPO targets vide its regulation Joint Electricity Regulatory Commission for Manipur & Mizoram (Renewable Purchase Obligation and its Compliance) (First Amendment) Regulations, 2022. The RPO targets for Third MYT Control Period FY 2023-24 to FY 2027-28 are shown in the table below:

MSPDCL plans to meet the RPO targets through:

Renewable Energy Certificates from IEX at prevailing rates

The table below shows the RPO to be met by MSPDCL through purchase of REC from IEX.

SI. No **Particulars Formula** Unit 2023-24 2024-25 Value Value 1 Energy Sale excl. Inter-State Sale MU 855.36 897.94 **Total RPO Target** 27% 30% 2 % 3 Total RE purchase requirement 1*2 MU 231.63 268.57 4 **HPO Target** % 1% 1% Hydro power purchase requirement 1*4 9.70 5 MU 5.65 6 **WPO Target** % 2% 2% 7 Wind power purchase requirement 1*6 MU 13.69 22.09 Other RPO Target 25% 26% 9 Other RE Purchase Requirement 1*8 MU 212.21 236.79 Energy Storage purchase obligation 10 target % 1% 2% 11 Energy Storage purchase requirement 1*10 MU 8.55 13.47 207.90 12 Actual hydro power purchase MU 202.46 13 Surplus / Deficit in Hydro power purchase 12-5 MU 196.82 198.20

12/1

15-7

15/1

%

MU

MU

%

Table 7.14: RPO Compliance

HPO achievement

WPO achievement

Wind power purchase

Surplus / Deficit in wind power purchase

14

15

16

17

24%

0.00

0%

-13.69

23%

0.00

0%

-22.09

SI. No	Particulars	Formula	Unit	2023-24	2024-25
				Value	Value
18	Other RE purchase	a+b+c+d+e	MU	0.00	0.00
а	Co-generation		MU	0.00	0.00
b	Small Hydro		MU	0.00	0.00
С	Biomass		MU	0.00	0.00
d	Solar		MU	0.00	0.00
е	Others		MU	0.00	0.00
19	Surplus / Deficit in other RE purchase	18-9	MU	-212.21	-236.79
20	Other RPO achievement	18/1	%	0%	0%
21	Energy Storage Purchase		MU	0.00	0.00
22	Surplus / Deficit in other RE purchase	21-11	MU	-8.55	-13.47
23	Energy Storage Purchase achievement	21/1	%	0%	0%
24	Total RE purchase achievement	12+15+18+21	MU	202.46	207.90
25	Total RPO achievement	24/1	%	24%	23%

Commission Analysis on Power quantum, cost and RPO Obligation:

The Commission feels that the power procurement from costly stations are to be reduced to the bare minimum of contracted procurement obligated quantities only and to buy more energy from power stations whose variable cost is cheaper for minimising this major expenditure component of ARR (i.e., Power purchase cost). Besides, the Commission further directs to limit the energy requirement to are needs and avoid sale of huge Outside State quantum which is always not profitable while disposing the surplus power. That means avoiding transaction involves loss component for each unit sold in IEX.

The Commission approved RPO Obligation compliance commitment for FY24-25 is tabled below:

SI. No.	Particulars (RPO approved by Commission)	Formula	Unit	2024-25
1	Energy Sale excl. Inter- State Sale		MU	897.94
2	Total RPO Target		%	29.91%
3	Total RE purchase requirement	1*2	MU	268.57
4	HPO Target		%	1.08%
5	Hydro power purchase requirement	1*4	MU	9.70
6	WPO Target		%	2.46%
7	Wind power purchase requirement	1*6	MU	22.09
8	Other RPO Target		%	26.37%
9	Other RE Purchase Requirement	1*8	MU	236.79
10	Energy Storage purchase obligation target		%	1.50%
11	Energy Storage purchase requirement	1*10	MU	13.47
12	Actual Hydro power purchase	Input value	MU	0.00
13	Surplus / Deficit in Hydro power purchase	12-5	MU	-9.70
14	HPO achievement	12/1	%	0.00%
15	Wind power purchase	Input value	MU	0
16	Surplus /Deficit in wind power purchase	15/7	MU	-22.09
17	WPO achievement	15/1	%	0.00%
18	Other RE purchase	a+b+c+d+e	MU	0
	a. Co-generation	Input value	MU	0
	b. Small Hydro	Input value	MU	0

SI. No.	Particulars (RPO approved by Commission)	Formula	Unit	2024-25
	c. Biomass	Input value	MU	0
	d. Solar	Input value	MU	0
	e. Others	Input value	MU	0
19	Surplus / Deficit in other RE purchase	18-9	MU	-236.79
20	Other RPO achievement	18/1	%	0.00%
21	Energy Storage Purchase	Input value	MU	0
22	Surplus / Deficit in other RE purchase	21/11	MU	-13.47
23	Energy Storage Purchase achievement	21/1	%	0%
24	Total RE purchase achievement	12+15+18+21	MU	0
25	Total RPO achievement	24/1	%	0.00%
26	RPO to be fulfilled	3-24	MU	268.57
27	RE Certificate cost to procure			45.12

During this year 2024-25, the MSPDCL shall endeavour to fully utilise the banked energy stock accumulated upto the end of FY2023-24 in order to minimise the purchase quantity from outside sources and thereby reduce the cost of power to a level lower than the total cost now approved by the Commission as it wants to give freehand to MSPDCL in its procurement process but judiciously. Incidentally, upon choosing the banked energy, the overall losses & power costs will also tend to fall.

7.8. Transmission Charges

Petitioner's Submission

Transmission charges payable to PGCIL are based on the point of connection charges per MW per month as notified by CERC and the scheduled generation and drawl by the applicable entity. MSPDCL has allocations from various Central Generating Stations and other generating stations located outside state which determines the transmission charges payable by MSPDCL.

PGCIL and SLDC for FY 2024-25 have been projected by escalating the existing charges by 5%. The Intra-State transmission charges for MSPCL has been adopted from the MYT order passed by JERC. NERLDC charges have been projected same as that of ARR of FY 2023-2024.

Table 7.15:Transmission Charges for FY 2024-25 (Rs. Crore)

SI. No.	Particulars	2022-23	2023-24	2024-25
1.	PGCIL Charges	87.98	92.38	97.00
2.	MSPCL Charges	64.20	73.50	112.06
3.	SLDC charges	0.70	0.74	0.78
4.	NERLDC Charges	1.00	0.71	0.71
5.	Total	153.9	167.3	210.53

Commission Analysis:

Since the variation proposed is not much year on yearly figures, the Commission

approves all the costs proposed which includes the MSPCL transmission charges at Rs.90.22Crs with the hope that billing mechanism will be established between two entities during all twelve (12) months period in FY2024-25 without fail. The MSPCL charges are not being paid by MSPDCL for the fundamental reason of non-existence of billing mechanism between both the entities since their formation as Corporate entities and same reason was also mentioned in the earlier years True-Up Orders when issued recently. Though this expenditure of MSPCL transmission charges are now allowed in the ARR of FY2024-25, it will only be considered in respective true-up if they are actually paid to MSPCL, with verifiable documentary proof submitted along. The same will also be cross checked with MSPCL audited financial accounts for its admission in FY2024-25 True-up claim in due course.

The <u>SLDC</u> charges payable to <u>MSPCL</u> amounting to Rs.0.78Crs is now disallowed as it is not having the any specific approval of the Commission to levy SLDC charges, hence MSPCL too can't levy them legitimately on anybody and thus disapproved now in ARR finalisation. No separate SLDC charges can be levied by MSPCL as all its allowable charges to be incurred were already covered in MSPCL ARR itself. If at all it is to be levied, it shall be basing on SLDC Tariff Order needing the approval of Commission and not otherwise. The MSPCL can't levy any extra charges on its own accord without the Commission's prior approval. Therefore, any such charges need not be paid to MSPCL and matter may be brought to the notice of Commission immediately if such need arises.

Accordingly, the revised & approved transmission charges by the Commission is amounting to Rs.187.93Crs as approved against all inter and intra Transmission charges and NRLDC Charges only.

7.9. Operation and Maintenance Expenses

Petitioner's submission

The Operation and Maintenance (O&M) expenses comprises of Employee Expenses, Repair and Maintenance (R&M) Expenses and Administrative and General (A&G) Expenses.

7.9.1. Employee Expenses

The Projection for Tariff filing is done by taking 5.72% year on year growth on employee expenses of the actual cost of FY 2022-23 figure.

The reason for increase in employee expenses in FY 2023 is

- i). 7th Pay arrears which has been accumulated for the last 2-3 years and paid in FY 23.
- ii). Creation of provision for gratuity, leave encashment and commutation of regular employees.

Table 7.16: Employee expenses for FY 2024-25 (Rs. Crore)

Particulars	2020-21	2021-22	2022-23	2023-24 (Estimated)	Escalation Factor	2024-25
Employee Expenses	63.15	59.36	96.07	101.57	5.72%	107.37

Commission Analysis:

The employee cost incurred in FY 2022-23 was amounting to Rs.96.07CRs as per the audited annual account of MSPDCL. But this amount includes a mere provision of Leave salary encashment & Gratuity for regular employees for Rs.7.2933Crs (as intimated by LIC of India as actuarial Valuator), which otherwise the normal amount is only Rs.88.7833Crs actually spent amount towards employee related expenses. The above provision was also seen reflected in the Current Liabilities of the Balance sheet of FY2022-23. The Regular Employees strength is comparatively less as most of the employees are working on deputation basis from the Government in the case of MSPDCL.

However, the employee expenses now approved by the Commission for FY 2024-25 is as follows:

Table 7.17: Employee expenses for FY2024-25 (Rs. Crore)

Particulars	Filed	Approved
Employee cost	107.37	107.37

7.9.2. R&M Expenses

Repair and Maintenance (R&M) Expenses includes all expenditure incurred on the maintenance and upkeep of distribution assets. It includes the expenses on repairs and maintenance of Plant and Machinery, Transformers, Lines, cable network, Vehicles, Office equipment, etc. As per regulations the R&M are projected by taking an escalation of 5.72% over the estimated figure of FY 2023-24. MSPDCL submits to the Commission that it is important for MSPDCL to incur the R&M expenses as mentioned above in order to maintain and strengthen the system and quality of supply.

Table 7.18: R&M expenses for FY 2024-25 (Rs. Crore)

Particulars	2020-21	2021-22	2022-23	2023-24 (Estimated)	Escalation Factor	2024-25
R&M Expenses	16.4	25.4	13.18	13.93	5.72%	14.73

MSPDCL requests the Commission to approve the R&M expense without any disallowances as the same is necessary for proper maintenance and strengthening of the system and quality of supply in the region in order to ensure consumer satisfaction.

Commission Analysis:

The R&M expenses now approved by the Commission for the MYT period at the same level as projected is as follows:

Particulars for FY2024-25	Filed	Approved
R&M Expenses	14.73	14.73

7.9.3. A&G Expenses

Administrative and General (A&G) Expenses includes all expenditure incurred in operating a business such as:

- Travel and conveyance expenses
- Consultancy and regulatory fees
- IT services and outsourcing cost
- Office Expenses
- Publication Expenses
- Other administration Expenses
- Telephone
- Hiring of vehicle etc.

As per regulations the R&M are projected by taking an escalation of 5.72% over the estimated figure of FY 2023-24.

Table 7.19:A&G expenses for FY 2024-25 (Rs. Crore)

	2020-21	2021-22	2022-23	2023-24	Escalation	
Particulars				(Estimated)	Factor	2024-25
A&G Expenses	6.28	4.52	7.46	7.89	5.72%	8.34

The total O&M expenses are shown in the Table below:

Table 7.20: O&M expenses for FY 2024-25 (Rs. Crore)

Particulars	2020-21	2021-22	2022-23	2023-24 (Estimated)	2024-25
O&M Expenses	85.83	89.28	116.71	123.39	130.4

Commission Analysis:

The A&G expenses now approved by the Commission for FY 2024-25 is as follows:

Particulars	Approved
A&G Expenses	Rs.8.34Crs

The total O&M expenses projected for Third Control Period are shown in the Table below:

Table 7.21: Approved O&M expenses for FY2024-25 (Rs. Crore)

Particulars	Filed in ARR	Approved now
Employee cost	107.37	107.37
Repair & Maintenance Expenses	14.73	14.73
Administration & general expense	8.34	8.34
Total O&M Expenses	130.44	130.44

7.10. Capitalisation Capital Expenditure Plan

Considering the increase in demand from HT & LT consumers, MSPDCL would be required to undertake significant capital expenditure for system augmentation and strengthening. System augmentation would not only help MSPDCL in handling increased load but would also ensure better quality of supply and network reliability to the consumers. Since, the **current T&D loss levels are high**, the capital expenditure would help in reduction in the T&D loss level.

Table 7.22: Capital Expenditure (Rs. Crore)

SI. No	Сарех	2024-25
1	SS-II	26.07

Commission Analysis:

As per the content of present filing, the licensee had proposed Rs.26.07Crs of investments in FY 2024-25by stating that this amount is needed for curbing high T&D Losses, whereas the filed T&D Losses are only to 15.44% and the distribution Losses are at 8.66% as per the filing figures. Then where is the need to curb high losses is not acceptable. Besides, no loans or funding arrangement were proposed in the filing to meet this expenditure. Hence, it is construed that no fresh capital expenditure is

required now and it is presumed that anything is needed would be spent from those grants acquired from grant source/Govtt of Manipur Capital subsidy by MSPDCL.

Consequently, the capitalization of assets worth Rs.26.07 Crs out of the fresh works undertaken will not be allowed for charging depreciation element under regulatory accounting as they were treated as created from grants/govt funds by MSPDCL. If this above amount relates to High Mast Lights cost, then the same may be ignored fully to the extent added.

Besides, the amount collected from consumer contributions if any possessed by MSPDCL from the inception of its Corporation status from 2014 then it may provide the details to the Commission each year-wise covering up to FY2022-23. However, this kind of direction was also given in FY2021-22 seems not complied with.

7.11. Gross Fixed Assets & Depreciation

Petitioner's Submission

The depreciation on the GFA is calculated as per the JERC (MYT) Regulations 2014.

The assets transferred to MSPDCL at the time of restructuring of erstwhile EDM are not booked as grants but as capital reserve/ equity. As such, the depreciation should be allowed on the entire assets transferred from the erstwhile EDM into the corporate entity of MSPDCL.

For calculating the GFA, the figures of the last year have been used. On the basis of the projected GFA, the additional depreciation has been calculated. The additional depreciation is on the new assets added to the GFA. The depreciation on the older assets has been calculated as per the accounts.

Table 7.23: GFA for FY 2024-25 (Rs. Crore)

Asset Categories	Opening balance as on 1.04.2024	Additions made	Closing balance as on 31.03.2025	Additional Depreciation for FY 2024-25	Depreciation for FY 25	Actual Depreciation Rate
Plant & Machinery	2,129.93	149.78	2,279.71	0.79	16.70	0.73%
Building	75.00	5.27	80.27	0.02	2.68	0.74%
Furniture & fittings	0.42	0.03	0.45	0.00	0.03	28.31%
Computer	2.97	0.21	3.18	0.00	0.48	25.47%
Heavy Equipments	0.05	0.00	0.05	0.00	0.00	0.00%
Heavy Vehicle	0.49	0.03	0.52	0.00	0.05	9.64%
Office Equipments	0.09	0.01	0.10	0.00	0.01	45.44%

Asset Categories	Opening balance as on 1.04.2024	Additions made	Closing balance as on 31.03.2025	Additional Depreciation for FY 2024-25	Depreciation for FY 25	Actual Depreciation Rate
Vehicle	1.33	0.09	1.42	0.00	0.14	0.00%
Land	0.35	0.02	0.37	ı	-	0.00%
Software	0.31	0.02	0.33	0.00	0.02	0.00%
TOTAL	2210.94	155.48	2,366.42	0.81	20.10	

Commission Analysis:

The currently Commission too approves the depreciation at **Rs.20.92Crs** for FY 2024-25 as per the proposals of MSPDCL and the same will be reviewed with actual figures to be reflected in their annual accounts for 2024-25 to be submitted in due course. The allowable depreciation will be decided in true-up for proper assessment and finalisation.

7.12. Interest and Finance charges

Petitioners Submission

The major part of capital expenditure undertaken by MSPDCL is funded by the Central / State Government's grants and consumer contribution. However, in addition to these sources of funds, MSPDCL has also taken a significant amount of loan from REC for RAPDRP-B Project and RGGVY project. The repayment of loans during the year has been considered as per actual repayment, and the repayment has been considered proportionately based on the opening loan balance. The details of loans with the computation of Interest on loan are shown in the Table below:

Table 7.24: Loan Details for FY 2024-25 (Rs. Crore)

S I. No.	Particulars	RAPDRP -B (REC)	RGGVY	SS-II	Installation of 130W LED Street Lights & 20m High Mast Lighting	Prepaid Meter Loan Valley (16113)	Prepaid Meter Loan Hill (16114)	SLTTL	LPS
1	Opening Loan	15.95	5.80	76.06	<mark>15.67</mark>	82.60	68.14	104.84	154.61
2	Addition during the year	0.00	0.00	30.02	0.00	0.00	18.86		
3	Repayment during the year	3.99	2.64	0.00	<mark>0.78</mark>	3.44	2.27	6.64	6.72
4	Closing Loan	11.96	3.15	106.08	<mark>14.88</mark>	79.16	84.73	98.2	147.89
5	Average Loan	13.96	4.48	91.07	<mark>15.27</mark>	80.88	76.43	101.52	151.25
6	Rate of Interest	0.12	MULTIPLE	0.11	<mark>0.11</mark>	0.11	0.11	9.50%	9.75%
7	Interest & Finance Charges	2.12	1.24	10.02	<mark>1.60</mark>	8.57	8.10	9.95	15.07

Commission Analysis:

There is no specific conclusive interest amount indicated by the Licensee except the steam of values displayed in the Table above. The **total of all interests together is Rs.56.67Crs**, while MSPDCL claims for Rs.56.70Crs without any justification for the excess claimed.

In fact, the interest calculated and claimed has no relevance to the audited accounts figure approved by the auditor is the glaring observation being made by Commission in the past five (5) years. There are some amounts being reflected as debts but no interest charge is paid for them and again some loans borrowed by the entity but it has no relevance to the distribution entity such as High Mast and LED street light amount of Rs.1.60Crs.

Of the Debts borrowed, the loan pertaining to High Mast Light will not be allowed in the electricity sector as it pertains to MAHUD department to maintain street lights. The responsibility of MSPDCL shall be only to execute the work due to their technical know-how. MSPDCL was already advised to make local arrangement of meeting such loan & interest obligation by MAHUD only. The relevant provision was categorically mentioned specifically in the Electricity Supply Code issued by this Commission was also appended at the end of FY2022-23 Tariff order for their reference. Hence, this is taken as a serious lapse from MSPDCL and follow-up action will be seen sooner.

As seen from the Audited accounts of FY 2022-23, various loans are being availed from different sources, but P&L account had only claimed finance cost for Atma-Nirbhar Bharat Loan etc only and no other interest were seen claimed so far and all others loans are being fully ignored in financial accounts prepared by statutory auditor.

After careful consideration, keeping in view of the balance True-up surplus adjustment of Rs.46.50Crs to be made in this financial year, the Commission considers the Interest on Loan amount at Rs.55.07Crs after disallowing the High Mast Lights interest component of s.1.60Crs (i.e., 56.67Crs - 1.60Crs) as a special case in this financial year to avoid any probable financial strait for MSPDCL.

7.13. Interest on Working Capital

Petitioner's Submission

As per Regulation 29.4 of JERC Terms and Conditions of Tariff Regulations 2014, Distribution Licensee shall be allowed interest on the estimated level of working capital for the financial year, computed as follows:

- a). Operation and maintenance expenses for one month; plus
- b). Maintenance spares at one (1) per cent of the historical cost escalated at 6% from the date of commercial operation; plus
- c). Receivables equivalent to one (1) month of the expected revenue from sale of electricity at the prevailing tariffs; minus
- d). 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 shall be allowed 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 computation of normative Interest on Working Capital (IoWC) as per Regulation 29.4 of JERC Terms and Conditions of Tariff Regulations 2014 for MSPDCL for FY 2024-25, is shown in the Table below:

SI. FY 2022-23 FY 2023-24 FY 2024-25 **Particulars** Unit No O&M Expenses for 1 month 9.73 10.28 10.87 1 Rs. Cr. Maintenance spares at 1% of GFA Rs. Cr. 26.23 23.44 25.08 escalated by 6% Receivables equivalent to 1 month of Rs. Cr. 38.72 47.35 49.77 sale of electricity at the prevailing tariffs less: Consumer Security Deposit 27.23 27.23 27.23 **Net Working Capital** Rs. Cr. 47.45 53.84 58.49 **SBAR Interest Rate** 12.90% 13.45% 13.45% % 7.24 Interest on Working capital 6.12 7.87 Rs. Cr.

Table 7.25: IoWC for FY 2024-25 (Rs. Crore)

Commission's Analysis

Therefore, allowing interest on working capital on a notional basis though not actually incurred would only burden the consumers and its withdrawal now has no actual financial impact on MSPDCL. As a matter of principle, it shall not be allowed for having not availing any short-term loans in the financial year. But, due to the fervid request of the Licensee, keeping in view of the huge remaining True-up recovery to adopted in this financial year the Commission considers to allows interest on working capital amount so claimed by MSPDCL.

7.14. Return on Equity

Petitioner's Submission

As per audited accounts, the RoE is computed on paid up capital of Rs. 10.05 Crore at the rate of 15.50% as stated in clause 26.1 of JERC (Multi Year Tariff) regulations 2014

Table 7.26: Return on Equity

SI. No	Particulars	Unit	FY 2022-23	FY 2023-24	FY 2024-25
1	Average Equity	Rs Cr.	10.05	10.05	10.05
2	RoE %	%	15.50%	15.50%	15.50%
3	Return on Equity	Rs Cr.	1.56	1.56	1.56
4	MAT Rate applicable	%	0%	0%	0%
5	Net RoE (Grossed up by MAT rate)	Rs Cr.	1.56	1.56	1.56

Commission Analysis:

The Commission now approves the return on equity at Rs.1.56 Crs for FY2024-25 without considering the Income tax component and the same will be admitted depends upon the incidence of tax on actual basis. In fact, the licensee too had claimed ROE without tax element.

7.15. Non-Tariff Income & Bad debts

Petitioners Submission

MSPDCL submits here that the details of Non-tariff income for FY 2022-23 based on the audited statement. The Non-tariff income for FY 2023-24 and FY 2024-25 is projected using escalation factor of 6% on the FY 2022-23 figure and so on.

Table 7.27: Non-tariff income (Rs Crore)

Particulars	2020-21	2021-22	2022-23	2023-24 (Estimated)	Escalation Factor	2024-25
Non-tariff Income	11.42	5.74	9.65	10.23	6.00%	10.84

Commission's Analysis

Keeping in view of the huge pending dues amount still to be recovered. The projected Non-Tariff Income towards recovery of revenue dues is not adequate and it shall be still at a higher level than projected based on escalation factor. However, the Commission prefers to enhance it higher figure for FY 2024-25 at the same time the licensee needs to put in best of efforts to levy more of these charges in the process of recovery of pending dues during this financial year for financial viability of the organisation.

After careful examination, the Commission now approves the Non-tariff income at Rs. 10.85 Crore for FY2024-25.

Though the Licensee had included bad debts to the tune of Rs.17.20Crs for pass through in FY2024-25, no details for the indicated amount was made available to the Commission in support of this claim authentication. In the absence of the most valid information on the Bad debts derived, the Commission strongly prefers to disallow the entire claim for the Bad debts to the tune of Rs.17.20Crs.

7.16. True-Up surplus back-log adjustments

Commission Analysis:

During the FY 2021-22, there a revenue surplus of Rs.58.32Crs was arrived at by the Commission after due True-Up procedure as per the Regulatory provisions in force. Accordingly, an amount of Rs.19.44Crs being one-third ($\frac{1}{3}$) value of surplus is determined to claw-back by Commission for passing it on as cost reduction benefit to retail consumers in the ARR determination for FY 2023-24.

In addition, the pending True-Up pertaining to the past six (6) years from 2015-16 to 2020-21 was also carried out by the Commission and found that there is a revenue surplus in the past also totalling to Rs.220.67Crs (details are tabulated in MYT Tariff Order already). Adopting the Regulation 10.6, one-third (1/3rd) of the noted surplus is now clawed back amounting to Rs.73.5567Crs shall have to be passed on as rebate in the retail tariff over two (2) years period starting from 2023-24.

In all an amount of Rs.46.50 Crs still left unrecovered is now adopted as claw back in FY 2024-25 retail supply ARR tariff determination relating to seven (7) Years true-up surplus recovery before arrive at the Net aggregate revenue requirement for those respective years for MSPDCL.

7.17. Aggregate Revenue Requirement

Petitioner's Submission:

Based on the above component-wise expenses, the Aggregate Revenue Requirement computed for FY 2024-25 by MSPDCL is given in the Table below

Table 7.28: Aggregate Revenue Requirement (Rs. Crore)

SL. No.	Particulars	2022-23	2023-24	2024-25		
Α	Cost of power purchase	589.72	587.67	597.24		
В	Transmission charges	153.88	167.829	210.54		
С	O&M Expenses	116.71	123.39	130.44		
1	Employee Expenses	96.07	101.57	107.37		
2	A&G Expenses	7.46	7.89	8.34		
3	R&M Expenses	13.18	13.93	14.73		
D	Depreciation	19.14	18.99	20.92		
Е	Interest on Loan	33.06	52.14	56.70		
F	Interest on Working Capital	6.12	7.24	7.87		
G	Bad Debt	15.60	16.38	17.20		
Н	Total Cost	934.23	973.64	1040.91		
- 1	Add: RoE	1.56	1.56	1.56		
J	Add: Income Tax	0	0	0		
	Add: Truing up Gap of Past Years	0	0	61.47*		
K	Total	935.79	975.20	1103.94		
	Less: Non Tarif Income	9.65	10.23	10.84		
	Aggregate Revenue Requirement (ARR)	926.14	964.97	1093.09		
	Revenue from sale of surplus power	33.09	38.02	40.38		
	Revenue at Existing Tariff	469.26	568.24	597.21		
	Revenue Gap / Surplus	-423.79	-358.70	-455.51		
	Add: Additional Revenue from Tariff Hike	0	0	89.32		
	Subsidy Requirement	423.79	358.70	<mark>366.19</mark>		
	*Partial claim of True up gap of FY 22-23 and balance shall be claimed in FY 25-26					

Commission's Analysis

Based on the approved costs Aggregate Revenue Requirement for FY 2024-25 is approved as detailed below:

Table 7.29: Approved ARR for FY2024-25 by the Commission

SI. NO.	Particulars	MYT Order	ARR Filed	Approved
Α	Cost of power purchase	615.74	597.24	641.07
В	Transmission charges	115.59	210.55	187.938
С	O&M Expenses	110.03	130.44	130.44
	-Employee Expenses	87.25	107.37	107.37
	-A&G Expenses	9.63	8.34	8.34

SI. NO.	Particulars	MYT Order	ARR Filed	Approved
	-R&M Expenses	13.15	14.73	14.73
D	Depreciation	3.28	20.92	20.92
Ε	Interest on Loan	5.45	56.70	55.07
F	Interest on Working Capital	0.00	7.87	7.87
G	Bad Debt	0.00	17.20	0.00
Н	Total Cost	850.09	1040.92	1043.30
I	Add: RoE	1.56	1.56	1.56
J	Add: Income Tax	0.00	0.00	0.00
K	Total (Gross ARR)	851.65	1042.48	1044.86
L	Less: Non Tarif Income	8.25	10.84	10.85
М	Less: 7 Yrs past True-Up surpluses	46.50	-61.47	46.50
	Sub-Total of other Income	54.75	-50.63	57.35
N	Aggregate Revenue Requirement	796.90	1093.11	987.51
0	Revenue from sale of surplus power		40.38	40.38
Р	Net ARR after Surplus energy sold	796.90	1052.73	947.13
Q	Retail Sales Revenue at revised Tariffs		686.53	0
	Revenue from Existing Tariffs		0	691.56
R	Govtt. Tariff subsidy for ARR Gap		366.20	255.57

Commission approves net ARR at **Rs.947.13 Crore for FY 2024-25** as against Rs.1052.73 Crore projected by MSPDCL. Accordingly, the tariff subsidy requirement from the Government is assessed as Rs.255.57Crs as against the licensee proposal of Rs.366.20Crs

The Category wise revenue realisable in FY 2024-25 as arrived at by Commission at existing tariffs which are in force from 1st April 2024 onwards is tabulated below

Table 7.30: Commission approved Revised Revenue for FY2024-25

SI. No.	Category (2024-25)	Energy Sales	(CPU) Total Rev	Revenue	Fixed Charge	CPU- Fixed	Energy Charge	CPU- ENG
Α	LT Supply	MU	Rs./Unit	Rs.Crs	Rs.Crs	Rs./kWh	Rs.Crs	Rs./kWh
1	KutirJyoti	0.00	#DIV/0!	0.40	0.40	#DIV/0!	0.00	#DIV/0!
2	LT Domestic	530.97	6.27	332.99	57.54	1.08	275.45	5.19
3	Commercial LT	112.13	7.80	87.48	10.08	0.90	77.39	6.90
4	LT Industires Micro /Small	14.75	6.77	9.98	1.72	1.17	8.26	5.60

SI. No.	Category (2024-25)	Energy Sales	(CPU) Total Rev	Revenue	Fixed Charge	CPU- Fixed	Energy Charge	CPU- ENG
5	Public Lighting	3.92	9.86	3.87	0.10	0.26	3.77	9.60
6	Public Water-Works	11.11	9.86	10.95	0.06	0.06	10.89	9.80
7	Irrigation and Agriculture	0.00	#DIV/0!	0.00	0.00	#DIV/0!	0.00	#DIV/0!
	LT Supply Sub Total	672.88	6.62	445.68	69.92	1.04	375.76	5.58
В	HT Supply							
1	Commercial	39.51	10.89	43.04	3.97	1.00	39.07	9.89
2	Medium Industry	9.23	9.59	8.85	0.65	0.70	8.20	8.89
3	Large Industry	20.64	11.03	22.76	1.89	0.92	20.87	10.11
4	Public Water-Works	49.96	11.20	55.96	2.67	0.53	53.29	10.67
5	Irrigation and Agriculture	0.82	7.02	0.58	0.11	1.30	0.47	5.72
6	Bulk Supply	104.90	10.93	114.70	6.89	0.66	107.81	10.28
	HT Supply Sub Total	225.06	10.93	245.89	16.17	0.72	229.72	10.21
	TOTAL (LT & HT)	897.94	7.70	691.56	86.08	0.96	605.48	6.74

Note: The Existing energy tariff rates were continued without any change in arriving at the above realisable revenue during FY 2024-25. The detailed break-up is provided at Annx-III.

The break-up details of true-up surplus identified from FY 2015-16 onwards is tabulated below for reference.

Financial Year	True-up Surplus amount Rs.Crs	MSPDCL portion (¾ rd) Rs.Crs	Claw Back amount (½ rd) Rs.Crs
2015-16	10.07	6.7133	3.3567
2016-17	56.83	37.8867	18.9433
2017-18	31.86	21.2400	10.6200
2018-19	15.05	10.0333	5.0167
2019-20	27.11	18.0733	9.0367
2020-21	79.75	53.1667	26.5833
2021-22	58.32	38.8800	19.4400
G.Total	278.99	185.9933	92.9967

In the above $1/3^{rd}$ of true-up surplus, 50% amounting to Rs.46.50Crs was adjusted for in FY2023-24 and the remaining unrecovered surplus is now adjusted in FY 2024-25 <u>in full and final settlement</u>.

7.18. ARR for FY 2024-25 for MSPDCL is proposed as follows:

The aggregate revenue requirement for FY 2024-25 is summarized below:

Table 7.31: Combined ARR of MSPDCL proposed for FY2024-25 (Rs. Crore)

Sl. No.	Particulars of Expenditure	2024-25
Α	Cost of power purchase	597.24
В	Transmission charges	210.54
С	O&M Expenses	130.44
1	Employee Expenses	107.37
2	A&G Expenses	8.34
3	R&M Expenses	14.73
D	Depreciation	20.92
E	Interest on Loan	56.70
F	Interest on Working Capital	7.87
G	Bad Debt	17.20
Н	Total Cost	1040.91
I	Add: RoE	1.56
J	Add: Income Tax	0
	Add: Truing up Gap of Past Years	61.47
K	Total	1103.94
L	Less: Non Tarif Income	10.84
M	Aggregate Revenue Requirement (ARR)	1093.09

^{*}Because the true up gap for FY 23 is coming high, we have proposed to recover this in two parts – 61.47 cr in the ARR of FY 24-25 and balance in the ARR for FY 25-26

From above table it can be seen that, the total ARR of MSPDCL proposed for FY 2024-25 is of Rs.1093.09 Cr. In order to recover the same, MSPDCL has primarily three main sources. MSPDCL can recover the ARR by sale of power at existing tariff to different consumers, can partially meet the revenue from Government subsidy received upfront and partly from the surplus power sold outside the state. Following table shows the status of revenue gap with existing consumer tariff.

7.19. Revenue gap for FY 2024-25

Petitioner's submission

Table 7.32: Revenue Gap for FY2024-25 at existing Tariff (Rs. Crore)

Sr. No	Particulars	Amount in Rs. Cr
1	Annual Revenue Requirement	1093.09
2	Revenue from sale of power at existing tariff	597.21
3	Revenue from sale of surplus power	40.38

Sr. No	Particulars	Amount in Rs. Cr
4	Total Revenue (2+3)	637.59
5	Revenue Gap	455.51

Thus, MSPDCL has estimated that it will face a Revenue Gap of Rs. 455.51 Cr in FY 2024-25 for the proposed ARR with recovery as per existing tariff. The projected Average Cost of Supply and Average realization from sale of power for FY 2024-25 is as shown in the Table Below:

Table 7.33: Projected ACOS and Avg. Realisation at existing tariff (Rs. Crore)

SI. No.	Particulars	Units	MSPDCL Projected
1	Aggregate Revenue Requirement (ARR)	Rs.Crs	1093.09
2	Revenue from sale of surplus power	Rs.Crs	40.38
3	Net ARR within state (1-2)	Rs.Crs	1052.72
4	Govt. Subsidy Requirement	Rs.Crs	365.19
5	Net ARR after Govt. Subsidy (3-4)	Rs.Crs	687.53
6	Revenue at Existing Tariff	Rs.Crs	597.21
7	Additional Revenue from Tariff Hike	Rs.Crs	89.32
8	Energy Sale with State	MU	897.94
9	Average Cost of Supply (3/6)	Rs./kWh	11.72
10	Average Revenue Realisation (5/6)	Rs./kWh	7.65
11	Average Subsidy per unit (7-8)	Rs./kWh	4.08
12	Average Revenue Realization at existing tariff (5a/6)	Rs./kWh	6.65
13	Average Subsidy Requirement at existing tariff (7-10)	Rs./kWh	5.07

In order to recover the estimated revenue gap, MSPDCL's proposal is discussed in following paragraphs:

Table 7.34: Average tariff increase required (FY 2024-25)

SI. No.	Particulars	Units	Without subsidy	With subsidy
1	Net ARR	Rs. Crs	1093.09	1093.09
2	Revenue from Existing Tariff	Rs. Crs	597.21	597.21
3	Sale of Surplus Power	Rs. Crs	40.38	40.38
4	Total Sales Proceeds	Rs. Crs	637.59	637.59
5	Revenue Gap	Rs. Crs	455.51	455.51
6	State Government Revenue Subsidy	Rs. Crs		366.19
7	Net Un-met GAP	Rs. Crs	455.51	89.32
8	Revenue from sale of power at proposed tariff (4+7-3)	Rs. Crs	1083.10	686.53
9	Unit revenue realisation at the proposed Tariff	Rs. /kWh	12.06	7.65
10	Average Tariff hike required = (SI no 7 / SI no 2) x100	%	81.3%	15%

While CERC approves the tariff hike of Central Generating Stations and Transmission Companies on a regular basis, there has been no proportionate increase in the MSPDCL's Retail Supply Tariff (RST).

This situation widens the gap between the revenue collection and the power purchase cost. Without corresponding increase in tariff, MSPDCL will not be able to sustain and pay the CPSU Generating Stations and Transmission Companies. Therefore, it is proposed to hike the MSPDCL consumer tariff and hence **15% increase** has been proposed so as to meet the increasing revenue gap

Commission's Analysis

As per the Commission, the Revenue Gap for FY 2024-25 after considering the possible revenue subsidy from Government is shown below:

Table 7.35: Revenue Gap after subsidy for FY 2024-25 by the Commission

SI. No	Particulars	Amount (Rs.Crs)
1	Net Aggregate Revenue Requirement	947.13
2	Revenue expected from existing tariff	691.56
3	Total expected Revenue gap (1-2)	255.57
4	Government Revenue Subsidy (ARR proposed)	366.19
5	Tariff subsidy needed for meeting the Gap	255.57

Since, the Commission derived unmet gap of Rs.255.57Crs is much lower than the Government budgetary support of Rs.366.19Crs as indicated in the ARR filing for FY 2024-25, with the existing energy charges from 1.04.2024 onwards. *The tariff order w.e.f* 1st *April 2024 could not be issued due to proclamation of Election code of conduct for 2024 Lok Sabha elections on 16th March 2024 and its consequential restrains to comply with*. Earlier, in the petition submitted by Licensee had proposed a steep hike of 15% over the present two-parts of tariff rates to get an additional revenue yield of Rs.89.32Crs through tariff revision. After careful examination, the Commission felt no need for hike in tariff as the unmet revenue gap is lesser than the announced government subsidy of Rs.366.19Crs from Govt. of Manipur and there still exists additional cushion of Rs.110.62Crs left to cover-up any revenue short-fall eventuality in future due to unforeseen eventualities as buffer.

With regard to assurance letter for Tariff subsidy from Govt of Manipur, it

was replied by MSPDCL vide its letter No.2/99/2023/MSPDCL-ARR/715-17, Dt 4th June 2024 that with reference to Finance Department letter No. FBUD-1/2/2023-e-FD Dt.07/05/2024, MSPDCL has submitted Budget Estimates of 2024-25 for Grant No.23 (Power). However, no such from Finance Department was made available to depict the same as annexure in the Tariff Order

Any steep hike at 15% in existing tariff would not only reduce the Government support assured under Section-65 of the Electricity Act 2003 but also burdens the retail consumers financially with undesired consequences largely when the situation foreseen is not demanding for such hike.

7.20. Tariff Proposal for FY 2024-25

Petitioner's submission

- The total revenue gap for the FY 2024-25 to be covered is Rs. **455.51** Crores. The above ARR gap can be sought to be filled by:
 - a. Tariff Increase
 - b. Budgetary support from the Govt. of Manipur
- In case the entire gap was to be met from Tariff Increase, the average increase in tariff
 would work out to nearly 100%. It is presumed that this is an unacceptable level of
 tariff hike, and the realistic tariff in the region needs to form the basis for the proposed
 maximum increase in tariff, with the balance gap being addressed by one of the other
 means.
- The MSPDCL has been receiving budgetary support from the Government of Manipur for Plan and Non –Plan Funds. The same support is expected to be provided during ensuing year. Accordingly, out of the gap of Rs. 455.51 Crore, Rs. 365.19 Crores is proposed to be covered by budgetary support from Government of Manipur. Therefore, the balance revenue gap will have to be met from tariff increase and other recovery mechanism.
- The provisions of the Section 61 (g) of the Electricity Act, 2003 state that the Appropriate Commission should be guided by the objective that the tariff progressively reflects the efficient and prudent cost of supply of electricity. In line with the above provision, the National Tariff Policy also states that the tariffs should be within ± 20 %

of the average cost of supply. However, in the present scenario it shall neither be feasible nor in the larger interest of the population of the State of Manipur to burden those with tariff anyway near to average cost of supply. Considering these limitations, the Tariff proposal has been formulated by MSPDCL with an endeavour to progressively approach to reduce the burden (budgetary support) on the Government of Manipur, without giving any tariff shock to the consumers. Furthermore, attempt has been made to evenly distribute the impact of increase in tariff required to fill the revenue gap left after the subsidy committed by the Government of Manipur within the given constraint of consumer mix in the State.

MSPDCL has considerably increased quality and duration of power supply throughout
the state. This has resulted in increased quantum of power purchase to be done by
MSPDCL which has in turn increased average cost of supply. As such MSPDCL proposes
to increase Tariff of all the consumers by 15.00% for FY 2024-25 to partially meet the
increased cost of supply.

Table 7.36: Existing & Proposed Tariff Structure with Subsidy by MSPDCL

		Existing Tariff for FY 2023-24		•	Proposed Tariff for FY24-25		
SI. No.	Category and Consumption slab	Fixed Charges (Rs/kW/KVA/ PM)	Energy Charges (Rs/kWh or kVAh)	Fixed Charges (Rs/kW/KVA /P M)	Energy Charges (Rs/kWh or kVAh)	% increase	
	LT SUPPLY						
1	Kutir Jyoti	Rs/Connection	Rs/kWh	Rs/Connecti	Rs/kWh		
	All units (upto 45 KWh/ 3 months)	25	2.10	25	2.10	0%	
2	Domestic	Rs/kW	Rs/kWh	Rs/kW	Rs/kWh		
(i)	First - 100 kWh/Month	65	5.10	80	5.80	14%	
(ii)	Next - 100 kWh/Month	65	5.95	80	6.85	15%	
(iii)	Above 200 kWh/Month	65	6.75	80	8.10	20%	
3	Non-Domestic /Commerc	cial					
(i)	First - 100 kWh/Month	85	6.55	100	7.50	15%	
(ii)	Next - 100 kWh/Month	85	7.25	100	8.50	17%	
(iii)	Above 200 kWh/Month	85	7.65	100	9.00	18%	
4	Public Lighting	70	9.60	100	10.60	10%	
5	Public Water Works	105	9.80	120	10.80	10%	
6	Irrigation and Agriculture						
	i) Agriculture	65	4.55	65	5.25	15%	
	ii) Irrigation (Others)	65	4.55	65	5.25	15%	
7	Small Industry	70	5.60	80	6.45	15%	

		Existing Tariff for FY 2023-24		Proposed for FY2	a	
SI. No.	Category and Consumption slab	Fixed Charges (Rs/kW/KVA/ PM)	Energy Charges (Rs/kWh or kVAh)	Fixed Charges (Rs/kW/KVA /P M)	Energy Charges (Rs/kWh or kVAh)	% increase
	HT SUPPLY	Rs./kVA	Rs./kVAh	Rs./kVA	Rs./kVAh	
1	Commercial	105	8.90	120	10.25	15%
2	Public Water Works	105	9.60	120	10.75	12%
3	Irrigation and Agriculture					
	i) Agriculture	105	5.15	120	5.95	16%
	ii) Irrigation (Others)	105	5.15	120	5.95	16%
4	Medium Industry	105	8.00	150	9.25	16%
5	Large Industry	105	9.10	150	10.60	16%
6	Bulk Supply	105	9.25	150	10.80	17%

Table 7.37: Proposed Tariff Structure at Full cost Tariff for FY2024-25 by MSPDCL

Table		Proposed Full Cost Tariff for FY 2024-25			
SI No.	Category and Consumption slab	Fixed Charges	Energy Charges		
	. =	(Rs/kW/KVA/PM)	(Rs/kWh or kVAh)		
	LT SUPPLY				
1	Kutir Jyoti	Rs/Connection	Rs/kWh		
	All units (upto 45 KWh/3 months)	50	4.15		
2	Domestic	Rs/kW	Rs/kWh		
(i)	First - 100 kWh/Month	110	8.55		
(ii)	Next - 100 kWh/Month	110	9.55		
(iii)	Above 200 kWh/Month	110	10.95		
3	Non-Domestic / Commercial	Rs/kW	Rs/kWh		
(i)	First - 100 kWh/Month	120	9.06		
(ii)	Next - 100 kWh/Month	120	10		
(iii)	Above 200 kWh/Month	120	10.5		
4	Public Lighting	120	10.6		
5	Public Water Works	140	10.8		
6	Irrigation and Agriculture	Rs/kW	Rs/kWh		
(i)	Agriculture	90	8.23		
(ii)	Irrigation (Others)	90	8.23		
7	Small Industry	100	9.52		
	HT SUPPLY	Rs./kVA	Rs./kVAh		
1	Commercial	150	10.25		
2	Public Water Works	150	10.75		
3	Irrigation and Agriculture				
(i)	Agriculture	150	8.24		
(ii)	Irrigation (Others)	150	8.24		
4	Medium Industry	150	9.65		
5	Large Industry	150	10.85		
6	Bulk Supply	150	11.05		

Commission's Analysis:

As can be inferred from the revenue gap derived by the Commission, the is no need to enhance the prevailing retail tariff at 15% tariff hike both in fixed and energy charges in FY 2024-25. This was considered based on the announcement of Government tariff subsidy to the extent of **Rs.366.19Crs** so intimated by MSPDCL in their additional information replies to Commission.

In this aspect, the Commission had already issued an Interim Order **Dt.21.03.2024** directing MSPDCL to levy the prevailing tariffs from 1st April 2024 to all the retail consumers until further orders *owing to proclamation of Election code of conduct on 16th March 2024 (Capy at Annexure-VIII)*. Through this Tariff Order, now the Commission approves revised retail tariffs for FY2024-25 w.e.f 16th June 2024 such that the Fixed charges and the existing Energy tariff rates of FY2023-24 are continued unaltered and details are tabulated below for tariff implementation:

Table 7.38: Commission approved Retail supply Tariff Structure for FY2024-25

SI.	Consumer Category (Slab wise) for FY 2024-25	Fixed Charge (Per Month)	Energy Charge (per Month)
INU	LT Supply	(Per Month)	(per iviolitii)
1	Kutir Jyoti	Rs/Connection	Rs/kWh
	-	25	2.10
	All units (upto 45 KWh/3 months)		
2	Domestic	Rs/kW	Rs/kWh
	(i) First - 100 kWh/Month	65	5.10
	(ii) Next 100 kWh/Month	65	5.95
	(iii) Above 200 kWh/Month	65	6.75
3	Non-Domestic / Commercial	Rs/kW	Rs/kWh
	(i) First - 100 kWh/Month	85	6.55
	(ii) Next 100 kWh/Month	85	7.25
	(iii) Above 200 kWh/Month	85	7.65
4	Public Lighting	70	9.60
5	Public Water Works	105	9.80
6	Irrigation and Agriculture	Rs/kW	Rs/kWh
	(i) Agriculture	65	4.55
	(ii) Irrigation (Others)	65	4.55
7	LT Industrial - Small/Micro	70	5.60
	HT Supply	Rs./kVA	Rs./kVAh
1	Commercial	105	8.90
2	Public Water Works	105	9.60
3	Irrigation and Agriculture		
	(i) Agriculture	105	5.15
	(ii) Irrigation (Others)	105	5.15
4	Medium Industry	105	8.00
5	Large Industry	105	9.10
6	Bulk Supply	105	9.25

Table 7.39:: Commission proposed Full Cost Tariff (without Subsidy) for FY 2024-25

-		Proposed Full Cost Tariff for FY 2024-25			
SI. No.	Category and Consumption slab	Fixed Charges (per month)	Energy Charges (per month)		
	LT SUPPLY				
1	Kutir Jyoti	Rs/Connection	Rs/kWh		
	All units (upto 45 KWh/3 months)	25	2.10		
2	Domestic	Rs/kW	Rs/kWh		
	(i) First - 100 kWh/Month	65	7.67		
	(ii) Next - 100 kWh/Month	65	8.95		
	(iii) Above 200 kWh/Month	65	10.15		
3	Non-Domestic /Commercial	Rs/kW	Rs/kWh		
	(i) First - 100 kWh/Month	85	10.76		
	(ii) Next - 100 kWh/Month	85	11.91		
	(iii) Above 200 kWh/Month	85	12.57		
4	Public Lighting	70	12.19		
5	Public Water Works	105	12.33		
6	Irrigation and Agriculture	Rs/kW	Rs/kWh		
	(i) Agriculture	65	4.55		
	(ii) Irrigation (Others)	65	4.55		
7	Small Industry	70	11.32		
	HT SUPPLY	Rs./kVA	Rs./kVAh		
1	Commercial	105	10.44		
2	Public Water Works	105	10.80		
3	Irrigation and Agriculture				
	(i) Agriculture	105	8.67		
	(ii) Irrigation (Others)	105	8.67		
4	Medium Industry	105	10.64		
5	Large Industry	105	10.46		
6	Bulk Supply	105	10.79		

7.21. Government Subsidy/ Support

The proposed Tariff subsidy support to MSPDCL from Government of Manipur is now fixed at **Rs. 366.19Crs** Crore as indicated in the ARR submission. As seen from the **Table-7.35** above, it is clear that the revenue from sale of power at revised tariffs leaves an unmet gap of **Rs.255.57Crs** which is far lesser than the tariff subsidy so assured by Govtt. Of Manipur and hence, no further revision in tariff is felt needed in this scenario. Consequently, the MSPDCL shall make assiduous efforts to get the required tariff subsidy/ support from Government of Manipur promptly on monthly basis in every month during FY2024-25 to even out the financial revenue constraints.

The Section-65 of the Electricity Act 2003 mandates the State Government to release subsidy amount due to the licensee in advance in each month so as to enable the licensee to promptly implement the subsidized tariffs to their consumers as per existing Subsidized Tariff Schedule placed at **Table-7.38** and revenue amount realizable from various categories is shown at **Table-7.30**. The element-wise detailed calculations of expected revenue from approved (subsidized) tariff are placed at **Annexure-III** for reference.

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 65of 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.

Hence, the State Government shall release the above stated annual subsidy amount of

Rs.255.57Crs in Twelve (12) equal monthly installments amounting to Rs.21.2975Crs (Rupees twenty-one point two nine seven five crores only) per month which is applicable from April 2024 month onwards. However, in the event of non-receipt of subsidy in any particular month from the Government, the licensee shall adopt the applicable full cost tariff schedule (FCTS) placed at Table-7.39, while issuing the monthly energy bill for that relevant month (detail revenue calculation from FCT is indicated at (Annexure-IV).

A brief summary of **Full cost** revenue amount of **Rs.947.13Crs** derived after adjusting revenues expected from Outsides sale of **Rs.40.38Crs** is tabulated below for reference.

Table 7.40: Commission derived MSPDCL Full Cost Tariff revenue for FY 2024-25

SI.		Energy	(CPU)	Revenue
No.	Category (2024-25)	Sales	Avg.Rev	(Full Cost)
Α	LT Supply	MU	Rs./Unit	Rs.Crs
1	Kutir Jyoti	0.00		0.40
2	LT Domestic	530.97	9.15	486.09
3	Commercial LT	112.13	12.49	140.10
4	LT Industries Micro/ Small	14.75	12.48	18.41
5	Public Lighting	3.92	12.45	4.89
6	Public Water-Works	11.11	12.39	13.76
7	Irrigation and Agriculture	0.00	0.00	0.00
	LT Supply Sub Total	672.88	9.86	663.66
В	HT Supply			
1	Commercial	39.51	12.61	49.82
2	Medium Industry	9.23	12.52	11.56
3	Large Industry	20.34	12.54	25.89
4	Public Water-Works	49.96	12.53	62.62
5	Irrigation and Agriculture	0.82	10.94	0.90
6	Bulk Supply	104.90	12.65	132.68
	HT Supply Sub Total	225.06	12.60	283.47
	TOTAL (LT & HT)	897.94	10.55	947.13

There may be a situation, where the outstanding subsidy was released by the government after elapse of sometime and thereby the consumers were billed at **full cost tariffs (FCT)** in any such relevant month or months on such occurrence. Given the situation, the entire excess amount so charged on account of full cost tariff shall have to be reflected as rebate, by the licensee at a time, in the immediate monthly billing cycle being issued to

respective consumer soon after receiving such pending subsidy pertaining to the past period. In case, if the refundable rebate amount exceeds the monthly bill amount to be adjusted, then such excess amount shall have to be carried forward and be adjusted in the following monthly bill/bills to be issued to the such consumer until full settlement is made through such refunding process.

Lastly, the brief summary of the calculations in support of subsidy amount so arrived at, the average cost of supply and the average revenue realisation details after approved tariff in comparison to the MSPDCL ARR filing is tabulated below:

Table 7.41: Average Cost of Unit Supply for FY2024-25 (MSPDCL Vs. Commission)

SI. No	Particulars	Units	MSPDCL Projected	Commission Approved
1	Net overall ARR	Rs. Cr	1093.09	987.51
2	Sale of surplus power	Rs. Cr	40.38	40.38
3	Net ARR within the state (1-2)	Rs. Cr	1052.71	947.13
4	Govt. subsidy for unmet revenue Gap	Rs. Cr	366.19	255.57
5	Net ARR after Govt. subsidy (3 - 4)	Rs. Cr	686.52	691.56
	a) Revenue from existing Tariff	Rs.Cr	597.21	691.56
	b) Additional revenue from Hike	Rs.Cr	89.31	Nil
6	Energy sale within the state	MU	897.94	897.94
7	Average cost of supply (3/6)	Rs/KWH	11.72	10.55
8	Avg. Revn. realisation (subsidy if paid)- (5a/6)	Rs/KWH	6.65	7.70
9	Avg. Subsidy per unit - (7-8)	Rs/kWh	5.07	2.85

8. Tariff Principles and Design

8.1. Background

2017-18 and the retail tariff, has been guided by the provisions of the Electricity Act, 2003, the National Tariff Policy (NTP), Regulations on Terms and Conditions of Tariff issued by the Central Electricity Regulatory Commission (CERC) and Regulations on Terms and Conditions of Tariff notified by the JERC for M&M. Section 61 of the Act lays down the broad principles, which shall guide determination of retail tariff. As per these principles the tariff should "Progressively reflect cost of supply" and also reduce cross subsidies "within the period to be specified by the Commission". The Act lays special emphasis on safeguarding consumer interests and also requires that the costs should be recovered in a reasonable manner. The Act mandates that tariff determination should be guided by the factors, which encourage competition, efficiency, economical use of resources, good performance and optimum investment.

The latest NTP, notified by Government of India in January 2016, provides comprehensive guidelines for determination of tariff as also working out the revenue requirement of power utilities. The Commission has endeavored to follow these guidelines as far as possible.

- b. The NTP mandates that the Multi-Year-Tariff (MYT) framework be adopted for determination of tariff from 1st April 2006. Accordingly, the MSPDCL has filed petition for determination of ARR for to FY 2020-21 with reliable data.
- c. The mandate of the NTP is that tariff should be within plus / minus 20% of the average cost. It is not possible for the Commission at this stage to lay down the road map for reduction of cross subsidy within ±20% mainly because of consumers' low paying capacity and relatively high cost of power. However, in this tariff order an element of performance target has been indicated by setting target for distribution loss reduction and increasing sales volume during FY 2018-19. The improved performance, by reduction of loss level, and increase in sales

will result in substantial reduction in average cost of supply. The existing and proposed tariffs of MSPDCL are two-part tariff. The Commission has considered for a nominal increase in tariff in view of the low paying capacity in the State.

d. Clause 8.3 of National Tariff Policy lays down the following principles for tariff design:

- (i) In accordance with the National Electricity Policy, consumers below poverty line who consume below a specified level, say 30 units per Month, may receive a special support through cross subsidy. Tariffs for such designated group of consumers will be at least 50% of the average cost of supply. This provision will be re-examined after five years.
- (ii) For achieving the objective that the tariff progressively reflects the cost of supply of electricity, the SERC would notify the roadmap, within six Months with a target that latest by the end of the year 2018-19 that tariffs are within ± 20% of the average cost of supply. The road map would have intermediate milestones, based on the approach of a gradual reduction in cross subsidy. For example, if the average cost of service is Rs.3 per unit, at the end of year 2015-16, the tariff for the cross subsidized categories excluding those referred to in para-1 above should not be lower than Rs. 2.40 per unit and that for any of the cross-subsidizing categories should not go beyond Rs.3.60 per unit.
- (iii) While fixing tariff for agricultural use, the imperatives of the need of using ground water resources in a sustainable manner would also need to be kept in mind in addition to the average cost of supply. 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.
- Regulation 16 of JERC for M&M (Terms and Conditions for Determination of Tariff)
 Regulations specifies.

- (i) The cross subsidy for a consumer category means the difference between the average per unit rate based on tariff schedule of the Commission for that Category and the combine average cost of supply per unit expressed in percentage terms as a portion of the combined average cost of supply.
- (ii) In the first place, the Commission shall determine the tariff, so that it progressively reflects the combined average cost of supply of electricity and also reduce cross-subsidies within a reasonable period. In the second phase, the Commission shall consider moving towards category wise cost of supply as a basis for determination of tariff.
- f. The Commission has considered special treatment to Kutir Jyoti connections and agricultural sector. It has also aimed at raising the per capita consumption of the State from 100 kwh in 2010-11 to 162 kWh in 2014-15 and 300 kWh by the end of 2018-19. The Commission endeavors that the tariffs progressively reflect cost of supply in a shortest period and the Government subsidy is also to be reduced gradually. The tariffs have been rationalized with regard to inflation, paying capacity of consumers and to avoid tariff shock.

8.2. Tariffs Proposed by the MSPDCL and Approved by the Commission

a) Existing & Proposed by MSPDCL

MSPDCL in its MYT tariff petition from FY 2024-25 has proposed for revision over existing retail tariff for FY 2023-24 to various categories of consumers to earn additional revenue to meet the expenses partly.

The MSPDCL has proposed tariff revision as indicated in table-9.1 below. The proposed increase in tariff by the MSPDCL would result in an overall increase in revenue is about **15.00%**

Table 8.1: Existing and Proposed Tariff for FY 2024-25 by MSPDCL

	Table 6.1. Existing and Propo	Existing Tari		<u> </u>	riff (2024-25)
SI. No.	Consumer Category	Fixed	Energy	Fixed	Energy
		Charges	charge	Charge	Charge
	LT Supply	(Rs./kW/PM)	Rs/kWh/PM	(Rs./kW/PM)	Rs/kWh/PM
1	Kutir Jyothi				
	All units (15kWh/PM)	25 (Connection)	2.10	25 (Connection)	2.10
2	Domestic				
i	0-100 kWh/month	65	5.10	80	5.80
ii	101-200 kWh/month	65	5.95	80	6.85
iii	Above 200 kWh/month	65	6.75	80	8.10
3	Commercial				
i	1-100 kWh/month	85	6.55	100	7.50
ii	101-200 kWh/month	85	7.25	100	8.50
iii	Above 200 kWh/month	85	7.65	100	9.00
4	Public Lighting System	70	9.60	100	10.60
5	Public Water works	105	9.80	120	10.80
6	a) Agriculture	65	4.55	65	5.25
	b) Irrigation (others)	65	4.55	65	5.25
7	Small Industry	70	5.60	80	6.45
	HT Supply	Rs/kVA/PM	Rs/kVAh/PM	Rs/kVA/PM	Rs/kVAh/PM
1	Commercial	105	8.90	120	10.25
2	Public Water works	105	9.60	120	10.75
3	a) Agriculture	105	5.15	120	5.95
	b) Irrigation (others)	105	5.15	120	5.95
4	Medium Industry	105	8.00	150	9.25
5	Large Industry	105	9.10	150	10.60
6	Bulk Supply	105	9.25	150	10.80

b) Category Wise Tariffs approved by the Commission

The Commission approved tariff categories/sub-categories are given below. The un-metered supply includes consumers not provided with energy meters. Unmetered supply will be billed based on assessed consumption arrived as per JERC for M&M (Electricity Supply Code) 2013 at the relevant rates of metered Tariff of the respective categories. For HT Connections billing shall be done on KVAH instead KWH in the case of energy charges also by licensee which problem was there even in the last year FY 2023-24.

c) Approved applicable Tariff for FY 2024-25 by the Commission

No hike in the existing energy charges is considered by the Commission for FY 2024-25 including fixed charges tariff also as it is so existed in FY 2023-24 without any change. The existing tariffs are to be charged to all retail consumers with effect from 16th June 2024 onwards only consequent to this Order.

Table 8.2: Category wise Tariffs Approved by the Commission for FY 2024-25

SI. No	Consumer Category (Slab wise)	Fixed Charge (Per Month)	Energy Charge (Per Month)
	LT Supply		Upto 15/06/24
1	Kutir Jyoti	Rs/Connection	Rs/kWh
	All units (upto 45 KWh/3 months)	25	2.10
2	Domestic	Rs/kW	Rs/kWh
	(i) First - 100 kWh/Month	65	5.10
	(iv) Next 100 kWh/Month	65	5.95
	(v) Above 200 kWh/Month	65	6.75
3	Non-Domestic / Commercial	Rs/kW	Rs/kWh
	(i) First - 100 kWh/Month	85	6.55
	(ii) Next 100 kWh/Month	85	7.25
	(iii) Above 200 kWh/Month	85	7.65
4	Public Lighting	70	9.60
5	Public Water Works	105	9.80
6	Irrigation and Agriculture	Rs/kW	Rs/kWh
	(i) Agriculture	65	4.55
	(iii) Irrigation (Others)	65	4.55
7	LT Industrial - Small/Micro	70	5.60
	HT Supply	Rs./kVA	Rs./kVAh
1	Commercial	105	8.90
2	Public Water Works	105	9.60
3	Irrigation and Agriculture		
_	(i) Agriculture	105	5.15
	(ii) Irrigation (Others)	105	5.15
4	Medium Industry	105	8.00
5	Large Industry	105	9.10
6	Bulk Supply	105	9.25

Note: The above table depicts fixed and energy charge category wise only. Detailed Charges description are given in the tariff schedule Appended in the subsequent relevant chapters.

d) Approved Full Cost Tariff

With the approved ARR for FY 2024-25, the Commission also works out the average revenue realization is at Rs.10.55/kWh based on full cost Tariff and it is Rs.7.70/kWh adopting existing tariffs without any changes in both the charges. In the event of non-receipt of monthly subsidy in advance in any month from the State Government, the Commission directs the Licensee to adopt charging full cost tariff

(FCT) to all those consumers in respect of those the subsidy was not received is tabulated below:

Table 8.3: Category wise Full Cost Tariff (No Subsidy) for FY 2024-25 by the Commission

CI.		Proposed Full Cost	t Tariff for FY 2024-25
SI. No.	Category and Consumption slab	Fixed Charges (per month)	Energy Charges (per month)
	LT SUPPLY		
1	Kutir Jyoti	Rs/Connection	Rs/kWh
	All units (upto 45 KWh/3 months)	25	2.10
2	Domestic	Rs/kW	Rs/kWh
	(i) First - 100 kWh/Month	65	7.67
	(ii) Next - 100 kWh/Month	65	8.95
	(iii) Above 200 kWh/Month	65	10.15
3	Non-Domestic /Commercial	Rs/kW	Rs/kWh
	(i) First - 100 kWh/Month	85	10.76
	(ii) Next - 100 kWh/Month	85	11.91
	(iii) Above 200 kWh/Month	85	12.57
4	Public Lighting	70	12.19
5	Public Water Works	105	12.33
6	Irrigation and Agriculture	Rs/kW	Rs/kWh
	(i) Agriculture	65	4.55
	(ii) Irrigation (Others)	65	4.55
7	Small Industry	70	11.32
	HT SUPPLY	Rs./kVA	Rs./kVAh
1	Commercial	105	10.44
2	Public Water Works	105	10.80
3	Irrigation and Agriculture		
	(i) Agriculture	105	8.67
	(ii) Irrigation (Others)	105	8.67
4	Medium Industry	105	10.64
5	Large Industry	105	10.46
6	Bulk Supply	105	10.79

Note: Fixed charge is per kW of contracted load for LT supply except kJ while in case of HT Supply, it is per kVA of Billing Demand. Energy charge is per kWh for LT supply and per kVAh for HT supply and for LT high value services provided with MDI meters. The above table depicts fixed and energy charge only. However, Tariff Charges description in detail are given under the Tariff Schedule chapter Appended.

Note: In addition, the abstract of Category-wise Full Cost Tariff (FCT), Subsidised

Tariff and the Subsidy allocation to each consumer category is appended as Annexure-IV at the end of this order for quick reference.

e) Miscellaneous Charges and Important Conditions of Supply

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

As per Electricity Act, 2003, electricity supply shall not be given without meters. Commission is also regularly giving directives in this regard. Therefore, the MSPDCL shall not release any new connections without meters which is very serious deviation. In next tariff order no unmetered tariff will be allowed.

Taking all in the second			
. Tariff Order for FY 2024-2	MSPDCL		

9. Voltage-wise cost of supply

9.1. Introduction

The Commission has been 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.

9.2. Methodology adopted for Computation of Voltage-wise cost of supply:

Petitioners' submission:

The Petitioners MSPDCL had submitted a simple methodology to functionalize use of Cost of Supply model vide their letter No.2/99/2023/MSPDCL-ARR/2907, Dt.28th February 2024 in reply to the Commission insistence on submission of the required data for determination of Voltage-wise cost of supply. In the connection it is say that 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.

Further, the Petitioners MSPDCL have submitted that 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.

Commission's analysis:

Cost of supply is a study of total costs incurred by a utility in providing service to its consumers, category-wise and voltage level wise. Vital input to cost of supply study include reliable, accurate and consistent information which is derived from special studies conducted in the field level, i.e., category-wise Load Factors, category-wise coincident Demand factors etc., based on which the cost related to Demand (MW),

Energy (MU) and customer charges have to be allocated to various consumer categories.

The Commission has stipulated the methodology to compute the consumer category-wise cost of supply in Regulation 36 (b) to (e) of BERC (Multi Year Distribution Tariff) Regulations, 2021. The Petitioners have not computed the voltage wise cost of supply as per the methodology suggested in the above Regulations. However, the Petitioners have considered the methodology suggested by Hon'ble APTEL in the judgement dated 10.05.2012 in Appeal No.14 of 2011, Appeal No.26 of 2011 and Appeal No.27 of 2011 for computation of Voltage wise Cost of Supply for FY 2023-24.

9.2.1. APTEL's guidelines on alignment of tariff to cost of supply

The Appellate Tribunal for Electricity (APTEL) in its Judgement dated 10.05.2012 on the Appeal No.14 of 2011 of Bihar Industries Association and Appeal No.27 of 2011 M/s. Kalyanpur Cements Limited has commented as below:

"We appreciate that the determination of cost of supply to different categories of consumers is a difficult exercise in view of non-availability of metering data and segregation of network costs. However, it will not be prudent to wait indefinitely for availability of the entire data and it would be advisable to initiate a simple formulation which could consider the major cost element to a great extent reflect the cost of supply. There is no need to make distinction between the distribution charges of identical consumers connected at different nodes in the distribution network. It would be adequate to determine the voltage-wise cost of supply considering the major cost element which would be applicable to all the categories of consumers connected to the same voltage level at different locations in the distribution system. Since the State Commission has expressed difficulties in determining voltage wise cost of supply, we would like to give necessary directions in this regard"

9.2.2. Methodology suggested by APTEL

The methodology given by the APTEL for determination of voltage-wise "Cost of Supply" and the inputs required are briefly given below:

"(i) The technical distribution system losses in the distribution network are to be assessed by carrying out system studies based on available load data for 33 kV and above

- voltages and in the case of 11 kV and 0.40 kV (LT), due to vastness of data, field studies to be carried out with representative feeders for the various consumer mix prevailing in the distribution system.
- (ii) The total losses in the system, which include commercial or non-technical losses, will be more than the technical losses determined based on the system studies. Therefore, the difference between the total losses in the system and the technical losses determined by the studies may have to be apportioned to different voltage levels in proportion to annual gross energy consumption at the respective voltage level.

The annual gross energy consumption of all consumers at a voltage level will be the sum of energy consumption of all consumer categories connected at that voltage plus the technical losses corresponding to that voltage level as worked out by the system studies.

- (iii) The power purchase cost which is the major component of tariff is to be segregated for different voltage levels considering the transmission and distribution losses, both technical and non-technical commercial for the relevant voltage level and upstream system.
- (iv) The network costs such as O&M costs, interest on loans, depreciation, interest on working capital and return on equity are to be pooled and apportioned equitably on pro-rata basis to all voltage levels to determine the cost of supply".

9.2.3. Pre-requisite for arriving at the voltage wise Cost of Supply (CoS):

As per the APTEL Judgment, an assessment of the technical and commercial loss in the distribution system network by carrying out system studies based on the available load data for 33 kV and above and field studies for representative feeders for 11 kV and 0.4 kV of the various consumer mix prevailing in the distribution system as well as segregation of network costs is a pre-requisite for arriving at the voltage-wise cost of supply.

The Commission has thus computed the voltage wise cost of supply following the methodology suggested by the APTEL.

9.3. Determination of Voltage-wise Technical losses

Petitioners' submission

The Petitioners have submitted that the Transmission and Distribution losses in a system comprises of two separate components – Technical Losses and Commercial Losses.

- a). Technical losses occur naturally and consist mainly of power dissipation in electricity system components such as transmission and distribution lines, and transformers.
- b). Commercial losses are caused by actions external to the power system and consist primarily of electricity theft, non-payment by customers, 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 which remain would be the commercial losses.

It is further submitted that the Petitioners have computed the voltage wise losses based on certain assumptions after observing the available sample feeder data available with the Distribution companies. MSPDCL has submitted that the voltage wise cost of supply has been computed keeping in view of distribution loss percentage. The Voltage wise losses submitted by the Licensee is tabled below:

Table 9.1: Voltage-wise Technical Losses adopted for MSPDCL for FY 2024-25

SI.	Voltage Level	Technical	Cumulative
No	(kV)	Loss (%)	Loss (%)
1.	400/132	3.00%	3.00%
2.	132/33	4.20%	7.07%
3.	33/11	6.71%	13.31%
4.	11/0.4	11.98%	23.70%

Commission's 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 2024-25.

The MSPDCL had submitted the overall T&D Losses at 18.00% in their ARR submission but here now indicated different losses adding up to 23.70% is not correlatable and 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 7.30% as approved for MSPCL and Distribution Loss of 8.66% which is yielding to overall losses at 15.18% as approved by the Commission for FY 2024-25.

The Commission has considered the following voltage-wise technical loss for FY 2024-25 for computing voltage wise cost of supply:

Table 9.2: Voltage-wise Technical Losses adopted for FY 2024-25

SI. No	Voltage Level (kV)	Technical Loss (%)	Cumulative Loss (%)
1.	400/132kV State Trans.Losses	3.00%	3.00%
2.	33 kV	3.49%	6.39%
3.	11 KV	4.13%	10.25%
4.	0.4 KV	5.49%	15.18%

9.4. Computation of Voltage-wise Cost of Supply

Petitioners' submission:

The Petitioners have submitted that the voltage wise sales have been arrived

considering the projected energy sales for FY 2023-24, across various categories at the respective voltages as mentioned in the Table below:

Table 9.3: Classification of Categories based on Voltage of power supply

SI. No	Voltage Level (kV)	Sales Categories (%)
1.	400/132	None
2.	132/33 kV	Airport, Satyam Steel, Malom Oil Depot
3.	11 kV	Tamu Power supply, MES(Leimakhong), HT Commercial, HT Public Water works, HT Irrigation, HT agriculture, Medium Industries, Large Industry and Bulk Supply
4.	0.4 kV	LT Domestic, LT Public Lighting, LT PWWs, LT Irrigation, LT Agriculture and LT Small Industries.

MSPDCL had not computed the voltage wise cost of supply for FY 2024-25 but merely provided the data called for such as the energy sales projected by them and input energy required at various voltages and the T&D losses assumed at various voltages. Further, the projected costs, i.e., power purchase costs and network costs have been provided in their information. The details are as follows:

Table 9.4: apportionment of Commercial losses to voltage wise sales for FY 2023-24

Voltage Level (KV)	Sales (MU)	Tech. Losses (MU)	Input Energy (MU)	Comml. Losses (MU)	Input at State Periphery
220/132	0.00	0.00	0.00	0	0
33	2.11	0.09	2.20	0.33	2.53
11	116.45	7.26	123.71	18.41	142.12
400V	456.62	47.42	504.04	72.20	576.25
Total	575.18	145.99	629.95	180.95	720.90

Table 9.5: PP cost and network Cost details provided by MSPDCL for FY 2023-24

Particulars of average Power Purchase Cost for 2024-25

SI	Particulars	Amount
No.		
1	GrPurchase (MU)	1136.09
2	RLDC Losses 2.33%	26.81
3	State Periphery (MU)	1109.27
4	Power Purchase cost + Inter-State Trans cost (Crs)	694.95
5	AVG. PP Cost (Rs./kWh)	6.26

Allocation of Network cost for the FY2024-25

SI. No.	Particulars	Amount (Rs. Cr)
1	Employee Cost	107.37
2	R&M costs	14.73
3	A&G expenses	8.34
4	Depreciation	20.92
5	Interest & Finance Charges	56.70
6	Interest on Working Capital	7.87
7	Interest on Security Deposit	0
8	Return on Equity	1.56
9	Miscellaneous Expense	78.67
10	Total (1 to 11)	296.15
11	State Transmission cost	112.84
12	Total cost	408.99

Commission's analysis

Since the information made available by the Licensee is partial, the Commission had computed the voltage-wise cost of supply based on the energy sales and T&D losses approved for MSPDCL in FY2024-25 duly making certain assumptions in view of the lack of adequate information from MSPDCL.

9.4.1. Energy Sales approved for FY 2024-25

The Commission has considered the approved energy sales for FY 2024-25 for MSPDCL and segregated as per voltage-wise as given in the Table below:

Table 9.6: Voltage wise Energy Sales (MUs) approved for FY 2024-25

Voltage Level (kV)	Sales Category	Sales (MU)
400/132	None	0.00
132/33	Airport, Satyam Steels	2.85
33/11	HT category supplies (All)	222.21
400V	L.T category supplies (All)	672.88
	Grand Total sales	897.94

9.4.2. Voltage-wise Technical Loss considered for FY 2024-25:

As per guidelines enumerated in APTEL Judgement, Distribution system technical losses have to be assessed by carrying out system studies based on available data. Since the DISCOMs have not provided such data, the Commission has assumed the technical losses at various voltage levels based on approved losses as shown in the Table above.

As stated in para 33 of APTEL Judgement dated 10.05.2012, the voltage-wise commercial losses are to be arrived at by segregating the total commercial losses in proportion to grossed up sales (Actual consumption + technical loss) voltage-wise.

In para 34 of APTEL Judgement it is reiterated that the power purchase cost is to be segregated for different voltage levels considering transmission and distribution losses (both commercial and technical) for relevant voltage level and upstream system. Thus, the losses (technical) at 33 kV shall be the losses at that voltage and also at upstream 132 kV voltages, the losses (technical) at 11 kV shall be the losses at that voltage and also of upstream 33 kV voltage and 132 kV voltage level and similarly for LT voltage.

The technical Losses have been arrived on the basis of the formulae given in the following table:

Table 9.7: Formulae for arriving at the technical losses at various voltage levels

Voltage Level (kV)	Sales (MU)	Volt. wise Tech. Loss (%)	Energy Input (MU)	Tech. Losses (MU)
1	2	3	4	5
220/132	Α	w	=A/(1-w%)	= 4)-(2)
33 kV	В	х	=B/(1-x%)(1-w%)	= (4)-(2)
11 kV	С	у	=C/(1-y%)(1-x%)(1-w%)	= (4)-(2)
0.4 kV	D	z	=D/(1-z%)/(1-y%)(1-x%)(1-w%)	= (4)-(2)
Total	(A+B+C+D)			

The technical losses and commercial Losses are computed as given in the Tables below:

Table 9.8: Computation of Technical losses at various voltage levels

SI. No	Voltage Level (kV)	Technical losses (%)	Cumulative loss (%)	Energy sale (MUs)	0,	Technical loss (MUs)
1	2	3	4	5	6	7= (6-5)
1	220/132	3.00%	3.00%	0	0	0.00
2	33 kV	3.49%	6.39%	2.85	3.04	0.19
3	11 kV	4.13%	10.25%	222.21	247.59	25.38
4	0.4 kV	5.49%	15.18%	672.88	793.29	120.41
	Total			897.94	1043.93	145.99

Table 9.9: Computation of Commercial losses at various voltage levels

SI. No.	Voltage Level (kV)	Energy sale (MUs)	Technical loss (MUs)	Sales + Tech. Loss (MUs)	Commercial loss (MUs)	Actual Purchases (MU)
1	2	3	4	5= (3+4)	6	7= (5+6)
1	220/132	0	0.00	0	0.00	0.00
2	33 kV	2.85	0.19	3.04	0.53	3.57
3	11 kV	222.21	25.38	247.59	42.92	290.51
4	0.4 kV	672.88	120.41	793.29	137.51	930.80
	Total	897.94	145.99	1043.93	180.95	1224.88

9.4.3. Allocation of Power Purchase Cost for FY 2024-25

The power purchase cost (excluding PGCIL Losses) has been allocated for different voltage levels considering the State Transmission loss and Distribution loss, (both commercial and technical) for the relevant voltage level and upstream as per the methodology indicated in APTEL Judgement.

Out of the total power purchase of 1254.10 MU approved for MSPDCL the CTU loss works out to 29.22 MUs as shown in the Energy Balance will result in 1224.88MU. The Commission, after deducting the regional transmission losses from the total power purchase computed the average power purchase cost per unit as detailed below:

Table 9.10: Average Power Purchase Cost

SI. No.	Particulars	MSPDCL
1	Gross Power Purchase (MU)	1254.10
2	PGCIL Losses (MU)	29.22
3	Net Power availability at transmission periphery (MU) (1-2+3)	1224.88
4	Total Power Purchase Cost and PGCIL Charges (Rs. Crs)	738.78
5	Average Power Purchase Rate (Rs /kwh) [(7/4)*10]	6.031

Table 9.11: Allocation of power purchase cost

SI. No.	Voltage Level (kV)	Sale (MUs)	Actual Purchases (MUs)	Power Purchase Cost (Rs. Crore)	Assigned PP cost (Rs./kWh)
1	2	3	4	5	6 = (5÷3)
1	220/132	0	0.00	0.00	0.00
2	33 kV	2.85	3.57	2.15	7.56
3	11 kV	222.21	290.51	175.22	7.89
4	0.4 kV	672.88	930.80	561.41	8.34
	Total	897.94	1224.88	738.78	8.23

9.4.4. Allocation of Network Cost for FY 2024-25

The APTEL in its Judgement has indicated the method for allocation of network costs at different voltage levels as under:

"....... all other cost such as Return on Equity, interest on loan, interest on working capital and O&M costs can be pooled and apportioned equitably, on pro- rata basis to all the voltage level to determine the cost of supply".

The network costs approved by the Commission for FY 2024-25 are as given in table below:

Table 9.12: Network cost approved for FY 2024-25

(Rs Crore)

SI. No	Particulars	MSPDCL
1	Employee expenses	107.37
2	R&M expenses	14.73
3	A&G expenses	8.34
4	Depreciation	20.92
5	Interest on loan	55.07
6	Return on equity	1.56
7	Interest on SD	0.00
8	Interest on working capital	7.87
9	Total (1 to 8)	215.86

Table 9.13:Allocation of Network cost voltage wise for FY 2024-25

Voltage Level	Category of sales	Energy Sale (MU)	Sales + Technical loss + Comml. Loss (MU)	echnical loss + Network Cost Cost Cost Cost Cost Cost Cost Cost	
1	2	3	4	5	6=(5/3)
220/132kV	None	0.00	0.00	0	0
132/33kV	Airport, Satyam Steels	2.85	3.57	0.63	2.209
33/11kV	All HT supplies	222.21	290.51	51.20	2.304
400V	All LT supplies	672.88	930.80	164.03	2.438
	Total	897.94	1,224.88	215.86	2.404

9.4.5. Cost of supply at different voltage levels

Based on the power purchase cost and network cost as above, the cost of supply at different voltage levels is arrived at as table below:

Table 9.14: Cost of supply at different voltage levels approved for FY 2024-25

SI. No	Supply voltage	Power Purchase cost (Rs./unit)	Network cost (Rs./unit)	Cost of supply (Rs./unit)
1	2	3	4	5=(3+4)
1	220/132	0	0.00	0.00
2	33 kV	7.56	2.209	9.768
3	11 kV	7.885	2.304	10.189
4	0.4 kV	8.343	2.438	10.781

9.5. Detailed Study to assess Voltage wise Technical Losses

The Commission is of the view that in the absence of actual data of voltage-wise technical losses as well as voltage-wise network costs, the voltage- wise cost of supply worked out based on above methodology as suggested by the APTEL will not be a true reflection of actual voltage-wise cost of supply. There is a need to work out the voltage-wise cost of supply in a more scientific manner, considering the actual data of voltage-wise technical loss levels derived from field studies and in accordance with the methodology suggested by the Commission

The Commission reiterates its earlier directive to the DISCOMs to undertake a detailed study to estimate the technical loss levels at each voltage level and compute the voltage-wise cost of supply and include the same in next tariff petition for FY 2024-25, keeping in view the methodology suggested now in this Tariff Order

10. Wheeling Charges for FY 2024-25

10.1. Background

MSPDCL has not proposed its wheeling charges for FY2024-25. The MSPDCL is not maintaining separate accounts for the distribution wire business and retail supply business. So, the ARR of the wheeling business is arrived at as per the following matrix.

Table 10.1: Allocation Matrix

SI. No.	Particulars	Wire business	Retail Supply business
1	Power purchase cost	0%	100%
2	Inter-State transmission Charges	0%	100%
3	Intra-State Transmission Charges	0%	100%
4	NERLDC Charges	0%	100%
5	Employee cost	60%	40%
6	R & M expenses	90%	10%
7	Adm. & General Expenses	50%	50%
8	Depreciation	90%	10%
9	Interest & Finance Charges	90%	10%
10	Interest on working Capital	10%	90%
11	Provision for bad debts	0%	100%
12	Income tax	90%	10%
13	Return on equity	90%	10%
14	Contribution to contingency reserves	100%	0%
15	Non-tariff Income	10%	90%

10.2. ARR for wheeling business projected by MSPDCL

Table 10.2: ARR for Wires Business for FY 2024-25 projected by MSPDCL

SI. No.	Particulars (Proposed by MSPDCL)	Total ARR (Rs.Crs)	Wire Business (%)	Retail Supply (%)	Wire business ARR (Rs. Crs)	Retail Supply business ARR (Rs.Crs)
1	Power Purchase Expenses	597.24	0%	100%	0.00	597.24
2	O&M Expenses	130.44				
	Employee Expenses	107.37	60%	40%	64.42	42.90
	Administration & General Expenses	8.34	50%	50%	4.17	4.20
	Repair & Maintenance Expenses	14.73	90%	10%	13.26	1.47
3	Depreciation	20.92	90%	10%	18.82	2.10
4	Interest on Long-term Loan Capital	56.70	90%	10%	51.03	5.67
5	Interest on Working Capital and on consumer Security Deposit	7.87	10%	90%	0.79	7.08
8	Bad Debts Witten off	17.20	0%	100%	0.00	17.20

SI. No.	Particulars (Proposed by MSPDCL)	Total ARR (Rs.Crs)	Wire Business (%)	Retail Supply (%)	Wire business ARR (Rs. Crs)	Retail Supply business ARR (Rs.Crs)
7	Transmission Charges intra-state and inter state	210.54	0%	100%	0.00	210.54
8	Return on Equity (Grossed up for	1.56	90%	10%	1.40	0.16
9	Truing gap of past years	61.47	0%	100%	0.00	61.47
	TOTAL ARR	1103.94			153.89	950.04
10	Lest Non-Tariff Income	10.84	10%	90%	1.08	9.76
11	TOTAL ARR	1093.09			152.81	940.28
12	Energy Available at State Periphery (MUs)	Energy Balance Table-48			1095.05	
13	Wheeling Tariff (Rs.kWh)	Sr.11•10/Sr.12			1.40	

The proposed Wheeling Charges for FY 2024-25 have been computed based on the methodology adopted by the Hon'ble Commission for determining the Wheeling Charges in the MYT Order dated March 12, 2018, as shown in the Table above.

Table 10.3: ARR for Wires Business for FY 2024-25 projected by MSPDCL

SI. No	Particulars Particulars	Units	Amount
1	ARR for Wires Business	Rs. Crore	152.81
2	Energy available at Distribution periphery	MU	1095.05
3	Wheeling Charges	Rs/kWh	1.3955

Thus, MSPDCL proposes Wheeling Charges of Rs. **1.40 per kWh** for Open Access transactions in the State of Manipur.

Commissions Analysis

ARR for wheeling business arrived based on approved ARR and methodology vide Table 10.1 supra is as detailed in table below.

Table 10.4: ARR of wheeling business approved by the Commission for FY 2024-25

SI. No.	Particulars	Total ARR	Wires Business	Retail Supply Business	Wires ARR	Supply ARR
Α	Expenditure	Rs.Crs	(%)	(%)	Rs.Crs	Rs.Crs
1	Cost of power purchase	641.07	0%	100%	0	641.07
2	Inter-State Transmission charges	97.00	0%	100%	0	97.00
3	Intra-State Transmission charges	90.22	0%	100%	0	90.22
4	NERLDC Charges	0.71	0%	100%	0	0.71
5	O&M Expenses	130.44			81.85	48.59
	Employee Expenses	107.37	60%	40%	64.42	42.95
	Repair & Maintenance Expenses	14.73	90%	10%	13.26	1.47

SI. No.	Particulars	Total ARR	Wires Business	Retail Supply Business	Wires ARR	Supply ARR
	Administrative & General Expenses	8.34	50%	50%	4.17	4.17
6	Depreciation	20.92	90%	10%	18.83	2.09
7	Interest on Loan	55.07	90%	10%	49.56	5.51
8	Interest on Working Capital	7.87	10%	90%	0.79	7.08
9	Provision for bad debts	0	0%	100%	0	0
	Total Cost	1043.30			151.03	892.27
В	Add: Return on Equity	1.56	90%	10%	1.40	0.16
	Add: Income Tax	0	90%	10%	0	0
	B: Total	1.56			1.40	0.16
С	Total ARR: A+B	1044.86			152.43	892.43
D	Less (Non-Tariff Income)	10.85	10%	90%	1.09	9.765
E	Less: FY2022-23 True-up Surplus	46.50		100%	0	46.50
F	Less: Past six year True-Up	0		100%	0	0
	Sub-total (D to F)	57.35			1.09	56.27
	Net Aggregate Revenue Requirement (C-D-E-F)	987.51			151.34	836.16

10.3. Wheeling Tariff

The wheeling tariff has been calculated on the basis of the ARR for wheeling business and total energy sold as detailed in table below:

Table 10.5: Wheeling Tariff approved by the Commission for FY 2024-25

SI. No.	Particulars	Unit	Amount
1	ARR for wheeling function	Rs/Crore	151.34
2	Energy available at Distribution periphery	MU	897.94
3	Wheeling tariff	Rs/kWh	1.685

The Commission approves wheeling charge at Rs. 1.685/kWh for FY 2024-25 as against zero projected by MSPDCL.

MSPDCL Tariff Order for FY 2024-25

11. Directives

11.1. General

While examining the information and data contained in the Tariff Petition for FY 2021-22, it is observed that the computation and compilation of the data have been done based on assumptions only and as a result, there has been difficulties in finalization of the ARR and determination of retail tariff also. The above observation itself substantiates the fact that the administrative, technical and commercial performances of the MSPDCL require substantial improvement within a specified time frame.

Similar situation was noticed in the ARR & Tariff petition for the FY 2021-22. The Commission had observed that while there is ample scope for reducing cost and increasing efficiency in the operation of the department, serious efforts appear to be lacking. It is in the above context that certain directives were given in the earlier Tariff Orders of which some were fully complied with. The Commission expected that MSPDCL would take prompt action on the directives and monitor their implementation. Unfortunately, action is yet to be taken on most of the important directives, which could make significant difference to operational efficiency and cost. In some cases, action has no doubt been initiated, but overall seriousness with which the directives were issued by the Commission does not appear to have been realized by the MSPDCL.

In the above background, the Commission is constrained to repeat the directives which have not been fully complied with and also specific new directives are added.

BALANCE DIRECTIVES ISSUED

Directive 3:

Maintenance of Asset & Depreciation Registers

MSPDCL was directed to update the asset register and submit to the Commission soon.

Compliances:

The Asset register is enclosed herewith as Annexure – I. GIS Mapping of around 70% is already completed and by June 2024 will be fully completed.

Commission's Comments

It is replied that in June 2024 that Asset register will be completed appears very much surprising. Thus, the deadline for submission is now left to the Licensee decision.

However, the directive is treated as not complied with.

Directive 4:

Management Information System (MIS)

MSPDCL was directed to take appropriate steps to build up credible & accurate database and management information system (MIS) and regularly update the same for future record and reference. Arrangement may also be made for "On-line Payment" and "Payment through Bank" of the electricity bills.

Compliances:

Management Information System (MIS) is a part of the ERP process under RDSS. The ERP tender has already been floated. However, the "On-line Payment" and "Payment through Bank" of the electricity bills is being currently provided through our own inhouse IT billing system (http://billing.mspdcl.info)

Commission's Comments

MSPDCL must make assiduous effort to implement ERP system under the RDSS scheme of Govt of India in order to have robust IT system to capture and accurate information on the performance of the utility. Since it is mentioned that ERP tenders are in the process of floating and outcome is awaited **Therefore**, the directive is treated as uncompiled and it is still in force.

Directive 5:

Revenue Arrears

MSPDCL was directed to assess year-wise Revenue Arrears due from consumers and submit a report by 30th September, 2011 to the Commission. The MSPDCL was also further directed to initiate action to collect/ liquidate the arrears.

Through prepaid meters future accumulation of fresh arrears can be arrested. At present we are in Post- paid meters' usage stage. In the directive, it was requested to submitted category wise year wise arrears due at a point of time say as on 31.03.2018. This may be reported by 30.06.2019.

Compliances:

The category wise outstanding arrears as on 31-03-2023 is as Below. The migration work of consumers is currently under process. So far MSPDCL have migrated around 80% of the total consumers in our billing system (http://billing.mspdcl.info).

SI. No	Catetory-wise outstanding dues up till 31/03/2023	Amount (Rs.Crs)
	LT Category	
1	Domestic LT	423.613
2	Kutir Jyoti LT	4.389
3	Commercial LT	45.154
4	Public Lighting LT	2.412
5	Public Water works LT	0.679
6	Irrigation and Agri., LT	0.001
7	Small Industry, LT	3.855
	HT Category	
1	Commercial HT	16.231
2	Bulk Consumer HT	49.872
3	Public Water Works, HT	2.464
4	Irrigation and Agri., HT	0.422
5	Medium Industry, HT	2.314
6	Large Industry, HT	6.619
	Total	558.024

Commission's Comments

The Category-wise and year-wise arrears details were called for was not submitted to the Commission so far, though the same information was directed for submission on or before 31st March 2018. The reply doesn't seems addressing this issue context. The reply appears casual in nature without any seriousness. The latest Revenue arrear dues as on 31.03.2021 and the amounts collected quarter-wise during FY 2019-20, 2020-21 and 2021-22 needs to be submitted to the Commission without fail or any plausible reason on or before 30th June 2024. The pending information shall contain the category wise arrears (including Government departments etc.) and had just added information from 2019 onwards is relevant and required This directive is not dropped and it is still to be complied.

Directive 8:

Sale of Power Outside the State

MSPDCL was directed to ensure that only surplus power be sold under UI sales after fully meeting the State's requirement without any stagnation of supply in the State. This

may be ensured strictly.

The average power purchase cost in Rs.6.84/kWh during FY 2017-18. While the surplus power of 225.71 MU but not 207.74 MU was sold at an average cost of Rs.2.438/kWh during FY 2017-18 by incurring loss in every unit sold. Instead, had the power drawn to the actual requirement by proper planning this type of loss can be avoided.

Therefore, this practice of selling units at loss be discontinued forthwith. The loss on account of this surplus power sell cannot be passed on to the consumers partially, though Government subsidy is also absorbing to a greater extent. In future, the Commission will flag this kind of loss transactions and would disallow to pass it on to consumers from next year tariff determination.

Compliances:

Due to improvement in the UI mechanism, the Power purchased under UI decreased from 33.58 MU in FY 2016-17, 6.02 MU in FY 2017-18 and 16.57 MU in 2018-19, 12.96 MU in FY 20-21 and 12.87 Mus in FY 21-22 (UI over drawal).

Further, sale of surplus power on IEX has been reduced from 207.74 MU in FY 2017-18 to 130 MU in 2018-19, 111.41 MU in FY 20-21 and 117.65 MU in FY 20-21. The total power sold outside the state in IEX is less than 10% of the total power purchased.

It is submitted that the load curve of the state is not flat and the power demand varies from time to time. The evening peak of 1800- 2100 hours faces a surge peak whereas the off-peak night hours of 2300-500 hours faces a huge slump in power, which is similar curve in most states. The states consumption is varying which is more in winter than other seasons. Also, the availability is fluctuating with power availability in monsoons much higher from hydro plants than the lean season of winter.

MSPDCL is now managing the variability by banking the electricity with trader when demand is low and CGPs are available. During winter season when demand is more than availability from CGPs the banked energy available with other utilities is used. At times, MSPDCL is constrained to take power from the CGS when the plants are operating at technical minimum or due to water height in dams, the Hydros have to be operated but the demand is not present.

As such, the outside state sales cannot be completely done away with. However, MSPDCL tries to limit the outside state level to close to 10% as done till now. It is requested that this directive may be reviewed and dropped.

Commission's Comments

The above reply is exactly what has been provided for in FY 2022-23 also without any change without any additional information. In future, the Commission will flag this kind of loss transactions and would disallow to pass it on to consumers from next year tariff determination if felt abnormal. Therefore, the dropping of this directive now would not precluded from imposing the same again if felt needed.

Directive 10: Unauthorized Connection/Theft of power Cases & Directive 11: Detailed Survey & Investigation

In the above two directives, the Commission had directed to carryout detailed survey & Investigation to

- 1. Identify unauthorized connections.
- 2. Physical verification of the connected load of all connections.
- 3. Physical verification of the categories under which the consumers are availing supply.
- 4. Verification & updating of names of the consumers etc. and 5. Regularize 30000 unauthorized consumers annually. Unauthorized connections shall be brought under billing once they are identified and regularized but not by prepaid metering plan. In either case physical verification of connections in only remedy.

Compliances:

1.Identify unauthorized connections:

Reply: Regular check is conducted at Sub-Divisional Level. Report for 2022-23 is enclosed as Annexure 2

2. Physical verification of the connected load of all connections.:

Reply: Physical Verification are done during the time of raid.

3. Physical verification of the categories under which the consumers are availing supply:

Reply: Physical Verification are done during the time of raid.

4. Verification & updating of names of the consumers etc. and

Reply: Verification and updating of names of the consumers are done on regular basis through consumer visit and migration of consumers to (http://billing.mspdcl.info)

5. Regularize 30000 unauthorized consumers annually. Unauthorized connections shall be brought under billing once they are identified and regularized but not by prepaid

metering plan. In either case physical verification of connections in only remedy

Commission's Comments

The directive will be in force till such time the comprehensive report on theft and pilferage rampancy status is submitted upon physical verification drive to be conducted by MSPDCL. Of late, Commission had noticed the revenue under collection in FY 2021-22 to the extent of above Rs.100Crs, which could be due to improper data of contracted load of consumers and unauthorised or existence of unbilled consumers still prevalent in the State causing lower revenue collection than the expectation by the Commission for the quantum of energy sales achieved in FY 2021-22.

This issue is of some magnitude and of serious nature needing more focused attention to plug the latent loop-holes of chronic nature still prevalent in the revenue collection mechanism.

The information submitted is cumbersome and not precisely summarised the year-wise data, instead the various excel sheets containing various column are provided only in the case of theft cases but nothing in respect of unauthorised connections relating to point-5. The comparative figure of levied penalty and recovery of sum is not provided anywhere in reply, leaving the same to the commission to ascertain for the annexures is improper. The same data cannot be mentioned in the directive reply is not the correct approach to reply the directive. The reply furnished in not satisfactory and incomplete.

This directive will be kept in force to monitor the progress and improvement to be made in future which is measured in terms of revenue collection commensurate with retail energy sales to the satisfaction of Commission.

Directive 12:

Replacement of Defective Meters and Installation of Meters to Un-Metered Connections

MSPDCL was directed to provide meters to all un metered consumers and replace the defective meters within the time frame given in the Commission Order Based on the availability of new energy meters, 100% replacement of No. 24012/2/5/09 – JERC dt 7.1.2011 on 100% metering plan and submit quarterly report regularly.

Compliances:

At present there is no meter shortage and all un-metered connections are installed with prepaid meters as and when the prepaid metering work is done at the Sub-Division.

Commission's Comments

The reply appears no constructive progress seems to have gained in this matter in the absence of requisite meters in stock since last year 2020-21 Tariff Order finalisation. The report called for on the year-wise status is missing the reply from MSPDCL side, except the descriptive explanation offered as above.

A report in this regard should be submitted by MSPDCL soon after the issue of this order without any delay latest by end of July 2024.

The Directive is treated as still in force.

BALANCE DIRECTIVES ISSUED IN FY 2015-16

Directive 13: Physical and Financial Status of RAPDRP & RGGVY Schemes

As per above directive MSPDCL has to submit physical and financial progress of work done and the impact of the works on revenue performance and metering with details of work done, amount of revenue increases etc.

Compliances

Attached Annexure-3 (contains the letters issued by ministry of Power relating to 2019 onwards)

Commission's Comments

The reply was given by the Licensee for this directive **is not relevant** to RGGVY schemes physical and financial status but relates to latest schemes taken up by MOP after 2019 onwards. While the directive relates to FY 2015-16 onwards. Despite, commission expressed its displeasure on the cold response in the last year (FY 2022-23) tariff order. Explain, why this be not treated as dis-obedience and Commission to take suitable action for the disobedience.

Directive 16: Investment Plan and Capping of Capital expenditure

Annual Investment Plan shall be submitted to the Commission and necessary approval

of Commission shall be obtained for all major capital works costing Rs. 5.00 Crore and above before execution of the works. Whether it is own funds or Govt. funds no matter, all capital works costing Rs.5.00 Crore and above shall be submitted to commission for approval.

Compliances:

The capital investment plan for MSPDCL has been provided in the MYT petition of MSPDCL for FY 24 to FY 28 as per the data formats of the Commission.

Commission's Comments

The above reply is just as what was provided without any wee-bit change in reply is observed as abnormal behaviour of the Licensee and not acceptable.

The Licensee had not adopted some format of its choice instead of the format stipulated by the Commission in the present MYT submission. The directive was specifically given for obtaining prior approval and mere intimation in MYT filing will not suffice the intention of the Directive in any way. All capital works costing Rs.5.00 crores and above shall have to be submitted to Commission for prior approval before the works are taken up. The source of funding is immaterial.

A report in this regard shall be submitted invariably to the Commission containing the projects under execution by MSPDCL immediately for approval lest the capitalisation of assets and consequential expenditure benefits will be prevented to accrue on those capital investments if noted in future.

Directive 17:

Maximum Demand Indicator Meters (MDI) to be provided to all high value connections **Compliances:**

It is submitted that the prepaid energy meters are already having facility to record the Maximum Demand. The high value connections are having the MD record facility and hence MD recording is taken care of. MSPDCL already has the facility of recording MDI of high value consumers. In this scenario, the directive may be reviewed

Commission's Comments

The above reply is just as what was provided without any wee-bit change in reply is observed as abnormal behaviour of the Licensee and not acceptable.

Where is the detailed reply on HVC with MDI which was due on July 2020 and this reply has no relevance in that context of what has been directed and MSPDCL behaviour is very much deplorable. Mere stating that the MDI is taken care will not suffice in this case. Details of High Value consumers with MDI shall have to be submitted forthwith from the time this order is issued.

Directive 18:

As verified from the Tariff Schedule, it is observed that unmetered categories are prevailing in all categories including HT. Continuance of HT connections without meters is highly irregular. As per Electricity Act, 2003 no service connection be released without meter. As such, the MSPDCL is directed to provide HT meters to all unmetered HT connections in the first instance and report compliance by 30.09.2016 positively.

In respect of LT categories, all unmetered connections be provided with meters by 31.03.2017. Progress and providing meters to unmetered connections be reported quarterly indicating category-wise number of unmetered connections at the beginning of the quarter and installed during the quarter and balance to be installed.

Compliance if fixing meters to all unmetered connections be repeated by 30.09.2019 positively.

Compliance Report:

In this regard it is submitted that MSPDCL is not allotting any new connection without installation of respective meters.

Commission's Comments

This kind of replying by MSPDCL shall be eschewed forthwith and this may be treated as advance warning for avoidance of Commission action for wage replying.

Metering of all consumers for proper revenue collection is of prime importance for the financial health of MSPDCL. All consumers are to be metered within 6 (six) months without fail.

The status report on this matter is still awaited by the Commission to know the progress achieved in the field ground reality. The MSPDCL may put up all its bet efforts sincerely to submit to achieve the metering as it amounts to non-compliance of Section-

55 of E.Act 2003 and asking for time upto FY2025to achieve 100% metering is unacceptable and present status achievement report be submitted for scrutiny forthwith. The reply is totally disregarded by the Commission and the same directive is still in force

DIRECTIVES ISSUED IN FY 2016-17

Directive 20: In house development of IT enabled system:

MSPDCL is directed to take steps for development of in-house IT enabled system so that all software issues can be attended/solved departmentally instead of depending on consultants.

Compliance Status

The entire software related to billing, payment and collection is now maintained inhouse. Any issues, modifications/upgrades are now done in-house in much lesser time comparatively.

The billing system is capable of churning out consumers' billing and payments data as desired to assist in energy audits and is being actively employed for the same.

Under RDSS, UBS (Unified Billing System) for total computerization of billing and payments as per the direction of the Ministry of Power is being planned. LOA has been awarded for taking up the work and Energy Accounting Module are planned to be taken up under RDSS of which the tender is yet to be floated.

Commission's Comments

The major portion of the above compliance report is a facsimile of last year reply with little additions at the end. This kind of replying by MSPDCL shall be eschewed forthwith. The Commission desires that IT application should be provided in energy audit to reduce AT&C losses. A report may be submitted in this regard by May 2020 is still awaited and not complied with during FY 2020-21. Which is still not submitted for reasons not covered in the reply and it appears quiet casual in nature.

The Status reply with reasons for delay in not sending earlier reply is expected by Commission on or before 1st July 2024. Mere stating that it is being implemented will no longer serve the purpose.

Directive 21:

Updation of computerised billing program of power factor and rebate/surcharge

MSPDCL should up-to-date computerised billing programme to facilitate adoption of power factor rebate/surcharge as indicated in the tariff schedule.

Compliance Status

This compliance will be covered when UBS module is implemented.

Commission's Comments

The status report on this matter is still awaited by the Commission to know the progress achieved in the field ground reality. Until such time the Directive will be in force and mere explanation of its achievement will not be considered for dropping. Even after observing the revenue realised in FY 2022-23, all the HT category consumers were under billed for not adopting the power factor in the billing cycle throughout the year. Then where is the question of dropping this directive without yielding the desired purpose

Directive 22:

Installation of meters to all 11 kV feeders and DT's

MSPDCL should install meters for all 11kV feeder and DT's in all RAPDRP covered towns by 30.06.2016. Sample study should be conducted to know the highest feeder loss and highest DT loss and report be submitted to the Commission by 30.09.2016. Targeted sale (date) by which 100% metering of 11 KV feeders be achieved may be intimated in the first insistence.

Compliance Status

100% 11 KV feeder meters and DT meters will be installed under RDSS scheme and is likely to be completed by FY 25. LOA for metering is already awarded..

Commission's Comments

The details of 11kV feeders, where the meters are installed may be reported along with monthly energy transmitted through the feeder for any consecutive period of 3 (three) months need be submitted by June 2020 is still awaited and not complied with during FY 2020-21. The status reply with reasons for delay in not sending earlier reply is expected by Commission immediately.

DIRECTIVES ISSUED IN FY 2017-18

Directive 24

The MSPDCL is directed to submit the required information in the format prescribed in JERC M&M (MYT) Regulations, 2014 from next tariff petition onwards which are mandatory.

Compliance status

MSPDCL has submitted all the necessary required information in the format prescribed.

Commission's Comments

The above reply is just a facsimile of the earlier year reply with no addition to it. But the formats designed by the Commission has not been adopted in this MYT filing. The MSPDCL is advised to be careful in future so that this irregularity don't recur and have a look at the formats submitted by P&ED Mizoram for format adherence in future. The repetition of same issue consecutively is unwarranted in this format preparation and don't prefer to send evasive replies on this matter and the directive will be continued further to monitor the improvement in future submission as the Filing made in FY 2024-25 is not made properly. The present filing in FY 2024-25 made is a skeleton submission of data without complying with the prescribed format specified in the MYT Regulation 2014. The basic trust on MSPDCL is missing upon noticing the non-compliance of what has been promised in the replies to directives and this trend is more prevalent.

Directive 25

The Commission is of the view to introduce KVAH billing in energy charges to all HT categories and LT categories with contracted load 20 kWh and above with effect from FY 2018-19 onwards. The licensee is directed to see that all HT connections are provided with tri-vector/MDI meters for such connections without fail.

Compliance status

Meter reading and billing for all the HT consumers has been started for kVAh measurement in line with the tariff order. All the HT consumer meters are having trivector / MDI meters are enclosed as Annexure-4.

Commission's Comments:

The MSPDCL is directed once again to provide details of all HT consumers with required tri-vector/MDI meters. The reply has not covered about the L.T Category consumers with CL of 20kW and above relevant from FY 2018-19 is still left as unanswered issue. The above reply is a copy paste of the earlier year reply and no progress seen made.

Directives issued by Hon'ble Commission in its tariff order for FY 2018-19.

Directive 29

MSPDCL was directed to ensure the installation and energization of meters at all 11 kV feeders which is the inter-company boundary and the energy injection point from MSPCL to MSPDCL system for proper energy accounting. The Commission also directed that there should be monthly joint reading of the meters by MSPCL and MSPDCL.

Compliances:

TSA between MSPCL and MSPDCL is currently under observation with the intervention of the State Government. Also, all 33 KV and 11 KV feeders will be 100% metered under RDSS which is expected to be completed by 2025.

Commissions Comments:

The details of first meter readings for 3 (three) consecutive months may be submitted is still awaited by the Commission during FY 2020-21 and the Licensee is once again directed to submit the latest available status report forthwith without fail and the non-compliance is considered seriously. This year MSPCL is also directed to sign the transmission service agreement and commence the issuance of monthly bills to MSPDCL.

Directive 30

MSPDCL and MSPCL were directed to conduct monthly joint meter reading of the 11-kV incoming meter (which is the injection point of energy from MSPCL to MSPDCL). MSPDCL was directed to complete installation and Energization of all 11-kV feeder meter by September, 2018 and calculate the energy injected by MSPCL to MSPDCL on monthly basis. MSPDCL was also directed to complete the DT metering by September, 2018 and conduct a case study of feeder-wise energy

loss for all 11 kV lines. The Hon'ble Commission further directed MSPDCL to come-up with LT line loss for individual DT fed LT lines.

The Licensee should submit compliance report in full shape by 15th July 2019 as the licensee has stated that all the metering installations would be completed by the end of 2018-19.

Compliances:

In continuation of the reply on directive no. 29, the following points are added:

➤ 100% DTR metering will be done under RDSS.

Commission's Comments

The above compliance report is totally not relevant to the basic purpose of the directive.

The detailed report is to be submitted by June 2020 is still awaited by the Commission.

The recurring charges for the installed systems can be included in the ARR.

The Licensee is once again directed to submit the latest available status report on or before 1st May 2023 without fail and the non-compliance will invoke serious action.

No reply on the above subject was received on or before 1st May 2023 and same status is continued even after the ending of financial year.

Directive 31

The Commission is of the view to introduce kVAh billing in energy charges to all HT categories and LT categories with contracted load of 20 kWh and above with effect from FY 2019-20 onwards. The licensee is directed to see that all HT connections are provided with trivector/MDI meters for such connections without fail.

Targeted date by which KVAH billing will be introduced be reported by 30.06.2019.

Compliances:

Latest report of HT connections and LT connections above 20kW is enclosed as Annexure-4.

Commission's Comments

The information submitted should be in abridged format to depict in the Tariff Order and the details can be referred to Excel file submitted. The main contention/intention of MSPDCL is not clear from the Data provided as reply and Commission shall not make an abstract of what has been sent by MSPDCL. Hence, the data so submitted by me

processed in a concise form for placing it in the Directive reply is what is needed. Many a time the Licensee was advised to be precise of what it is submitting and shall not leave it to Commission to interpret the voluminous data.

The Licensee is once again directed to submit the latest available status report immediately without fail and the non-compliance will be considered seriously. This directive is clubbed with Directive 25 above.

New Directives issued in FY2019-20

Directive 35

Licensee shall submit the detailed information on the following items latest by 15th August 2019:

- a) Details of year wise pre-paid meters purchased so far with copies of supply/work order since the adoption of the pre-paid metering system.
- b) Year- wise installation of pre-paid meter since adoption of the pre-paid metering system.
- c) Circle wise installation of pre-paid meters giving details of sub-division with category wise consumers with activated pre-paid meters.
- d) Report on the year wise impact of pre-paid metering in the billing efficiency and collection efficiency of:
- 1) Sub-division, Division and Circle since the adoption of prepaid meters.
- 2) Up to date circle wise, Division/Sub-division list of consumers with activated/inactivated prepaid meter.
- 3) Plan and target date for installation and activation of pre-paid meter to all the consumers under MSPDCL.

Compliance of Directives:

All the above data is furnished as Annexure-5.

Commissions Comments:

It is surprising to the Commission that even after a year of issue of the directive, no compliance is submitted. The Information should have been be submitted by June 2020 is still awaited by the Commission.

The information on purchase order bill copies for procurement of meters were enclosed

in Annexure-5a and the balance information called for still missing in the reply provided.

The Licensee is once again directed to submit the latest available detailed report circle wise status report immediately without fail.

Directive 36

MSPDCL should work out strategy to arrive at slab-wise energy consumption per consumer per month in respect of domestic and commercial categories. The average number of consumers consuming electrical energy in the first slab, second slab and third slab in domestic and Commercial categories respectively should be submitted along with their tariff petition for FY 2020-21 positively for proper assessment of revenue projection.

Compliances:

The required information upto 2022-23 is submitted as Annexure-6

Commission's Comments

The data base Information so gathered pertaining to FY 2020-21 and 2021-22 should be submitted immediately as the same reply is still awaited by the Commission.

Directive 37

MSPDCL should vigorously take up consumer metering either in Post-paid/Prepaid mode not only in valley but also in hilly areas, 100% metering should **be achieved within September 2019.** This will lead to meaningful consumption of Energy and fruitful consumer awareness campaign in hill areas and plain areas. This will also reduce unaccounted energy and Distribution losses of the DISCOM.

Compliances:

The latest installation report for new 2.00 lakh prepaid meters are enclosed as annexure-7.

Districts	LT Metering (Target)	
Districts	Pre Paid Energy Meters (nos)	
Bishnupur	9,121	
Chandel	20,765	
Churachandpur	16,711	
Imphal West	11,964	

Districts	LT Metering (Target)	
DISTRICTS	Pre Paid Energy Meters (nos)	
Imphal East	47,777	
Senapati	35,690	
Thoubal	25,207	
Tamenglong	19,873	
Ukhrul	12,892	
Total	2,00,000	

Commission's Comments

The information Hilly area and Valley is submitted in annexure-7a and Anexure-7b This Directive is dropped.

Fresh Directives in FY 2020-21 based on ARR Submission

1. Distribution Losses & Outside State sales

"The MSPDCL shall invariably submit the details to the Commission on 15th of each month following the month in which the quantum of energy input/received by each circle and also the quantum of energy sold in the relevant month by each circle separately for each of the twelve (12) months promptly starting from April to March without fail. The information so furnished by the licensee would form the basis to arrive at the Distribution losses incurred by the MSPDCL in the entire year for truing-up purpose in future. Besides, the Licensee shall also submit the details of the quantity of Outside state sales achieved in each month starting from April to March for record along with the Circle wise sales information."

Compliances:

The Hon'ble Commission is requested to provide a specific format for early submission. Energy data upto State Periphery are readily available, however the 132kV intra-State and below data will need specific format to submit.

Commission's Comments

The format in which the directive is referred is already reflected in the formats suggested for ARR submission in the relevant regulation.

The Directive is still in force and needs compliance. The evasive reply as provided can no longer be entertained.

2. Levy of penalties for non-payment of long pending 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 MSPDCL 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 by end of June 2020.

Compliances:

The reply on this matter is not submitted by the Licensee

Commission's Comments

The above reply is a rancid old answer without any updated information. This is made just for the sake of reply to directive with no intent to intimate the current position.

The Action plan report called for by the Commission on or before June 2020 is still awaited. The reply has not addressed this aspect and making unwarranted suggestions. Submit the said report immediately without fail. The inaction on non-submission in intolerable and testing the patience of Commission with whole lot of evasive replies.

The Directive is still in force and needs compliance.

3 Adopting Merit Order Despatch technique in Power purchases to minimise cost of power purchase and reduce the surplus power for sale

It is observed that the MSPDCL is procuring the quantum of power purchase which is much more than their state sale requirement. They are resorting to selling these surplus quantities in the outside state sale through IEX at a loss of above Rs.1.20/kWh for each such unit sold. This is will erode the profitability of the organisation due to excess payment for power purchases and also to absorb the loss sustained due to Outside state sale for each unit sold.

The Licensee shall follow the merit order despatch principles judiciously or limit to their minimum off-take of energy which is costly in each month so as to minimise the power purchase cost and to pass on any such benefit of gains to the consumers and at the same time they are directed to keep the Outside State sales quantity to the least possible level all the time.

In this regard, the MSPDCL is directed to review their power purchase quantity agreements with all the Central generating and neighbouring state power generators and limit the minimum off-take quantity to the reasonable quantities of requirement and report the compliance latest by 15th September 2020 positively.

Compliances:

No reply is received from MSPDCL.

Commission's Comments

The explanation given above doesn't match with the realistic situation as depicted in the ARR submission and Commission is not convinced with the compliance reply and still feels that MSPDCL shall do a lot in curtailing the excess quantum of purchase unnecessarily. This will not only burden the general public but also burdens the State Government Exchequer adversely in the subsidy form. This issue needs top-priority and take steps to minimise purchases from costly CGS stations and can also think of surrendering the excess quota from CGS with due discussions with State Government on this issue. The Commission is unhappy with the routine reply which cannot be corroborated with real-time purchases being made by MSPDCL.

4 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.

Compliances:

No compliance reply received

Commission's Comments

Report the number of cases detected during FY 2020-21 to 2022-23 if you are following the commission instruction on mixed loads and the additional revenues realised if any. Why MSPDCL is not coming out with facts and figures and concealing the required data. The same shall have to be provided to the commission **by end of April 2023** and same thing is seriously awaited.

Levy of rebate/surcharge on availing supply at a voltage higher/lower than the applicable base load. In dealing with such consumption loads, the billing shall be made strictly as per the clause 1.1as stipulated under general conditions of supply in Tariff Schedule. Report the number of cases detected during FY 2020-21 and the additional revenues realised if any

Compliances:

No compliance reply received from MSPDCL.

Commission's Comments

The above reply is a repetition of last year's response and nothing new is noticed. Report the number of cases detected during FY 2020-21 TO 2022-23 and any additional revenues realised if any. **The directive is still in force.**

Fresh Directives on ARR submissions in FY 2021-22

Directive No.1:

- a) Submit the total Outstanding Arrears payable to various CPSCU Gencos & Transcos, IPPs and RE Generators individually along with yearly accumulated dues in the past and the constituent penalties and late payment charges break-up details separately for which the <u>Special Long-Term Transition Loans to DISCOMS for COVID-19 is being</u> <u>availed for an amount of Rs.111.48Crs.</u>
- b) Besides, also submit a detailed report duly indicating the actual amounts drawn and dates of drawal for each tranche to the Commission latest by 16th June 2021 for record purpose.

c) The proposed Loan amortisation schedule may also be submitted. If the Interest is payable along with Tax, indicate the applicable Tax rate being adopted for in each disbursement to be made to the REC/PFC as per the loan agreement entered with.

Compliance:

For Point-(a)- As per Commission's request on providing the details of late payment surcharge amount involved for two months shall be provided for Commissions reference is attached as **Annexure 8**

For other points of directive: Loan Amortization Schedule is enclosed as **Annexure 9.** There is no Tax Component involved in the matter

Commissions Comments:

The details of late payment surcharge amount involved for two months shall be provided for Commissions reference. <u>This late payment details are still waited.</u> The reply is made without referring to commission comments.

Directive No.3

Availing of Rs.15.67crs from REC for installation of **Street Lights and High Mast Lights: Submit the Loan amortisation schedule proposed for at the time of availing the loan and details of loan drawal amounts along with dates of drawal**. Also, provide the following details relating to the loan:

- i). Tenure of the loan repayment and period of moratorium
- ii). Is the repayment of interest being on monthly resting or annually and applicable rate of interest of loan at which it is availed?
- iii). Interest calculation if payable based on 365 days based or 12 months based. What's is the tax rate payable along with interest if so provide the relevant details.
- iv). The entire project execution cost is Rs.17.5071 crs, while the principle loan amount is only Rs.15.67crs. How the differential uncovered gap of Rs.1.84crs is being managed by the MSPDCL in this aspect.
- v). The Cost benefit analysis for the loan availed is not described in detail in the ARR filing submission. What is the interest burden (Rate of Interest and

monthly/Quarterly amount payable) towards this loan amount consequent on its availing?

Compliance:

Loan drawal amount with date of drawal:

1. drawn on 6th October 2021 : ₹1,10,15,854

3. drawn on 25th January 2022: ₹1,75,65,833

4. drawn on 9th February 2022: ₹3,60,29,572

Overall Loan amount drawn sofar `6,46,11,259 (Rs.6.46crores)

Amortization schedule is attached in soft copy format.

Item(i) reply: Tenure = 10 years, Moratorium period = 3 years

Item(ii) reply: Repayment Monthly resting and Rate of interest: 11% during moratorium and 11.15% post moratorium.

Item(iii) reply: interest calculation is on 365 days basis.

Item-(iv) reply: "Project cost as per LoA is `16,00,81,185/- differential uncovered gap of Rs.0.3381 cr will be being managed by the MSPDCL."

Item-(V): Interest Paid:

Due on 1st Nov.2021 - Rs.86316

Due on 1st Dec. 2021 - Rs.99595

Due on 1st Jan. 2022 - Rs.102915

Due on 1st Feb .2022 - Rs.137445

Due on 1st Mar. 2022 - Rs.433435

Overall amount paid - Rs.8,59,706

Commission's Comments:

No fresh reply is provided, except the repetition of the last years answer

The Street lighting (High Mast Lights) loan amount is fully disallowed by the Commission for the reason detailed therein. Hence, whatever so far what has been paid must be recovered and payable in future will have to be transferred to MAHUD only. The Compliance report on this aspect is required to be submitted by end of June 2022. This amount recovery by MSPDCL is very essential. (No reply is attempted to cover this aspect).

There are other issues like uncovered gap of 1.84Crs to be managed and Cost benefit analysis for the loan is still not addressed by the reply given. The replies are given

irrespective of the commissions comments is of no use and would not amount to compliance of Directive.

Directive No.5:

Unmetered Supplies: Report number of consumers detected under the unmetered supplies in the past from 2019-20 onwards and the details of revenue collected from such consumers. Also submit the corrective actions initiated/taken to prevent such consumers from resorting to theft of energy again.

Compliance:

Raid Report is attached as Annexure-2

Commission's Comments:

The Reply is very vague about the billing of those consumers based on meters installed at their place of consumption. If the unmetered Consumers noticed in 2019-20 to the tune of 1,42,751, why MSPDCL could not release meters to record their consumption. Moreover, it is also not clear from the reply whether the dues to be collected have been recovered to the tune of Rs.156.61crs. The exhaustive details of billing pattern under which those consumers are being registered and being billed need be intimated to the Commission and the category wise revenue collections so far made from these delinquents. It is advised to provide a comprehensive reply instead of making a vague answering. The Directive is still in force and not dropped.

Directive No.8

The MSPDCL shall also conduct system studies and energy audit after proper assessment of metering systems in operation. Further, segregation of technical and commercial loss has to be completed without any plausible excuses and **initial report** on these issues be submitted to Commission on or before end of August 2021.

Compliance:

This compliance will be provided after completion of the Energy Accounting Module under RDSS which is expected to be completed by 2025.

Commission's Comment:

While the directive is called for a report in August 2021 itself. This kind of casual replying of the directive will make commission to invoke the provisions under Section 142 or 146 of the E.Act 2003. There is no disciplined response ever seen in the case of Directives and this kind of lackadaisical attitude would not be tolerated any more. Where did the excess true-up surplus of Rs.220.67crs gone, which were supposed to be with MSPDCL. Keeping such huge amount, again asking for fund allotment appears the careless attitude of the Licensee. It here by warned to be conscious in the replies. **The directive** is still in force.

Directive No.9:

It is necessary that the Licensee should chalk out a constructive & strategic plan to curtail distribution losses in FY2021-22 and submit such action plan to the Commission with an assurance to achieve before end of 30th June 2021 (pg-89 FY 2021-22).

Compliance:

The REF (Result Evaluation Framework) under RDSS is provided for kind reference as **Annexure 10.**

Commission's Comments:

You must make a detailed reply for this matter on or before 2nd week from issuance of this Tariff Order.

New Directive for FY 2023-24

Directive No.1:

The Audited Annual accounts do not contain the following information, which otherwise is needs to be recorded for future reference.

- Quantum of Energy & cost of power purchase details are captured in any Schedule of the audited account.
- b) The details of Distribution Losses sustained during the Financial year by providing the percentage of losses and the relevant quantum of units also.
- c) The Break-up of Retail Energy sale to various consumers in respect of units sold actually
- d) The Audited accounts must depict the revenue realised from various consumer

category each category wise for future reference also true-up admissibility purpose. In the absence of these details, the entity is providing the break up details according to their calculations according to its way of derivation. But the revenue shown in FY 2021-22 appears under estimated and not commensurate with the quantum of sales achieved during FY 2021-22.

Therefore, the Commission want the above details shall be reflected in the FY 2022-23 audited accounts invariably. The Copy of the Audited accounts will be considered as proof of compliance of this directive.

Compliance:

(a), (b) & (c) - Hon'ble Commission is requested to provide a compatible format for inclusion in the Audit Report.

(d) – As directed by the Commission, same has been recorded for the future reference and compliance. However, we are not in a position to revise the statement of audited accounts for FY 2022-23 as same has been audited by C&AG and adopted by the members in AGM. However, we agree to comply with the same in our next Financial Statement provided that the format for inclusion in the Audit report may specified by the Hon'ble Commission.

Commission's Comments:

It is quiet surprising to see the licensee asking for formats for brief summary of the energy details in Audited annual accounts is a fundamental information and it is very deplorable to reply so. This kind of flippancy is not tolerated.

Against the Point-D, the directive was given much ahead of the finalisation of audited annual accounts for FY2022-23. The Reply is not convincing and the it is reiterated that the licensee must comply to the above without fail. The Licensee must approach the commission with the present data format to finalise and modify the format.

Directive No.2:

At the time of submission of ARR filing, the Licensee is not adopting the prescribed formats as embedded in the MYT Regulation 2014 and adopting the format of his choice

in the submission. This kind of flexibility is not to be adopted and shall scrupulously comply with designed formats. If needed so the formats being submitted by P&ED may be adopted for in the net filing.

Compliance & Commission comments;

No Reply is provided for the above directive. The next ARR filing submitted will be rejected if the prescribed formats are not adopted.

12. Fuel and Power Purchase Cost Adjustment

12.1. Background

Section 62 sub-section 4 of the Electricity Act, 2003 provides that no tariff or part of any tariff may ordinarily be amended, more frequently than once in every financial year, except in respect of any changes expressly permitted under the terms of any fuel surcharge formula as may be specified. This provision of the Act requires the Commission to specify the formula for fuel surcharge recovery.

Accordingly, the Commission had issued by JERC for Manipur and Mizoram (Fuel and Power Purchase Cost Adjustment) Regulations, 2023 through Notification No. H.13011/27/12-JERC, dated 25th October, 2023 in this matter for deriving the Fuel Price adjustment. Henceforth, the provisions enshrined in this Regulations shall be invoked in this matter.

MSPDCL Tariff Order for FY 2024-25	

TARIFF SCHEDULE

MSPDCL Tariff Order for FY 2024-25

Tariff Schedule

- 1. General Conditions of Supply (For all categories of Consumers):
- **1.1 Rebate for advance payment:** For payment of energy bill in advance, a rebate of 1% shall be allowed on the rate of charge of the applicable tariff. This will be applicable only to those consumers provided with prepaid energy meters.
- 1.2 Rebate/Surcharge for availing supply at voltage higher/lower than base voltage: For those who avail supply at higher voltage than the classified supply voltage for corresponding load as per clause-3.2 of Electricity Supply Code Regulations, 2013 of JERC (Manipur and Mizoram) rebate shall be allowed and of those availing power at lower voltage than the specified voltage (as per the above Regulation) surcharge shall have to be levied as detailed below:
 - (i) For consumers having Contracted load upto 50kW If the supply is given at HV/EHV, a rebate of 5% shall be admissible on both the rates of energy charge and fixed charge of the applicable tariff.
 - (ii) For consumers having contracted load above 50kW If supply is given at a voltage lower than the base voltage for corresponding load as per clause mentioned above, the consumer shall be required to pay an extra charge of 10% additionally on the bill amount (Energy charge + Fixed charge) calculated at the applicable tariff.
 - (iii) All voltages mentioned above are nominal rated voltages as per clause 3.2 of the Electricity Supply Code Regulations, 2013 issued by JERC (Manipur & Mizoram).
- 1.3 Payment: All payments can be made by way of Cash (upto an amount acceptable to the Licensee from time to time), Banker's Cheque, Demand Draft or Money Order or etransfer by Online. Cheques and demand drafts shall be payable at any branch of a scheduled commercial bank that is a member of the clearing house for the area where the concerned Sub Divisional Office is located.
 - However, part payment is subjected to acceptance by the competent authority. Bank commission/charges, if any, should be borne by the consumers.
- **1.4 Validity of existing Recharge Voucher:** in the case of any consumer with a prepaid meter having purchased pre-paid voucher prior to the effective date of new Tariff, the existing

voucher shall be continued invariably till such voucher amount is fully exhausted. Thus, the Licensee shall cautiously issue voucher such that the issued voucher validity is for a minimum number of days beyond the effective date of new tariff.

- in advance from the normal due date for that bill payment. 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 JERC for Manipur & Mizoram (Electricity Supply Code Regulations, 2013 with latest amendments).
- Surcharge for late payment of bills: If payment is not received within the due date surcharge @ 2% per month at simple interest on the outstanding principal amount for the period of delay in successive period or part thereof will be levied/charged, until those number of days outstanding amount is not fully repaid.
- 1.7 Single Point Delivery: This tariff is based on the supply being given through a single point of delivery and metering is also at one voltage. Supply at other points at other voltage/voltages shall be separately metered and billed for and shall be considered as separate connection.
- **1.8 Voltage and frequency**: All voltages and frequency shall be as per clause 3.1 and 3.2 of Electricity Supply Code Regulations, 2013 issued by the JERC for Manipur & Mizoram with all applicable amendments made from time to time.

1.9 Power Factor Incentive / Surcharge: -

a) If the average monthly power factor of the consumer increases above 95%, he shall be paid an incentive at the following rate:

Criteria condition	Eligible Incentive
For each one percent increase by	Incentive at One percent (1%) of the
which his average monthly power	total amount of the bill under the
factor is above 95%, up to unity	head 'energy charge'.
power factor	

a) If the average monthly power factor of the consumer falls below 90%, he shall pay a surcharge in addition to his normal tariff, at the following rate:

Criteria condition	Surcharge payable
For each one percent by which his	Surcharge levied at One percent
average monthly power factor falls	(1%) of the total amount of the bill
below 90% up to 85%	under the head 'energy charge'.

c) If average monthly power factor of the consumer falls below 85%, he shall pay a surcharge in addition to his normal tariff at the following rate:

Criteria condition	Surcharge payable
For each one percent by which his	Surcharge levied at Two percent
average monthly power factor falls	(2%) of the total amount of the bill
below 85%	under the head 'energy charge'.

- d) If the average monthly power factor of the consumer falls below 70%, then the utility shall have the **right to disconnect supply** to consumer's installation after serving a notice of 15 days. Supply may be restored only after suitable steps are taken to improve the power factor to the satisfaction of the Utility. This is, however, without prejudice to the levy of surcharge for low-power factor in the event of supply not being disconnected.
- 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 figures after decimal. Figure 5 or above, in the third place after decimal be rounded-off to the next higher figure in the second place after decimal.
- 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 if he maintains the average monthly power factor in subsequent three (3) months at not less than 90%, then the surcharge billed on account of low power factor during the said period, shall be withdrawn and credited in next month's bill after the said observation period of three (3) months.
- 1.10 Transformation loss: The consumers getting their supply at HT and metered on the LT side shall be charged transformation loss in kWh as per clause-5.7 of JERC for Manipur and Mizoram (Electricity Supply Code) Regulations, 2013. The same is reproduced for convenience sake:

(1) The average losses in the transformer shall be calculated as follows and added to the energy consumption indicated by the meter:

where C = KVA rating of the transformer. For conversion of kVAh to kWh or vice versa, latest power factor as per JERC (M&M) (Electricity Supply Code) Regulations, 2013 with latest amendment is to be adopted.

- (2) The transformer loss arrived at by the above formula shall be added to the energy consumption, even when the recorded energy consumption is found **nil**.
- (3) 1% of the transformer capacity for transformer above 63 KVA will be added to the recorded maximum demand on the Low-Tension side to arrive at the equivalent High-Tension demand.
- 1.11 Rounding-off 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 (not to be rounded), except for load less than 500 W. Load less than 500 W shall be taken as 0.5 kW for calculation purpose of fixed/demand charge in the monthly billing. The Licensee should update Contracted load/Billing demand as per the provisions of clause-4.108 of JERC for Manipur and Mizoram (Electricity Supply Code) Regulations, 2013 (with up to date amendment).

Fixed/Demand charge in the monthly billing shall be calculated as follows:
Fixed/Demand charge per month = Contracted load (in kW) or Billing demand (in kVA)

x Rate of fixed charge per month per kW/kVA (as the case may be).

Sample calculation for Domestic Purpose (1) 1.24KW (2) 0.36 kW, Fixed charge for Domestic is Rs 60.00 per kW of contracted load is assumed.

Sample 1: - Fixed charge = $1.24 \times 60 = \text{Rs } 74.40 = \text{Rs } 74.00$.

Sample 2: - Fixed charge = 0.36 kW (=0.50 kW after rounding) x 60 = Rs 30.00.

Note: Fraction of rupees is rounded-off as per clause 1.11 of this tariff schedule and load below 0.5 kW is rounded-up to 0.5 kW as per clause 1.10 of this tariff schedule.

- 1.12 Rounding-off 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 individually rounded-off to nearest rupee (fraction of 50 paisa and above to be round off to the next higher rupee and fraction less than 50 paisa to be ignored). In case of non-availability/scarcity of small change of rupees less the Rs.10/-, consumer may be allowed to tender next higher amount divisible by 10. Such over tendered amount shall be carried forward into next month bill as credit and shall not earn interest for whatsoever reason.
- 1.13 Mixed Load: Any part of the connection given for one specific category purpose, should not be utilized for any different purpose, involving higher rate of charge in the tariff. A separate connection shall have to be taken invariably for such loads/purposes under appropriate category afresh, failing which the entire consumption (i.e., existing category consumption and additional consumption for different purpose) shall be billed in that corresponding category having higher rate of applicable tariff for which any part of that connection is utilised for the entire period of lapse.

1.14 System of supply:

1.14.1- LT Supply:

- i) Alternating current, 50 Hz, single phase (1Ø) 230 Volts up to 8kW
- ii) Alternating current, three phase (3Ø), 400 Volts for loads above 8 kW **up to** 50 kW. wherever 3-phase (3Ø) connection is required for load less than or equal to 8 kW,
- iii) Alternating current, three phase (3Ø), 400 Volts for loads above 8 kW **up to** 50 kW. Wherever 3-phase (3Ø) 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.

1.14.2- HT Supply:

Supply of Electricity to the Consumers at voltage above 400V as per Clause 3.2 of JERC for Manipur and Mizoram (Electricity Supply Code) Regulations, 2013 with up to date amendment.

1.14.3 The maximum demand: The Mixed 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.

1.14.4 Billing demand: As defined in Clause 2.3(12) of the Joint Electricity Regulatory Commission for Manipur and Mizoram (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 sanctioned load wherever contract demand has not been provided in the supply agreement."
- 1.14.5 Government Subsidy: Section-65 of E.Act 2003 is hereby reproduced "Provision of subsidy by State Government:- If the State Government requires to grant of any amount of 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 Tariff order is issued by the Commission in this regard in each year."

Therefore, if the government subsidy is regularly received, the licensee shall adopt tariff 'A' (Subsidised Tariff) or in the event of non-receipt of said subsidy, the Licensee shall be at liberty to implement tariff 'B' (Full Cost Tariff i.e., without Subsidy) during the period of non-receipt.

There could be a situation, where the outstanding monthly subsidy due was released by the government after passage of much time elapse and thereby consumers were to be billed at full cost tariffs (Tariff-B) in those relevant month or months when subsidy due was not released as stipulated by the Commission. Given

the situation, the entire excess amount so charged to all those consumers on account of full cost tariff adoption shall have to be refunded in the form of deduction by treating such excess amount so collected by Licensee as an advance payment in one instalment in the immediate monthly billing cycle where bills to be issued to respective consumers soon after receipt of such pending Tariff 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 following monthly bill/bills to be issued to such consumer/consumers until full settlement is done with.

1.14.6 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.

1.14.7 Contingency: - In case of any inconsistency between this Tariff schedule and the prevailing JERC for Manipur and Mizoram (Electricity Supply Code) Regulations, 2013, the provisions, meaning and the contents of the said Electricity Supply Code shall only prevail.

2. Subsidised Tariff for FY 2024-25 to LT & HT Category Supply:

Low Tension supply (LT):

2.1 LT Category -1: - Kutir-Jyoti/ BPL Connection

Applicability: Applicable to all households who have been given connection under Kutir Jyoti Scheme or similar connection under any scheme of the State Govt. or Central Govt. for the benefit of poorer section. As per existing norms unless superseded by other new norms of KJS, if the total consumption in the last three (3) months exceeds 45 kWh, thereon the connection should be converted to LT Category-2 (Domestic).

Permitted load: Initially single light point connection which can be extended by one or two light points or as per the norms specified by competent Authority from time to time

Tariff Rates:

A) Fixed Charge: Rs 25.00 per month per Connection.

B) Energy charge per month:

Metered Supply:

Energy Units	Tariff applicable
All Unit	@ Rs 2.10 per kWh

Note: 1- if the total consumption of any consecutive three 93) months is more than 45 kWh, thereon consumer shall be re-categorised/converted under normal domestic category permanently from the very 1st/2nd/3rd month of that consecutive three months, depending upon from such month instance when the total units consumed exceeds the specified limit of 45 kWh is noticed and there upon monthly bill will be served under domestic category instead of KJS. (clause 4.90 of the JERC for Manipur and Mizoram (Electricity Supply Code) Regulations, 2013 with latest amendments may be referred to for adoption).

Note 2: In case a Kutir Jyoti /BPL consumer gets converted to a domestic consumer, thereon such recategorized/converted consumer shall be required to deposit load security/meter security as applicable to domestic consumer and failure/disobey to pay amounts to contravene the provisions of clause-5.9 of the JERC for Manipur and Mizoram (Electricity Supply Code) Regulations, 2013 along with applicable latest amendments and liable for suitable penal action.

2.2 LT Category-2: - Domestic

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 it is with attached kitchen/kitchen facility in the dwelling house. 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 will not be applicable to institutions conducting commercial activities of any nature.

Tariff Rates:

A)	Fixed Charge:	Rs 65.00 per month per kW of Contracted Load.
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B) Energy charge per month: -

Metered Supply:

Slab wise Units	Tariff applicable
i) First 100 kWh	@ Rs.5.10 per kWh
ii) Next 100 kWh	@ Rs 5.95 per kWh
iii) Above 200 kWh	@ Rs 6.75 per kWh

Note: If any portion of the domestic connection if utilized for any different usage other than for dwelling purpose such as Non-domestic, Commercial, Industrial usage, etc., a separate connection shall be taken forthwith for such other load purposes under appropriate category, failing which the entire consumption made in that billing month shall be treated, as the case may be, in the corresponding category having higher applicable tariff amongst the utilised purposes.

2.3 LT Category-3: Non-Domestic / Commercial:

Applicability: This tariff is applicable to all kinds of lights, all types of fans, heating devices, Television, VCR/VCP, Radio, Refrigerator, Air Conditioner, lift motors, Pumps and all other appliances for the purpose of private gain including other small power. This tariff includes power loads for non-domestic purposes like Government/Semi-government/Non-government offices, shops, hospitals, nursing homes, clinics, dispensaries, health centres, restaurants, bars, hotels, clubs, guest houses, circuit houses/rest houses, tourist lodges, picnic spots, resorts, farm/garden houses, clubs, markets, optical houses, public buildings, community halls, stadiums, meeting/conference halls, religious premises like churches, temples, mosques, gurudwaras, religious offices, all types of studios, tea stalls, professional chambers (like Advocates, Chartered Accountants, Consultants, Doctors, etc.), private trusts, marriage halls, 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, Government/Non-Government Institutions, 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. 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 tele-communication system/towers and others applications not covered under any other categories.

Tariff Rates:

A)	Fixed Charge:	Rs 85.00 per month per kW of Contracted Load.
A)	rixed Charge.	ns 65.00 per month per kw or contracted Loads

B) Energy charge per month: -

Metered Supply:

Slab wise Units	Tariff applicable
i) First 100 kWh	@ Rs.6.55 per kWh
ii) Next 100 kWh	@ Rs 7.25 per kWh
iii) Above 200 kWh	@ Rs 7.65 per kWh

2.4 LT Category-4: - Public Lighting

Applicability: Applicable to Public Street Lighting System under municipality, Town, Committee, Sub-Town/Village, etc. including Signal system and Road & Park lighting/illumination in areas of Municipality Town/Committee, Sub - Town/Village, etc.

Tariff Rates:

A)	Fixed Charge:	Rs 70.00 per month per kW of Contracted Load.
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B) Energy charge per month: -

Metered Supply:

Energy Units	Tariff applicable
All Unit	@ Rs 9.60 per kWh

2.5 LT Category-5: - Public Water Works (PWW)

Applicability: Applicable to all public water supply system and sewerage system.

Tariff Rates:

A)	Fixed Charge:	Rs 105.00 per month per kW of Contracted Load.
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B) Energy charge per month: -

Metered Supply:

Energy Units	Tariff applicable
All Unit	@ Rs 9.80 per kWh

2.6 LT Category-6: - Irrigation and Agricultural

6a. Agriculture Category (LT):

Applicability: This tariff is applicable to water pumping for Agricultural purpose by **Individual farmers** only.

Tariff Rates:

A)	Fixed Charge:	Rs 65.00 per month per kW of Contracted Load.
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B) Energy charge per month: -

Metered Supply:

Energy Units	Tariff applicable
For all Unit consumed	@ Rs 4.55 per kWh

6b. Irrigation Category (LT):

Applicability: This tariff is applicable to farmers pumping for Irrigation/Agricultural purpose by those farmers **other than individual farmer**.

Tariff Rates:

A)	Fixed Charge:	Rs 65.00 per month per kW of Contracted Load.
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B) Energy charge per month: -

Metered Supply:

Energy Units	Tariff applicable
For all Unit consumed	@ Rs 4.55 per kWh

2.7 LT Category-7: - Small/Micro Industry

Applicability: Applicable to all Industrial power consumers with demand of power up to 50 kW those are **not covered by Category No.3** (Supply to Non-Domestic/Commercial Purposes), such as all types of workshops using electricity for works such as steel fabrication works, motor body builders, Tyre re-treading works, power handloom industry, weaving houses, carpentry works. Saw mills, flour/rice mills, Oil mills, re-rolling mills, coffee/ginger/turmeric processing units, winery plants, Ice candy units, fodder cutting units, poultry farming/hatchery units, silk rearing/processing units, pisciculture, prawn culture, floriculture in green houses, mushroom production

units, sugarcane crushing units, milk/meat processing units, bamboo processing units, paper/steel/aluminum recycling units, manufacturing/processing/preserving of goods such as cold storage plants/units, agriculture based industries, horticulture and any other type of industry where raw material is converted into finished products with the help of electrical motive power, printing press, construction of power generating stations/substations and power supply to any generating stations etc. This will include domestic or commercial purpose usage within the industrial complex.

Tariff Rates:

A)	Fixed Charge:	Rs 70.00 per month per kW of Contracted Load.
,		

B) Energy charge per month: -

Metered Supply:

Energy Units	Tariff applicable
For all Unit consumed	@ Rs 5.60 per kWh

1. Subsidized Tariffs for HT Category Supply

The tariffs are applicable for those consumer availing supply at voltage above 400V 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 Contract Demand of above **55.56 kVA**, as per clause 3.2 of JERC for M&M (Electricity Supply Code) Regulations, 2013 with up to date amendments made.

3.1 H.T. Category – 1: Commercial

Applicability: This Tariff is applicable to similar purposes defined in LT Supply under Category-3 for Commercial Purposes usage.

Tariff Rates:

B) Energy charge per month:

Metered Supply:

Energy Units	Tariff applicable
For all Unit consumed	@ Rs 8.90 per kVAh

3.2 H.T. Category - 2: Public Water Works (HT- PWW)

Applicability: This tariff is applicable to similar purposes defined in LT Category-5 Supply for Public Water Works (PWW) and sewerage system.

Tariff Rates:

A) Demand Charge: Rs 105.00 per month per kVA of Billing Demand.

B) Energy charge per month: -

Metered Supply:

Energy Units	Tariff applicable
For all Unit consumed	@ Rs 9.60 per kVAh

3.3 H.T. Category - 3: Irrigation & Agriculture

3a. HT – Agriculture Category:

Applicability: This Tariff is applicable to water pumping for agricultural purposes by **Individual farmer** only.

Tariff Rates:

A) Demand Charge: Rs 105.00 per month per kVA of Billing I	Demand.	
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B) Energy charge per month:

Metered Supply:

Energy Units	Tariff applicable
For all Unit consumed	@ Rs 5.15 per kVAh

3b. HT – Irrigation Category:

Applicability: This tariff is applicable to farmers pumping water for Irrigation/Agricultural purpose by those **other than individual** farmers.

Tariff Rates:

A)	Demand Charge:	Rs 105.00 per month per kVA of Billing Demand.
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B) Energy charge per month: -

Metered Supply:

Energy Units	Tariff applicable
For all Unit consumed	@ Rs 5.15 per kVAh

3.4 H.T. Category - 4: Medium Industry

Applicability: This Tariff is applicable to similar purpose defined in LT Category-7 for Small industry purpose with Contract Demand up to 125 kVA.

Tariff Rates:

A)	Demand Charge:	Rs 105.00 per month per kVA of Billing Demand.
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B) Energy charge per month: -

Metered Supply:

Energy Units	Tariff applicable
For all Unit consumed	@ Rs 8.00 per kVAh

3.5 H.T. Category- 5: Large Industry

Applicability: This Tariff is applicable for supply of power to industrial consumers having license from designated authority of appropriate government and not covered under any other category, at a single point for industrial purposes with **Contract Demand above 125 kVA.**

Tariff Rates:

A)	Demand Charge:	Rs 105.00 per month per kVA of Billing Demand.
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B) Energy charge per month: -

Metered Supply:

Energy Units	Tariff applicable
For all Unit consumed	@ Rs 9.10 per kVAh

3.6 H.T. Category - 6: Bulk Supply within the State

Applicability: This tariff is applicable for all installations, including mixed loads similar to LT category 2 & 3 such as private sector installation, educational institution, defense installation, government & public sector offices & complexes and Hospital etc., that will arrange their own distribution system of power within the premises with the approval of competent authority. This will not include industrial complexes consisting mixed load of LT category 2 & 3.

Tariff Rates:

A) Demand Charge: Rs 105.00 per month per kVA of Billing Demand.

B) Energy charge per month: -

Metered Supply:

Energy Units	Tariff applicable
For all Unit consumed	@ Rs 9.25 per kVAh

4. Approved Full Cost Tariff (i.e., Without Govt Subsidy) for FY 2024-25

CI.		Proposed Full Cost	t Tariff for FY 2024-25
SI. No.	Category and Consumption slab	Fixed Charges	Energy Charges
NO.		(per month)	(per month)
	LT SUPPLY		
1	Kutir Jyoti	Rs/Connection	Rs/kWh
	All units (upto 45 KWh/3 months)	25	2.10
2	Domestic	Rs/kW	Rs/kWh
	(i) First - 100 kWh/Month	65	7.67
	(ii) Next - 100 kWh/Month	65	8.95
	(iii) Above 200 kWh/Month	65	10.15
3	Non-Domestic /Commercial	Rs/kW	Rs/kWh
	(i) First - 100 kWh/Month	85	10.76
	(ii) Next - 100 kWh/Month	85	11.91
	(iii) Above 200 kWh/Month	85	12.57
4	Public Lighting	70	12.19
5	Public Water Works	105	12.33
6	Irrigation and Agriculture	Rs/kW	Rs/kWh
	(i) Agriculture	65	4.55
	(ii) Irrigation (Others)	65	4.55
7	Small Industry	70	11.32
	HT SUPPLY	Rs./kVA	Rs./kVAh
1	Commercial	105	10.44
2	Public Water Works	105	10.80
3	Irrigation and Agriculture		
	(i) Agriculture	105	8.67
	(ii) Irrigation (Others)	105	8.67
4	Medium Industry	105	10.64
5	Large Industry	105	10.46
6	Bulk Supply	105	10.79

5. Temporary Power 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 JERC for Manipur & Mizoram (Electricity Supply Code) Regulations, 2013 along with latest amendments. If the applicant provides the materials for service line, it shall be treated as per clause 4.133 of the JERC for Manipur & Mizoram (Electricity Supply Code) Regulations, 2013 with latest amendments If the licensee/MSPDCL desired to delegated to power to various level of officers, it may be done through an executive order within the licensee/MSPDCL. However, in all cases, overall duration should not violate the supply code mentioned above. If the service line is arranged by consumer, it shall be treated as per clause 4.133 of the JERC for Manipur & Mizoram (Electricity Supply Code) Regulations, 2013 with latest amendments and be returned to the consumer after the period is over. The Bill shall be served at the following rates:

Tariff 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.
- 6. Computation of energy consumed for un-metered supply:
 - **6.1:** Street light connection & unmetered consumers:
 - As per Section-55 of Electricity Act 2003 and as per clause 5.1 of the JERC for Manipur & Mizoram (Electricity Supply Code) Regulations, 2013 with latest amendments, no installation should be serviced without fixing appropriate and correct meter. Therefore, after elapse of more than 20 years from the E. Act 2003 effective date and after elapse of several years from the effective date of the said supply code, the formula for computation of energy consumed for unmetered supply is withdrawn. Henceforth, MSPDCL should invariably install energy meters for all category of consumers.
 - **6.2: Short period of unmetered supply:** For un-meter (meter not available) supply as a result of defective, burnt, lost meter shall be treated as per 6.11 6.13 of the JERC for Manipur and Mizoram (Electricity Supply Code) Regulations, 2013 along with up to date amendments.

6.3: For Un-authorised 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 JERC for Manipur and Mizoram (Electricity Supply Code) Regulations, 2013 along with applicable up to date amendments. The energy so computed shall be evaluated as follows: -

(a) Load less than 10 kW

- (1) **First instance:** Thee (3) times of the rate of the applicable tariff (fixed and variable charges) for which the stolen energy was assessed as consumed/utilised.
- (2) **Second and subsequent instance:** Six (6) times of the rate of the applicable tariff (fixed and variable charges) for the entire quantum stolen energy was assessed as consumed/utilised.

(b) Load exceeding 10 kW

- (1) First instance: Three (3)) times the rate of the applicable tariff (fixed and variable charges) for which the stolen energy was assessed as consumed/utilized.
- (2) Second and subsequent instance: Six (6) times the rate of the applicable tariff (fixed and variable charges) for which the stolen energy was assessed as consumed/utilized.

Note: - Additional punishment of theft shall be as per Electricity Act 2003 (with latest amendment) and as per the JERC for Manipur and Mizoram (Electricity Supply Code) Regulations, 2013 along with applicable latest amendments.

7. Miscellaneous Charges

7.1 Meter Rent

7.1.1 Meter Rent for non-prepaid meters: Monthly charges for hiring of the meter, indicator payable shall be as follows:

a)	AC, Single phase Energy meter, whole current	Rs. 10.00 per month
b)	AC, Three phase Energy meter, whole current	Rs. 20.00 per month
c)	AC, three phase Energy meter, CT operated	Rs. 50.00 per month
d)	AC, three phase Energy meter, CT & PT operated	Rs. 500/- per month

7.1.2 Meter Rent for Pre-Paid Meters: Monthly charges for hiring of the meter, indicator payable shall be as follows:

a)	AC, Single phase PP, Energy meter, whole	Rs. 20.00 per month
	current	
b)	AC, Three phase PP, Energy meter, whole	Rs. 40.00 per month
	current	

7.1.3 Meter Rent for Smart Meters: Monthly charges for hiring of the meter, indicator payable shall be as follows:

a)	AC, Single phase PP, Energy meter, whole	Rs. 40.00 per month
	current	
b)	AC, Three phase PP, Energy meter, whole	Rs. 60.00 per month
	current	

7.2. Pole/Tower usage charge per month

7.2.1 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 nest higher integer.

7.3 Other charges for meter:

i) Meter shifting charge:

- (1) Rs 100.00 per shifting if resulted from reconstruction / modification of building and at consumer's request. Required material if need be borne by Consumer himself.
- (2) Free of cost if shifting is done in the interest to licensee. Required material is borne by licensee.
 - Meter shifting shall be carried out as per Chapter 5 of the JERC for Manipur and Mizoram (Electricity Supply Code) Regulations, 2013 with latest up to date amendments.

ii) Replacement of meter: - Licensee shall have stock of energy meter as per clause 5.51 of the JERC for Manipur and Mizoram (Electricity Supply Code) Regulations, 2013 with up to date amendments. 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.

However, in case of replacement of post-paid meter by prepaid meter by the utility, no meter replacement charge shall be borne by the consumer and the entire charge shall be borne by the utility.

iii) Execution charge for re-installation/installation of meter: -

- a) For existing consumer shall be at free of cost.
- b) For disconnected consumer being re-connected (if meter is removed) shall be charged @ Rs 75.00.
- c) For new consumer, it shall be included in the cost of service connection under the nomenclature of **Execution Charges**.

iv) Cost of Energy Meters supplied by Licensee:

As per the Licensee's purchase rate plus testing fee, if supplied from the Licensee (energy meters approved / tested by the Licensee only shall be used. 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 is either on account of manufacturing defect or fault of licensee then, it shall be at free of cost.

7.4 Charges for testing of Meters at the request of consumers: (Testing charge is inclusive of costs of meter re-sealing materials/equipment).

SI. No	Type of Meter for testing	Charges payable
i)	For AC, Single phase (1Ø)	Rs.50.00 per meter per testing.
	LT energy meter	
ii)	For AC, Three phase (3Ø) LT	Rs.75.00 per meter per testing.
	energy meter whole current	
iii)	For AC, three phase (3Ø) LT	Rs.100.00 per meter per testing.
	energy meter, CT operated	
iv)	For Energy meter, AC Three	Rs.150.00 per meter per testing.
	Phase (3Ø), CT & PT operated	
v)	For any other type of meter,	Rs.200.00 per meter per testing.
	HT Supply	

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 JERC for Manipur and Mizoram (Electricity Supply Code) Regulations, 2013 with up to date amendments.

7.5 Testing of Consumer's Installation:

The first test and inspection will be carried out free of cost as per clause 4.47 of the Joint Electricity Regulatory Commission for Manipur and Mizoram (Electricity supply Code) Regulations, 2013 with up to date amendments. 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. 100.00 per test payable in advance, shall be levied. In the event of the consumer failing to pay the testing charge in advance with in stipulated time, the Licensee will be at liberty to disconnect the consumer's premise from the supplier's main.

7.6 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: -

SI.No	Description	Reconnection charge
(i)	For AC single phase (1Ø) LT supply	Rs. 80.00
(ii)	For AC three phase (3Ø) LT supply	Rs.150.00
(iii)	For AC HT supply	Rs.400.00

Note: - Additional charges will be levied if extra material is required.

7.7 Charges for 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 Joint Electricity Regulatory Commission for Manipur and Mizoram (Electricity supply Code) Regulations, 2013 along with up to date amendments.

7.8 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 as per purchase rate of the Licensee. If the Licensee supplies the materials or the consumer may arrange the required materials as per the required specifications of the

Department.

The execution charge shall be as follows:

(1) For Cable and wire-:

S.No	Description	Execution charge
(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.

(2) For Cut-Out & Fuse: -

1) per Cut-Out	- Rs 15.00
2) per Fuse -	Rs 5.00

(3) For Replacement of meters (if cost of meter arranged by consumers)

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a) Single Phase: Rs.40/- b) Three Phase: Rs.60/- c) CT operated: Rs.80/- d) CT & PT operated: Rs.80/-
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Works shall be executed only on producing the proof of payment receipt from concerned office.

Note: If Licensee is providing with the meter for replacement, then the extra cost as specified by the Licensee will have to be paid including any applicable taxes.

7.9 Re-rating of Installation: - This charge is for meeting expenses toward spot verification of load and other connected recording works. Fees for re-rating of the consumer's installation at the request of the consumer shall beRs.100.00 per rerating per connection. Inspection for re-rating should be carried out only on advance payment in the concerned office and on physical production of such payment receipt.

These charges shall be payable by the consumer in advance. The aforesaid charges do not include the charges payable by the consumer for other works connected due to change of connected load. Rerating shall be carried out as per clause 4.94 to 4.107 of the JERC for Manipur and Mizoram (Electricity Supply Code) Regulations, 2013 with up to date amendments made.

7.10 Security Deposit:

(a) Load Security:

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 JERC for M&M (Electricity Supply Code) Regulations, 2013. **However, consumer with prepaid meter shall not be required to pay load security deposit.**

(b) Meter Security (if Licensee's meter is used):

The amount of Security deposit towards 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.

7.11 Charges for Replacement of tamper-proof Meter Box:

For AC single phase LT or three phases LT without CT or with CT, the charge will be as per Licensee's purchase rate in case the energy meter box is replaced by the Licensee from its store.

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/-

7.12 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.

7.13 Service Lines & Service Connection:

- (i) 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 Joint Electricity Regulatory Commission for Manipur and Mizoram (Electricity Supply Code) Regulations, 2013.
- (ii) Cost of Service Connection: As stipulated in clause 4.37 and 4.131 of the Joint Electricity Regulatory Commission for Manipur and Mizoram (Electricity Supply Code) Regulations, 2013. If the consumer desires to arrange service connection materials, the Department (not below rank of Junior Engineer concerned) will check all the materials.
- **7.14 Mutation Fee:** Mutation fee i.e. fee for change of name shall be Rs.50/- per change. This shall be carried out as per clause 4.81 to 4.84 of the Joint Electricity Regulatory

Commission for Manipur and Mizoram (Electricity Supply Code) Regulations, 2013 along with up to date amendments made.

7.15 Cost of Application Form: The application form shall be free of cost vide clause 4.14 of the Joint Electricity Regulatory Commission for Manipur and Mizoram (Electricity Supply Code) Regulations, 2013 along with up to date amendments made.

7.16 Operation & Maintenance (O&M) Charge on dedicated assets: -

The O & M charge of assets created out of such amount received without any obligation to return the same and no interest costs attached to such subvention, from consumer contribution, Deposit work and any similar nature shall be as follows: -

- (1) The completion costs shall be escalated at the rate of 4 % per annum from the year of completion to arrive the costs of the assets for 2015-16 level.
- (2) The annual O & M charges/expenses shall be 5 % from the 2015-16 level costs.
- (3) The O & M charges/expenses for each subsequent will be determined by escalating the base charges/expenses determined above for 2015-16, at the escalation factor of 5.72 % to arrive at possible O & M charges / expenses for each year.

 MSPDCL Tariff Order for FY 2024-25

ANNEXURES

MSPDCL Tariff Order for FY 2024-
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ANNEXURE - I

MINUTES OF THE 23rd MEETING OF THE STATE ADVISORY COMMITTEE OF MANIPUR

For the FY2024-25 State Advisory Committee meeting could not be convened by the Commission due to non-conducive and tense Law & Order situation prevailed in Imphal town to host the SAC meeting on 19th March 2024.

ANNEXURE - II

LIST OF PERSONS ATTENDED PUBLIC HEARING IN VIRTUAL MODE ON TARIFF PETITION FOR FY 2024-25 IN RESPECT OF MSPDCL, MANIPUR STATE

Date & Time : 19th March, 2024 (Tuesday), 1:00 PM

Venue : Conference Hall of JERC(M&M) (Virtual Mode)

Sl. No.	Name of Participant	Designation & Organisation
1.	Mr. R. THANGA	CHAIRPERSON, JERC (M&M)
2.	Er. BENJAMIN L. TLUMTEA	MEMBER, JERC (M&M)
3.	Mr. H. SHANTIKUMAR SINGH	MD, MSPDCL
4.	Mr. RICHARD ZOTHANKIMA	SECRETARY, JERC(M&M)
5.	Mr. H. THANTHIANGA	CHIEF(ENGINEERING), JERC(M&M)
6.	Mr. LALREMRUATA SAILO	ASST. CHIEF(ENGINEERING), JERC(M&M)
7.	Mrs. LALCHANCHINMAWII	ASST. SECRETARY, JERC(M&M)
8.	Mr. H. LALNUNFELA	PAO, JERC(M&M)
9.	Mr. M. SURJIT SINGH	STENO (DEALING HAND), JERC(M&M)
10.	Mr K. HARI PRASAD	CONSULTANT/ JERC(M&M)
11.	Mr. G.R.S. GOWTHAM	CONSULTANT/ JERC(M&M)
12.	Mr. RABI SINGH	ED (TECH), MSPDCL
13.	Mr. KAMEI GAIKULUNG	ED (COMMERCIAL)
14.	Mr. CHITALJIT MEETEI	GM (F&A), MSPDCL
15.	Mr. A. IBOTOMBA SINGH	GM – PROJECT, MSPDCL
16.	Mr. U. ROCKY	DGM (COMMERCIAL), MSPDCL
17.	Mr. TH. SATYAJEET SINGH	DM (F&A), MSPDCL
18.	Mrs. N. PURNIMA	DM (ELECTRICAL)
19.	Mr PIYUSH LOHIA	Consultant/MSPDCL
20.	Mr. K. SANATOMBA	GEN. SECY., AMPCA
21.	Mr. S. CHAOBA	PRESIDENT, AMPCA

ANNEXURE - III

	MSPDCL - Expected Revenue in FY 2024-25 at Subsidised existing Tariffs w.e.f 1.04.2024											
						Subsidis	sed Tariff	Revenu	ie /month	Annual		
SI. No.	Category	Consu- mers	Contracte d Load (in kW)	Annual energy Sales (in MU)	Sales/ Consumer /Month (in kWh)	Fixed Charge (Rs/kW/ kVA)	E.C (Rs./kWh / kVAh)	Total Fixed Charges (in Rs lac)	charge (E.C) usage in month	Total energy charge (Rs lakh)	Total Revenue (Fix+Enrg) (Rs lakhs)	Average realisation (Rs/kWh)
1	2	3	4	5	6	7	8	10	11	12	13=(10*12+12)	14
1	Domestic LT											
1)	Kutir Jyoti					per con	nection					
	All units	13494	6967	0.00		25	2.10	3.37	0.00	0.00	40.48	
2)	Normal Domestic											
i)	0 - 100 kWh	421524	607241	407.05	80.47	65	5.10	394.71	0.00	20759.55	25496.03	6.26
ii)	101 - 200 kWh	40063	87662	78.09	162.43	65	5.95	56.98	881.47	4237.71	4921.48	6.30
iii)	Balance >200 kWh	18561	42831	45.83	205.76	65	6.75	27.84	1143.90	2547.83	2881.91	6.29
	Sub Total (2)	480148	737734	530.97	92.15	65		479.53	2025.37	27545.09	33299.42	6.27
	Total Domestic LT	493642	744701	530.97	89.63			482.90	2025.37	27545.09	33339.90	6.28
2	Non-Domestic/Commercia	I										
a)	Low Tension											
i)	0 - 100 kWh	18088	48450	54.96	253.21	85	6.55	41.18	0.00	3599.88	4094.07	7.45
ii)	101 - 200 kWh	6127	10421	14.32	194.77	85	7.25	8.86	1342.06	986.73	1093.03	7.63
iii)	Balance >200 kWh	6954	39981	42.85	513.49	85	7.65	33.98	3778.22	3152.85	3560.66	8.31
	Commrl- LT	31169	98852	112.13	299.79	85		84.02	5120.28	7739.47	8747.76	7.80
b)	Commercial HT	1239	28340	39.51	2657.38	105	8.90	33.06	23650.73	3907.10	4303.86	10.89
	Commercial (LT&HT)	32408	127192	151.64	389.92			117.09		11646.57	13051.62	8.61
3	Public Lighting	561	1234	3.92	582.89	70	9.60	0.86	5595.72	376.70	387.07	9.86
4	Public Water Works											
a)	Low Tension - PWW	43	492	11.11	21531.01	105	9.80	0.52	211003.88	1088.78	1094.98	9.86
b)	High Tension - PWW	234	19040	49.96	17792.02	105	9.60	22.21	170803.42	5329.07	5595.63	11.20
	Total PWW	277	19532	61.07	18372.44			22.73	381807.29	6417.85	6690.61	10.96
5	Irrigation & Agri						<u> </u>					
a)	Low Tension - Irr & Agl	0	-	-	-	65	4.55	0.00	0.00	0.00	0.00	
b)	High Tension - Irr & Agl	21	760	0.82	3253.97	105	5.15	0.89	16757.94	46.92	57.56	7.02
	Total Irr. & Agl LT	21	760	0.82	3253.97			0.89	16757.94	46.92	57.56	7.02
6	Industrial											
a)	LT - Small/Micro	2420	20460	14.75	507.92	70	5.60	14.32	2844.35	826.00	997.86	6.77
b)	HT - Medium Indst	140	4640	9.23	5494.05	105	8.00	5.41	43952.38	820.44	885.40	9.59
c)	HT - Large Indst	54	13510	20.64	31851.85	105	9.10	15.76	289851.85	2086.93	2276.07	11.03
	Total Industrial	2614	38610	44.62	1422.47			35.50	336648.59	3733.38	4159.34	9.32
7	Bulk Supply HT	436	49190	104.90	20049.69	105	9.25	57.39	185459.67	10781.39	11470.05	10.93
	Grand Total	529959	981219	897.94		11-06-20	024 15:24	717.35		60547.90	69156.15	7.70

ANNEXURE - IV

MSPDCL - Expected Annual Revenue in FY2024-25 based on Full Cost Tariff rates (No Subsidy)													
						Applicable Tariff		Revenue realisation / per Month					
SI. No.	Consumer Category	Consu- mers (Nos)	Contracte d Load (CL) (in kW)	Annual energy Sales (in MU)	Sales/ Consumer /Month (in kWh)	Fixed Charge (Rs/kW/ kVA)	Energy charge (Rs./kWh/ kVAh)	Total Fixed Charges (Rs lacs)	Energy charge/ Consr (in Rs.)	Total energy charge (Rs lacs)	Total Revenue (Rs in lacs)	months Revenue (in Rs lacs)	Average billing rate (ABR) (Rs/kWh)
1	2	3	4	5	6	7	8	9	10	11	12=(9+11)	13=(12)*12	14
1	Domestic LT												
1)	Kutir Jyoti					per conn							
	All units	13494	6967	0.00		25	2.10	3.37	0.00	0.00	3.37	40.48	#DIV/0!
2)	Normal Domestic												
i)	0 - 100 kWh	421524	607241	407.05	80.47	65	7.67	394.71	0.00	2601.37	2996.08	35952.90	8.83
ii)	101 - 200 kWh	40063	87662	78.09	162.43	65	8.95	56.98	1325.48	582.23	639.21	7670.55	9.82
iii)	Balance >200 kWh	18561	42831	45.83	205.76	65	10.15	27.84	1720.10	387.65	415.49	4985.86	10.88
	Sub Total (2)	480148	737734	530.97	92.15	65		479.53	3045.57	3571.25	4050.78	48609.31	9.15
	Total Domestic LT	493642	744701	530.97	89.63			482.90	3045.57	3571.25	4054.15	48649.79	9.16
2	Non-Domestic/Commerci	al											
a)	Low Tension												
i)	0 - 100 kWh	18088	48450	54.96	253.21	85	10.76	41.18	0.00	492.73	533.91	6406.96	11.66
ii)	101 - 200 kWh	6127	10421	14.32	194.77	85	11.91	8.86	2204.32	142.10	150.96	1811.53	12.65
iii)	Balance >200 kWh	6954	39981	42.85	513.49	85	12.57	33.98	6205.70	448.68	482.66	5791.94	13.52
	Commrl- LT	31169	98852	112.13	299.79	85		84.02	8410.02	1083.51	1167.54	14010.43	12.49
b)	Commercial HT	1239	28340	39.51	2657.38	105	10.44	33.06	27756.33	382.11	415.18	4982.11	12.61
	Commercial (LT&HT)	32408	127192	151.64	389.92			117.09		1465.62	1582.71	18992.54	12.52
3	Public Lighting	561	1234	3.92	582.89	70	12.19	0.86	7104.51	39.86	40.72	488.64	12.45
4	Public Water Works												
a)	Low Tension - PWW	43	492	11.11	21531.01	105	12.33	0.52	265469.52	114.15	114.67	1376.02	12.39
b)	High Tension - PWW	234	19040	49.96	17792.02	105	10.80	22.21	192161.61	499.62	521.83	6262.00	12.53
	Total PWW	277	19532	61.07	18372.44			22.73	457631.12	613.77	636.50	7638.02	12.51
5	Irrigation & Agri												
a)	Low Tension - Irr & Agl	0		-		65	4.55	0.00	0.00	0.00	0.00	0.00	#DIV/0!
b)	High Tension - Irr & Agl	21	760	0.82	3253.97	105	8.67	0.89	28227.76	6.59	7.47	89.68	10.94
	Total Irr. & Agl LT	21	760	0.82	3253.97			0.89	28227.76	6.59	7.47	89.68	10.94
6	Industrial												
a)	LT - Small/Micro	2420	20460	14.75	507.92	70	11.32	14.32	5748.66	139.12	153.44	1841.27	12.48
b)	HT - Medium Indst	140	4640	9.23	5494.05	105	10.64	5.41	58443.13	90.91	96.32	1155.90	12.52
c)	HT - Large Indst	54	13510	20.64	31851.85	105	10.46	15.76	333275.20	199.97	215.73	2588.72	12.54
	Total Industrial	2614	38610	44.62	1422.47			35.50	397466.99	429.99	465.49	5585.89	12.52
7	Bulk Supply HT	436	49190	104.90	20049.69	105	10.79	57.39	216395.20	1048.31	1105.70	13268.43	12.65
	Grand Total	529959	981219	897.94				717.35				94713.00	10.55

Annexure-V

	Abstract of Catego	ry-wise F	ull Cost	Γariff, Su	bsidised	Tariff an	d Subsidy	allocatio	on for FY	2024-25 -	MSPDCL	3
		Energy	Full C	ost Tarif	f (No Sub	sidy)	Sul	osidised	Govt. Subsidy			
c	onsumer Category	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)	Subsidy Amount (₹ Crs)	Avg. per unit (₹/kWh)
1	KJ(Domestic)		Conc/kW	(₹ /kWh)			Conc/kW	(₹ /kWh)				
i)	First all kWh	0.00	25	2.10	0.40	#DIV/0!	25	2.10	0.40	#DIV/0!	0.00	#DIV/0!
2	Domestic		(₹ /CL/kW)	(₹ /kWh)			(₹ /CL/kW)	(₹ /kWh)				
i)	First 100 kWh	407.05	65	7.67	359.53	8.83	65	5.10	254.96	6.26	104.57	2.57
ii)	101 - 200 kWh	78.09	65	8.95	76.71	9.82	65	5.95	49.21	6.30	27.49	3.52
iii)	Above 200 kWh	45.83	65	10.15	49.86	10.88	65	6.75	28.82	6.29	21.04	4.59
	Domestic total	530.97			486.09	9.15			332.99	6.27	153.10	2.88
	Total Domestic	530.97			486.50	9.16			333.40	6.28		
3	Commercial & Non-Don	nestic	(₹/CL/kW)	(₹/kWh)			(₹ /CL/kW)	(₹/kWh)				
i)	First 100 kWh	54.96	85	10.76	64.07	11.66	85	6.55	40.94	7.45	23.13	4.21
ii)	101 - 200 kWh	14.32	85	11.91	18.12	12.65	85	7.25	10.93	7.63	7.19	5.02
iii)	Above 200 kWh	42.85	85	12.57	57.92	13.52	85	7.65	35.61	8.31	22.31	5.21
	Sub Total	112.13			140.10	12.49			87.48	7.80	52.63	4.69
4	Commercial/ND HT	39.51	105	10.44	49.82	12.61	105	8.90	43.04	10.89	6.78	1.72
			(₹/CL/kW)	(₹ /kWh)			(₹ /CL/kW)	(₹ /kWh)				
5	Public Lighting	3.924	70	12.19	4.89	12.45	70	9.60	3.87	9.86	1.02	2.59
6	Public Water Supply LT	11.11	105	12.33	13.76	12.39	105	9.80	10.95	9.86	2.81	2.53
7	Agriculture-LT	0.00	65	4.55	0.00	#DIV/0!	65	4.55	0.00	#DIV/0!	0.00	#DIV/0!
_		10.00	(₹/kVA/BD)	(₹/kVAh)			(₹ /kVA/BD)	(₹/kVAh)				
	Public Water Supply HT	49.96	105	10.80	62.62	12.53	105	9.60	55.96	11.20	6.66	
	Irrigation-HT	0.82	105	8.67	0.90	10.94	105	5.15	0.58	7.02	0.32	3.92
	Industrial		(₹ /CL/kW)	(₹ /kWh)			(₹ /CL/kW)	(₹ /kWh)				
i)	LT - Small/Micro	14.75	70	11.32	18.41	12.48	70	5.60	9.98	6.77	8.43	5.72
ii)	HT-Medium Industries	9.23	(₹ /kVA/BD) 105	(₹ /kVAh) 10.64	11.56	12.52	(₹ /kVA/BD) 105	(₹ /kVAh) 8.00	8.85	0.50	2.70	2.02
	Large Industrial - HT	20.64	105 105	10.64	25.89	12.52 12.54	105 105	9.10	22.76	9.59 11.03	2.70 3.13	
	Bulk Supply HT	104.90	105	10.46	132.68	12.54	105	9.10	114.70		17.98	
15	Grand Total (LT & HT)	897.94	105	10.79	947.13	10.55	105	9.20	691.56	7.70	255.57	2.85
	CL- denotes Contracted Load		s Billng Dem	and	347.13	10.55			031.30	7.70	255.57	2.65

Annexure VI

Eastern Region Transmission Losses for FY2022-23

ANNUAL COMPENDIUM Market Operation 6.10 National vs Regional Transmission loss National Vs Regional Transmission loss % Loss National Loss Regional Loss National Loss (%) Regional Loss (%) Maximum 4.4 2.7 2.9 Minimum 1.5

3.6

Average

2.0

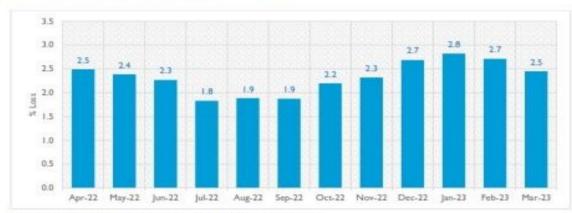
Annexure VII

North Eastern Regional Transmission Losses for FY 2022-23

CH-5: MARKET OPERATIONS

REGIONAL TRANSMISSION LOSS OF NER DURING FY 2022-23

Monthly Average Regional Transmission Loss in %:



Average Regional Transmission Loss for FY 2022-23 is 2.33%

Week-wise National vs. Regional Transmission Loss in %:



Nate

Regional Loss Calculation Method = [Injection + Import) - (Drawal + Export)] / (Injection + Import) "100
 National Loss Calculation Method = (In - Dr) / Ir " 100

Here, In = sum of injection into the ISTS at regional nodes

Dr = sum of drawal from the ISTS at regional nodes

Ir = sum of injection into the ISTS at regional nodes by projects covered under Clause 13(1)

उ.पू.को भाग्ने के धार्षिक सार-संग्रह 2022-23 NERLDC ANNUAL COMPENDIUM FY 2022-23

MSPDCL Tariff Order for FY 2024-25

Annexure VIII



JOINT ELECTRICITY REGULATORY COMMISSION FOR MANIPUR AND MIZORAM AIZAWL: MIZORAM

TBL Bhawan, 2nd -5th Floor, E-18, Peter Street, Khatla, Aizawl, Mizoram - 796001 Fax: 0389-2301299/2300240, Tel. No. : 0389-2310623/2320555 Website: www.jerc.mizoram.gov.in, Email: jerc.mm@gmail.com

Dated Aizawl, the 21st March, 2024

ORDER

No. H. 20013/46/23-JERC/36: Whereas the Manipur State Power Distribution Company Limited (MSPDCL) has filed petition before the Joint Electricity Regulatory Commission for Manipur and Mizoram (hereinafter referred to as the Commission) on 26.12.2023 for determination of Aggregate Revenue Requirement(ARR) & Tariff for FY 2024-25 alongwith Annual Performance Review for FY 2023-24 and Truing up for FY 2022-23 and whereas this petition is under examination for issue of order, the Model Code of Conduct for 2024 Lok Sabha election came into force from 16th March, 2024 and will remain in effect until the election process is concluded. Therefore, in exercise of the power conferred under sub-section (2) of section 94 of the Electricity Act, 2003, the Commission hereby makes decision as an interim measure that the prevailing retail electricity tariff of MSPDCL during FY 2023-24 shall continue from 01.04.2024 until such time the retail tariff order for FY 2024-25 is issued by the

Sd/- R. THANGA Chairperson

Memo No. H. 20013/46/23-JERC/36

Dated Aizawl, the 21st March, 2024

Copy to:

- The P.S. to Hon'ble Chief Minister, Govt. of Manipur for kind information.
- The P.S. to Hon'ble Minister, Electricity Department, Govt. of Manipur for kind information.
- The Chief Secretary, Govt. of Manipur for kind information.
- The Commissioner (Finance), Finance Department, Govt. of Manipur for kind information
- The Secretary (Power), Electricity Department, Govt. of Manipur for kind information
- The Managing Director, Manipur State Power Company Limited, Manipur for kind information and necessary action.
- The Managing Director, Manipur State Power Distribution Company Limited, Manipur for kind information and necessary action.
- 8. Mr. Lalramhlun Puruolte, i/c. JERC (M&M) website for kind necessary action.
- 9. The Editor, Poknapham (Daily Newspaper), Keishampat Thiyam Leikai, Imphal, Manipur 795001 for kind publication of interim order for 2 (two) days insertion in the size of 3 columns and 16 cm on or before 26th March, 2024. Bills may be submitted in GST format along with the published copies of the interim order for necessary payment.
- 10. The Editor, Imphal Free Press (Daily English Newspaper), Palace Gate, New Checkon Road, Imphal 795001 for kind publication of the interim order for 2 (two) days insertion in the size of 3 columns and 16 cm on or before 26th March, 2024. Bills may be submitted in GST format along with the published copies of the interim order for necessary payment.
- Guard File.
- Notice Board.

(RICHARD ZOTHANKIMA)
Secretary



JOINT ELECTRICITY REGULATORY COMMISSION

FOR MANIPUR AND MIZORAM

TBL Bhawan, 2nd to 5th Floor, Peter Street, E-18, Khatla, Aizawl, Mizoram, 796001

Website: www.jerc.mizoram.gov.in

e-mail: jerc.mm@gmail.com

Ph: 0389 2336555/2335625 Fax: 0389-2336299/2335523